

This folder contains the data and codes to replicate the results of the paper "News Shocks, Business Cycles, and the Disinflation Puzzle", by Hafeedh Bouakez and Laurent Kemoe, to be published in the *Journal of Money, Credit, and Banking*.

The folder contains four sub-folders, numbered 1 to 4 and described below.

1. The Sub-folder "2007" contains the codes to replicate all the results based on Barsky and Sims' original sample ending in 2007Q3 (Figures 1, 7, 9, the top panel of Figure 11, and Parts of Tables 1 & 2).

- The data file is "news\_shock\_data.xlsx".
- The script "Irf\_VD\_MSSR.m" computes the impulse response functions, associated confidence intervals, and variance decompositions based on our agnostic approach. The results are stored in the matrix "Irf\_VD\_MSSR.mat".
- The script "Irf\_VD\_BS.m" computes the impulse response functions, associated confidence intervals, and variance decompositions based on Barsky & Sims' approach. The results are stored in the matrix "Irf\_VD\_BS.mat".
- The script "Irf\_VD\_MS.m" computes the impulse response functions, associated confidence intervals, and variance decompositions based on the Max Share approach. The results are stored in the matrix "Irf\_VD\_MS.mat".
- The script "Figure1.m" uses the results stored in "Irf\_VD\_BS.mat" as well as those predicted by the standard New Keynesian model (stored in "NK.mat") and the Smets & Wouter's mode (stored in "SW\_BS.mat") to generate Figure 1. The theoretical results are obtained by feeding the models with the estimated TFP process.
- The script "Figures7\_9\_Tables1\_2.m" uses the results stored in the matrices "Irf\_VD\_MSSR.mat", "Irf\_VD\_BS.mat", "Irf\_VD\_MS.mat", along with those predicted by the Smets & Wouter's model under the different estimated TFP processes (stored in "SW\_MSSR.mat", "SW\_BS.mat", and "SW\_MS.mat"), to generate Figures 7, 9, the top panel of Table 1 and the left panel of Table 2.
- The script "HD\_MSSR.m" computes the historical decomposition of the series used in the VAR, based on our agnostic approach. The results are stored in "HD\_MSSR.mat" and used by the script "Figure11\_top\_panel.m" to generate the top panel of Figure 11.

2. The Sub-folder "2019" contains the codes to replicate all the results based on the extended sample ending in 2019Q4 (Figures 2, 8, 10, the bottom panel of Figure 11, Parts of Tables 1 & 2, and Table 3).

- The Excel file "newsdata2019.xlsx" shows data sources and transformations (which are described in Footnote 8 of the paper).
- The script "Irf\_VD\_MSSR.m" computes the impulse response functions, associated confidence intervals, and variance decompositions based on our agnostic approach. The results are stored in the matrix "Irf\_VD\_MSSR.mat".
- The script "Irf\_VD\_BS.m" computes the impulse response functions, associated confidence intervals, and variance decompositions based on Barsky & Sims' approach. The results are stored in the matrix "Irf\_VD\_BS.mat".
- The script "Irf\_VD\_MS.m" computes the impulse response functions, associated confidence intervals, and variance decompositions based on the Max Share approach. The results are stored in the matrix "Irf\_VD\_MS.mat".
- The script "Figure2.m" uses the results stored in "Irf\_VD\_BS.mat" as well as those predicted by the standard New Keynesian model (stored in "NK.mat") and the Smets & Wouter's mode (stored in "SW\_BS.mat") to generate Figure 2. The theoretical results are obtained by feeding the models with the estimated TFP process.

- The script "Figures8\_10\_Tables1\_2.m" uses the results stored in the matrices "Irf\_VD\_MSSR.mat", "Irf\_VD\_BS.mat", "Irf\_VD\_MS.mat", along with those predicted by the Smets & Wouter's model under the different estimated TFP processes (stored in "SW\_MSSR.mat", "SW\_BS.mat", and "SW\_MS.mat"), to generate Figures 8, 10, the bottom panel of Table 1 and the right panel of Table 2.
- The script "HD\_MSSR.m" computes the historical decomposition of the series used in the VAR, based on our agnostic approach. The results are stored in "HD\_MSSR.mat" and used by the script "Figure11\_bottom\_panel.m" to generate the bottom panel of Figure 11.
- The script "Table3.m" also uses the results stored in the matrix "HD\_MSSR.mat" to produce Table 3.

3. The Sub-folder "Annual" contains the data used to plot Figure 3 ("Figure3.xlsx") and the script to replicate Figure 4.

- The script "reducedform.m" uses annual data (imported from "Annual data.xlsx") to compute the impulse responses to a reduced-form innovation to the annual TFP series constructed by Basu, Fernald, and Kimball (2006). The results are stored in the matrix "ModelRF.mat".
- The script "Figure4.m" uses the results stored in the matrix "ModelRF.mat" to generate Figure 4.

4. The Sub-folder "Simulations" contains the dynare codes to solve and generate artificial data from the constant and non-constant returns to scale versions of the New Keynesian model presented in Section 2.3 of the paper, as well as the scripts to generate Figures 5 & 6 in the paper.

- The dynare code "NK\_CRS.mod" solves, computes impulse responses, and simulates artificial series from a standard New Keynesian Model with constant returns to scale.
- The dynare code "NK\_IRS.mod" solves, computes impulse responses, and simulates artificial series from a standard New Keynesian Model with increasing returns to scale.
- The script "Simul\_CRS\_BS.m" uses simulated data from "NK\_CRS.mod" to estimate the impulse responses to a reduced-form innovation to measured TFP. The results are stored in the matrix "Sim\_data\_CRS\_BS.mat".
- The script "Simul\_IRS\_BS.m" uses simulated data from "NK\_IRS.mod" to estimate the impulse responses to a news shock based on Barsky & Sims' approach. The results are stored in the matrix "Sim\_data\_IRS\_BS.mat".
- The script "Simul\_IRS\_MS.m" uses simulated data from "NK\_IRS.mod" to estimate the impulse responses to a news shock based on the Max Share approach. The results are stored in the matrix "Sim\_data\_IRS\_MS.mat".
- The script "Simul\_IRS\_MSSR.m" uses simulated data from "NK\_IRS.mod" to estimate the impulse responses to a news shock based on our agnostic approach. The results are stored in the matrix "Sim\_data\_IRS\_MSSR.mat".
- The script "Figure5.m" generates Figure 5 using the results stored in the matrices "Sim\_data\_CRS\_BS.mat" and "Sim\_data\_IRS\_BS.mat", and the theoretical impulse responses to the surprise technology shock.
- The script "Figure6.m" generates Figure 6 using the results stored in the matrices "Sim\_data\_IRS\_BS.mat", "Sim\_data\_IRS\_MS.mat", and "Sim\_data\_IRS\_MSSR.mat", and the theoretical impulse responses to the news shock.