

## **Regulation on market risk management in banks**

### **1. General provisions**

1.1. This Regulation have been developed in accordance with Article 34.5 of the Law of the Republic of Azerbaijan ‘on Banks’ and determine minimum requirements for market risk management in banks, as well as in local branches of foreign banks (hereinafter – banks).

1.2. The organizational structure of market risk management in banks is regulated by the ‘Corporate governance standards in banks’ approved by Decision No.41/1 of the Management Board of the Central Bank of the Republic of Azerbaijan (hereinafter – the Central Bank) dated 28 August 2023.

### **2. Definitions**

2.1. The definitions used in this Regulation bear the following meanings:

2.1.1. market risk – the risk of losses arising from changes in financial and commodity markets, in particular changes in interest rates, foreign exchange rates, credit spreads, and the value of securities and commodities.

2.1.2. interest rate risk – the risk arising from unfavorable changes in interest rates. Interest rate risk includes basis risk, repricing and price mismatch risk, optionality risk, and yield curve risk.

2.1.3. currency risk – risk arising from unfavorable changes in exchange rates.

2.1.4. capital risk – the risk arising from unfavorable changes in the value of securities purchased by the bank.

2.1.5. commodity risk – the risk arising from unfavorable change in the value of commodities in the market.

2.1.6. market liquidity risk – the risk that, due to limited market liquidity or unfavorable changes in market conditions, an asset cannot be sold at its market price, or that, for any reason, the market price of such asset cannot be determined.

2.1.7. credit spread – the additional interest rate required by the market, over and above the interest rate established for risk-free assets (e.g., government securities), in order to compensate for the credit risk of an asset.

2.1.8. trading book – positions held by banks for the purpose of conducting short-term trading transactions in financial markets or benefiting from short-term (actual or expected) price movements or arbitrage profits. This definition also includes derivative financial instruments (hedging instruments) used to mitigate the risks related to such positions.

2.1.9. arbitrage profit – profit earned from price differences as a result of buying and selling the same asset at different prices in different markets.

2.1.10. banking book – all on- and off-balance-sheet items not included in the trading book.

2.1.11. interest rate risk in the banking book (hereinafter – IRRBB) – the risk to bank’s capital and earnings arising from unfavorable changes in interest rates that affect positions in the banking book.

2.1.12. credit spread risk in the banking book (hereinafter – CSRBB) – credit spread risk arising from credit risk-bearing instruments not covered by IRRBB.

2.1.13. basis risk – the risk arising from changes in interest rates of indices based on different interest rate benchmarks for financial instruments with the same or similar maturities.

2.1.14. repricing or maturity mismatch risk – the risk arising from a mismatch between the timing of interest rate changes on bank's assets and liabilities and the timing of related cash flows.

2.1.15. optionality – the counterparty's option embedded in bank's on- and off-balance-sheet assets and liabilities that affects the timing and amount of the bank's cash flows.

2.1.16. optionality risk – the risk arising from items that contain optionality. This risk consists of behavioral optionality risk and automatic optionality risk.

2.1.17. behavioral optionality risk – the risk arising from interest rate changes that influence customer behavior (e.g., the exercise by a borrower of the right to repay a loan early without any penalty, or the exercise by a customer of the right to withdraw a deposit early. Such rights are determined by contractual terms or by legislation).

2.1.18. automatic optionality risk – the risk arising from the exercise, where it is financially beneficial to the customer, of an explicit right granted to the customer under the contractual terms of financial instruments.

2.1.19. yield curve risk – the risk arising from non-parallel changes in interest rates across different maturities.

2.1.20. economic value of equity (EVE) – the present value of the bank's expected net cash flows. The present value of expected net cash flows is calculated by subtracting the present value of expected net cash flows of liabilities from the present value of expected net cash flows of assets and adding the present value of expected net cash flows of off-balance-sheet items.

2.1.21. the price value of a basis point (hereinafter – PV01) – a measure that quantifies the change in the present value of the bank's interest rate-sensitive assets and liabilities resulting from a 1 basis point (i.e., 0.01%) change in interest rates.

2.1.22. economic value at risk (hereinafter – EVaR) – a measure that quantifies the maximum expected loss in the economic value of equity over a specified time horizon and at a given confidence level.

2.1.23. stress test – an assessment tool used to evaluate the potential impact of one or more shocks on a bank's financial condition.

2.1.24. shock – a probable and measurable event that may potentially affect bank's activities.

2.2. The definitions 'risk profile', 'risk appetite' and 'risk limit' used in this Regulation bear the meanings specified in the 'Corporate governance standards in banks' approved by Decision No. 41/1 of the Management Board of the Central Bank dated 28 August 2023; the definition 'liquid market' bear the meaning specified in the 'Regulation on prudential ratios and requirements related to credit risks, including large credit risk exposures' approved by Decision No. 29/1-2 of the Management Board of the Central Bank dated 22 July 2022; the definition 'hedging' bear the meaning specified in the 'Regulation on setting open currency position limits in banks' approved by Decision No. 45/1 of the Management Board of the Central Bank dated 23 December 2025; and the definition 'model validation' bear the meaning specified in the 'Regulation on credit risk management in banks' approved by Decision No. 46/4 of the Management Board of the Central Bank dated 21 September 2023.

### **3. The market risk management system**

3.1. The Bank establishes a market risk management system, commensurate with the nature and scale of its operations, the specifics of its activities, the environment in which it operates, and its risk profile.

3.2. The market risk management system is integrated into the bank's overall risk management process and, at a minimum, covers interest rate risk, currency risk, capital risk, and commodity risk.

3.3. The establishment of the bank's market risk management system and the assessment of its effectiveness are ensured by the bank's Supervisory Board.

3.4. The Supervisory Board, at least annually, reviews the adequacy of the market risk management system with respect to market risks arising from the impact of other types of risk, overall market, and macroeconomic conditions, as well as results of assessments of the market risk management system conducted by internal audit, external audit, and/or other specialized third parties, and makes relevant decisions.

3.5. The market risk management system should be established in a manner adequate to bank's operational policies and at a minimum, cover the following elements:

3.5.1. policies and procedures for market risk management.

3.5.2. requirements for the measurement of market risks.

3.5.3. requirements for the measurement of IRRBB.

3.5.4. requirements for stress testing.

3.5.5. monitoring and reporting of market risks.

3.6. The market risk management system covers all structural units of the bank, its domestic and cross-border operational units, as well as its subsidiary undertakings.

#### **4. Market risk management policies and procedures**

4.1. The market risk management policy is developed in accordance with the bank's business strategy and risk appetite. In addition to the requirements for risk management policies set out in the 'Corporate Governance Standards in Banks' approved by the Management Board of the Central Bank on 28 August 2023 under Decision No. 41/1, the market risk management policy should, at a minimum, cover the following:

4.1.1. tools for identification and assessment of market risks and the use of their results.

4.1.2. risk limits for market risks and the frequency of their review.

4.1.3. definition of the scope of activities of structural units exposed to market risk.

4.1.4. determination of authorities and responsibilities of bank's Supervisory and Management Boards, structural units included in the internal control function, and other personnel responsible for market risk management.

4.1.5. the establishment of the process for determining the level of capital adequate to cover unexpected losses.

4.1.6. market risks specific to new products.

4.1.7. the review, reporting, and resolution procedures for unusual or contentious market transactions (valuations not consistent with market conditions, sudden trading of illiquid assets, price manipulation, transactions with suspicious counterparties, etc.).

4.1.8. the review and, where necessary, the updating of the policy in the event of changes to the bank's market risk profile.

4.1.9. information on shocks used in stress testing.

4.2. The bank develops internal rules for the management of market risks, commensurate with the nature of its activities and the complexity of its operations. These rules comprehensively regulate bank's market risk-generating activities and the market risk management process and serve as guidance for the implementation of the bank's market risk policy.

4.3. Internal rules designate the structural unit responsible for centralized control over market risk management, define its authorities and reporting lines, establish procedures for reporting, and specify its interactions with bank's other structural units.

4.4. The bank should review its market risk policy and internal rules at least annually and make amendments, if necessary.

## **5. Requirements for the market risk measurement**

5.1. The bank should regularly measure market risk and monitor changes in market risk factors (interest rates, exchange rates, market prices of securities, commodity prices, etc.) as well as other market conditions. Within the framework of market risk, the bank should, at least, measure the following risks:

5.1.1. Interest rate risk: measurement of interest rate risk should cover revaluation or maturity mismatch risk arising from positions in the bank's trading book, yield curve risk, basis risk, and optionality risk. In addition, the sensitivity of income and expenses to changes in interest rates should be taken into account. Interest rate risk should be calculated separately for each material currency (a currency in which the volume of assets or liabilities constitutes 5% or more of bank's total assets or liabilities). For each material currency, yield curves should be divided into different maturities, and the impact of changes in interest rates on each maturity should be assessed.

5.1.2. IRRBB: requirements for the measurement of IRRBB are set out in Section 6 of this Regulation.

5.1.3. Currency risk: the currency risk is measured based on its open currency positions. Requirements for the calculation of open currency positions are established by the 'Regulation on setting open currency position limits in banks' approved by the Management Board of the Central Bank on 23 December 2025 under Decision No. 45/1.

5.1.4. Capital risk: when assessing capital risk, the bank should identify risk factors separately for each equity market included in its portfolio. The assessment of equity risk should take into account overall price changes in the equity market (e.g., market indices), sector-specific risks in the relevant market, and, where necessary, risks related to individual issuers.

5.1.5. Commodity risk: In addition to risks arising from direct changes in spot prices (current trading prices), the bank is exposed to basis risk, interest rate risk, and forward gap risk (risks arising from changes in the prices of commodity forward contracts due to factors other than interest rate changes) within the framework of commodity risk. The bank actively involved in commodity trading, should also take into account the difference in convenience yield (i.e., the implicit economic value arising from physically holding the commodity) between spot positions and positions in derivative financial instruments.

5.1.6. Market liquidity risk: The bank should regularly assess market liquidity risk and the hedging capacity of its positions. Considering that markets in less developed or emerging countries carry higher liquidity risk, banks should conduct more in-depth analyses of such markets, apply more advanced and additional approaches to assess liquidity risk, and manage it effectively. Where market liquidity risk cannot be measured quantitatively, it should be assessed qualitatively and appropriately reflected in reports.

5.2. Models and statistical analyses used for the measurement of market risks should base on assumptions that reflect reality. Models should be subject to regular independent validation, and validations should be conducted objectively and without bias. Personnel performing model validation should not have any dependency on those developing the models (e.g., model

validation and model development should not be performed by the same staff member, and conflicts of interest should be avoided).

5.3. The bank conducts stress tests to assess the impact of sharp changes in market risk factors (interest rates, exchange rates, and security prices) on bank's financial results and capital position, determine compliance with its risk appetite, and measure potential losses.

## 6. Requirements for IRRBB measurement

6.1. IRRBB consists of revaluation or maturity mismatch risk, basis risk, and optionality risk.

6.2. The bank should be fully informed of all characteristics of IRRBB, identify positions subject to IRRBB, and ensure the measurement, monitoring, and management of this risk. This requirement also applies to bank's CSRBB.

6.3. IRRBB is measured using both the method of changes in capital value and the income-based method.

6.4. The Economic Value of Equity (EVE) method is used to determine the sensitivity of the bank's capital position to interest rate risk over the long term and calculates the change in the present value of the bank's expected net cash flows under scenarios of interest rate movements. The EVE method is calculated using the following formula:

$$\Delta EVE = EVE_{\text{calculated under the severest scenario}} - EVE_{\text{calculated under the baseline (no-shock) scenario}}$$

where, EVE - economic value of bank's equity.

6.5. The Bank may assess whether the  $\Delta EVE$  exceeds 15% of its Tier 1 capital.

6.6. The income-based measurement method is used to assess the sensitivity of the bank's capital position to short-term interest rate risk and calculates changes in the bank's net interest income under stress-testing scenarios. The income-based measurement method is calculated with the below formula:

$$\Delta NII = NII_{\text{calculated under the severest scenario}} - NII_{\text{calculated under the baseline (no-shock) scenario}}$$

where NII – bank's net interest income. The bank's net interest income is determined by deducting interest expenses from interest income. Calculations should be carried out over a 12-month period, taking into account the constant balance sheet principle (calculations are performed without changing the total size of bank's balance sheet).

6.7. In addition to the approach specified in Item 6.4 herein,  $\Delta EVE$  can be calculated based on PV01 and EVaR indicators.

6.8. The bank submits information on the measurement of IRRBB (measurement results, methods used, and baseline indicators for those methods) to the Central Bank in electronic form no later than the 15th day of the month following the end of each quarter.

## 7. Market risk monitoring and reporting

7.1. The Bank should have procedures and an information system for monitoring market risks adequate for its risk profile and lines of business. The monitoring of market risks covers at least the following information:

7.1.1. positions (e.g., trading book, banking book, open and hedged positions, concentrations, etc.).

7.1.2. market data (e.g., market liquidity) and changes in market prices (e.g., changes in interest rates, exchange rates, equity and commodity prices, etc.).

7.1.3. market risk measurement indicators as defined in Sections 5 and 6 herein (e.g., yield curve, PV01, EVaR, etc.).

7.1.4. stress-test findings.

7.1.5. compliance with market risk policies and limits.

7.1.6. bank's income and expenses.

7.1.7. global and macroeconomic developments.

7.2. The bank should have a reporting mechanism that informs the Supervisory Board, Risk Management Committee, Management Board, and relevant business units, and supports the effective management of market risks. Reports should at a minimum include the information specified in Section 7.1 herein.

7.3. The bank determines the frequency of monitoring and reporting depending on the scale and nature of risks arising from its activities and changes in the markets it operates in.