



PORTABLEDYME PORTUGAL

An INFORUM National Multi-Sectoral Model for Portugal

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A PortableDyme Model for Portugal

▶ Why?

- ⇒ Enhancements/Improvements of the PortableDyme model template
- ⇒ No INFORUM member from Portugal
- ⇒ But: contact to the Ministry of Environment in Portugal
- ⇒ One of the EU countries that is not part of the BTM

Data and Model Structure

- ▶ Model structure:
 - ⇒ Based on the INFORUM modelling approach
 - Considering the complete macroeconomy (volumes, prices, employment, ...)
 - Bottom-up approach: modelled at industry level
 - Dynamic model
 - ⇒ Nominal and real values, prices
 - ⇒ Basic and purchasers' prices
 - ⇒ National accounts
- ▶ Model can be used for forecasting and scenario analysis
 - ⇒ Answering 'what if' – questions
 - ⇒ Evaluation of developments over time or comparison of different situations at a particular time

Data and Model Structure

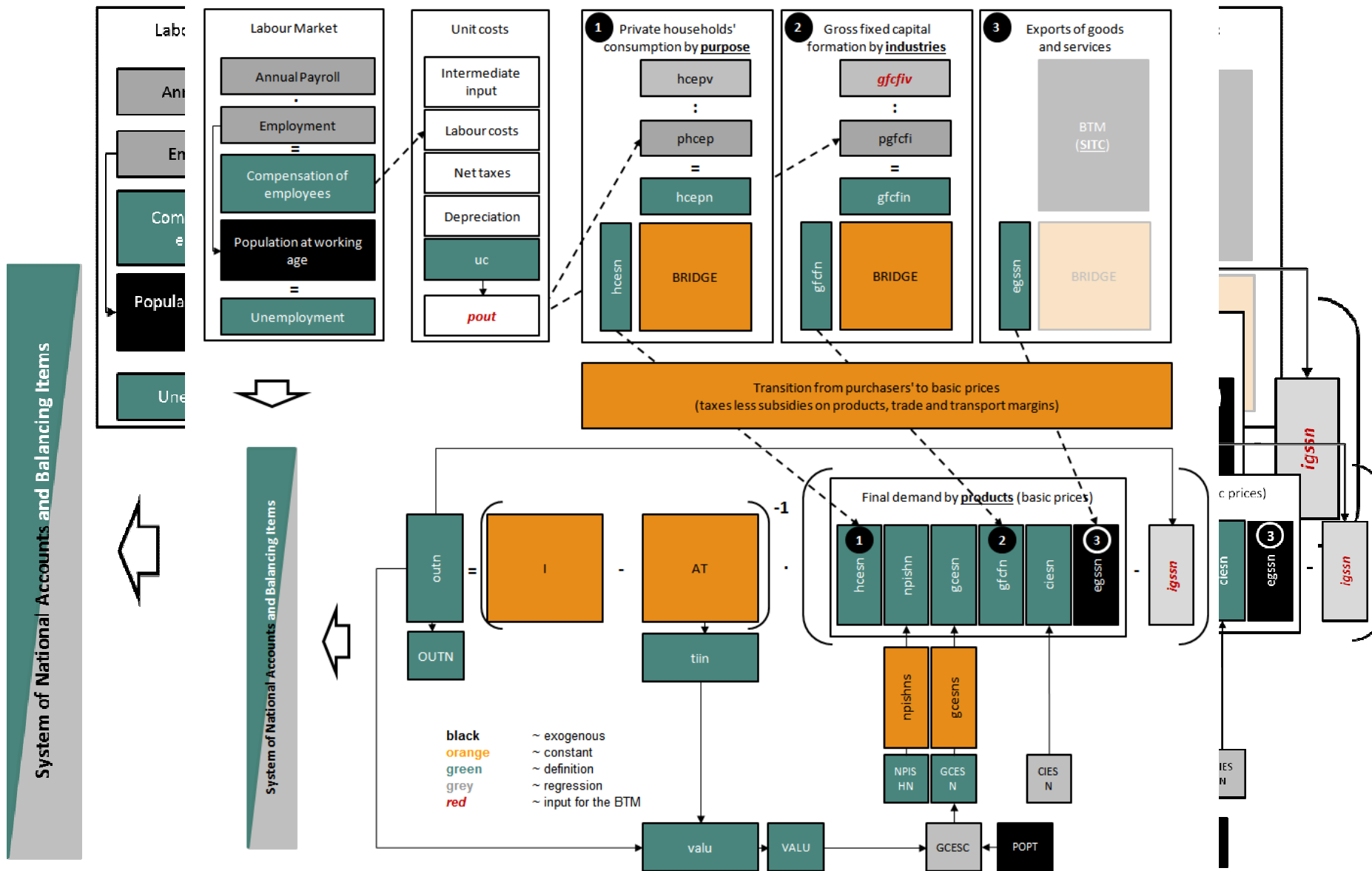
► Data from Eurostat (<http://ec.europa.eu/eurostat/data/database>)

- ⇒ Population, employment, IO tables, national accounts, ...
- ⇒ Eurostat provides **tables codes**
- ⇒ ESGV 2010

The screenshot shows the Eurostat Database website interface. The main navigation bar includes 'News', 'Data', 'Publications', 'About Eurostat', and 'Help'. The 'Data' section is active, and the 'DATABASE' tab is selected. The left sidebar contains various options like 'Information', 'Browse statistics by theme', 'Statistics A - Z', 'Population Census 2011', 'Bulk download', 'Web Services', 'Access to microdata', and 'Metadata'. The main content area displays a 'Data Navigation Tree' with the following structure:

- Database by themes
 - General and regional statistics
 - Economy and finance
 - National accounts (ESA 2010) (na10)
 - Annual national accounts (nama10) (Important information - Irish GDP revision)
 - Main GDP aggregates (nama_10_ma)
 - Auxiliary indicators (population, GDP per capita and productivity) (nama_10_aux)
 - Basic breakdowns of main GDP aggregates and employment (by industry and by assets) (nama_10_bbr)
 - Detailed breakdowns of main GDP aggregates (by industry and consumption purpose) (nama_10_dbr)
 - Breakdowns of non-financial assets by type, industry and sector (nama_10_nfa)
 - Regional economic accounts - ESA 2010 (nama_10reg)
 - Quarterly national accounts (namq_10) (Important information - Irish GDP revision)
 - Supply, use and Input-output tables (naio_10)
 - Annual sector accounts (ESA 2010) (nasa_10) (Explanations)

Data and Model Structure



Data and Model Structure

- ▶ Important steps
 - ⇒ Linking IO tables to national accounts
 - ⇒ Linking IO framework (national concept) to GDP calculation (domestic concept)
 - ⇒ Transition from basic to purchasers' prices
 - ⇒ Building bridge matrices for investment and consumption

Data and Model Structure

▶ Helpful tools:

⇒ Preconfigured modelling routines and scripts (for model building and evaluation)

- Consistency checks (e.g. for the national accounts)
- Scripts for writing data to Excel from dyme database
 - For one simulation
 - » At macro level
 - » At industry level
 - For more simulations > scenario comparison

⇒ Standardised interfaces from the MM to the BTM (and vice versa >> to be done)

▶ Routines can be easily adopted to other countries (blueprint)

▶ Country forecasts can be easily compared

Results

- ▶ Model presentation / live simulation

To Do's

- ▶ Linking table for exports by products (CPA) to SITC
- ▶ Complete evaluation
 - ⇒ Input from country experts
- ▶ Documentation

Thank you for your attention.

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