The Distributional Financial Accounts of the United States

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Acknowledgements and Disclaimer

This project reflects the combined efforts of the Flow of Funds and Microeconomic Survey sections at the Federal Reserve Board. Contributors include: Michael Batty, Jesse Bricker, Joseph Briggs, Marco Cagetti, Ella Deeken, Sarah Friedman, Elizabeth Holmquist, Susan McIntosh, Kevin Moore, Danielle Nemschoff, Eric Nielsen, Karen Pence, Sarah Reber, Molly Shatto, Paul Smith, Kamila Sommer, Tom Sweeney, Jeff Thompson, Alice Henriques Volz.

The analysis and conclusions set forth here are those of the authors and do not indicate concurrence by other members of the research staff, the Board of Governors, or the Federal Reserve System.

Overview

Motivation: Produce quarterly, timely data on the distribution of wealth that are consistent with macro aggregates in the Financial Accounts of the United States.

- ▶ Construction of the Distributional Financial Accounts (DFA)
- ▶ Headline results
- ▶ Comparisons with other measures of the wealth distribution
- ▶ Application: demographic trends

DFA Construction Approach

Combine two existing FRB data products:

- ▶ Financial Accounts (FA): quarterly aggregate household wealth
- ▶ Survey of Consumer Finances (SCF): triennial survey of household balance sheets

Apply the distributional information contained in the SCF to aggregate wealth in the FA:

1. Match each component of FA wealth to an analogous SCF measure (Reconciliation)
2. For each part of the wealth distribution, interpolate and forecast the SCF analog in between SCF waves
3. In each quarter, apply the distribution of the SCF analog to the FA wealth component

Reconciliation

- For 30% of assets and liabilities (by amount), the SCF "Bulletin" measure aligns well with the FA (e.g. real estate, mortgages, DC pensions, checking accounts)
- 50% require significant adjustments to the SCF measure (e.g. assets in trusts and IRAs, valuation of non-publicly traded businesses)
- 20% are not directly measured in the SCF and instead are imputed using related SCF information (e.g. DB pensions, annuities, and insurance)
- The SCF is re-weighted to incorporate the wealth of the Forbes 400

Empirical Reconciliation Results

Table 1: FA and SCF Wealth Levels

	Average SCF/FA (%)	FA 2019Q3 ($M)	SCF 2019 ($M)
Total Assets	**101**	**124,905**	**123,320**
Nonfinancial assets	**104**	**37,416**	**35,323**
Real estate	114	33,718	29,612
Consumer durable goods	61	3,699	5,711
Financial assets	**99**	**87,489**	**87,997**
Time deposits and short-term investments	55	4,436	9,761
U.S. government and municipal securities	78	3,388	4,380
Corporate equities and mutual fund shares	131	29,812	27,010
Pension entitlements	100	27,145	27,166
Equity in noncorporate business	105	14,799	12,259
Other	90	7,909	7,422
Total Liabilities	**85**	**14,028**	**15,305**
Home mortgages	91	10,743	10,415
Consumer credit	61	2,727	4,117
Other	110	558	772
Net worth	**104**	**110,877**	**108,015**

Interpolation and Forecasting

We employ the "temporal disaggregation" method of Fernandez (1981) to construct quarterly DFA data:

- ▶ Extension of Chow and Lin (1971)
- ▶ Estimate the relationship between the triennial SCF and quarterly indicator series (currently 11 overlapping observations)
- ▶ Use these relationships to fill in distributions between SCF waves for each asset and liability, for each wealth and demographic group
- ▶ Indicator series: relevant FA series level, SP 500, Fed Funds rate, home prices and ownership, etc.

Headline Results
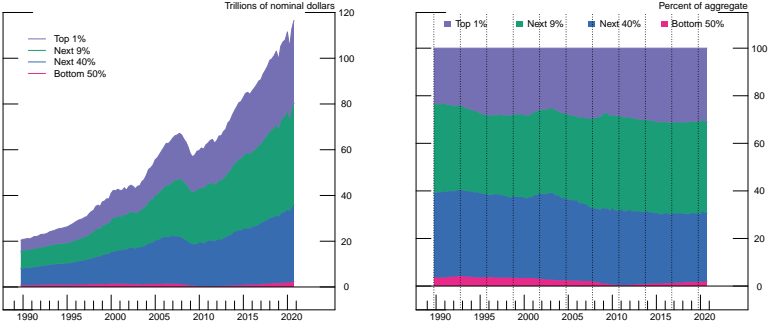
Figure 1: Net Worth by Wealth Percentile Group
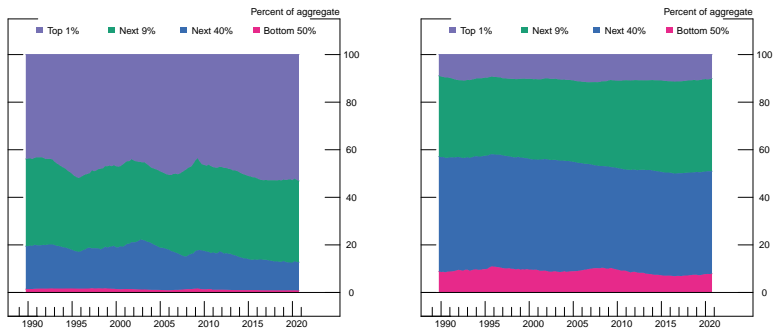
Shares by Asset Category

Figure 2: Business Equity (left), Pensions and Real Estate (right)

Comparison with SCF

Table 2: Average Wealth Shares by Decade

Years	Wealth Group	Baseline (1)	SCF Levels (2)	SCF Wealth Breakdown Directly Measured (3)	Indirectly Measured (4)
1989-1999	Bottom 50	4.0	4.4	3.5	7.6
	Next 40	35.0	34.8	34.7	38.0
	Next 9	34.8	34.6	34.9	33.6
	Top 1	26.3	26.1	26.9	20.8
2000-2009	Bottom 50	2.4	3.5	1.8	7.3
	Next 40	33.2	32.8	32.0	42.6
	Next 9	36.7	36.2	36.5	35.6
	Top 1	27.7	27.4	30.0	14.6
2010-2019	Bottom 50	1.0	2.1	0.2	5.9
	Next 40	29.7	29.3	28.4	39.6
	Next 9	38.4	37.6	38.8	38.7
	Top 1	31.0	30.9	32.6	15.8

Indirectly Measured: DB pensions, annuities, life insurance, misc. assets, other loans and advances, unpaid life insurance premiums

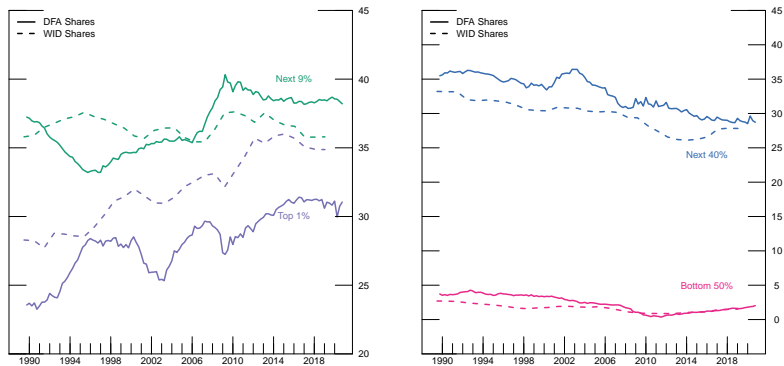# Comparison with World Inequality Database (WID)

Figure 3: Wealth Shares from the DFA and WID
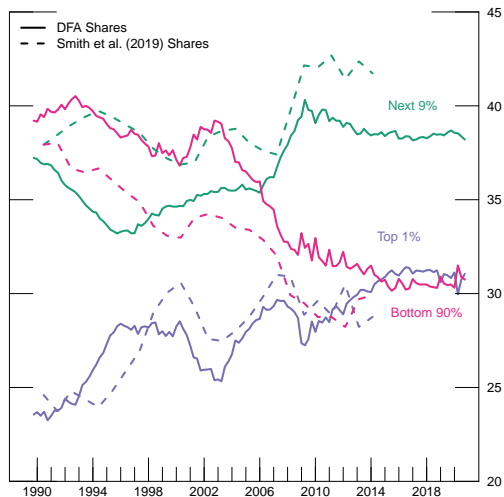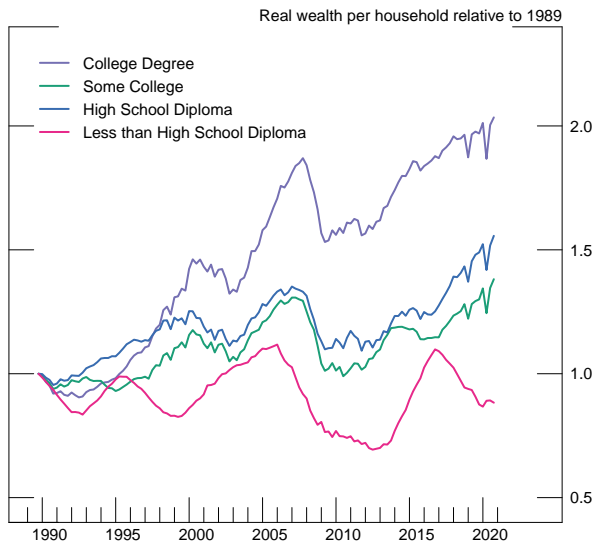
Comparison with Smith et al (2020)
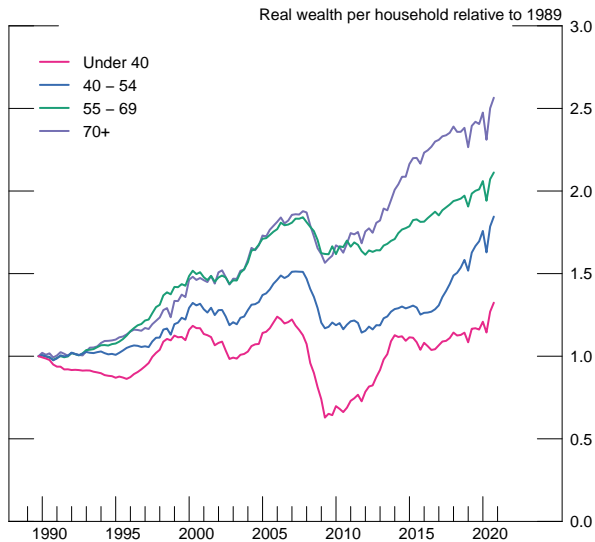

Figure 4: Wealth Shares from the DFA and Smith et al.

Wealth by Education

Real wealth per household relative to 1989

- College Degree
- Some College
- High School Diploma
- Less than High School Diploma

Wealth by Race

Real wealth per household relative to 1989

Legend:
- White
- Black
- Hispanic
- Other

Wealth by Age

Real wealth per household relative to 1989
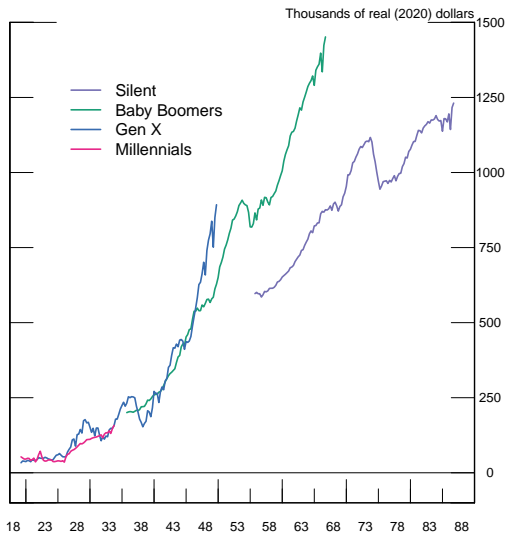
Legend:
- Under 40
- 40 – 54
- 55 – 69
- 70+
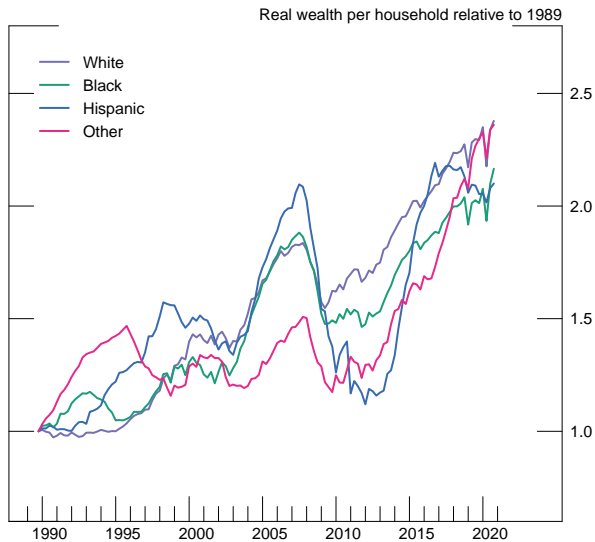
Wealth by Generation

Figure 5: Per Household Real Net Worth by Age

Conclusion

▶ DFA released approximately 11 weeks after the quarter close: https://www.federalreserve.gov/releases/z1/dataviz/dfa/index.html

▶ Distributions of wealth and its components from 1989 to present by: wealth, income, education, race, age, generation