

GREEN BUBBLES: A FOUR-STAGE PARADIGM FOR DETECTION AND PROPAGATION

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REPOSITORY OVERVIEW

The repository includes the following folders and files:

- › **Economic variables**: contains the dataset on economic and financial indicators covering the period from January 2005 to February 2024;
- › **Google Trends**: contains the dataset on search volume indices covering the period from January 2005 to February 2024;
- › **Google Trends OD (Original Data)**: contains the raw data as downloaded directly from the Google Trends platform (including all search term details);
- › **Code.html**: an HTML report generated with R Markdown, summarizing all results and providing an accessible overview of the findings;
- › **Code.Rmd**: an R Markdown file with the full reproducibility code. After installing the required packages, all chunks can be run to replicate the results presented in the article;
- › **Figures**: contains all figures included in the article, generated from the `Code.rmd` file.

All data processing was performed using R version 4.5.1 on a Windows 11 laptop equipped with 16 GB of RAM. To ensure full reproducibility, it is recommended to use the same R version. The complete code requires approximately 15 minutes to execute.

To replicate the analysis, first install the appropriate version of **R**, followed by **Rtools** and **RStudio**. Then, open the `Code.rmd` file, run the **first code chunk** to install all required packages, and continue executing the subsequent chunks to reproduce the results.

At the end of the `Code.rmd` file, a code chunk containing the `sessionInfo()` command displays the R version, platform details, and package versions used in this analysis.