

Data for “Supply, Demand and Monetary Policy Shocks in a Multi-Country New Keynesian Model”, Dees, Pesaran, Smith and Smith (DPSS, 2010).

The Data folder consists of the following subfolders:

i. Source Data

The directory “Source Data” contains 33 csv data files which refer to the 33 countries in the GVAR model used to construct the deviations from the estimated permanent components. The data is quarterly over the period 1979Q1-2006Q4. Each series is seasonally adjusted when needed, following the seasonal adjustment procedure described in the Appendix of [Pesaran, Schuermann and Smith \(2009\)](#). For the details of the series that have been seasonally adjusted and/or interpolated from annual data, see the Supplement to [DPSS \(2010\)](#).

The variables included are the following:

Y : Real GDP

CPI : Consumer price index

E : Exchange rate of country i at time t expressed in US dollars. For the 8 euro area countries namely: Austria, Belgium, Finland, France, Germany, Italy, Netherlands and Spain the exchange rate is the Euro/Dollar Rate. Pre 99Q1, the Euro Dollar Rate is applied backwards to the dollar rate of the individual euro area country currencies.

RS : Short rate of interest per annum, in per cent (typically a three month rate)

POIL : Nominal price of oil

Details of the data sources as well as the lag order and number of cointegrating relations used for the country specific VARX* models in the GVAR model, can be found in the Supplement to [DPSS \(2010\)](#).

ii. Transformed Data

The directory “Transformed Data” contains, for each series, the original variable in logs say, y , the permanent component of the variable, y_p , and the cyclical component denoted, y_c such that $y=y_c+y_p$, as well as the corresponding country specific foreign (star) variables, steady states and cyclical components (deviations from steady state). All star variables are constructed as country specific trade weighted averages over the period 2001-2003 of the other countries in the GVAR. Steady state values are long-horizon forecasts from the GVAR. For more details on the variables and log transformations see [Dees, di Mauro, Pesaran and Smith \(2007\)](#).

y : log real GDP or log output (log Y)

p : log CPI

$Dp=p-p(-1)$: inflation (log CPI-log CPI(-1))

e : log exchange rate against US dollar (log E)

$ep=e-p$: real exchange rate (log CPI-log E)

r : quarterly short term interest rate

ys : foreign log real GDP

ps : log foreign price

Dps : foreign inflation

es : log foreign exchange rates

$eps=es-ps$: foreign real exchange rate

rs : foreign short term interest rate

$poil$: log oil price

$reer=ep-eps$: real effective exchange rate

$y_c=y-y_p$: log output deviation from steady state

Dp_c : inflation deviation from steady state

ep_c : real exchange rate deviation from steady state

r_c : interest rate deviation from steady state

y_p : output steady state

Dp_p : inflation steady state

ep_p : real exchange rate steady state

r_p : interest rate steady state

ys_c : foreign log output deviation from steady state

Dps_c : foreign inflation deviation from steady state

eps_c : foreign real exchange rate deviation from steady state

rs_c : foreign interest rate deviation from steady state

ys_p : foreign log output steady state

Dps_p : foreign inflation steady state

eps_p : foreign real exchange rate steady state

rs_p : foreign interest rate steady state

y_hp : deviation of log output from hp filtered value (=1600).

ys_hp : foreign deviation of log output from hp filtered value (=1600). For each country this variable is constructed as trade weighted averages over the period 2001-2003 of the y_hp variable in all other countries in the GVAR.

Construction of US ep_c

As ep does not enter the US model as a domestic variable in the GVAR, we do not directly obtain ep_c from the multivariate decomposition discussed in [Dees, Pesaran, Smith and Smith \(2009\)](#). To obtain ep_c note that $ep = -p$ for the US. Using the log price level p of the US for 1979Q3 as an initial value we cumulate the US Dp_c series. This way we obtain US p_c such that $ep_c = -p_c$ for the period 1979Q4-2006Q4. We then demean the ep_c series to ensure that it has mean zero.

References

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- Dees, S., Pesaran, M.H., Smith, L.V. & Smith, R. P. (2009). Identification of New Keynesian Phillips Curves from a Global Perspective. *Journal of Money, Credit and Banking*, 41, 1481-1502.
- Dees, S., Pesaran, M.H., Smith, L. V. and Smith, R. P. (2010). Supply, Demand and Monetary Policy Shocks in a Multi-Country New Keynesian Model. CESifo Working Paper, 3081.
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