Data and Programs for

"How Useful Are Estimated DSGE Model Forecasts for Central Bankers?"

READ ME FIRST

Refet S. Gürkaynak
November 30, 2010

The empirical results presented in this paper are obtained in three steps:

1. Real time (vintage) data collection and organization
2. DSGE Model and BVAR estimation and forecast generation
3. Forecast comparison

Questions about (1) should be directed to Rochelle Edge (rochelle.m.edge@frb.gov), questions about (2) should be directed to Burçin Kısacıkoğlu (burcink@bilkent.edu.tr, bkisaci1@jhu.edu), and questions about (3) should be directed to Refet Gürkaynak (refet@bilkent.edu.tr).

***

The first link below takes you to the data and programs for forecast comparison. The data files in that folder contain the realized values and the forecasts of inflation, output growth and interest rates. One set of data files have the Greenbook forecasts as the judgemental forecasts and DSGE and BVAR forecasts that are compatible (in real time data availability sense) with these. The (STATA) program **eg_fcast_eval_oct142010.do** calls these data files, combines them, runs the analysis and produces the figures and tables using GB data in the paper. The program calls the OUTREG and DMARIANO routines, which can be installed by typing "ssc install outreg" and "ssc install dmariano" (without the quotation marks) at the Stata prompt.

The program itself is well annotated and it should be easy to follow what exactly is going on. It will display a ton of figures ("graph drop _all" gets rid of them), write a looong log file and save the tables and figures shown in the paper.

The files for forecast comparison using the Blue Chip forecasts as the judgemental forecast are similar except for two differences. First, the data files we make available do not contain the blue chip forecast series as these are proprietary (hence the program crashes as it looks for that data) and the annotations in the program are much less helpful as most of them are copied from the code for the Greenbook compatible data. Someone who understands how the code for the Greenbook compatible data works will have no difficulty understanding how this code works. It is the same code for the most part (but the BC code recognizes that there are three forecasts per quarter rather than two) and differ only in the figures they produce. The BC code produces figures from rolling regressions etc.

The Blue Chip data can be bought and downloaded from
http://www.aspenpublishers.com/Product.asp?catalog_name=Aspen&product_id=SS01934600
We use the median forecasts, as reported in the paper. If you add the Blue Chip forecast data to the data files and run the code, you should get results identical to those reported in the paper.

***

The second and third links below takek you to the data and programs used to construct the forecast files. In particular, the MATLAB codes there repeatedly call DYNARE to estimate the DSGE and the BVAR models with data of the correct vintage and then to produce and save forecasts of inflation, GDP growth and interest rates. This is done separately for forecasts to be used together with Greenbook forecasts and for those to be used together with Blue Chip forecasts as the data vintages are different. The results are what are found in the forecast comparison data files.

The model estimation and forecast generation data and code folders contain readme files that explain the procedures in more detail.