

How strong is the link between the global financial cycle and national macro-financial dynamics? A wavelet analysis

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REPLICATION MATERIAL

1. Content:

The replication material contains:

- The underlying raw data (**2509. Dataset for estimation.xlsx**), also including information about sources and variable. Data transformations as specified in the paper are conducted in R.
- The main code to replicate all results jointly (**Main.r**).
- A set of folders for the figures ("**Figure ...**") or tables ("ResultsFEVD"). These folders also contain the specific R code to replicate corresponding result.

2. Software environment

All the estimations were conducted in the open-source language **R (version 4.4.2 of 2024-10-31)**, run on *Mac OS Sequoia 15.6.1* with Apple's M4 chip, and tested for the last time on August 30th, 2025.

During our research process, we benefited from various open-source R libraries included in our code. Among those, we specially acknowledge *vars* (by Bernhard Pfaff) for structural vector autoregressive modelling, *WaveletComp* (by Angi Rösch & Harald Schmidbauer) for continuous wavelet analysis, and *tidyverse* (by Hadley Wickham) for data management and plotting.

3. Replication of the results

One way to replicate the results is to run **Main.r**. All figures will be stored in the corresponding folder and can be accessed by the user, while the FEVD results will show up in the R console.

Alternatively, the user can click on the desired folder to find the specific R code. Running such code will replicate the selected part of the analysis only.

Regardless of the user's choice and without loss of graphics quality, the figures are generated individually, i.e., the arrangement of multiple figures as shown in the paper is not part of the R code and is rather left at the discretion of the user.

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