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[1] covering the period from January 2005 to February 2024;

› **Google Trends**: contains the dataset on search volume indices[2] 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_resubmission_2.html**: an HTML report generated with R Markdown, summarizing all results and providing an accessible overview of the findings;

› **Code_resubmission_2.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.

All data were processed using R version 4.4.1, with the required packages installed on a laptop with 16 GB of RAM. The complete code runs in approximately 15 minutes on average. The following libraries are required to be installed in order to reproduce all the results.

› aTSA

› bbdetection

› bestNormalize

› blorr

› bruceR

› bsts

› BVAR

› car

› caret

› changepoint

› corrplot

› cpm

› DescTools

› devtools

› dplyr)

› epiDisplay

› exuber

› factoextra

› fANCOVA

› fDMA

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[1] Available at daily or monthly frequency.
[2] Available at monthly frequency, without individual search term details.

- fGarch
- forecast
- fpp
- ggfortify
- ggplot2
- ggpmisc
- ghyp
- glmnet
- goft
- grid
- gridExtra
- HoRM
- hrbrthemes
- lattice
- lmtest
- lubridate
- MCS
- Metrics
- ModelMetrics
- modelr
- multDM
- oddsratio
- parameters
- plotmo
- pscl
- psych
- qcc
- rbmi
- Rbeast
- readr
- readxl
- Rlibeemd
- rugarch
- Rssa
- stats
- strucchange
- tictoc
- tidyr
- TSA
- tsDyn
- tseries
- tsoutliers
- tvReg
- urca
- vars
- visreg
- xtable
- zoo