

Computer Tutorial 4: The Factor Augmented VAR (FAVAR)

I have provided Matlab code which estimates the FAVAR model of Bernanke, Boivin and Elias (2005, QJE) where the factors are approximated by Principal Components. The code produces impulse responses. Experiment with this code (i.e. change the prior, lag length or number of factors) to see if results are robust and to gain experience in Bayesian FAVAR modelling.

Bernanke, Boivin and Elias isolate a single variable, the interest rate, in the FAVAR. The code provided isolates three (the interest rate, the unemployment rate and inflation). Note also that the identification scheme used by Bernanke, Boivin and Elias divides the variables into “slow moving” (i.e. those which do not react quickly to a monetary policy shock) and “fast moving” (those which do) and I have followed their recommendations in the code.