Written by Eric Hsu, edited by Andrew Tai, 5/11/16.

This folder contains replication files for “Monetary policy effectiveness in China: Evidence from a FAVAR model” by John Fernald, Mark Spiegel, and Eric Swanson. To replicate the results in the paper:

1. Run “d01\_read\_CEIC\_data.do” in the folder for Part (1) of the project. This reads in and cleans the raw data. For documentation on the data sources, see the excel spreadsheet in this folder.

Note: If there is an error, check that Stata’s working directory is the location of this program.

1. In “d02\_make\_matlab\_input.do”, load the main function, and run the first function call at the bottom of the do file. (Do not call the function more than once.) Calling the function will create a Matlab input file that is needed in Part (2).
2. Go to the data folder of Part (2). Open “Input.xls”, which was just created in step 2. Convert all the data cells from text to numeric format. The easiest way to do this is to type the number 1 into an empty excel cell in a new spreadsheet, copy the cell, and “paste special” into all of the data cells of Input.xls. Choose the "multiply" option for paste special.
3. Open “frbsffavar\_china.m” in Part (2). Set the parameters as indicated in “d02\_make\_matlab\_input.do” in the comments to the function call you just ran. Run the Matlab program, which will fill in missing data and estimate the latent factors.  
     
   If the Matlab program errors, the reason may be that you did not correctly convert the data cells from text format to numeric format. It may also error because you did not specify the right number of EA and PR factors at the top of the Matlab program.
4. Go to the results folder in Part (2) to find the Matlab output. Locate the folder with the most recent date (this folder was just created by the Matlab program). Copy the file named “favarfcast\*\*\*\*\*.xls”, where \*\*\*\*\* is the current date. Paste this file in the data folder of Part (3) and rename the file as indicated in “d02\_make\_matlab\_input.do” in the comments for the function call that you ran in step 2.
5. Repeat steps 2, 3, 4, and 5 for each function call in “d02\_make\_matlab\_input.do” to reproduce all the data files for Part (3).
6. In Part (3), run programs g01, g02, and g03 to reproduce Figures 1-8 and Figure A1. All output is in the “Output” folder for Part (3).

Other notes:

1. Some tips for using the Census Bureau's x12 program are here: http://www.census.gov/ts/papers/gettingstartedx12.pdf