

## **INTERNATIONAL MONETARY FUND**

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## **CCAMTAC Regional Webinar**

"The Quarterly Macro Forecasting Framework – A Novel Approach to Policy Analysis and Forecasting"

March 19, 2025

Introduction and Moderation:

Mr. Norbert Funke, Director, CCAMTAC

Presenter:

Mr. Tibor Hledik, Lead Economist, Joint Vienna Institute

Ms. Maria Arakelyan, Senior Economist, Joint Vienna Institute

Mr. Rilind Kabashi, Senior Economist, Joint Vienna Institute

Interventions:

**Mr. Narek Karapetyan**, Head of Fiscal and Monetary Policies Coordination Division, Macroeconomic Policy Department, Ministry of Finance of Armenia

The webinar focused on the innovative Quarterly Macroeconomic Forecasting Framework (QMFF), which aims to enhance economic forecasting and policy analysis. The core of the framework consists of behavioral equations specified in terms of deviations of real variables from their long-run trends. It is a novel combination of a gap-based modeling approach and financial programing. It has the flexibility to be adjusted to accommodate the macroeconomic characteristics of various countries and different exchange rate regimes, as well as to incorporate backward- or forward-looking expectation formation. During the seminar, the speaker highlighted the potential of the QMFF to be integrated into various institutional policy processes, making it especially relevant for countries that may not have established quarterly projection models as well as for the ones wishing to enhance their current macro-forecasting frameworks. An example of Bosnia and Herzegovina was provided, demonstrating its applicability in real-world scenarios.

One of the advantages of QMFF is its flexibility in scenario creation. The framework enables users to quickly generate alternative scenarios and adjust assumptions across all sectors of the economy. This capability is vital for timely policy adjustments and for responding effectively to economic shocks.. Further, the unique combination of a gap model with traditional financial programming enhances policy analysis and forecasting, while providing policymakers with granular representation of forecasts across various sectors. Numerous technical features of the QMFF were discussed, including the utilization of quarterly data to align with standard forecasting practices, and the implementation of various filters for estimation of trends and gaps. The seminar also covered impulse response functions, which are essential for analyzing the impact of economic shocks on variables within the model. It further explored historical decompositions and in-sample simulations, illustrating how they can be utilized both while



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building the frameworks and during the forecasting process. Another key topic discussed was the QMFF's ability to export outputs to Excel, which facilitates better understanding and communication of results among stakeholders.

During the seminar, Narek Karapetyan provided a valuable intervention that underscored the practical implications of the QMFF in real-world economic policymaking. He shared with the model developing experience of the Ministry of Finance of Armenia in cooperation with the IMF, which included development of a DSGE model, which was integrated into the forecasting and policy analysis system of the Ministry, and currently includes development of a Quarterly Projection Model (QPM), which is expected to become functional this year. He highlighted the value added that both the DSGE and QPM models add in fiscal policy making, cultivating the culture of evidence-based decision making the government.

Narek also highlighted the necessity of continuous training and support for users, which would help in maximizing the effectiveness of models. By addressing these practical aspects, Narek's insights contributed significantly to the discussion, reinforcing the need for the framework to be both robust and accessible to a wide range of users in the policy-making community.

In conclusion, the presentation underscored the usefulness of the QMFF in modern economic analysis. Its rigorous analytical techniques, the unique combination of gap models with standard accounting frameworks, the capability to create detailed scenarios are some of the factors that make it an appealing tool for policymakers. The webinar wrapped up with a call for further exploration into the framework's applications across different countries, highlighting its versatility in addressing various country features in terms of monetary policy strategies and exchange rate regimes.