Pursuant to Article 5, Paragraph 1, Item b), Article 20, Paragraph 2, Item b) and Article 37 of the Law on the Banking Agency of Republika Srpska ("Official Gazette of Republika Srpska, No.: 59/13 and 4/17), Articles 89 and 90 of the Banking Law of Republika Srpska ("Official Gazette of Republika Srpska, No.: 4/17, 19/18 and 54/19), Article 6, Paragraph 1, Item b) and Article 19, Item b) of the Statute of the Banking Agency of Republika Srpska ("Official Gazette of Republika Srpska, No.: 63/17), the Management Board of the Banking Agency of Republika Srpska, at the 4th session, held on 26 December 2023, adopted the

DECISION

ON MANAGING INTEREST RATE RISK

IN THE BANKING BOOK

1. General provisions

Subject of the Decision

Article 1

(1) This Decision shall stipulate minimum standards for setting up the system of managing interest rate risk in the banking book, measuring the interest rate risk in the banking book, standardized approach and supervisory outlier test, determining internal capital requirements for interest rate risk in the banking book, and data quality and internal controls relating to managing of interest rate risk in the banking book.

(2) The provisions of this Decision shall be applied to all banks headquartered in Republika Srpska to which the Banking Agency of Republika Srpska (hereinafter: the Agency) has issued an operating license.

(3) The bank is obliged to apply the provisions of this Decision on an individual and consolidated basis.

(4) Matters relating to the management of interest rate risk in the banking book not defined by this Decision but defined by the Banking Law of Republika Srpska (hereinafter: the Law) or other by-laws, shall be regulated by the provisions of such law or other by-law.

Definitions

Article 2

Definitions used in this Decision and by-laws enacted based on this Decision shall have the following meaning:

1) **Interest rate risk** is a prospective risk of negative effects on financial result and capital of a bank due to adverse movements in interest rates.

2) **Interest rate risk in the banking book** has the same meaning as in Article 90, Paragraph 7 of the Law and includes gap risk, basis risk and option risk.

3) **Interest rate sensitive instruments** are financial instruments sensitive to interest rate change and include financial asset items excluding CET1 capital deductible items, liabilities excluding those which are CET1 capital and other permanent instruments without maturity date and off-balance-sheet items in the banking book. Interest rate sensitive instruments also include non-performing exposures, interest rate and other derivatives where cash flows are fully or partially

determined by interest rate, and trading book activities referred to in Article 39 of the Decision on calculating capital in banks, unless interest rate risk for relevant positions in not covered within other risk.

Non-performing exposures are exposures defined by Article 2, Paragraph 1, Item 2) of the Decision on credit risk management and determining expected credit losses, and shall be included after impairment, i.e. provisioning for coverage of expected credit losses for off-balance sheet exposures.

4) **Gap risk** is the risk resulting from the term structure of interest rate sensitive instruments that arises from differences in the timing of their rate changes, covering changes to the term structure of interest rates occurring consistently across the yield curve (parallel risk) or differentially by period (non-parallel risk).

5) **Basis risk** is the risk arising from the application of different reference interest rates for instruments that have similar maturity or time period until the next interest rate change, i.e. the imperfect correlation of reference interest rates for instruments of assets and liabilities.

6) **Option risk** is the risk arising from options (derivatives) or embedded options into interest rate sensitive instruments, i.e. the risk arising from interest rate sensitive instruments where the holder will certainly exercise the option if it is in their financial interest to do so (automatic options) and the risk arising from flexibility embedded implicitly or within the terms of interest rate sensitive instruments, such that changes in interest rates may affect a change in the behavior of the client (behavioral options).

7) **Material currency** is any currency that accounts for more than 5% of total financial assets or liabilities in the banking book. Material currency shall also be the currency that accounts for less than 5% of total financial assets or liabilities in the banking book, if the sum of assets or liabilities per all currencies included in the calculation accounts for less than 90% of total financial assets or liabilities in the banking book, excluding interest rate non-sensitive items.

8) **Net interest income measures** are measures which include short-term effect of interest rate changes, i.e. used for the calculation of changes in expected future profitability within a given time horizon (at least one year) resulting from interest rate movements.

9) **Net interest income measures plus market value changes** are measures after the market value changes of instruments have been taken into account, which are valued at fair value due to interest rate movements.

10) **Economic value (EV) measures** are measures covering long-term effect of interest rate changes, i.e. used to calculate changes in the net present value of interest rate sensitive instruments over their remaining life resulting from interest rate movements. EV measures reflect changes in value over the remaining life of the interest rate sensitive instruments.

11) **Economic value of equity (EVE) measure** is a specific form of EV measure where changes in the net present value of interest rate sensitive instruments, resulting from interest rate movements, reflect the economic value of bank equity.

12) **Unconditional cash flow modelling** is a cash flow modelling under the assumption that the timing and amount of cash flows is independent of the specific interest rate scenario.

13) **Conditional cash flow modelling** is a cash flow modelling under the assumption that the timing and amount of cash flows is dependent of the interest rate scenario, i.e. it is assumed that the timing of cash flows of instruments with embedded options and instruments whose timing is dependent of client behavior is being modelled depending on interest rate movement scenario.

14) **Run-off balance sheet** is a balance sheet (including off-balance sheet items) where existing banking book positions are amortized and are not replaced by any new positions.

15) **Dynamic balance sheet** is a balance sheet (including off-balance sheet items) incorporating amended composition of positions depending on future business expectations, adjusted for the relevant scenario in a consistent manner.

16) **Constant balance sheet** is a balance sheet (including off-balance sheet items) in which all items when maturing, i.e. repricing, are replaced with items that have the same amount, maturity (repricing) period and spread components.

17) **Risk-free yield** is a yield that does not include instrument-specific or entity specific credit spreads or liquidity spreads.

18) **Parallel shock up** is a parallel upward shift of interest rates for all maturities.

19) **Parallel shock down** is a parallel downward shift of interest rates for all maturities.

20) **Flattener shock** is a non-parallel (rotation) shock with positive interest rate shocks for shorter maturities and negative interest rate shocks for longer maturities.

21) **Steepener shock** is a non-parallel (rotation) shock with negative interest rate shocks for shorter maturities and positive interest rate shocks for longer maturities.

22) **Short rates shock up** is a non-parallel shock, i.e. shock with larger positive interest rate shocks for shorter maturities.

23) **Short rates shock down** is a non-parallel shock, i.e. shock with larger negative interest rate shocks for shorter maturities.

24) **Pass-through rate** means the percentage of change of the market interest rate assigned to the deposit, i.e. which will be transferred to clients, to enable the bank to maintain the same level of stable deposits.

25) **Retail** - shall have the same meaning as in the Decision on liquidity risk management.

26) **Legal entity** - shall mean the client not meeting the terms of the retail definition.

27) **Non-maturity deposits -** deposits without a maturity date, in which the depositor is free to withdraw the deposit at any point in time. They are comprised of stable and non-stable deposits without a maturity date.

28) **Transactional retail deposits** – retail deposits (non-interest bearing and other retail accounts) without a maturity date where the component of interest income is irrelevant for the client's decision to hold cash funds in the account.

29) **Non-transactional retail deposits** – retail deposits without a maturity date where the component of interest income is relevant for the client's decision to hold cash funds in the account.

30) **Stable non-maturity deposits -** deposits without a maturity date, which are stable according to the historical monitoring, i.e. that are highly likely to remain undrawn, under the current level of unchanged interest rates on the market. They are comprised of core and non-core component.

31) **Core component of non-maturity deposits -** the amount of stable non-maturity deposits that are unlikely to be repriced even under significant changes in the interest rate environment.

32) **Non-core component of non-maturity deposits** - the amount of stable non-maturity deposits not meeting the condition for classification into the core component of stable deposits.

2. Minimum standards for setting up the system of managing interest rate risk in the banking book

Minimum requirements for managing interest rate risk in the banking book

Article 3

(1) The bank shall be obliged to set up and conduct a comprehensive, reliable and efficient system of managing interest rate risk in the banking book, which is proportional to the size and internal organization of the bank, and type, scope and complexity of its operations, i.e. business model, the bank's risk profile and defined risk appetite, all in accordance with the Decision on the bank management system and additional requirements defined by this Decision.

(2) Requirements referred to in Paragraph 1 of this Article shall refer to the bank's obligation to set up and conduct appropriate strategies, policies, procedures and systems for identification, measuring and monitoring of interest rate risk in the banking book, and managing of such risk, as well as appropriate limits in order to ensure that the bank shall maintain an adequate level of exposure to the interest rate risk in the banking book in accordance with the defined risk appetite.

(3) The bank shall be obliged to manage the risks arising from its exposure to the interest rate risk in the banking book, which affect its net interest income and economic value.

(4) The parent bank, within the banking group, shall be obliged to ensure that the arrangements and processes of managing interest rate risk in the banking book are consistently and correctly integrated on a consolidated and sub-consolidated basis.

Risk appetite for interest rate risk in the banking book

Article 4

(1) The bank shall be obliged to adopt clearly defined principles and rules for assuming risk, i.e. define the bank's appetite for the interest rate risk in the banking book, taking into account the level of acceptable impact of interest rate fluctuation on its net interest income and economic value.

(2) The bank that is significantly exposed to the gap risk, basis risk or option risk shall be obliged to define the risk appetite in relation to each of these sub-categories of the interest rate risk in the banking book, i.e. shall be obliged to set up limits for each of those sub-categories.

(3) The bank shall be obliged to clearly define the competences, responsibility lines and accountability for decision-making process in managing of the interest rate risk in the banking book, hedge instruments and strategies, and the capacity of assuming interest rate risk in the banking book.

(4) When determining risk appetite for the interest rate risk in the banking book, the bank shall be obliged to consider the risks affecting the net interest income as a consequence of accounting treatment of the banking book transactions. The impact on net interest income is not limited only to net interest income, but also to the impact of movements of interest rates on market value of instruments which, depending on accounting treatment, are reflected either on income statement or directly on capital (through accumulated other comprehensive income). The bank shall be obliged to also take into account the impact on net interest income linked to embedded instrument options measured at fair value within continuous shocks and stress scenarios of interest rates, as well as potential impact of interest derivatives if their efficiency was less due to interest rate movements.

(5) The bank which, when managing interest rate risk in the banking book, applies interest and other derivatives, shall be obliged to fully understand and document the usage of hedging in the form of those derivatives.

(6) The bank which applies client behavior modelling for measuring exposure to interest rate risk in the banking book shall be obliged to fully understand the process and results of modelling, and document the assumptions applied.

(7) In case the bank, in its business objectives, strategy and policy, defined a large risk appetite, its governing bodies shall be obliged to ensure proportionately reliable and efficient management system in accordance with Article 3 of this Decision.

Exposure limit system

Article 5

The bank shall be obliged to also set up limits limiting the exposure to interest rate risk in the banking book in accordance with defined risk appetite and ensure their consistent implementation, particularly the following:

1) limit policy which is proportional to the nature, size, complexity and capital adequacy of the bank, and capacity to measure own risks and managing of them,

2) limits at the level of the banking group which clearly defines that an acceptable level of interest rate risk in the banking book should be applied on a consolidated basis, and where applicable, on a level of individual members of the banking group,

3) reporting systems which ensure that the information on positions which exceed or are likely to exceed set limits shall be delivered, without delay, to the adequate management level, which shall, in accordance with defined bank policy, and when necessary, escalate to a higher management level, depending on the amount of deviation from defined limits, and measures to be taken in accordance with deviation from the defined limits,

4) reporting to the management and supervisory board on risk measures should be conducted at least quarterly, and the report should contain a comparative overview of current exposures with set limits.

Policies, procedures and processes for managing of interest rate risk in the banking book

Article 6

(1) The bank shall, based on the Strategy of risk appetite and risk management, adopt and implement adequate policies, procedures and processes for managing interest rate risk in the banking book. The bank shall be obliged to ensure that:

1) procedures for measuring and assessing interest rate risk in the banking book have been established,

2) access to measuring and appropriate assumptions for measuring and assessing interest rate risk in the banking book, including the method of defining internal capital requirements for interest rate risk in the banking book, are adequate and proportional,

3) assumptions of applied models are regularly reviewed, and when necessary amended,

4) standards for valuing positions and measuring the efficiency of them are defined,

5) an appropriate documentation and control over allowed risk hedging strategies and hedging instruments is in place,

6) competences and responsibilities of competent bodies and bank employees in charge of managing exposure to interest rate risk in the banking book have been defined in a clear and detailed manner.

(2) Policy for managing interest rate risk in the banking book should include all components of interest rate risk in the banking book which are important for the bank, and include, inter alia, the following:

1) internal definitions and set up clear boundaries between the banking book and the trading book,

2) detailed definition of economic value and its compliance with the method applied for valuing assets and liabilities (for example, based on discounted value of future cash flows and based on discounted value of future net interest income), and which is adopted for internal use,

3) detailed definition of net interest income with changed market value of instruments and its compliance with the approach the bank applies when developing financial plans and financial projections, and which is adopted for internal use,

4) severity and form of different interest rate shocks applied for internal calculation of interest rate risk in the banking book, if applicable,

5) application of approach for conditional cash flow modelling or unconditional cash flow modelling,

6) treatment of ‘pipeline transactions’ (including related risk hedging),

7) aggregating multi-currency interest rate exposures (for example, cross-currency interest rate swaps),

8) measuring and managing basis risk arising from different reference interest rates,

9) capital used for calculation which is applied when measuring interest rate risk in the banking book within the Internal Capital Adequacy Assessment Process (ICAAP),

10) treatment of behavioral assumptions of current and saving accounts (for example, assumed maturity for liabilities with contracted short maturity, however long maturity from the aspect of client behavior),

11) measuring interest rate risk in the banking book arising from behavioral and automatic options of assets and liabilities,

12) to which extent data used for internal measuring calculations is detailed, if applicable,

13) internal definition of commercial margin and appropriate methodology for internal treatment of commercial margins.

(3) It is required from the bank to regularly, and at least annually, review policies for managing interest rate risk in the banking book, and if necessary to perform audit thereof.

Competences and responsibilities

Article 7

(1) The bank supervisory board shall be obliged to:

1) adopt strategy of managing interest rate risk in the banking book, which may be an integral part of the overall strategy of risk management in the bank, policies also including clearly defined risk appetite for interest rate risk in the banking book, and ensure its implementation,

2) adopt an adequate organizational structure with accurately established and delimited lines of authority, which enables ensuring the independence of functions of managing interest rate risk from the functions of risk assuming for interest rate risk in the banking book,

3) adopt enactments on interest rate risk measurement system,

4) adopt an enactment on system of internal controls over the process of managing interest rate risk in the banking book, and

5) stipulate content and frequency of reporting on interest rate risk and ensure the overall and reliable system of reporting on interest rate risk.

(2) The bank management shall be obliged to:

1) propose strategy and policy of risk assuming and managing interest rate risk in the banking book which may be an integral part of the overall strategy, also including a clearly defined risk appetite for interest rate risk in the banking book, adopt other internal enactments for managing interest rate risk in the banking book (operational procedures, instructions, and similar), and ensure their consistent implementation,

2) propose an adequate organizational structure with accurately established and delimited lines of authority, which enables ensuring the independence of functions of managing interest rate risk from the functions of risk assuming for interest rate risk in the banking book,

3) propose enactments on interest rate risk measurement system (methodologies, assumptions which must be adequate, documented and stable over the horizon period, input data and similar),

4) propose an enactment on system of internal controls over the process of managing interest rate risk in the banking book,

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

6) ensure implementation of periodic validation of models and methods of measurement of interest rate risk in the banking book and assessment of adequate risk model,

7) ensure the implementation of stress testing related to interest rate risk in the banking book, and apply the results when making decisions and revising policies, internal enactments and limits related to interest rate risk,

8) implement a defined risk appetite for interest risk in the banking book,

9) implement the framework of hedging strategy for interest rate risk in the banking book.

3. Measuring interest rate risk in the banking book

Measuring interest rate risk in the banking book

Article 8

(1) To measure interest rate risk in the banking book, the bank shall be obliged to use at least one measure based on net interest income, including the change in the market value of instruments and at least one method of measuring the economic value, which together include all components of interest rate risk in the banking book.

(2) In measuring interest rate risk in the banking book, the bank shall be obliged to apply a standardized approach, which it will also use for the purposes of reporting to the Agency. Depending on the size, complexity of the activity and risk profile, the bank may additionally apply its own calculations and assumptions, i.e. its own internal models.

(3) If the Agency assesses that the standardized approach referred to in Paragraph 2 of this Article has not been adequately applied, it may order the bank to apply a simplified standardized approach.

(4) The bank shall be obliged to establish reliable measurement systems that include all components and sources of interest risk in the banking book that are relevant to its business model.

(5) The bank shall be obliged to measure its exposure to interest rate risk in the banking book in terms of possible changes in economic value and net interest income with changes in the market value of instruments and shall be obliged to use the complementary characteristics of both approaches in order to encompass the complex nature of interest rate risk in the banking book in the short- and long-term time frames. It shall be particularly obliged to measure:

1) the overall effect of key modeling assumptions for measuring interest rate risk in the banking book in terms of the economic value measure and the net interest income measure, and

2) interest rate risk in the banking book arising from interest rate derivatives, if it is relevant for the business model.

(6) The bank shall be obliged to fully integrate the supervisory outlier test into an internal system of measuring exposure to interest rate risk and use it as a tool in measuring exposure to interest rate risk in the banking book.

Methods of measuring interest rate risk in the banking book

Article 9

(1) The bank shall be obliged to identify and measure all components of interest rate risk in the banking book specified in Article 2, Paragraph 1, Items 4-6 of this Decision, and in order to determine all the components, the bank shall be obliged to consider at least:

1) gap risk – inventory (dispersion and concentration) of mismatches in different time bands,

2) basis risk - inventory of instrument groups depending on reference interest rates,

3) option risk – inventory of instruments with automatic and behavioral options by volume.

(2) Depending on the size of the bank, and the complexity of its activities and risk profile, the bank should use a number of quantitative tools that correspond to its risk exposure. The bank should fully understand the limitations of each quantitative tool used, as well as the consequences of different accounting treatments and banking book transactions.

Managing models for interest rate risk in the banking book

Article 10

(1) Regarding the application of Article 8, Paragraph 2 of this Decision, the bank may use in-house developed models or models developed by a third party, whereby it shall be obliged to use the bank's internally available data, which are relevant to its business model and interest rate risk profile. Before obtaining internal approval for the use of the model, the organizational unit or function independent of the development of the model should review and validate the process of determining input data, assumptions, modeling methodology, and model results. The same requirements shall be applied in the event that the model was developed by a third party, where the bank shall be obliged to ensure that the bank's employees fully understand the model, and that they are able to explain in detail the process of determining input data, assumptions, modeling methodology, and model results to the Agency during the supervision.

(2) The bank shall be obliged to ensure that the validation of the measurement model of interest rate risk in the banking book and the assessment of risk model are integrated into the governing processes and policies independently of their development. The validation policy should determine the following:

1) employees and/or organizational units responsible for the development, validation, documentation, introduction and use of the model, and

2) responsibilities and policies for model control, among other things for the development of initial and ongoing validation procedures, evaluation of results, approval, version control, exception, escalation report, modification and decommission model processes.

(3) The model validation framework should include the following five core elements:

1) evaluation of conceptual and methodological soundness, including developmental evidence,

2) ongoing model monitoring, including process verification and benchmarking,

3) outcomes analysis, including back-testing of key internal parameters (e.g., stability of deposits, loan prepayment rates, early redemptions of deposits, pricing of instruments),

4) thorough assessment of expert opinions and judgements used when developing and applying models; and

5) validation of diversification assumptions (key internal parameters should be calculated sufficiently granularly by segment in accordance with the bank's specific business model).

(4) Before issuing an approval for the use of the model, the bank's management shall be obliged to review the validation results and initial validation of the model as well as all recommendations. The bank shall be obliged to ensure that the model, even after adoption, undergoes ongoing review, process verification and validation at a frequency that is consistent with the level of model risk determined by the bank.

(5) In the process of ongoing review, the bank shall be obliged to establish quantitative and qualitative criteria, which obligate employees who perform model validation to inform the bank's management in a timely manner in order to determine corrective measures and restrictions on model usage. As part of

ongoing model review, there should be a clear version control process of the model and associated authorizations.

(6) The bank may outsource the development and/or validation of the model for managing interest rate risk in the banking book, provided that these models are adequately customized to the specific characteristics of the bank, and in that case shall be obliged to conduct the process in accordance with the provisions of the Decision on outsourcing management before the start of model usage. The bank shall be obliged to provide appropriate documentation on the usage of the model developed and/or validated by a third party and on all special customizations. Thereby, the banks are expected to fully understand the analytics, assumptions and methodologies of the used model and to ensure that they are adequately integrated into the overall systems and processes of the bank risk management.

Assumptions of measuring interest rate risk in the banking book

Article 11

(1) When measuring interest rate risk in the banking book, the bank shall be obliged to fully understand and document key behavioral and modelling assumptions, which should be aligned with business strategies and tested at least annually.

(2) In relation to the different measures of interest rate risk in the banking book, the bank should take into account assumptions made for the purpose of risk quantification in relation to the following areas:

1) the exercise of interest rate options (automatic or behavioral) by both the bank and its clients under specific interest shock and stress scenarios,

2) the treatment of term deposits without contracted maturity,

3) the treatment of fixed rate loans and fixed rate loan commitments in terms of the risk of early redemption,

4) the treatment of term deposits in terms of the risk of early redemption.

Behavioral assumptions for accounts with embedded client optionality

Article 12

(1) In assessing the implications of embedded optionality, the bank should take into account:

1) the potential impact on current and future loan prepayment speeds arising from the interest rate scenario, i.e. underlying economic environment and contractual features,

2) the elasticity of adjustment of product rates to changes in market interest rates,

3) the migration of balances between different product types as a result of changes in their features, terms and conditions.

(2) The bank should have policies in place governing the setting of and the regular assessment of the key assumptions for the treatment of on- and off-balance-sheet items that have embedded options. This means that the bank should:

1) identify all material products and items subject to embedded options that could affect either the interest rate expected cash flow or the behavioral repricing date (as opposed to contractual maturity date) of the relevant balances,

2) have appropriate strategies for interest rate determining and risk mitigation strategies (e.g., use of derivatives or early redemption penalties chargeable to the client as an offset to the potential break costs,

3) ensure that modelling of key behavioral assumptions is justifiable in relation to the historical data and based on prudent hypotheses.

Behavioral assumptions for accounts without specific repricing dates

Article 13

(1) In making behavioral assumptions about accounts without specific repricing dates for the purposes of interest rate risk management, the bank shall be obliged to:

1) identify "core' component" – i.e., deposits that are stable and unlikely to reprice even under significant changes in interest rate environment,

2) ensure that modelling assumptions for these deposits reflect depositor characteristics (e.g., retail/legal entities) and account characteristics (e.g., transactional/non-transactional) in a manner that:

1. retail transactional deposits include non-interest-bearing and other retail accounts whose remuneration component is not relevant in the client's decision to hold money in the account,

2. retail non-transactional deposits include retail accounts whose remuneration component is relevant in the client's decision to hold money in the account,

3. legal entity deposits include accounts from corporate and other legal entities, excluding financial client deposits or other fully price-sensitive accounts,

3) assess the potential migration between deposits without specific repricing dates and other deposits that could modify, under different interest rate scenarios, key behavioral modelling assumptions,

4) consider potential constraints on the repricing of retail deposits in low or negative interest rate environments and the effect that such constraints may have on the stability of deposits under different interest rate scenarios,

5) ensure that assumptions about the decay of core component and other modelled balances are prudent and appropriate in balancing the benefits to net interest income against the additional

economic value risk entailed in locking in a future interest rate return on the assets financed by these balances, and the potential forgone revenue under a rising interest rate environment,

6) rely on statistical or quantitative methods to determine the behavioral repricing dates and the cash flow profile of non-maturity deposits, along with additional logical controls and the contribution from different experts within the bank,

7) understand the impact of the used assumptions on the measures of interest rate risk in the banking book and internal capital allocation decisions, by using the contractual terms rather than behavioral assumptions to isolate the impact of assumptions on both types of measures,

8) undertake stress testing to understand the sensitivity of the chosen risk measures to changes in key assumptions, taking the results of such tests into account in internal capital allocation decisions to cover the internal capital requirements for the interest rate risk in the banking book.

(2) Non-maturity deposits of financial clients shall not be subject to modelling behavioral assumptions, except operational deposits defined by Article 38, Paragraph 1, Item 1 of the Decision on liquidity risk management.

Interest rate shock scenarios for ongoing management

Article 14

(1) The bank shall be obliged to regularly measure its exposure to interest rate risk in the banking book in the context of the different measures of interest rate risk in the banking book under various interest rate shock scenarios for potential changes in the level and shape of the interest rate risk-free yield curves, and changes in the relationship between different reference interest rates (i.e. basis risk). The bank shall be obliged to conduct measurement at least quarterly and more frequently in times of increased interest rate volatility or increased levels of interest rate risk in the banking book.

(2) For the purpose of internal measurement, and taking into account the proportionality principle, the bank may apply a conditional or unconditional cash flow modelling approach.

(3) The bank shall be obliged to assess exposures in each material currency in which it has positions in interest rate sensitive instruments. For the material currency exposures, the interest rate shock scenarios should be currency-specific and consistent with the underlying economic characteristics of that currency.

(4) For the purpose of ongoing management of interest rate risk in the banking book, the bank shall be obliged to take into account six interest rate shock scenarios:

1. parallel shock up

2. parallel shock down

3. flattener shock

4. steepener shock

5. short rates shock up

6. short rates shock down.

The method of calculating interest rate shock scenarios shall be described in more detail in the Agency's separate enactment.

(5) The Agency may request from the bank to apply additional interest rate shock scenarios other than those stipulated by Paragraph 4 of this Article.

(6) The bank shall be obliged to use the results of the application of the interest rate shock scenarios as a basis for making decisions at the appropriate levels of management, which includes strategic or business decisions and decisions on risk management, and when determining and reviewing policies and limits for interest rate risk in the banking book.

4. Standardized approach and supervisory outlier test

Standardized approach and supervisory outlier test

Article 15

(1) The bank shall be obliged to, as a minimum, for the purpose of measuring the interest rate risk in the banking book, assess the interest rate risk by positions in the banking book in accordance with the standardized approach or in accordance with the simplified standardized approach if the Agency assesses that the bank's standardized approach is not adequate.

(2) The bank shall be obliged to regularly, and at least quarterly, calculate:

1) the effect of parallel shocks, upward and downward shock (six scenarios stipulated in Article 14, Paragraph 4 of this Decision) on its economic value of equity measure,

2) the effect of parallel shocks (two scenarios stipulated in Article 14, Paragraph 4, Items 1 and 2) on its net interest income measure, i.e. annual net interest income.

(3) If the drop in the economic value of equity, referred to in Paragraph 2, Item 1 of this Article, is above 15% of the bank's Tier 1 capital under any of the six scenarios, the bank shall be obliged to notify the Agency thereof immediately.

(4) If the drop in the annual net interest income of the bank, referred to in Paragraph 2, Item 2 of this Article, is above 2.5% of the bank's Tier 1 capital, as a consequence of two supervisory shocks, the bank shall be obliged to notify the Agency thereof immediately.

(5) The Agency shall by a separate enactment stipulate the method of applying standardized and simplified standardized approach, reporting templates on supervisory outlier test and reporting time frames.

5. Determining internal capital requirements for the interest rate risk in the banking book

Identification, calculation and coverage of internal capital requirements

Article 16

(1) It is necessary for the bank to take into account the total impact of the interest rate risk arising from the transactions conducted in the banking book when determining internal capital requirements based on the results of internal measurement systems, taking into account its risk appetite, and key assumptions and risk limits.

(2) The bank shall be obliged to consider the following when assessing the amount of internal capital requirements for interest rate risk in the banking book:

1) internal capital requirements arising from the impact of unfavorable movements of interest rates on economic value, and

2) internal capital requirements arising from the impact of changes in interest rates on future net interest income measures and market value changes of instruments.

(3) The bank should not rely only on supervisory assessments of capital adequacy for interest rate risk in the banking book or on the outcome of the supervisory outlier test, but shall be obliged to develop and use its own methodologies for capital allocation, based on its risk appetite, level of risk and strategy for assuming and managing risks. In determining the appropriate level of capital, it is necessary to consider both the amount and quality of required capital.

(4) When assessing the adequacy of determined internal capital requirements for interest rate risk in the banking book, the bank shall be obliged to take into account the following:

1) the amount and maturity of the internal limits of exposure to interest rate risk in the banking book, and whether these limits have been reached at the time of determining the internal capital requirements,

2) the expected cost of hedging the open positions taking into account the expected future level of interest rates,

3) sensitivity of internal measures of interest rate risk in the banking book to key or imperfect modeling assumptions,

4) the impact of shock and stress scenarios on positions priced with different reference interest rate indices (basis risk),

5) the impact on economic value and net interest income plus instrument market value changes of mismatched positions in different currencies,

6) the distribution of capital relative to risks across legal entities included in the banking group's prudential perimeter of consolidation, in addition to the adequacy of overall internal capital requirements on a consolidated basis,

7) the drivers of risk, and

8) the circumstances under which the risk may materialize.

(5) To calibrate the amount of internal capital requirements for interest rate risk in the banking book, the bank shall be obliged to use measurement systems and a range of interest rate shock and stress scenarios, which are adapted to the bank's risk profile in order to quantify the potential scale of any effects of interest rate risk in the banking book under adverse conditions.

Stress testing

Article 17

(1) The bank shall be obliged to perform stress testing for interest rate risk in the banking book, for the purpose of quantifying the internal capital requirements, at least annually and more frequently in times of increased interest rate volatility and increased levels of interest rate risk in the banking book.

(2) In performing stress testing referred to in Paragraph 1 of this Article, the bank shall be obliged to consider the outcome of reverse stress tests in order to:

1) identify interest rate scenarios that could severely threaten the capital, economic value and net interest income measures plus instrument market value changes, and

2) reveal vulnerabilities arising from risk hedging strategies and the potential behavioral reactions of clients.

(3) In testing under stressed conditions, the bank shall be obliged to use larger and more extreme shifts and changes in interest rates than those used for the purpose of ongoing management, including at least the following:

1) substantial changes in the relationships between reference interest rates (basis risk),

2) sudden and substantial shifts in the risk-free yield curve (both parallel and non-parallel),

3) breakdowns of key assumptions about the behavior of asset and liability classes,

4) significant changes to current market and macro conditions and

5) specific scenarios that relate to the bank's business model and risk profile.

(4) The bank shall be obliged to use the test results from this article as a basis for making decisions at the appropriate levels of management as well as for the distribution of capital to cover internal capital requirements for interest rate risk in the banking book.

6. Data quality and internal controls

Information system and data quality

Article 18

(1) The bank shall be obliged to support the management of interest rate risk in the banking book in a timely and accurate manner through information systems and applications that the bank uses for:

1) implementation, processing and recording of business transactions,

2) identification, measurement and aggregating exposure to interest rate risk in the banking book,

3) developing reports.

(2) The systems referred to in Paragraph 1 of this Article should enable:

1) collection of interest rate risk data for all bank exposures to interest rate risk in the banking book, including exposures to gap, basis and option risk, as well as the measurement system from Article 8 of this Decision for identifying, measuring and aggregating the main drivers of exposure to interest rate risk in the banking book,

2) fully and clearly recording of all transactions, taking into account the characteristics of interest rate risk in the banking book related to those transactions,

3) sufficient flexibility to accommodate a reasonable range of shocks and stress scenarios and any additional scenarios the bank uses for internal measurement,

4) measurement, assessment and monitoring of the contribution of individual transactions to the overall exposure,

5) calculation of the economic value measure and net interest income measure for the bank's interest rate risk in the banking book, as well as the calculation of the measure based on interest rate shocks and stress scenarios of the Agency's, and

6) inclusion of additional restrictions that the Agency may request for assumptions of internal risk parameters.

(3) Systems referred to in Paragraph 1 of this Article should be adjusted to the complexity and number of transactions due to which the interest rate risk in the banking book arises.

(4) The information system should be able to gather detailed information on the repricing date(s) of a given transaction, interest rate type or reference interest rate, any options (including early repayment or redemption) and the fees relating to the exercise of these options.

(5) The bank must have in place adequate organizational controls of information systems to prevent the loss of data used by applications for interest rate risk in the banking book, as well as controls of changes to the coding used in those applications, so as to ensure, in particular:

1) the reliability of input data and parameters, and the integrity of processing systems for models of interest rate risk in the banking book,

2) that the likelihood of errors occurring in the information system is minimized and

3) that adequate measures are taken if market disruptions occur.

(6) The bank shall be obliged to implement appropriate procedures to ensure the accuracy of the data entered into the information systems, and to establish appropriate mechanisms for verifying the accuracy of the aggregation procedure and the reliability of the model outcome.

(7) Data inputs should be automated as much as possible to reduce possible errors, and data mapping should be periodically reviewed and tested against an approved model version.

(8) The bank shall be obliged to identify potential reasons for discrepancies and irregularities that may arise at the time of data processing and should have procedures in place to handle those discrepancies and irregularities, including procedures for the mutual reconciliation of positions to enable these discrepancies and irregularities to be eliminated.

(9) The parent bank of the banking group shall be obliged to ensure that the input data used to feed models measuring the interest rate risk in the banking book across the group is consistent with the data used for financial planning.

Internal controls

Article 19

(1) The bank shall be obliged to carry out regular reviews and assessments of its internal control systems and procedures for managing interest rate risk in the banking book.

(2) Reviews referred to in Paragraph 1 of this Article should be carried out regularly by employees or organizational units independent of the function being reviewed.

(3) The bank shall be obliged to set up a regular review of the procedures for identification, measuring, monitoring and controlling the interest rate risk in the banking book, at least within a three-year cycle, by the internal audit function.

Internal reporting

Article 20

(1) Internal reports shall be submitted to the supervisory board and management at least on a quarterly basis.

(2) The internal reports referred to in Paragraph 1 of this Article should contain information at relevant levels of aggregation (by consolidation level and currency) and the level of information adapted to the individual management level and to the specific situation of the bank and environment. The reports should contain at least:

1) summaries of the aggregated exposures of interest rate risk in the banking book, including information on exposure to gap, basis and option risk; the reports should contain explanations of all material positions of assets, liabilities, cash flows and strategies that are driving the level and direction of interest rate risk in the banking book,

2) alignment with policies and limits,

3) key modelling assumptions, such as characteristics of non-maturity deposits, prepayments on fixed rate loans, early withdrawals of fixed term deposits, drawing of commitments, currency aggregation and treatment of commercial margins,

4) data on the impact of key modelling assumptions on measuring interest rate risk in the banking book in terms of economic value measure and net interest income measure, including changes in assumptions under various interest rate scenarios,

5) data on the impact of interest rate derivatives and other derivatives on measuring interest rate risk in the banking book,

6) data on the impact of fair value instruments, including Level 3 assets and liabilities, as defined by the International Financial Reporting Standards 13 – Fair value measurement (IFRS 13), on measuring interest rate risk in the banking book,

(7) results of stress tests as referred in Article 17 of this Decision, the interest rate shocks as referred in Article 14 of this Decision, the supervisory outlier tests as referred in Article 15 of this Decision, and assessments of sensitivity to key assumptions and parameters, and

8) summaries of the reviews of policies of interest rate risk in the banking book, procedures and adequacy of the measurement systems, including any findings of internal and external auditors or consultants.

(3) The reports referred to in Paragraph 1 of this Article should include the results of the model reviews and audits as well as comparisons of past forecasts or risk estimates with actual results to inform on potential modelling shortcomings, such as:

1) assessment of modelled prepayment losses against historical realized losses and

2) identifying portfolios exposed to material changes in market value.

7. Transitional and final provisions

Transitional and final provisions

Article 21

(1) This Decision shall enter into force on the eighth day from the date of its publication in the "Official Gazette of Republika Srpska” and shall be applied as of 30/06/2025.

(2) Banks shall be obliged to harmonize their operations with the provisions of this Decision by 30/06/2025.

(3) With the implementation of this Decision, the Decision on managing interest rate risk in the banking book ("Official Gazette of Republika Srpska", No.: 75/17) shall cease to be valid.

Number: UO-44/23

Date: 26 December, 2023

PRESIDENT OF THE
MANAGEMENT BOARD
Dejan Kusturić