Wealth Inequality in the United States since 1913

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Is rising inequality purely a labor income phenomenon?

Income inequality has increased sharply since the 1980s yet **the existing evidence on trends in wealth inequality is mixed**

$\rightarrow$ Is rising inequality solely driven by labor income?

We develop **a new technique to estimate the distribution of wealth** since 1913: we capitalize income tax returns

I.e., we multiply individual-level data on dividends, interest, rents... by 1/(aggregate rate of return of respective asset class)

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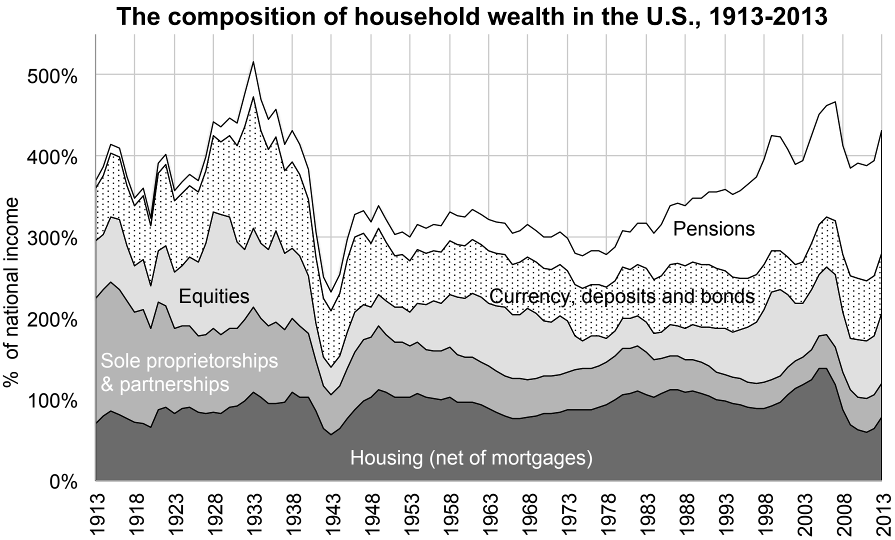
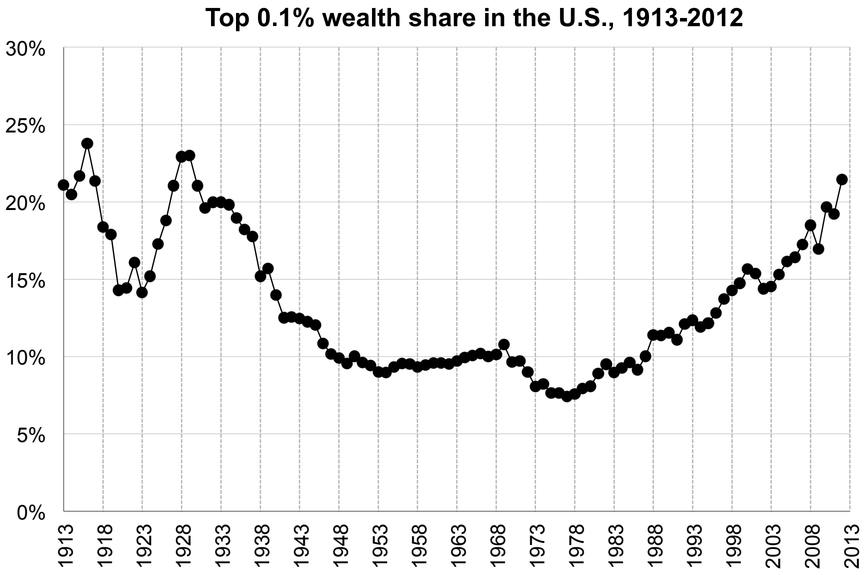
Key result: wealth inequality has surged, but phenomenon is concentrated mostly within the top .1% (=wealth above \$20m)

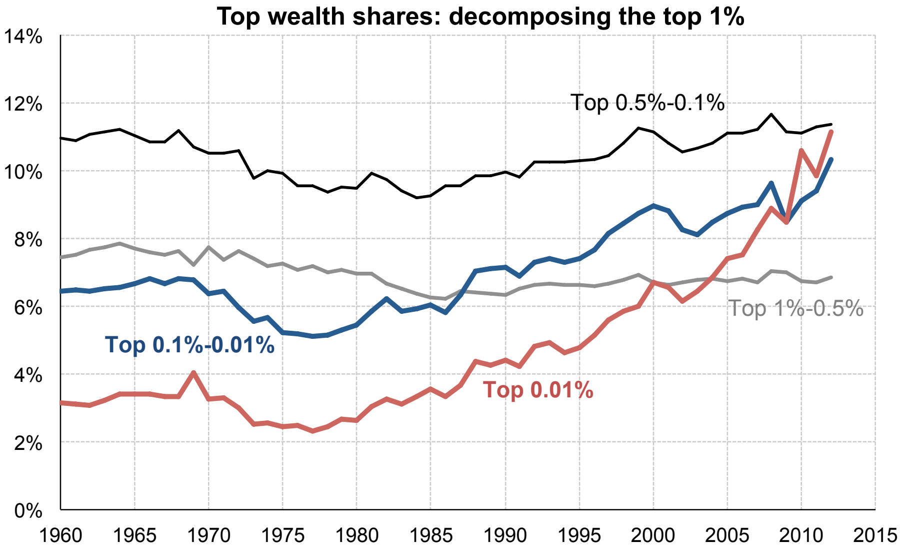
We estimate the distribution of total Flow of Funds wealth



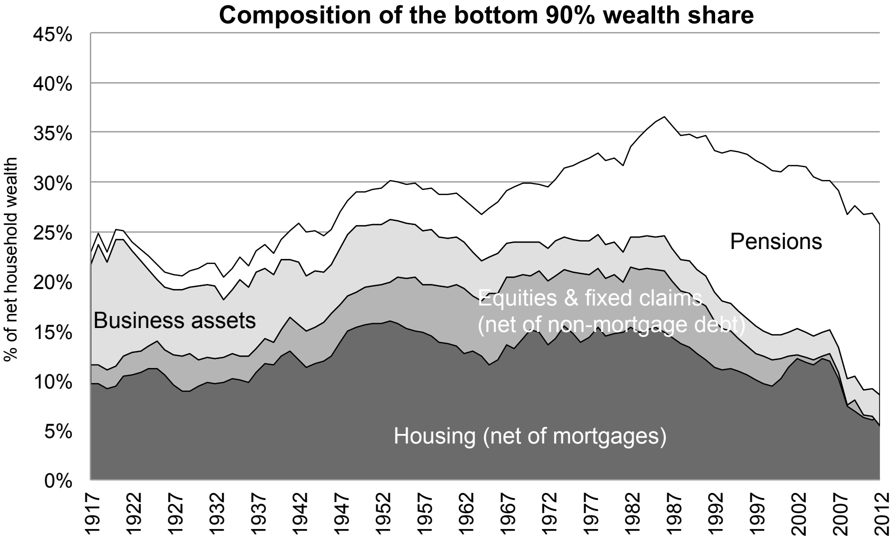
Wealth concentration is back to its 1920s level



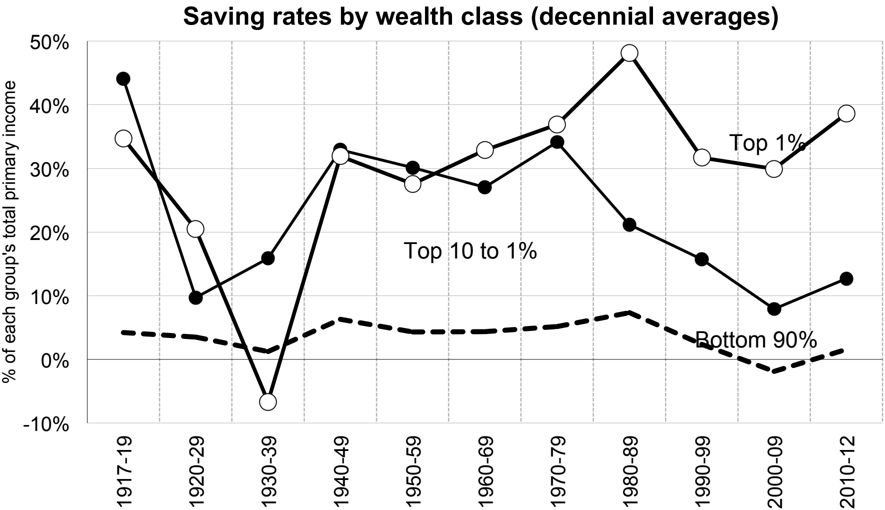
No increase in wealth shares below top 0.1% so far



The rise and fall of middle-class wealth



Middle-class wealth is falling because its relative saving rate is plummeting



The rich save more as a fraction of their income, except in the 1930s when there was large dis-saving through corporations. NB: The average private saving rate has been 9.8% over 1913-2013.

The capitalization technique raises a number of potential difficulties

1. Some wealth does not generate taxable income

2. The rich may declare a higher fraction of their income today than in the 1970s because of

    Changes in tax laws

    Reduced tax evasion

3. Wealthy households may have higher rates of return

4. SCF and estate tax returns do not show rising top 1% and 0.1% wealth shares

$$\Downarrow$$

We have taken each of these potential concerns very seriously

I- Wealth that does not generate taxable income

We systematically account for non-taxable capital income

Pensions

- Published IRS data on value of IRAs ($\approx$ 30% of pension wealth)
- Imputations for other forms of pension wealth (based on wages & pension distributions)

Owner-occupied housing

- Property tax paid
- Mortgage interest paid

$$\Downarrow$$

Could be improved, but largely irrelevant for top 1% and above because pensions and housing very small there

II- Changes in tax avoidance and evasion

A large amount of capital income is taxed at the household level

A lot of income flows to individual income tax returns

Mutual funds, S corporations, partnerships, holding companies...

We have conducted a systematic IRS - NIPA reconciliation exercice to identify "missing" income every year:

Fraction of economic capital income declared on tax returns is high

But it is no higher today than in 60s-70s kinc

E.g., corporate retained earnings are as high today as in 60s-70s

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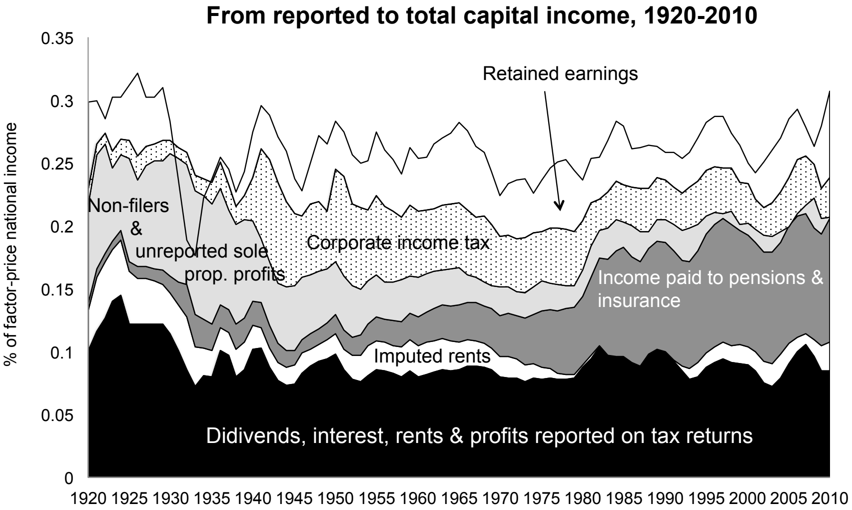
On aggregate, no more sheltered capital income in the 1970s than today

The fraction of capital income declared on tax returns has remained constant



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We find no evidence the wealthy had much more sheltered income in the 1970s

Estate and income tax data show that:

- Despite high tax rates the wealthy did earn a lot of dividends in the 1970s
- Trust wealth was higher in the 1960s than today, but (i) only marginally; (ii) we fully re-attribute it to its owners trusts
- Capital gains realizations were lower in the 1970s but we find same rise of top wealth shares when capitalizing dividends only and ignoring KG

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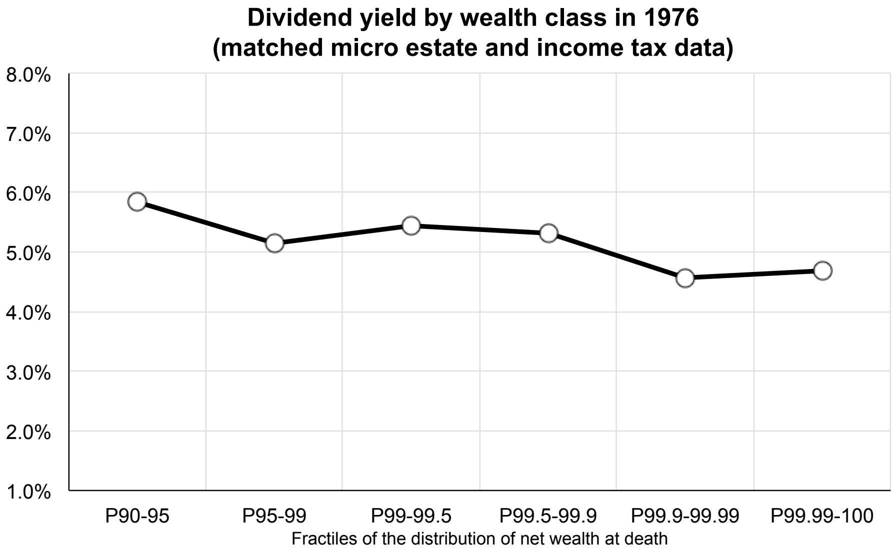
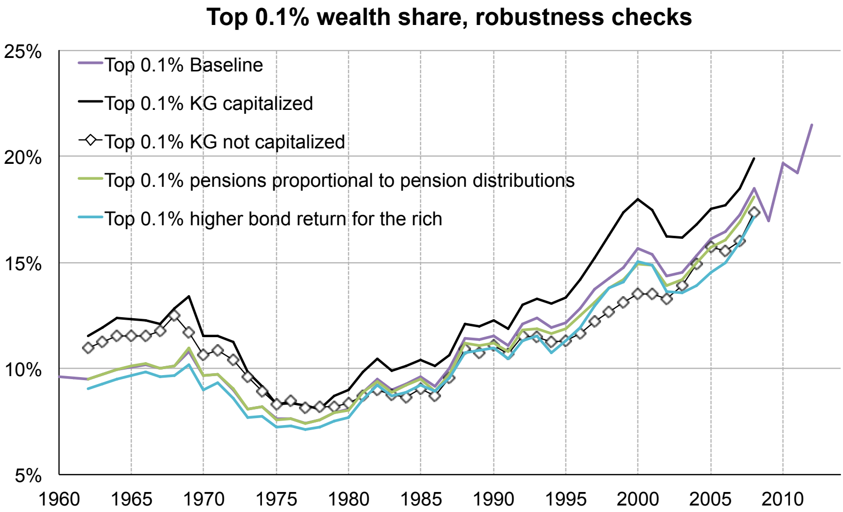
Our series capture a real increase in wealth concentration and not declining tax avoidance at the very top

Despite high tax rates, the rich did collect a lot of dividends in the 1970s



Capitalizing capital gains or ignoring them makes little difference to the results



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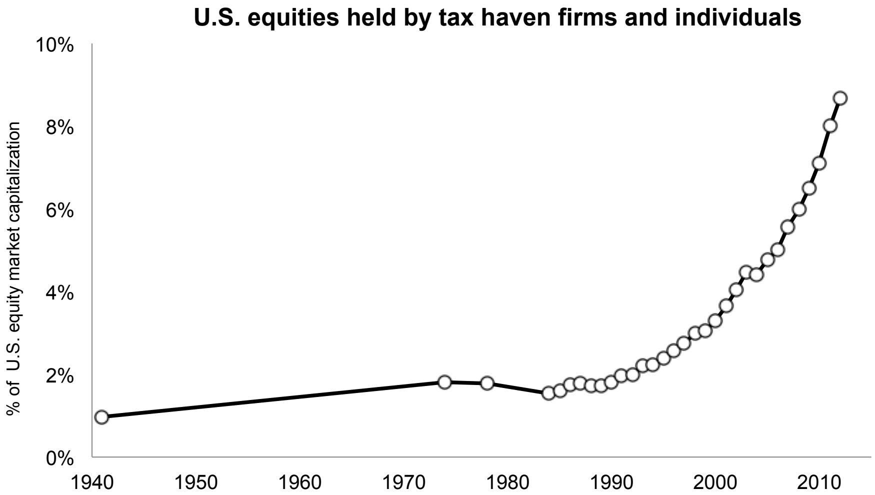
Tax evasion, if anything, has probably increased since the 1970s



In 2012, 9% of the U.S. listed equity market capitalization was held by tax haven investors (hedge funds in the Caymans, banks in Switzerland, individuals in Monaco, etc.). Source: Zucman (2014) using US Treasury International Capital data.

III- Rates of return varying by wealth group

Is the return constant within asset class?

Our key assumption: for a given asset class the **realized rate of return** is the same for the different groups of the wealth distribution

Two potential issues:

- Maybe the very rich have higher equity/bond returns (e.g., better at spotting good investment opportunities) $\rightarrow$ level bias
- Maybe this differential has increased since the 1970s (e.g., due to financial globalization/innovation) $\rightarrow$ trend bias

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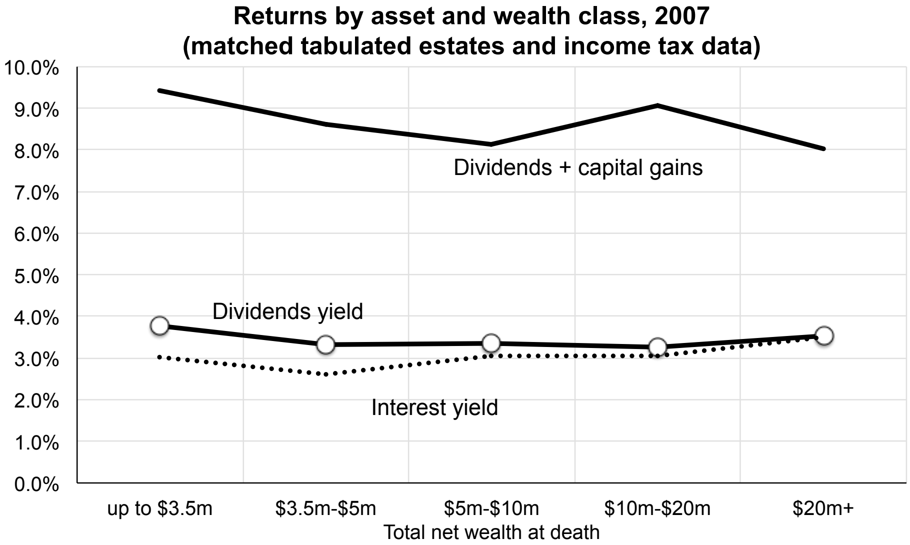
Three checks show that the realized return within asset class is flat and has remained flat

Check 1: No evidence that the wealthy have higher returns within asset class



Check 2: The capitalization method works for foundations

How we check the validity of the capitalization method with foundations data:

- Use publicly available, quasi-exhaustive IRS micro-data
- Micro-files include information on wealth at market value and income
- Apply same rates of returns & capitalization technique as for individuals
- (Memo: foundation wealth = 0.8% of household wealth mid-1980s, $\nearrow$ 1.2% today)

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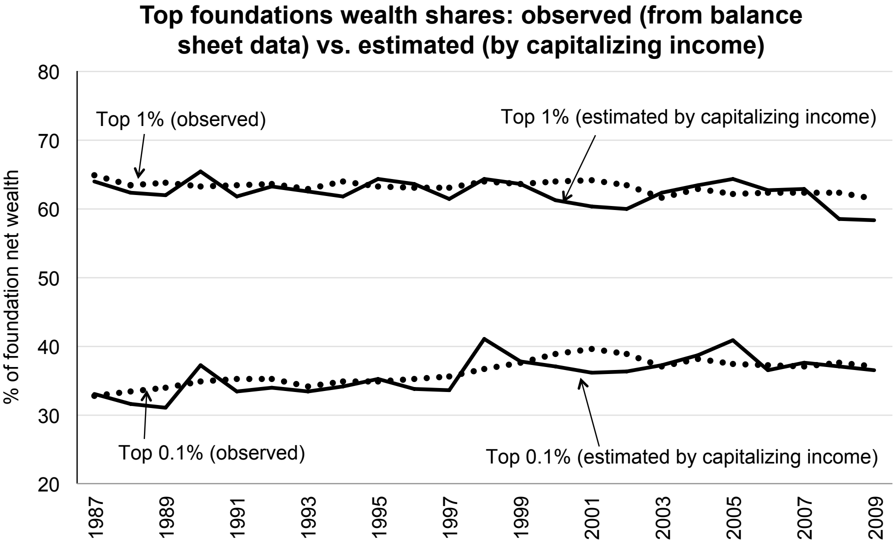
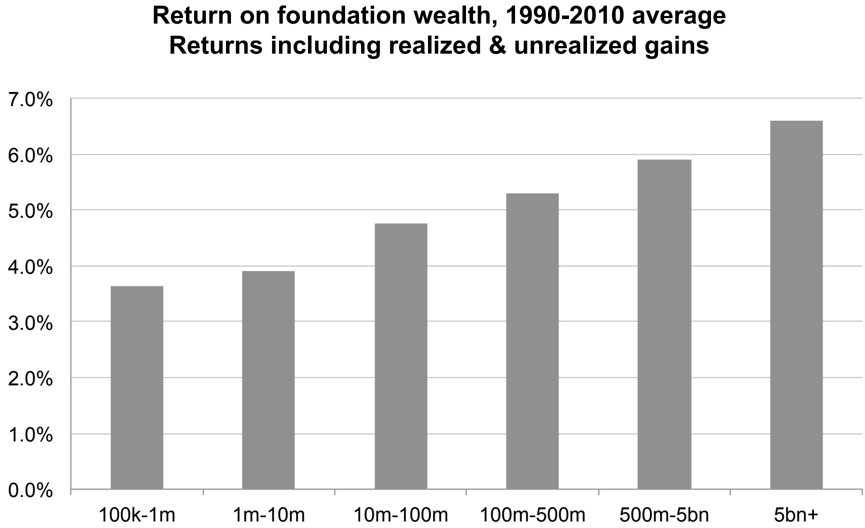
By capitalizing foundation income we are able to reproduce the correct foundation wealth distribution

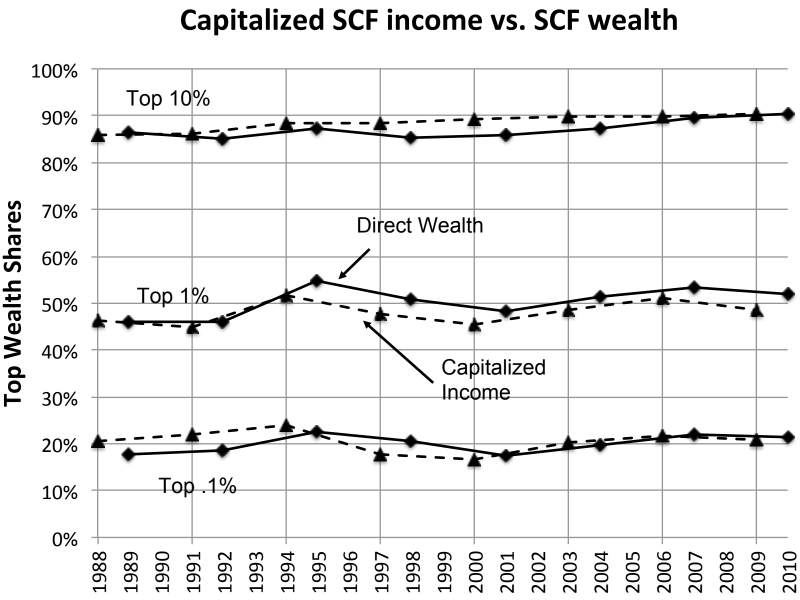
The capitalization method works for foundations



NB: Flat realized returns within asset class does not imply flat total return r



Check 3: The capitalization method works for the SCF



IV- Consistency with other estimates

Other methods obtain conflicting results, but they face data limitations

Forbes rankings: large increase in wealth concentration consistent with our estimates

Surveys: SCF shows increase in top 10%, but much less in top 1% and 0.1%

Key issue: SCF fails to capture surge in capital income concentration since 1989

Estate tax: No increase in top 1% share since 1980s (Kopczuk-Saez, 2004)

Key issue: Estate tax multiplier method fails to take into account widening mortality differential by wealth class

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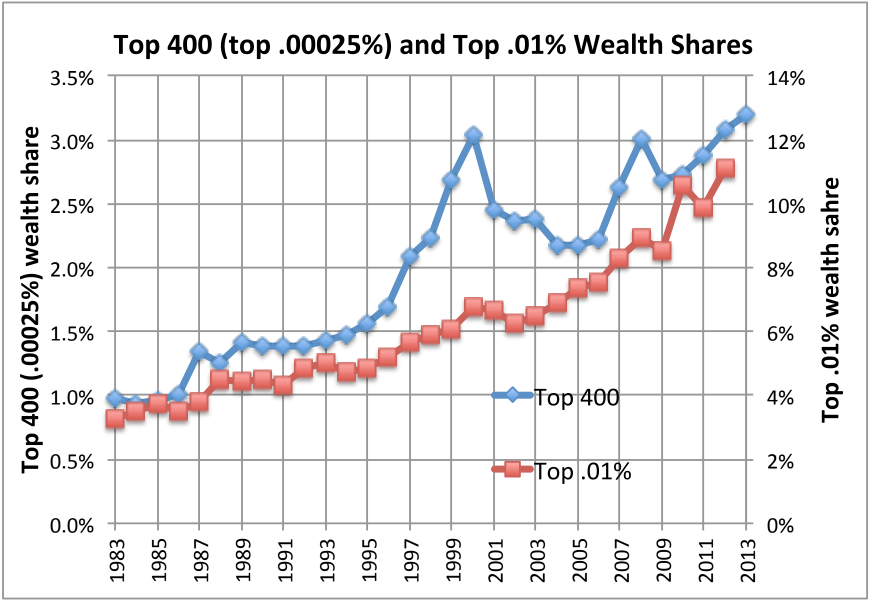
Our capitalization analysis can help re-design SCF weights and estate multiplier weights

Our estimate for top 0.01% is consistent with Forbes rankings



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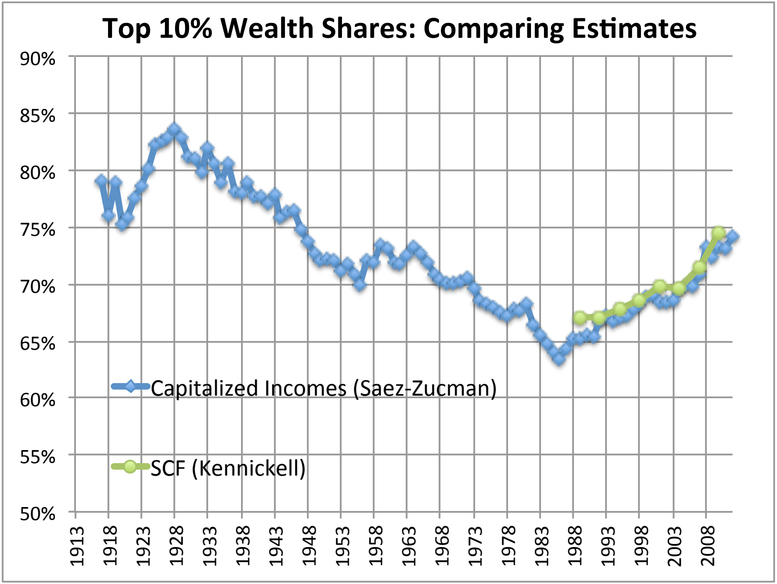
Our top 10% wealth share is consistent with SCF



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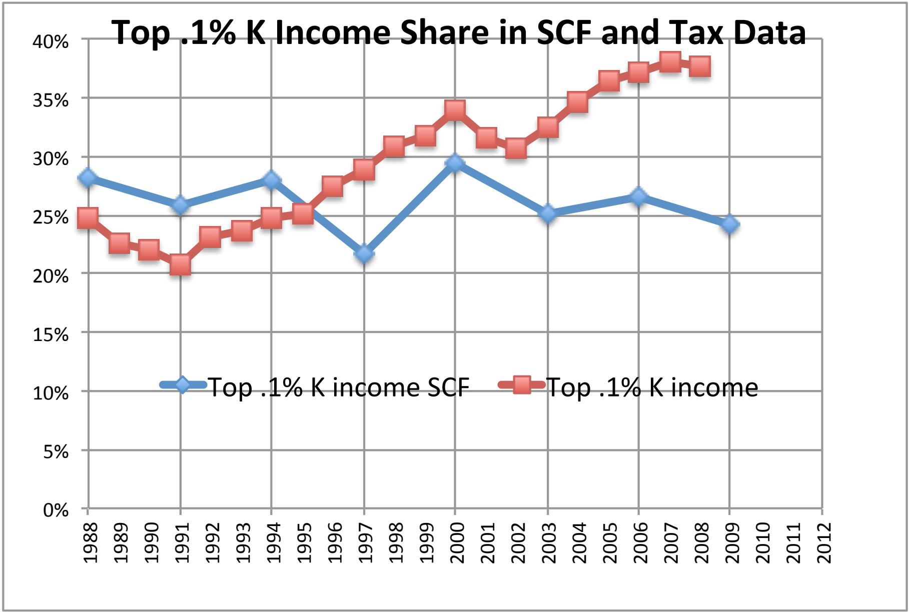
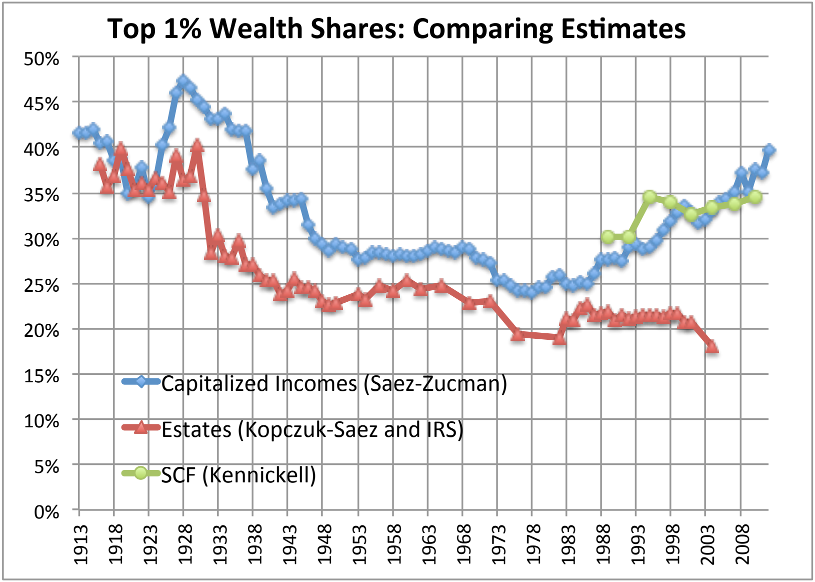
SCF fails to capture rising top capital income share



Estate tax returns fail to capture rising top wealth shares



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Conclusion

Wealth inequality is making a comeback

Main long-run trends in the distribution of wealth:

Long run U-shaped evolution for the very rich
(top 0.1%: $>$\$20 million today)

Long run L-shaped evolution for the rich
(top 1% to 0.1%: btw \$4 million and 20 million today)

Long-run $\cap$ for the middle-class
(top 50% to 90%: less than \$500K today)

Fall of bottom 90% share will continue if saving rate remains low

Policies:

Progressive taxation is not enough

Need to encourage saving / discourage debt to reverse trend:
forced long-term saving + borrow against yourself

Supplementary Slides

Aggregate income and wealth: concepts and data

Wealth

$W =$ Total assets minus liabilities of households at market value

Excludes durables, unfunded DB pensions, non-profits

Flow of Funds since 1945

Before 1945: Goldsmith, Wolff (1989), Kopczuk & Saez (2004): based on same concepts and methods as Flow of Funds

Income

NIPA since 1929

Kuznets (1941) for 1919-1929 and King (1930) before

▸ defs

Wealth categories definition

Equities: corporate equities, including S corporation equities, and money market fund shares (treated as dividend-paying for income tax purposes)

Fixed claims: currency, deposits, bonds, and other interest-paying assets, net of non-mortgage debts

Business assets: sole proprietorships, farms (land and equipment), partnerships, intellectual property products

Housing: owner- and tenant-occupied housing, net of mortgage debt

Pensions: funded pension entitlements, life insurance reserves, IRAs. Excludes social security and unfunded defined benefit pensions

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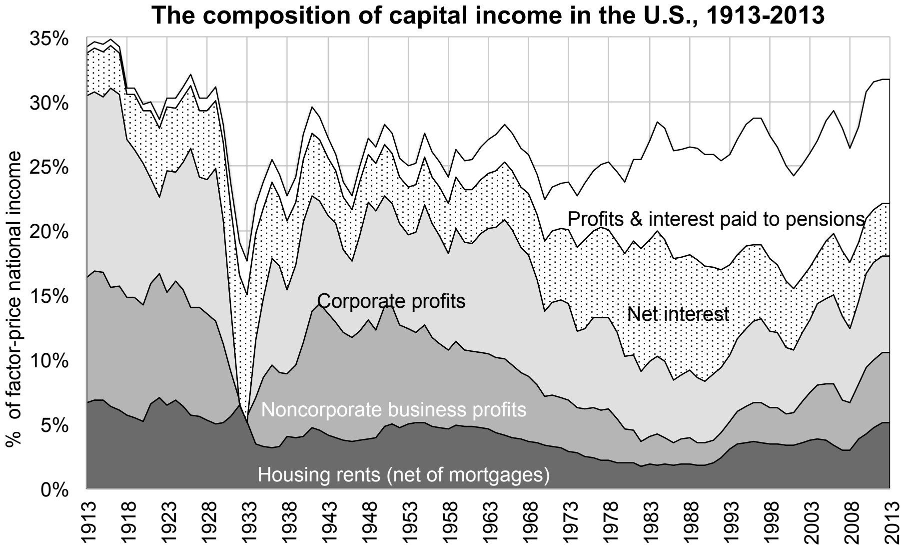
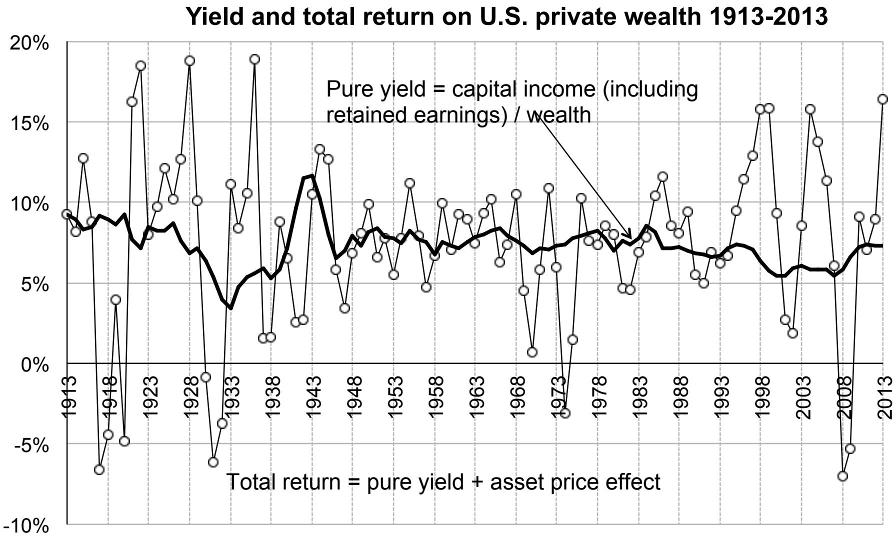
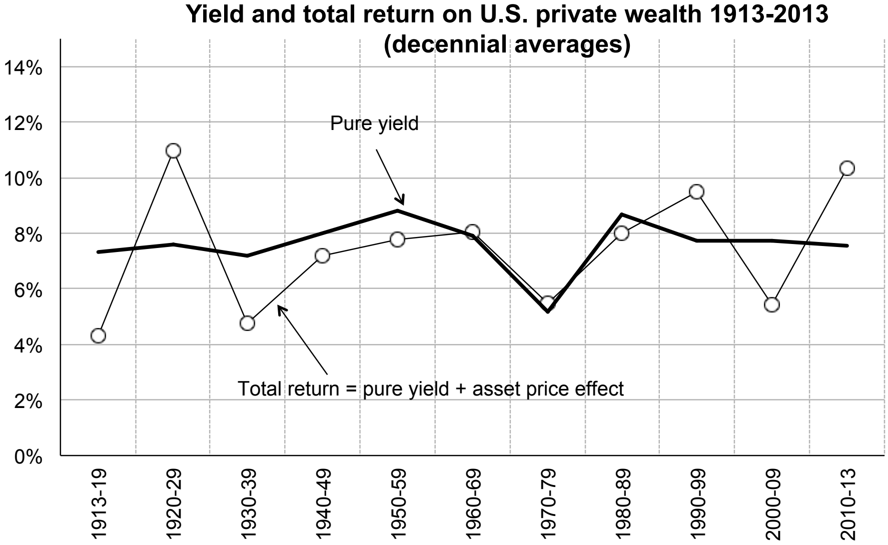
A U-shaped capital income share



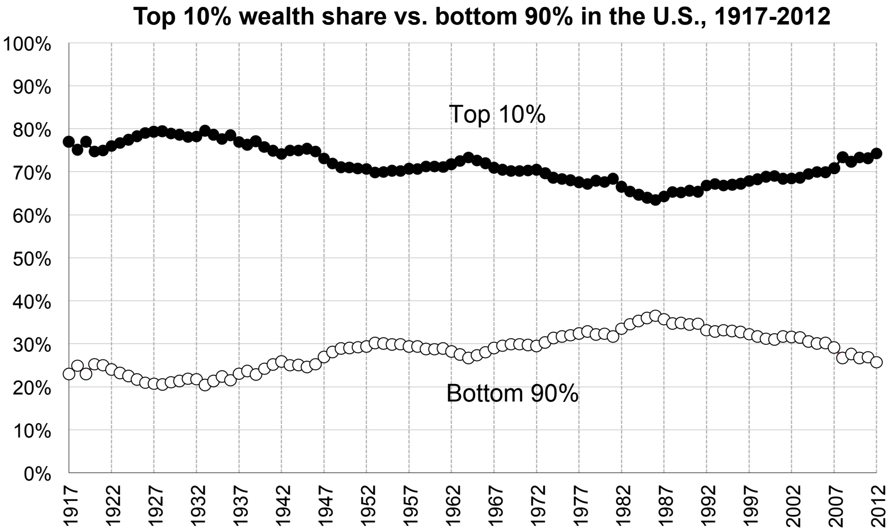
Returns volatility is back



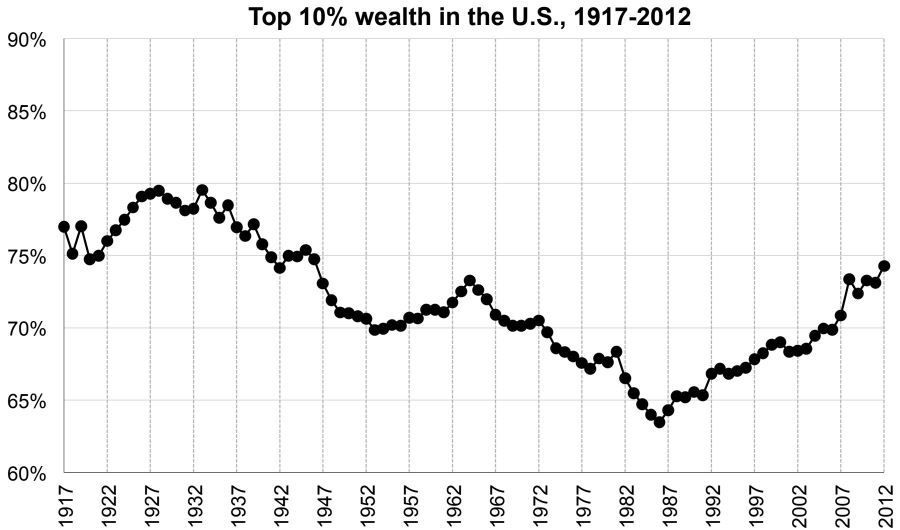
In the long run pure price effects tend to wash out



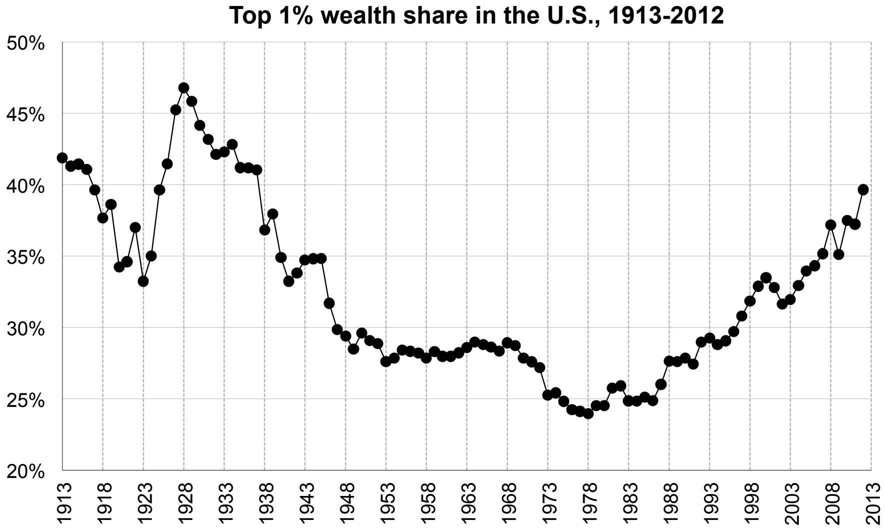
Wealth has always been very concentrated



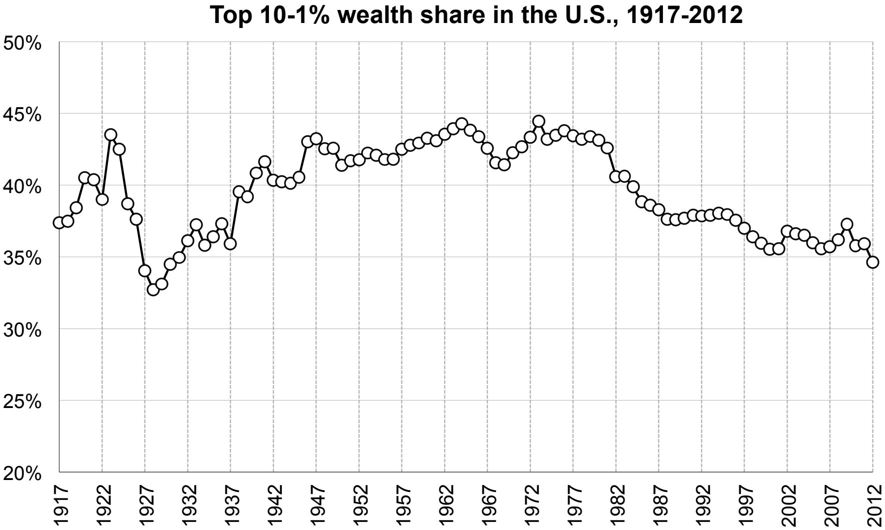
The top 10% is climbing back



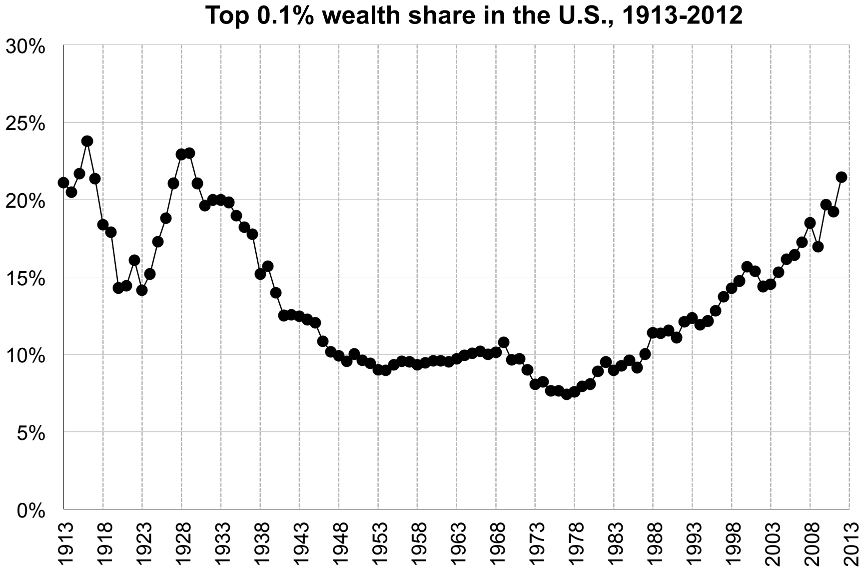
Top 1% has gained more than top 10%



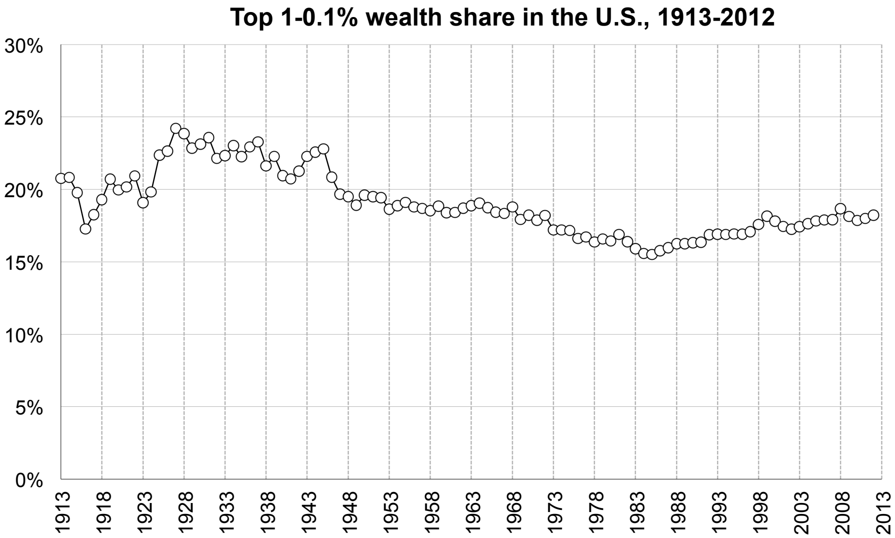
The middle rich are losing ground



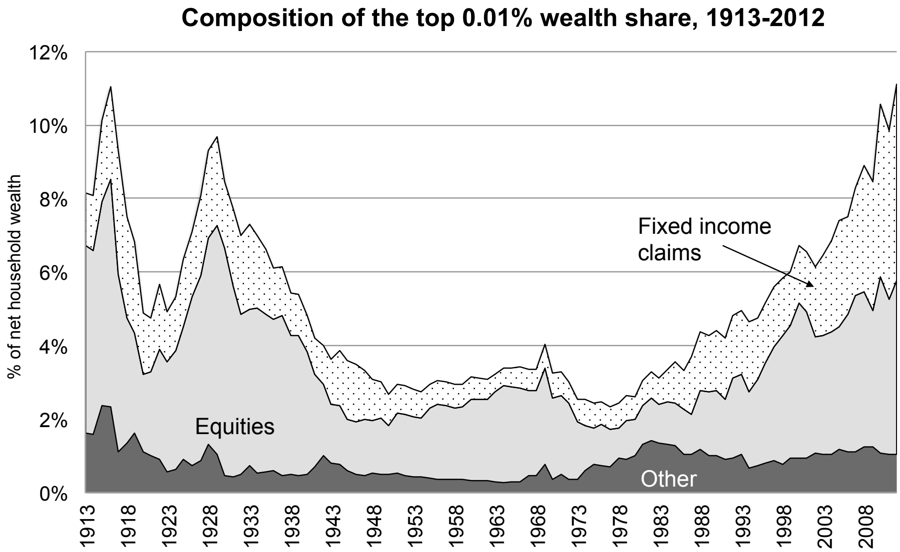
Top 1% surge is due to the top 0.1%



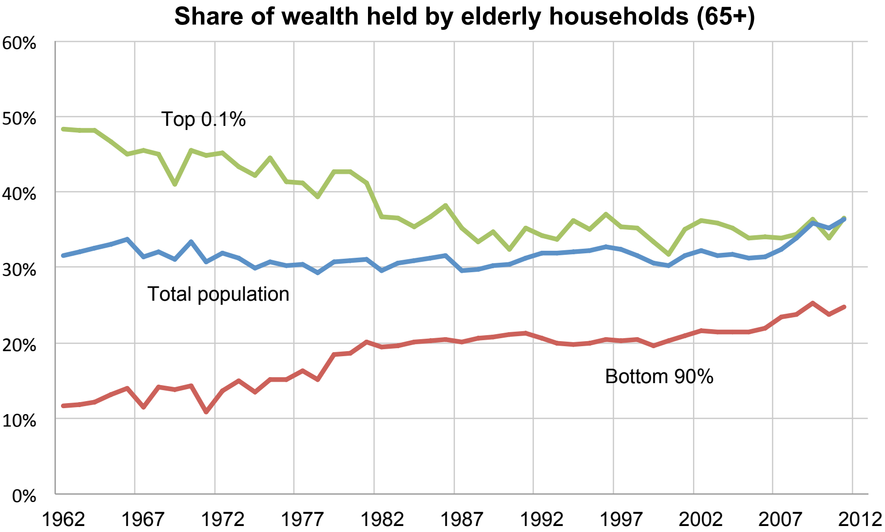
Almost no recovery for the merely rich



Top 0.01% share: $\times$ 4 in last 35 years



Wealth is getting older, but at the very top remains younger than in the '60s-'70s



Findings are robust to different methodological choices

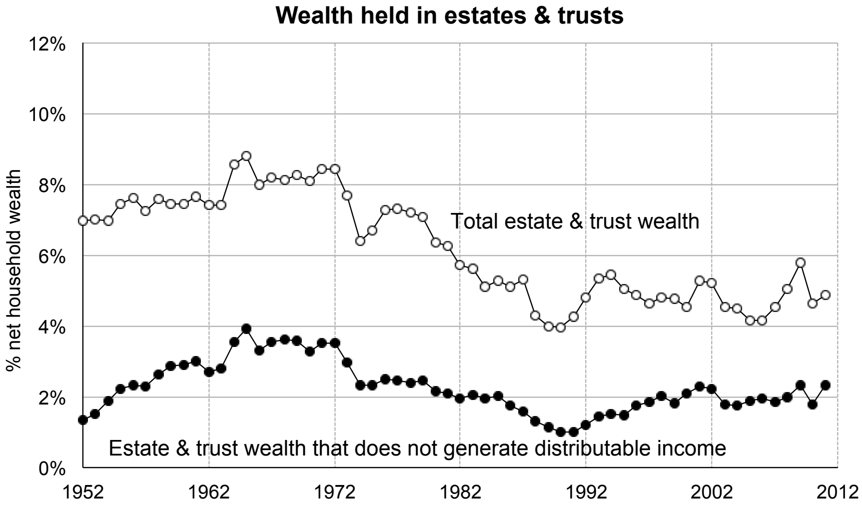
Robustness checks:

- Different treatment of capital gains
  - Capitalizing dividends only (Bill Gates world)
  - Capitalizing dividends plus capital gains (Warren Buffet world)
  - Capitalizing dividends plus capital gains for shares but not ranking (the best of both worlds)
- Allowing for bond yield rising with wealth
- Different imputations for pension wealth

$\Downarrow$

All show wealth inequalities rising fast at the very top, but not below the top 0.1% graph

Most trusts generate income taxable at the individual level



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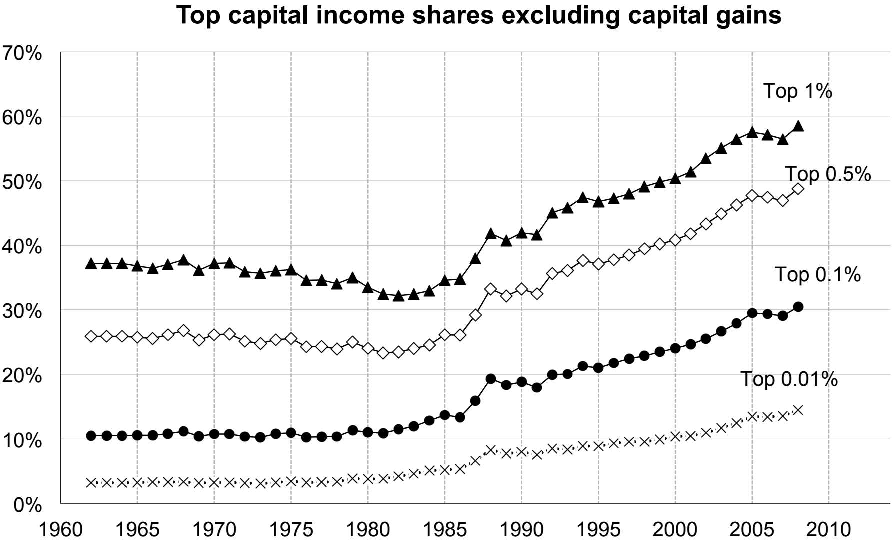
The concentration of declared capital income is rising fast



A first step toward DINA

We are constructing new, consistent series on the distribution of wealth W and capital income Y_K

Y_K is about $1/3$ of national income Y

Next step: distribution of Y_L so as to obtain the full distribution of national income $Y = Y_K + Y_L$

Will make it possible to break GDP growth by fractile, before and after-tax, based on a representative microfile with individual-level income and wealth consistent with macro aggregates

$=$ **distributional national accounts (DINA), reconciling macro and inequality studies** OTA

Improving Estimates with Internal Data

Internal IRS data could be used to refine our estimates:

- Value of all IRAs available at individual micro level (30% of all pensions)
- Value of DB and 401(k) pensions could be estimated from employer and past contributions
- Value of homes could be estimated using geo-code and Zillow
- Value of businesses (partnerships and S-corps) could be estimated by matching with business returns balance sheets
- Date of birth data to compute wealth distributions by age
- Date of death data to compute mortality rates by wealth and improve estate multiplier estimates

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Improving Estimates with Enhanced Information Tax Reporting

401k reporting of account balances (and not only IRAs)

Market/assessed value of real estate on property tax bills

Mortgages outstanding on form 1098

Market value of accounts and portfolio securities on forms 1099

Purchases and sales of securities ($\rightarrow$ saving)

$\Downarrow$

This would allow to obtain consistent income, wealth, and savings information at the micro-level

Foundations or charitable organizations already report all this information back