DESCRIPTION OF REPLICATION PROGRAMS THAT ACCOMPANY PAPER: Reis, Ricardo (2009) "Optimal Monetary Policy Rules in an Estimated Sticky Information Model." American Economic Journal: Macroeconomics, forthcoming.

Written by: Ricardo Reis, 26 January 2009.
Please cite if you use. I do not provide tech. support

All of the programs were written for Matlab version 7.

1. REPLICATION INSTRUCTIONS

First, you must obtain the suite of estimation files for this class of models SIBE (sticky-information Bayesian estimation). Follow the instructions in that file to generate Chile_USGpost.mat and Chile_EMUpost.mat using the data USGdata.mat and EMUdata.mat respectively. In particular note the number of draws, chains, and so on described in the paper. (You can skip this step. If you want to get the post.mat files directly e-mail me; they are about 70Mb each).

Next, you must obtain the suite of files to study optimal policy in this class of model SIPR (sticky-information policy rules). Put it in some directory and update the path instructions in some of the files to reflect that directory.

Finally, you can run the files: OMPR_Table1.m, OMPR_Table2.m, OMPR_Table3.m, OMPR_Table4.m, OMPR_Table5.m, OMPR_Table6.m, OMPR_Table7.m, OMPR_Table8.m, OMPR_Table9.m, OMPR_figures.m, OMPR_cis.m to obtain all the figures and tables in the paper.

2. LIST OF ALL THE FILES

Master programs:
OMPR_figures.mat Computes all the figures
OMPR_Table1(to9).mat Computes each of the tables in the paper
OMPR_cis.mat Computes indifference intervals
OMPR_Optimalpolicy.mat Calculates optimal policy rules all at once
OMPR_robpy.mat Calculates robust price-targeting rule
OMPR_robtr.mat Calculates robust interest-rate rule
OMPR_Robustpolicy.mat Calculates robust policy rules performance

Input files:
Prior_pars.mat has the prior parameters;
USGdata.mat has the USG data.
OMPRrobdraws.mat Draws for computing robustly optimal policies
OMPR_USGopt.mat Optimal policy results
OMPR_EMUopt.mat Same for EMU
OMPR_USGrobtr.mat Robustly-optimal interest-rate rule
OMPR_USGrobpy.mat Robustly-optimal price-targeting rule
OMPR_USGrob.mat Histograms from robustness exercises
OMPR_USGpost.mat Posterior distribution draws for USG

OMPR_EMUpost.mat Same for EMU
OMPR_USGpost_stats.mat Descriptive statistics from posterior distribution
OMPR_EMUpost_stats.mat Same for EMU
OMPR_USGtable1.mat Auxiliary file for table 1 to avoid repeating the same calculations every time

Programs called:
OMPRmoments.m Computes serial correlations and accelerationist Phillips correlation
OMPRmomentssim.m Computes moments for many different parameter draws
OMPRvd.m Computes variance decompositions
SIGEma.m solves the model for 4 variables
SIGEmafive.m solves the model for 5 different variables
OMPR_optpy1.mat Optimal price-targeting rule at priors
OMPR_optpy2.mat Optimal price-targeting rule with single-stickiness
OMPR_optpy3.mat Optimal price-targeting rule with single-stickiness
OMPR_opttr1.mat Optimal interest-rate rule at priors
OMPR_opttr2.mat Optimal interest-rate rule with single-stickiness
OMPR_opttr3.mat Optimal interest-rate rule with single-stickiness
OMPR_robdraws.mat Set draws for computing robustly optimal policies