Virtual event: Introduction to ESCAP Macroeconomic Model

1500 to 1700 (Bangkok time), Thursday 19 November 2020

Background

How could countries “build forward better” from the COVID-19 pandemic and make their economies more resilient to adverse shocks? What types of policy packages could countries consider? What would be their economic, social, and environmental impacts? What would be their financing modalities? These are key questions of high relevance for Asia-Pacific countries in the coming months.

ESCAP’s Macroeconomic Policy and Financing for Development Division is organizing a virtual event to illustrate how countries could benefit from policy simulations in designing their COVID-19 recovery packages. The event will showcase the ESCAP Macroeconomic Model (see description below) and present selected medium- to long-term policy scenarios for “building forward better”, which will feature in ESCAP’s forthcoming Economic and Social Survey of Asia and the Pacific 2021.

The virtual event is part of ESCAP’s ongoing efforts to support Asia-Pacific countries navigate through the pandemic and build forward better. In May, ESCAP launched its COVID-19 Policy Response Tracker to monitor developments in containment measures, fiscal and monetary policies, as well as SME, trade, transport, social protection, and statistics related measures. In August, ESCAP conducted a virtual workshop on a new excel-based COVID-19 Simulation Tool aimed at assessing the near-term impacts of lockdowns and fiscal relief packages.

The Model

The ESCAP Macroeconomic Model was developed to support the design of economic recovery packages for countries in the Asia and Pacific region, and offer insights into how countries can build resilience in the post-COVID-19, while enhancing sustainability along economic, social and environmental dimensions.

The model runs within the EViews software and is fully global in scope. It comprises 46 individual full country models for the Asia and Pacific region, smaller models of 9 key trading partners outside of the region, plus aggregate models for the remaining countries grouped into 4 regions. These individual models are linked together via trade, remittances and financial markets, as well as global carbon emissions and energy markets.

The country models are characterized by a long run neo-classical supply side and a short run Keynesian demand side. Households consume, save and supply labour; firms produce output, hire labour and invest; governments pursue fiscal policy by spending and taxing and central banks monetary policy by setting the short-term interest rate and exchange rate policy. The balance of demand and supply, together with tax policy, global commodity prices and other imported prices, determine inflation. The model also includes environmental and social channels, linking macroeconomic developments to carbon emissions and air quality, inequality and poverty.

The fiscal module within the ESCAP Macroeconomic Model is elaborated to allow a range of policy scenarios to be studied. Government spending is disaggregated into spending on social protection, spending on health, spending on environmental protection, fossil fuel subsidies, other government consumption, other government investment and interest payments. Government revenue is disaggregated into income tax revenue, corporate tax revenue, indirect tax revenue, taxes on
international trade and transactions, carbon tax revenue, commodity revenue, and other net revenue.

The model structure is designed to assess policy questions such as the net returns to establishing a universal social protection floor and universal health coverage; delivering affordable and clean energy; investing in energy efficiency gains; building climate resilient infrastructure; strengthening biodiversity; and closing the digital divide by investing in ICT and education. It can also be used to assess debt sustainability under different financing assumptions and the potential feedback of rising debt on risk premia.

**Target audience**

The event is open to policy makers, researchers from think-tanks, academics, as well as staff from UN organizations including country teams.

**Format**

A virtual event on MS Teams for pre-registered participants.

The event will be recorded. The video will be uploaded and added to ESCAP’s COVID-19 webpage.

**Tentative agenda**

**Date:** 15.00 – 17.00 (Bangkok time), Thursday **19 November 2020**

**Total length:** 1.5 to 2 hours

5 mins  **Opening remarks**

Mr. Hamza Ali Malik, Director, Macroeconomic Policy and Financing for Development Division (MPFD), ESCAP

20 mins  **Presentation, part I: Overview of the model**

20 mins  **Presentation, part II: Using the model for policy simulation**

Ms. Dawn Holland, Fellow, National Institute of Economic and Social Research (UK); former Chief of Global Economic Monitoring Branch, Department of Economic and Social Affairs (DESA), United Nations

40 mins  **Questions and answers**

5 mins  **Closing remarks**

Ms. Sweta C. Saxena, Chief, Macroeconomic Policy and Analysis Section, MPFD, ESCAP

Moderator: Mr. Vatcharin Sirimaneetham, Economic Affairs Officer, MPFD