

A new flexible, extensible model of the global economy with input-output models at its heart

Topic: World input-output modeling and databases I

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A global model is presented that can be used as the basis for assessing the impacts of future changes in trade, migration, security and development aid. The model is based on input-output models for 40 countries, linked with trade data at the sector level.

This is made possible by the World Input-Output Database, a collection of input-output tables for 40 countries across 15 years, and by databases of commodities and services trade from the UN. The input-output stage and the international trade stage are "weakly coupled" allowing for more flexibility in the specification than in standard MRIO models.

The model is constructed using a minimum number of assumptions, and is based as far as possible on empirical observation. Some initial analysis of the model and its properties are also presented.