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CCAMTAC - Regional Research Seminar Series

"Quarterly Projection Model (QPM) of the Ministry of Finance of Georgia"

October 22, 2025

Introduction and moderation:

Mr. Nurdaulet Abilov, Economist, CCAMTAC

Presenters:

Mr. Mikheil Mgebrishvili, Head of the Macroeconomic Modeling Division, Macroeconomic Analysis and Fiscal Policy Planning Department, Ministry of Finance of Georgia

Ms. Natia Matsiashvili, Senior Specialist, Macroeconomic Analysis and Fiscal Policy Planning Department, Ministry of Finance of Georgia

Intervention:

Ms. Arman Juragat, Economist, Monetary Policy Department, Bank of Mongolia

Mr. Nursultan Mamatov, Chief Economist, Monetary Policy Department, National Bank of the Kyrgyz Republic

In this research seminar, economists from Georgia's Ministry of Finance presented their Quarterly Projection Model (QPM), developed to strengthen macroeconomic forecasting and policy analysis and used as an integral part of the Forecasting and Policy Analysis System (FPAS). The presentation began with a recap of FPAS, which combines structural DSGE models, econometric and machine learning approaches, and spreadsheet-based revenue forecasting. The QPM was introduced to address capacity gaps and staff turnover, and to provide a flexible, quarterly framework for medium-term analysis and improved communication with policymakers.

The presenters detailed the evolution of the QPM, describing how it expanded from a basic macroeconomic model into a sophisticated tool integrating fiscal, monetary, real, and external sectors. The model now features a production function with endogenous potential GDP, a fiscal block capturing government revenues, expenditures, and debt dynamics, and behavioral equations for Georgia's main trading partners (US and EU). The QPM also disaggregates inflation into food, energy, and core components, allowing for more granular analysis of price dynamics and policy transmission.

The Ministry of Finance team demonstrated the model's forecasting performance, showing how it captures GDP and inflation trends, impulse response functions, and the effects of external

shocks. They discussed the trade-offs between model complexity and accuracy, noting that while adding more sectors and disaggregation can improve explanatory power, it may also increase volatility and calibration challenges. The presenters emphasized that the QPM is used for regular forecasting rounds, policy analysis, and communication with top management and external partners, including the European Commission.

During the discussion of the presentation, Arman praised the QPM's comprehensive fiscal block, highlighting its inclusion of government revenues, expenditures, and debt dynamics, which he noted is more advanced than the fiscal modeling used at the Bank of Mongolia. He also commended the endogenous treatment of potential GDP via a production function, the disaggregation of aggregate demand, and the behavioral modeling of the external sector. Arman raised questions about the determination of the neutral rate in the Taylor Rule, the handling of fiscal shocks, and the possibility of including financial sector dynamics to further improve forecasting.

Nursultan emphasized the model's coherence in linking all key sectors and its relevance for policy analysis. He appreciated the inclusion of public capital in potential output and the detailed fiscal reaction function. In addition, he shared that their own modeling approach relies on calibration and expert judgment, and uses a hybrid of short-term models and medium-term assumptions. He suggested that future enhancements could include uncertainty presentations, such as fan charts, to make forecasts more intuitive for policymakers, and asked about out-of-sample forecast evaluation and the treatment of external sector assumptions in projection rounds.