

# Income and Wealth Inequality: Evidence and Policy Implications

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October 2014

# 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 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)

US 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

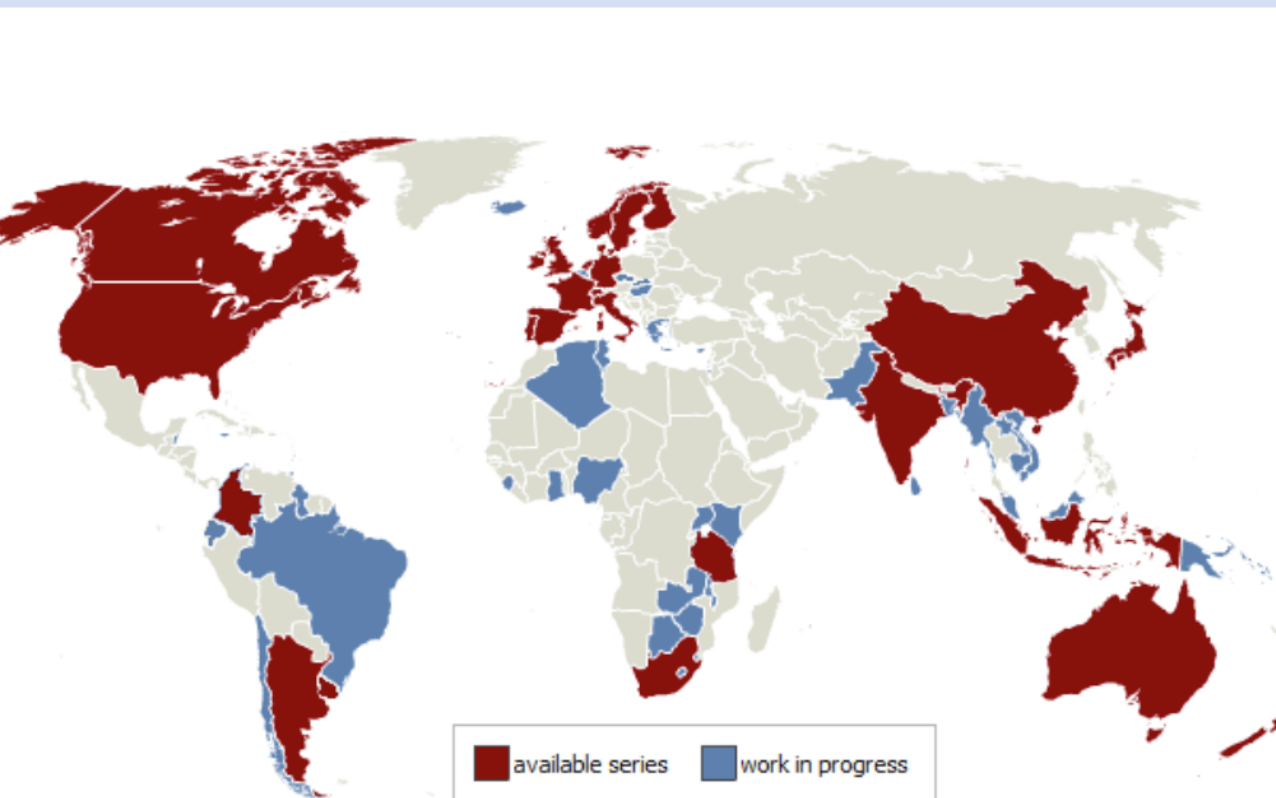
(a) covering long-time periods

(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 WORLD TOP INCOMES DATABASE



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



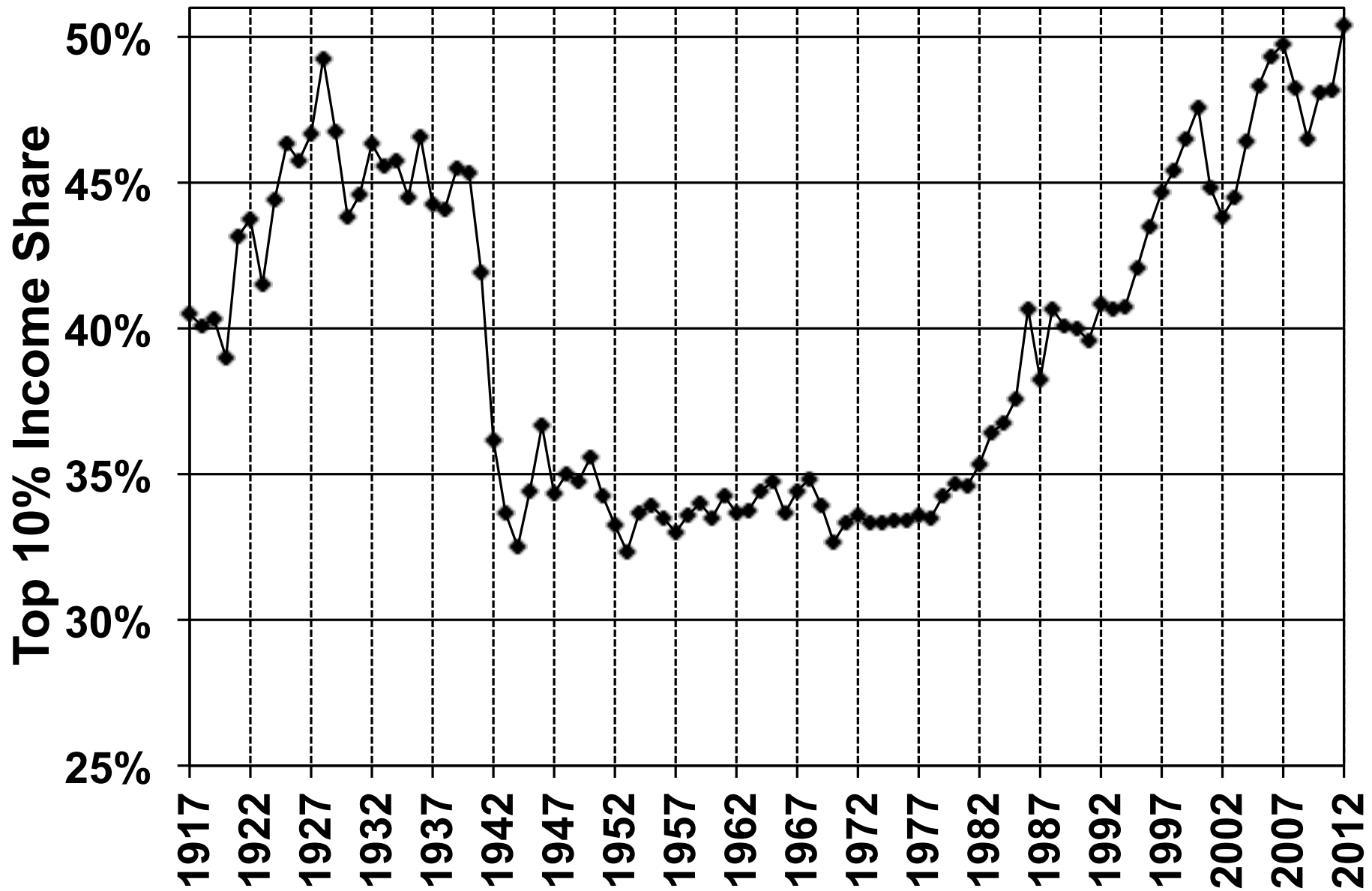
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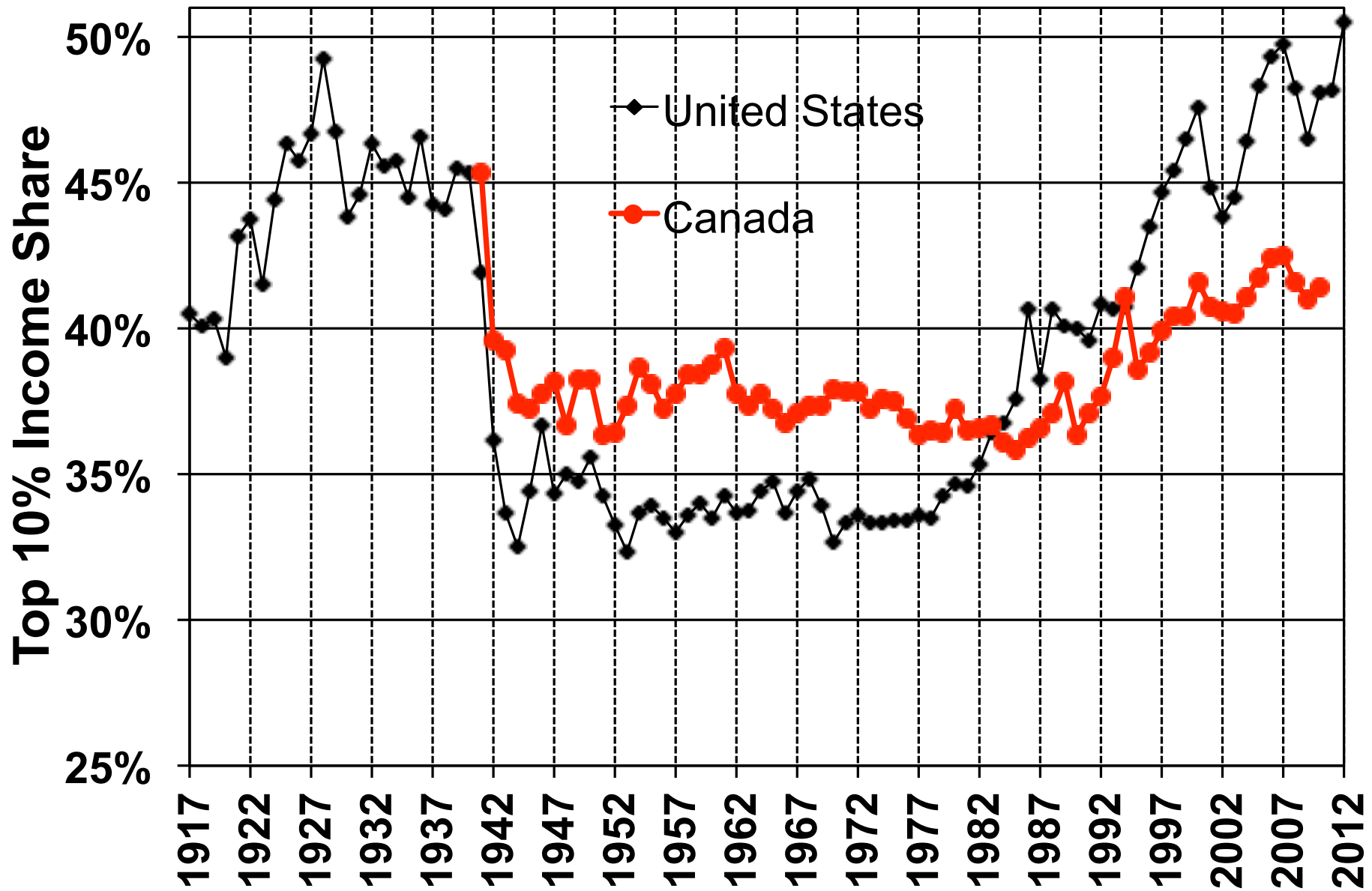


# Top 10% Pre-tax Income Share in the US, 1917-2012



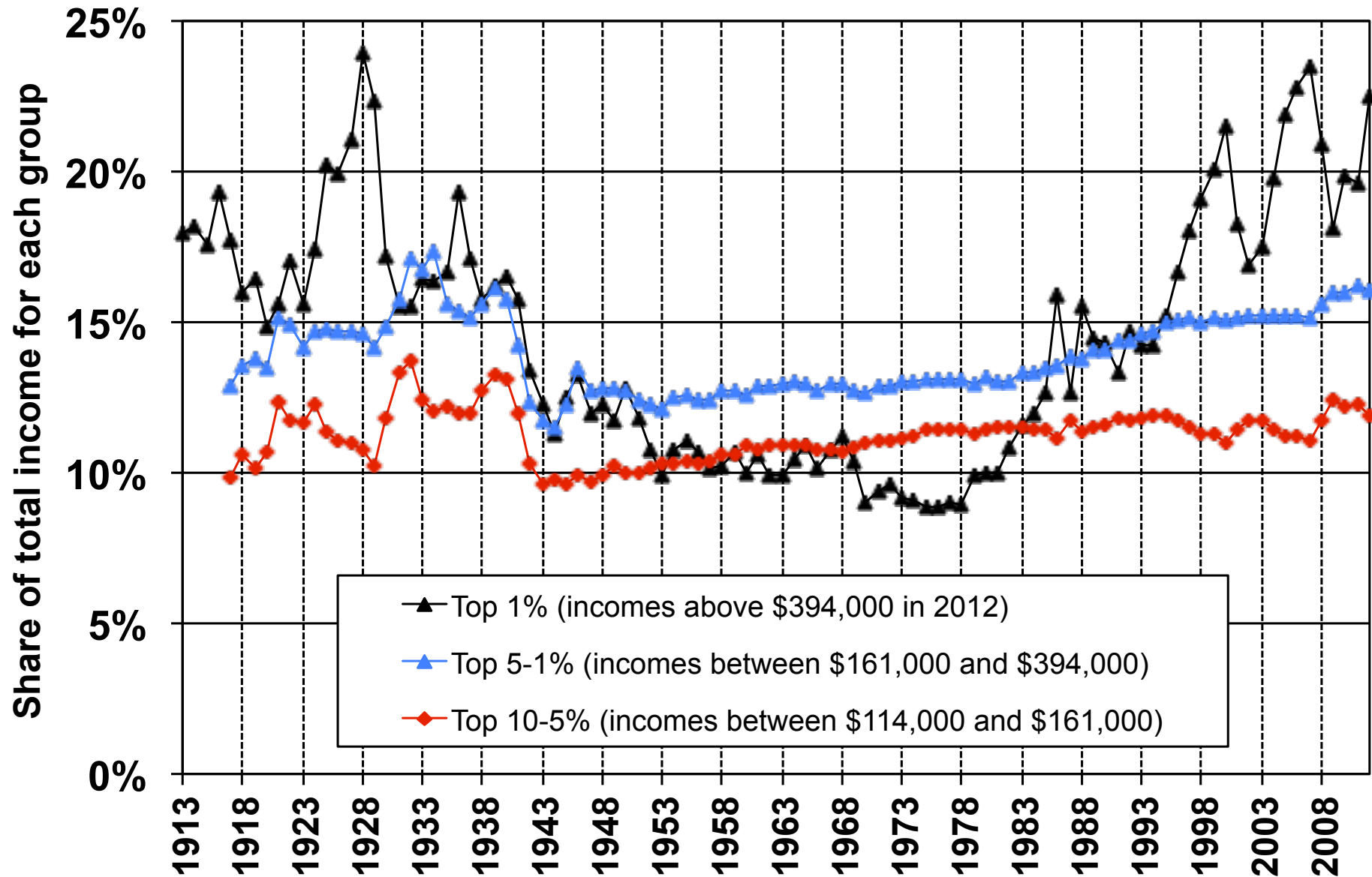
Source: Piketty and Saez, 2003 updated to 2012. Series based on pre-tax cash market income including realized capital gains and excluding government transfers. 2012 data based on preliminary statistics

# Top 10% Pre-tax Income Share in the US and Canada



Source: Piketty and Saez, 2003 updated to 2013. Series based on pre-tax cash market income including realized capital gains and excluding government transfers. Canada: Saez and Veall (2005) and Veall (2012)

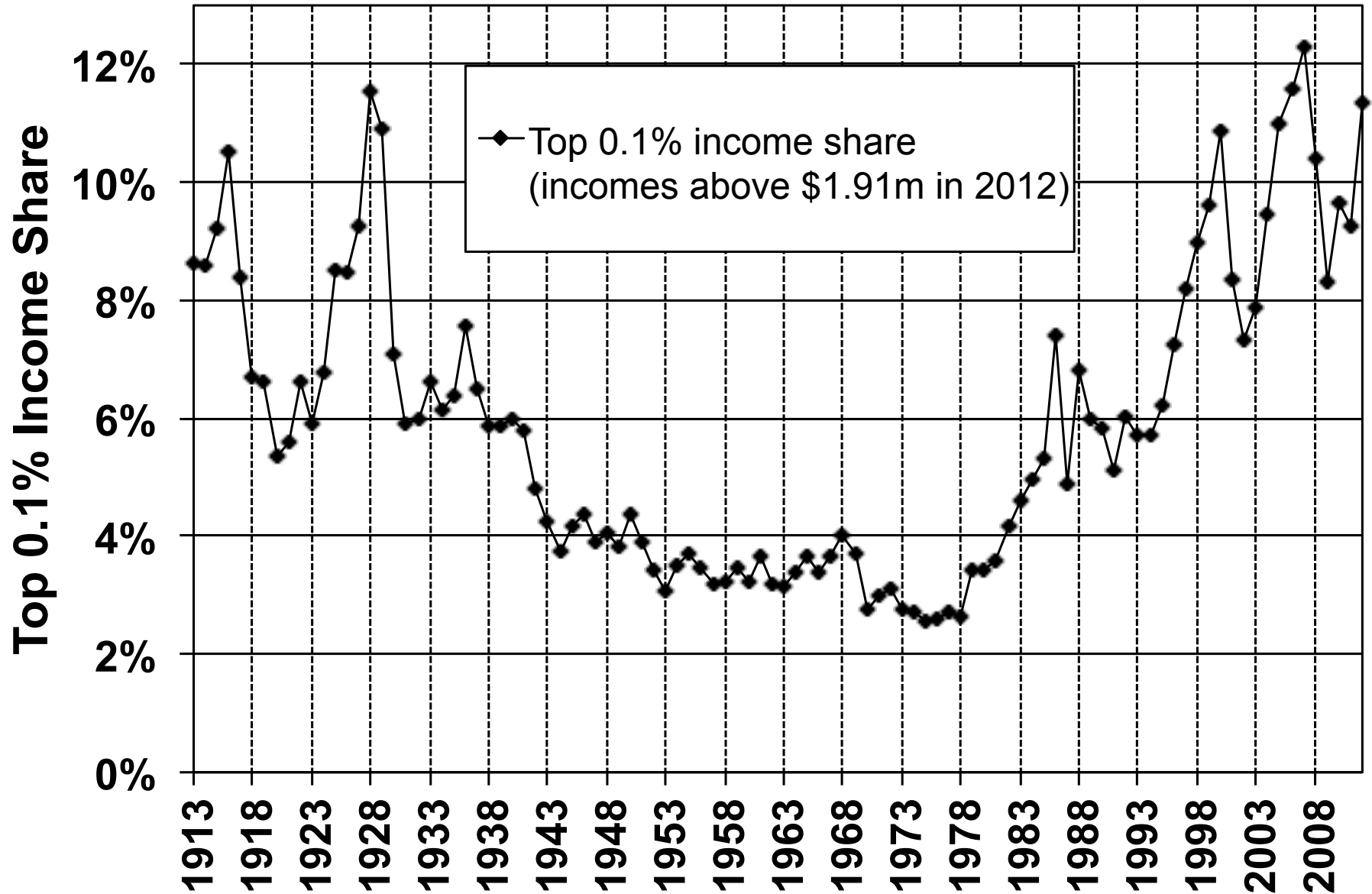
## Decomposing Top 10% into 3 Groups, 1913-2012



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.

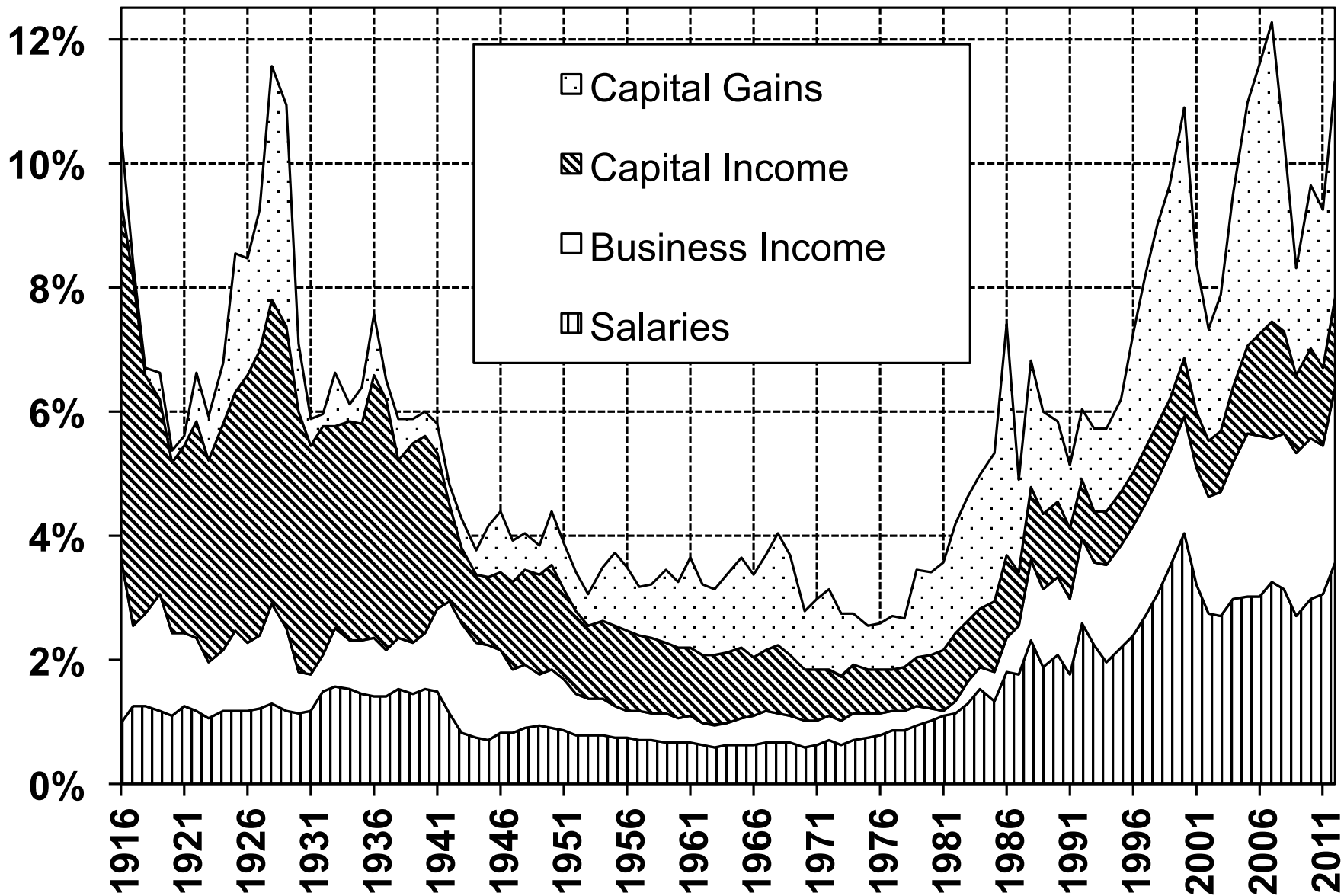


## Top 0.1% US Pre-Tax Income Share, 1913-2012



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.

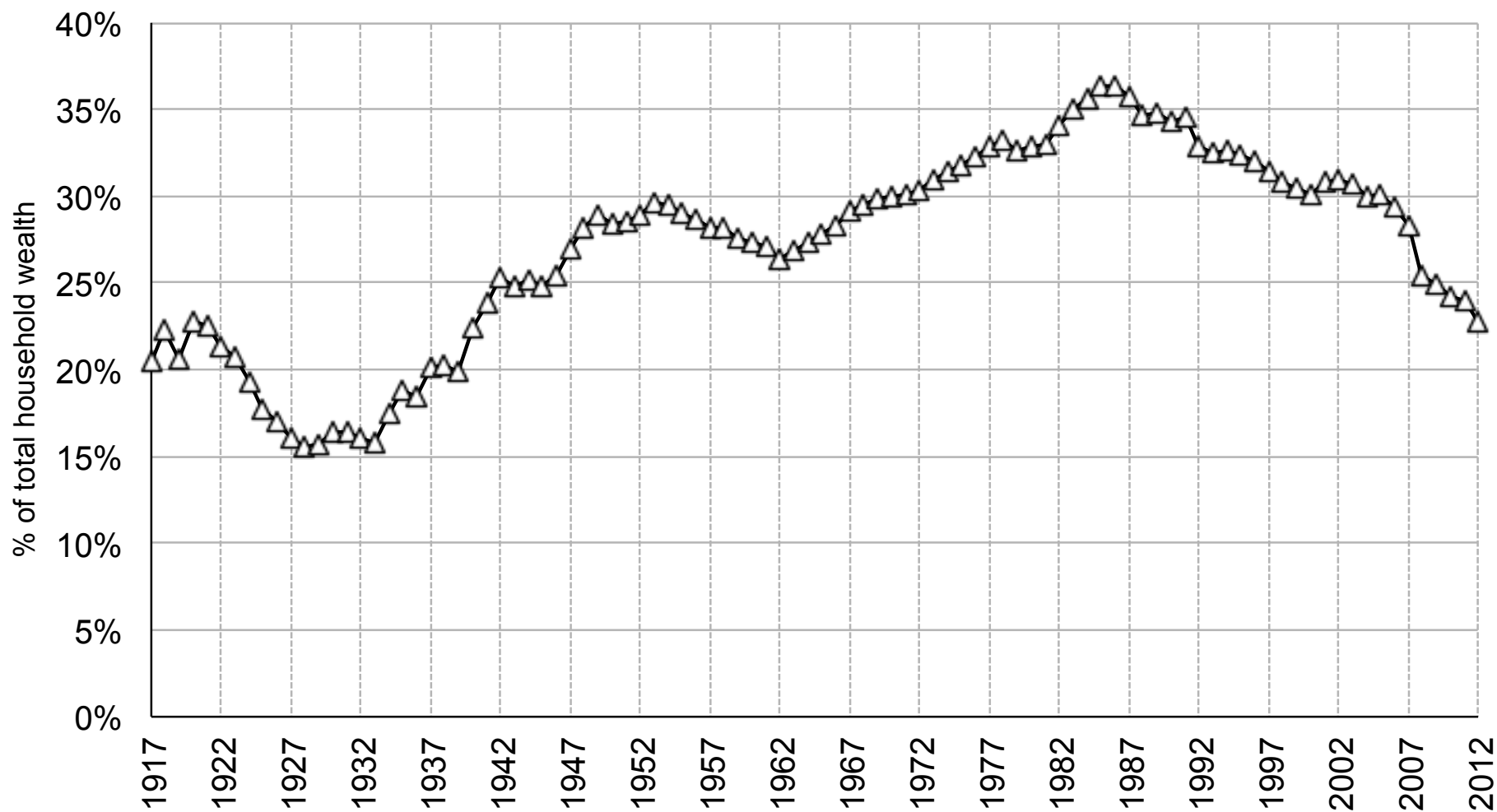
# US Top 0.1% Pre-Tax Income Share and Composition



Source: Piketty and Saez, 2003 updated to 2012

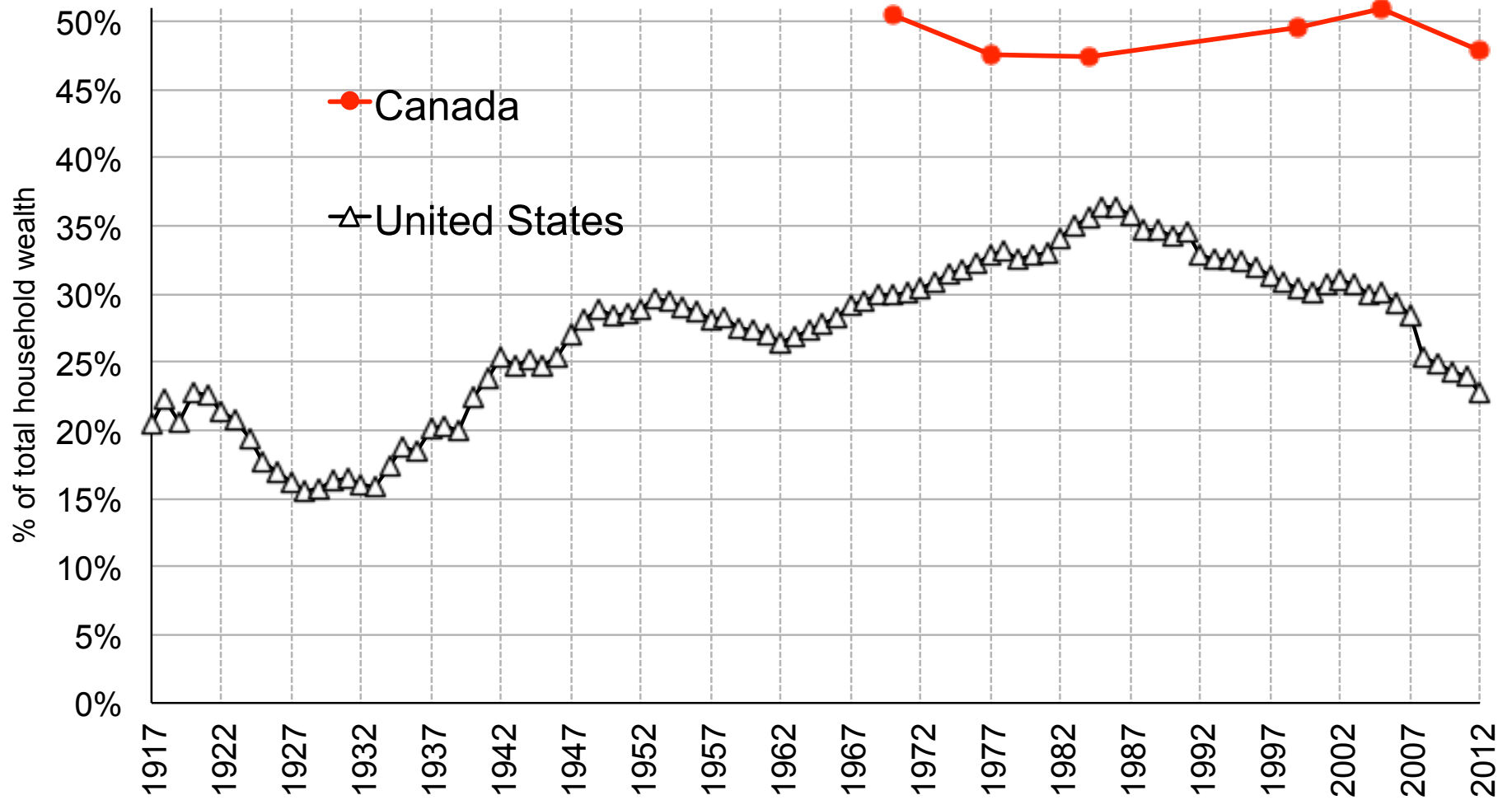
. Series based on pre-tax cash market income including or excluding realized capital gains, and always excluding government transfers

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



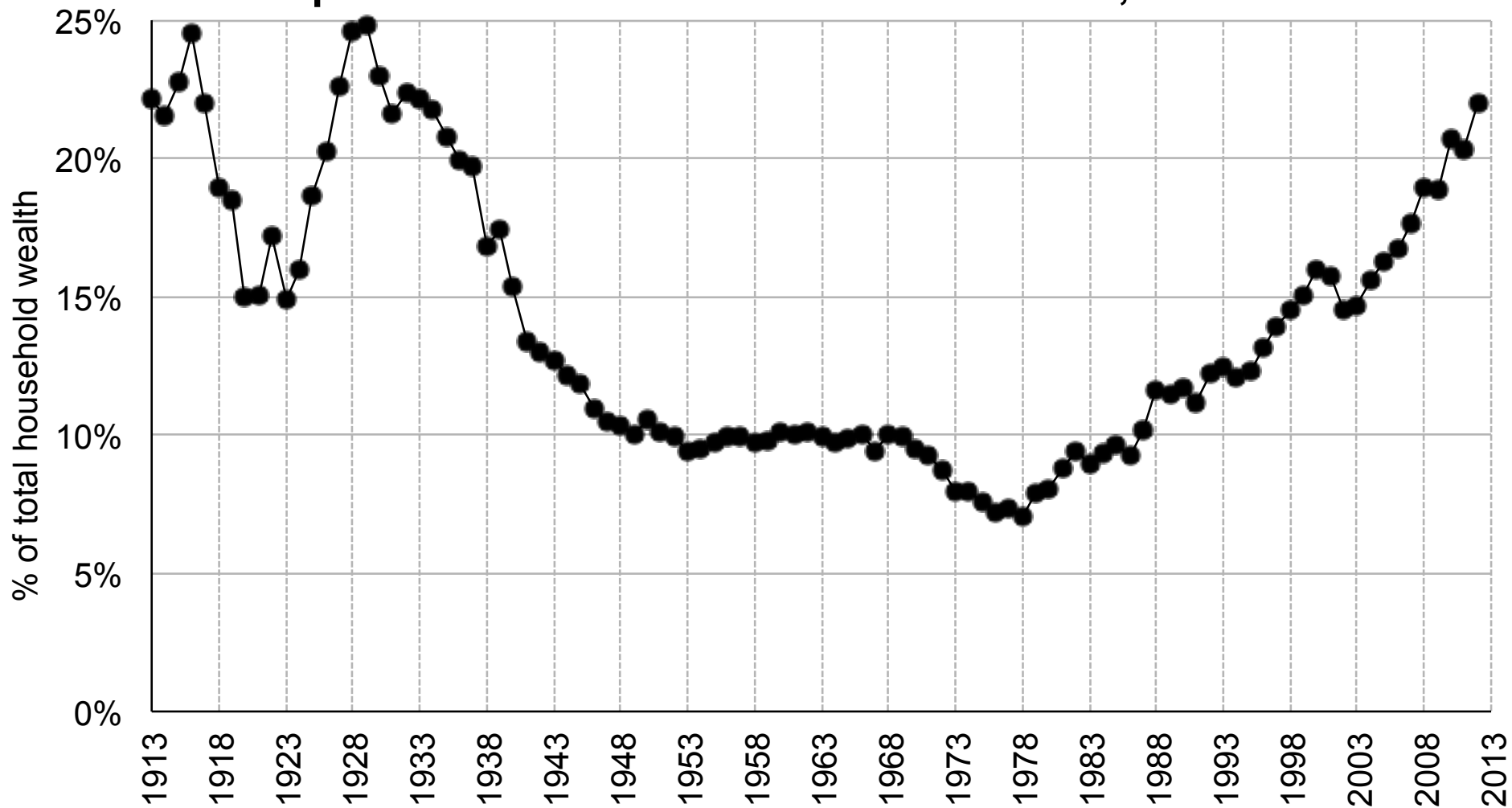
Wealth shares estimated using capitalization method by Saez and Zucman (2014)

## Bottom 90% wealth share in the US and Canada



Canada source: Survey of Financial Security (wealth includes employer pensions)

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



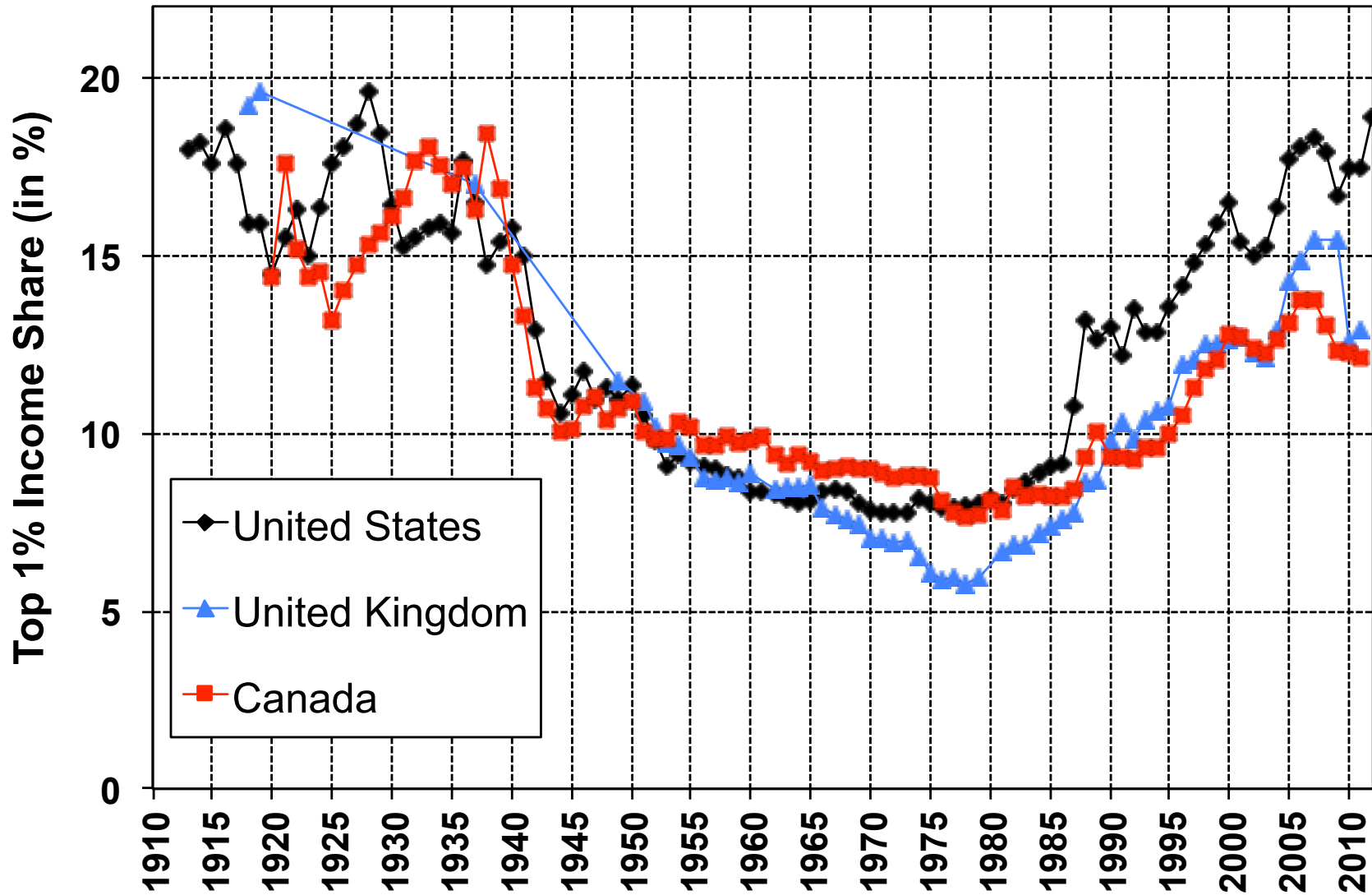
This figure depicts the share of total household wealth held by the 0.1% richest families, as estimated by capitalizing income tax returns. In 2012, the top 0.1% includes about 160,000 families with net wealth above \$20.6 million. Source: Appendix Table B1.

## **SUMMARY OF US RESULTS**

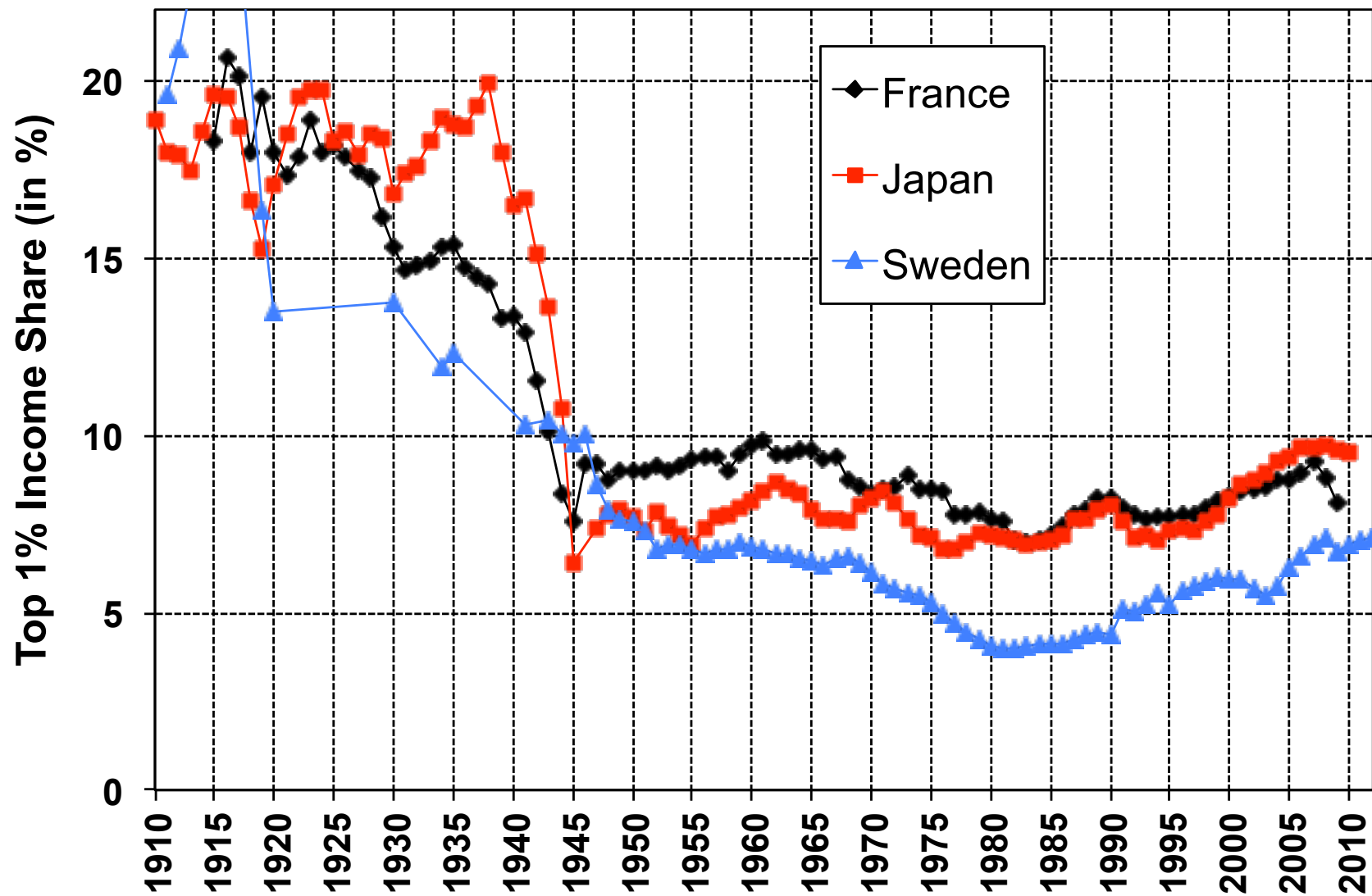
- 1) Dramatic reduction in income and wealth concentration during the first part of the 20th century
- 2) Much lower income and wealth inequality in decades following World War II
- 3) Sharp increase in income and wealth inequality since 1970s
- 4) US now combines extremely high labor income inequality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

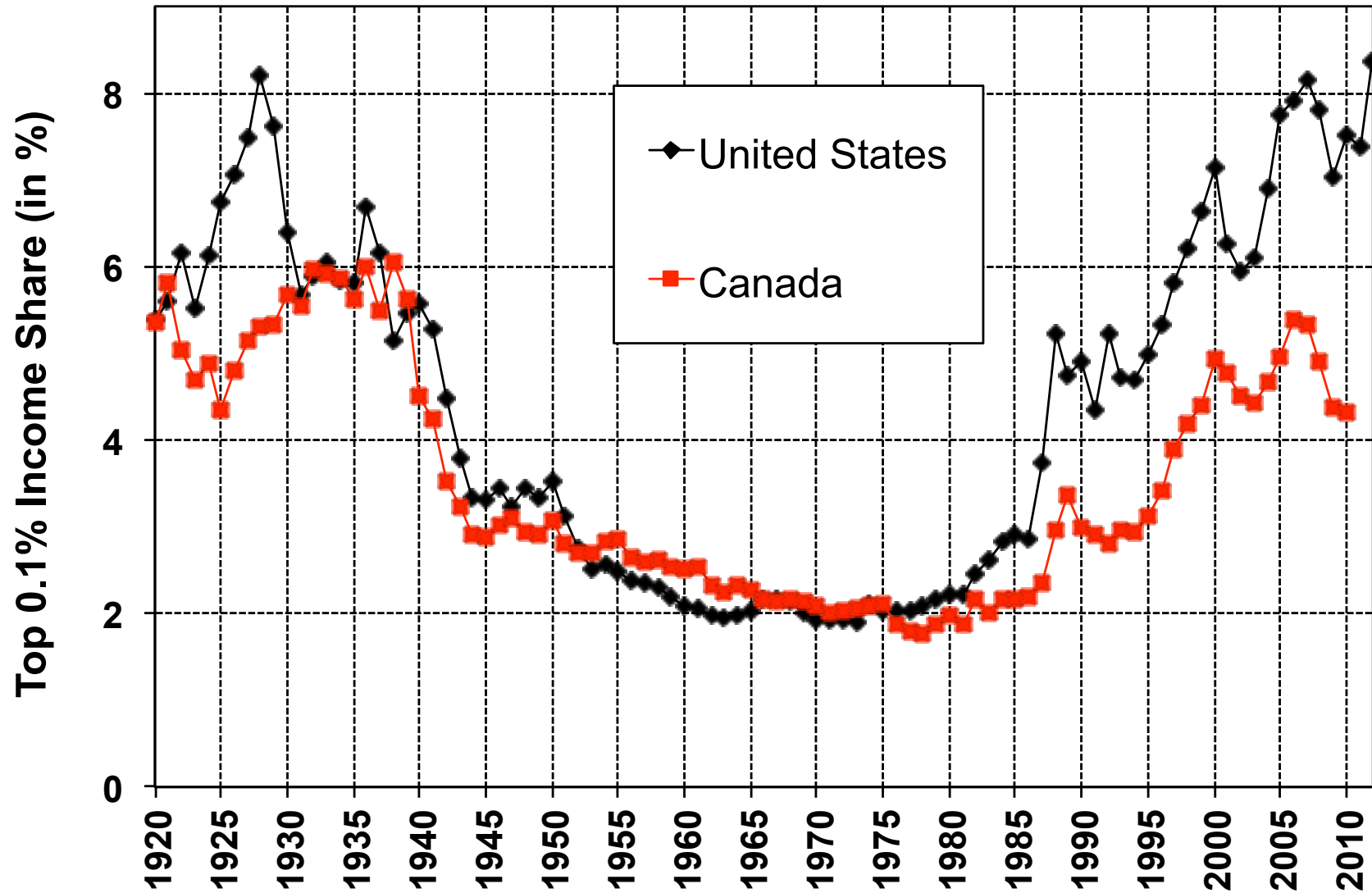
All countries experience sharp reduction in income concentration during the first part of the 20th century

- 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

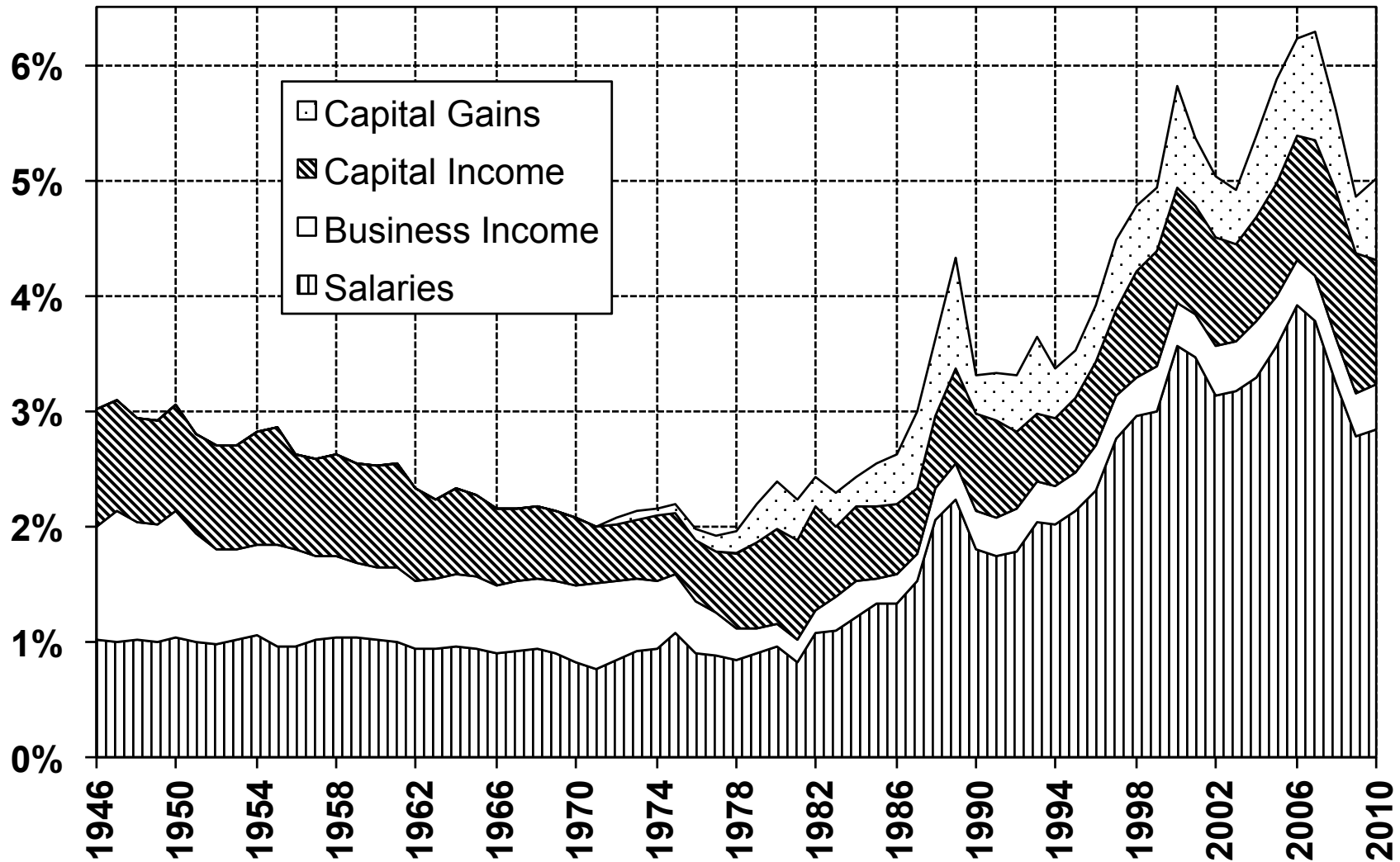
## Result 2: Recent Surge in Inequality

- 1) Driven by surge in top **labor** incomes which then fuels **wealth** inequality
- 2) Difference across countries rules out technical change and globalization as the unique explanations
- 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%?

## Top 0.1% income share: US vs. Canada

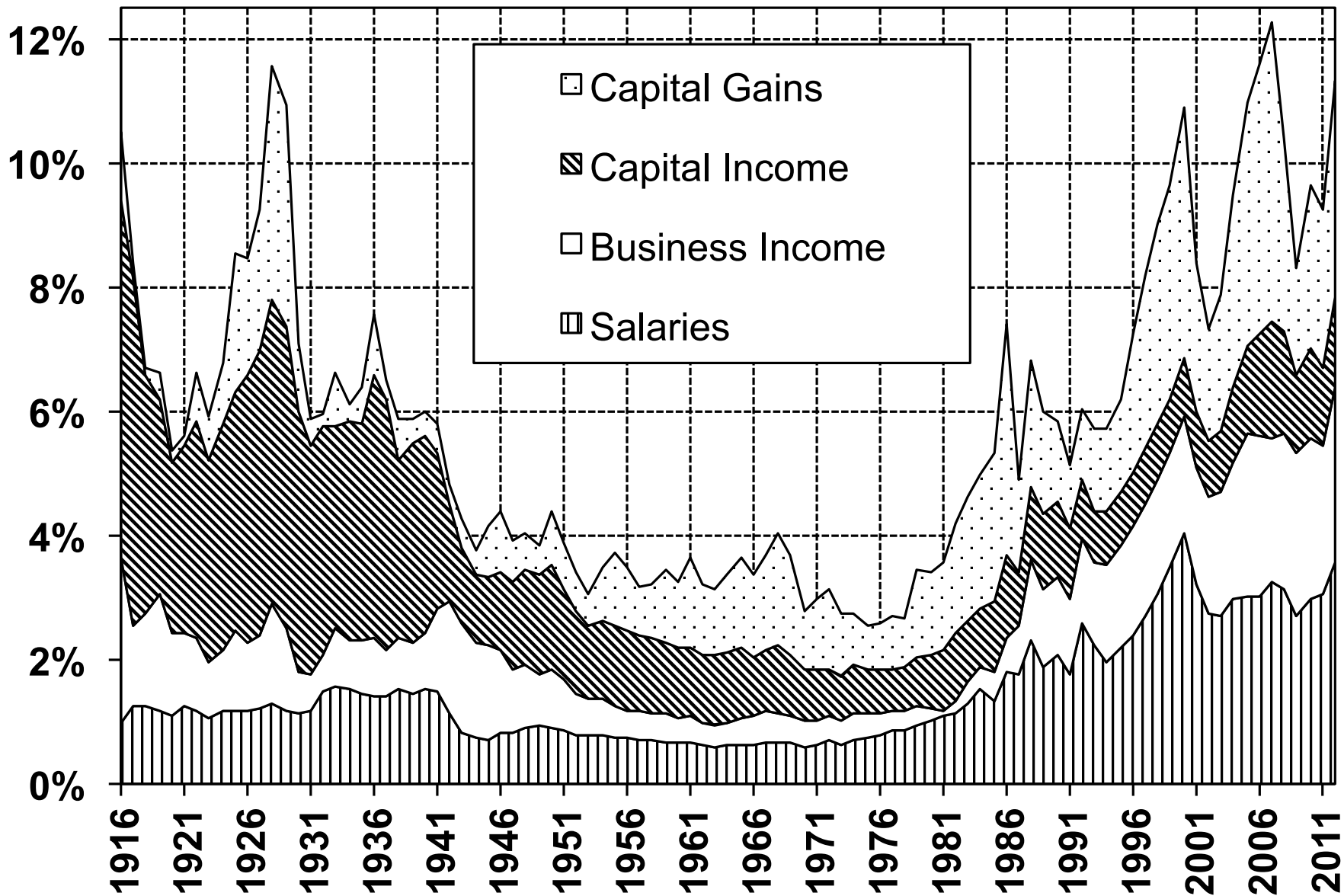


## Canada: Top 0.1% Income Share and Composition



Source: Saez and Veall (2005) and Veall (2012) Series based on pre-tax cash market income including realized capital gains, and always excluding government transfers. Note: Canadian capital incomes would be larger if including private corporations retained earnings (see Wolson, Veall, Brooks 2014)

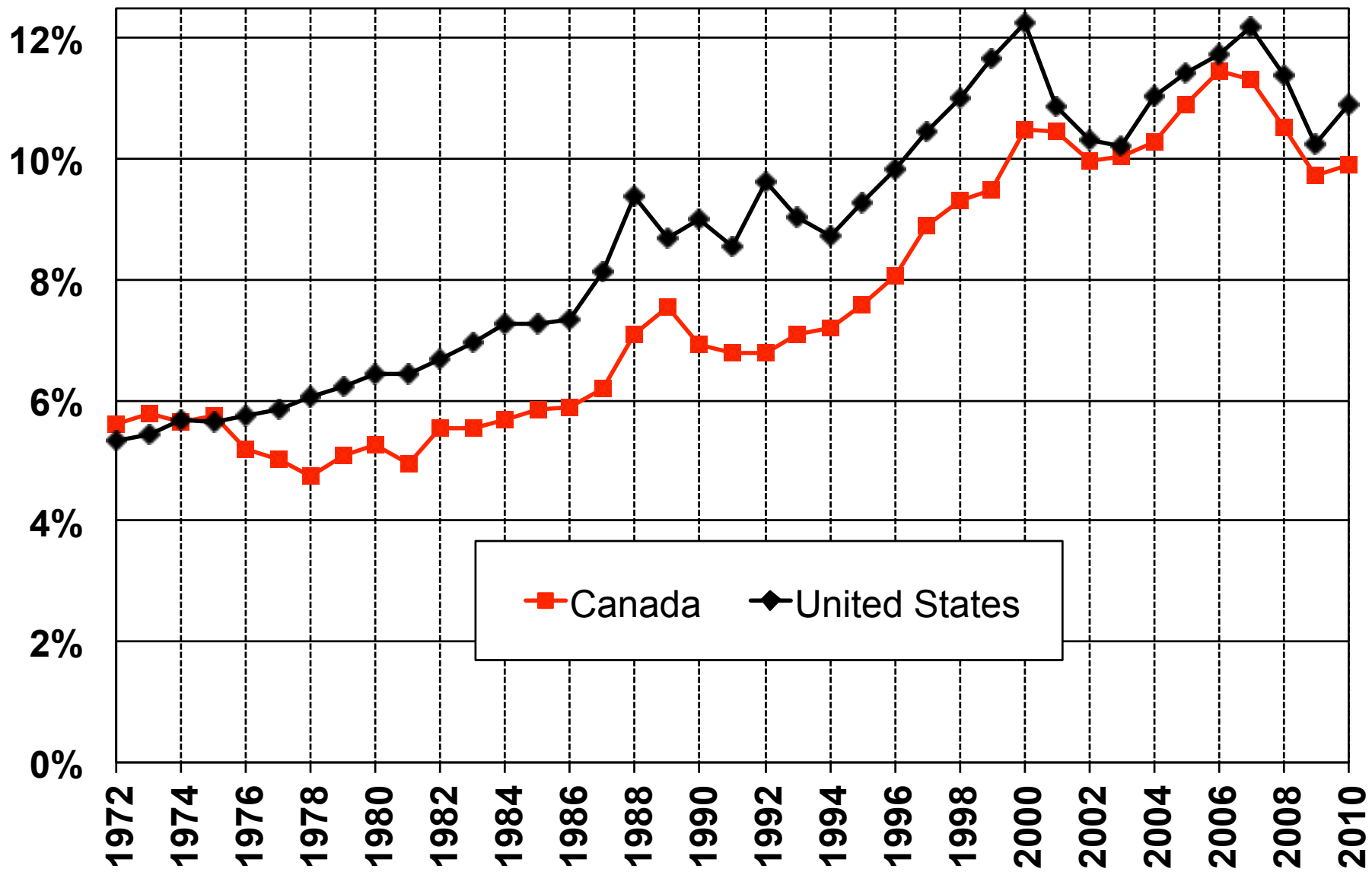
# US Top 0.1% Pre-Tax Income Share and Composition



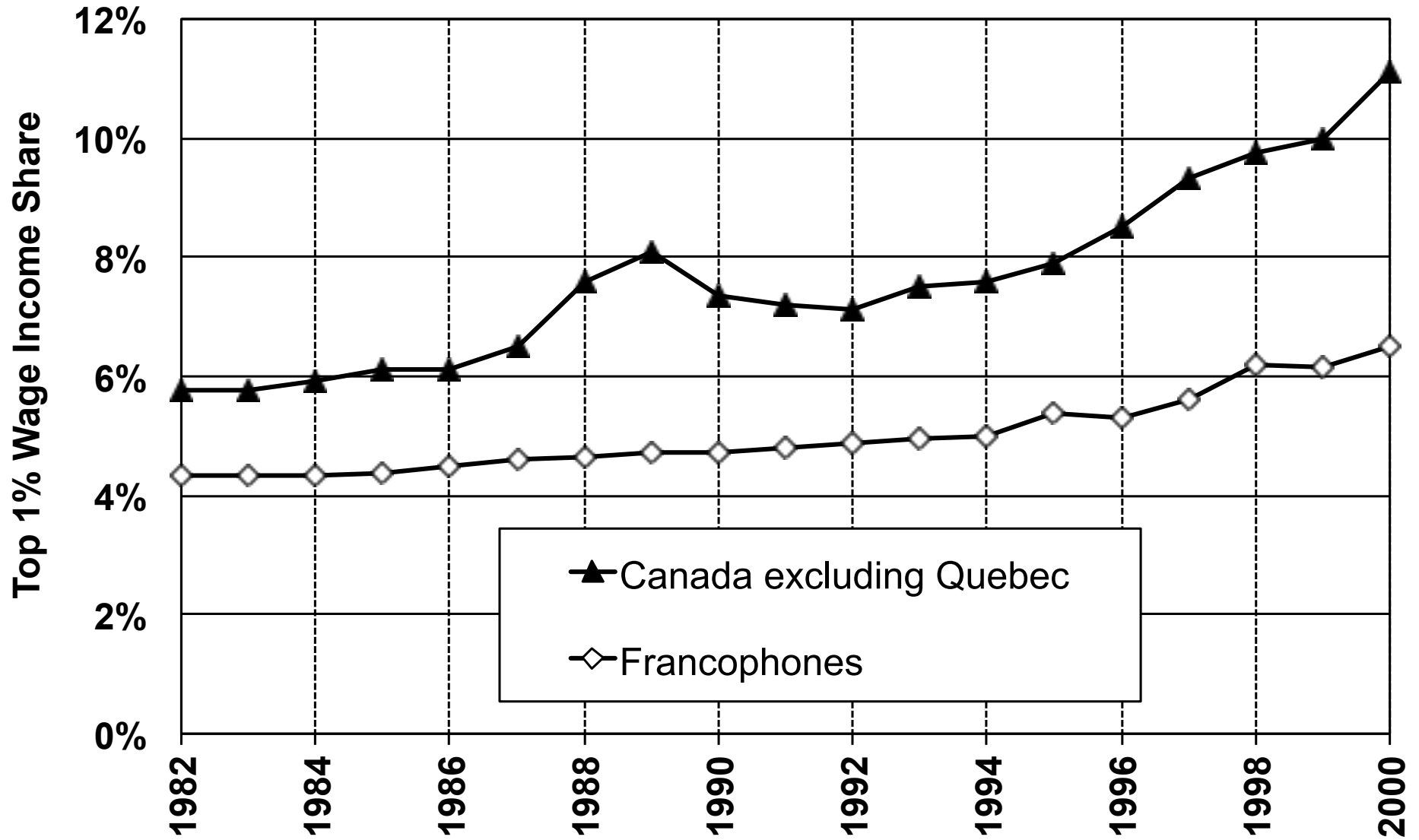
Source: Piketty and Saez, 2003 updated to 2012

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

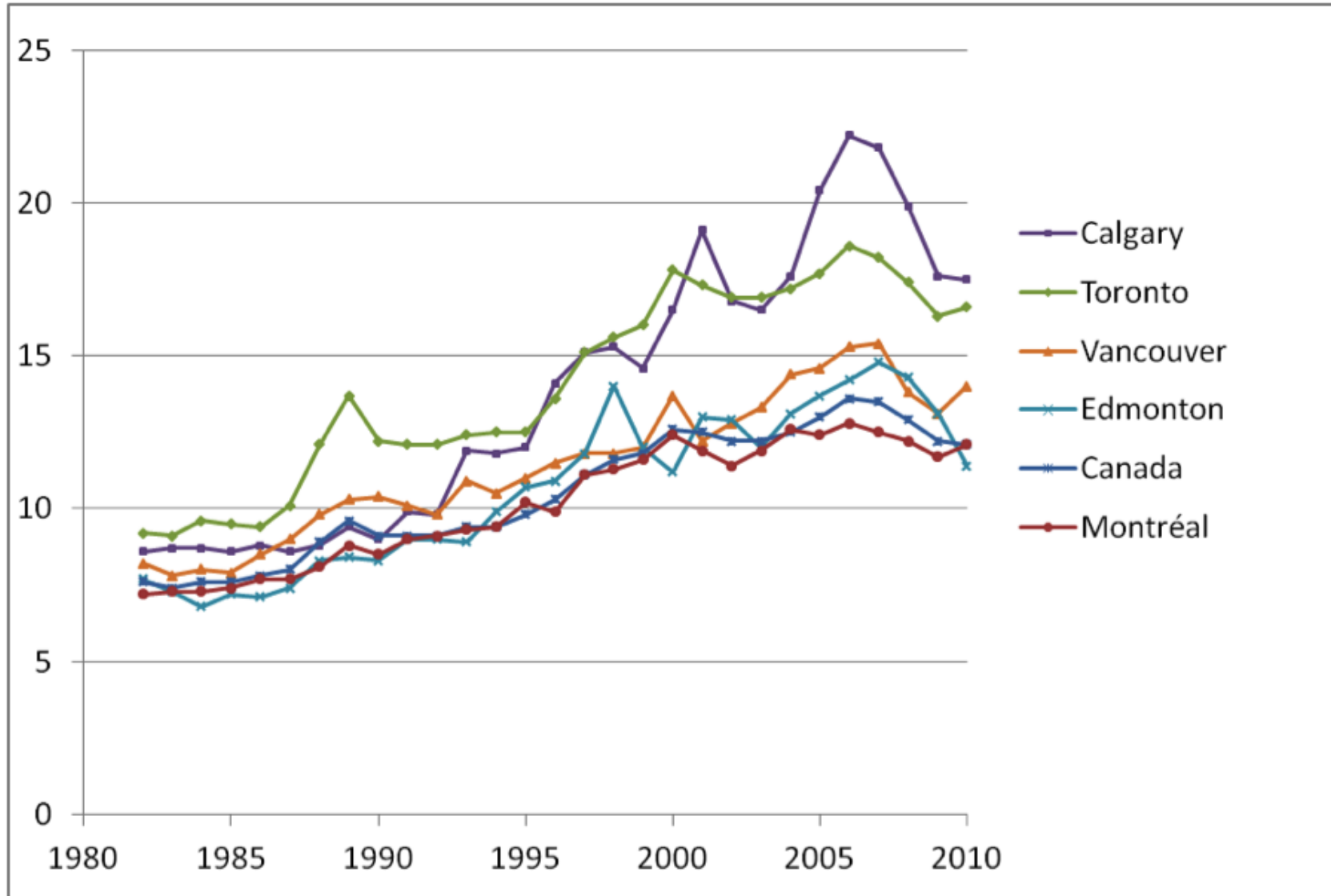
## Top 1% wage income share in Canada and the US



# Top 1% Wage Income Share, Francophones vs. English



# Top 1% Income Share in Various Canadian Cities



Source: Murphy and Veall (2014). Income is pre-tax market income.



## Canadian Surge in Top Wage Incomes

1) Surge in top incomes in Canada is almost fully driven by surge in top wage incomes (not capital income)

2) Top wage incomes in Canada follow closely top US wage incomes

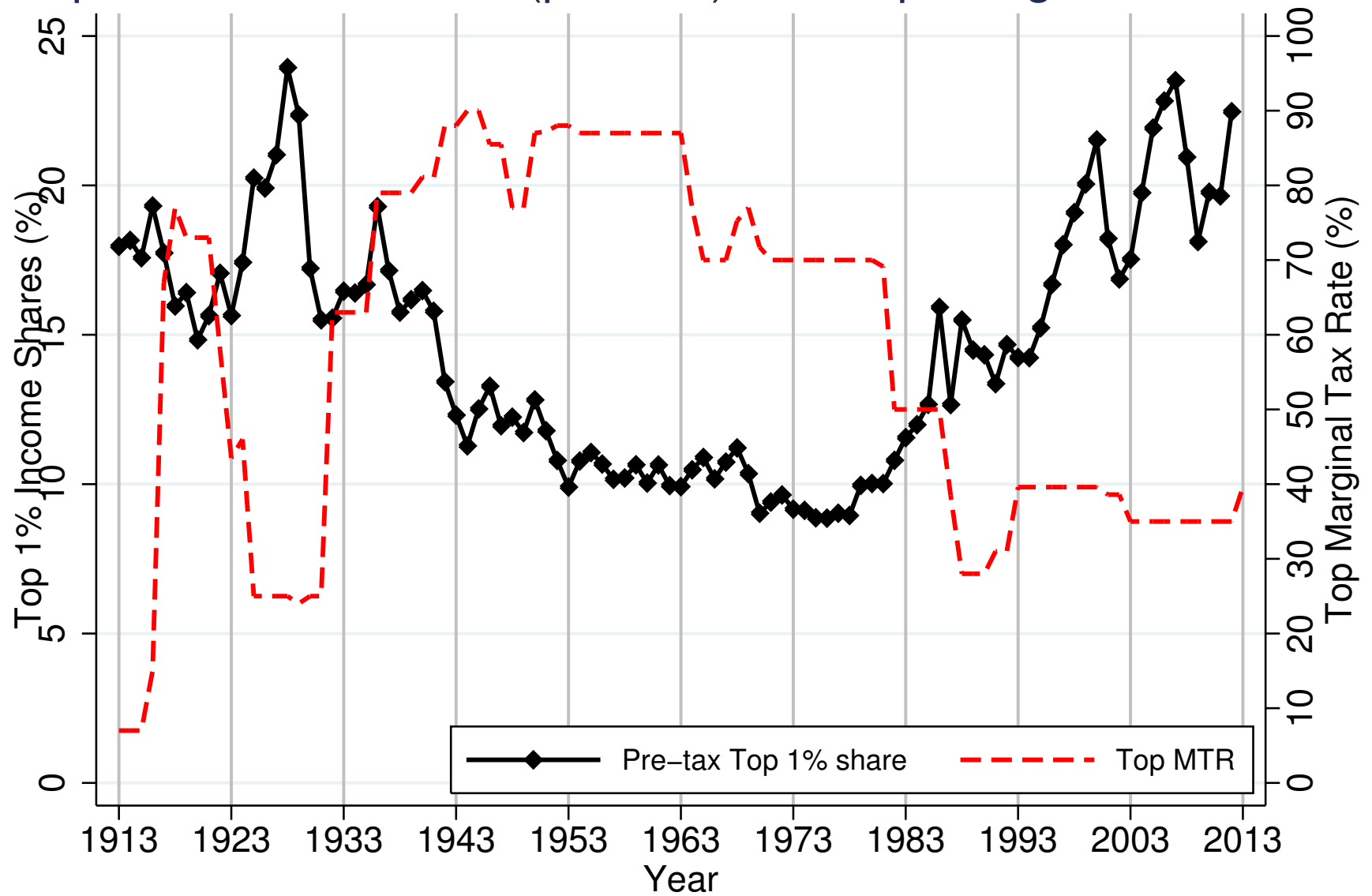
3) Top wage incomes among Francophones in Quebec have increased much less

⇒ Income inequality increase in Canada explained by

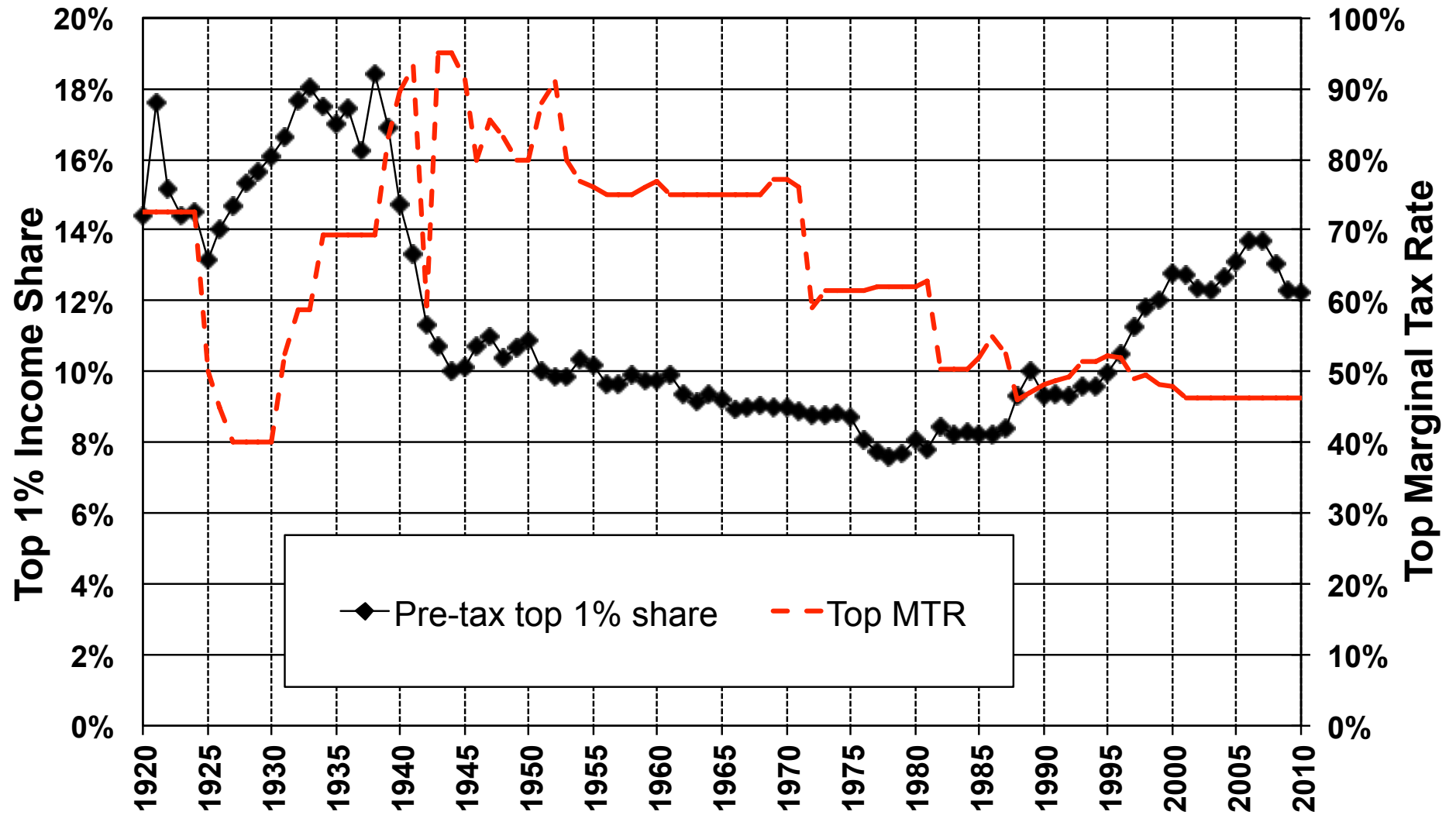
(a) US top wages surge

(b) labor market mobility/integration between US and Canada

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

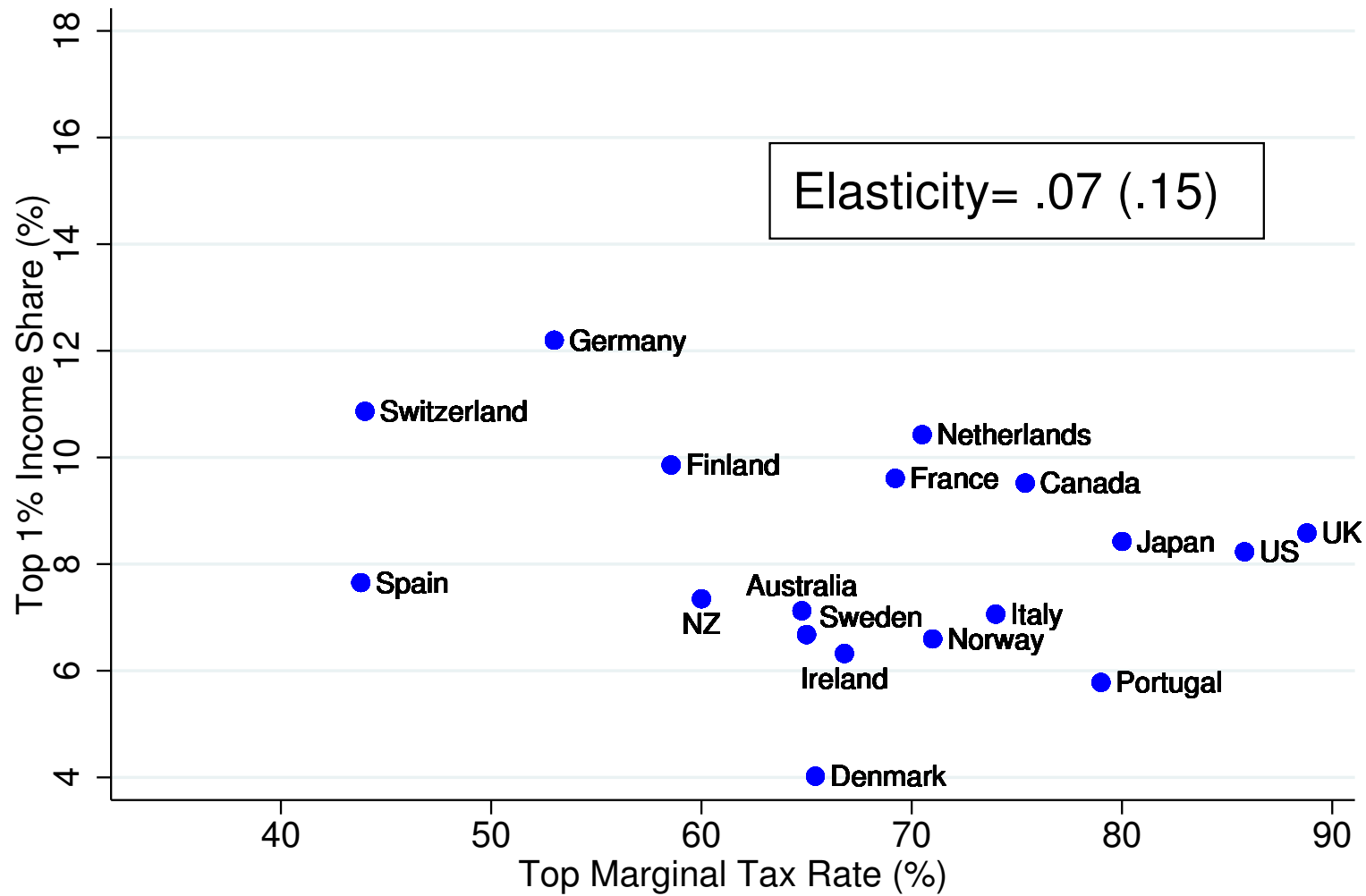


## Top 1% Income Share and Top Marginal Tax Rate, Canada



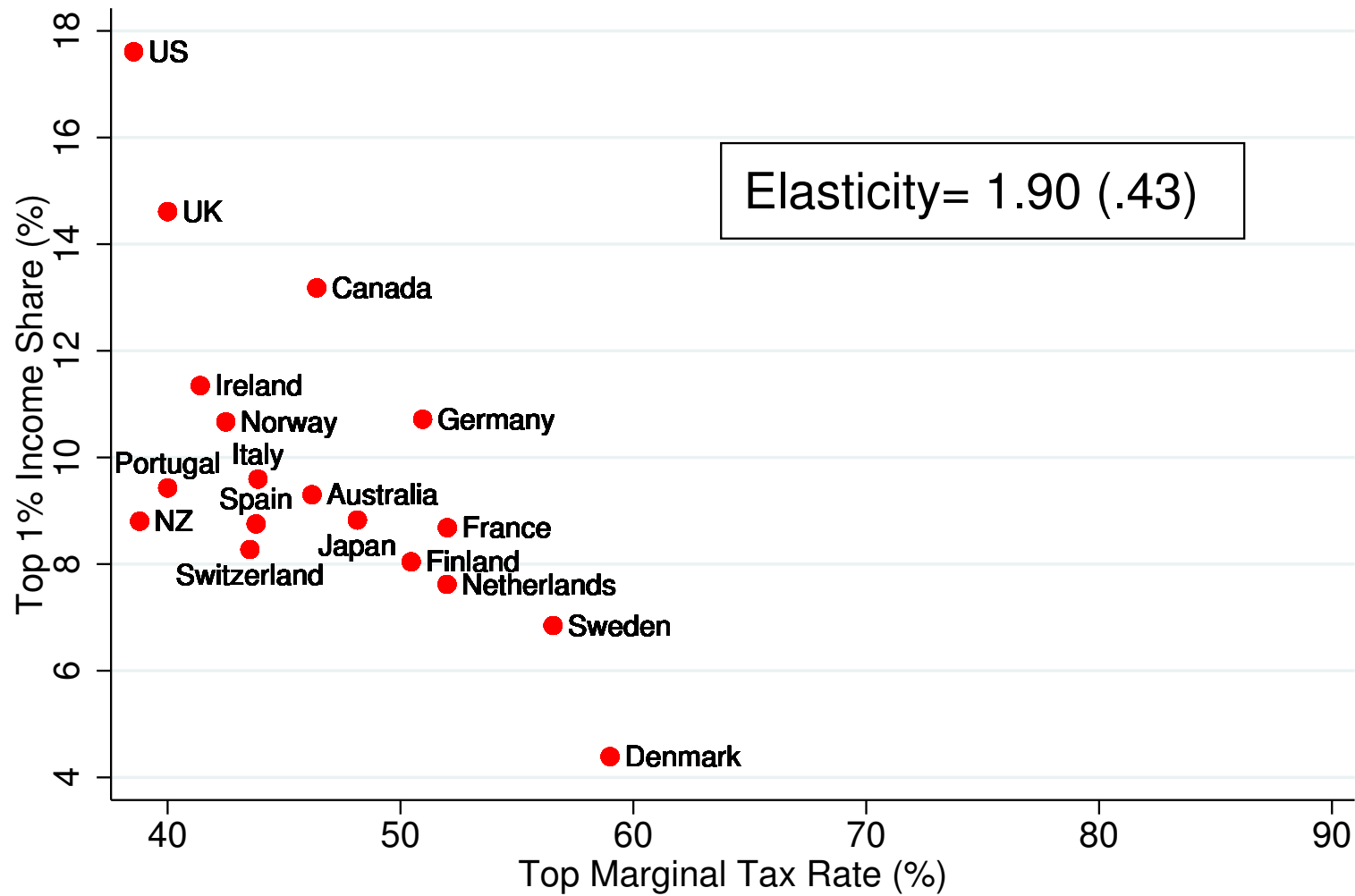
Source: Saez and Veall (2005) and Veall (2012). Top marginal tax rate includes federal tax rate and the Ontario provincial tax rate.

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

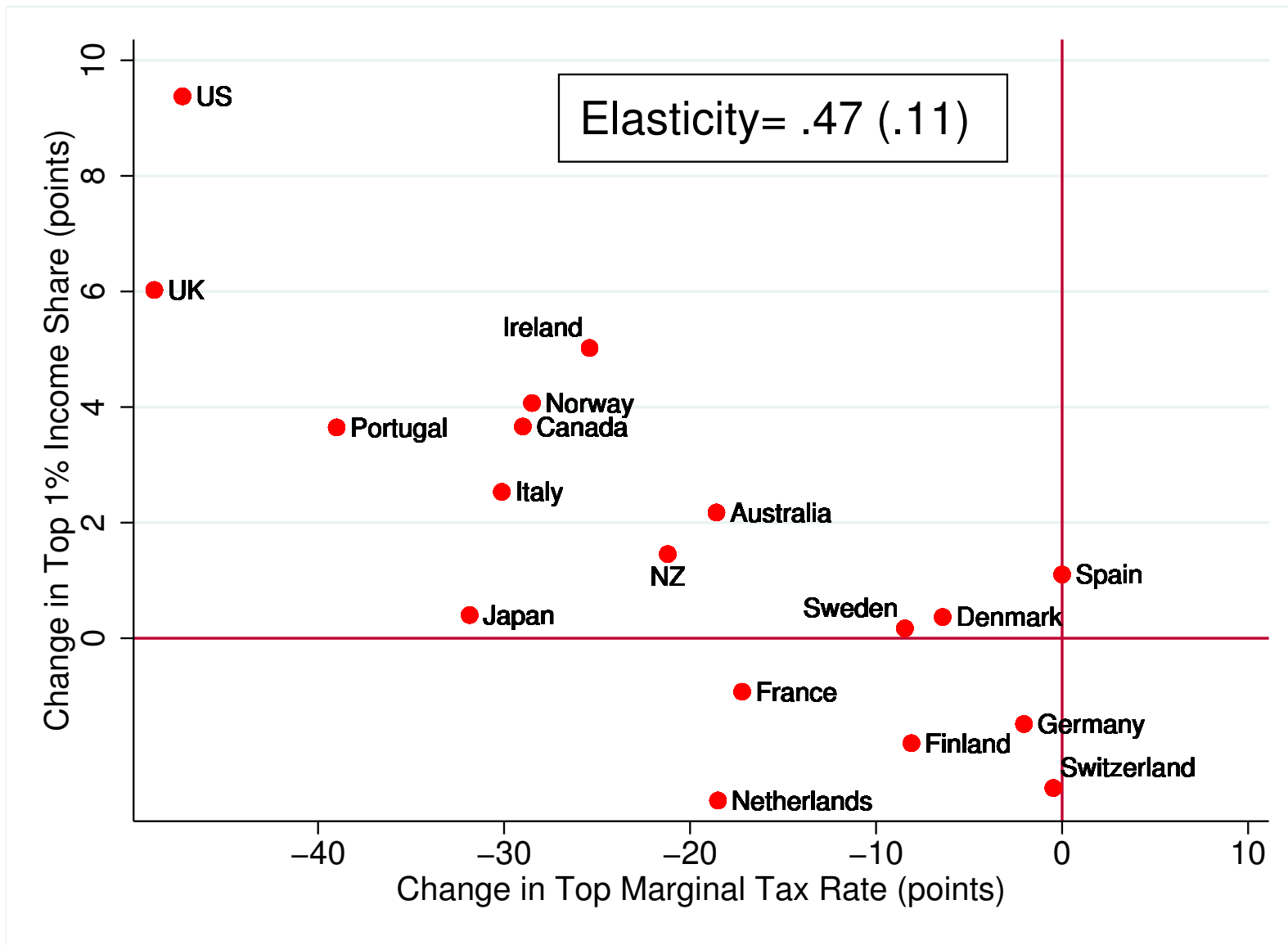


Top tax rates include central+local income taxes (Piketty-Saez-Stancheva '14)

## 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

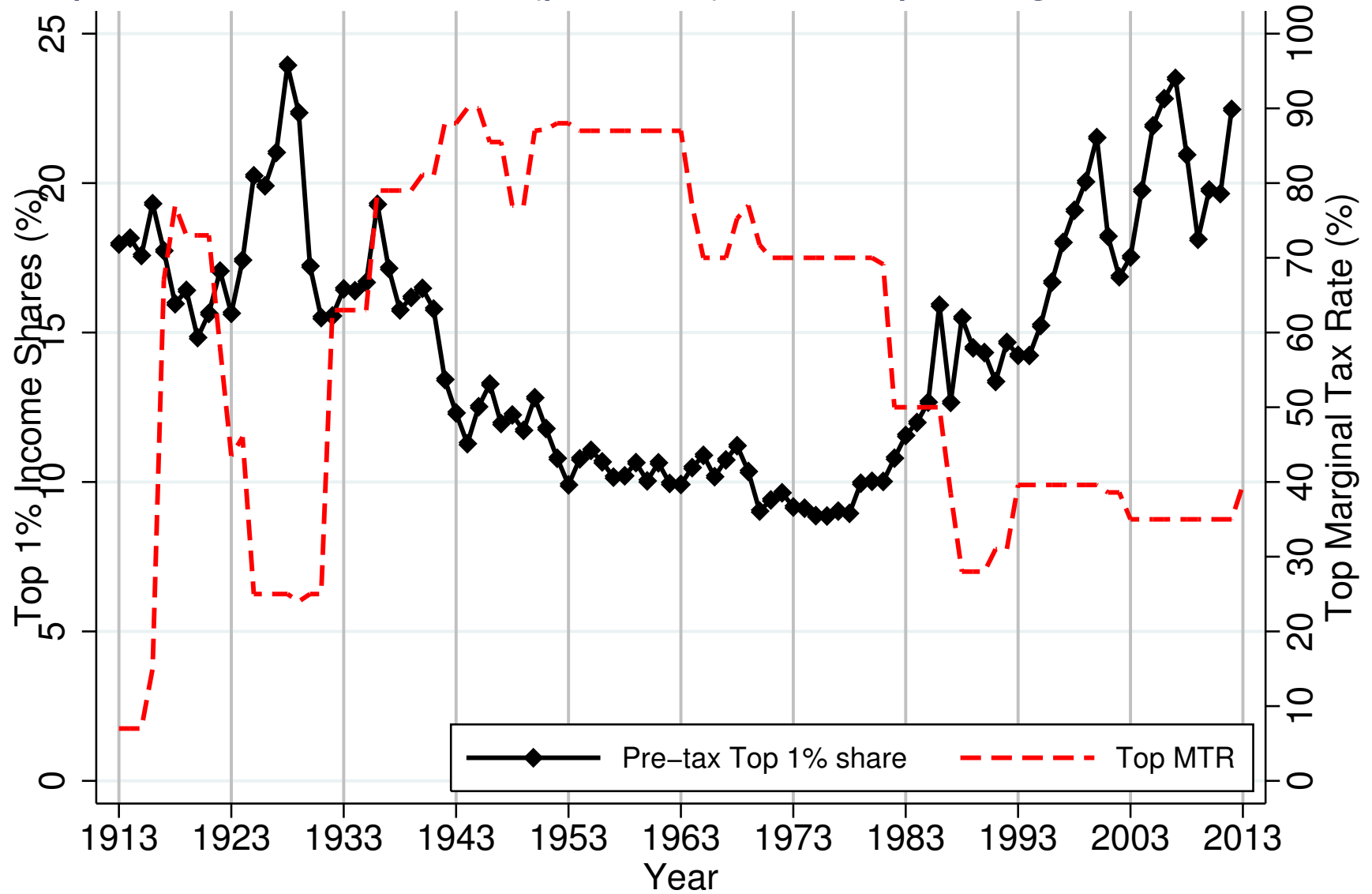
**1) Supply-Side:** Top earners work less and earn less when top tax rate increases  $\Rightarrow$  Top tax rates should not be too high

**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

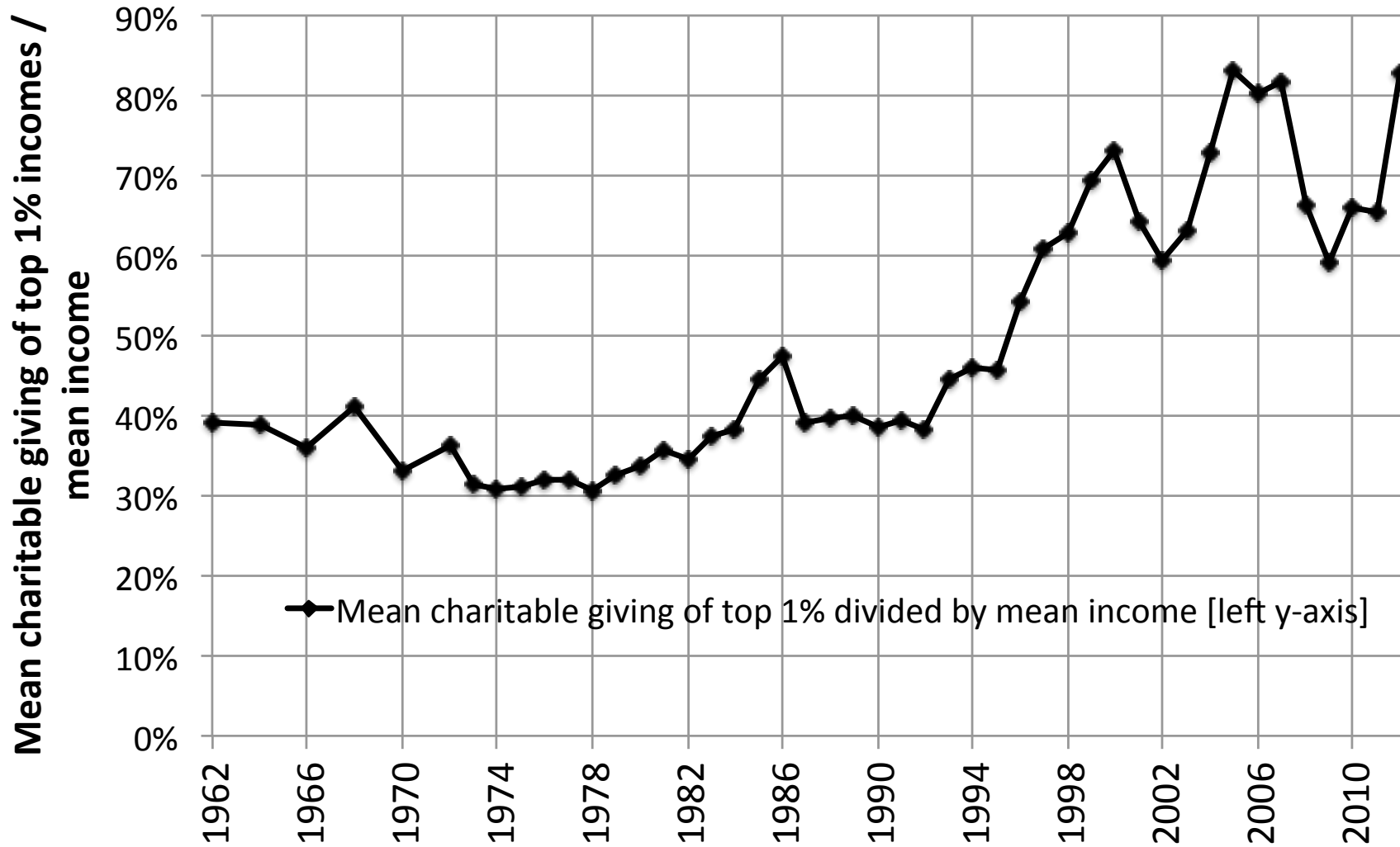
Because charitable is tax deductible, incentives to give are stronger when tax rates are higher

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

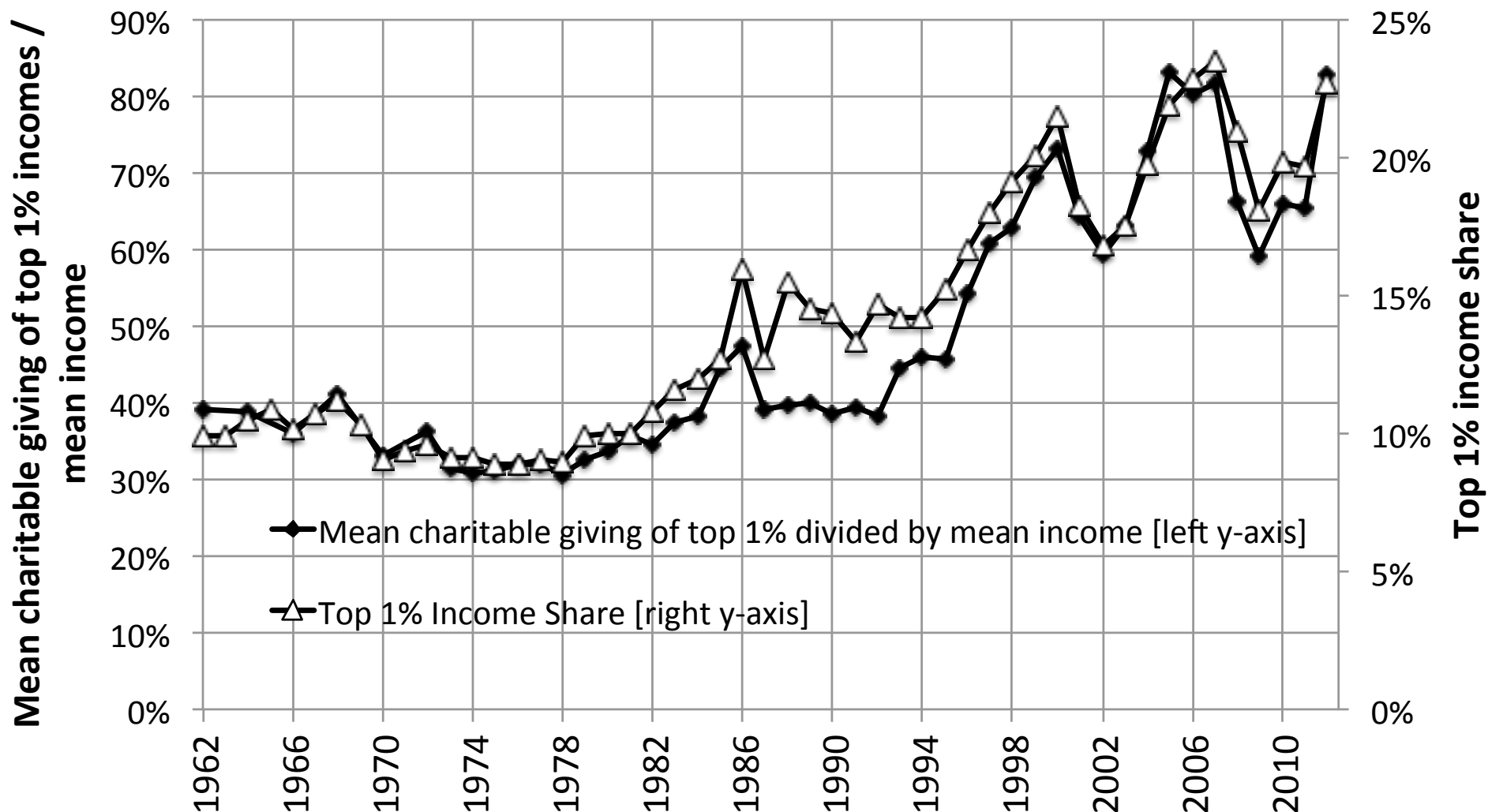
⇒ Incomes at the top have grown for real

## 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)

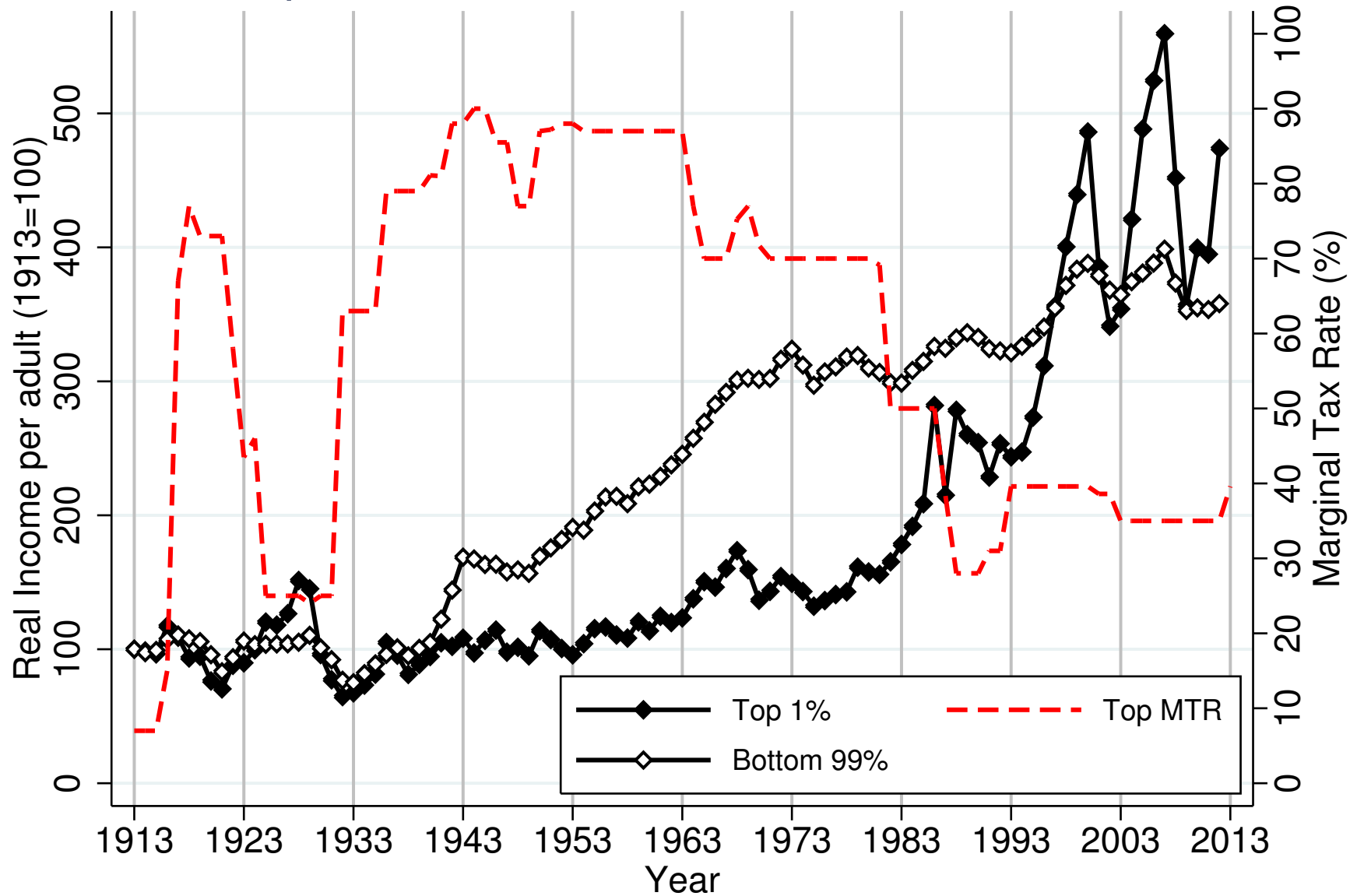
**US Evidence:** Top 1% incomes grow slowly from 1933 to 1975 and fast afterwards. Bottom 99% incomes grow fast from 1933 to 1975 and slowly afterwards

**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

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