

Replication files for
“Wealth Inequality in a Low Rate Environment”
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1 Description of Folder

The replication directory contains five folders, “Code”, “Data”, and “Output”, “Save”, and “Supplemental Data”

- Folder “Data” containing the following datasets:

Name	Type	Description
forbes400_1985.csv	csv	Hand-collected data on top 100 individuals in the 1985 Forbes ranking
forbes400_2015.csv	csv	Hand-collected data on top 100 individuals in the 2015 Forbes ranking
forbes400_panel.csv	csv	Forbes ranking from 1985 to 2015 Gomez [2023]
IMA.csv	csv	Bureau of Economic Activity [2023]
wealth_szz_baseline_estimates.csv	csv	Smith Matthew [2022]
funda.csv	csv	SP Global Market Intelligence [2023] (synthetic version) ¹
SCF/rscfp2016.csv	csv	Federal Reserve Board [2016]
SCF/p16i6.csv	csv	Federal Reserve Board [2016]
FRED/AAA.csv	csv	Moody’s [2023a]
FRED/BAA.csv	csv	Moody’s [2023b]
FRED/BOGZ1FL192090005A.csv	csv	Board of Governors of the Federal Reserve System (US) [2023a]
FRED/DPRIME.csv	csv	Board of Governors of the Federal Reserve System (US) [2023b]
FRED/SPPOPGROWUSA.csv	csv	Board of Governors of the Federal Reserve System (US) [2023c]
FRED/TTLHH.csv	csv	U.S. Census Bureau [2023]
FRED/CPIAUCSL.csv	csv	U.S. Bureau of Labor Statistics [2023]
FRED/RTFPNAUSA632NRUG.csv	csv	University of Groningen and University of California, Davis [2023]
FRED/TNWBShNO.csv	csv	Board of Governors of the Federal Reserve System (US) [2023d]

- Folder “Code” containing the following programs:

¹See the “Data Availability” section below

Name	Type	Description
/Julia/main.jl	Julia	generates Figures in Section 2
/Stata/main.do	Stata	generates Tables and Figures in Section 4 / Appendix C and E
/Stata/suffstat_clean.do	Stata	generates financing data for top 100 individuals in Forbes rankings
/Stata/suffstat_analysis.do	Stata	generates tables used to estimate sufficient statistic
/Stata/interest_rates.do	Stata	estimates the decline in interest rates
/Stata/wealth_inequality.do	Stata	estimates the increase in wealth inequality
/Stata/SCF.do	Stata	estimates the proportion and type of entrepreneurs
/Matlab/main.m	Matlab	implements the model calibration and solution
/Matlab/replication.m	Matlab	generates Tables and Figures in Section 5 / Appendix D
/Matlab/getDistSS.m	Matlab	computes steady-state wealth distribution
/Matlab/getLoss.m	Matlab	computes the loss function (baseline)
/Matlab/getLossChi.m	Matlab	computes the loss function (elastic extensions)
/Matlab/getMIT.m	Matlab	computes sequence of aggregates given an MIT shock
/Matlab/getModelOutput.m	Matlab	computes equilibrium in model experiment (baseline)
/Matlab/getModelOutput_ext.m	Matlab	computes equilibrium in model experiment (elastic extensions)
/Matlab/getQ.m	Matlab	computes transition probability matrix for state variables
/Matlab/getSS.m	Matlab	computes aggregates in steady-state
/Matlab/getTopShares.m	Matlab	computes top wealth share
/Matlab/getZeta.m	Matlab	computes Pareto exponent of wealth distribution in steady-state

- Folder “Output” containing three empty subdirectories, “Output/Figures”, “Output/Numbers” and “Output/Tables”. This folder is used to save the figures, numbers, and tables created by the programs.
- Folder “Save”, which is empty. This folder is used to save intermediary datasets created by the programs.
- Folder “Supplemental Data” containing two key datasets on the external financing of top entrepreneurs created by the programs

Name	Type	Description
forbes400_1985_financing.csv	csv	Equity payout yield, leverage and speed for individuals in 1985 Forbes ranking
forbes400_2015_financing.csv	csv	Equity payout yield, leverage and speed for individuals in 1985 Forbes ranking

2 Instructions

- To replicate the tables and figures in the paper, please follow these steps.
 1. Run “Code/Julia/main.jl” with Julia, after changing the MyPath variable (defined in the main.jl file) to the address of the replication folder
 2. Run “Code/Stata/main.do” with Stata, after changing the global MyPath (set in the main.do file) to the address of the replication folder

3. Run “Code/Matlab/main.m” with MATLAB after setting MATLAB current directory to “.../Code/Matlab”
4. Run “Code/Matlab/replication.m” with MATLAB after setting MATLAB current directory to “.../Output”

The code will generate figures in .pdf and .eps format in “Output/Figures”, numbers in .tex format in “Output/Numbers”, and tables in .tex format in “Output/Tables”, with names corresponding to the ones given in the paper. Note that the code does not replicate Table C.VII in the Online Appendix, which is simply taken from Appendix Table A.3. in [Kochen \[2022\]](#).

- To obtain the same results as the paper, you need to replace the synthetic version of funda.csv (Compustat annual) by the actual one from Wharton Research Data Services (WRDS). See the section on Data Availability below.
- Confirmed to run on an iMac 2020 or a PC:
 - Julia 1.9 (with installed packages Plots v1.39.0, LaTeXStrings v1.3.0, and PGFPlotsX v1.6.0)
 - Stata MP 16.0 (with installed command listtab v11.0, winsor2 v2.0, and binscatter v7.02)
 - Matlab R2023a

Expected running time is 5min.

3 Data Availability

All data are available online and the URLs are given in the bibliography. The only exception is the “funda.csv” dataset, which is from [SP Global Market Intelligence \[2023\]](#). This dataset can be accessed by subscription through Wharton Research Data Services (WRDS) (single user license around \$20K/year).

If you have a working subscription, you can download the dataset by following these instructions. Get to the Compustat Fundamentals Annual page and follow these steps:²

- Step 1: Choose entire time sample (1950-06 to most 2021-12),
- Step 2: Set the option “search the entire database” and keep default filers (Consolidation Level: C, industry format: INDL, data format: STD, Population Source: D).
- Step 3: Choose the set of variable: `gvkey conm at che seq dv mkvalt prcc_f csho adjex_f aqc sppe`

²URL at the time of writing is <https://wrds-www.wharton.upenn.edu/pages/get-data/compustat-capital-iq-standard-poors/compustat/north-america-daily/fundamentals-annual/>.

- Step 4: Keep default query output (Output format: csv, Compression Type: Uncompressed, Date Format: YYYY-MM-DD)

Finally, overwrite the synthetic dataset “funda.csv” in the Folder “Data” with the dataset output by WRDS.

References

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