

PortableDyme – A simplified software package for model building

Topic: Input-Output Modeling Software

Author: Anett GROSSMANN

Co-Authors: Frank Hohmann

Macroeconomic multisectoral models have proven to be powerful tools for forecasting, simulation and policy analysis. Such models are based on huge datasets, contain hundreds to thousands of (interdependent) equations and therefore tend to be inherently complex. Building such models is by no means a simple task. Model builders not only have to have a profound knowledge of economic theory but also have to get acquainted with software packages and programming languages. PortableDyme (Großmann, Hohmann&Wiebe 2012) has been designed to make the whole model building process easier especially for beginners. From the technical point of view, PortableDyme is a complete software package for model building. It is based on the powerful INFORUM set of programs and has been pre-configured to run on any Microsoft Windows computer without installation.

To assist beginners in model building, PortableDyme also contains a basic but extensible macroeconomic multisectoral model. The structure of the model reflects the different steps of model building – starting from collecting historical data up to performing scenario analysis. Most of the data is taken from the WIOD database (World Input Output Database) which provides a harmonized dataset for 40 countries. For these countries, adapting the model can be accomplished within a few hours. The aim of this paper is to introduce the main building blocks of the PortableDyme programming environment and show how this software can be used to build large-scale econometric input-output models.