Multiple Models Exercise*

Using the same data and prior dummy observations as in the previous problem set (rmpy.txt), compute approximate posterior odds on the eight models obtained by setting lag length at 7, 4, 3, and 2 and by imposing or not imposing Granger causal priority of the M, P, Y block.

(a) Compute the approximate posterior odds assuming equal prior probabilities of all 8 models. Note that if you use the dummy observations, the "prior density" terms in the Gaussian approximation to the posterior are taken care of automatically. Be sure to maintain sample size as you compare models, meaning that if you use `rfvar3.m`, you need to drop observations at the beginning of the `ydata` and `xdata` matrices when you use models with fewer lags.

(b) Does this model and sample show that different models would be chosen according to whether lag length or GCP restrictions were chosen first?

(c) Are the approximate odds very different from what they would have been had the ordinary Schwarz criterion ($-k \log T/2$) been applied? (Note that here, with persistent variables, the Schwarz criterion is likely to be asymptotically incorrect.)