Replication Package for **Finance without exotic risk**

1. Overview

The Stata code in this replication package produces the data underlying the paper's 10 tables, 21 appendices, and 1 figure. It draws primarily on data from CRSP, Compustat, and IBES. Runtime is approximately 72 hours with real data and 24 hours with pseudo data.

2. Data Availability

The paper uses CRSP, Compustat, and IBES data obtained from WRDS (https://wrds-www.wharton.upenn.edu), which is copyrighted and requires institutional access, and historical data on book values from Ken French's data library, which is publicly available online at http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

List of Datasets

Directory	File name	Provided	Source
Data/Compustat/	funda.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/Compustat/	funda.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/Compustat/	fundq.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/Compustat/	fundq.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/Compustat/	DFF_BE_With_Nonindust.xslx		https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_historical_be_data.html
Data/CRSP/	dsf.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/CRSP/	dsf.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/CRSP/	mcti.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/CRSP/	msf.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/CRSP/	msf.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/CRSP/	stocknames.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/CRSP/	stocknames.sas7bndxd	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	actpsumu_epsus.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	actpsumu_epsus.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	adjsum.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	adjsum.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	ptgsumu.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	ptgsumu.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	statsumu_epsus.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	statsumu_epsus.sas7bndx	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	statsum_xepsus.sas7bdat	No	https://wrds-www.wharton.upenn.edu
Data/IBES/	statsumu_xepsus.sas7bndx	No	https://wrds-www.wharton.upenn.edu

As an alternative to the copyrighted data, we provide a set of pseudo datasets created by adding white noise to variables from the original CRSP, Compustat, and IBES files for a subset of the observations. While the pseudo datasets do not replicate the tables or figures in the paper, they provide a functional illustration of how the code operates and how the analysis is structured.

List of Pseudodatasets

Directory	File name	Provided
PseudoData/Compustat/	funda.sas7bdat	Yes
PseudoData/Compustat/	funda.sas7bndx	Yes
PseudoData/Compustat/	fundq.sas7bdat	Yes
PseudoData/Compustat/	fundq.sas7bndx	Yes
PseudoData/CRSP/	dsf.sas7bdat	Yes
PseudoData/CRSP/	dsf.sas7bndx	Yes
PseudoData/CRSP/	mcti.sas7bdat	Yes
PseudoData/CRSP/	msf.sas7bdat	Yes
PseudoData/CRSP/	msf.sas7bndx	Yes
PseudoData/CRSP/	stocknames.sas7bdat	Yes
PseudoData/CRSP/	stocknames.sas7bndxd	Yes
PseudoData/IBES/	actpsumu_epsus.sas7bdat	Yes
PseudoData/IBES/	actpsumu_epsus.sas7bndx	Yes
PseudoData/IBES/	adjsum.sas7bdat	Yes
PseudoData/IBES/	adjsum.sas7bndx	Yes
PseudoData/IBES/	ptgsumu.sas7bdat	Yes
PseudoData/IBES/	ptgsumu.sas7bndx	Yes
PseudoData/IBES/	statsumu_epsus.sas7bdat	Yes
PseudoData/IBES/	statsumu_epsus.sas7bndx	Yes
PseudoData/IBES/	statsum_xepsus.sas7bdat	Yes
PseudoData/IBES/	statsumu_xepsus.sas7bndx	Yes

3. Software and Hardware Requirements

The code was run using Stata17 on a Linux computer running "Red Hat Enterprise Linux" with Intel(R) Xeon(R) Gold 6234 CPU @ 3.30GHz, 16 cores, and 188GB of memory. The code makes use to the following four Stata package: (1) gtools, (2) ivreg2, (3) ivreghdfe, and (4) estout. These packages can be installed by typing the commands below at the Stata prompt:

1. ssc install gtools, replace:
2. ssc install invreg2, replace
3. ssc install ivreghdfe, replace
4. ssc install estout, replace

4. Instructions

First, download all files to a folder on your computer (e.g., mydir) and update the directory path in the fourth line of BGLS2025.do accordingly.

Next, download the following SAS files from WRDS and place them in the appropriate *mydir*/Data subdirectories:

a. In *mydir*/Data/COMPUSTAT
    1. funda.sas7bdat
    2. funda.sas7bndx
    3. fundq.sas7bdat
    4. fundq.sas7bndx

b. In *mydir*/Data/CRSP
    1. dsf.sas7bdat
    2. dsf.sas7bndx
    3. mcti.sas7bdat
    4. msf.sas7bdat
    5. msf.sas7bndx
    6. stocknames.sas7bdat
    7. stocknames.sas7bndxd

c. In *mydir*/Data/IBES
    1. actpsumu_epsus.sas7bdat
    2. actpsumu_epsus.sas7bndx
    3. adjsum.sas7bdat
    4. adjsum.sas7bndx
    5. ptgsumu.sas7bdat
    6. ptgsumu.sas7bndx
    7. statsumu_epsus.sas7bdat
    8. statsumu_epsus.sas7bndx
    9. statsum_xepsus.sas7bdat
    10. statsumu_xepsus.sas7bndx

Add to *mydir*/Data/COMPUSTAT the book equity data from Davis, Fama, and French (2000) using the file "DFF_BE_With_Nonindust.xlsx" available from Ken French's data library at: https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/det_historical_be_data.html.

Finally, open the file "BGLS205.do" in Stata and execute it.

5. List of tables and programs

The code in the replication code reproduces all tables and figures in the paper and all online appendices, as explained below.

Table/Figure/Appendix	Program	Line number	Output file
Table 1	Table01_02_June.do	#80, #81	Table01_02_June.xlsx
Table 2	Table01_02_June.do	#82	Table01_02_June.xlsx

Table 3	Table03_June.do	#40, #43, #69	Table03_June.csv
Table 4	Table04_June.do	#147, #150	Table04_June.csv
Table 5	Table05_06_dp_June.do	#234	Table05_06_dp_June_BOOK.csv Table05_06_dp_June_SIZE.csv sv Table05_06_dp_June_INV.csv sv Table05_06_dp_June_PROF.csv sv Table05_06_dp_June_MOME.csv
Table 6	Table05_06_dp_June.do	#368	Table05_06_dp_June_BOOK.csv Table05_06_dp_June_SIZE.csv sv Table05_06_dp_June_INV.csv sv Table05_06_dp_June_PROF.csv sv Table05_06_dp_June_MOME.csv
Table 7	Table07_June.do	#39, #42	Table07_June.csv
Table 8	Table08_dp_June.do	#185, #188	Table08_dp_June.csv
Table 9	Table09_June.do	#113	Table09_June.csv
Table 10	Table10_June.do	#117, #131	Table10_June.csv
Figure 1	graphs_June.do	#30, #41, #52, #63	graphs_figure01_BOOK.tif, graphs_figure01_SIZE.tif, graphs_figure01_INV.tif, graphs_figure01_PROF.tif, graphs_figure01_MOME.tif
Appendix A1	AppendixA1_June.do	#57, #58, #61, #62, #131, #139	AppendixA1_June_ret.csv AppendixA1_June_reg.csv AppendixA1_June.xlsx
Appendix B1	Appendix B1_June.do	#100, #106, #112, #118, #138	AppendixB1_June.xlsx
Appendix B2	Appendix B2_June.do	#74, #75	AppendixB2_June.xlsx
Appendix B3	Appendix B3_June.do	#41, #44	AppendixB3_June.csv
Appendix B4	Appendix B4_June.do	#177, #179	AppendixB4_June_BOOK.csv AppendixB4_June_SIZE.csv AppendixB4_June_INV.csv AppendixB4_June_PROF.csv AppendixB4_June_MOME.csv
Appendix B5	Appendix B5_June.do	#178, #180	AppendixB5_June.csv
Appendix B6	Appendix B6_June.do	#143, #146	AppendixB6_June.csv
Appendix B7	Appendix B7_June.do	#56, #59, #61	AppendixB7_June.csv
Appendix B8	Appendix B8_June.do	#88	AppendixB7_June.csv
Appendix B9	Appendix B9_June.do	#135	AppendixB8_June.csv
Appendix B10	Appendix B10_June.do	#128, #154	AppendixB10_June.csv

Appendix B11	Appendix B11_June.do	#109, #110	AppendixB11_June.xlsx
Appendix B12	Appendix B12_June.do	#107, #110	AppendixB12_June.csv
Appendix B13	Appendix B13_June.do	#122, #125	AppendixB13_June.csv
Appendix C1	Appendix C1_June.do	#218	AppendixC1_June.csv
Appendix C2	Appendix C2_June.do	#196, #197	AppendixC2_June.csv
Appendix C3	Appendix C3_June.do	#188, #189	AppendixC3_June.csv
Appendix C4	Appendix C4_June.do	#203	AppendixC4_June.csv
Appendix C5	Appendix C5_June.do	#184, #185	AppendixC5_June.csv
Appendix D1	Appendix D1_June.do	#34	AppendixD1_June.csv
Appendix D2	Appendix D2_June.do	#218, #230, #240	AppendixD2_June.csv