

QUANTITATIVE TOOLS FOR MONTARY OPERATIONS

PROPOSED DATES: December 8-12, 2025

TARGET GROUP | Junior to mid-level central bank officials interested in monetary policy and its implementation and quantitative tools employed in these areas. Participants with experience in bank central bank operations, financial markets, and basic knowledge of quantitative methods.

DESCRIPTION | This 5-day workshop will equip participants with practical skills to apply advanced quantitative tools for monetary policy implementation. Through interactive sessions and hands-on exercises, participants will strengthen their ability to support policy decisions. The course teaches advanced statistical methods to estimate and implement foreign exchange intervention rules based on a risk approach, to conduct stress tests on central bank's balance sheet as well as its profit & loss. The course covers topics:

1. **Central bank Balance Sheet Stress Testing (CBST):** Assessing and forecasting items of the central bank balance sheet and analyzing liquidity and solvency risks under different scenarios.
2. **VaR for FX Interventions (FXI) with Market Shallowness Index:** Applying VaR techniques for FX interventions in shallow markets.
3. **Liquidity Forecasting:** Developing models to forecast short-term liquidity needs.
4. **Haircut Models:** Understanding haircut frameworks for collateralized lending, including the ELA and regular monetary policy operations.
5. **Communication with NLP:** Brief overview of NLP tools for market sentiment analysis and communication strategies.

OBJECTIVES | Upon completion of this workshop, participants should be able:

- Understand the background and application of these tools in central bank policy and its implementation.
- Analyze the results and reports produced by quantitative tools for internal discussion and decision-making

LANGUAGE | The workshop will be delivered in English language, with simultaneous interpretation to Russian.