Advanced SUT/SAM Multiplier Modeling and Analysis

Objective of the course

The Advanced SUT/SAM Multiplier Modelling Course is an intensive extension of the Introductory Input–Output and Supply and Use Tables (I-O/SUT) Multiplier Modelling programme, designed to strengthen participants' capacity to construct and apply expanded quantity and price multiplier SUT/SAM models for policy analysis. Building on the migration from SUT to Social Accounting Matrices (SAMs), the course provides hands-on training in the development of unconstrained and supply-constrained SAM multiplier models, building a SUT price multiplier models for price analysis (CPI, PPI, GDP deflator, EPI, IPI, WPI and more), forward–backward linkages, decomposition techniques, and building policy simulations. The course is designed for policy analysts and researchers in government, statistic houses, central banks, academia and international organizations engaged in policy guidance; and participants should have undertaken the introductory course in IO/SUT course or have exposure to economy-wide data and/or modeling. The course is delivered in five modules as follows.

- **Module 1: Price analysis in the SUT Price Multiplier Model**
  - Introduction to price analysis in
  - Introduction to Modelling prices in the SUT
  - Hands-on construction of a price Multiplier Model in the SUT
  - Interpreting values of the SUT Price Multiplier Model
  - Policy simulation in the SUT price Model
- **Module 2: Theoretical and empirical structure of Social Accounting Matrices (SAMs) and their construction**
  - Introduction to Social Accounting Matrices (SAM)
  - Theoretical and empirical Migration from SUT to SAM
  - Steps for Building and balancing a Macro SAM
  - Practical skills in changing SAM values and its rebalancing
- **Module 3: Unconstrained Extended SAM Multiplier Model and structural pathways**
  - Theoretical composition of SUT Multiplier models
  - Derivation of accounting multipliers
  - Theoretical and empirical extension of the SUT Multiplier Model to SAM Multiplier Model by including Household income, Income distribution and Household expenditure
  - Forward and backward linkages computations
  - Interpreting SAM Multipliers
  - Additive and multiplicative decomposition.
  - Extension of SAMs to include employment assessments
- **Module 4: Constrained SUT and SAM multiplier models for policy analysis**
  - Introduction to supply constrained SUT and SAM
  - Advanced skills in construction of supply constrained SAM Multiplier model
  - Policy analysis using the supply constrained SAM multiplier model
  - Construction of a SAM Price Multiplier Model
  - Policy simulation in the SAM price Model
- **Module 5: Policy impact analysis and interpretation of SAM multiplier results**

- Policy analysis using an extended SAM multiplier Model
- Price analysis using a SAM Price multiplier Model for policy guidance
- Group exercise 5: Policy simulation (hands-on Real World Policy Simulation)
- Group presentation of results on SAM modeling for policy Analysis

Mode of delivery

The course is delivered through an intensive, hands-on approach in which participants systematically build the SUT price model and a SAM multiplier model (both constrained and unconstrained), 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.