Guide to the code for Inoue and Kilian, "When Is the Use of Gaussian-inverse Wishart-Haar Priors Appropriate?" (2025, forthcoming: JPE)

1. Overview

(a) The data for the empirical illustrations were obtained from Baumeister and Hamilton (2018), Kilian and Zhou (2022) and Antolin-Diaz and Rubio-Ramirez (2018), respectively. These data have been saved to *.mat files in the respective subdirectories.

(b) The application code is written in MATLAB and relies on parallel processing. It has been suitably adapted from the MATLAB code provided by Giacomini and Kitagawa (2012) and Giacomini, Kitagawa and Read (2024), as available on their homepages.

Because the code uses parallel processing, as in the original Giacomini et al. code, even after fixing the random seed at the beginning of the code, the results may be slightly different each time when executing the code. The differences tend to be in the third decimal place when computing the boundaries of the identified set, its width and the maximum error and do not affect the substance of our results.

(c) The code for the Watson (2019) and Uhlig (2017) stylized examples is written in Julia. MATLAB is used to produce Figure 1 from the data generated in Julia.

2. Guide to the files:

The code is organized by subdirectory:

\table1

Executing the file table1.m reproduces Table 1 for the Watson (2019) model.

\table2

Executing the file table2.m reproduces Table 2 for the Watson (2019) model.

\table3

Executing the file table3.m reproduces Table 3 for the Uhlig (2017) model.

\table4and5

Executing the file table4a5a.m, table4b5b.m and table4c5c.m (corresponding to the model with no restrictions, only impact restrictions and additional narrative restrictions) reproduces the respective rows in Tables 4 and 5.

\table6

Executing the file table6.m reproduces Table 6 for the Uhlig (2005) model.

\table7

Executing the files table7_Uhlig.m and Table 7_ADRR reproduces the respective columns in Table 7 for the Uhlig (2005) and Antolin-Diaz and Rubio-Ramirez

(2018) models.

\table8
Executing the file table8.m reproduces Table 8 for the Antolin-Diaz and Rubio-Ramirez (2018) model

\table9
Executing the file table9.m reproduces Table 9 for the Kilian and Zhou (2022) model.

\figure1
Executing the file figure1.m reproduces Figure 1 for the Watson (2019) model.