

Replication package for  
“Green Stocks and Monetary Policy Shocks: Evidence from Europe”  
by Michael Bauer, Eric Offner, Glenn Rudebusch

This replication package contains the data and code used to produce all tables and figures in the paper “Green Stocks and Monetary Policy Shocks: Evidence from Europe” by Bauer, Offner, and Rudebusch, published in the *European Economic Review*.

## Raw and intermediate data

### Raw data files, subfolder data

<u>File</u>	<u>Description</u>
*european_prices.xlsx	Daily stock prices from Datastream
*european_mktcap.xlsx	Daily market cap from Datastream
*accounting_data.csv	Accounting and emission data from Refinitiv
Dataset_EA-MPD.xlsx	High-frequency OIS rates from the Euro Area Monetary Policy Event-Study Database. Data is available <a href="#">here</a>
shocks_ecb_mpd_me_d.csv	Monetary policy surprises from Jarocinski and Karadi (2018). Data is available <a href="#">here</a>
*index_data.csv	Stock indices from Bloomberg

*Data files marked with \* contain licensed/proprietary data and are not part of the replication package. Sample data files are included, which append “\_SAMPLE” to the filename and contain the first ten rows of the actual data files and anonymized firm names.*

### Intermediate data files, subfolder output

<u>File</u>	<u>Description</u>
euro_surprises.RData	Monetary policy surprises (3m, 1y OIS rates, first principal component of 1m, 3m, 6m, and 12m, Target, FG, and KTW)
european_data_mps.RData	Pre-processed merged market and accounting data and monetary policy surprises
euro_port_mps.RData	Portfolios based on total emissions and emission intensity merged with monetary policy surprises

## Setup, Data Processing and Estimation

### *Directories*

- R: All the necessary R code
- data: All necessary raw data

- figures: All figures in pdf format
- output: Pre-processed data used for the analysis

When running the R code, the **working directory** needs to be the root folder of the replication package.

### *Installation of R packages*

Code file R/setup.R installs (if missing) and loads all the packages required for running the R code.

### *Creation of monetary policy surprises:*

- Code: R/create\_mps.R
- Requires: data/Dataset\_EA-MPD.xlsx
- Output: output/euro\_surprises.RData

### *Preprocessing of firm-level data:*

- Code: R/preprocessing.R
- Requires:
  - data/european\_prices.xlsx
  - data/european\_mktcap.xlsx
  - data/accounting\_data.csv
  - data/shocks\_ecb\_mpd\_me\_d.csv
  - data/euro\_surprises.RData
- Output:
  - output/european\_data\_mps.RData
  - output/euro\_port\_mps.RData

## Figures and Tables

### *Table 1 to Table 8*

- Code:
  - R/table1\_summary\_statistics.R
  - R/table2\_baseline.R
  - R/table3\_portfolios.R
  - R/table4\_greenness\_measures.R
  - R/table5\_different\_surprises.R
  - R/table6\_heterogeneous\_effects.R
  - R/table7\_mean\_green\_brown.R
  - R/table8\_heterogeneous\_effects.R
- Requires: output/european\_data\_mps.RData
- Output: All files print tables as latex code to console

### *Figure 1*

- Code: R/figure1\_reaction\_bmg.R
- Requires: output/euro\_port\_mps.RData

- Output: Figure 1 in figures/catterplot\_BMG\_both.pdf

*Figure 2 and Table 9:*

- Code:
  - R/figure2\_reaction\_indexes.R
  - R/table9\_energy\_indexes.R
- Requires:
  - data/index\_data.csv
  - output/euro\_surprises.Rdata
  - data/shocks\_ecb\_mpd\_me\_d.csv
- Output:
  - Figure 2 in figures/BMG\_indices.pdf
  - Table 9 in latex code to the console