

Income and Wealth Inequality: Evidence and Policy Implications

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MEASURING INEQUALITY

Inequality matters because the public cares about it

⇒ Need to provide transparent inequality measures

Goals: Understand drivers of inequality trends and the effects of public policy on inequality

Two key economic concepts: **Income** and **Wealth**

Income is a flow = Labor income + Capital income

Capital income is the return on Wealth

Wealth is a stock accumulated from savings and inheritances

BASIC US ECONOMIC FACTS

In aggregate, labor income is about 70-75% of total income

Capital income is about 25-30% of total income

Total wealth is about 400% of total annual income

Annual rate of return on wealth = 6-7%

Wealth inequality is always much higher than income inequality
(bottom 50% families own about zero wealth)

Government taxes 1/3 of **market incomes** to fund transfers and public goods: **disposable income** inequality lower than **market income** inequality

TOP INCOME SHARES

Simple way to measure inequality: what share of total **pre-tax market income** goes to the top 10% families, top 1%, etc.

Individual income tax statistics are the only source

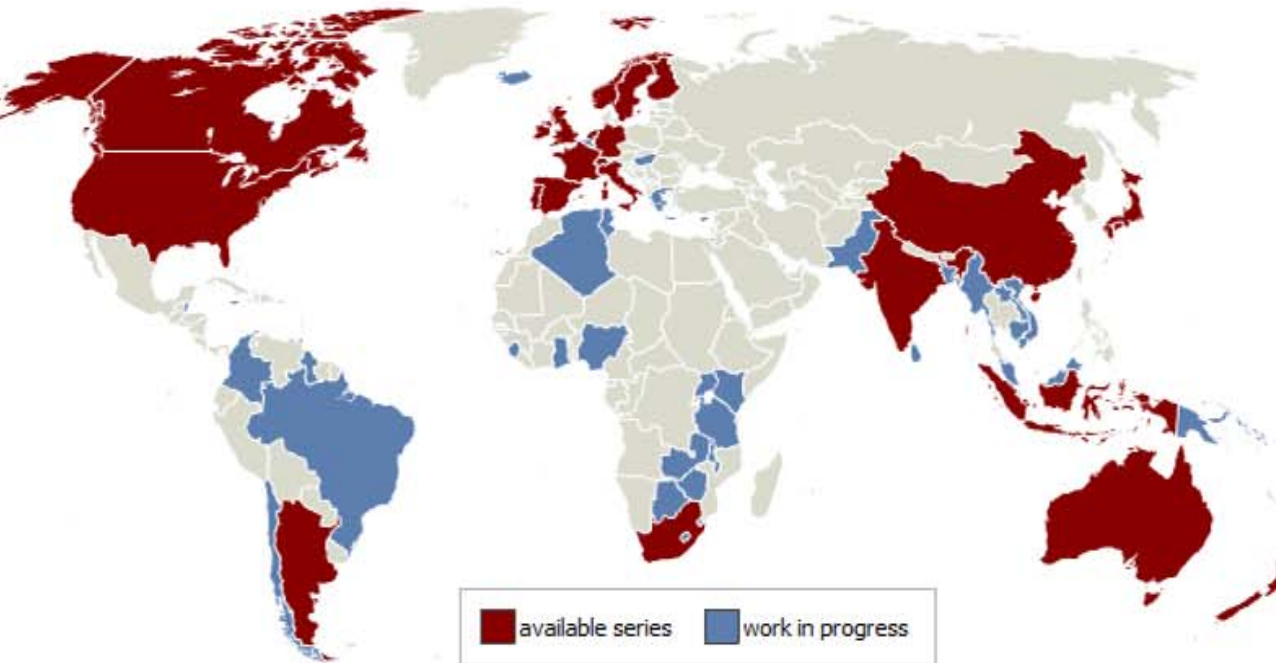
(a) covering long-time periods

(b) capturing well top incomes

25 countries have been analyzed in the on-going **World Top Incomes Database**

Caveats: Income concept used is narrower than National Income and focus is solely on pre-tax, pre-transfer income

THE TOP INCOMES DATABASE



- Home
- Introduction
- The Database
- Graphics
- Country Information
- Work in Progress
- Acknowledgments



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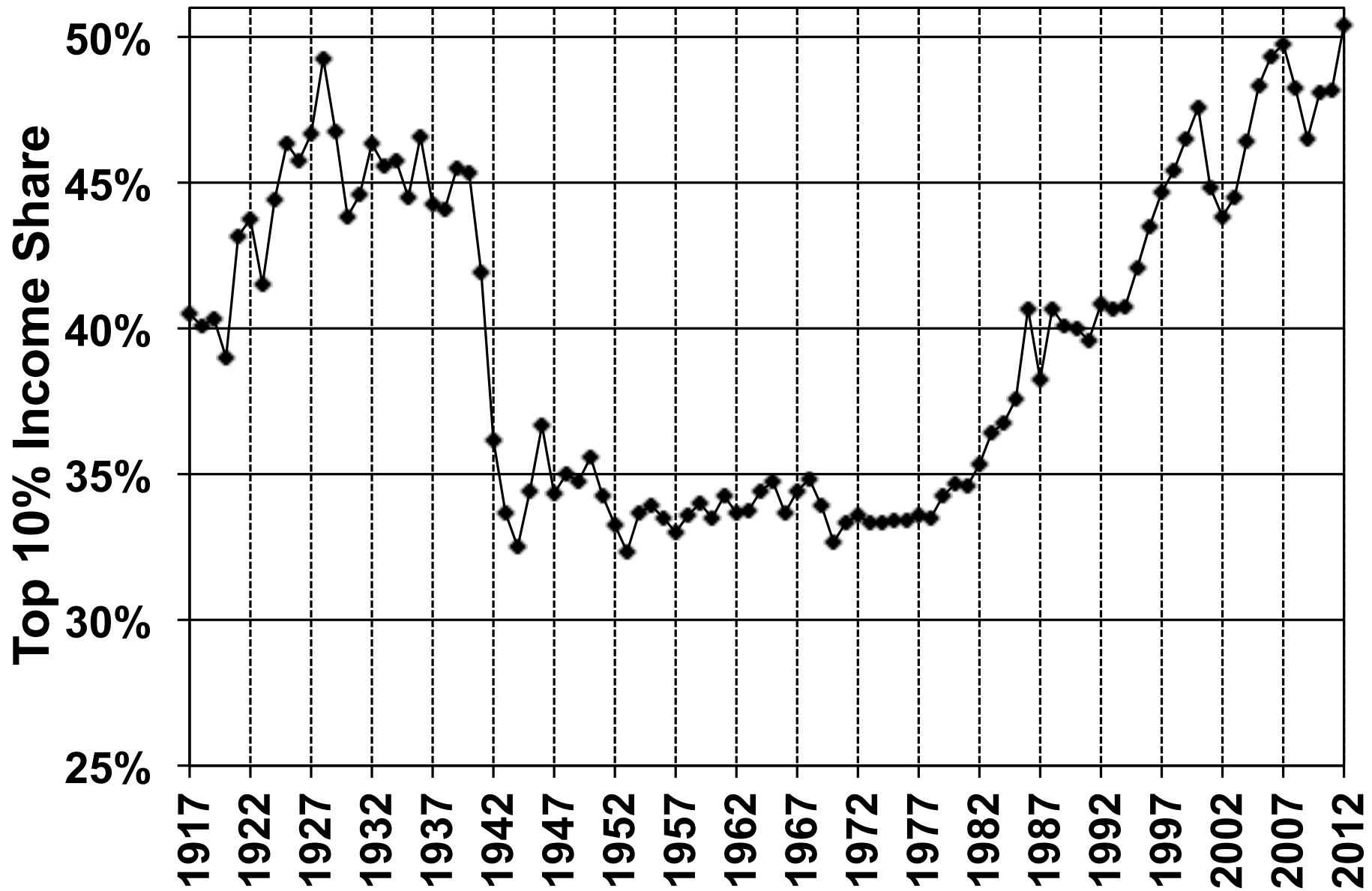


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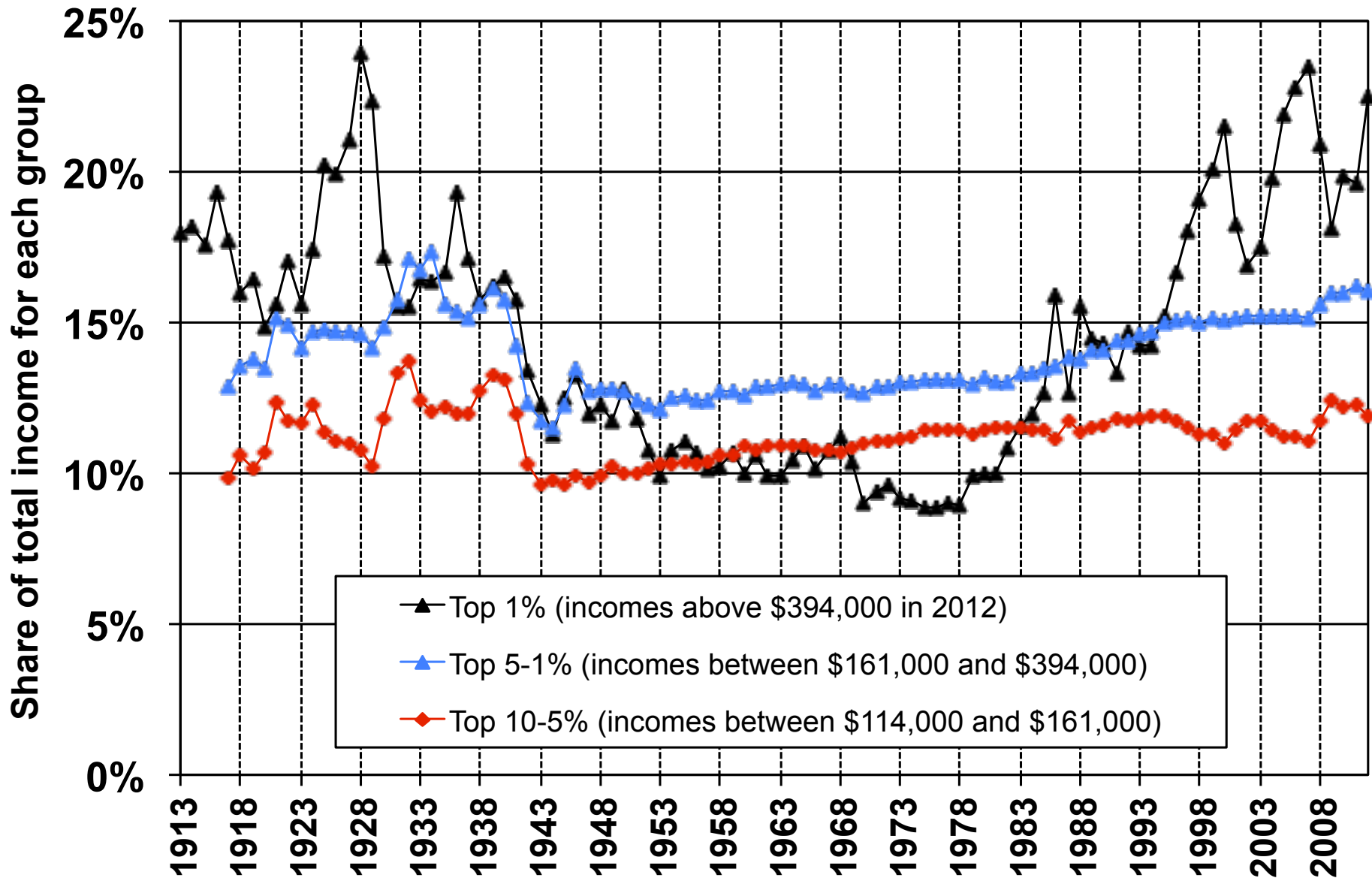
INSTITUTE FOR ECONOMIC MODELLING

Top 10% Pre-tax Income Share in the US, 1917-2012



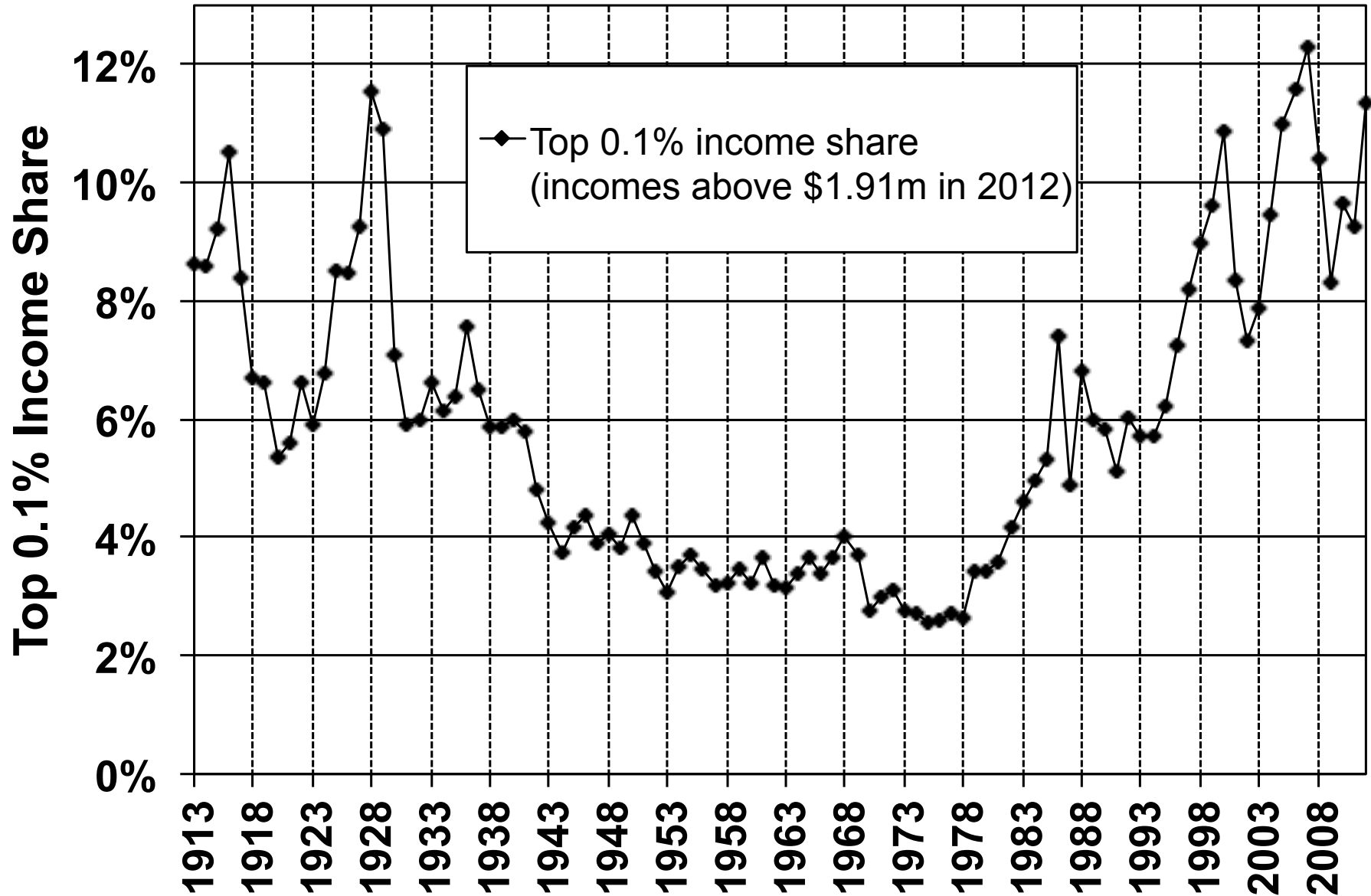
Source: Piketty and Saez, 2003 updated to 2012. Series based on pre-tax cash market income including realized capital gains and excluding government transfers. 2012 data based on preliminary statistics

Decomposing Top 10% into 3 Groups, 1913-2012



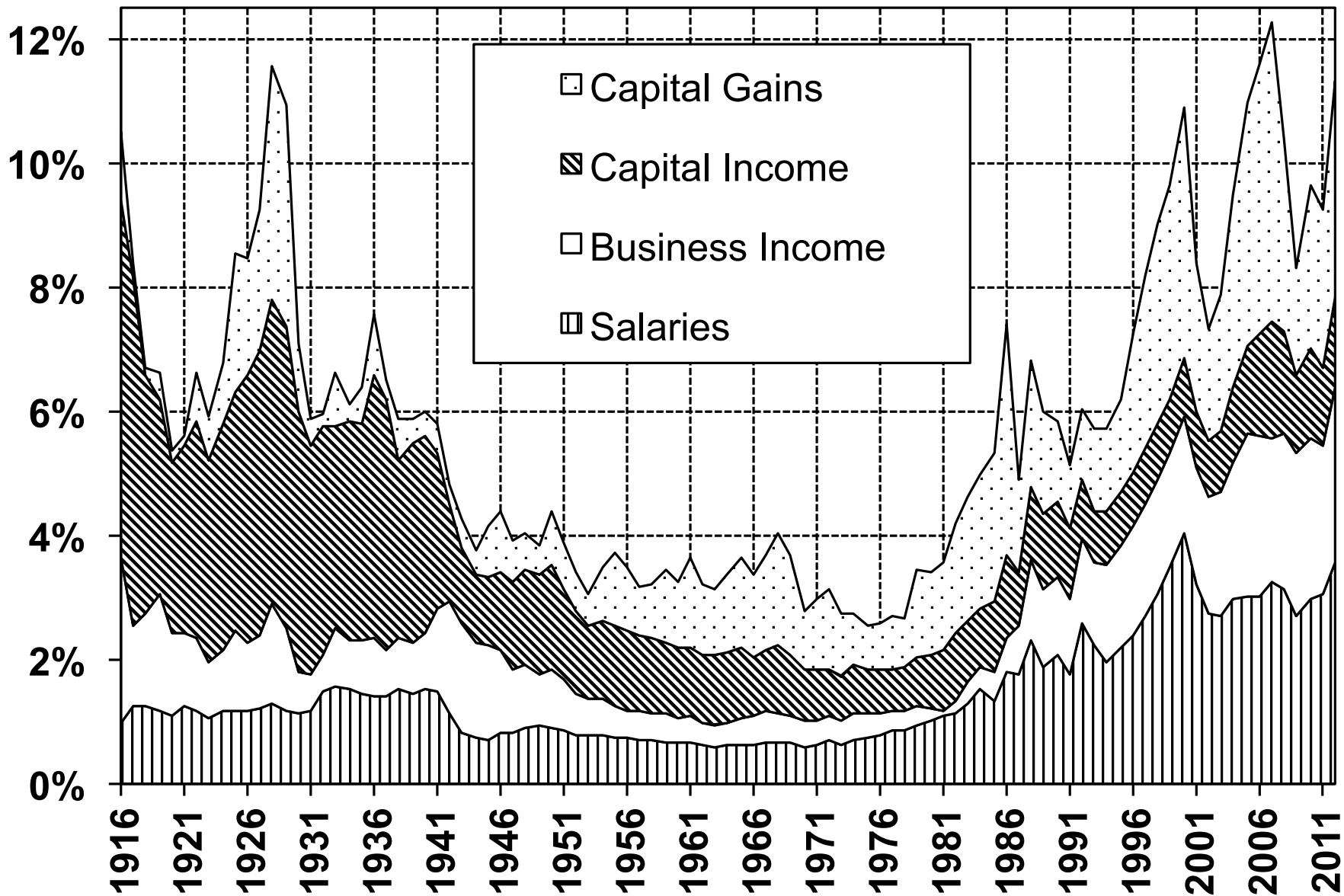
Source: Piketty and Saez, 2003 updated to 2012. Series based on pre-tax cash market income including realized capital gains and excluding government transfers. 2012 data based on preliminary statistics.

Top 0.1% US Pre-Tax Income Share, 1913-2012



Source: Piketty and Saez, 2003 updated to 2012. Series based on pre-tax cash market income including or excluding realized capital gains, and always excluding government transfers.

US Top 0.1% Pre-Tax Income Share and Composition



Source: Piketty and Saez, 2003 updated to 2012

. Series based on pre-tax cash market income including or excluding realized capital gains, and always excluding government transfers

Table 1. Real Income Growth by Groups

	Average Income Real Growth	Top 1% Incomes Real Growth	Bottom 99% Incomes Real Growth	Fraction of total growth (or loss) captured by top 1%
	(1)	(2)	(3)	(4)
Full period 1993-2012	17.9%	86.1%	6.6%	68%
Clinton Expansion 1993-2000	31.5%	98.7%	20.3%	45%
2001 Recession 2000-2002	-11.7%	-30.8%	-6.5%	57%
Bush Expansion 2002-2007	16.1%	61.8%	6.8%	65%
Great Recession 2007- 2009	-17.4%	-36.3%	-11.6%	49%
Recovery 2009-2012	6.0%	31.4%	0.4%	95%

Computations based on family market income including realized capital gains (before individual taxes).

Incomes exclude government transfers (such as unemployment insurance and social security) and non-taxable fringe benefits.

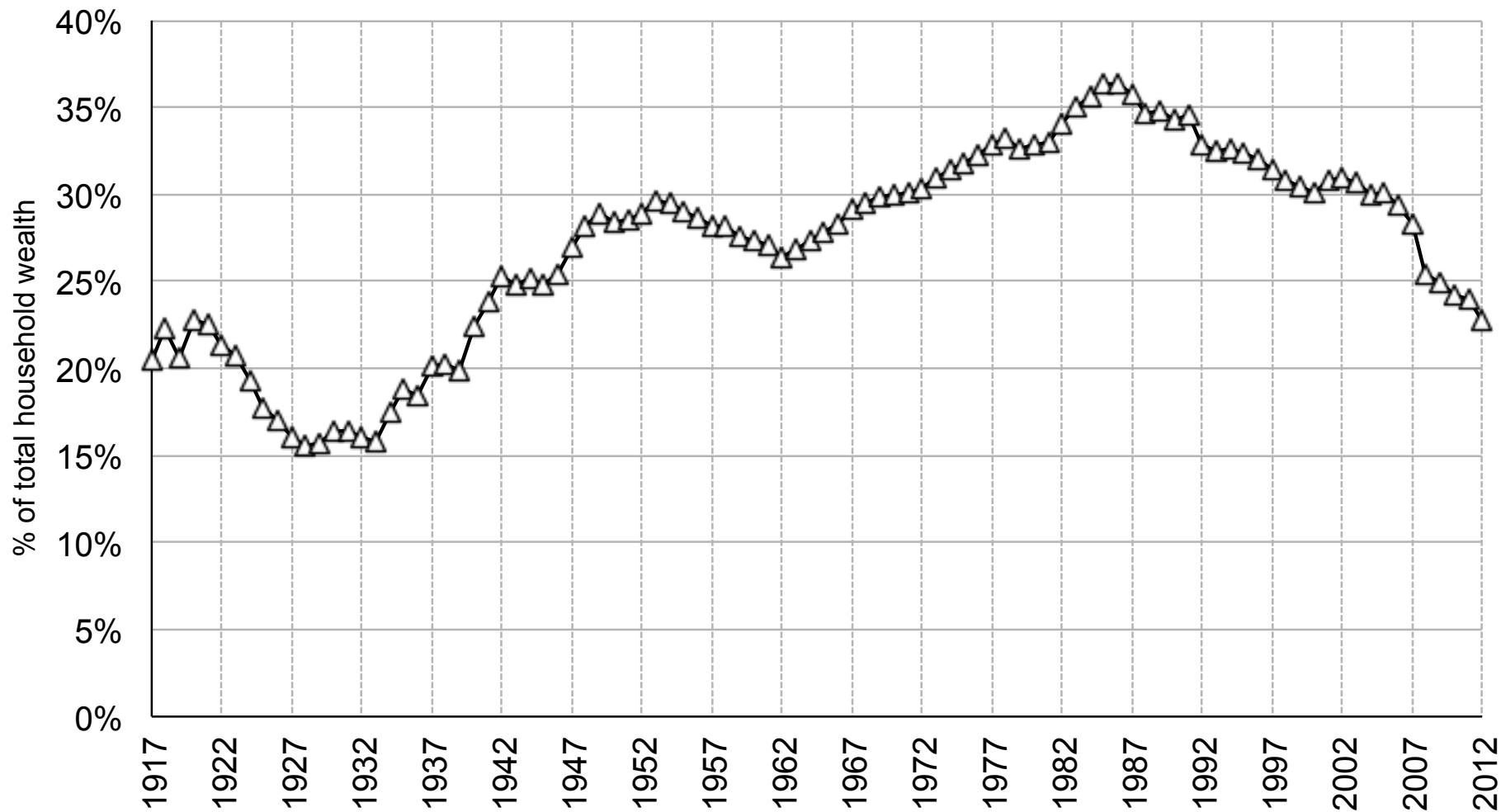
Incomes are deflated using the Consumer Price Index.

Column (4) reports the fraction of total real family income growth (or loss) captured by the top 1%.

For example, from 2002 to 2007, average real family incomes grew by 16.1% but 65% of that growth accrued to the top 1% while only 35% of that growth accrued to the bottom 99% of US families.

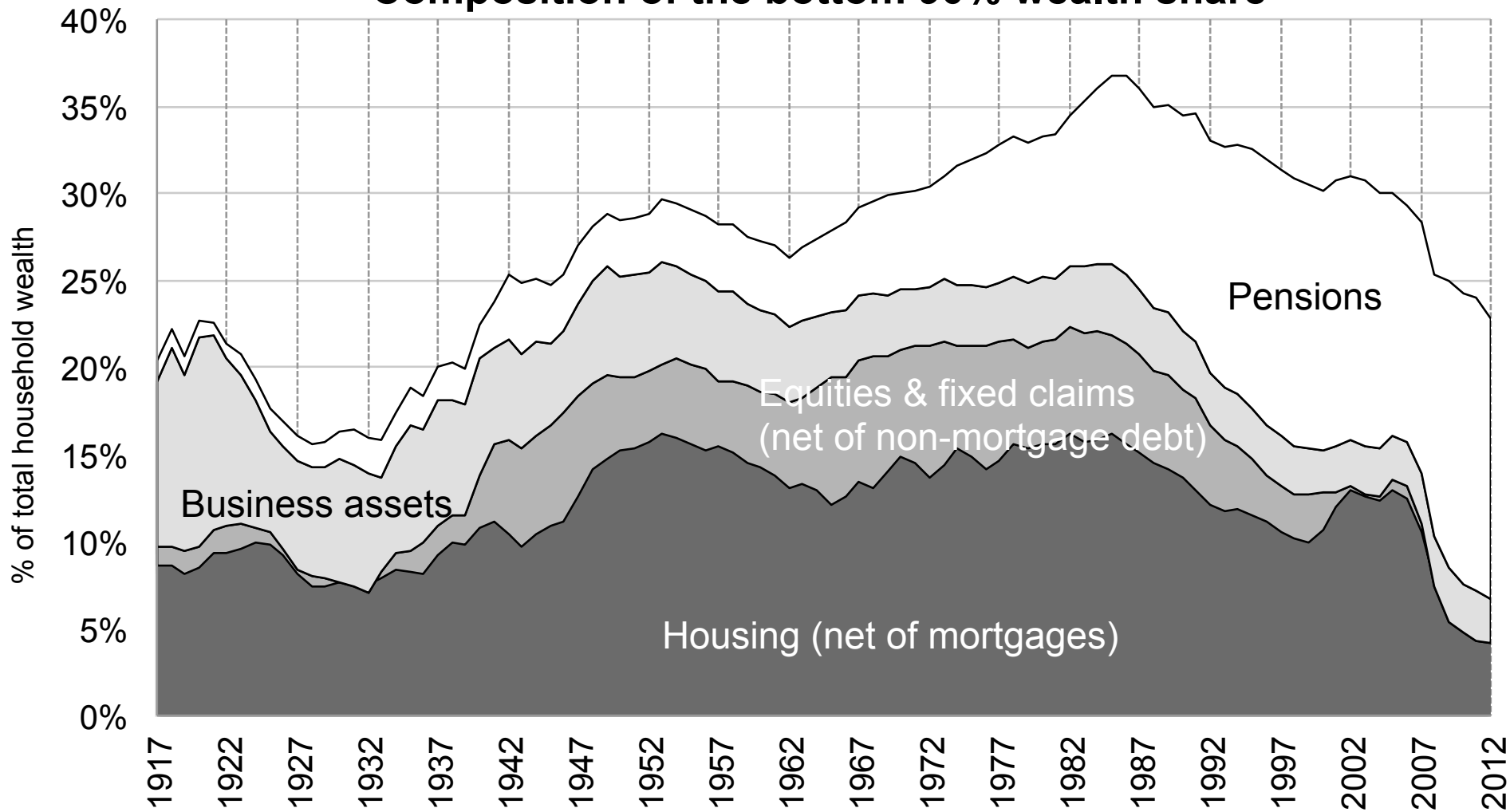
Source: Piketty and Saez (2003), series updated to 2012 in August 2013 using IRS preliminary tax statistics for 2012.

Bottom 90% wealth share in the United States, 1917-2012

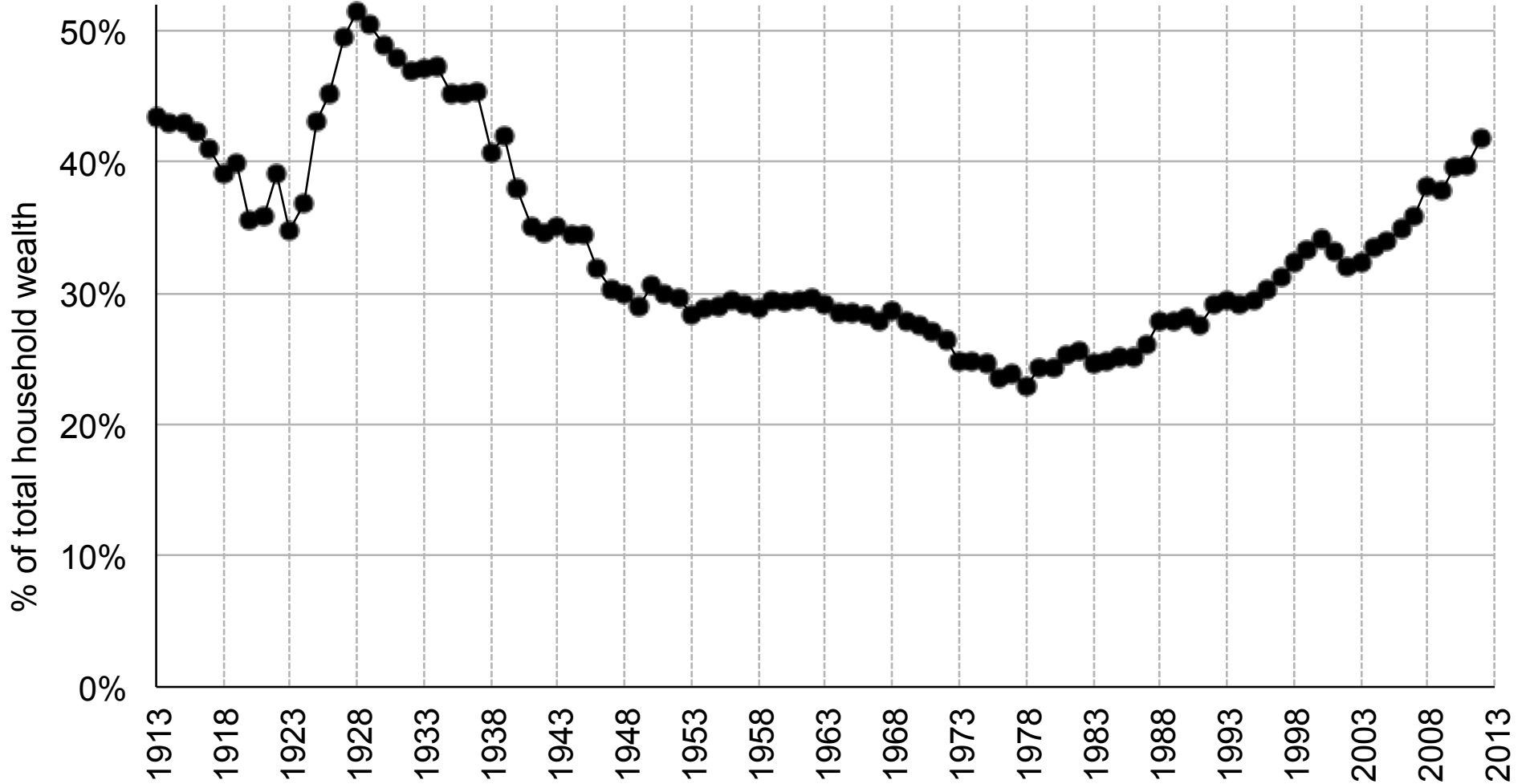


Wealth shares estimated using capitalization method by Saez and Zucman (2014)

Composition of the bottom 90% wealth share

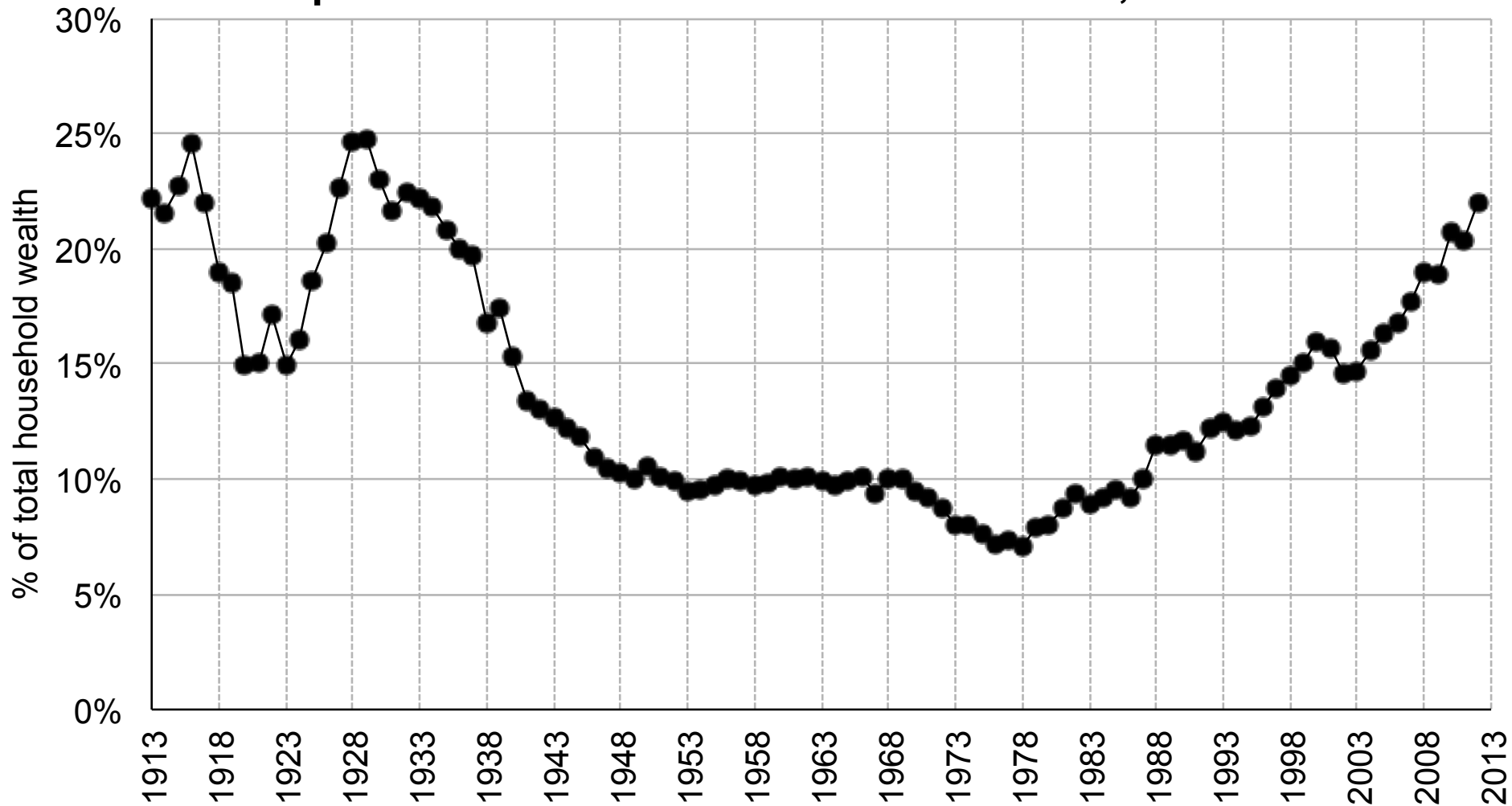


Top 1% wealth share in the United States, 1913-2012

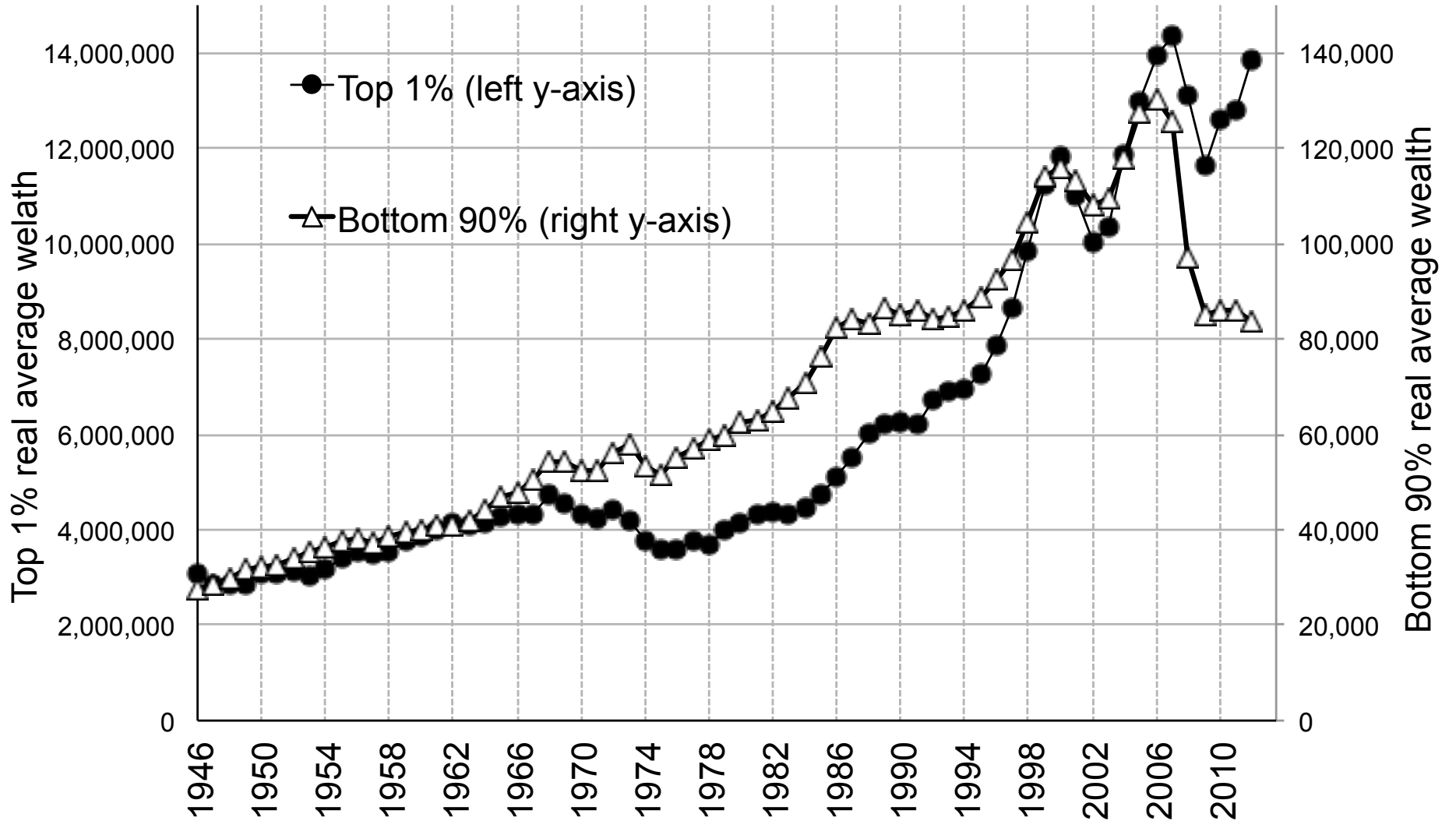


This figure depicts the share of total household wealth held by the 1% richest families, as estimated by capitalizing income tax returns. Source: Saez and Zucman (2014).

Top 0.1% wealth share in the United States, 1913-2012



Real average wealth of bottom 90% and top 1% families



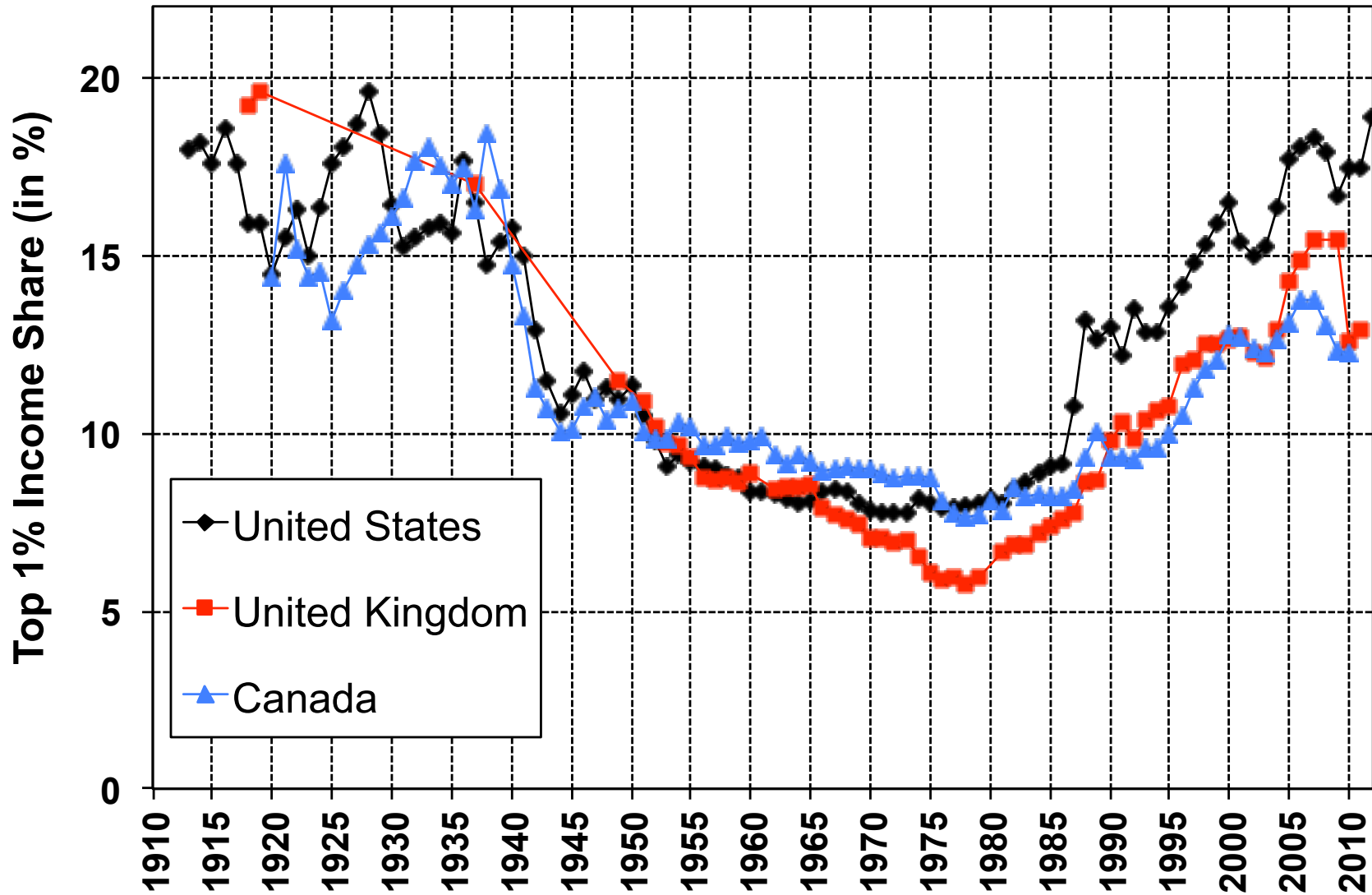
Real values are obtained by using the GDP deflator, 2010 dollars. Source: Appendix Tables B3.

SUMMARY OF US RESULTS

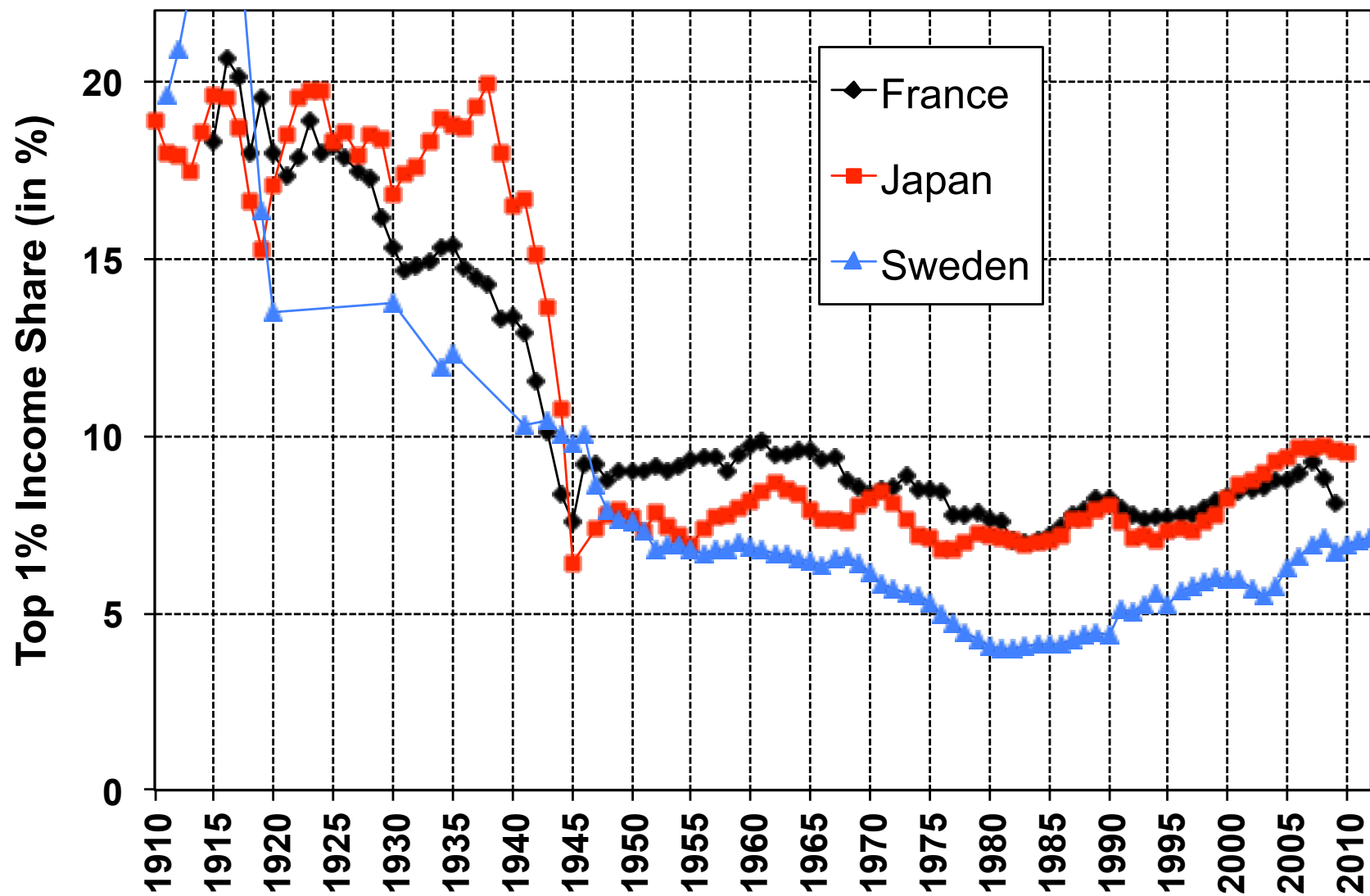
- 1) Dramatic reduction in income and wealth concentration during the first part of the 20th century
- 2) Much lower income and wealth inequality in decades following World War II
- 3) Sharp increase in income and wealth inequality since 1970s
- 4) US now combines extremely high labor income inequality with very high wealth inequality

Analyzing international evidence is useful to understand drivers of inequality

Top 1% share: English Speaking countries (U-shaped)



Top 1% share: Continental Europe and Japan (L-shaped)



Result 1: Drop in Inequality in 1st Half of 20th Century

All advanced countries had very high income concentration one century ago (explains pessimism of Piketty 2014)

All countries experience sharp reduction in income concentration during the first part of the 20th century

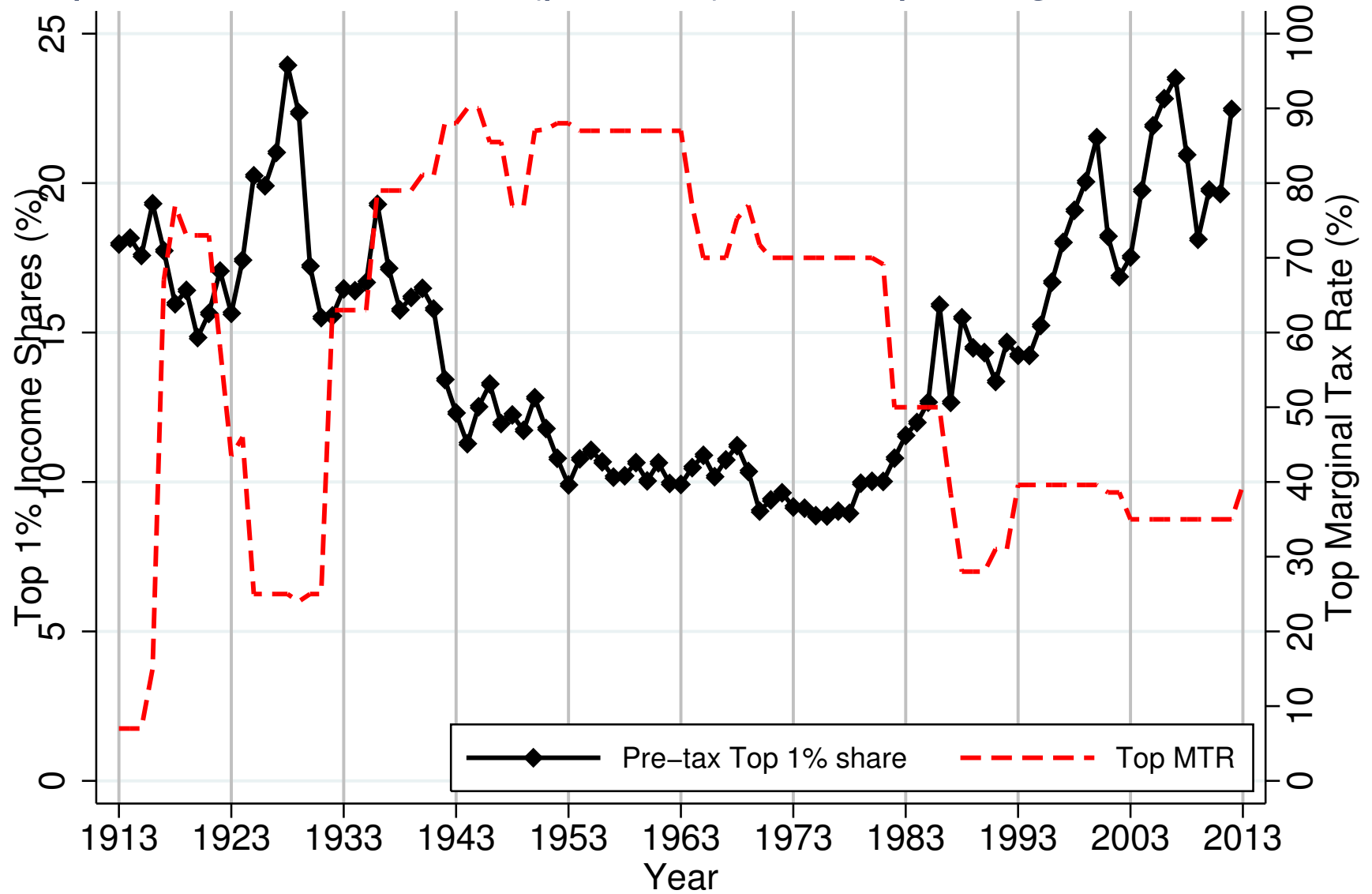
- 1) This is primarily a capital income phenomenon
- 2) War and depression shocks hit top capital earners (drop follows each country specific history)
- 3) Government policy responses—regulations and progressive income and inheritance taxation—make this drop permanent

Result 2: Recent Surge in Inequality

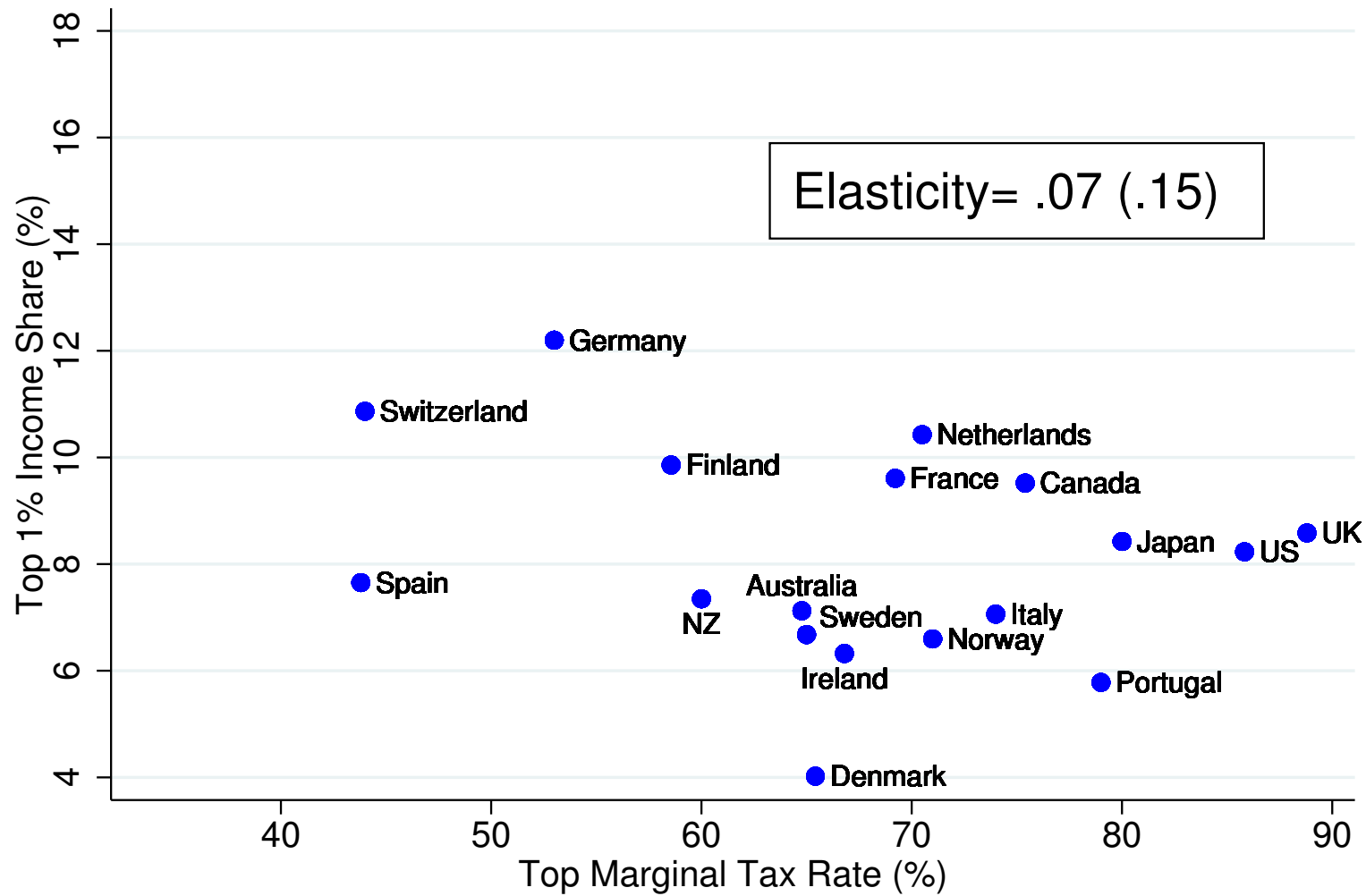
- 1) Driven by surge in top **labor** incomes which then fuels **wealth** inequality
- 2) Difference across countries rules out technical change/globalization as the sole explanation
- 3) Policies play a key role in shaping inequality (tax and transfer policies, regulations, education)
- 4) Key debate: do gains of the top 1% reflect productivity or do they come at the expense of the 99%?

Looking at the role of top tax rates helps shed light on this

Top 1% Income Share (pre-tax) and Top Marginal Tax Rate

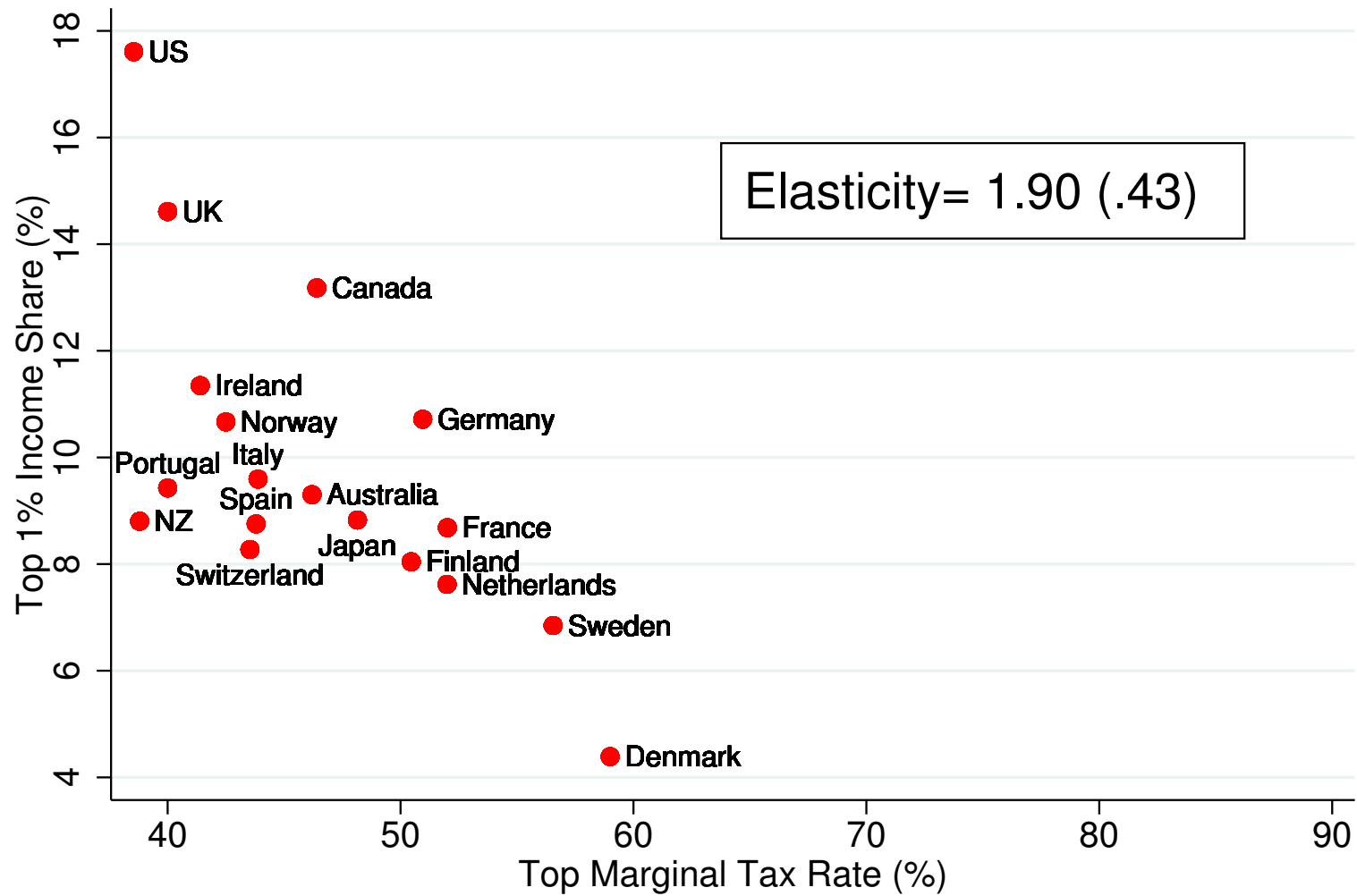


A. Top 1% Share and Top Marginal Tax Rate in 1960–4

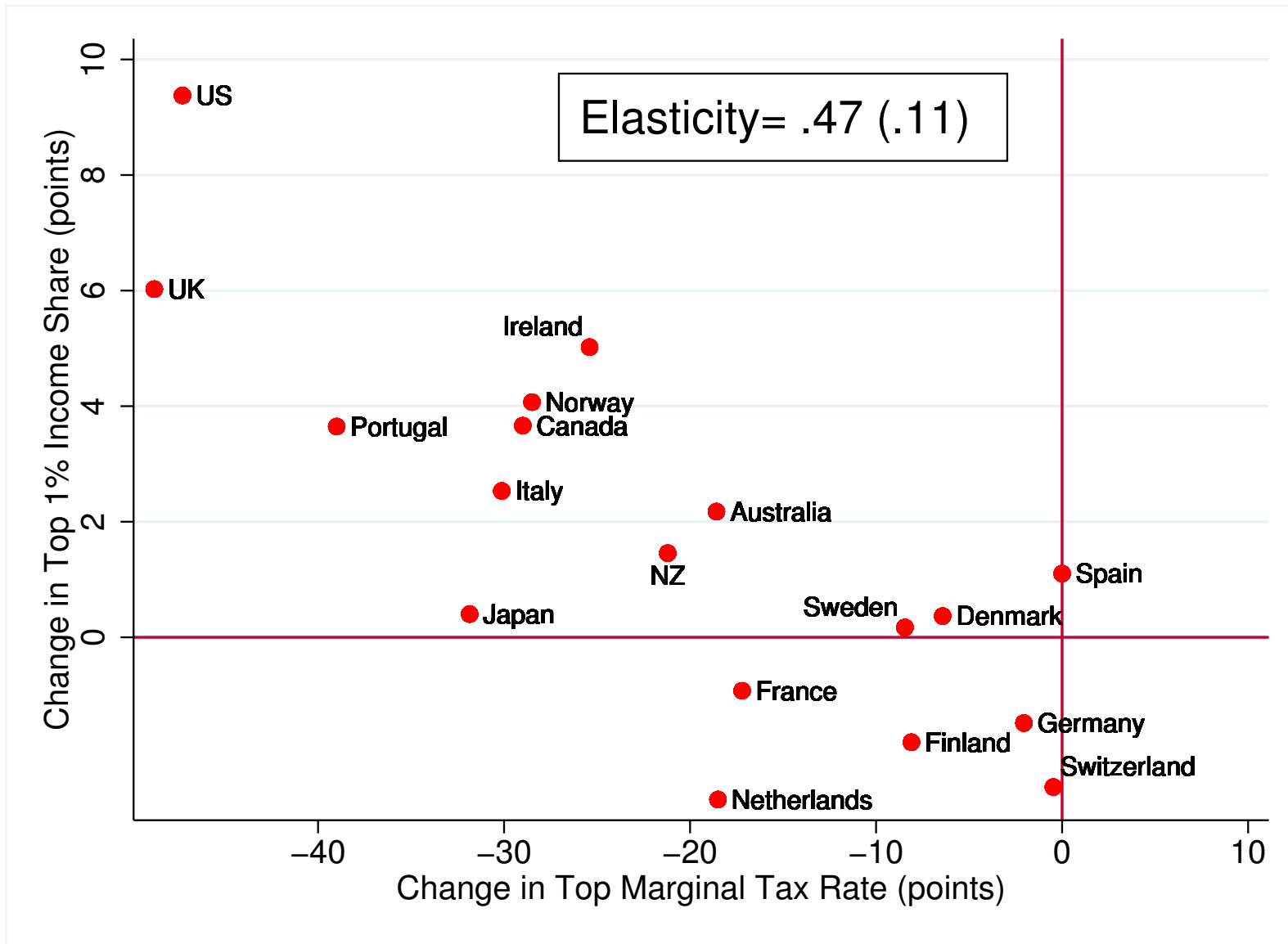


Top tax rates include central+local income taxes (Piketty-Saez-Stancheva '14)

B. Top 1% Share and Top Marginal Tax Rate in 2005–9



Top tax rates include central+local income taxes (Piketty-Saez-Stancheva '14)



Top tax rates include central+local income taxes (Piketty-Saez-Stancheva '14)

ECONOMIC EFFECTS OF TAXING THE TOP 1%

Strong empirical evidence that **pre-tax** top incomes are affected by top tax rates

3 potential scenarios with very different policy consequences

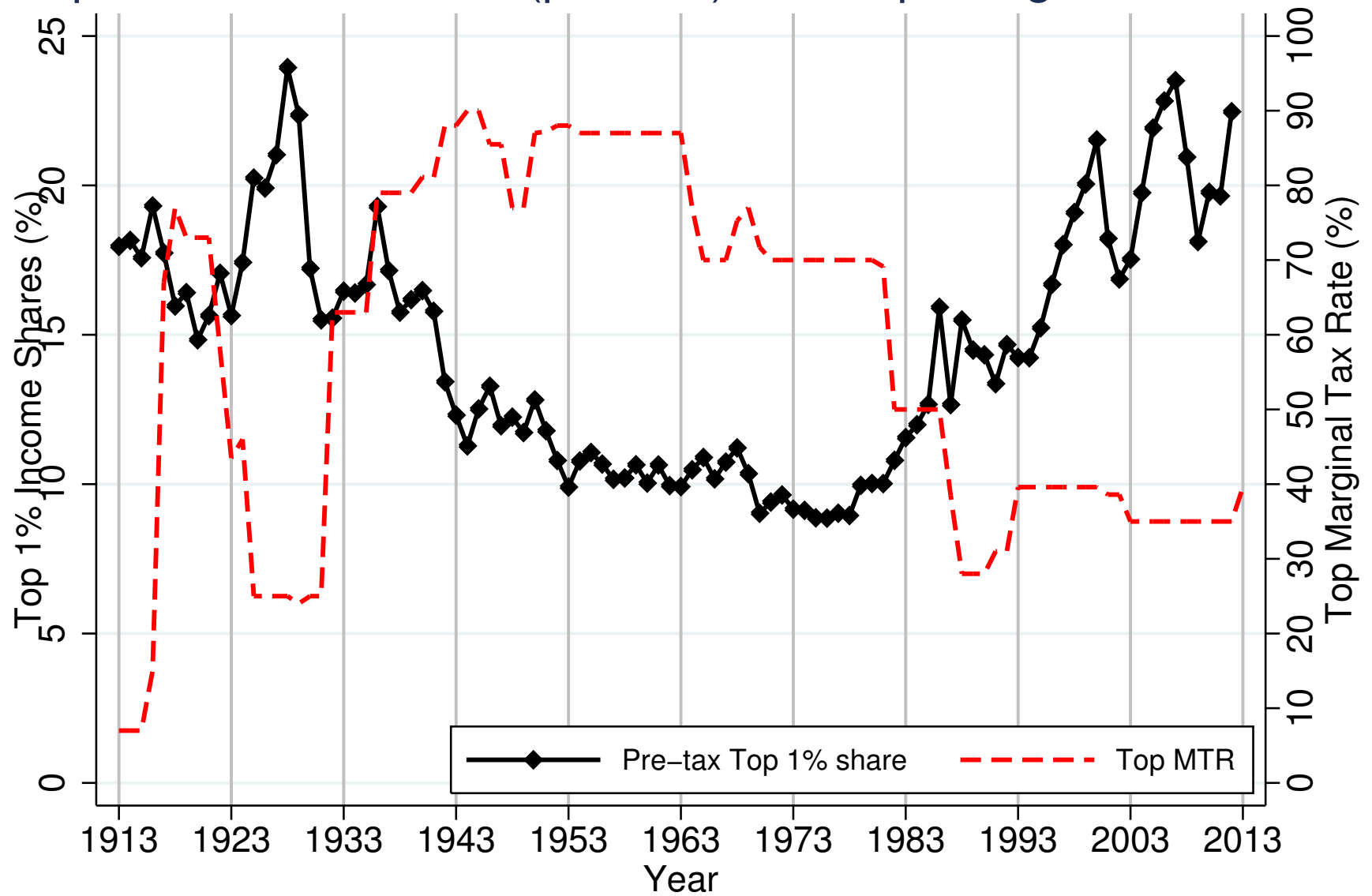
1) Supply-Side: Top earners work less and earn less when top tax rate increases \Rightarrow Top tax rates should not be too high

2) Tax Avoidance/Evasion: Top earners avoid/evade more when top tax rate increases

\Rightarrow a) Eliminate loopholes, b) Then increase top tax rates

3) Rent-seeking: Top earners extract more pay (at the expense of the 99%) when top tax rates are low \Rightarrow High top tax rates are desirable

Top 1% Income Share (pre-tax) and Top Marginal Tax Rate



Real changes vs. tax Avoidance?

Test using charitable giving behavior of top income earners

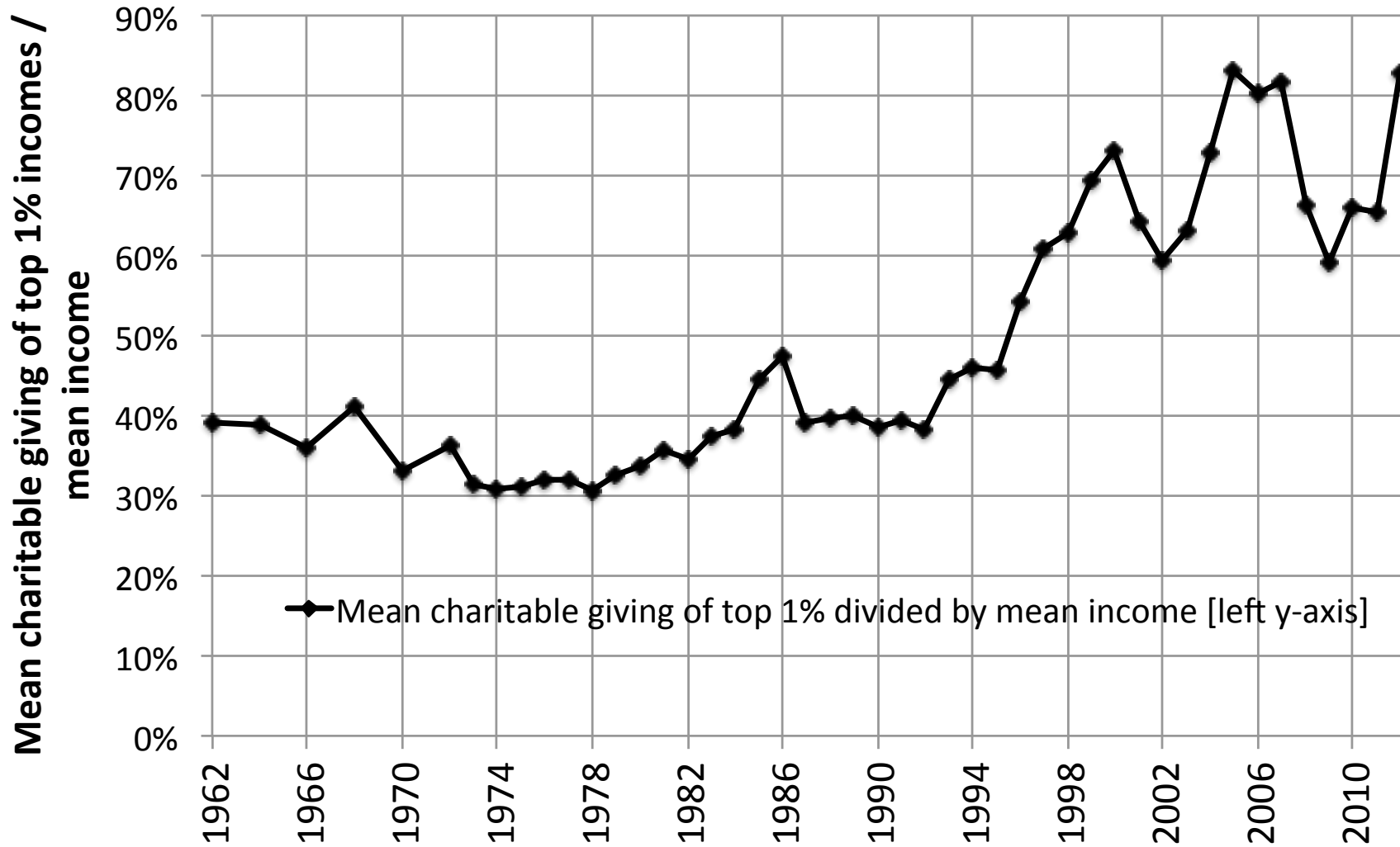
Because charitable is tax deductible, incentives to give are stronger when tax rates are higher

Under the tax avoidance scenario, reported incomes and reported charitable giving should move in opposite directions

Empirically, charitable giving of top income earners has grown in close tandem with top incomes

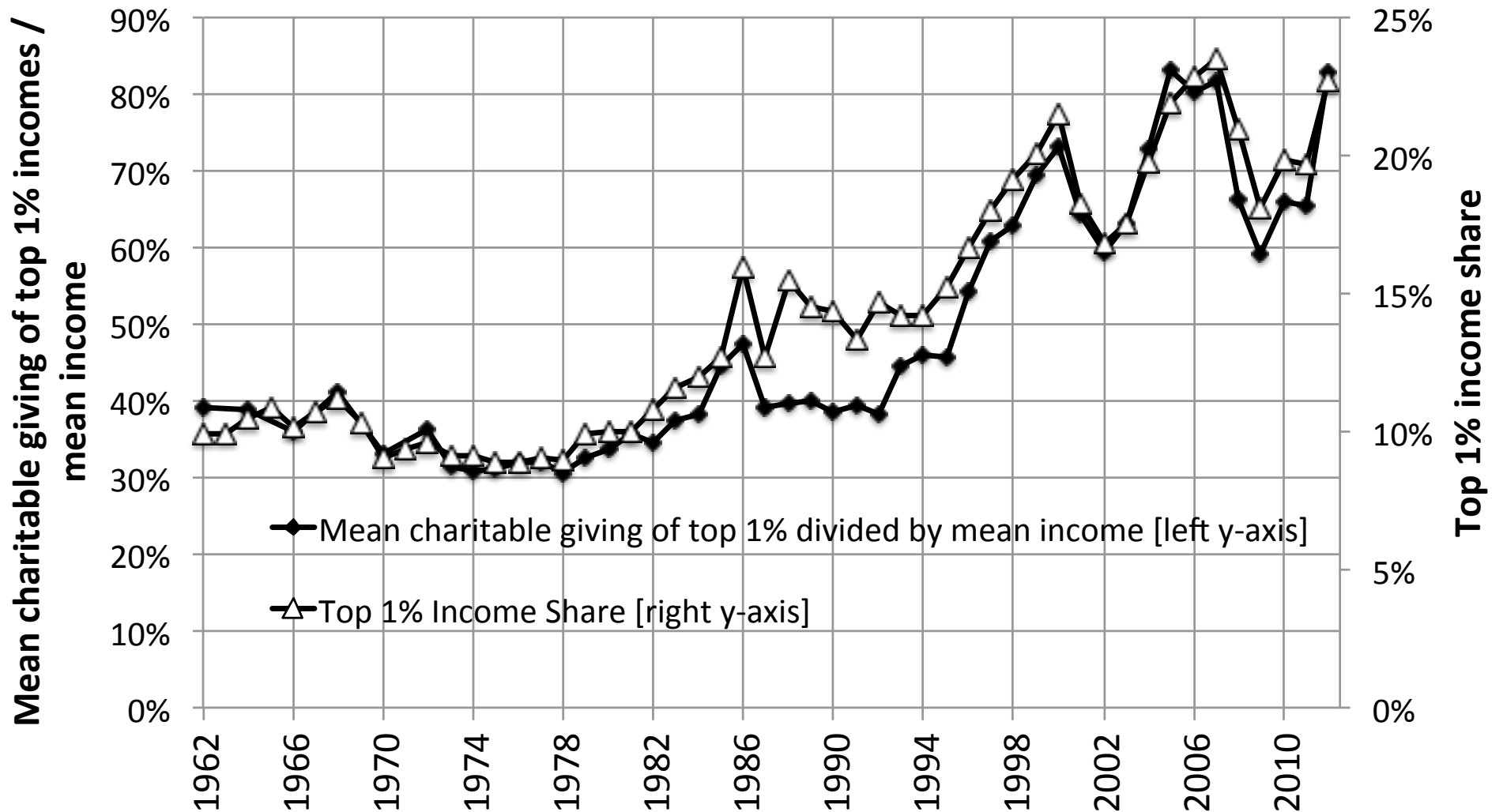
⇒ Incomes at the top have grown for real

Charitable Giving of Top 1% Incomes



Source: Appendix Table XX. The figure depicts average charitable giving of top 1% incomes (normalized by average income per family) on the left y-axis.

Charitable Giving of Top 1% Incomes, 1962-2012



Source: Appendix Table XX. The figure depicts average charitable giving of top 1% incomes (normalized by average income per family) on the left y-axis. For comparison, the figure reports the top 1% income share (on the right y-axis).

Supply-Side or Rent-seeking

Under rent-seeking scenario, growth in top 1% incomes should come at the expense of bottom 99% (and conversely)

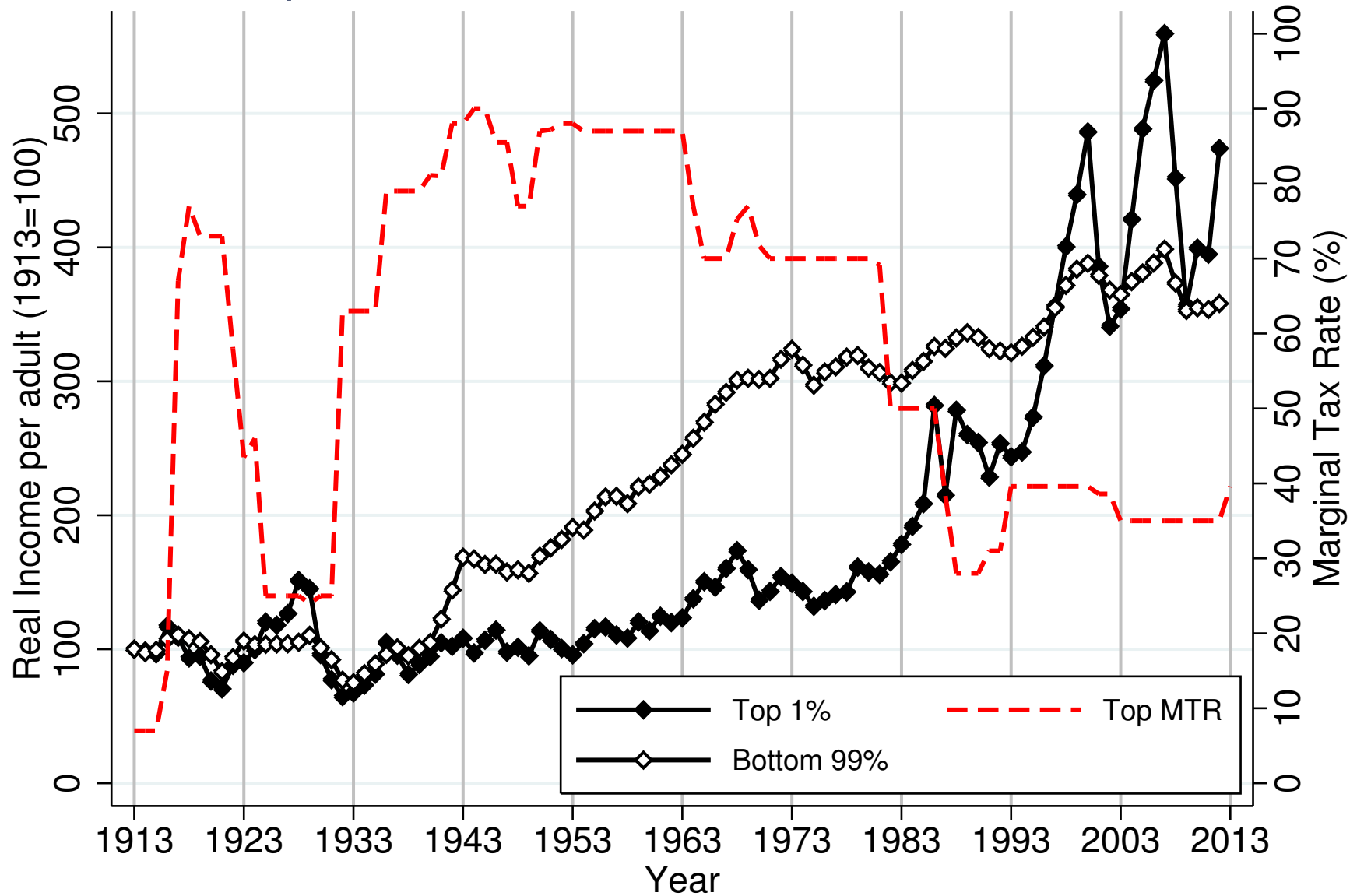
US Evidence: Top 1% incomes grow slowly from 1933 to 1975 and fast afterwards. Bottom 99% incomes grow fast from 1933 to 1975 and slowly afterwards

International evidence: Hard to find an effect of top rate cuts on economic growth

⇒ Consistent with rent-seeking effects

More research needed on this critical question

Top 1% and Bottom 99% Income Growth

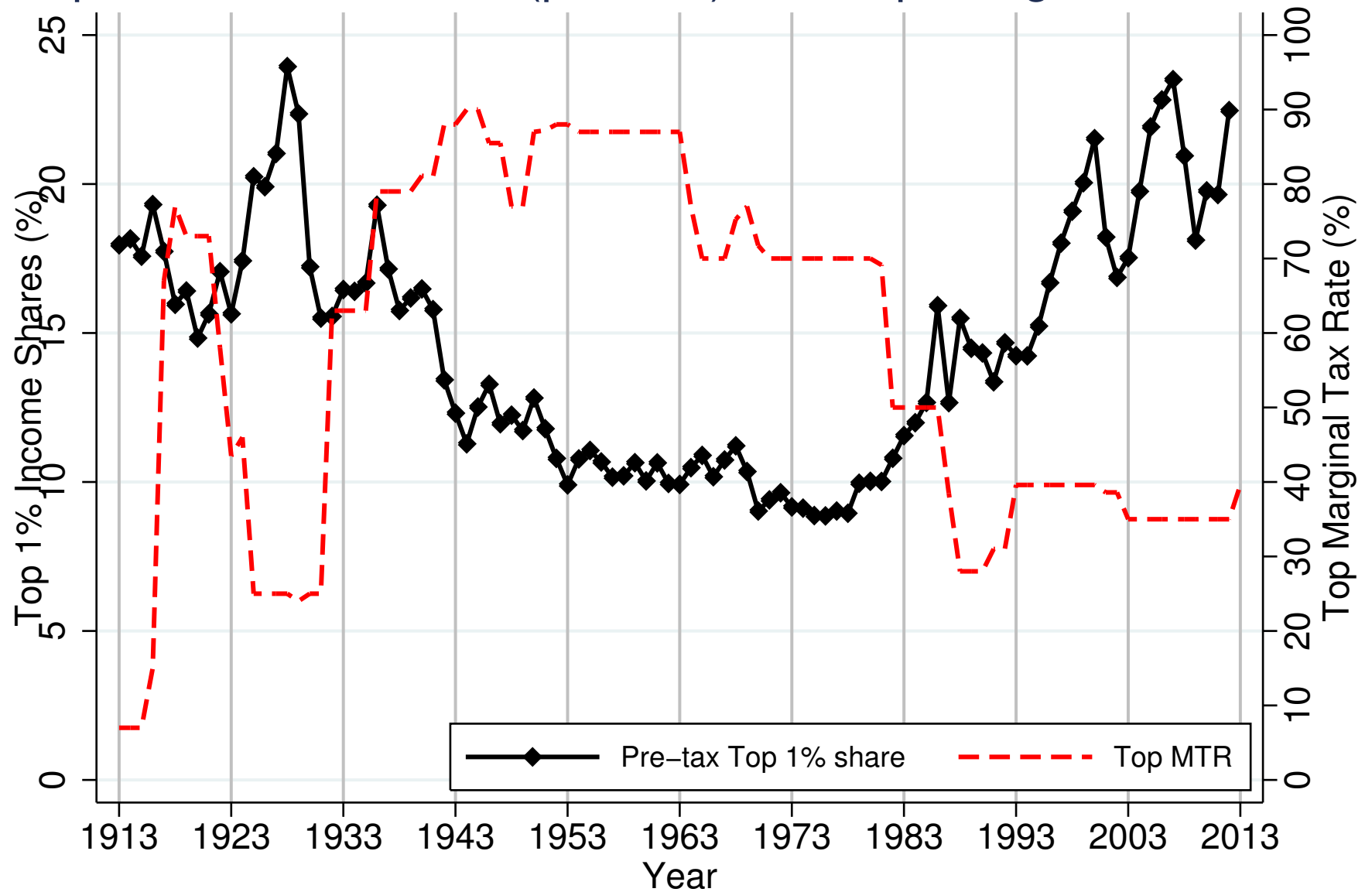


POLICY CONCLUSIONS

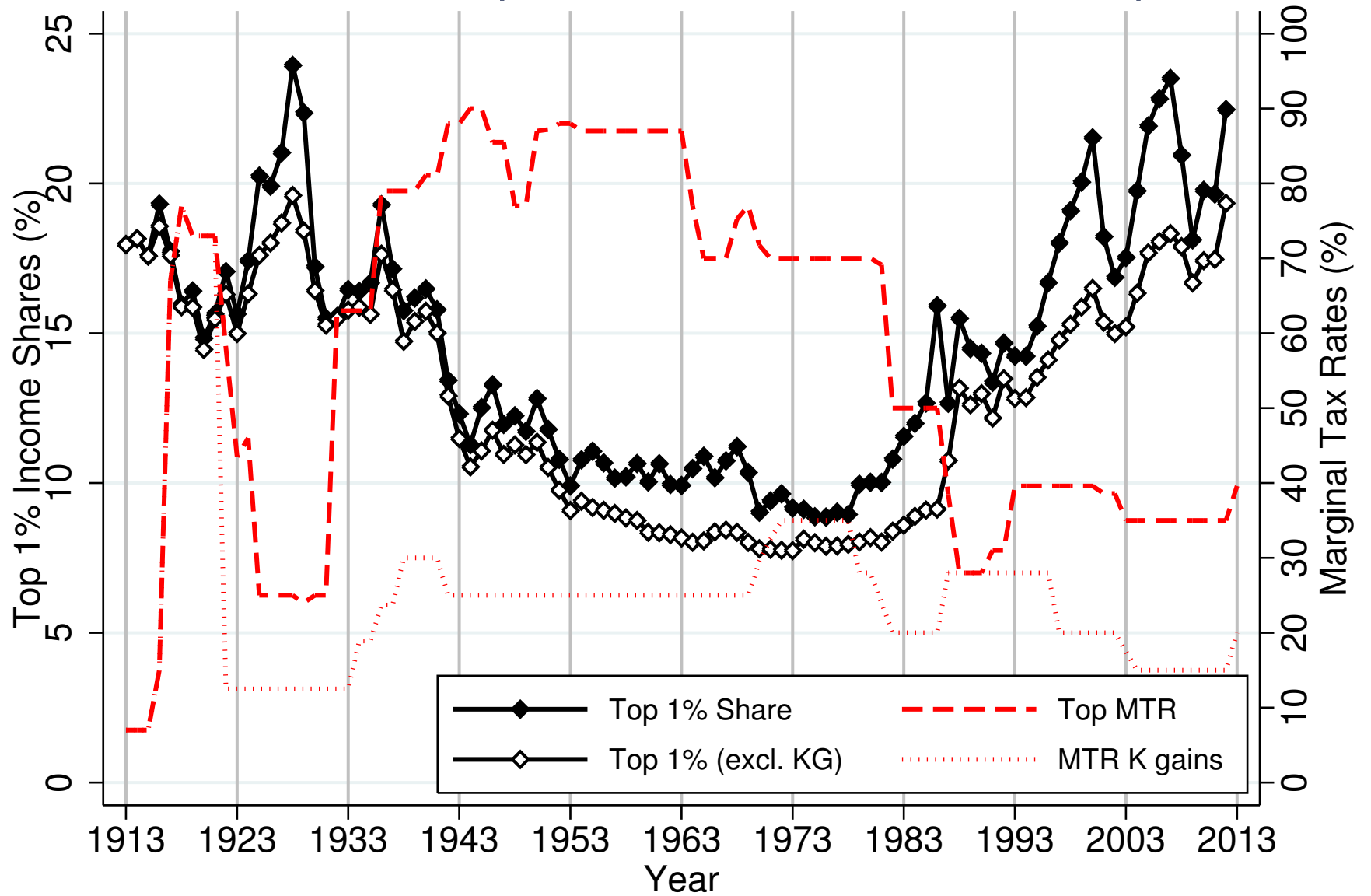
- 1) US historical evidence and international evidence shows that tax policy plays a key role in the shaping inequality
- 2) High top tax rates reduce the **pre-tax** income gap without visible effect on economic growth
- 3) Public will favor more progressive taxation only if it is convinced that top income gains are detrimental to the 99%
- 4) In globalized world, progressive taxation will require international coordination to keep tax avoidance/evasion low

SUPPLEMENTARY SLIDES

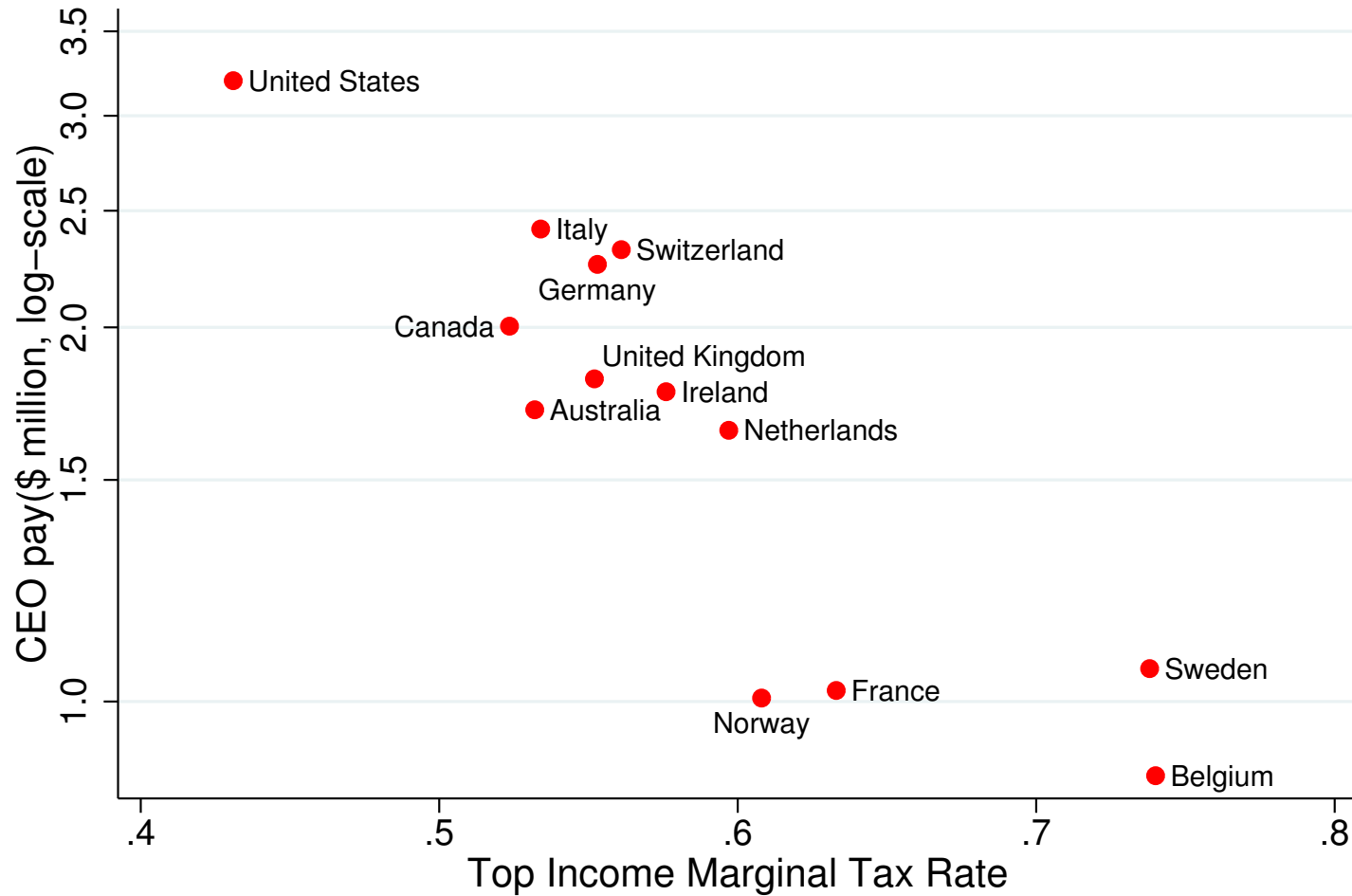
Top 1% Income Share (pre-tax) and Top Marginal Tax Rate



Tax Avoidance: Top 1% Income Shares and Top MTR

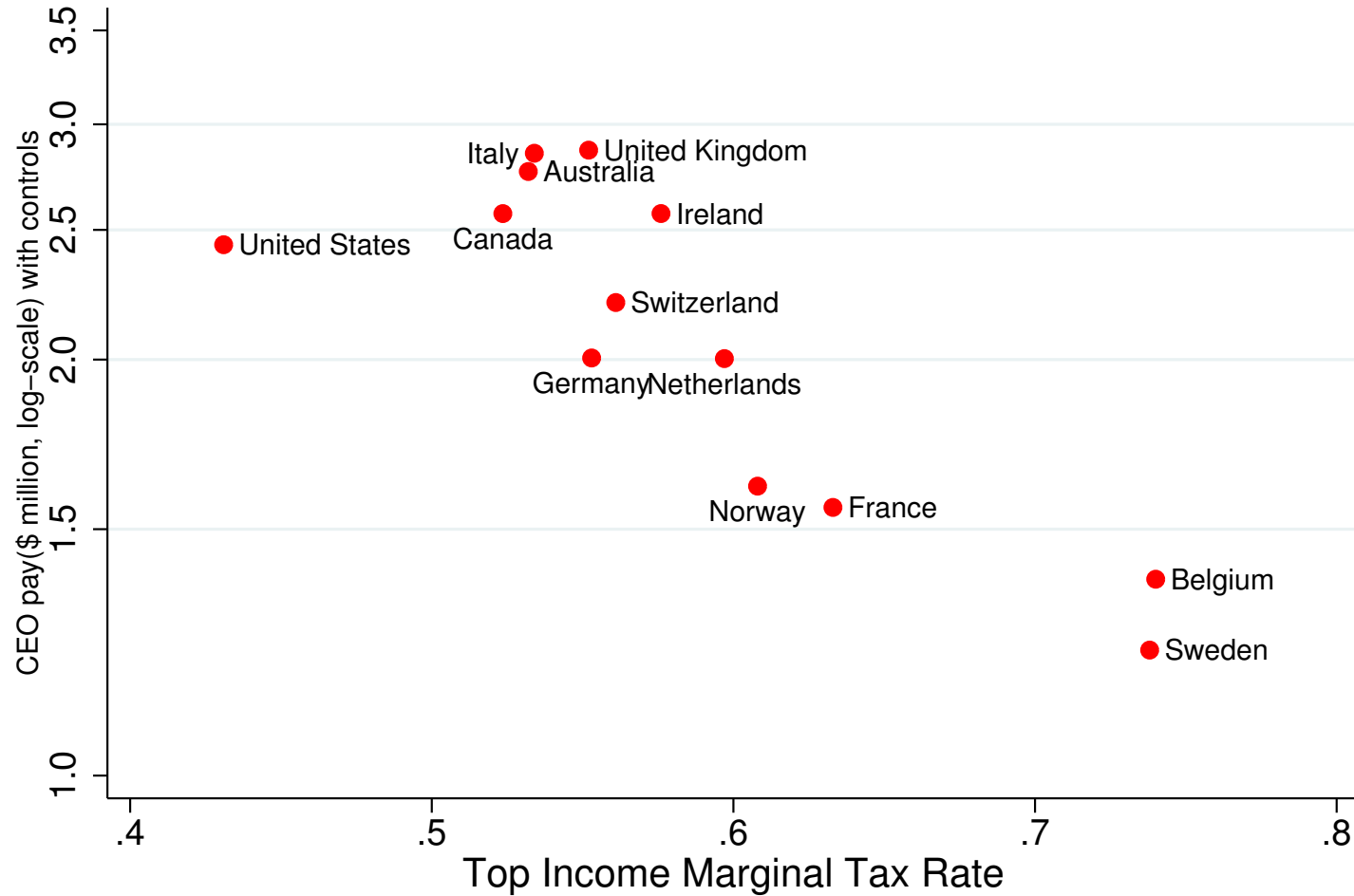


A. Average CEO compensation



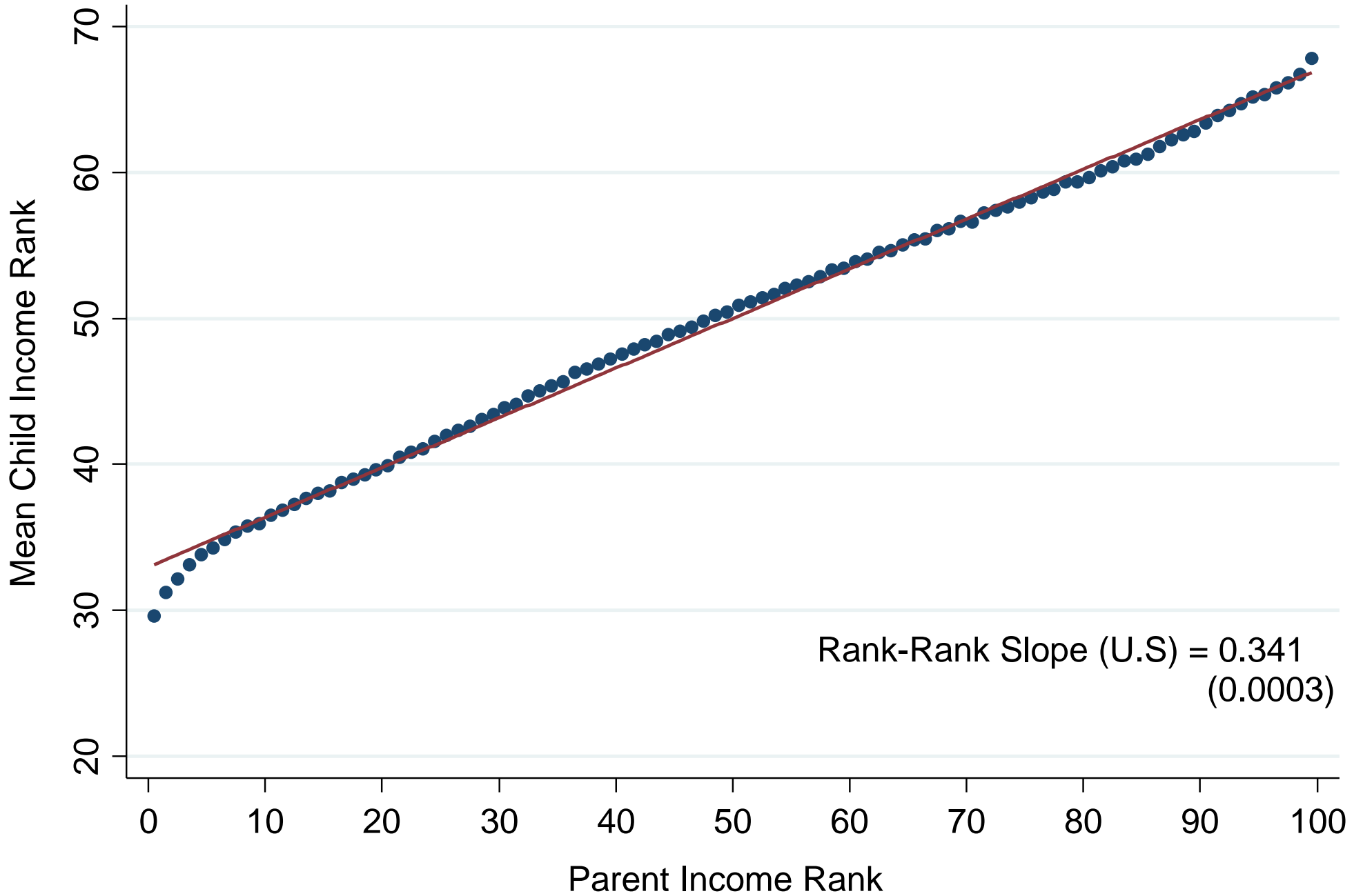
Link between top tax rate and CEO pay in 2006 across countries

B. Average CEO compensation with controls

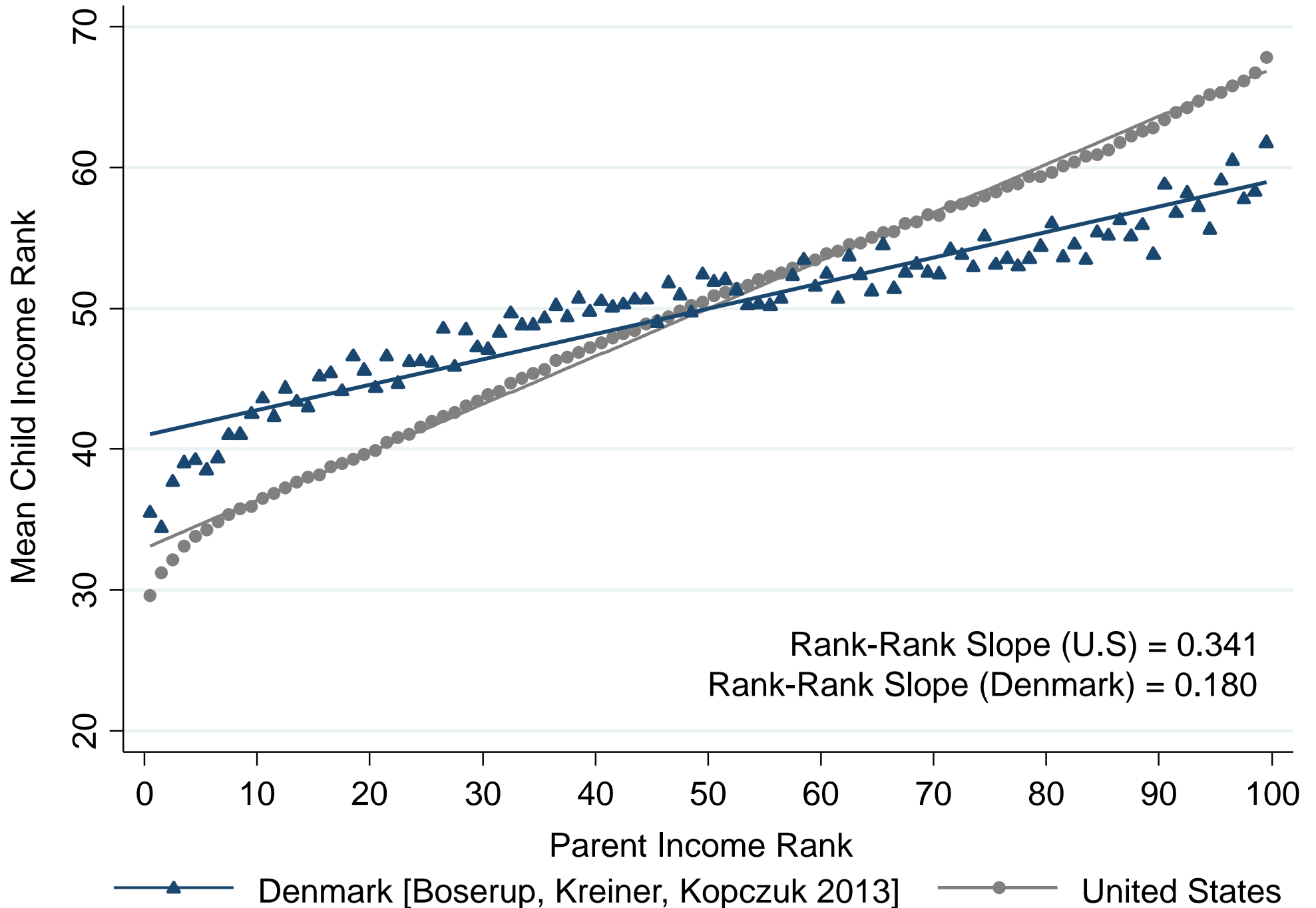


Controlling for firm profitability, governance, size, and industry

Mean Child Percentile Rank vs. Parent Percentile Rank



Intergenerational Mobility in the United States vs. Denmark



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