1. Introduction to IO/SUT Multiplier Modeling and Analysis

Objective of the course

The course aims to equip participants with analytical skills in multiplier-based analysis of Input–Output (I-O) Tables and Supply and Use Tables (SUT), using aggregated macro-level matrices to examine economy-wide interlinkages among production sectors, institutions, agents, and the global economy. Participants are introduced to the theoretical foundations and structural blocks of I-O and SUT frameworks and their application in policy-oriented multiplier modelling. Designed for policy analysts and researchers in government, statistical agencies, central banks, academia, and international organizations, the course assumes some familiarity with national accounts while reintroducing core concepts to ensure accessibility for participants with limited prior exposure. The course is delivered in five modules as follows.

- **Module 1: Introduction to matrix applications in excel**
  - Introduction to Economy Wide Models
  - Introduction to Matrix application and Analysis
  - Introduction to advanced excel tools for multiplier modelling and Analysis
  - Group exercise 1: Advanced excel commands
- **Module 2: Construction of an Input-Output (IO) Table and Supply and Use Tables**
  - Introduction to System of National Accounts (SNA 2008)
  - Structure of IO and SUT Tables
  - Building transaction matrices and flow of funds
  - Data requirements for building IO/SUT Tables
  - Step-by-step construction of an I-O and SUT Tables
  - Splining and splicing of national accounts data
  - Group exercise 2: Construction of IO and SUT Tables
- **Module 3: Development of Input-Output (IO) Multiplier Modelling**
  - Introduction to underlying data (interpretation)
  - Step by step construction of Input-Output (IO) multiplier model
  - Adding employment vectors to the IO multiplier model
  - Policy simulations using I-O Multiplier model
  - Interpretation of results from I-O Table Multiplier model
  - Group exercise 3: IO multiplier modelling
- **Module 4: Development of SUT Tables and Multiplier Modelling**
  - Introduction to Supply and Use Tables (SUT) and underlying data (interpretation)
  - Step-by-step construction of a SUT Multiplier Model
  - Economic policy pathways in the SUT multiplier model
  - Group exercise 4: Policy analysis in the SUT multiplier model
- **Module 5: Policy impact analysis and interpretation of SUT multiplier results**
  - Policy impact assessments using SUT Multiplier model
  - Interpretation of results from SUT Table Multiplier model

- Group exercise 5: Policy simulation (hands-on Real World Policy Simulation)
- Group presentation of results on SUT modeling for policy Analysis

Mode of delivery

The course is delivered through an intensive, hands-on approach in which participants systematically build the IO/SUT Multiplier model, over the duration of the training. The programme is highly sequential, requiring full attendance at all sessions, as each step builds directly on the previous one. Participants work in teams to enhance peer learning and methodological coherence, while each participant is required to have an individual laptop and mouse for practical implementation. By the end of the course, each team presents policy simulation results generated from their model. For the online delivery option, participants are required to submit all assignments within the stipulated timelines to ensure completion within the scheduled period, as extensions may incur additional facilitation costs. To apply for this course, fill in the form below or send an email to apply@macrosolve.net or macrosolveinfo@gmail.com.