Comments on Measurement of Top Wealth Shares

...see Wojciech Kopczuk, “What Do We Know About the Evolution of Top Wealth Shares in the United States?”, Journal of Economic Perspectives, Winter 2015 for related discussion

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Three ways of measuring top wealth shares:

- Survey data, SCF: observe wealth for a sample (Bricker et al. 2015)
- Estate tax data, mortality multiplier: wealth from estate tax returns, weighted by inverse mortality $\frac{1}{m}$ to get distribution (Kopczuk-Saez, 2004, IRS estimates)
- Capitalization method: distribution of capital income from income tax returns, multiply by inverse rate of return $\frac{1}{r}$ (asset class-specific) to get wealth (Saez-Zucman, 2015)
Top 1% and 0.1% wealth share
Figure 11. Reconciling Survey of Consumer Finances (SCF) and Administrative Data Top 1% Wealth Shares

Sources: Federal Reserve Board, Survey of Consumer Finances (SCF); and Saez and Zucman (2014). See Appendix B for details on SCF and FA wealth concepts. Wealth thresholds for identifying the top 1% of households and tax units are reported in Appendix C.
Top 1% wealth share in the SCF
Top 1% wealth share in the SCF, add 1962 and 1983
Top 1% wealth share in the SCF, comparison

![Graph showing the share of total wealth for SCF, Capitalization, and Estate multiplier from 1960 to 2010. The share of total wealth for SCF shows a general upward trend, with fluctuations. Capitalization starts at a higher level than SCF and shows a decline followed by an increase. Estate multiplier starts lower than SCF and shows fluctuation with no clear trend.](image-url)
Top 1% wealth share in the SCF, all years
Top 0.1% wealth share

[Graph showing the share of total wealth over time from 1920 to 2000 with Capitalization and Estate multiplier highlighted.]

- Capitalization
- Estate multiplier
Comparison to estate tax data

Level differences:
- Different unit of observation
- Different coverage of assets (e.g. DC wealth and debt not in capitalization series)

Divergence starting after 1986 (not in the 1970s). Jump in fixed income component — state and local bonds unobserved before, imputed; observed after 1986.

Run up in the stock market in late 1990s not visible in estate tax data. Also, not visible in the SCF
The role of fixed income

![Graph showing the share of total wealth and estate tax multiplier over time. The x-axis represents years from 1920 to 2000, and the y-axis represents the share of total wealth from 0.00 to 0.20. The graph includes two lines: one for net of fixed income and another for fixed income. The estate tax multiplier and capitalization are also shown, with the net of fixed income and fixed income highlighted.]
Comparison to estate tax — explanation in Saez-Zucman

- End of life planning important — I (Kopczuk, 2007) agree. That paper uses mid-1970s data. I know of no evidence that would imply massive increase or decline in avoidance/evasion.

- They take decedents from income tax, use mortality multiplier from K-S to recover capital income distribution. It does not work — their conclusion is that these multipliers are off.

- ...however, one of the points of estate tax planning is not to realize income shortly before death. They effectively have a test! There is no reason why income tax returns shortly before death would be representative of capital income distribution

- They show mortality rates constructed using administrative tax data that imply widening mortality differentials. Conclude that K-S have incorrect socioeconomic mortality adjustments

- Let’s compare mortality profiles...
Mortality profiles in 1999-2003

- Population mortality rates
- Adjusted for socio-economic factors (Kopczuk–Saez)
- Income tax data mortality rates (Saez–Zucman)
- Top 10% of capital incomes on tax returns (Saez–Zucman)
- Top 1% of capital incomes on tax returns (Saez–Zucman)
Mortality profiles in 1979-1983

- Population mortality rates
- Adjusted for socio-economic factors (Kopczuk-Saez)
- Income tax data mortality rates (Saez-Zucman)
- Top 10% of capital incomes on tax returns (Saez-Zucman)
- Top 1% of capital incomes on tax returns (Saez-Zucman)
Mortality over time at age 70

- Population mortality rates
- Adjusted for socio-economic factors (Kopczuk–Saez)
- Income tax data mortality rates (Saez–Zucman)
- Top 10% of capital incomes on tax returns (Saez–Zucman)
- Top 1% of capital incomes on tax returns (Saez–Zucman)
Widening mortality differential are intriguing but...

Population mortality rates in Saez-Zucman are off. This is especially true at older ages and it was worse in the 1970s than today.

As the result their evidence of widening mortality differentials appears to be just due to their population baseline becoming more representative.

Why problems here? Low income, old, sick people need not file. Realization of capital income shortly before death is tax inefficient.
How much could mortality differences explain anyway?

- The potential of a bias in mortality multipliers to affect top shares is there but it is limited.
- Changing multipliers scales the population and wealth of that population.
- Assuming Pareto distribution with parameter $a$ ($a \approx 1.5$) and adjusting mortality multiplier by a factor of $\gamma$ implies modification of the top share by a factor of $(1 + \gamma)^{1/a}$.
- For $\gamma = 0.3$ (huge), it would be an adjustment by 20%. The estate-based Top 0.1% share in 2000 is 9.1, capitalization share is 16%. 


The role of fixed income

Share of total wealth over time, showing the impact of estate tax multipliers and capitalization with and without fixed income.
Fixed income in the SCF (Bricker et al, 2015)

Figure 13. Wealth Composition in the SCF and Capitalized Administrative Income Data, 1989-2013

Notes: In panel A, we assume that the assets of Forbes 400, omitted from the SCF, are split proportional to the assets of the top 0.01% according to Saez and Zucman (2014). Administrative data are through 2012, though labelled as 2013. For each year on the x-axis, share of wealth held by the top 0.1 percent of families is broken into four general types of wealth: wealth from housing, from pensions, from corporate equities and private businesses, and from fixed income assets. Fixed income assets are bonds, CDs, savings accounts, and money market funds. Equities and businesses include the net worth of corporate equities, S-Corps, partnerships, and sole proprietorships. The cumulative height of the SCF top 0.1 percent is the SCF net worth benchmarked to FA values, adjusted for tax-units, and including an estimate of the Forbes 400 (i.e. the purple line in figure 12, panel C). Data sources: Federal Reserve Board, Survey of Consumer Finances (SCF); and Saez and Zucman (2014), Appendix Table B5b.
Capitalization factor for fixed income
Capitalization factor for fixed income, sensitivity

\[
\frac{1}{r} \quad \text{and} \quad \frac{1}{r + 0.01}
\]
Contribution of fixed income to top 0.1% share, sensitivity

Baseline

Share of total wealth

Baseline

\( r + 0.01 \)

\( 1 \)

r based on income–estate link

year


0.00

0.02

0.04

0.06

0.08

0.10

0.00

0.02

0.04

0.06

0.08

0.10
Conclusions

- Three different approaches, each makes very different assumptions.
- Not reconciled.
- If Saez-Zucman are right, we’d need:
  - SCF getting worse over time
  - ...and estate tax avoidance dramatically increasing in the 1980s and 1990s (S-Z estimate in 2000 was 16%, gap 7%; in 1986 there was no gap)
- Fixed income patterns are puzzling. My best bet: problems with capitalization factors.
- Bias in income-tax based mortality rates suggests problems with identifying top wealth holders based on capital income tax data.
Top 1% and 0.1% wealth share

The diagram shows the share of total wealth held by the top 1% and 0.1% over time. The share is represented on the y-axis, while the year is on the x-axis. The top 1% is shown in blue, the top 0.1% in gray, and estate tax multiplier, SCF, and capitalization in black. The share of total wealth for the top 1% and 0.1% has fluctuated significantly over the years, with the top 1% consistently holding a higher share than the top 0.1%.