Policy Uncertainty and Aggregate Fluctuations: Evidence from Emerging and Developed Economies

2023-11-15

This folder replicates the baseline model in "Policy Uncertainty and Aggregate Fluctuations: Evidence from Emerging and Developed Economies" By Haroon Mumtaz and Franz Ruch.

Data for the baseline model are saved in the "data" folder. Please refer to section 4 from the paper for details of the data collected, sources, and transformations.

The code requires matlab to run.

This code produces the data to construct Figure 8 and fully produces figures A4.1 and A4.2 in the paper.

The folder "benchmark", contains the following:

-"estimate5_fe_10.m" is the main file that estimates the model.

-"get_irf_fevd.m" produces mat files that contain the IRFs and FEVDs.

-"extract_uncertainty_measures.m" produces the fiscal and monetary policy uncertainty measures used in the paper. The code produces an excel file called "Unc.xls" with tabs for goverment spending uncertainty (g) and real interest rate uncertainty (r). These tabs are used to generate figure 2.

-"CF.m" and "plot_cf_gdp.m" produces the counterfactual analysis. "CF.m" produces an excel called "CF.xls". The excel includes tabs for seperate country and uncertainty cases where EMDEs are colloquially refered to as "poor" and advanced economies as "rich". For example: -Figure 8B is generated from tab "no_pol_poor" for EMDEs in blue, and from tab "no_pol_rich" for Advanced economies in red. -Figure 8C is generated from tab "no_g_poor". -Figure 8D is generated from tab "no_mp_poor".

-"plot_cf_gdp.m" provides examples of how the resulting counterfactuals can produce charts.

The folder also contains code to replicate figures A4.2 (plot_levels_irfs_f.m) and A4.1 (plot_vol_irfs_f.m).

The "functions" folder contains additional functions that are necessary to estimate the baseline model.

Data Availability Statement

All data is public and available in this package.

Variable	Definition	Transformation	Sources
Git	Real public consumption expenditure, seasonally adjusted	Log level	Haver Analytics
Yit	Real GDP, seasonally adjusted	Log level	Haver Analytics
piit	GDP deflator, seasonally adjusted	Log level	Haver Analytics
Tit	Real general/central government revenue	Log level	Haver Analytics
Rit	Ex-ante real interest rate	Level	Haver Analytics; OECD

Variable	Definition	Transformation	Sources
Cit	Real private consumption expenditure, seasonally adjusted	Log Level	Haver Analytics
Iit	Real gross fixed capital formation, seasonally adjusted	Log Level	Haver Analytics
ERit	Real effective exchange rate, CPI-based	Log first difference	Bruegel; Haver Analytics
Sit	Equity prices	Log Level	Haver Analytics