

PORTABLEDYME PORTUGAL

An INFORUM National Multi-Sectoral Model for Portugal

Anett Großmann, Frank Hohmann 24th INFORUM Conference, August 29th - September 2nd 2016

- 1. A PortableDyme Model for Portugal
- 2. Data and Model Structure
- 3. **Results**
- 4. **To Do's**

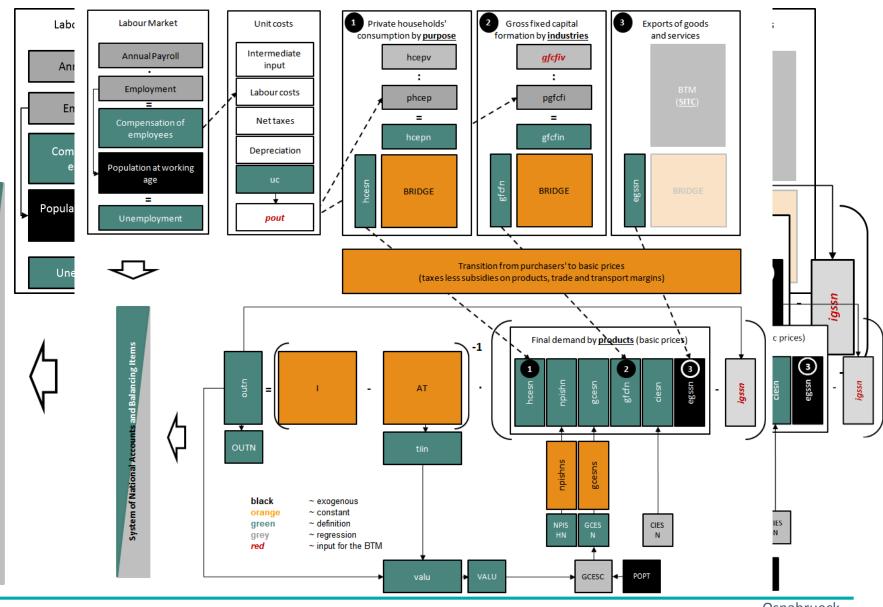
A PortableDyme Model for Portugal

- ► 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

- 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 from Eurostat (http://ec.europa.eu/eurostat/data/database)
 - ⇒ Population, employment, IO tables, national accounts, ...
 - ⇒ Eurostat provides **tables codes**
 - ⇒ ESVG 2010

abase - Eurostat × +								
ec. europa.eu /eurostat/data/database		G	Q. Suchen		4 1	î î	★ 自	
						Sign	n In Regi	ster 鱼
			Legal notice 🚮 RSS Co	okies Links	s Conta	act	English	-
eurostat			Type a keyword, a code,	a titla				Q
Your key to European st	atistics		Type a keyword, a code,	a uue				K
European Commission > Eurostat > D	Data > Database							
News Da	ita Publicați	ons	About Eurostat	He	elp			
DATA	DATABASE							
	DAIADASE							
DATADACE								
- DATABASE	> 🗁 Data Navigation Tree	\backslash						
Information	Database by themes							
Information Browse statistics by theme	Database by themes	tatistics						
Information	Image: Database by themes Image: Database by the themes Image: Data							
Information Browse statistics by theme	Database by themes General and regional si Economy and finance National accounts (f	ESA 2010) (na10)	M (Important information - I	rish GDP revi	ision)			
Information Browse statistics by theme Statistics A - Z	Database by themes Database by themes General and regional si D Economy and finance D National accounts (i D Annual national a	ESA 2010) (na10) accounts (nama10)	M (Important information - In	rish GDP revi	ision)			
Information Browse statistics by theme Statistics A - Z Population Census 2011	Database by themes General and regional si Economy and finance De National accounts (fi Annual national a De Main GDP aggr	ESA 2010) (na10) accounts (nama10) regates (nama_10_m			-			
Information Browse statistics by theme Statistics A - Z Population Census 2011 Bulk download	Database by themes General and regional si General and regional si Economy and finance De National accounts (8 De Annual national a De Annual national a De Annual national a De Auxiliary indica De Auxiliary indica	ESA 2010) (na10) accounts (nama10) egates (nama_10_n itors (population, Gi	na)	ity) (nama_1	10_aux)		·s)	
Information Browse statistics by theme Statistics A - Z Population Census 2011 Bulk download – Web Services	Database by themes General and regional si General and regional si Economy and finance Annual national accounts (finance) Annual nationaccounts (finance) Annual nationaccounts (finance	ESA 2010) (na10) accounts (nama10) egates (nama_10_m itors (population, Gi vns of main GDP ag	DP per capita and productivi gregates and employment (l	ity) (nama_1 by industry	10_aux) and by	asset		
Information Browse statistics by theme Statistics A - Z Population Census 2011 Bulk download – Web Services SDMX Web Services Json and Unicode Web Services	Database by themes General and regional si General and regional si Economy and finance National accounts (f Annual national a Main GDP aggr Auxiliary indica Basic breakdow (nama_10_bbr) Detailed breakdow	ESA 2010) (na10) accounts (nama10) egates (nama_10_n itors (population, Gi vns of main GDP ag downs of main GDP	DP per capita and productivi gregates and employment (l aggregates (by industry and	ity) (nama_1 by industry l consumpti	10_aux) and by tion pur	asset		0_dbr)
Information Browse statistics by theme Statistics A - Z Population Census 2011 Bulk download – Web Services SDMX Web Services Json and Unicode Web Services Access to microdata	Database by themes General and regional si Economy and finance National accounts (finance) Annual national a Main GDP aggr Auxiliary indica Basic breakdow (nama_10_bbr) Detailed breakdowns of	ESA 2010) (na10) accounts (nama10) egates (nama_10_n itors (population, Gi vns of main GDP ag downs of main GDP i non-financial asset	na) DP per capita and productivi gregates and employment (l 2 aggregates (by industry and ts by type, industry and secto	ity) (nama_1 by industry l consumpti	10_aux) and by tion pur	asset		0_dbr)
Information Browse statistics by theme Statistics A - Z Population Census 2011 Bulk download – Web Services SDMX Web Services Json and Unicode Web Services	Database by themes General and regional si Economy and finance National accounts (finance) Annual national a Annual national a Annual national a Main GDP aggr Auxiliary indica Basic breakdow (nama_10_bbr) Detailed breakdowns of Breakdowns of Breakdowns of	ESA 2010) (na10) accounts (nama10) egates (nama_10_m tors (population, Gi vns of main GDP ag downs of main GDP f non-financial asset vmic accounts - ESA	na) DP per capita and productivi gregates and employment (I P aggregates (by industry and ts by type, industry and secto 2010 (nama_10reg)	ity) (nama_1 by industry d consumpti br (nama_10	10_aux) and by tion pur 0_nfa)	asset pose)		0_dbr)
Information Browse statistics by theme Statistics A - Z Population Census 2011 Bulk download – Web Services SDMX Web Services Json and Unicode Web Services Access to microdata GISCO:Geographical Information	Database by themes General and regional si Economy and finance National accounts (finance) Annual national a Annual national a Annual national a Main GDP aggr Auxiliary indica Basic breakdow (nama_10_bbr) Detailed breakdowns of Breakdowns of Breakdowns of	ESA 2010) (na10) accounts (nama10) egates (nama_10_n itors (population, Gi vns of main GDP ag downs of main GDP con-financial asset omic accounts - ESA il accounts (namq_1	DP per capita and productivi gregates and employment (I P aggregates (by industry and ts by type, industry and sector 2010 (nama_10reg) 10) M (Important information	ity) (nama_1 by industry d consumpti br (nama_10	10_aux) and by tion pur 0_nfa)	asset pose)		0_dbr)



System of National Accounts and Balancing Items

Osnabrueck, August/September 2016

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

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
 - \Rightarrow Input from country experts
- Documentation

Thank you for your attention.

Anett Großmann

T +49 (0) 40933 - 180 E grossmann @ gws-os.com Economist

Frank Hohmann

T +49 (0) 40933 - 130 E hohmann @ gws-os.com Software developer

Confidentiality of Information

The content of this document is strictly confidential and must not be circulated or used without permission of GWS.



www.gws-os.com

Gesellschaft für Wirtschaftliche Strukturforschung mbH Heinrichstr. 30 49080 Osnabrück Tel + 49 (0) 541 40933-180 Fax + 49 (0) 541 40933-110 grossmann @ gws-os.com

WWW.GWS-OS.COM / © GWS 2016