Readme file for "Are the effects of monetary policy shocks big or small?

Data used in the paper:

- Macroeconomic series are in Data_AEJ.xlsx, in the MonthlyData worksheet.
- Romer and Romer (2004) shocks are taken from David Romer's website. Data used to estimate these shocks is also available in Romer&Romer.wf1 eviews workfile.
- The baseline VAR and the hybrid VAR shocks used in the paper can be found in Shocks worksheet in Data_AEJ.xlsx. These shocks are backed out of VAR estimations in estimation1.m in the MatlabFiles folder.
- GARCH shocks are in the Data_AEJ.xlsx file, Shocks worksheet. The estimation is done in Romer&Romer.wf1 eviews workfile (garcheq is the estimation used to generate the shocks). As described in the paper, this estimation only begins in 1972:11. Shocks prior to this are extracted in AppendixFigure3 worksheet in Data_AEJ.xlsx workfile.
- TVC shocks are in the Data_AEJ.xlsx file, Shocks worksheet. The time-varying paramaters estimation is done in App_Figure4_AEJ.m in the TVCmodel-final subfolder of the MatlabFiles folder. The extraction of the shocks is done in DataTVC_AEJ.xlsx in the main folder.
- Smets-Wouters (2007) shocks are in Data_AEJ.xlsx file, Shocks worksheet. These are extracted from replicating the Smets-Wouters estimation program of their AER paper. Programs are available from AER website.
- Bernanke-Mihov measure of the stance of monetary policy, found in Data_AEJ.xlsx worksheet Figure6, is downloaded from Mihov's website.
- Boschen-Mills (1995) measure of stance of monetary policy, found in Data_AEJ.xlsx worksheet Figure6, is taken straight from their 1995 paper.

Files used to generate Figures in the paper:

- Figures 1-5, 9-11 are all generated by Matlab files in the MatlabFiles folder and are denoted by FigureX_AEJ.m
- Figure 6 is in Data_AEJ.xlsx in the main folder.
- Figures 7 and 8 are both generated by Figures7_8_AEJ.m in the MatlabFiles folder.
- Figure 12 is generated by Figure12_AEJ.m in the modelaveraging subfolder of the MatlabFiles folder. This file uses output from the model-averaging procedure. The output files are denoted by MA3_AEJI_J_K.mat where:
    - *I*=1 for IP, 2 for UE, 3 for prices

- *J*=1 for whole sample, 2 for restricted sample
- *K*=1 for original R&R shocks, 2 for GARCH shocks, 3 for TVP shocks, 4 for Smets and Wouters shocks.

These output files are generated from running MA3estimation_open_AEJ.m file in the same folder.

- Appendix Figures 1, 2, 5, 7 are all generated by Matlab files in the MatlabFiles folder and are denoted by App_FigureX_AEJ.m
- Appendix Figures 3, 6, and 8 are generated in Data_AEJ.xlsx in the main folder, in the worksheets labeled with each Appendix Figure #.
- Appendix Figure 4 is generated by App_Figure4_AEJ.m which is in the TVCmodel-final subfolder of the MatlabFiles folder.

Note: Footnote 4 claims that results are robust to using the CPI excluding shelter. In the files used to generate figures 1-8, this can be verified by changing the price index used in the estimation to the CPI less shelter. In Figure1_AEJ.m, for example, Lines 11 and 12 allow the user to specify the price index to be the CPI less shelter (pmeasureVAR and pmeasureIRF=2) instead of the overall CPI (pmeasureVAR and pmeasureIRF =1).

<u>Files used to generate Tables in the paper:</u>

- Table 1 in the paper is available in Tables_AEJ.xlsx and is generated in the Eviews workfile monthly.wf1. The equations are saved as eq_I_J where
  - *I*=ip for industrial production, pi for inflation, ue for unemployment
  - *J*=ws for whole sample, rs for restricted sample.
- Table 2 in the paper is available in Tables_AEJ.xlsx and the results are generated in the Matlab file Table2_AEJ.m in the modelaveraging subfolder of the MatlabFiles folder. This file uses output from the model-averaging procedure. The output files are denoted by MA3_AEJI_J_K.mat where:
  - *I*=1 for IP, 2 for UE, 3 for prices
  - *J*=1 for whole sample, 2 for restricted sample
  - *K*=1 for original R&R shocks, 2 for GARCH shocks, 3 for TVP shocks, 4 for Smets and Wouters shocks.

  These output files are generated from running MA3estimation_open_AEJ.m file in the same folder. In addition, the Table2_AEJ.m uses the output files MA3estimation_VAR_AEJ.mat and

MA3estimation_VARrr_AEJ.mat which are generated by MA3estimation_VAR_AEJ.m and MA3estimation_VARrr_AEJ.m respectively.

- Appendix Table 1 is available in Tables_AEJ.xlsx and is generated from IC_MC1_true12.m in the modelaveraging subfolder of the main Matlab folder. The output file from this Monte Carlo exercise is IC_MC1_true12.mat.
- Appendix Table 2 is available in Tables_AEJ.xlsx. Estimation is done in Eviews file Romer&Romer.wf1. The three equations in Appendix Table 2 are saved in the workfile as rr_eq, rr_eq_rest, and garcheq. All of the data in this workfile are from Romer and Romer (2004), available on David Romer's website and follow their mnemonics.