

Pursuant to Article 29, paragraph (2) and in relation to Article 21, paragraph (12) of the Deposit Insurance Act (Official Gazette 82/2015) and Article 43, paragraph (2), item (9) of the Act on the Croatian National Bank (Official Gazette 75/2008 and 54/2013), the Governor of the Croatian National Bank hereby issues the

Decision on the approval procedure for the methodology for determining the aggregate risk weight for credit institutions in the calculation of contributions to the deposit guarantee scheme

1 GENERAL PROVISIONS

Subject matter

Article 1

This Decision governs in detail:

- 1) the decision-making procedure regarding the application of the State Agency for Deposit Insurance and Bank Resolution for approval of the methodology for calculating the aggregate risk weight for an individual credit institution;
- 2) the criteria that must be met for approval of the methodology;
- 3) time limits for deciding on the application;
- 4) documentation on the basis of which a decision shall be adopted and which must be enclosed with the application;
- 5) frequency of methodology updates;
- 6) obtaining approvals for the updated and amended methodology; and
- 7) reporting to the Croatian National Bank.

Definitions

Article 2

The terms used in this Decision shall have the following meaning:

- 1) '*Agency*' means the State Agency for Deposit Insurance and Bank Resolution;
- 2) '*contribution*' ('C') means the contribution that a credit institution shall pay for covered deposits, which is based on the amount of covered deposits and the aggregate risk weight for an individual credit institution;
- 3) '*covered deposits*' ('CD') means the average amount of covered deposits for a credit institution in the previous quarter, which is calculated as the average on the last day of each month in the quarter;
- 4) '*contribution rate*' ('CR') stands at 0.08% for each quarter or 0.32% per annum, unless the Agency decides otherwise in accordance with Article 14 of the Deposit Insurance Act;

- 5) '*individual risk score*' ('IRS') means the primary measure of risk in an individual risk category of a credit institution, transformed from the original values of risk indicator (A) towards the boundaries that ensure its range from 0 to 100;
- 6) '*aggregate risk score for a credit institution*' ('ARS') means a sum of all individual indicators' risk scores adjusted for appropriate indicator weights;
- 7) '*aggregate risk weight*' ('ARW') means a measure of risk for an individual credit institution estimated by the functional transformation of the aggregate risk score for an individual credit institution, adjusted for the cyclical factor;
- 8) '*risk categories*' ('z') for which individual risk indicators are identified are: capital, liquidity and funding, asset quality, business model and management, and potential losses for the Agency;
- 9) '*cyclical factor*' (' μ ') means an adjustment coefficient which is applied to the amount of total contributions of all credit institutions in a reference year in such a way that it reduces or increases the aggregate risk weight for a credit institution, with due account of the phase of the business cycle and the pro-cyclical impact of contributions on the financial position of members of the deposit guarantee scheme;
- 10) '*reference year*' means a period in which the calculated aggregate risk weight for a credit institution is applied, which the Agency calculated by use of the methodology and according to the data from the Croatian National Bank and which lasts for 12 months.

Contribution Article 3

- (1) The Agency shall each quarter calculate a contribution for each credit institution by multiplying the contribution rate (CR) by institution's covered deposits (CD) and its aggregate risk weight (ARW).
- (2) In the calculation of the aggregate risk weight for a credit institution, the Agency shall include the cyclical factor, which shall be identical for all credit institutions in a reference year.
- (3) The methodology for calculating the aggregate risk weight for a credit institution shall be developed by the Agency on the basis of the criteria prescribed in this Decision.

2 CRITERIA TO BE MET BY THE METHODOLOGY

Methodology for calculating the aggregate risk weight for a credit institution Article 4

- (1) The methodology for calculating the contribution based on the aggregate risk weight shall contain the following elements:
 - a) the contribution calculation formula;
 - b) risk categories and risk indicators; and
 - c) risk weights.

(2) The methodology shall ensure that the aggregate risk weight for a credit institution calculated in accordance with the data delivered by the Croatian National Bank is applied for 12 months.

Calculation formula
Article 5

(1) The calculation formula referred to in Article 4, item (a) of this Decision shall be as follows:

$$C_i = CR \times CD_i \times ARW_i$$

Where:

C_i = Annual contribution from credit institution 'i' which is a member of the deposit guarantee scheme

CR = Contribution rate (identical for all member institutions in a given year)

ARW_i = Aggregate risk weight for credit institution 'i' which is a member of the deposit guarantee scheme multiplied by the cyclical factor

CD_i = Covered deposits for credit institution 'i' which is a member of the deposit guarantee scheme

(2) The contribution rate (CR) shall be 0.08% on a quarterly basis or 0.32% per annum. Exceptionally, the Agency may set a contribution rate higher or lower under the conditions and in the manner prescribed in Article 14 of the Deposit Insurance Act.

(3) The aggregate risk score for credit institution 'i' (ARS_i) shall be calculated by summing up all individual indicators' risk scores adjusted for appropriate risk weights (IRS_i). When assigning the aggregate risk score (ARS_i) it is necessary to ensure that the chosen method takes into consideration the riskiness of each credit institution in line with the value of its indicators (A) according to the following formula:

$$IRS_j = \begin{cases} 100 & A_j > a_j \\ 0 & A_j < b_j \\ \frac{A_j - b_j}{a_j - b_j} \cdot 100 & b_j \leq A_j \leq a_j \end{cases}$$

where $j=1, \dots, n$, and the higher value of the indicator denotes a more risky credit institution or

$$IRS_j = \begin{cases} 0 & A_j > a_j \\ 100 & A_j < b_j \\ \frac{a_j - A_j}{a_j - b_j} \cdot 100 & b_j \leq A_j \leq a_j \end{cases}$$

where $j=1, \dots, n$, and the lower value of the indicator denotes a more risky credit institution.

The boundaries for each indicator A_j (a_j i b_j) should be identical for all credit institutions and ensure there is sufficient differentiation of credit institutions according to risk indicators, regulatory requirements and historical data.

(4) The aggregate risk weight for credit institution 'i' (ARWi), which is a member of the deposit guarantee scheme, may range from 75% to 150% and shall be assigned on the basis of the aggregate risk score for that credit institution (ARSi) by applying the transformation function of the following form:

$$ARW_i = 75 + (150 - 75) \cdot (1 - \log_n(n - (n - 1) \cdot ARS_i)) \text{ for } n \in \mathbb{N} \text{ such that } n \geq 10.$$

(5) Assignment of the aggregate risk score (ARSi) according to the aggregate risk weight (ARWi) should prevent the assignment of the same risk category to all credit institutions members of the deposit guarantee scheme, if their risk profiles are very different. However, this does not imply that in each reference year the full interval should necessarily be used and that credit institutions must be assigned to the ARW corresponding to the lowest and the highest points of the interval.

(6) In the calibration of the boundaries and the transformation function referred to in paragraphs (3) and (4) of this Article, the Agency shall use relevant historical data about credit institutions' failures or events where a credit institution has been likely to fail, about recovery rates of the deposit guarantee scheme, and information about regulatory and institutional changes.

(7) The cyclical factor (μ) shall be set by the Croatian National Bank for each calendar year taking into account the phase of the business cycle and the pro-cyclical impact that contributions may have on the financial position of credit institutions.

(8) The Croatian National Bank shall deliver the data on the level of the cyclical factor by 15 May of the current year for the preceding year, which the Agency shall use to calculate the aggregate risk weight in the next reference year.

Core risk indicators

Article 6

(1) The calculation of the aggregate risk weight (ARWi) for an individual credit institution should be based on a set of risk indicators (A) from each of the following risk categories (z):

- a) capital;
- b) liquidity and funding;
- c) asset quality;
- d) business model and management; and
- e) potential losses for the deposit guarantee scheme.

(2) Each category referred to in paragraph (1) of this Article shall include the core risk indicators specified in Annex 1 to this Decision.

(3) By way of derogation from paragraph (2) of this Article, a specific core indicator may be excluded and replaced by another one, where the Agency shall strive to ensure that the proposed

proxy is the most appropriate and that the indicator adequately reflects the risks posed by the credit institution to the system.

Additional risk indicators

Article 7

(1) In addition to the core indicators referred to in Article 6 of this Decision, additional risk indicators may be included in the calculation of the ARWi if they are relevant for determining the aggregate risk weight for credit institutions.

(2) Additional risk indicators shall be classified into appropriate categories referred to in Article 6, paragraph (1) of this Decision.

(3) By way of derogation from paragraph (2) of this Article, where additional indicators do not fall into the description of any other category, they shall be classified into the 'Business model and management risk' category.

(4) Additional risk indicators used in the calculation method should capture a sufficiently wide spectrum of sources of risk and the selection of risk indicators should be aligned with the best practices in risk management and with the existing prudential requirements.

Values of indicators

Article 8

(1) For each credit institution the values of risk indicators shall be calculated on a solo basis.

(2) By way of derogation from paragraph (1) of this Article, the value of risk indicators shall be calculated at the consolidated or semi-consolidated level if a credit institution, which is a member of a group in accordance with Article 7, 8 or 21 of Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending regulation (EU) No 648/2012 (OJ L 176, 27.6.2013), has received from the Croatian National Bank a waiver from meeting capital and/or liquidity requirements on a solo basis.

(3) To calculate the values of risk indicators, data in audit reports shall be used.

Weights for risk indicators

Article 9

(1) The sum of weights assigned to all risk indicators by all categories should be equal to 100%.

(2) The weight of a particular risk indicator shall be assigned according to the defined minimum weights and ranges specified in Annex 1 to this Decision.

(3) The sum of the minimum weights specified in Annex 1 to this Decision may range from 86.5% to 93.5%. The remaining 6.5% to 13.5% of flexible weights (FW) should be distributed among the additional indicators.

(4) By way of derogation from paragraph (3) of this Article, where there are no additional indicators or where distributed flexible indicators referred to in paragraph (3) of this Article do not exhaust the maximum aggregate value of flexible weights, the remaining (undistributed) weights shall be distributed among the core indicators in such a way that preserves the relationship of the minimum weights assigned to core indicators.

3 DECISION-MAKING PROCEDURE REGARDING APPROVAL OF THE METHODOLOGY AND DOCUMENTATION THAT SHOULD BE ENCLOSED

Application for prior approval

Article 10

(1) The Agency shall submit an application for prior approval to use or amend the methodology for calculating the aggregate risk weight for a credit institution to the Croatian National Bank.

(2) The Agency shall enclose the following with the application for approval:

- a description of the method for calculating the aggregate risk weight for each credit institution, risk indicators, boundaries, weights and the transformation function applied;
- a simulation of the calculation of the aggregate risk weight for each credit institution for the current year in accordance with the submitted methodology; and
- the date from which the methodology is planned to be applied.

(3) The Croatian National Bank may require the Agency to supplement the application or deliver additional documents, data and information which are necessary for deciding on the application for approval of the methodology.

(4) The Croatian National Bank shall complete the approval procedure within 90 days of the submission of the complete application.

(5) The Croatian National Bank may require the Agency to make a presentation on the method for calculating the aggregate risk weight and contributions for credit institutions in accordance with the submitted methodology.

Issuance of approval of the methodology

Article 11

(1) The Croatian National Bank shall issue approval of the methodology for calculating the aggregate risk weight for a credit institution if the methodology submitted meets all of the following requirements:

- the methodology meets all criteria under Title 2 of this Decision;
- application of the methodology does not result in the payment of disproportionate contributions relative to the aggregate risk weight for a credit institution; and
- application of the methodology shall not have a negative impact on the financial stability of the Republic of Croatia.

(2) Where in the course of assessing the methodology the Croatian National Bank establishes that there are deficiencies in the methodology for which the approval is sought, the Croatian National Bank shall invite the Agency to eliminate the deficiencies within a reasonable period, which may not be longer than 60 days.

(3) Where the Agency fails to eliminate the deficiencies in accordance with the invitation referred to in paragraph (2) of this Article, the Croatian National Bank shall refuse the application and explain the reasons for refusal.

(4) Where the Croatian National Bank refuses or rejects the application referred to in Article 10 of this Decision, the Agency shall submit a new application within 30 days of receipt of the decision.

(5) The decision-making procedure regarding the new application shall be carried out in accordance with the provisions of this Article.

4 REPORTING TO THE CROATIAN NATIONAL BANK AND FREQUENCY OF METHODOLOGY UPDATES

Reporting Article 12

(1) The Agency shall report to the Croatian National Bank at least annually on the application of the methodology by delivering the calculations of the aggregate risk weight for each credit institution for the current year.

(2) The report shall be delivered by 30 June of the current year at the latest.

Amendments to the methodology and revocation of approval Article 13

(1) The approval issued in accordance with Article 11 of this Decision shall expire two years from the beginning of application of the methodology.

(2) The Agency shall submit an application for renewal of the approval to the Croatian National Bank three months before the expiry of the approval.

(3) The procedure for approval renewal shall be carried out in accordance with the provisions governing the procedure for issuing prior approval referred to in Articles 10 and 11 of this Decision.

(4) After the expiry of the approval, the aggregate risk weight for a credit institution shall be deemed to be equal to the aggregate risk weight established for the credit institution in the last period in which the methodology was applied, but the aggregate risk weight shall not be higher than 100%.

5 DATA CONFIDENTIALITY AND METHODOLOGY DISCLOSURE

Confidentiality of data and information

Article 14

The Croatian National Bank and all employees of the Croatian National Bank, the Agency and all employees of the Agency shall protect the confidentiality of all data and information which are mutually exchanged for the purpose of developing the methodology for calculating the aggregate risk weight and shall not disclose them or make them available to third parties without prior written consent and only in accordance with the provisions of the Deposit Insurance Act and the Credit Institutions Act.

Methodology disclosure

Article 15

(1) The Agency shall publicly disclose a description of the calculation methodology, including risk indicators.

(2) The Agency shall, on request of an individual credit institution, deliver the results of the risk classification and its components for the credit institution in question.

6 TRANSITIONAL AND FINAL PROVISIONS

Aggregate risk weight before approval of the methodology

Article 16

(1) The Agency shall submit to the Croatian National Bank an application for prior approval for the first use of the methodology for calculating the aggregate risk weight for a credit institution by 31 December 2015 at the latest.

(2) The aggregate risk weight for a credit institution shall be deemed to be 100% until the Croatian National Bank approves the use of the methodology for calculating the aggregate risk weight for the credit institution.

(3) The value of the cyclical factor shall be deemed to be one as long as the Croatian National Bank does not set the cyclical factor for the first time pursuant to the authorisation referred to in Title 2 of this Decision.

Entry into force
Article 17

This Decision shall enter into force on the day following that of its publication in the Official Gazette.

No.: 274-020/11-15/BV
Zagreb, 9 November 2015

Croatian National Bank
Governor
Boris Vujčić

Annex 1 Core indicators by risk categories and corresponding weights*

| Risk category (z) and risk indicator (A) | Description | Minimum weight/range (MW) | Flexible weight/range (FW) |
|---|--|----------------------------------|-----------------------------------|
| Capital | | 18% | |
| Capital-to-assets ratio | Numerator: Own funds Denominator: Total net assets (net assets and standard off-balance sheet items) | 9% | |
| Common equity tier 1 ratio | Numerator: Common equity tier 1 capital Denominator: Total risk exposure amount | 9% | |
| Liquidity and funding | | 18% | |
| Liquidity ratio | Numerator: Readily marketable assets Denominator: Net assets | 9% | |
| Loan-to-deposit ratio | Numerator: Loans to non-financial sector Denominator: Deposits of non-financial sector | 9% | |
| Asset quality | | 23%-29% | |
| Non-performing loans ratio (NPL ratio) | Numerator: Gross B and C loans Denominator: Total gross loans | 13% | |
| NPL coverage | Numerator: value adjustments for B and C loans Denominator: B and C gross loans | 10%-16% | |
| Business model and management | | 14.5%-15.5% | |
| Implicit asset risk ratio | Numerator: Risk-weighted exposure amount Denominator: Total assets (net assets and standard off-balance sheet items) | 6.5% | |
| Return on assets | Numerator: Net income Denominator: Net assets Note: An average of 2 years is used. | 6.5% | |
| Low-risk sector indicator | Binary value: 1=credit institution belongs to the low-risk sector; 0=credit institution does not belong to the low-risk sector | 1.5%-2.5% | |
| Potential losses for the Agency | | 13% | |
| Unencumbered assets/covered deposits | Numerator: Unencumbered assets Denominator: Covered deposits | 13% | |
| Sum | | 86.5%-93.5% | 6.5%-13.5% |

*Indicators refer to the end of the period (31 December of a reference year), unless stated otherwise.