Replication Package for Fan Charts 2.0: Flexible Forecast Distributions with Expert Judgement

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Repository

https://github.com/sokolandrej/fanCharts2.git

Data

All data used in the paper are processed in the code from the raw series in *data.mat*, which correspond to columns D to H of the 'MATLAB' tab in *data.xlsx*. Columns B and C also contain the non-seasonally-adjusted data for HICP and house prices, while columns G and H contain the seasonally adjusted series used in the paper (x-13 spec files are provided in the replication folder).

The data are obtained by splicing official series from the ECB's Statistical Data Warehouse (see individual tabs in *data.xlsx*) with pre-1999 data from two vintages of the (discontinued) Area-Wide-Model (AWM) database. The 'ecbwp042' tab is from here, while the 'AWM19UP18' tab, which used to be available here, can still be retrieved from the GRETL app, or here.

Codes

To replicate all charts and tables in the paper, MATLAB codes are provided. For the project, version R2021b (with *Parallel* and *Statistics and Machine Learning* toolboxes) on a Linux machine running Ubuntu 22.04 was used. The run time on an i7-13700H with 64Gb RAM and *Parallel Toolbox* is approximately 1.5h.

Running MAIN.m reproduces all charts and tables. The charts and tables will be saved in the */replication* subfolder. *The /mfunctions* subfolder contains all required MATLAB functions and includes codes from A. Azzalini/A. Capitanio, A. Cesa-Bianchi, J. D'Errico, DYNARE, D. Giannone/M. Lenza/G. Primiceri, D. Korobilis, B. Rossi/T. Sekhposyan.