

Input-output tables for use in Computable General Equilibrium (CGE) models: the case of the USAGE model of the United States

Topic: CGE modelling

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Maureen Rimmer is a Senior Research Fellow at the Centre of Policy Studies Monash University. She is a key contributor in the development, application and documentation of the USAGE model of the United States. This is a 500-industry, dynamic, CGE model of the U.S. economy, with facilities for generating results for the 50 States and 700 occupations. One of Maureen's specialties is the preparation of input-output data as an input to USAGE.

USAGE is used in Washington by the U.S. International Trade Commission and the U.S. Departments of Commerce, Homeland Security and Agriculture. Apart from the design and implementation of USAGE, Maureen has made major contributions in applications of the model to key policy areas such as: the replacement of imported crude oil with domestically produced biofuels; legalization of unauthorized immigrants; and an analysis of the 2008-9 U.S. recession with and without the Obama stimulus package.

Maureen's keynote presentation will be on "Input-output tables for use in Computable General Equilibrium (CGE) models: the case of the USAGE model of the United States". CGE models are extensively used to analyse the effects on macro variables and industries of changes in: taxes, public consumption and transfer payments; environmental policies; technology; international commodity prices; labour-market policies; immigration policies; and business conditions and terrorism threats. They are particularly useful when price sensitivity is important. The main data used by CGE models is the input-output table. However, input-output tables prepared by statistical agencies are typically unsuitable for use in CGE models. This presentation is concerned with the transformation of the 1992 benchmark input-output table of the United States into a form suitable for use in the USAGE model. Problems encountered include: negative input-output flows; hard-to-interpret concepts such as "rest-of-world adjustment for final users"; and flows presented in producers' prices rather than basic prices.