Pursuant to Article 5, Paragraph 1, Item b, Article 20 and Article 37 of the Law on the Banking Agency of Republika Srpska (“Official Gazette of Republika Srpska” No. 59/13 and 4/17), and Article 6, Paragraph 1, Item b of the Statute of the Banking Agency of Republika Srpska ("Official Gazette of the Republika Srpska" No. 63/17), the Management Board of the Banking Agency of Republika Srpska, at the session held on 25 July, 2017 adopted the

DECISION
ON THE MANAGEMENT OF INTEREST RATE RISK IN THE BANKING BOOK

General provisions

Article 1

(1) This Decision determines the minimum standards for establishing the management system of interest rate risk in the banking book, sources of interest rate risk, method of calculating changes in the economic value of a bank arising from banking book positions using simplified calculation, treatment of financial derivatives, and reporting to the Banking Agency of Republika Srpska. (hereinafter: the Agency).

(2) All banks headquartered in Republika Srpska (hereinafter: RS) to which the Agency has issued an operating license, shall be obliged to apply the provisions of this Decision.

(3) The provisions of this Decision shall be applied on an individual basis, and on a consolidated basis in accordance with the regulations governing supervision on a consolidated basis.

(4) For issues related to risk management in banks that are not defined by this Decision, but are defined by the law or other by-laws, the provisions of that law or other by-law shall apply.

Definitions

Article 2

(1) Definitions used in this Decision shall have the following meaning:

1) Interest rate risk is the risk of possible negative effects on the financial result and capital of the bank due to changes in interest rates.

2) Interest rate risk in the banking book is the risk of possible negative effects on the financial result and capital of the bank based on positions in the banking book due to changes in interest rates.

3) Repricing risk is the risk to which a bank is exposed due to maturity mismatch (for fixed interest rates) and revaluation (for variable interest rates) of asset positions, liabilities, and long and short off-balance sheet position in the banking book.

4) Yield curve risk is the risk to which a bank is exposed due to changes in the shape and slope of the yield curve.

5) Basis risk is the risk to which a bank is exposed due to the difference in reference interest rates for instruments with similar characteristics in relation to the maturity or time until the next change in the interest rate.

6) Optionality risk is the risk arising from options, including embedded options in interest-sensitive positions (e.g. loans with the possibility of early repayment, deposits with the possibility of early withdrawal, etc.).

7) Trading book - in accordance with Article 2, Paragraph 1, Item 37 of the Banking Law of Republika Srpska.

8) Banking book - in accordance with Article 2, Paragraph 1, Item 38 of the Banking Law of Republika Srpska.

9) The economic value of the bank's banking book is an estimate of the present value of all expected net cash flows of the bank's banking book positions, i.e. expected cash flows of assets reduced by the expected cash flows of the bank's liabilities.

10) Significant currency is any currency that makes up more than 5% of total balance sheet assets or liabilities.

11) Standard interest rate shock is a parallel positive and negative shift of interest rates on the reference yield curve by 200 basis points.

12) Base point is a unit equal to one hundredth of 1%.

13) Risk-free yield curve is an appropriate general yield curve that does not include credit risk margins specific to a particular instrument or entity, nor liquidity risk margins.

14) The reference interest rate represents the interest rate at the change of which other interest rates are managed.

Interest rate risk measurement and sources

Article 3

(1) Interest rate risk in the banking book may have a negative impact on profit, i.e. net interest income, i.e. the economic value of the banking book. The bank is obliged to establish a system for measuring interest rate risk in the banking book, which includes all significant sources of interest rate risk to which it may be exposed, namely:

1) repricing risk,

2) yield curve risk,

3) basis risk and

4) optionality risk.

(2) In order to apply the principle of proportionality, a bank classified by the Agency as systemically important bank should adequately take into account all four sources of interest rate risk to which it may be exposed. Other banks, in terms of the form of interest rate risk, are obliged to act in accordance with Paragraph 4 of this Article. The Agency may, depending on the type,

scope and complexity of the bank's activities, regardless of the classification criteria, require the bank to adequately cover all four sources of interest rate risk from the previous Paragraph.

(3) A systemically important bank, in addition to a purely static analysis of the impact of a standard interest rate shock or interest rate shocks in current portfolios, should use a dynamic interest rate simulation approach. In doing so, the scenarios that calculate different directions of interest rate trends should be taken into account.

(4) The bank is obliged to measure and assess the negative impact of interest rate risk on net interest income, i.e. profit, i.e. the economic value of the banking book. Regularly measuring the sensitivity of both aspects and implementing different scenarios includes as a minimum the yield curve risk and the basis risk.

(5) For the purposes of reporting to the Agency, and in connection with the aspect of impact on the economic value of the banking book referred to in Paragraph 1 of this Article, the bank shall use a simplified calculation, i.e. standard interest rate shock approach referred to in Article 5 of this Decision.

(6) When calculating interest rate risk, banks shall apply the following:

1) appropriate general risk-free yield curve,

2) capital is not included in liabilities and

3) the assumed date of revaluation of prices for balances on clients' accounts (bank liabilities) without predetermined dates of repricing should be limited to a maximum of five (5) years. The fixed and variable part are included in the calculation of the assumed maturity.

(7) For the purposes of calculating interest rate risk, banks are obliged to consider and assess the impact of:

1) assumptions about non-interest-bearing assets and liabilities from the banking book,

2) assumptions on the behavior of clients in relation to deposits without an agreed maturity, and assumptions on the maturity of liabilities with short contractual maturities that act as long-term liabilities, and

3) constructed options of assets and liabilities that may be automatic or dependent on their behavior.

(8) Notwithstanding Paragraph 5 of this Article, a bank in accordance with the risk management policy and risk profile, should, for the purposes of the internal capital adequacy assessment process, develop and utilize its own methodology for measuring interest rate risk in the banking book, i.e. calculating internal capital requirements at a level sufficient to cover that risk.

Minimum standards for establishing the management system of the interest rate risk in the banking book

Article 4

(1) The bank is obliged to establish a comprehensive and efficient management system of interest rate risk in the banking book, which is proportional to the type, scope and complexity of the bank's operations, as well as its risk profile.

(2) The bank management is obliged to:

1) propose the strategy and policy of management of interest rate risk in the banking book that can be an integral part of the general strategy, i.e. risk management policy in the bank and adopt other internal acts for management of interest rate risk in the banking book, and ensure their implementation,

2) propose an adequate organizational structure with precisely defined, clear and delimited lines of competences, which enables ensuring the independence of interest rate risk management functions from the functions of assuming interest-bearing positions in the banking book,

3) propose an act on the system of measuring interest rate risk, which includes significant sources of interest rate risk,

4) prepare an act defining the input data for the system of measuring interest rate risk (e.g. interest rates, maturities) which will adequately reflect the impact on the change in the economic value of the bank,

5) stipulate the assumptions of the interest rate risk management system that must be adequate, documented and stable over time, and all significant changes to the assumptions must be documented, clarified and approved by the supervisory board,

6) propose an act on the system of internal controls over the management process of the interest rate risk in the banking book,

7) ensure the timeliness, reliability and usability of interest rate risk reports,

8) conduct testing related to interest rate risk in the banking book and apply the results when making decisions and revising policies, internal acts and limits related to interest rate risk. When conducting stress testing, all sources of interest rate risk defined in Article 3, Paragraph 1, Items 1-4 of this Decision should be taken into account.

(3) The bank supervisory board is obliged to:

1) adopt the management strategy of the interest rate risk in the banking book, which may be an integral part of the general risk management strategy in the bank, policies and other internal acts for the management of the interest rate risk in the banking book, and ensure their implementation,

2) adopt an adequate organizational structure with precisely defined, clear and delimited lines of competences, which enables ensuring the independence of interest rate risk management functions from the functions of assuming interest-bearing positions in the banking book,

3) adopt an act on the system of measuring interest rate risk, which includes significant sources of interest rate risk,

4) adopt an act defining the input data of the system for measuring interest rate risk (e.g. interest rates, maturities), which will adequately reflect the impact on the change in the economic value of the bank,

5) adopt an act on the assumptions of the interest rate risk management system that must be adequate, documented and stable over time,

6) adopt an act on the system of internal controls over the management process of the interest rate risk in the banking book and

7) stipulate the content and frequency of interest rate risk reporting and provide a comprehensive and reliable system of interest rate risk reporting.

(4) The bank shall adopt and implement comprehensive policies and procedures for the management of the interest rate risk in the banking book. It is necessary to:

1) ensure that the supervisory board and the bank management are responsible for managing interest rate risk in the banking book, in accordance with their competencies,

2) ensure regular validation of the models used to quantify the exposure to the interest rate risk in the banking book. The information system used by the bank should provide full measurement / assessment and monitoring of the yield / share of individual transactions in the total exposure and

3) banks' internal reporting systems on interest rate risk should provide timely and comprehensive information on their exposures to the interest rate risk in the banking book.

(5) Banks should have well-reasoned, comprehensive and documented policies that cover all elements related to interest rate risk in the banking book. Policies should at a minimum include the following:

1) internal definition and establishment of a clear boundary between the banking book and the trading book,

2) definition of economic value and its consistency with the method used to value assets and liabilities (e.g. based on the discounted value of future cash flows and / or based on the discounted value of future profits),

3) definition of profit risk and its consistency with the approach used by the bank in the development of business plans and financial projections,

4) the size and form of various interest rate shocks that will be used for the internal calculation of interest rate risk in the banking book,

5) use of dynamic and / or static approaches in the application of interest rate shocks,

6) handling approved and unused transactions, including any related protection,

7) aggregation of multi-currency interest rate exposures,

8) measurement and management of basis risk resulting from different interest rate indices,

9) (non) inclusion of non-interest-bearing assets and liabilities from the banking book, including capital and reserves, in calculations that measure interest rate risk in the banking book,

10) treatment of current and savings accounts, taking into account the assumed maturity of liabilities with short contractual maturities, but which act as long-term liabilities,

11) measuring the effects of interest rate risk in the banking book arising from embedded and automatic asset or liability options, including the effects of convexity and non-linear payment profiles and

12) the level of detail used in the measurement calculations (e.g. use of time periods, inclusion of cash flows from interest or only from principal, etc.).

(6) Scenario analyzes and / or sensitivity analyzes are used to manage interest rate risk and for stress testing. The analysis of scenarios for measuring interest rate risk in the banking book should be performed at least quarterly, but also more often in conditions of higher interest rate volatility, or when the measured risk levels are significant in the context of the bank's operations.

(7) Stress testing for interest rate risk should be integrated into the overall structure and programs of stress testing of the bank. In this testing, interest rate risk should interact with other risk categories, and secondary effects should be also calculated. The bank is obliged to conduct stress testing at least once a year.

Methodology for assessing the change in the economic value of the banking book

Article 5

(1) For the purposes of reporting to the Agency on the exposure to the interest rate risk in the banking book, the bank shall use a simplified calculation of the assessment of changes in the economic value of the banking book, applying standard interest rate shock to the banking book positions in all significant currencies individually and for other currencies.

(2) For the purposes of simplified calculation of the change in the economic value of the banking book, which includes both balance sheet and off-balance sheet positions, interest rate sensitive positions shall be allocated to 13 time zones in the manner shown in the table. The weights are based on assessed standard interest rate shock of 200 basis points over time and assessed modified duration for each time zone.

Table 1. Weights by time zones

Time zone	Time zone middle	Assessed modified duration	Assumed standard interest rate shock in basis	Weight
1	2	3	4	5
up to 1 month	0,5 months	0,04 years	200 bp	0,08%
from 1 to 3 months	2 months	0,16 years	200 bp	0,32%
from 3 to 6 months	4,5 months	0,36 years	200 bp	0,72%
from 6 to 12 months	9 months	0,71 years	200 bp	1,43%
from 1 to 2 years	1,5 years	1,38 years	200 bp	2,77%
from 2 to 3 years	2,5 years	2,25 years	200 bp	4,49%
from 3 to 4 years	3,5 years	3,07 years	200 bp	6,14%
from 4 to 5 years	4,5 years	3,85 years	200 bp	7,71%
from 5 to 7 years	6 years	5,08 years	200 bp	10,15%
from 7 to 10 years	8,5 years	6,63 years	200 bp	13,26%
from 10 to 15 years	12,5 years	8,92 years	200 bp	17,84%
from 15 to 20 years	17,5 years	11,21 years	200 bp	22,43%
over 20 years	22,5 years	13,01 years	200 bp	26,03%

(3) Balance sheet positions are allocated at net book value.

(4) Positions with a fixed interest rate shall be allocated to time zones according to the remaining maturity.

(5) Positions with a variable interest rate shall be allocated to time zones according to the deadline until the next change in the interest rate.

(6) The bank shall be obliged to allocate positions for which it is not known or cannot be determined with certainty the maturity, i.e. until the change of the interest rate (revolving loans,

used loans on the transaction account, etc.) in appropriate time zones in a manner defined by the instructions for application of this Decision.

(7) The bank shall separately disclose positions in which interest rates change on the basis of a decision of the bank management body, i.e. positions with a variable interest rate, when applicable in accordance with the applicable legal framework.

(8) The bank is obliged to allocate positions with a variable interest rate in appropriate time zones based on the assessment of the probability of variability and the frequency of changes in interest rates, which is based at least on:

1) previous changes and frequency of changes in interest rates of subject positions,

2) previous changes and frequency of changes in market interest rates and their correlation with changes in interest rates of subject positions, and

3) assessment of other internal (e.g. net interest margin, average cost of funds, business strategy and financing of bank placements, liquidity cost) and external factors (e.g. reputational risk, competition, market position, market share, country risk, etc.) which affect the formation of variable interest rates.

Calculation process

Article 6

(1) For the purposes of simplified calculation of the assessment of the change in the economic value of the banking book, the bank shall be obliged to:

1) for each significant currency individually and for other currencies, perform total netting of the positions of assets and liabilities and financial derivatives (or active and passive off-balance sheet items) for each time zone, so that it obtains the total net position per zone,

2) multiply the obtained total net position referred to in Item 1 of this Paragraph for each time zone by the stipulated weights from the Table referred to in Article 5 of this Decision, for each significant currency individually and for other currencies in total,

3) add up the obtained weighted positions by all time zones so that the total net long or net short position of the banking book is obtained for each significant currency and for other currencies in total, and

4) add up the net long and net short positions in all currencies so as to obtain the total net weighted position of the banking book.

(2) The total net weighted position of the banking book referred to in Paragraph 1, Item 4 of this Article shall be disclosed in absolute amount and shall represent the change in the economic value of the bank's banking book, which arose as a result of applying standard interest rate shock.

Minimum ratio of change in the economic value of the banking book and regulatory capital

Article 7

(1) The bank is obliged to calculate the ratio of the change in the economic value of the banking book and the regulatory capital of the bank.

(2) The amount of the change in the economic value of the banking book represents the amount referred to in Article 6, Paragraph 2, calculated in the manner determined by Article 5 and 6 of this Decision.

(3) The ratio of the change in the economic value of the banking book and the regulatory capital of the bank should not exceed 20%.

(4) If the stated change referred to in Paragraph 3 of this Article is higher than 20%, the Agency shall, within the framework of the supervisory review, impose measures to eliminate identified irregularities.

Financial derivatives

Article 8

(1) If the bank uses a financial derivative from the trading book (Attachment 2 to the Decision on calculation of capital in banks) for the purposes of management of the interest rate risk in the banking book, it shall include such an instrument in calculating the change in the economic value of the banking book.

(2) The bank shall treat the financial derivative referred to in Paragraph 1 of this Article from the moment of establishing the protection relation as an instrument of internal protection in terms of Article 114 of the Decision on calculation of capital in banks and meet the conditions of the said Article.

(3) Financial derivatives are converted into positions in the relevant underlying instrument. The amounts to be taken into consideration are the principal amount of the underlying instrument or the envisaged underlying instrument.

(4) Futures and forward contracts, including interest rate forward contract, shall be treated as a combination of long and short positions. The maturity is the period until delivery or performance of the contract increased by, where applicable, the maturity of the underlying instrument.

(5) A swap contract is treated as two envisaged positions with relevant maturities.

(6) In the case of options, the amount of the delta equivalent of the underlying instrument or the amount of the envisaged underlying instrument shall be taken.

Reporting to the Agency

Article 9

(1) The bank shall include in the report on exposure to the interest rate risk in the banking book all positions in the banking book that are sensitive to changes in interest rates.

(2) The bank shall compile the report on exposure to the interest rate risk in the banking book by significant currencies individually and for other currencies in total.

(3) The bank shall compile and submit the report referred to in Paragraph 1 of this Article on a quarterly basis.

Transitional and final provisions

Article 10

(1) This Decision shall enter into force on the eighth day from the day of its publication in the "Official Gazette of Republika Srpska".

(2) The method of application of this Decision and forms for reporting on interest rate risk in the banking book are stipulated by the Instructions for the application of the Decision on management of interest rate risk in the banking book.

(3) The bank is obliged to harmonize its operations with the provisions of this Decision within nine months from the day the Banking Law of Republika Srpska enters into force ("Official Gazette of Republika Srpska" No. 4/17).

Number: UO-282/17

Date: 25 July, 2017

PRESIDENT OF THE
MANAGEMENT BOARD
Mira Bjelac