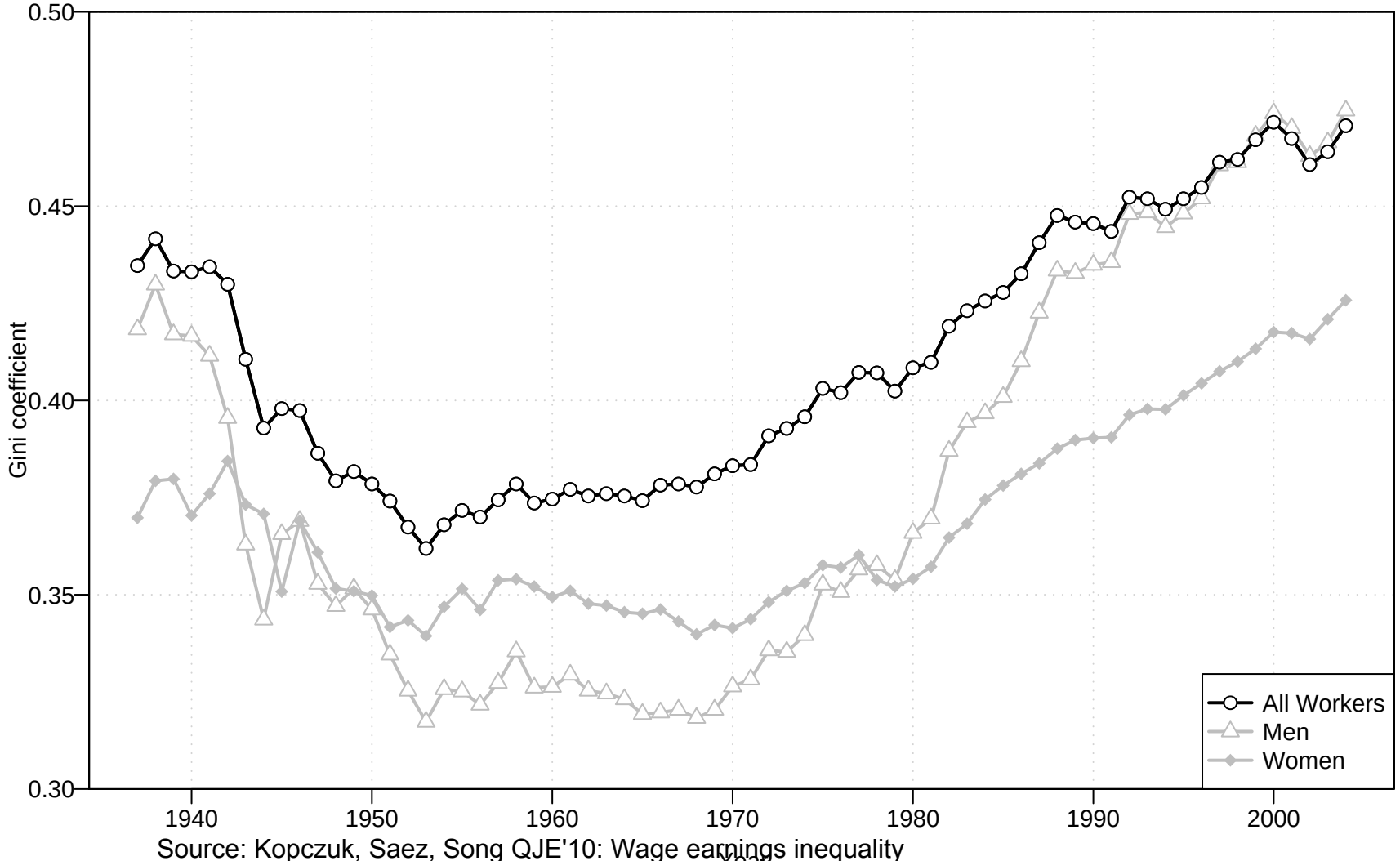
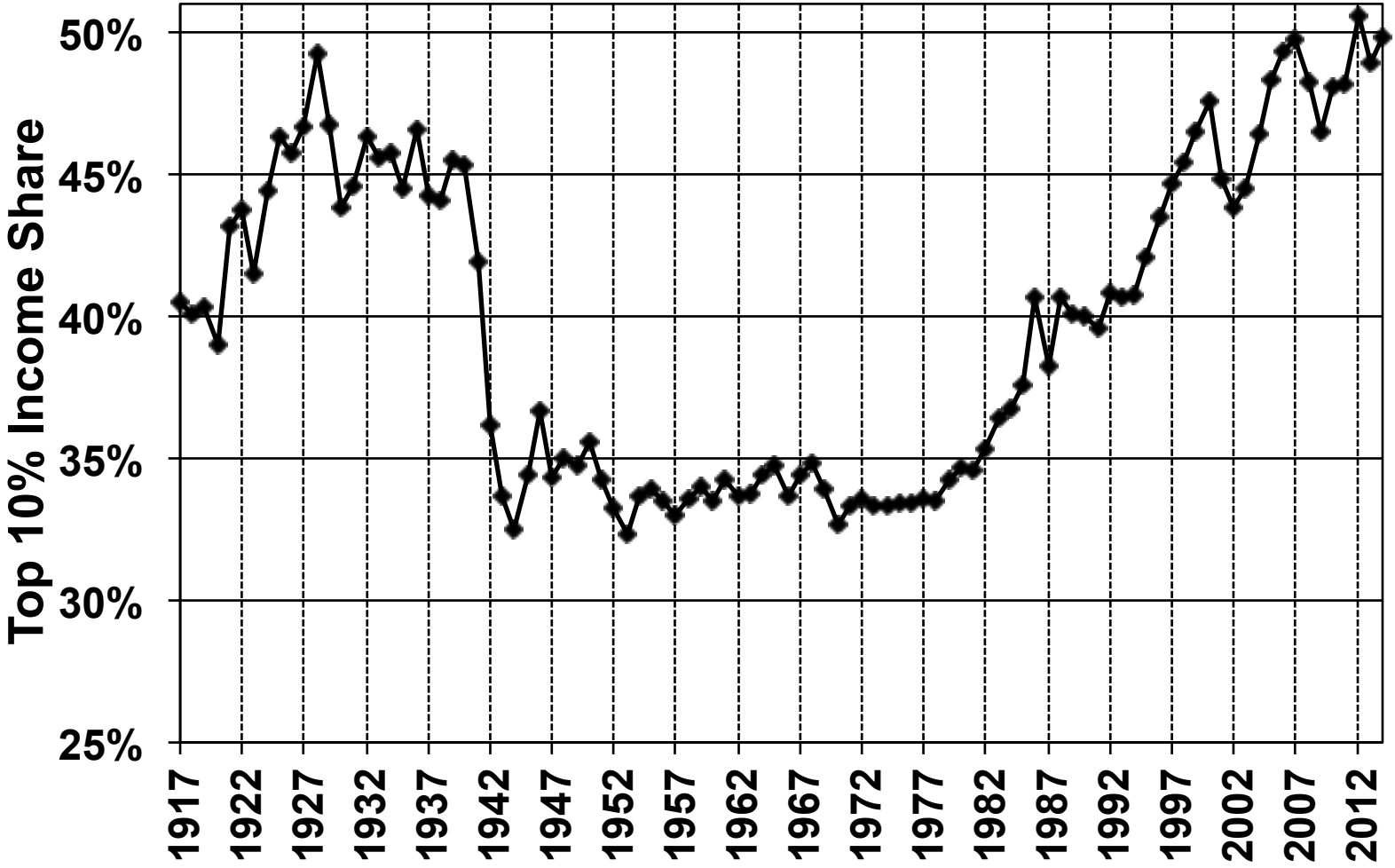
Figure 1: Gini coefficient



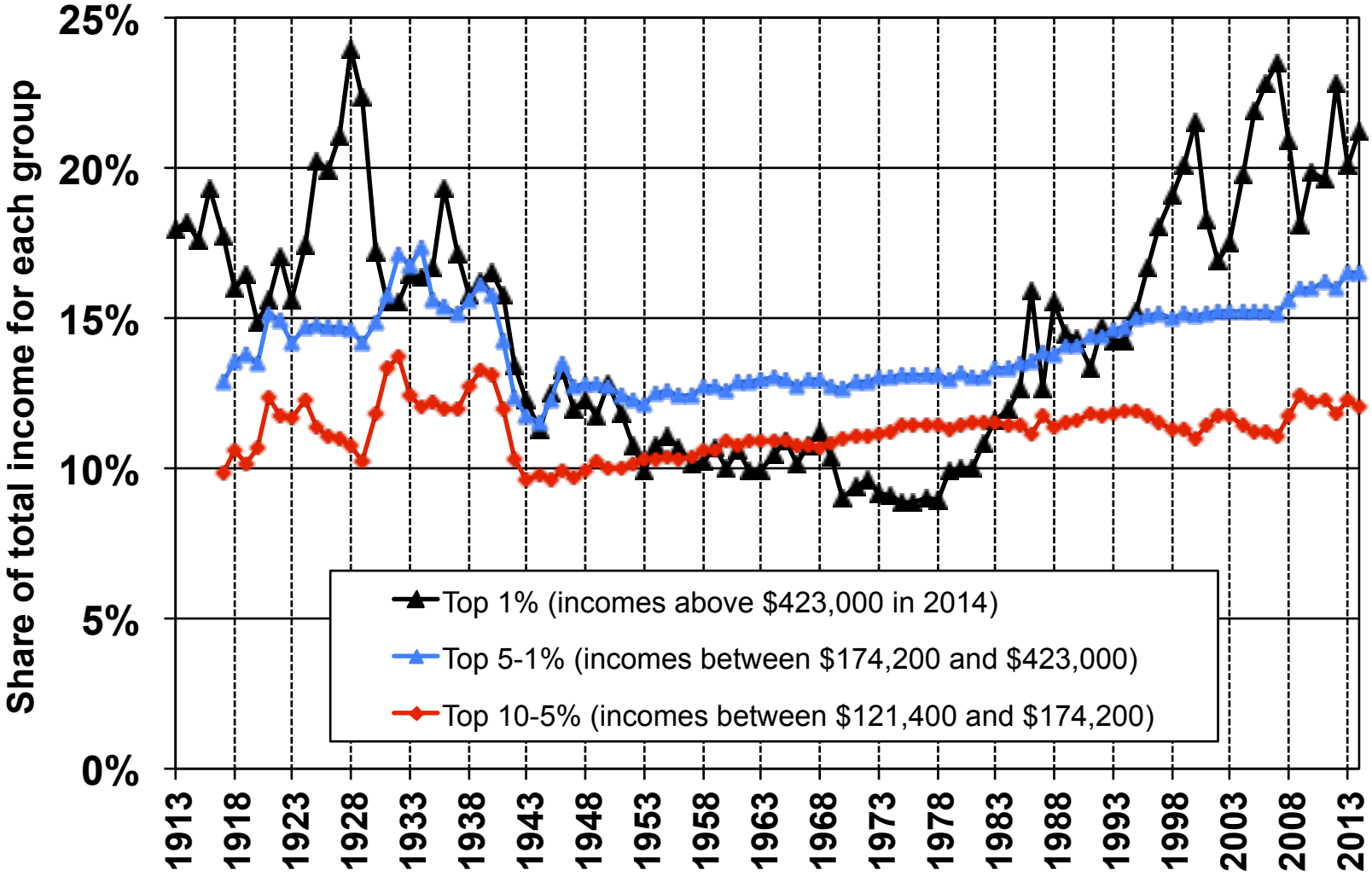
Source: Kopczuk, Saez, Song QJE'10: Wage earnings inequality

Top 10% Pre-tax Income Share in the US, 1917-2014

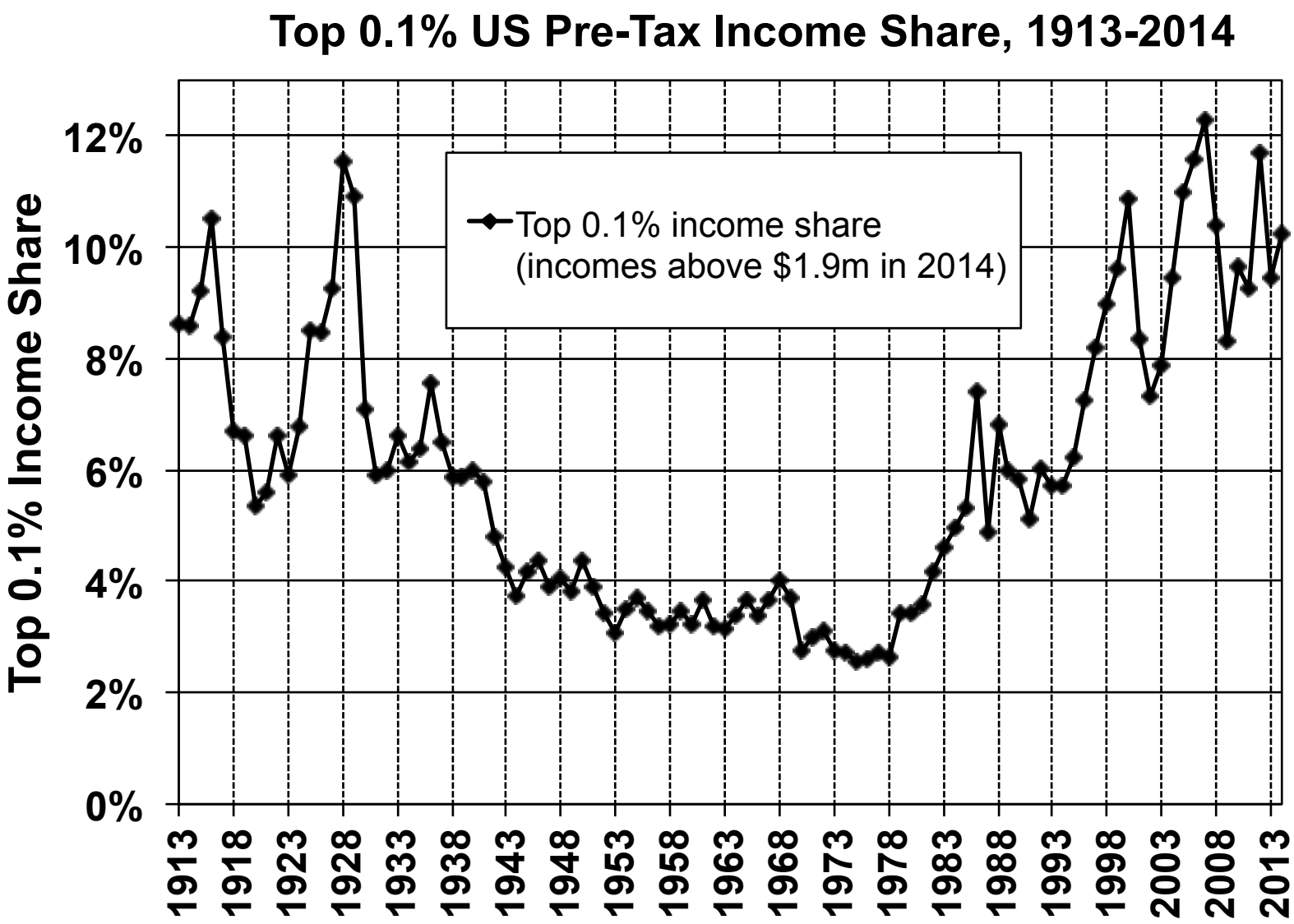


Source: Piketty and Saez, 2003 updated to 2014. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.

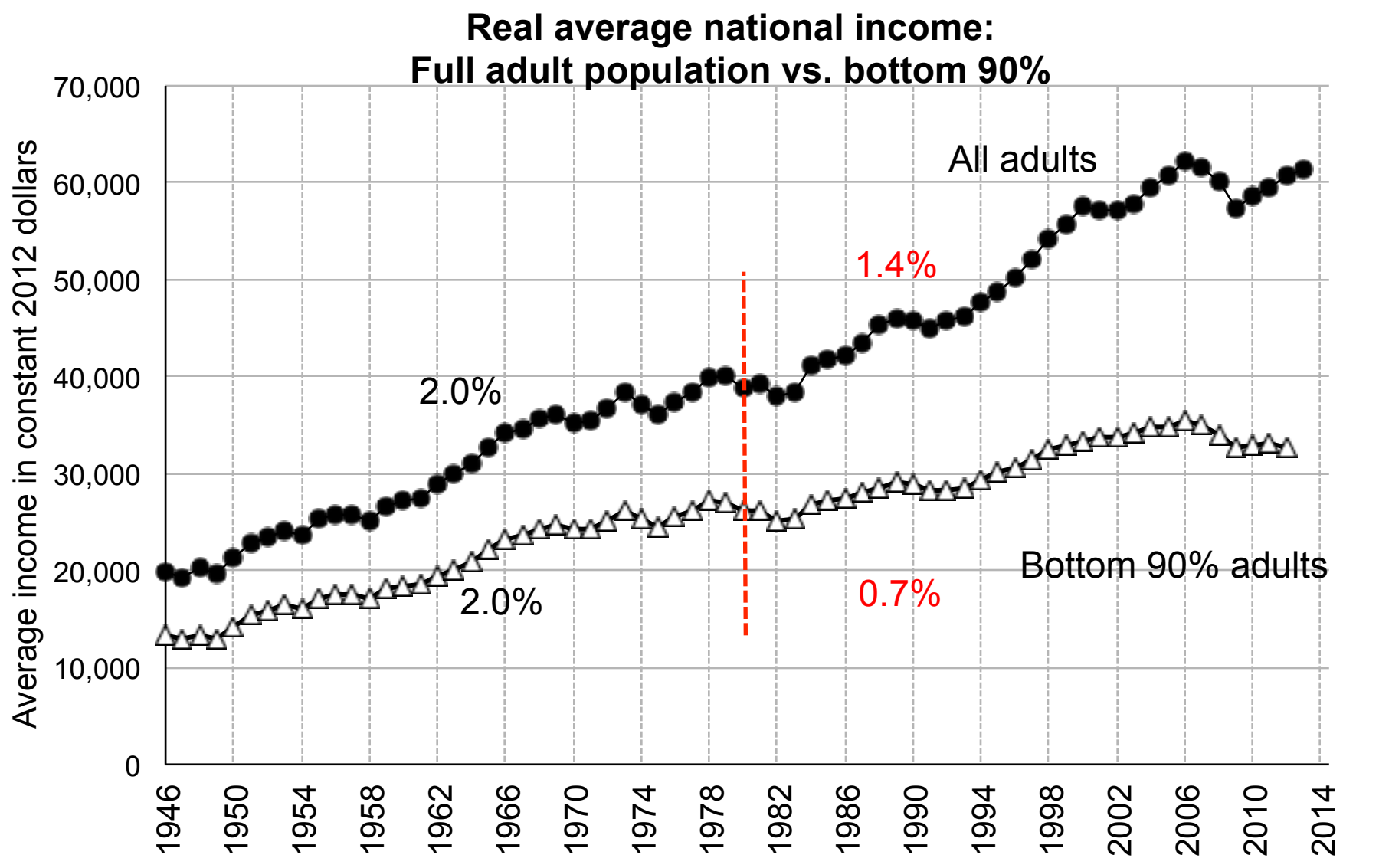
Decomposing Top 10% into 3 Groups, 1913-2014



Source: Piketty and Saez, 2003 updated to 2014. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.

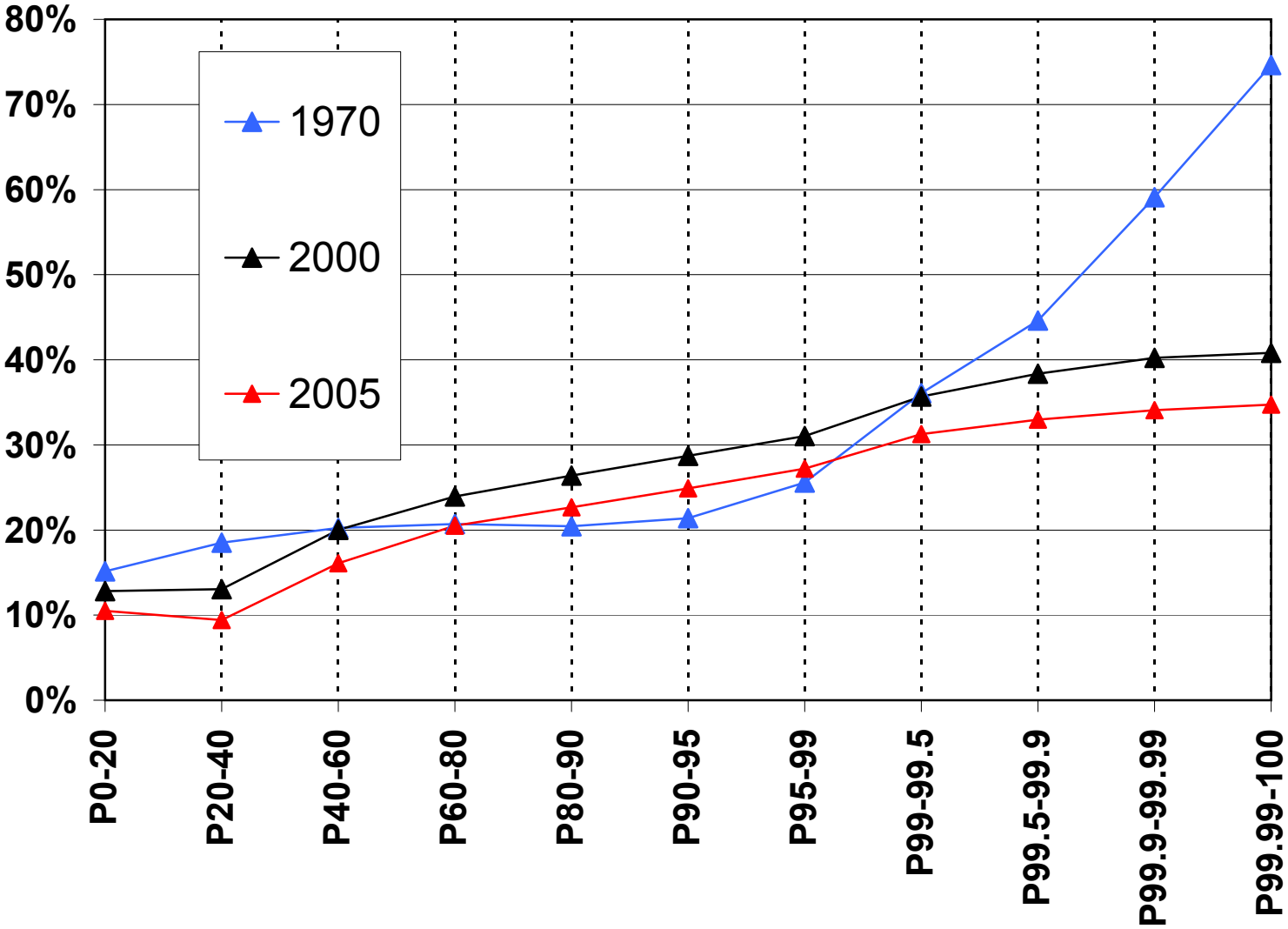


Source: Piketty and Saez, 2003 updated to 2014. Series based on pre-tax cash market income including or excluding realized capital gains, and always excluding government transfers.



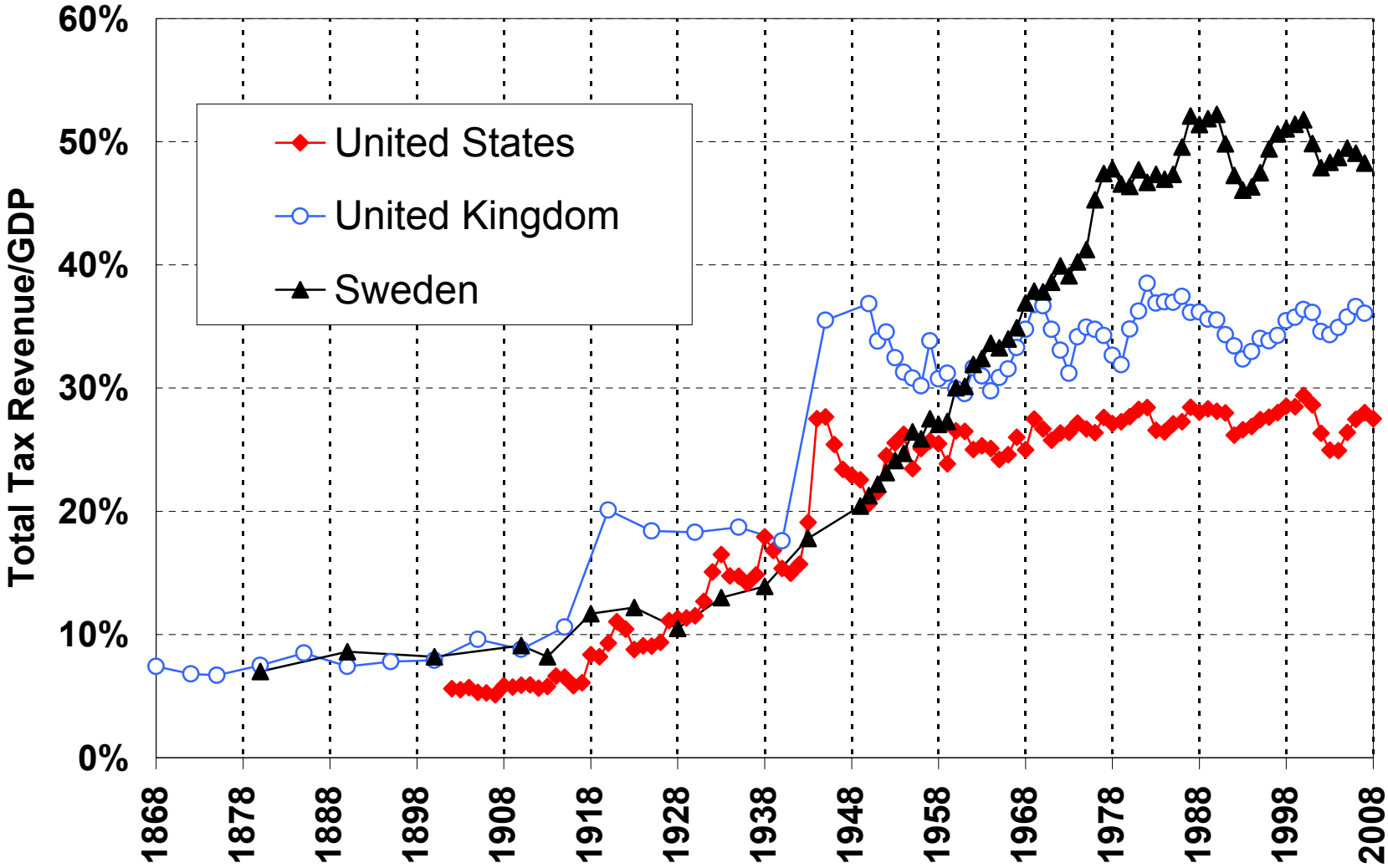
Real values are obtained by using the national income deflator and expressed in 2012 dollars. Source: Appendix Tables XX.

2. Federal Average Tax Rates by Income Groups (individual+corporate+payroll+estate taxes)



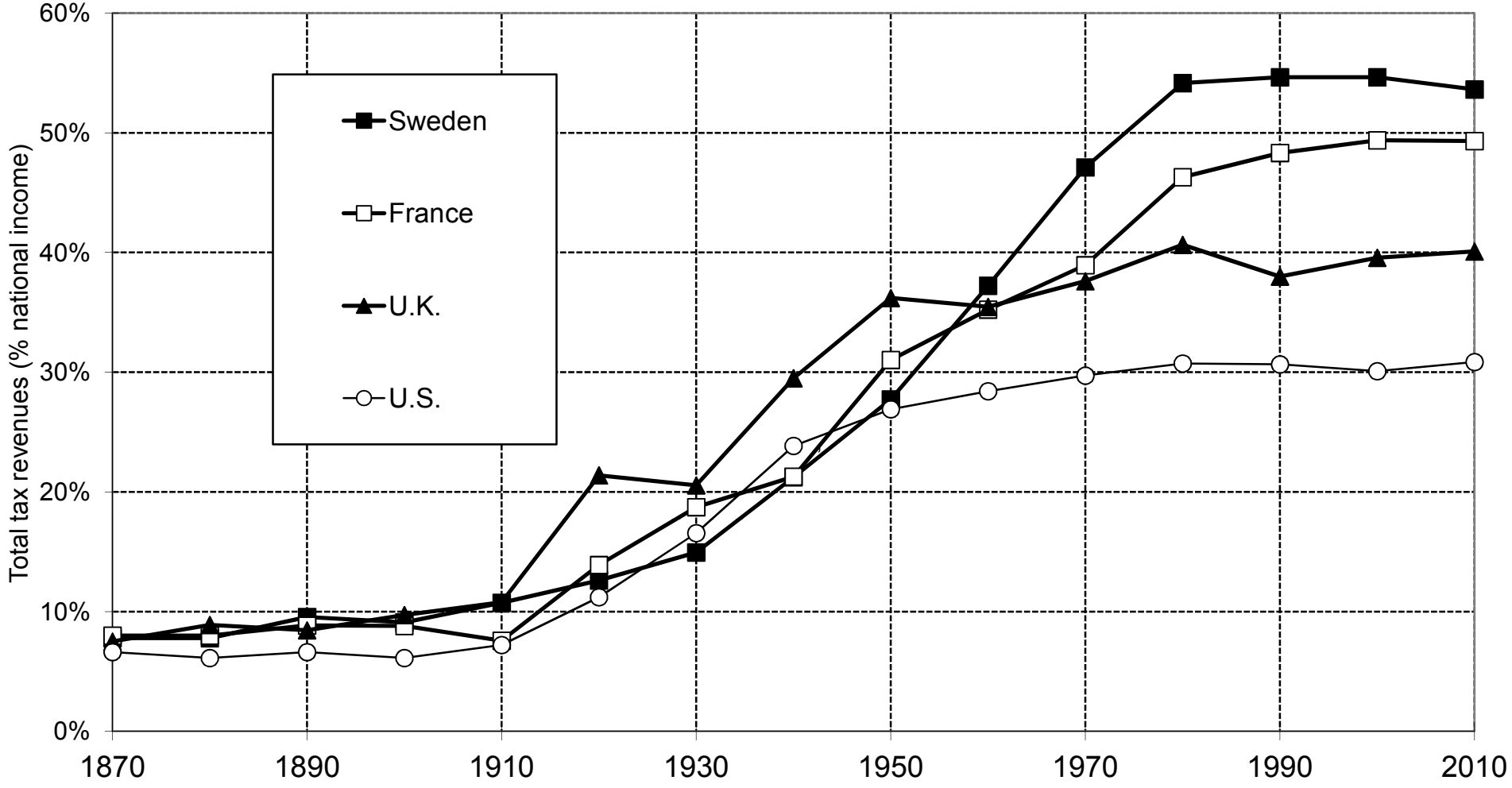
Source: Piketty and Saez JEP'07

2A. Tax revenue/GDP in the US, UK, and Sweden



Source: Kleven-Kreiner-Saez NBER WP 2009

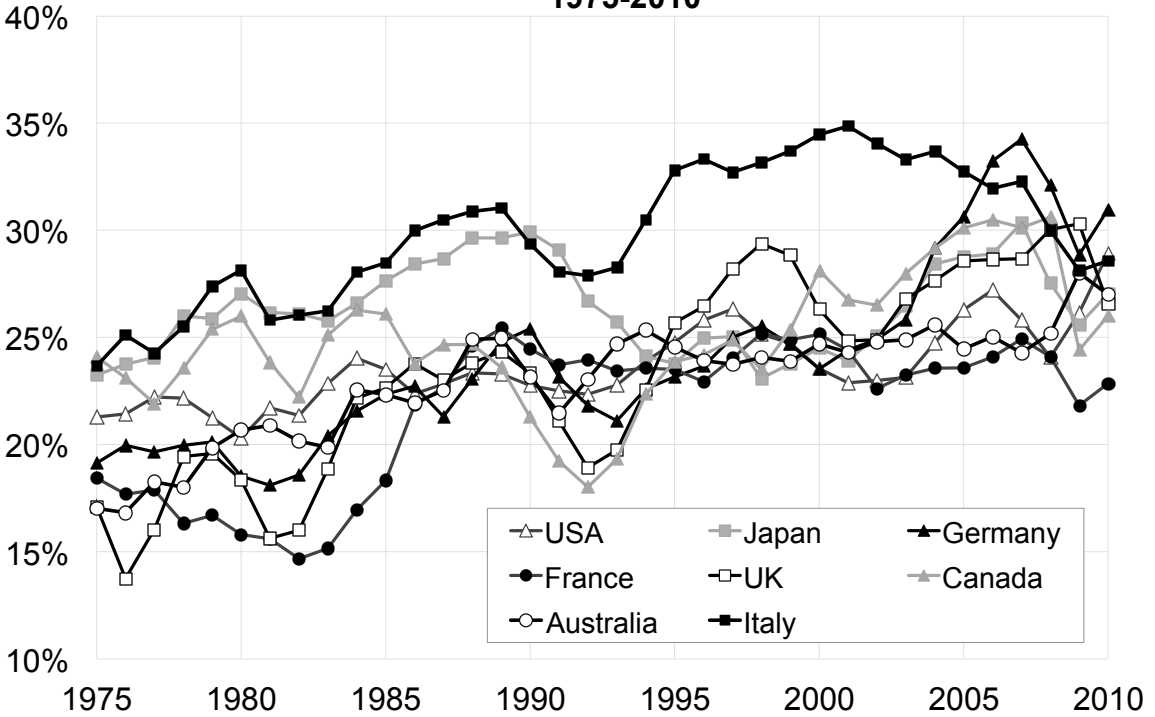
Figure 13.1. Tax revenues in rich countries, 1870-2010



Total tax revenues were less than 10% of national income in rich countries until 1900-1910; they represent between 30% and 55% of national income in 2000-2010. Sources and series: see piketty.pse.ens.fr/capital21c.

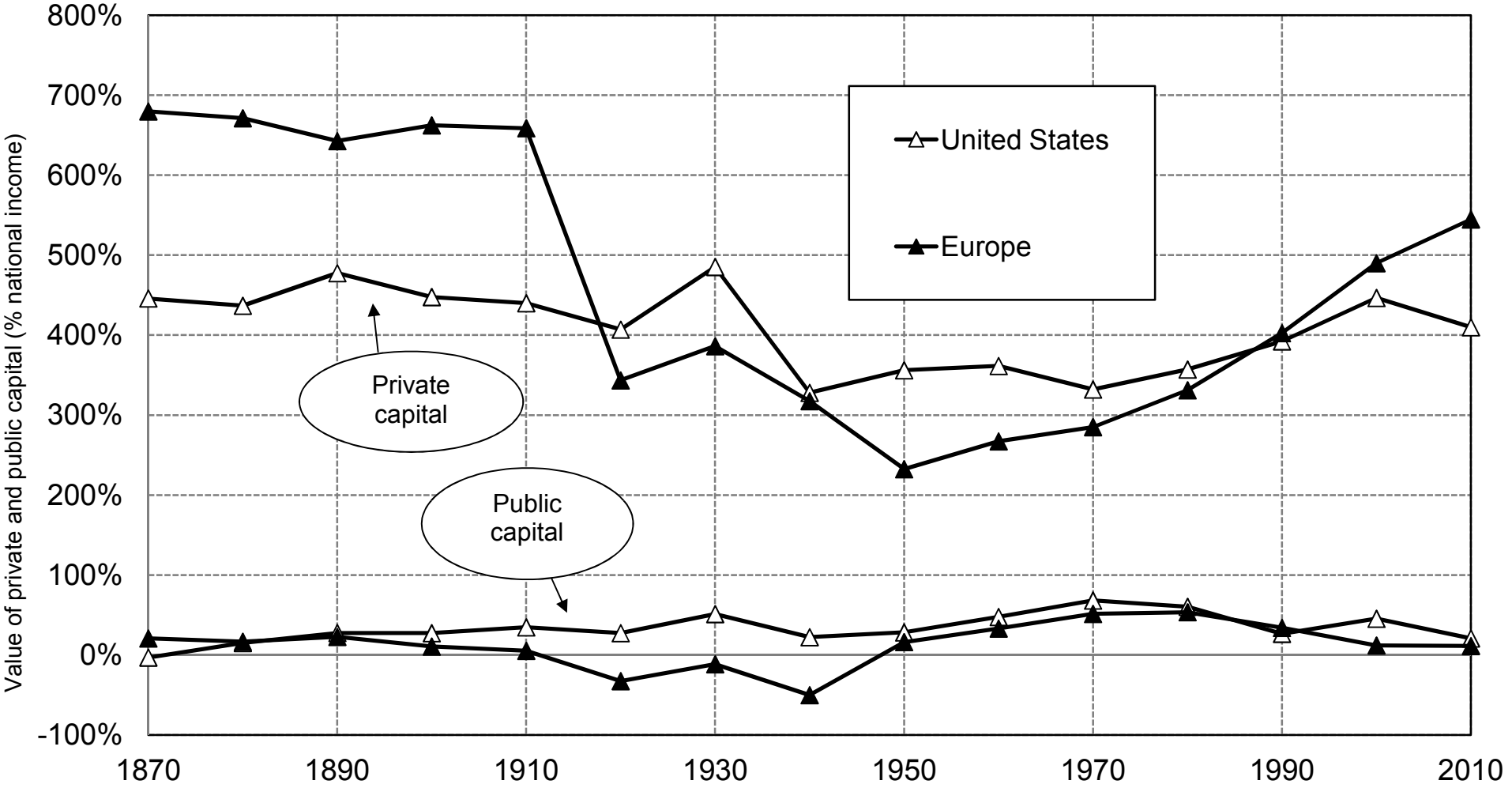
Source: Piketty (2014)

Figure 12: Capital shares in factor-price national income 1975-2010



Source: Piketty and Zucman (2014)

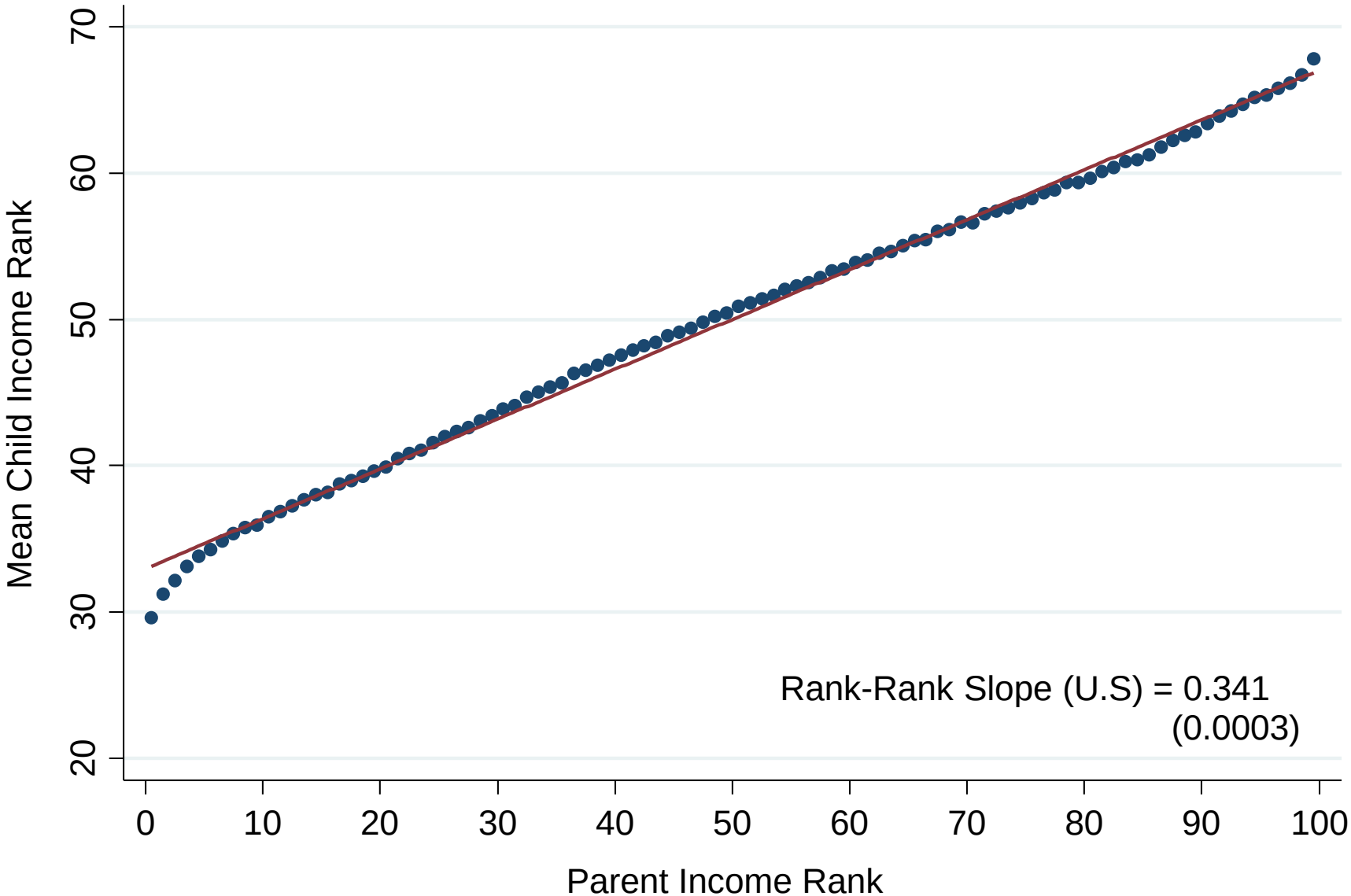
Figure 5.1. Private and public capital: Europe and America, 1870-2010



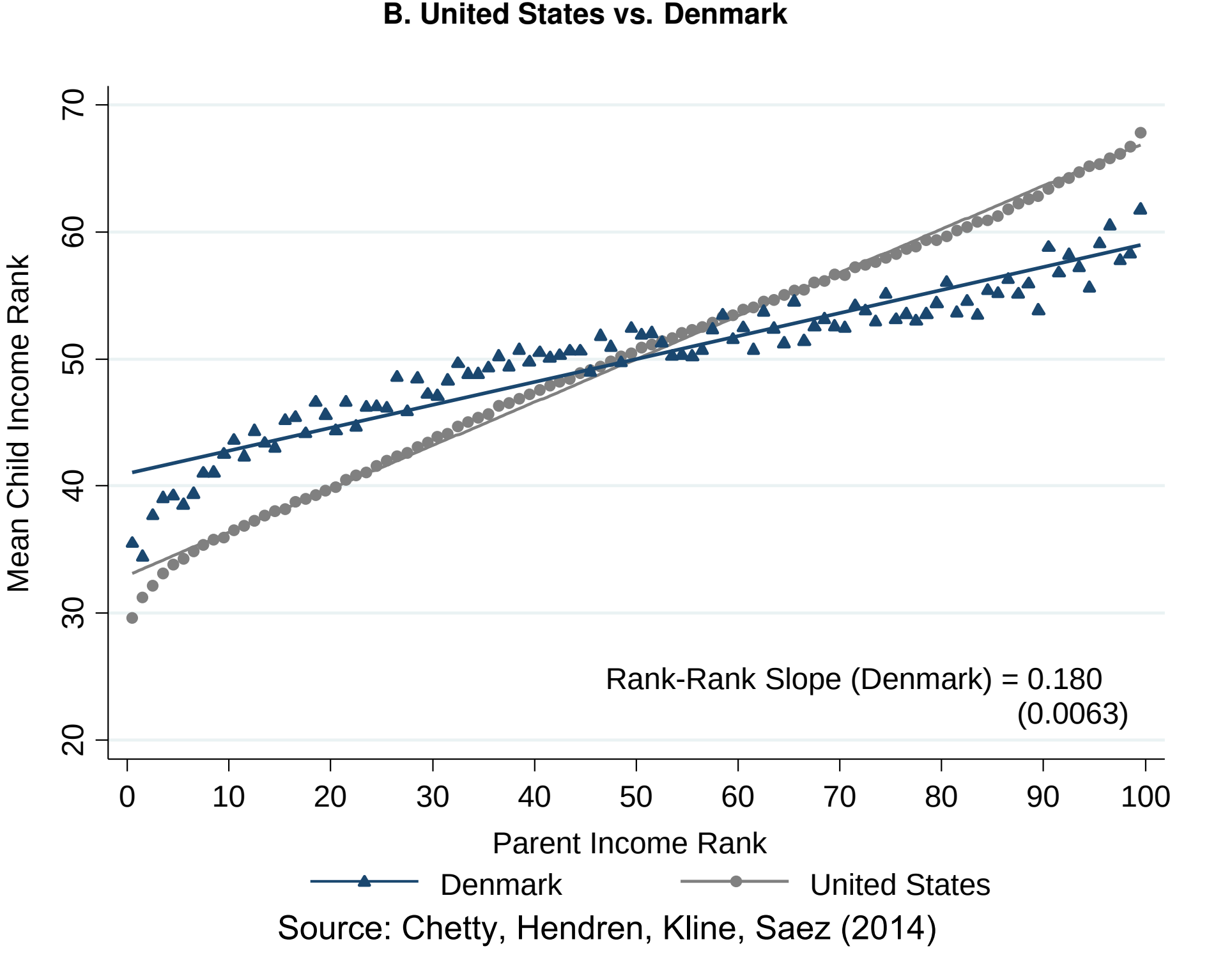
The fluctuations of national capital in the long run correspond mostly to the fluctuations of private capital (both in Europe and in the U.S.). Sources and series: see piketty.pse.ens.fr/capital21c.

Source: Piketty (2014)

A. Mean Child Income Rank vs. Parent Income Rank in the U.S.



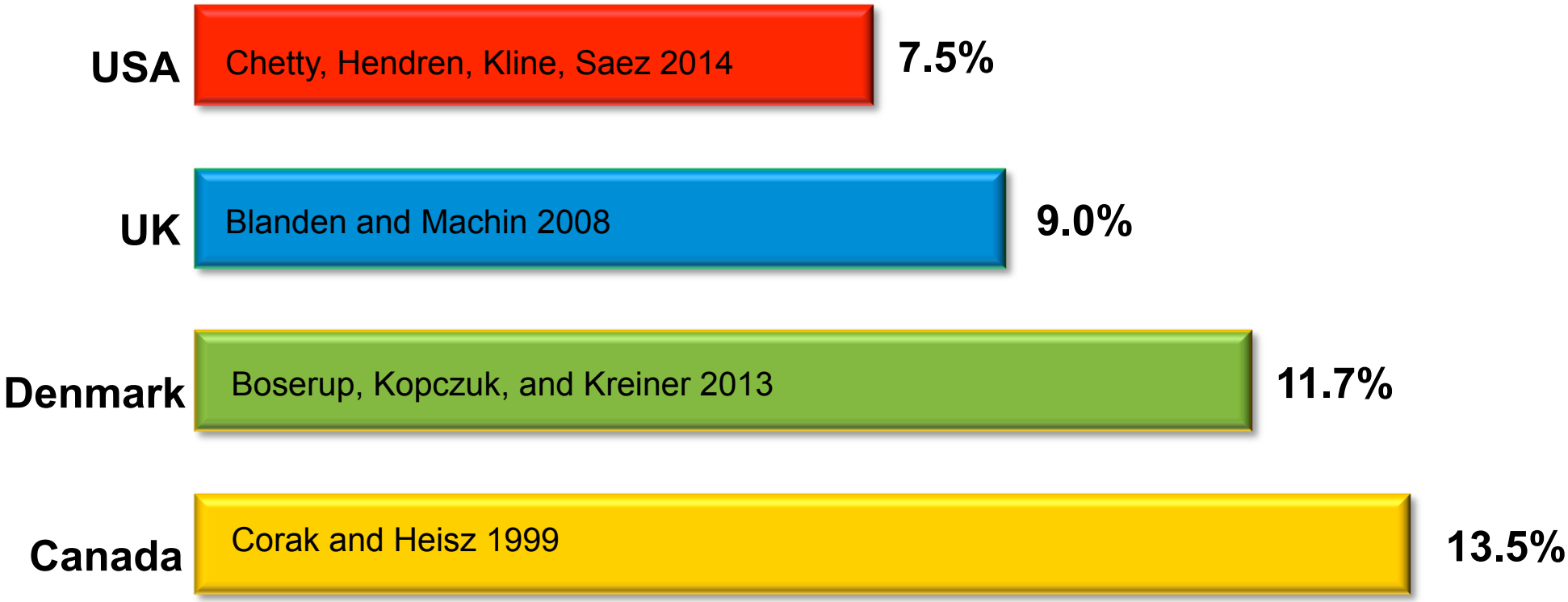
Source: Chetty, Hendren, Kline, Saez (2014)


B. United States vs. Denmark
Mean Child Income Rank
20
30
40
50
60
70
0
10
20
30
40
50
60
70
80
90
100
Parent Income Rank
Rank-Rank Slope (Denmark) = 0.180
(0.0063)
Denmark
United States
Source: Chetty, Hendren, Kline, Saez (2014)

Source: Chetty et al. (2014)

The American Dream?

- Probability that a child born to parents in the bottom fifth of the income distribution reaches the top fifth:



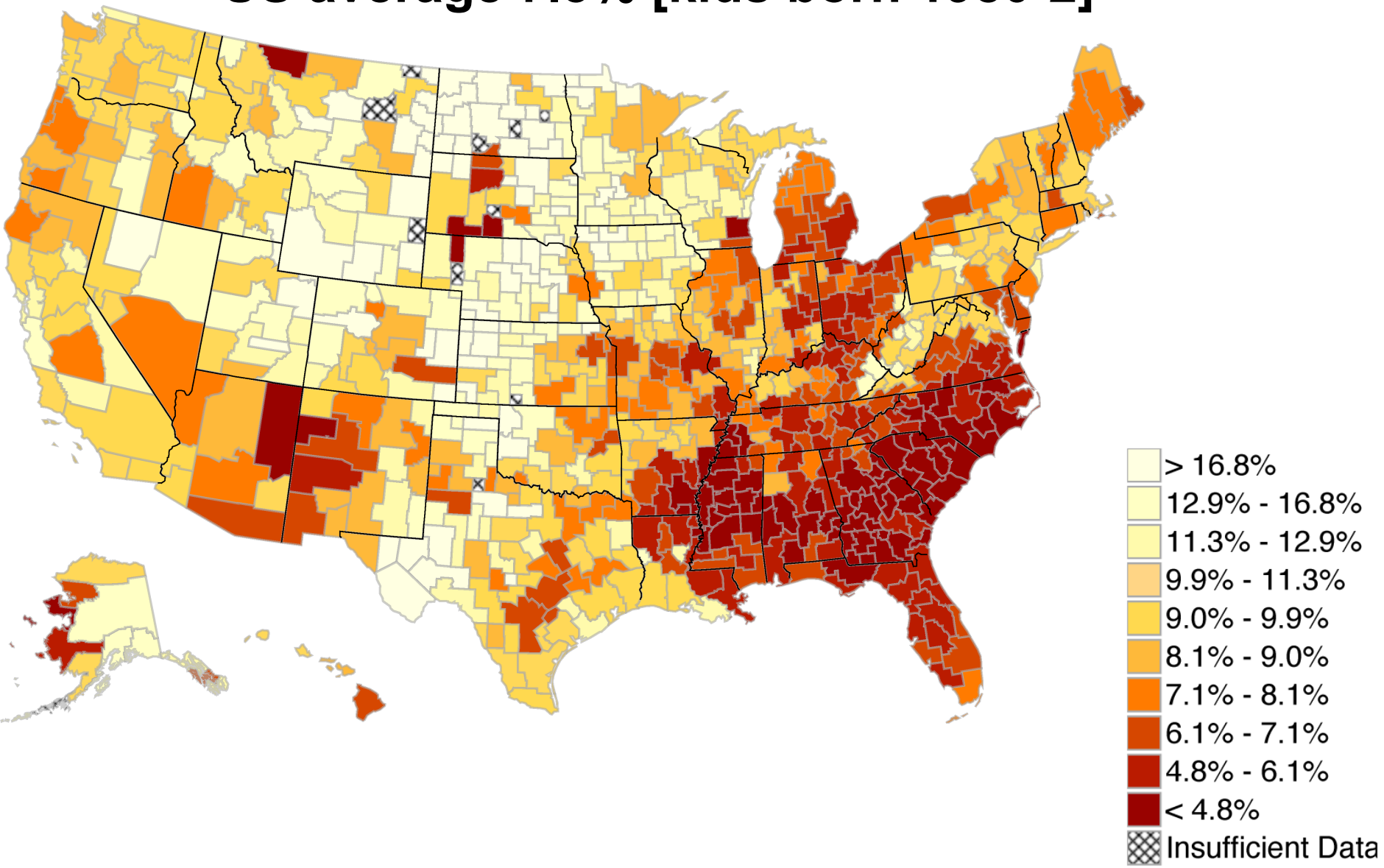
→ Chances of achieving the “American Dream” are almost two times higher in Canada than in the U.S.

Source: Chetty et al. (2014)

The Geography of Upward Mobility in the United States

Probability of Reaching the Top Fifth Starting from the Bottom Fifth

US average 7.5% [kids born 1980-2]



Note: Lighter Color = More Upward Mobility

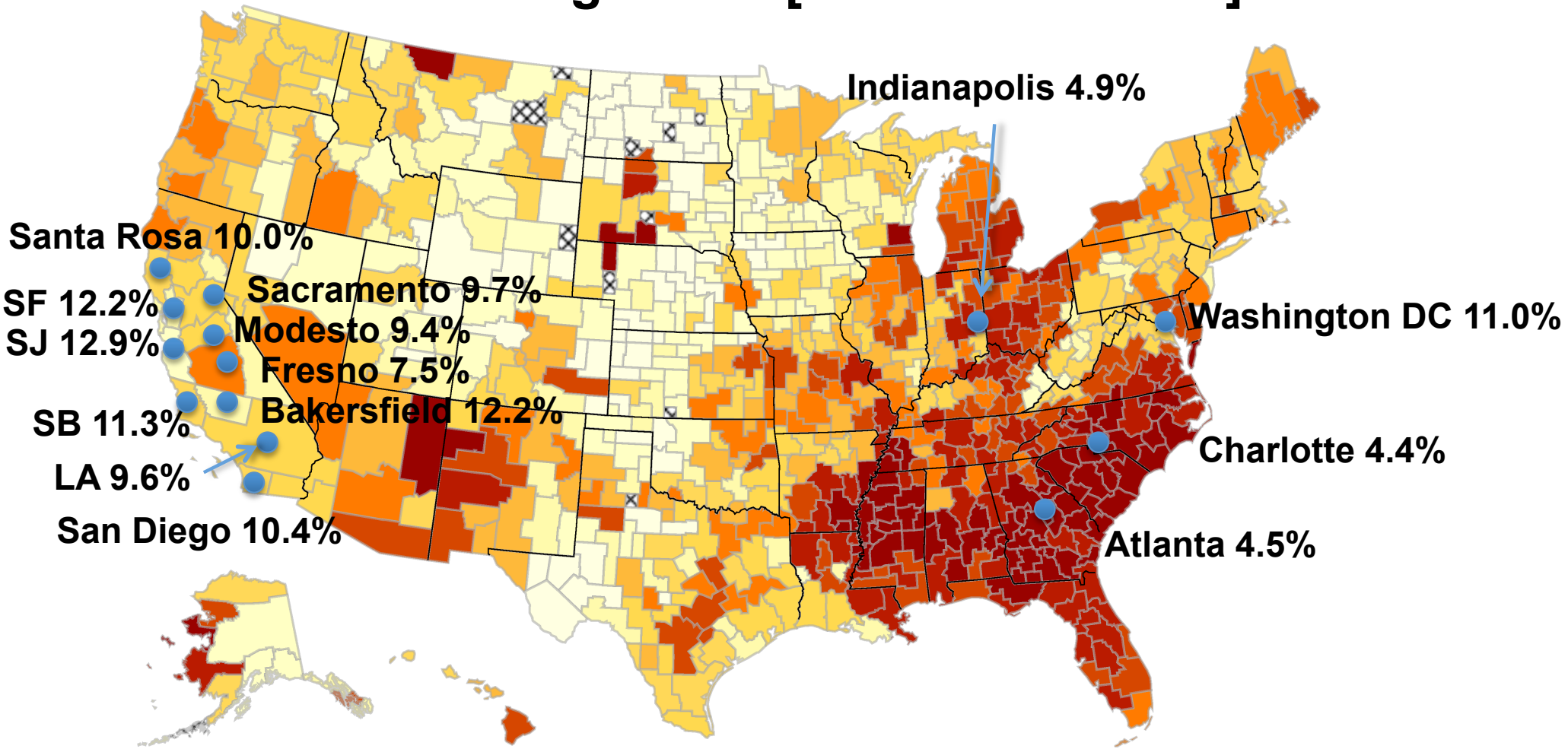
Download Statistics for Your Area at www.equality-of-opportunity.org

Source: Chetty et al. (2014)

The Geography of Upward Mobility in the United States

Odds of Reaching the Top Fifth Starting from the Bottom Fifth

US average 7.5% [kids born 1980-2]



Note: Lighter Color = More Upward Mobility

Download Statistics for Your Area at www.equality-of-opportunity.org

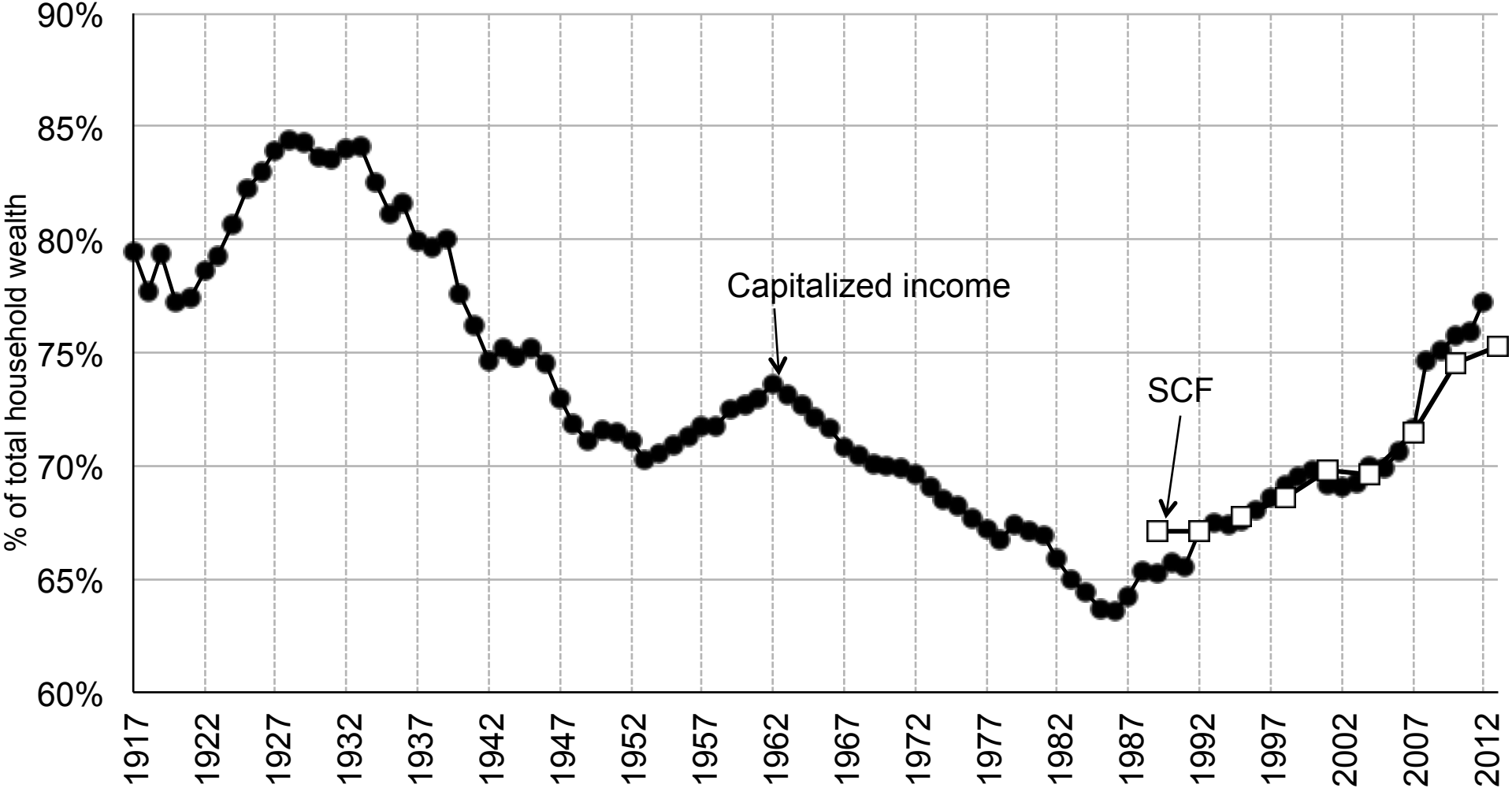
TABLE 1. Upward Mobility in the 50 Largest Metro Areas: The Top 10 and Bottom 10

Rank	Commuting Zone	Odds of Reaching Top Fifth from Bottom Fifth	Rank	Commuting Zone	Odds of Reaching Top Fifth from Bottom Fifth
1	San Jose, CA	12.9%	41	Cleveland, OH	5.1%
2	San Francisco, CA	12.2%	42	St. Louis, MO	5.1%
3	Washington, D.C.	11.0%	43	Raleigh, NC	5.0%
4	Seattle, WA	10.9%	44	Jacksonville, FL	4.9%
5	Salt Lake City, UT	10.8%	45	Columbus, OH	4.9%
6	New York, NY	10.5%	46	Indianapolis, IN	4.9%
7	Boston, MA	10.5%	47	Dayton, OH	4.9%
8	San Diego, CA	10.4%	48	Atlanta, GA	4.5%
9	Newark, NJ	10.2%	49	Milwaukee, WI	4.5%
10	Manchester, NH	10.0%	50	Charlotte, NC	4.4%

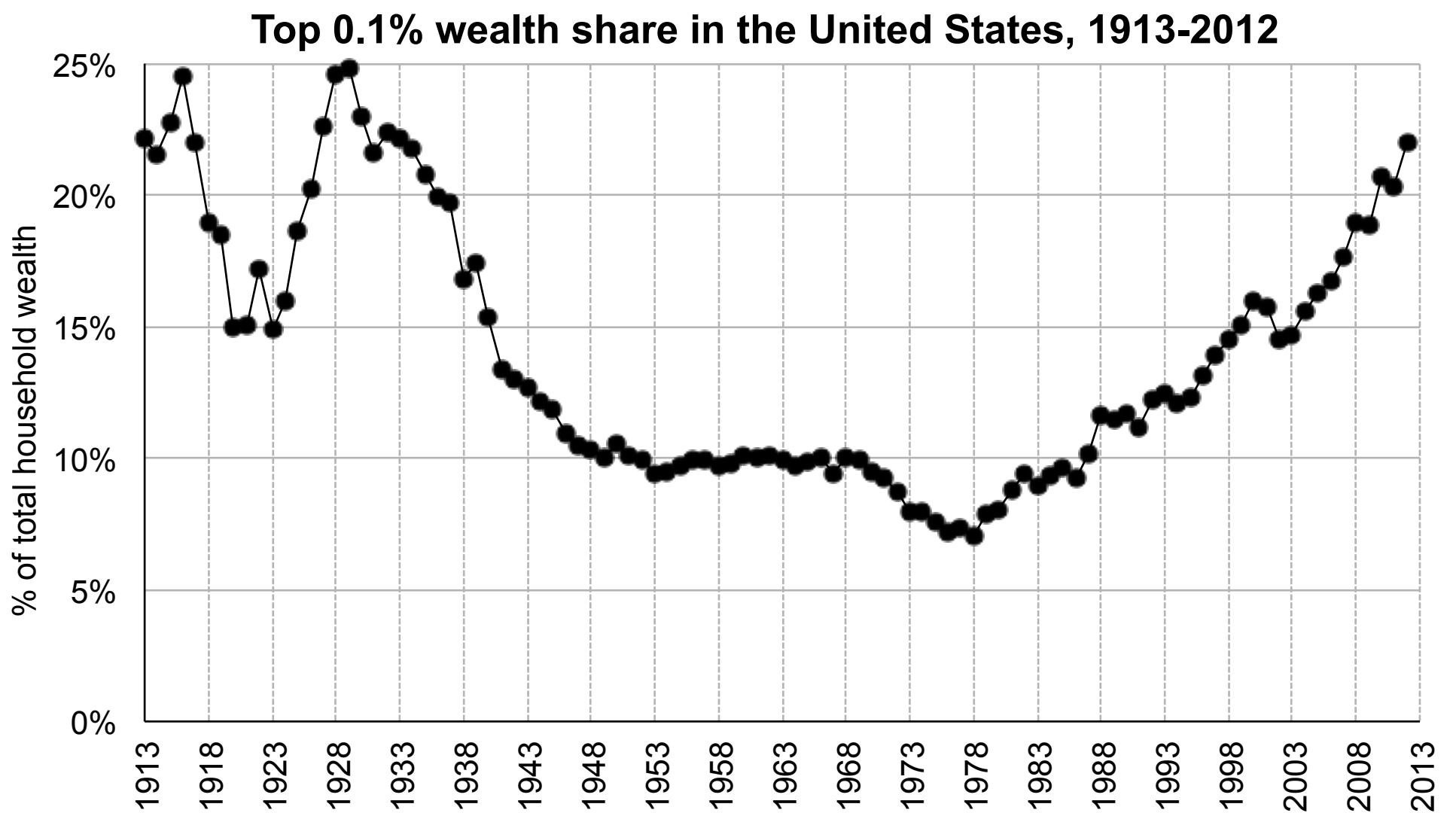
Note: This table reports selected statistics from a sample of the 50 largest commuting zones (CZs) according to their populations in the 2000 Census. The columns report the percentage of children whose family income is in the top quintile of the national distribution of child family income conditional on having parent family income in the bottom quintile of the parental national income distribution—these probabilities are taken from Online Data Table VI of Chetty et al., 2014a.

Source: Chetty et al., 2014a.

Top 10% wealth share in the United States, 1917-2012

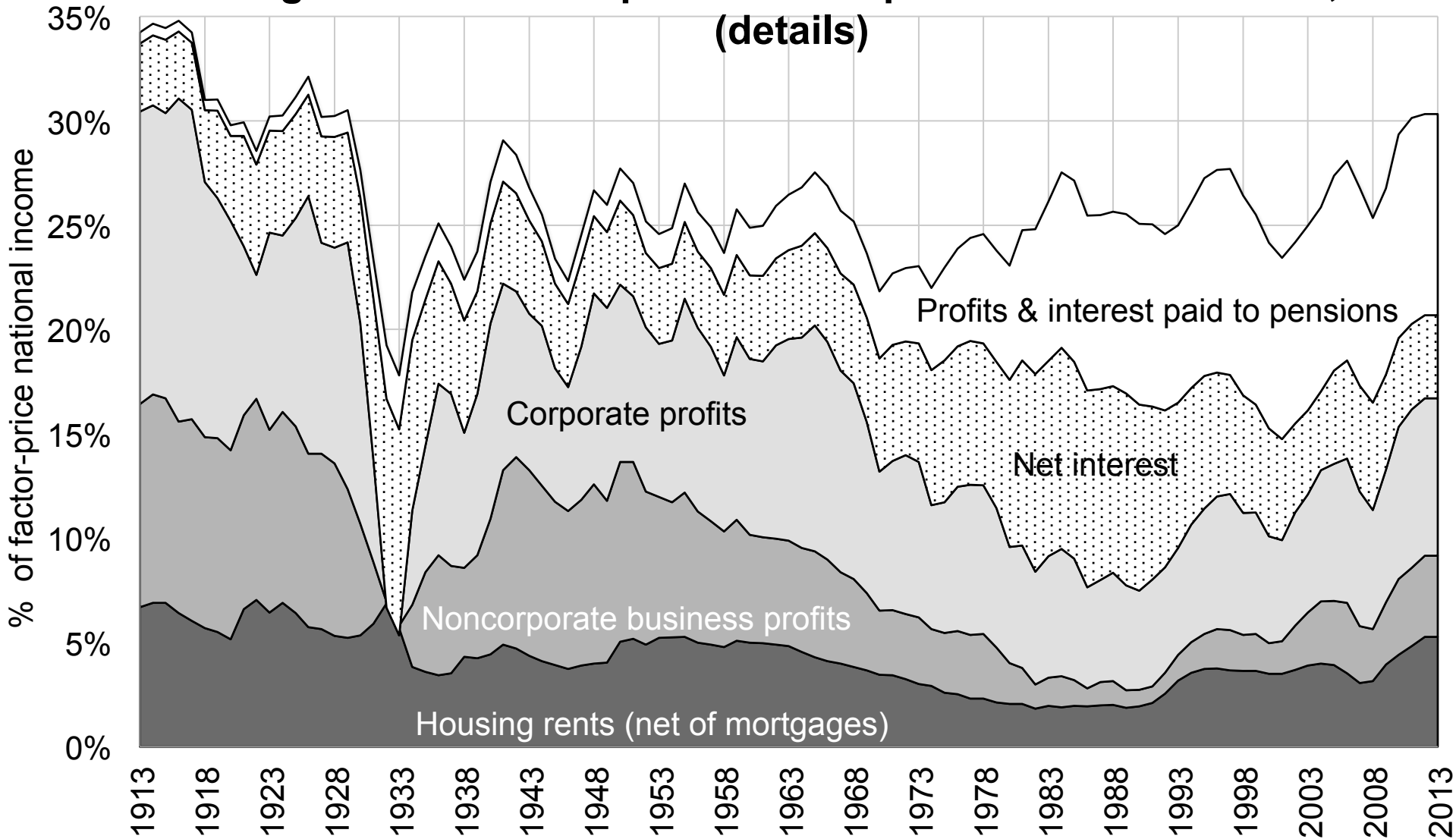


The figure depicts the share of total household wealth owned by the top 10%, obained by capitalizing income tax returns versus in the Survey of Consumer Finances. The unit of analysis is the familly. Source: Appendix Tables B1 and C4.

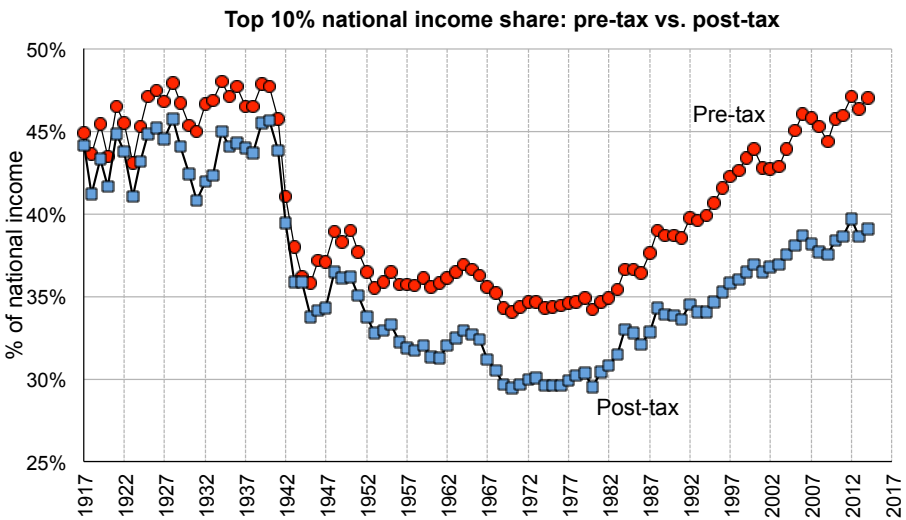


This figure depicts the share of total household wealth held by the 0.1% richest families, as estimated by capitalizing income tax returns. In 2012, the top 0.1% includes about 160,000 families with net wealth above $20.6 million. Source: Appendix Table B1.

Figure A6: The composition of capital income in the U.S., (details)

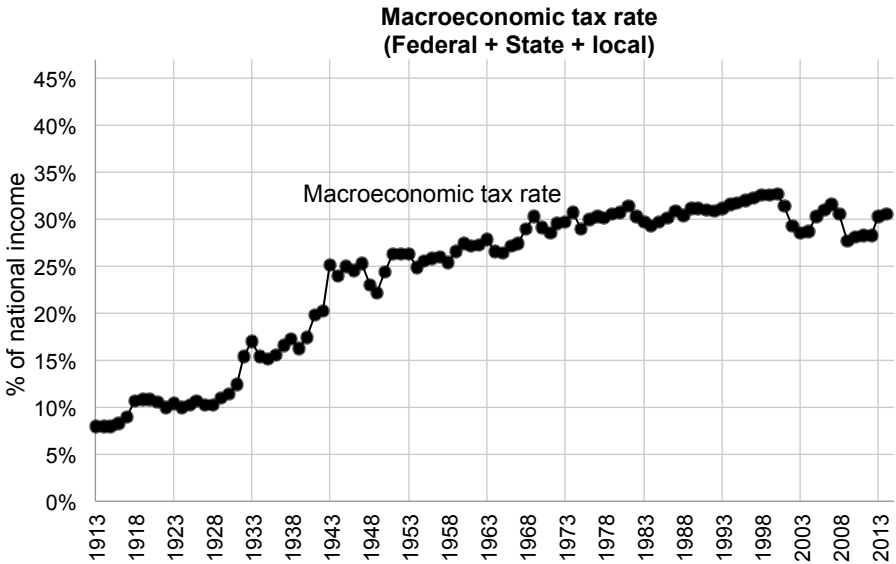


DINA confirm the rise of income inequality, but post-tax inequality ↗ less



Source: Appendix Tables II-B1 and II-C1

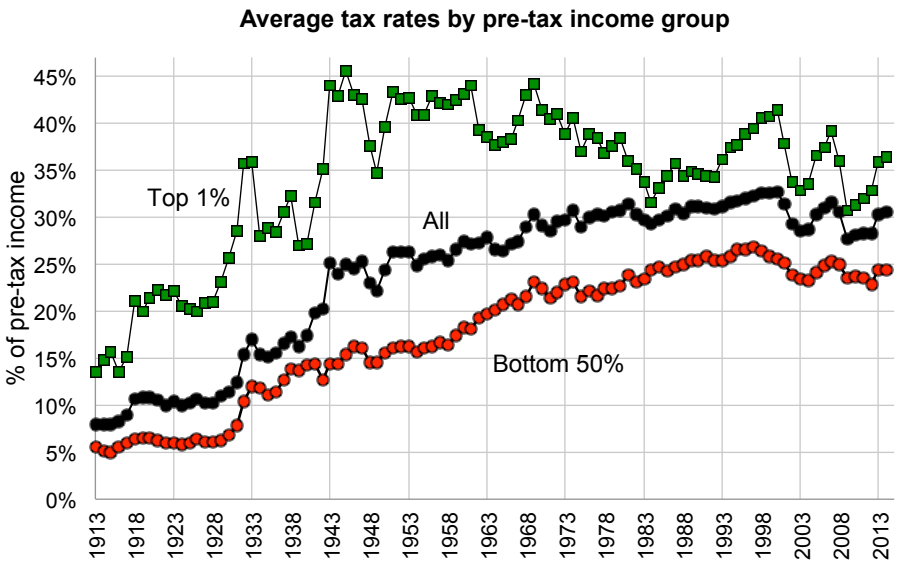
The macro rate of tax rose until the 1960s and has been constant since then



Source: Appendix Table II-G1.

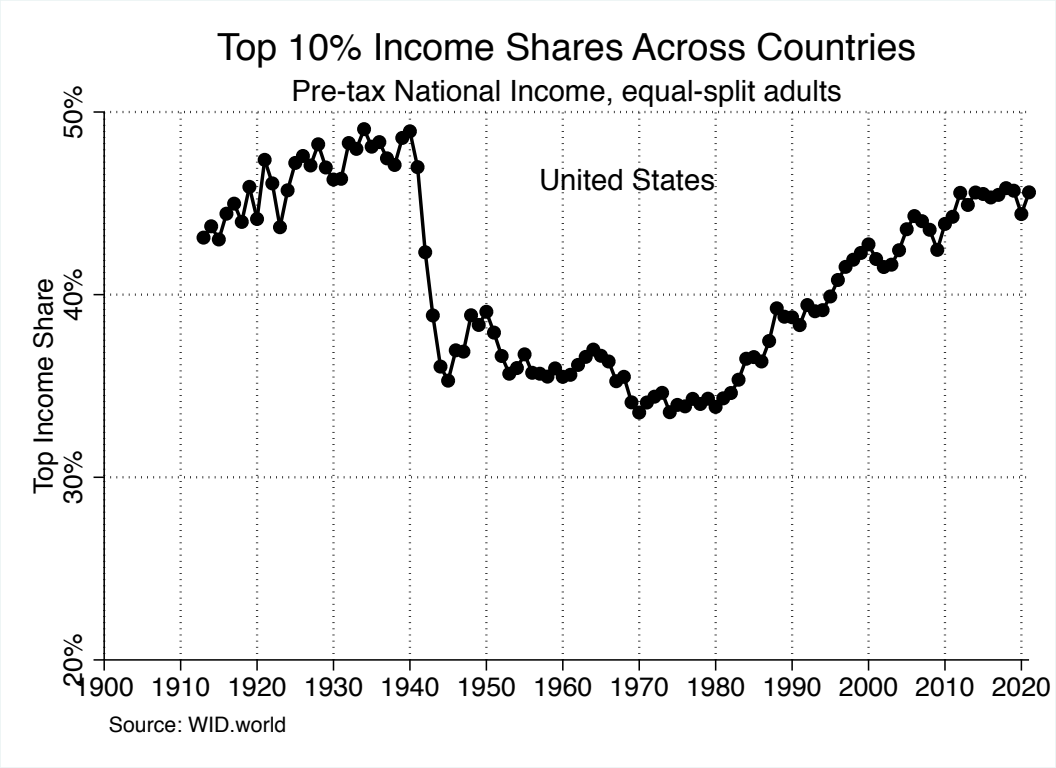
Source: Piketty, Saez, Zucman (2016)

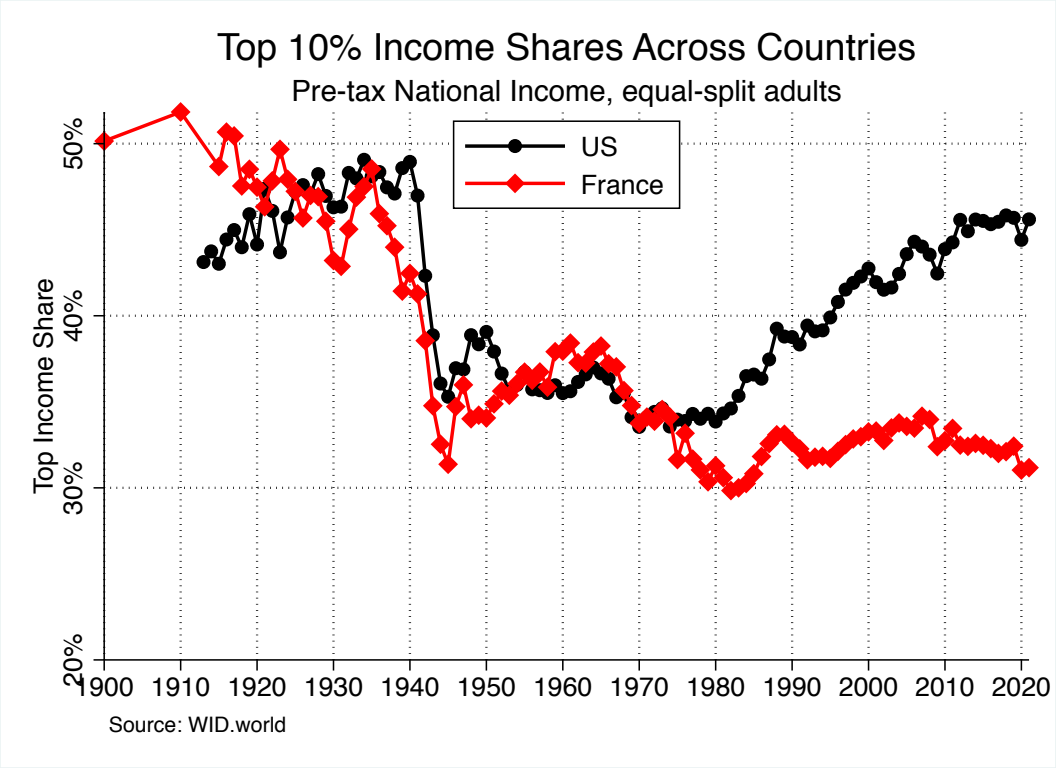
Tax progressivity has declined since the 1960s

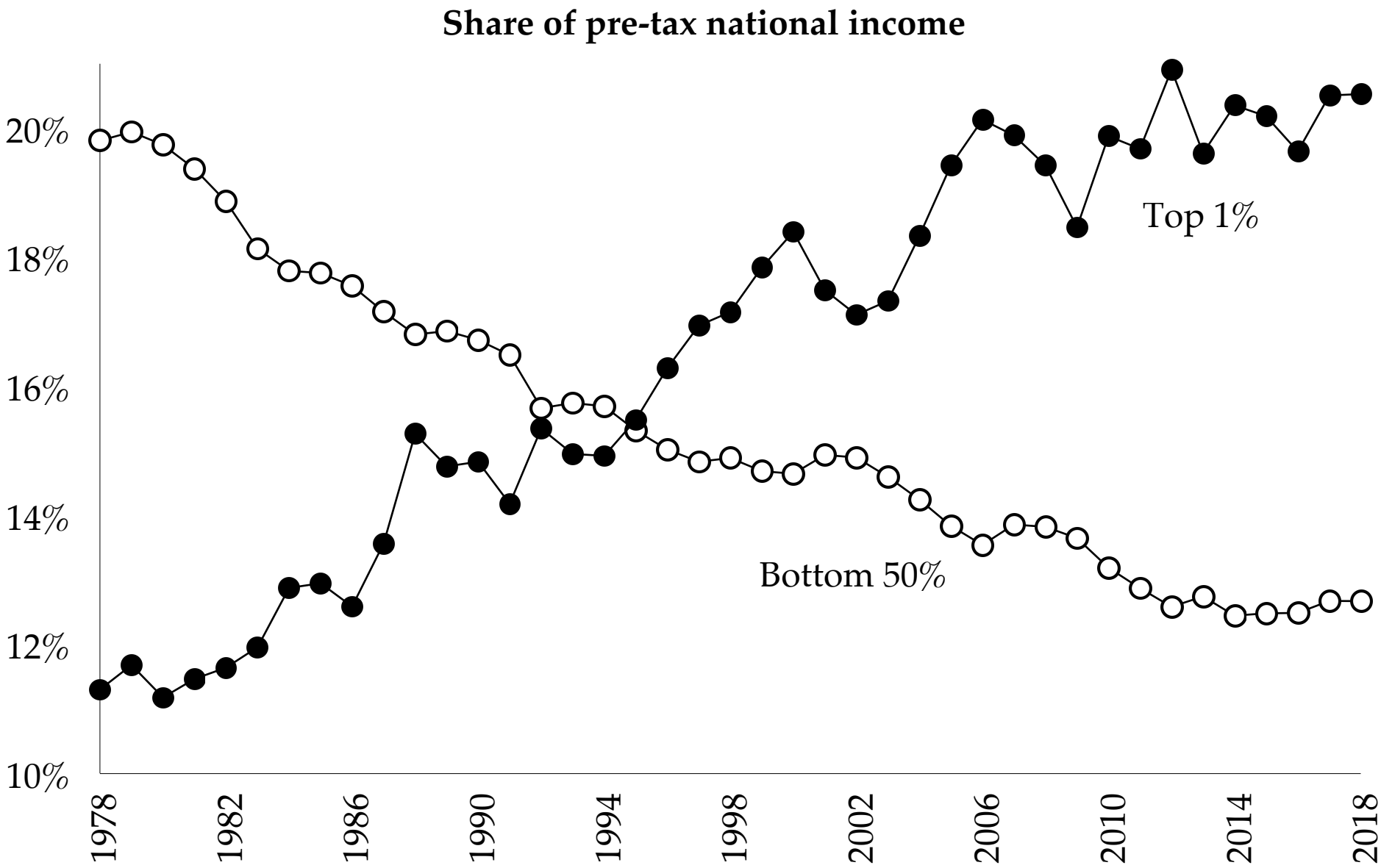


Source: Appendix Table II-G1.

Source: Piketty, Saez, Zucman (2016)

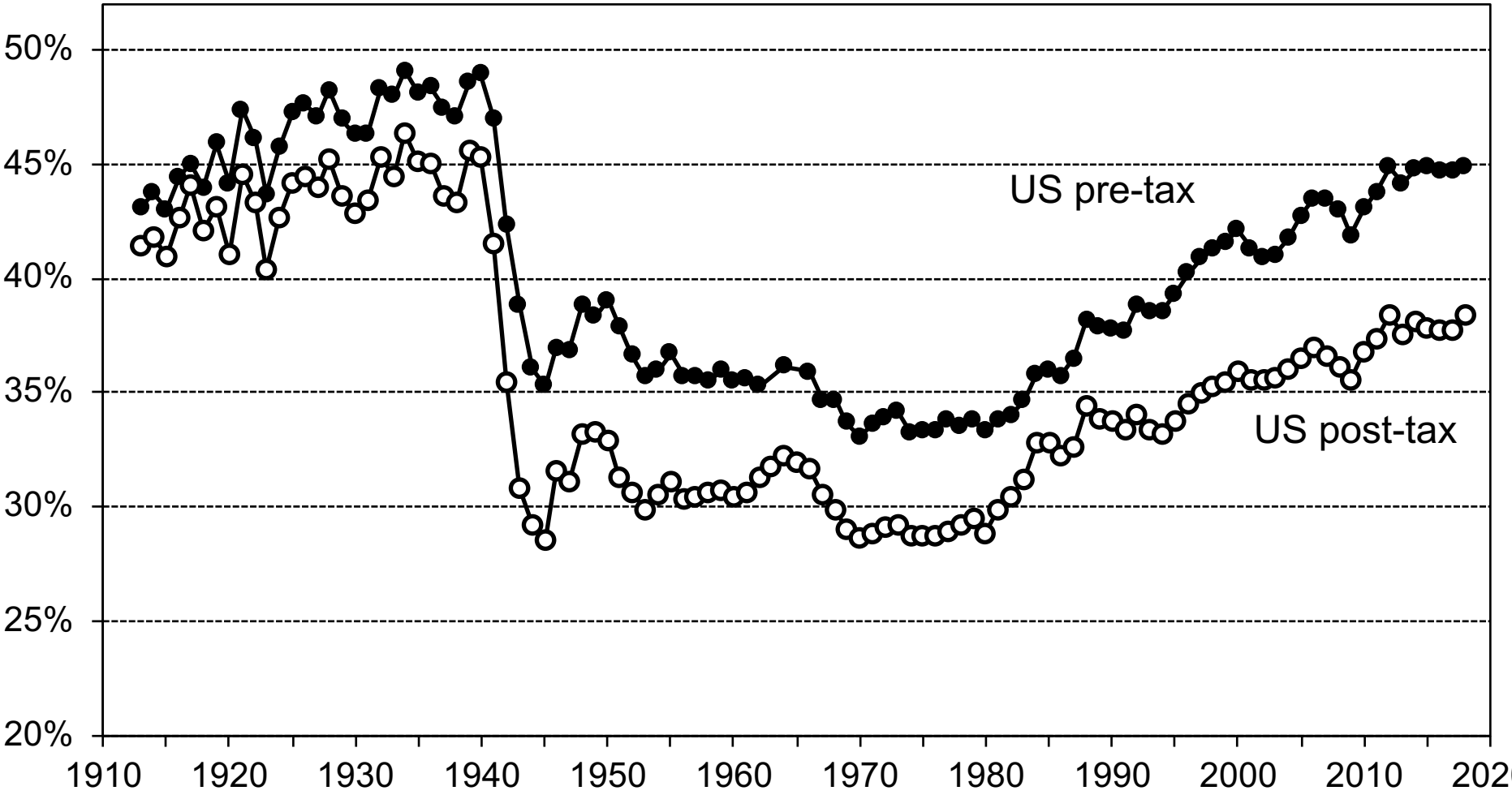

Top 10% Income Shares Across Countries
Pre-tax National Income, equal-split adults
United States
Top Income Share
50%
40%
30%
20%
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
Source: WID.world


Top 10% Income Shares Across Countries
Pre-tax National Income, equal-split adults
US
France
Top Income Share
50%
40%
30%
20%
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
Source: WID.world

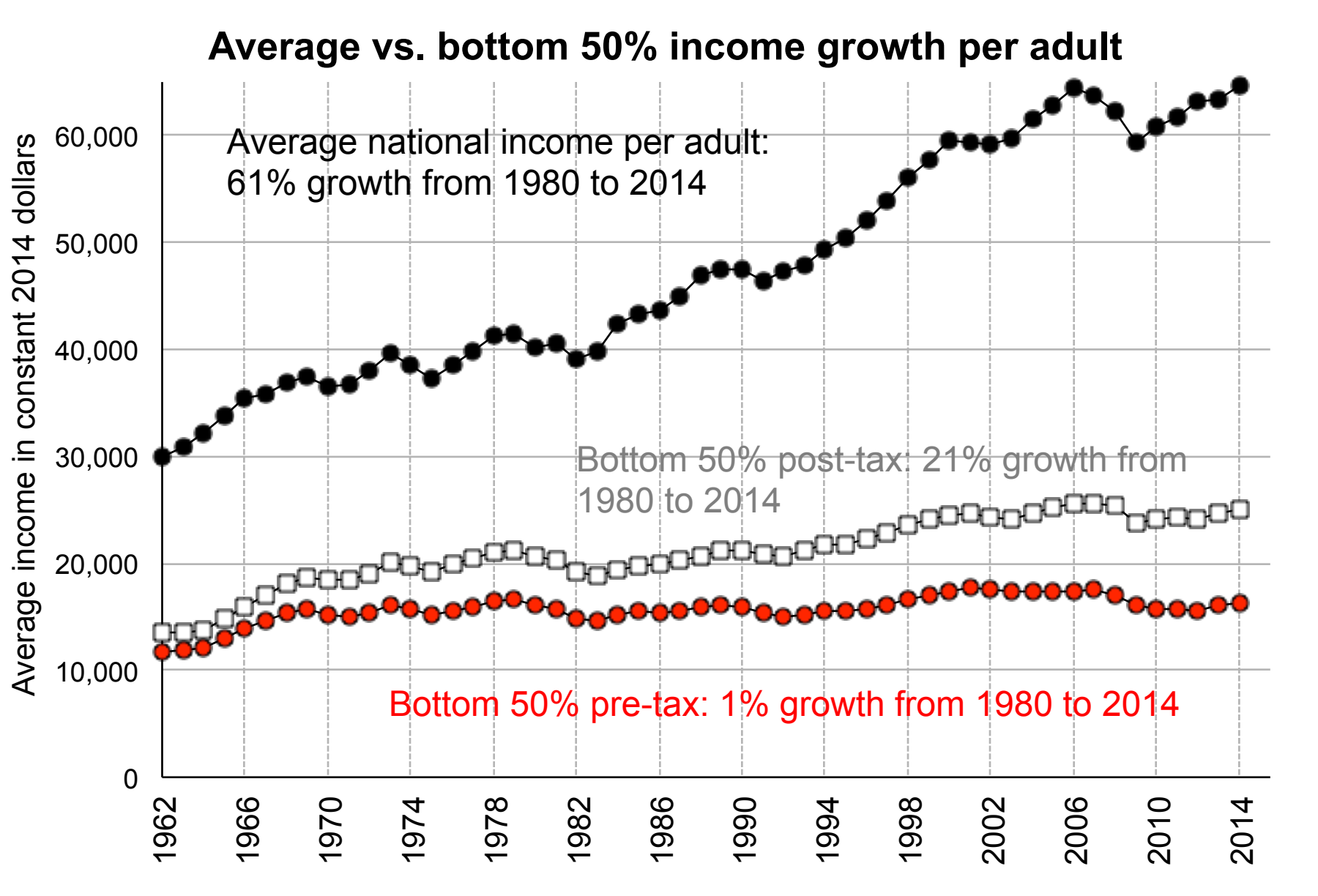


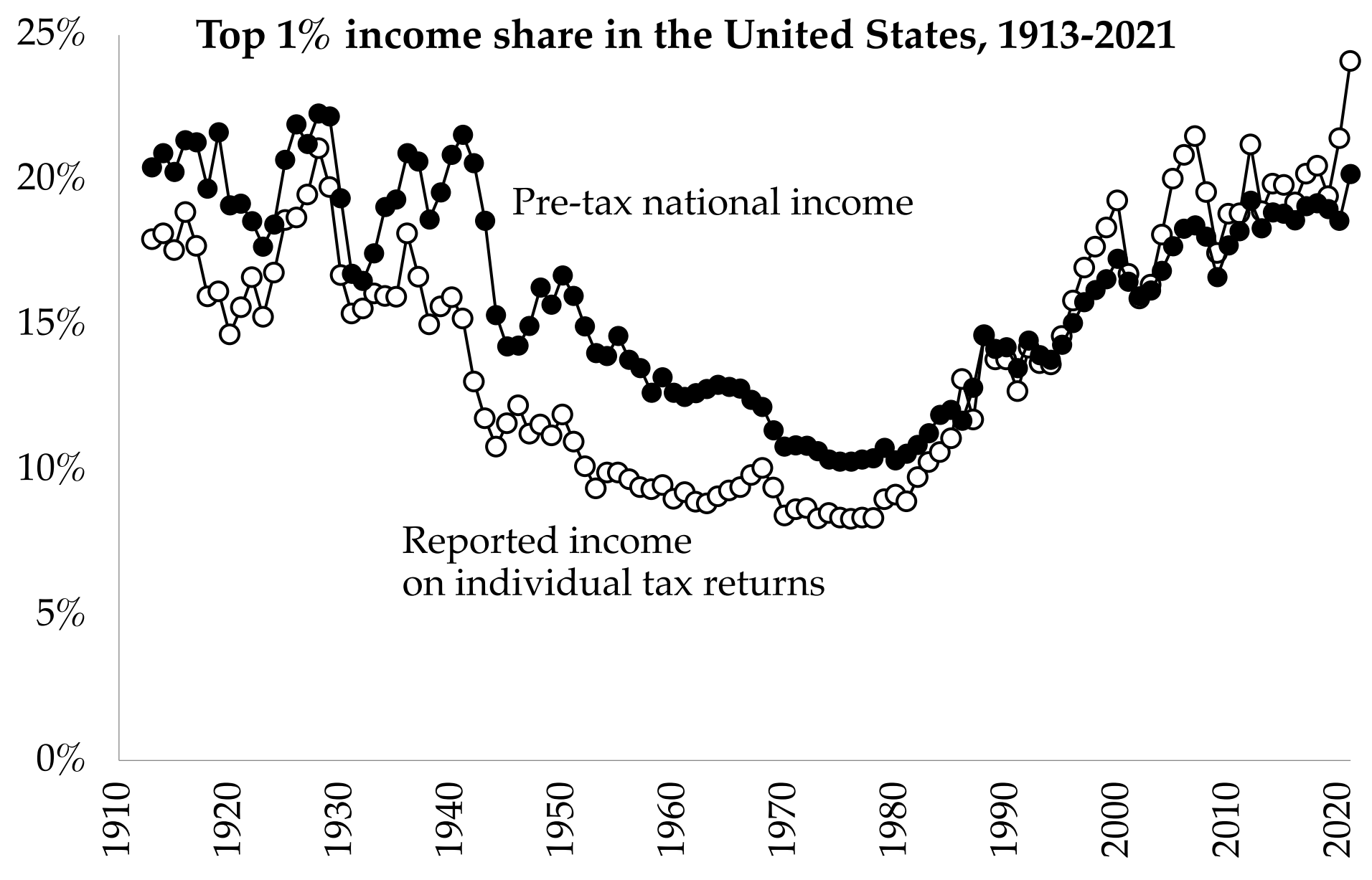
Source: Saez and Zucman (2019), Figure 1.1

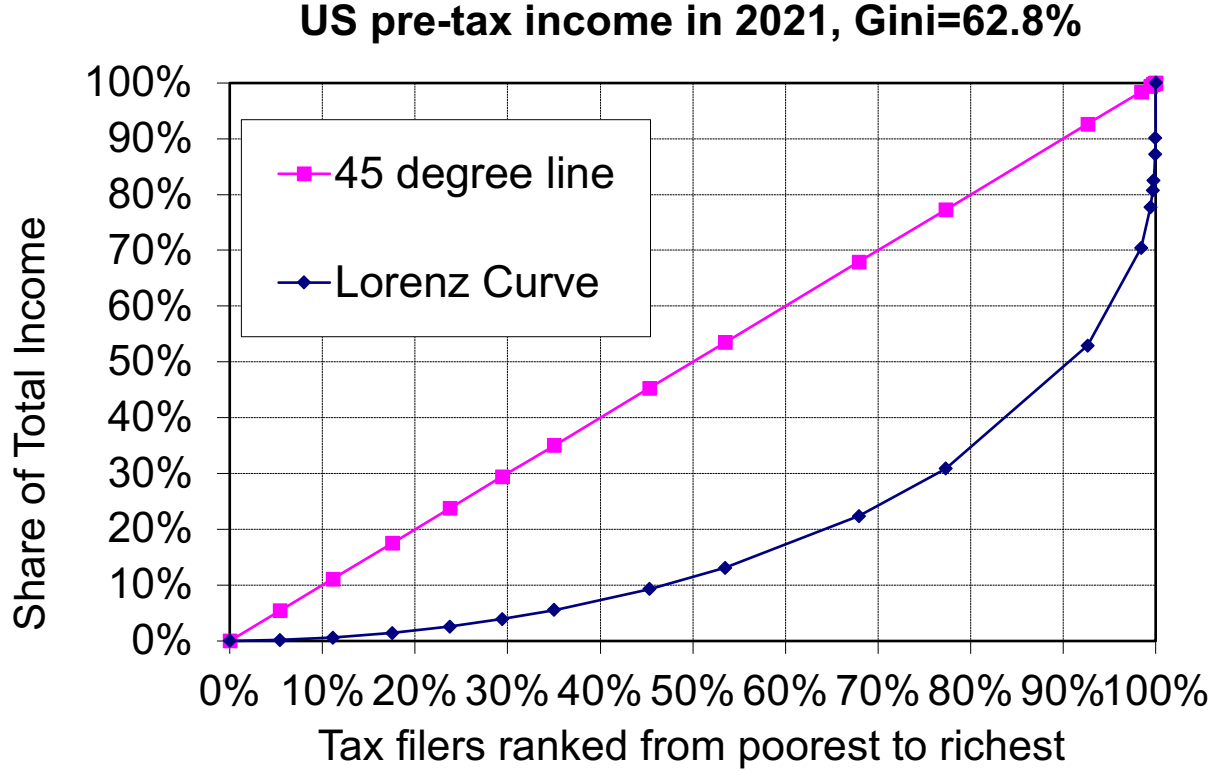
US Top 10% Income Shares pre-tax vs. post-tax, 1913-2018



Top income shares of pretax and posttax national income among adults (income within married couples equally split). Source is Piketty, Saez, Zucman (2018) for US and Piketty et al. (2020) for France.

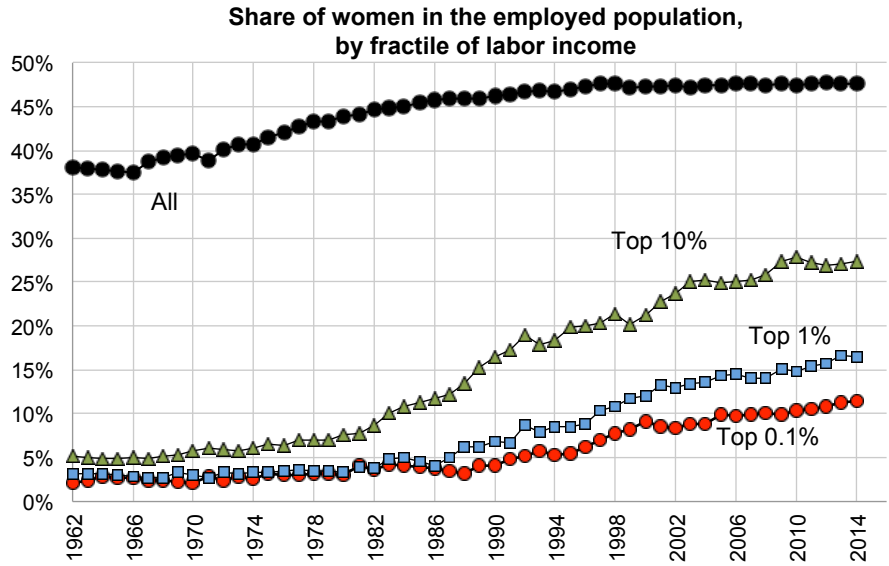

Average vs. bottom 50% income growth per adult
Average income in constant 2014 dollars
60,000
50,000
40,000
30,000
20,000
10,000
0
Average national income per adult:
61% growth from 1980 to 2014
Bottom 50% post-tax: 21% growth from
1980 to 2014
Bottom 50% pre-tax: 1% growth from 1980 to 2014
1962
1966
1970
1974
1978
1982
1986
1990
1994
1998
2002
2006
2010
2014


Top 1% income share in the United States, 1913-2021
25%
20%
15%
10%
5%
0%
Pre-tax national income
Reported income
on individual tax returns
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020

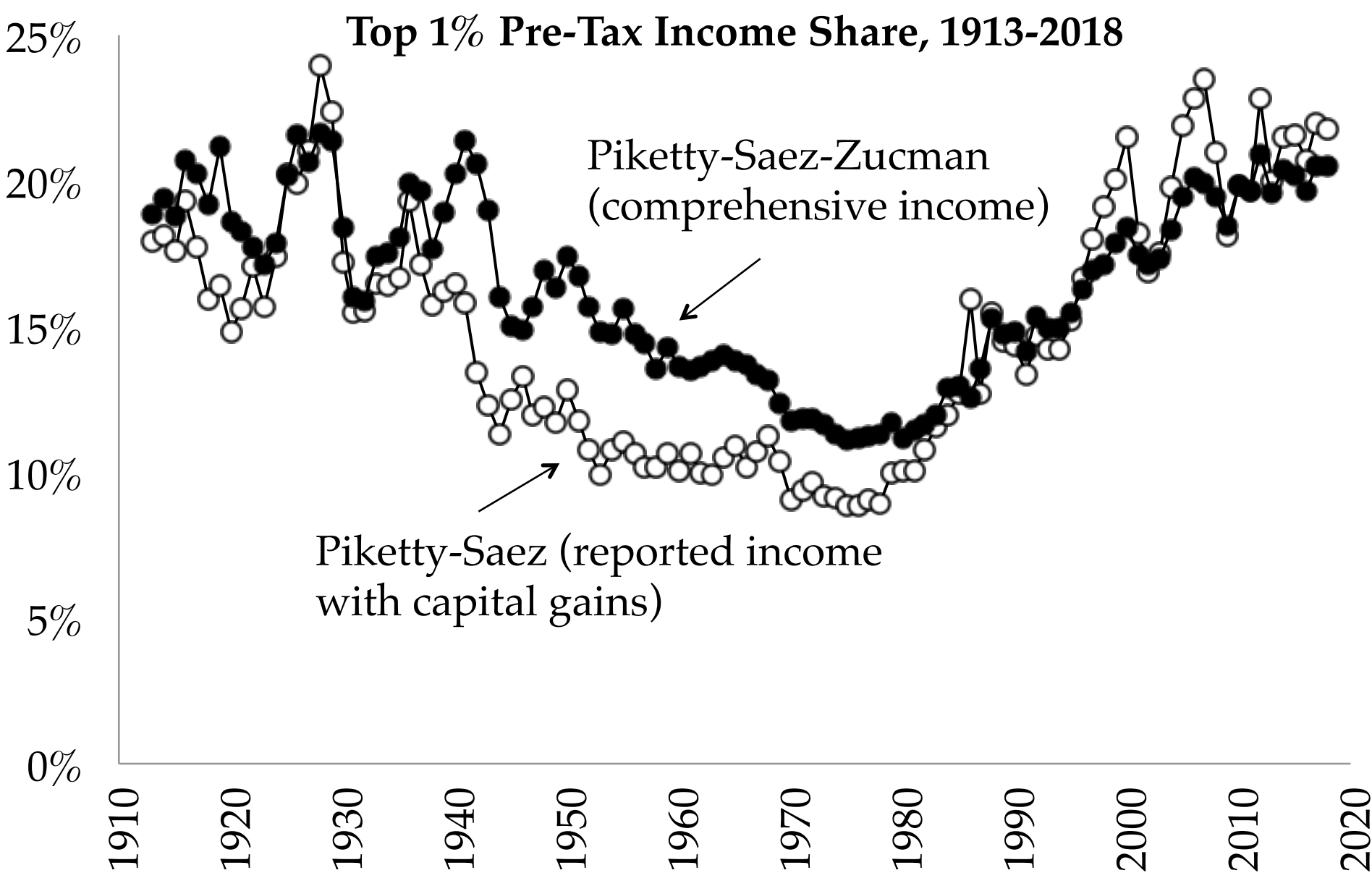


Source: IRS Individual income tax statistics for 2021

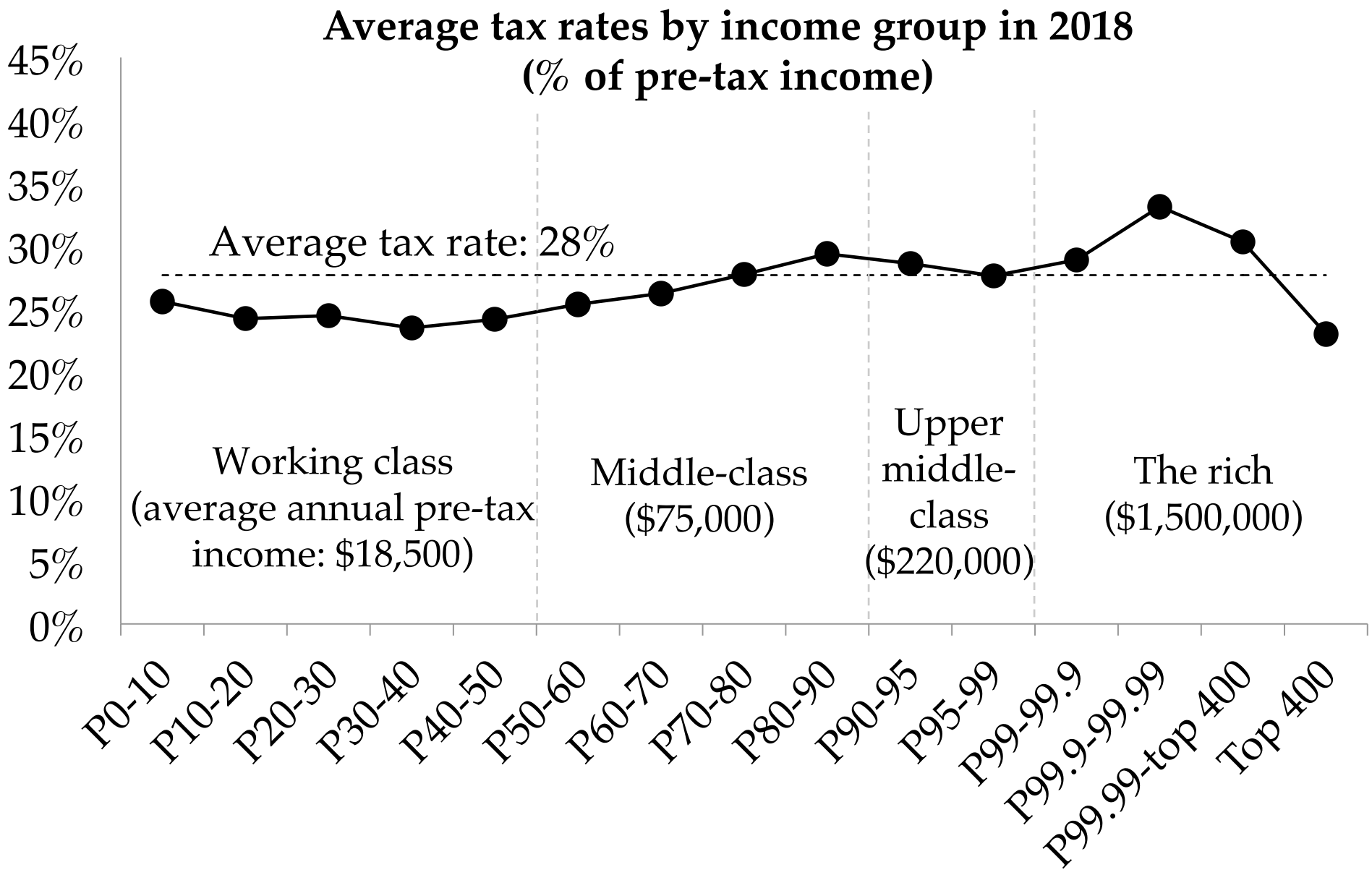
Men still make 85% of the top 1% of the labor income distribution

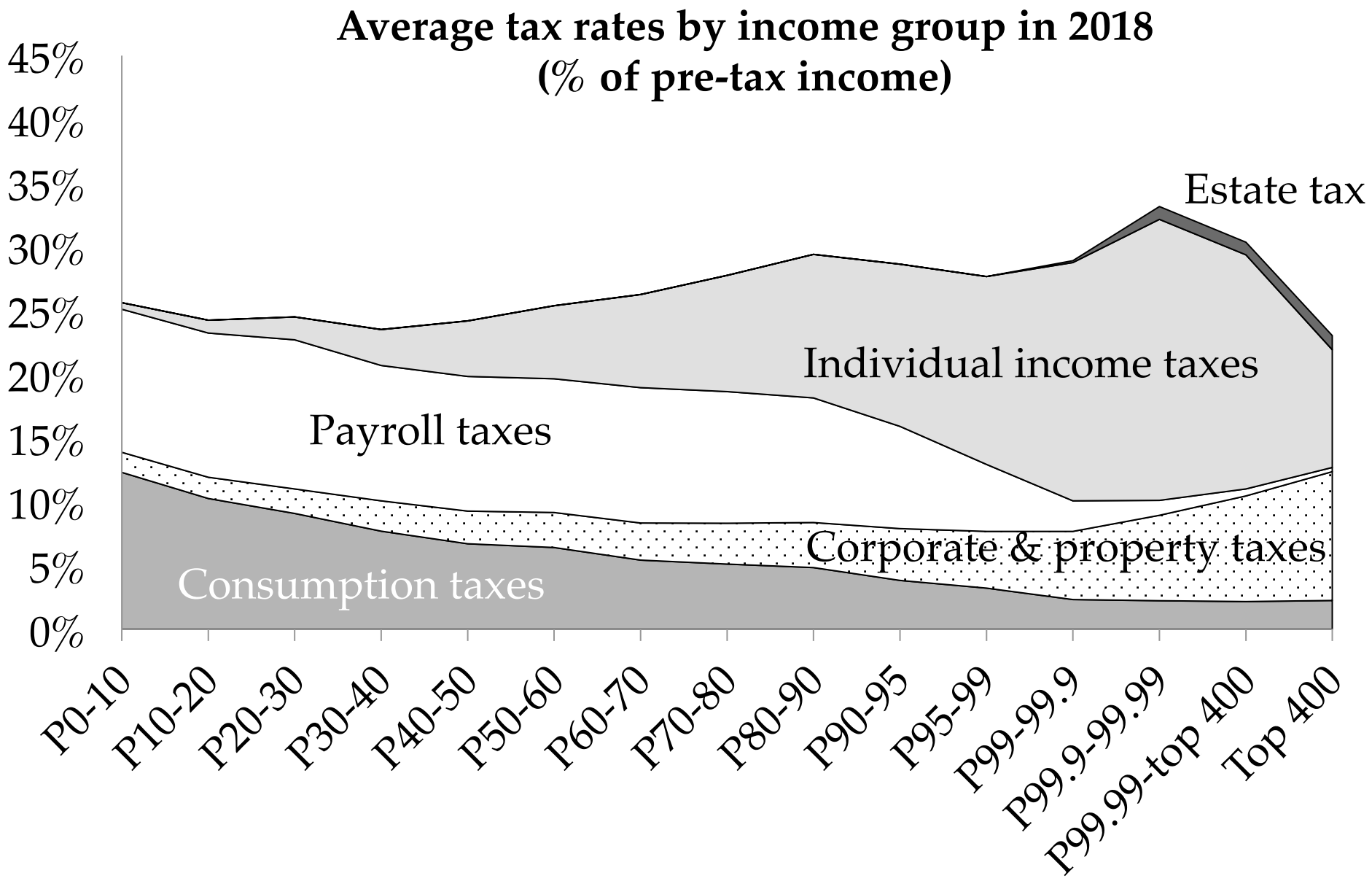


Source: Appendix Table II-F1.


Top 1% Pre-Tax Income Share, 1913-2018
25%
20%
15%
10%
5%
0%
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
Piketty-Saez-Zucman
(comprehensive income)
Piketty-Saez (reported income
with capital gains)


Top 1% Pre-Tax Income Share, 1913-2018
25%
20%
15%
10%
5%
0%
Piketty-Saez (reported income with capital gains)
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020


Average tax rates by income group in 2018
(% of pre-tax income)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Average tax rate: 28%
Working class
(average annual pre-tax
income: $18,500)
Middle-class
($75,000)
Upper
middle-
class
($220,000)
The rich
($1,500,000)
P0-10
P10-20
P20-30
P30-40
P40-50
P50-60
P60-70
P70-80
P80-90
P90-95
P95-99
P99-99.9
P99.9-99.99
P99.99-top 400
Top 400


Average tax rates by income group in 2018
(% of pre-tax income)
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
Estate tax
Individual income taxes
Payroll taxes
Corporate & property taxes
Consumption taxes
P0-10
P10-20
P20-30
P30-40
P40-50
P50-60
P60-70
P70-80
P80-90
P90-95
P95-99
P99-99.9
P99.9-99.99
P99.99-top 400
Top 400

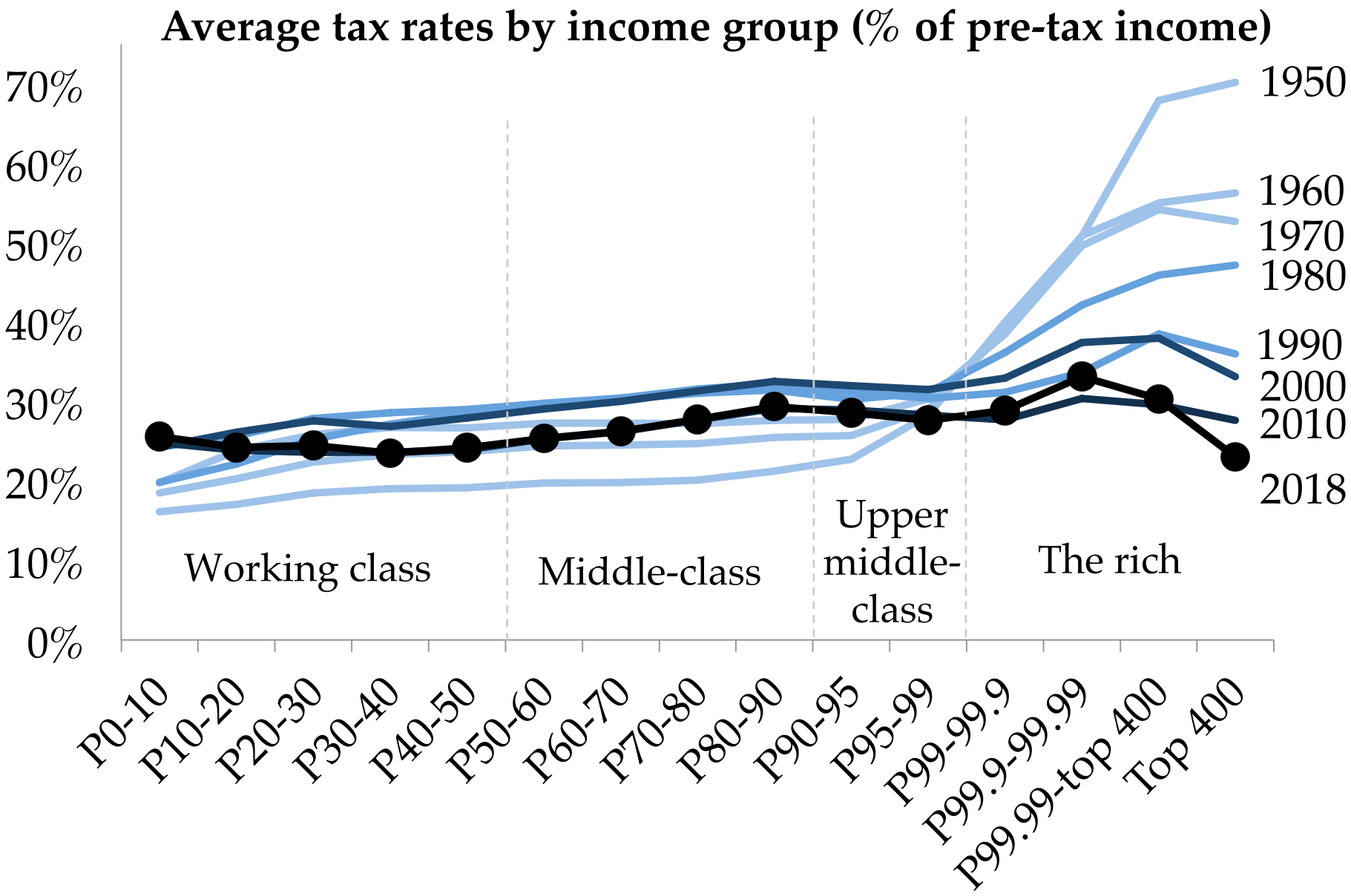
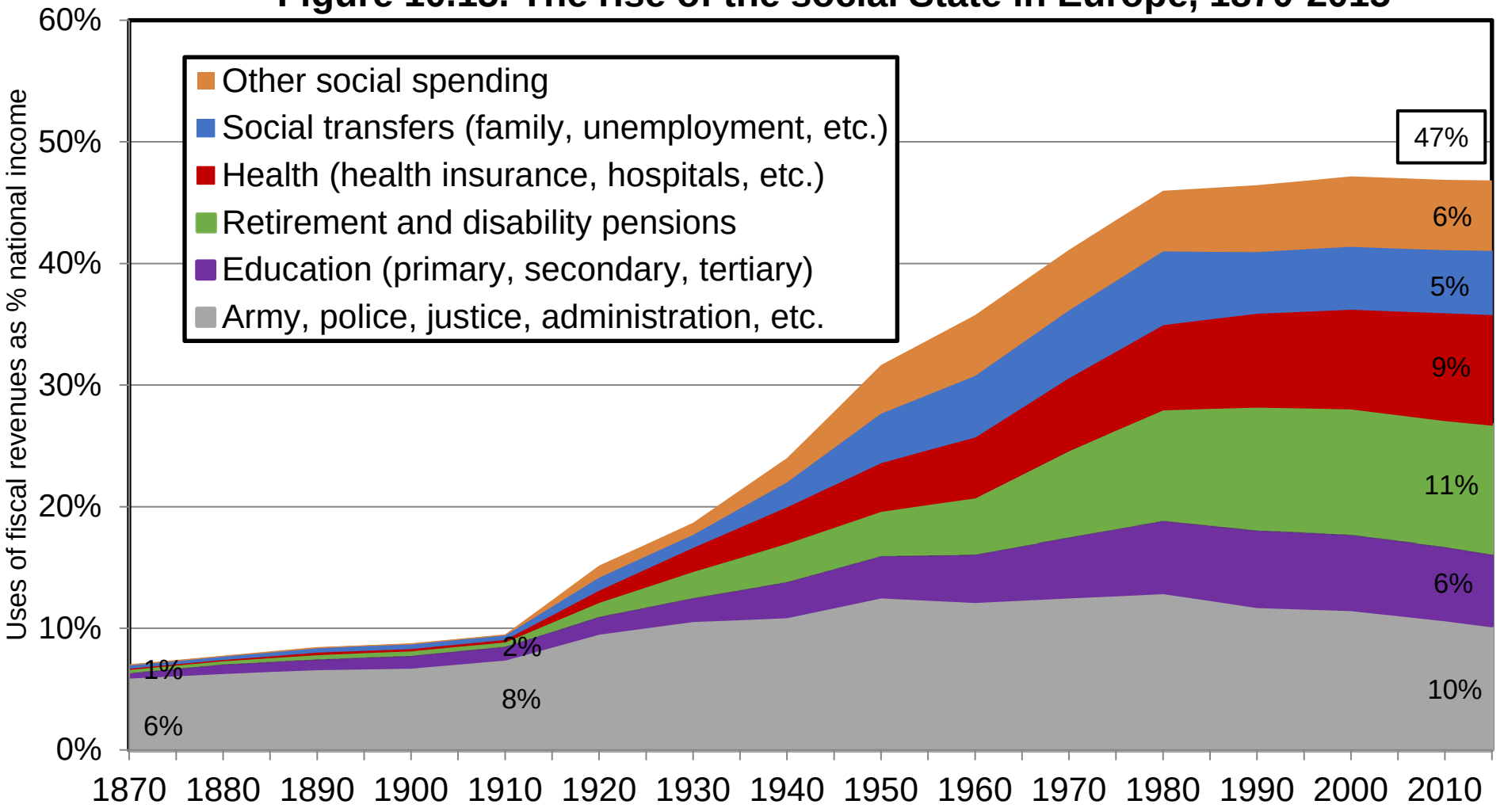
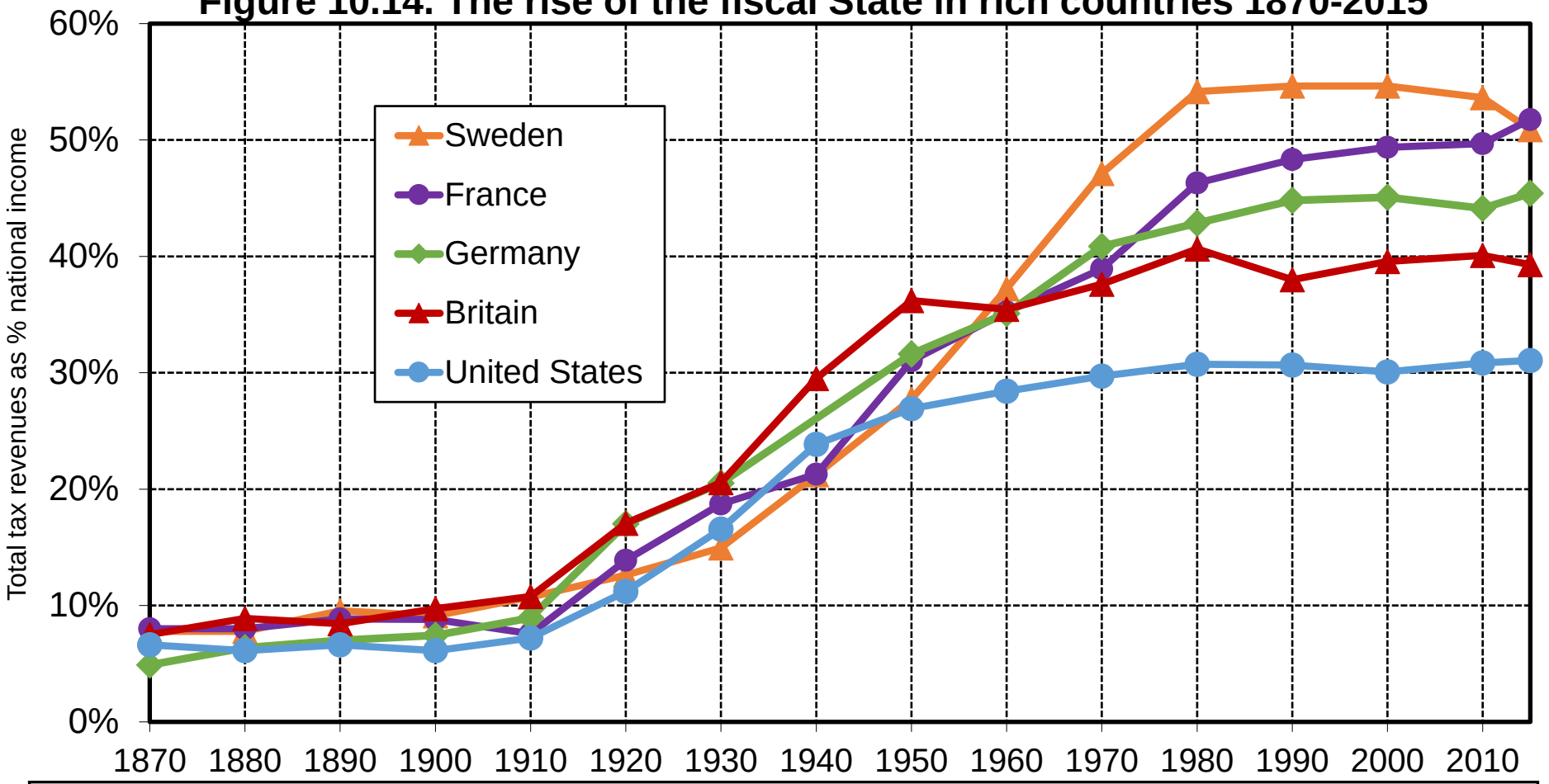

Average tax rates by income group (% of pre-tax income)
70%
60%
50%
40%
30%
20%
10%
0%
1950
1960
1970
1980
1990
2000
2010
2018
Working class
Middle-class
Upper middle-class
The rich
P0-10
P10-20
P20-30
P30-40
P40-50
P50-60
P60-70
P70-80
P80-90
P90-95
P95-99
P99-99.9
P99.9-99.99
P99.99-top 400
Top 400

Figure 10.15. The rise of the social State in Europe, 1870-2015



Interpretation. In 2015, fiscal revenues represented 47% of national income on average in Western Europe et were used as follows: 10% of national income for regalian expenditure (army, police, justice, general administration, basic infrastructure: roads, etc.); 6% for education; 11% for pensions; 9% for health; 5% for social transfers (other than pensions); 6% for other social spending (housing, etc.). Before 1914, regalian expenditure absorbed almost all fiscal revenues. **Note.** The evolution depicted here is the average of Germany, France, Britain and Sweden (see figure 10.14). Sources and séries: see piketty.pse.ens.fr/ideology.

Figure 10.14. The rise of the fiscal State in rich countries 1870-2015

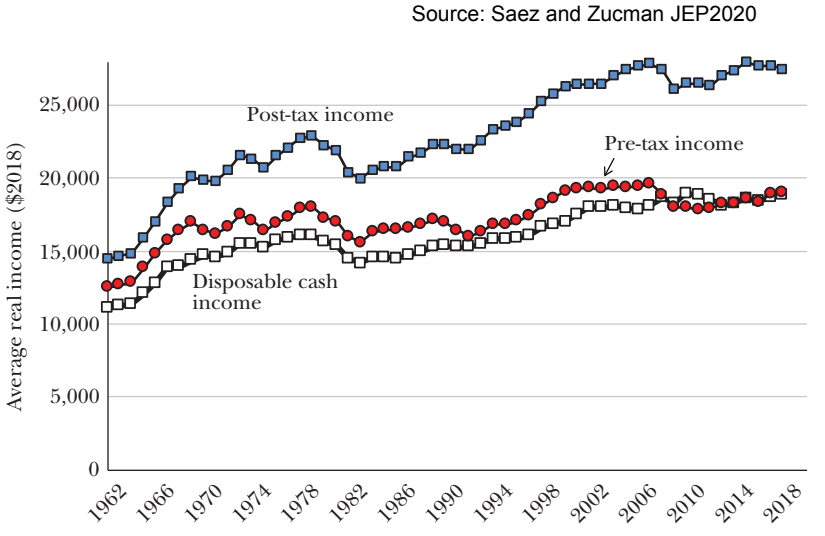


Interpretation. Total fiscal revenues (all taxes and social contributions included) made less than 10% of national income in rich countries during the 19th century and until World War 1, before rising strongly from the 1910s-1920s until the 1970s-1980s and then stabilizing at different levels across countries: around 30% in the U.S., 40% in Britain and 45%-55% in Germany, France and Sweden.

Sources and series: see piketty.pse.ens.fr/ideology.

Figure 6

The Evolution of Bottom 50 Percent Incomes



Source: Piketty, Saez, and Zucman (2018), updated September 2020.

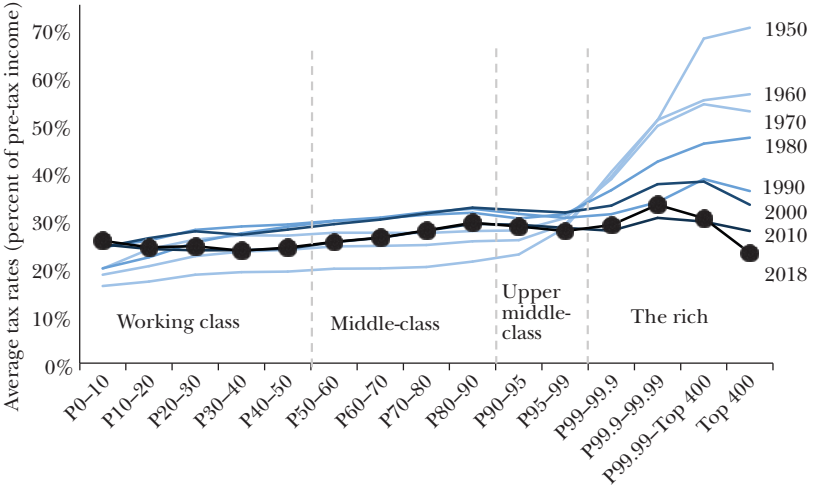
Note: The figure depicts the evolution of the real incomes per adult (in 2018 dollars) for the bottom half of the income distribution for three income concepts: (1) pre-tax income before deducting taxes or adding government transfers (concept sums up to national income), (2) post-tax income that deducts all taxes and adds all transfers (cash and in-kind) and collective public expenditures minus the government deficit (also sums up to national income), (3) disposable cash income which is pre-tax income minus all taxes plus cash (or quasi-cash) transfers, i.e., (3) does not include in-kind transfers (primarily Medicaid and Medicare) and collective public expenditures that are included in (2).

Figure 5

Average Tax Rates By Income Groups

(percent of pre-tax income)

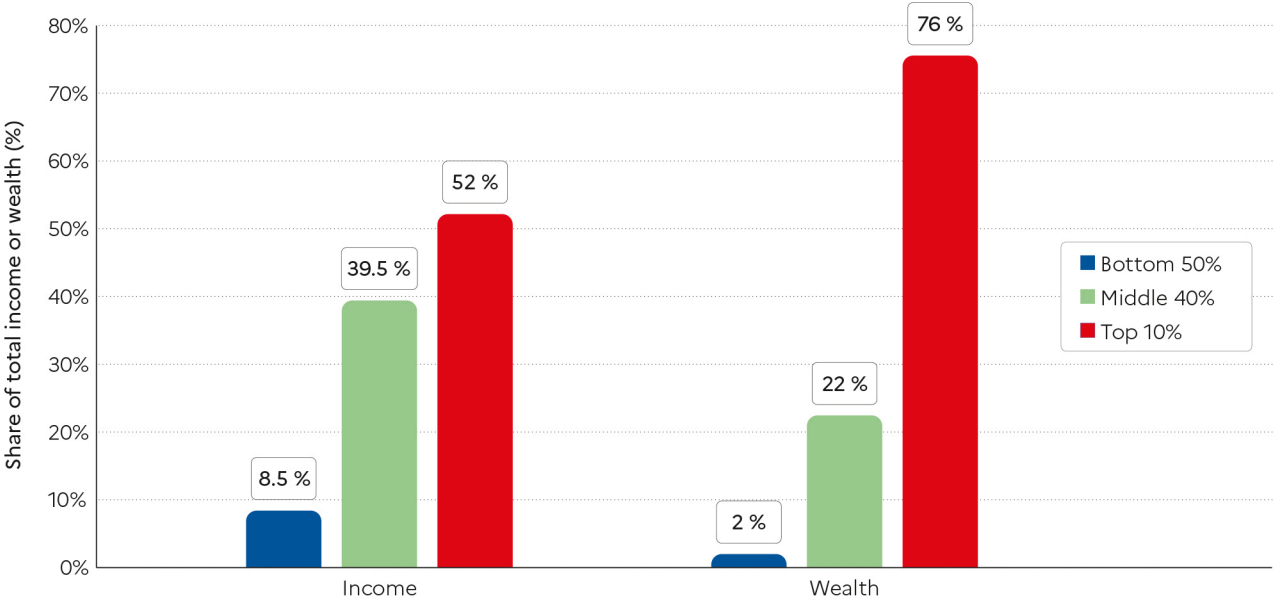
Source: Saez and Zucman JEP2020



Source: Saez and Zucman (2019b).

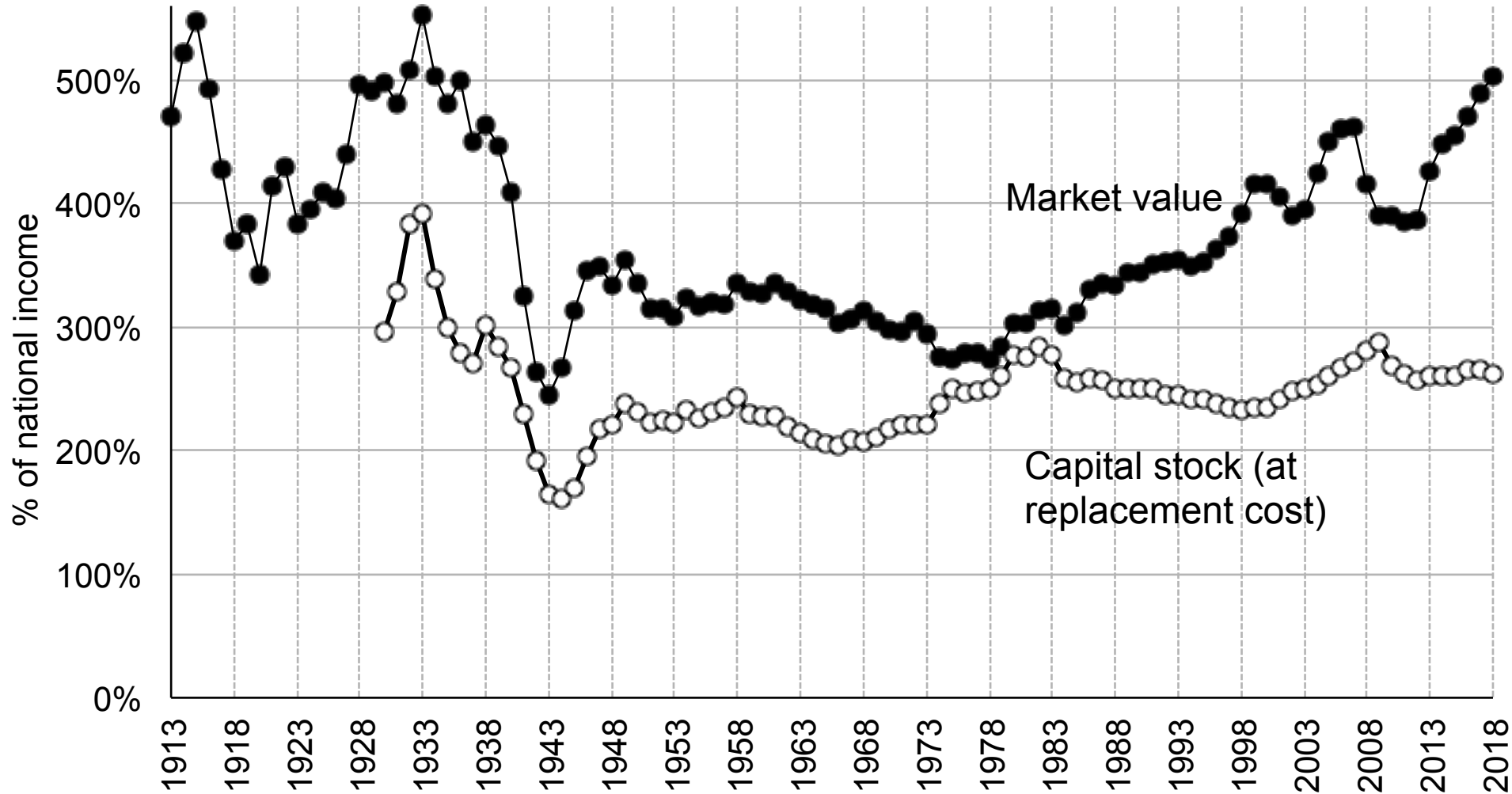
Note: The figure depicts the US average tax rate by income groups from 1950 to 2018. All federal, state, and local taxes are included. Taxes are expressed as a fraction of pre-tax income. P0-10 denotes the bottom 10 percent of the income distribution, P10-20 the next 10 percent, etc.

Figure 1 ***Global income and wealth inequality, 2021***



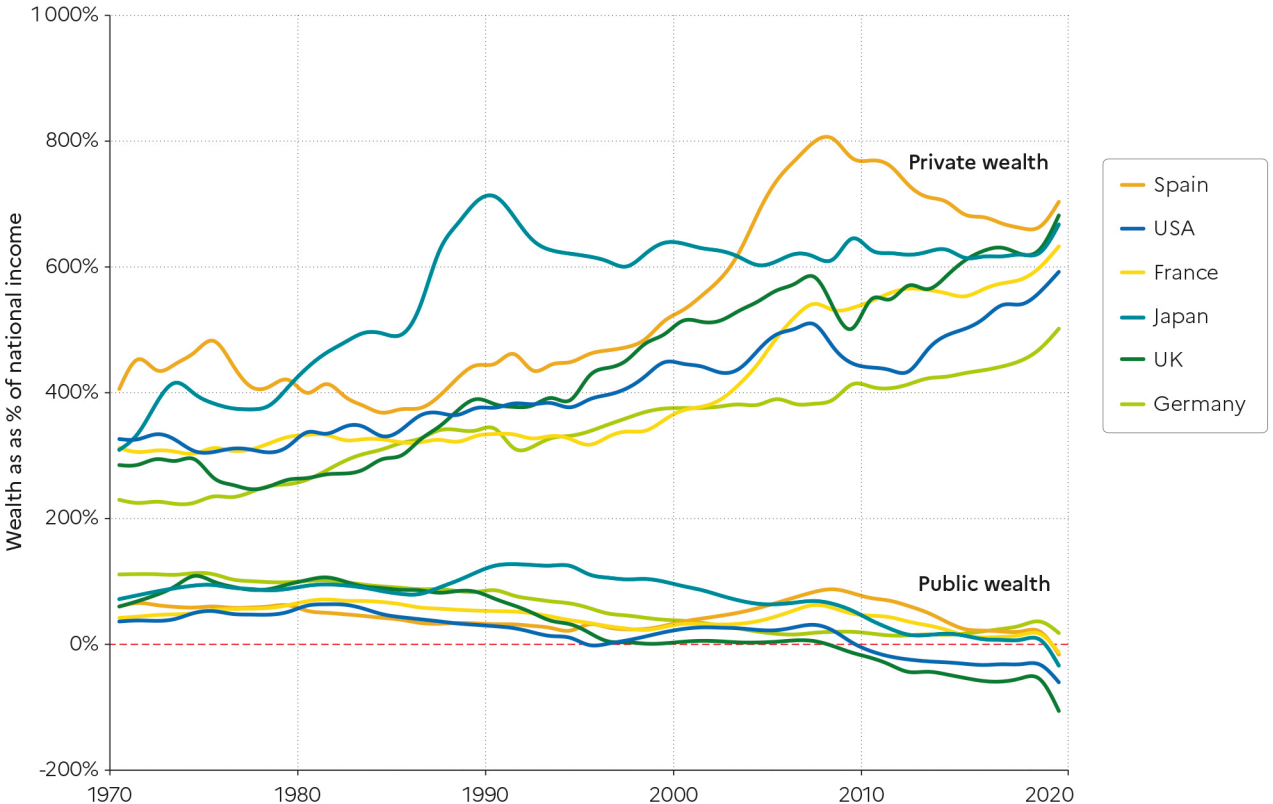
Interpretation: *The global 50% captures 8% of total income measured at Purchasing Power Parity (PPP). The global bottom 50% owns 2% of wealth (at Purchasing Power Parity). The global top 10% owns 76% of total Household wealth and captures 52% of total income in 2021. Note that top wealth holders are not necessarily top income holders. Incomes are measured after the operation of pension and unemployment systems and before taxes and transfers.* ***Sources and series:*** *wir2022.wid.world/methodology.*

Total household wealth (to national income)



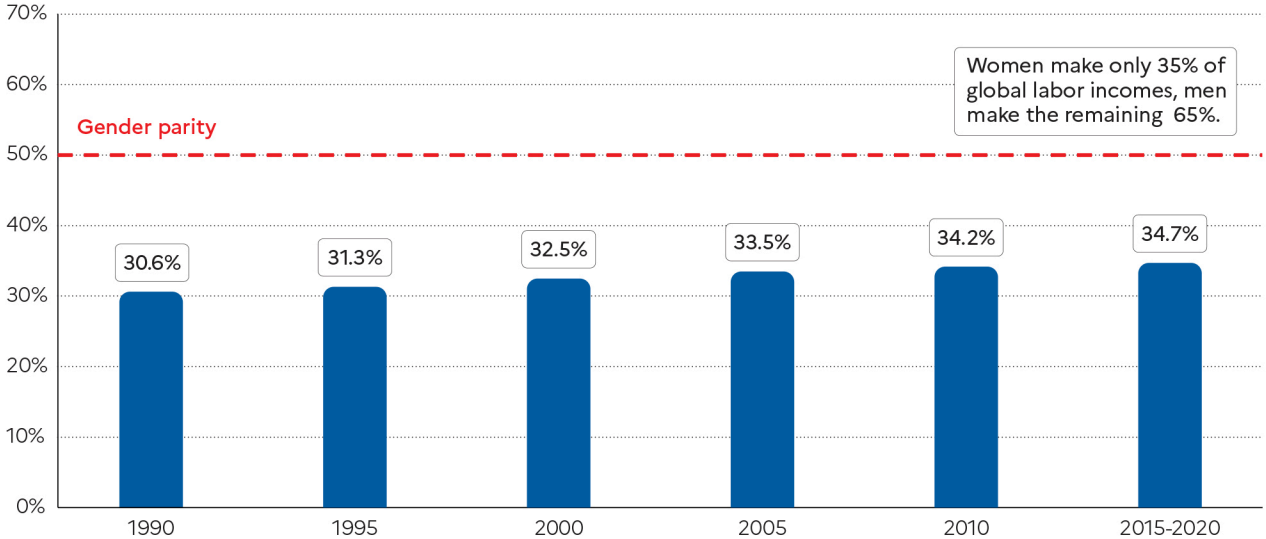
This figure depicts the share of total household wealth relative to national income Source: Piketty, Saez, and Zucman (2018).

Figure 8 ***The rise of private versus the decline of public wealth in rich countries, 1970-2020***



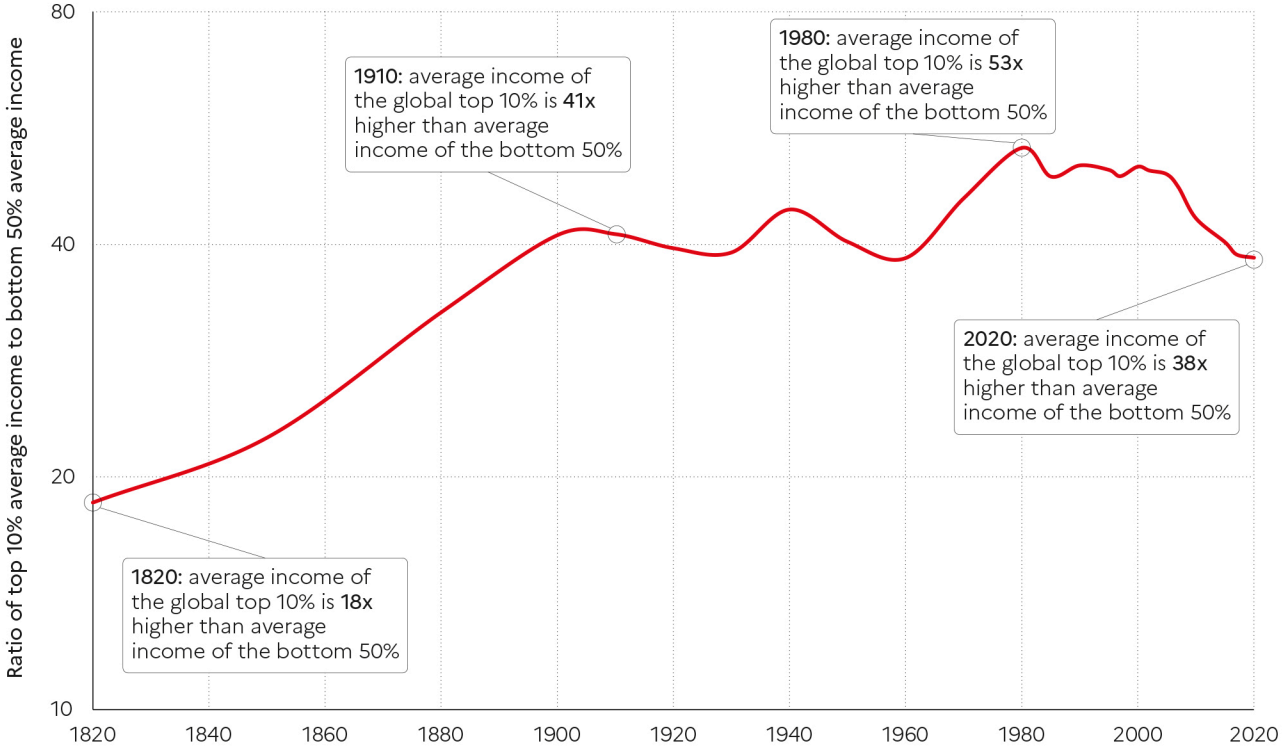
Interpretation: *Public wealth is the sum of all financial and non-financial assets, net of debts, held by governments. Public wealth dropped from 60% of national income in 1970 to -106% in 2020 in the UK.* ***Sources and series:*** *wir2022.wid.world/methodology, Bauluz et al. (2021) and updates.*

Figure 12 *Female share in global labor incomes, 1990-2020*



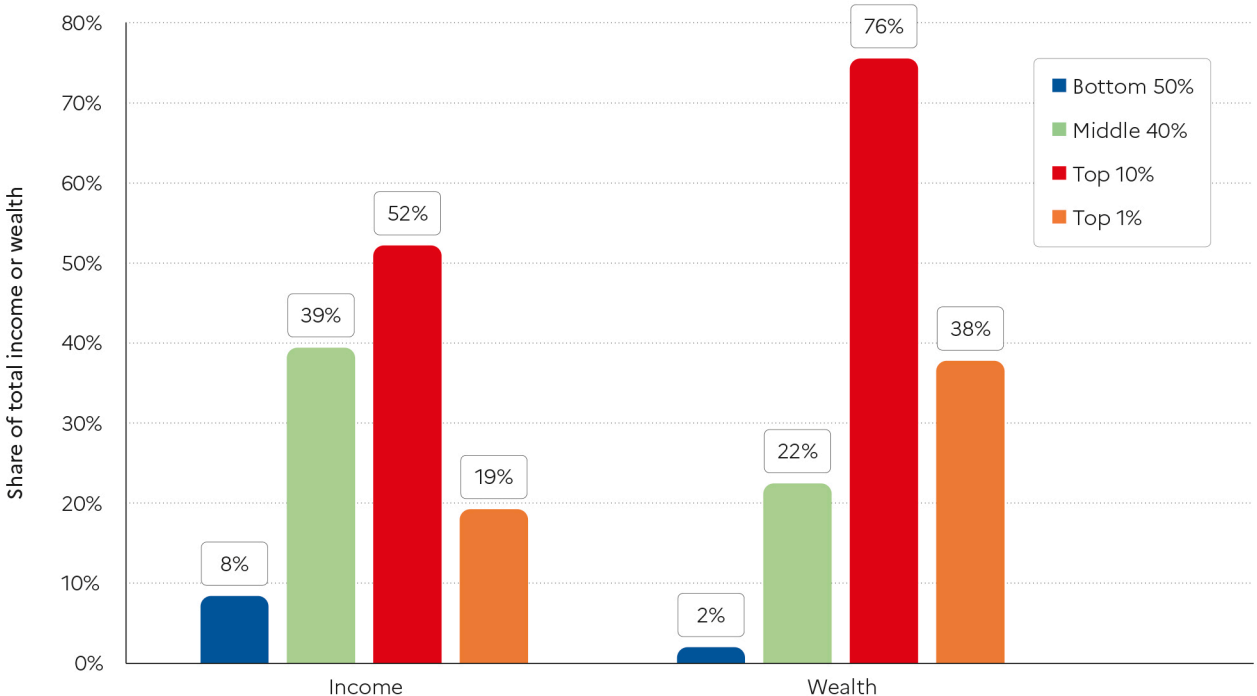
Interpretation: *The share of female incomes in global labour incomes was 31% in 1990 and nears 35% in 2015-2020. Today, males make up 65% of total labor incomes.* ***Sources and series:*** *wir2022.wid.world/methodology and Neef and Robilliard (2021).*

Figure 5 ***Global income inequality: T10/B50 ratio, 1820-2020***

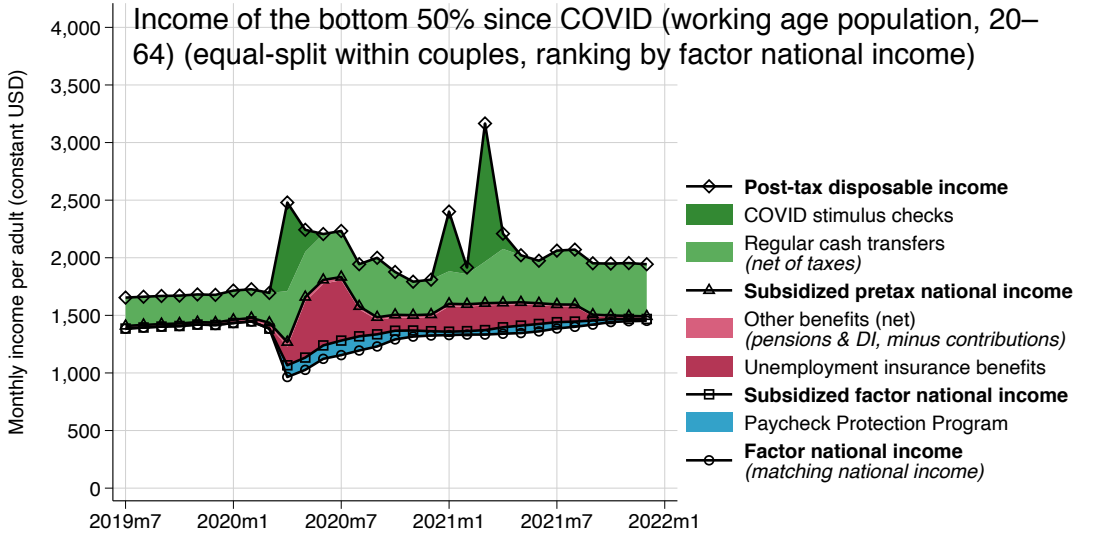


Interpretation: *Global inequality, as measured by the ratio T10/B50 between the average income of the top 10% and the average income of the bottom 50%, more than doubled between 1820 and 1910, from less than 20 to about 40, and stabilized around 40 between 1910 and 2020. It is too early to say whether the decline in global inequality observed since 2008 will continue. Income is measured per capita after pension and unemployement insurance transfers and before income and wealth taxes.* ***Sources and series:*** *wir2022.wid.world/lmethodology and Chancel and Piketty (2021).*

Figure 1.1 ***Global income and wealth inequality, 2021***

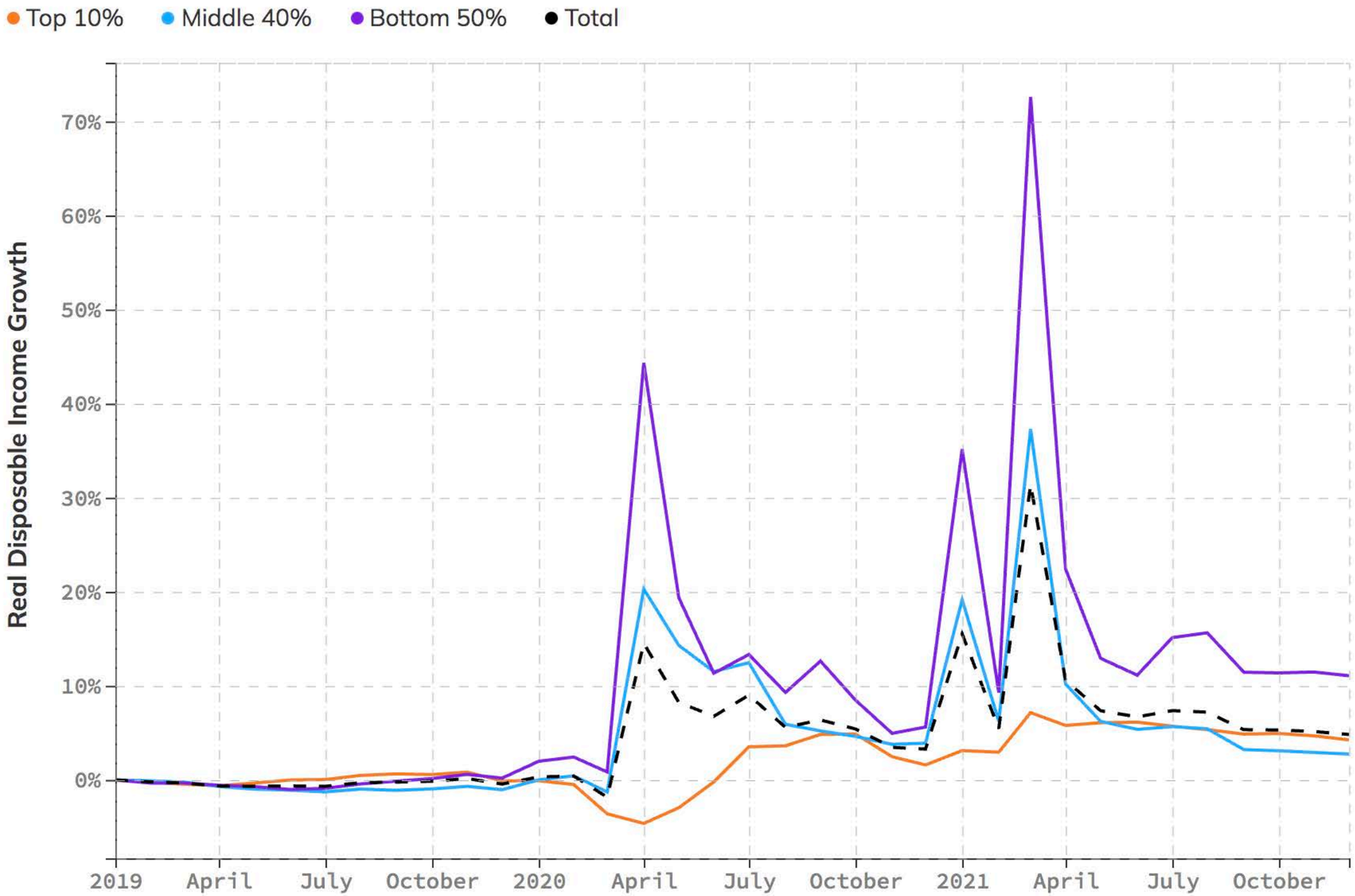


Interpretation: *The global 50% captures 8% of total income measured at Purchasing Power Parity (PPP). The global bottom 50% owns 2% of wealth (at Purchasing Power Parity). The global top 10% owns 76% of total Household wealth and captures 52% of total income in 2021. Note that top wealth holders are not necessarily top income holders. Income is measured after the operation of pension and unemployment systems and before taxes and transfers.* ***Sources and series:*** *wir2022.wid.world/methodology*


Income of the bottom 50% since COVID (working age population, 20–64) (equal-split within couples, ranking by factor national income)
Monthly income per adult (constant USD)
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
2019m7
2020m1
2020m7
2021m1
2021m7
2022m1
Post-tax disposable income
COVID stimulus checks
Regular cash transfers
(net of taxes)
Subsidized pretax national income
Other benefits (net)
(pensions & DI, minus contributions)
Unemployment insurance benefits
Subsidized factor national income
Paycheck Protection Program
Factor national income
(matching national income)

Disposable Income During the Pandemic

> Thanks to government transfers to help with covid losses (such as checks to families, extra unemployment benefits, the paycheck protection program, etc.), disposable income (defined as income after taxes and cash transfers) increased a lot, especially so for the Bottom 50%.



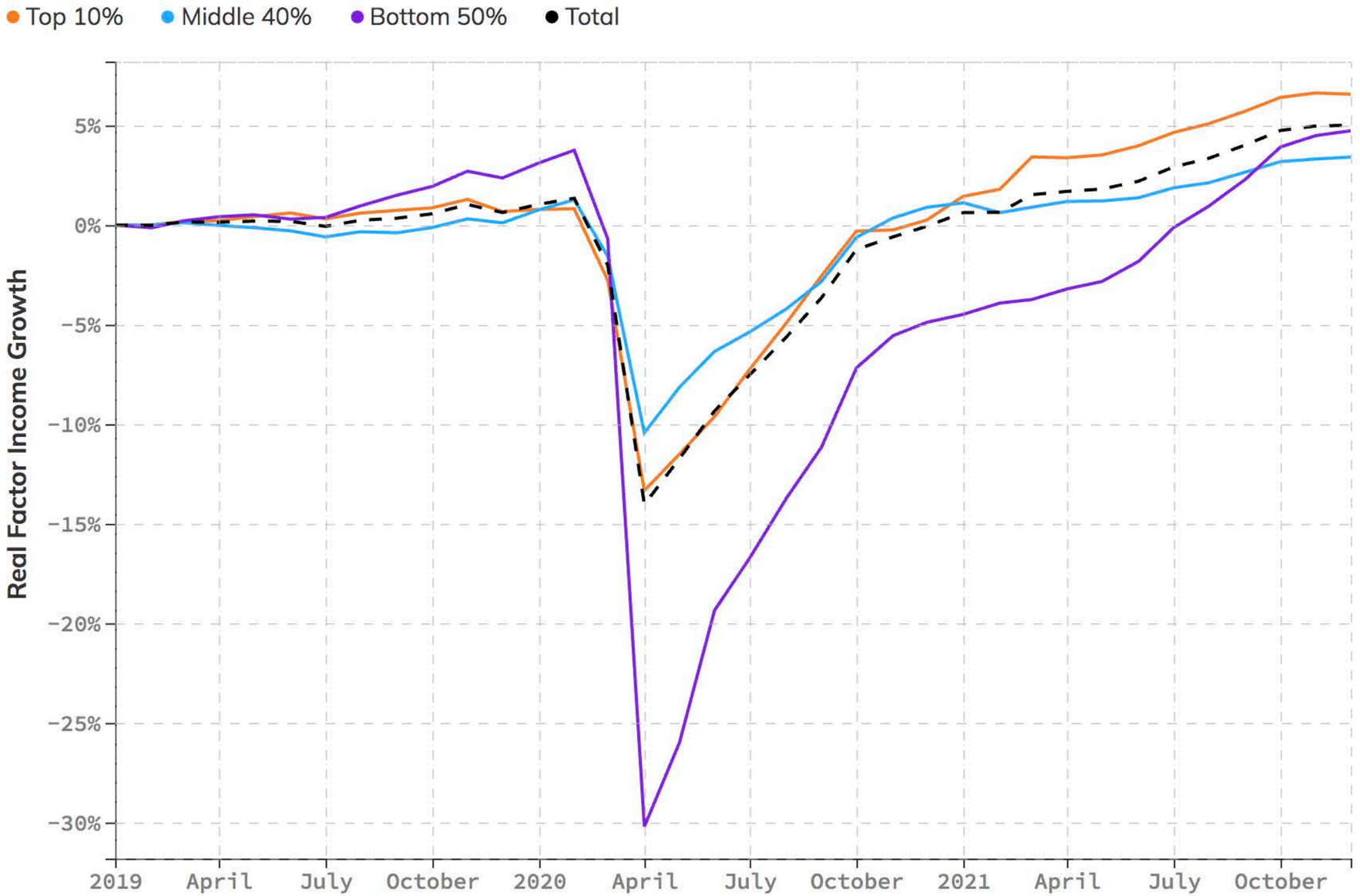
Disposable income growth per unit

From 01/2019 to 12/2021

Group	Growth (%)	Gain ($)
☐ Top 0.01%	4.6%	$910k
☐ Top 0.1%	5.8%	$260k
☐ Top 1%	6.4%	$67k
☑ Top 10%	4.2%	$11k
☑ Middle 40%	2.7%	$1.9k
☑ Bottom 50%	11.1%	$2.6k
☑ Total	4.8%	$3.2k

Factor Income During the Pandemic

Factor income (defined as labor income from work and capital income from ownership) fell a lot during COVID and the fall was much more dramatic for people in the Bottom 50%. But factor income recovered fast for all groups. All income figures adjust for price inflation.

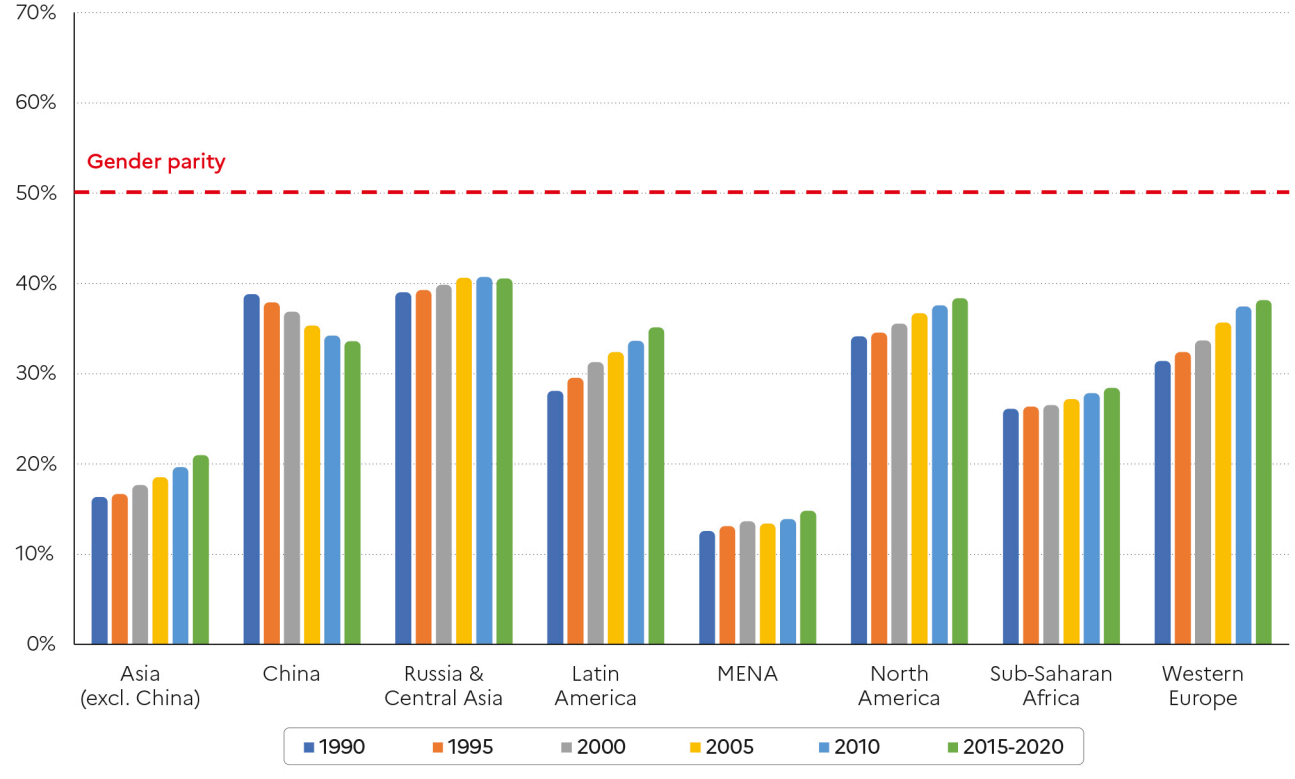


Factor income growth per unit

From 01/2019 to 12/2021

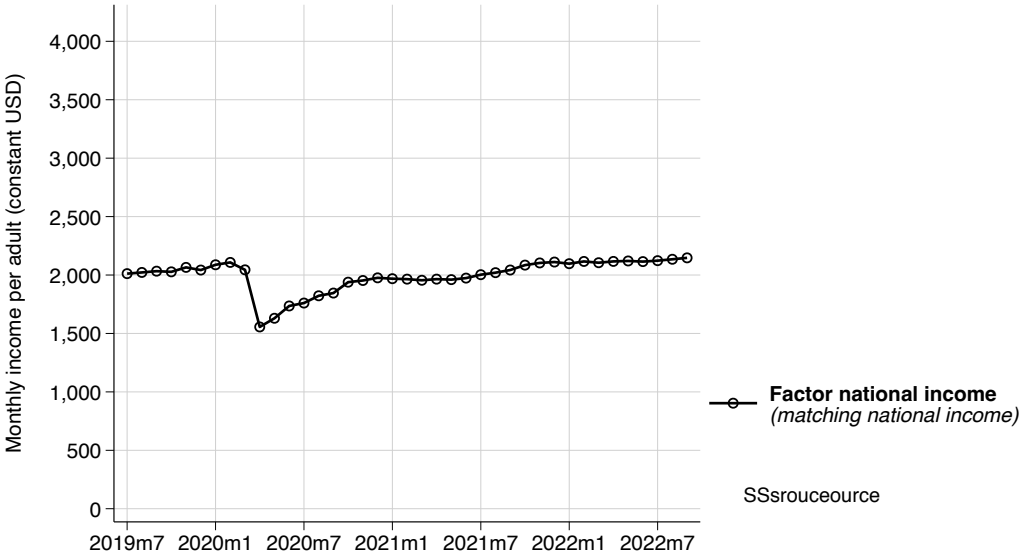
Group	Growth (%)	Gain ($)
☐ Top 0.01%	5.7%	$1.8M
☐ Top 0.1%	6.9%	$470k
☐ Top 1%	8.2%	$120k
☑ Top 10%	**6.6%**	$24k
☑ Middle 40%	**3.4%**	$2.9k
☑ Bottom 50%	**4.7%**	$870
☑ Total	**5%**	$4.0k

Figure 13 ***Female labor income share across the world, 1990-2020***

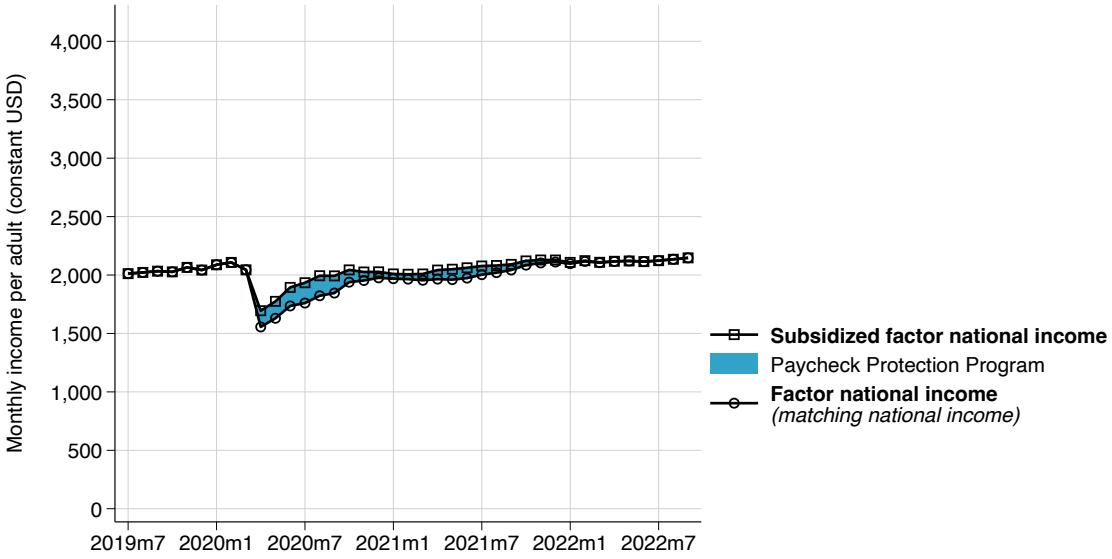


Interpretation: *The female labour income share rose from 34% to 38% in North America between 1990 and 2020.* ***Sources and series:*** *wir2022.wid.world/methodology and Neef and Robilliard (2021).*

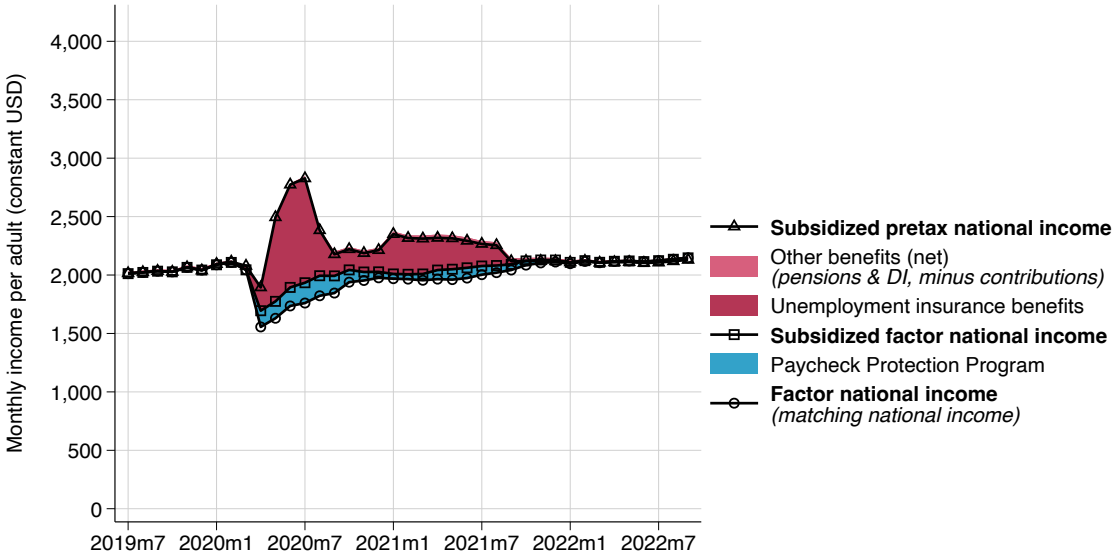
Bottom 50% Incomes (aged 20-64): The Role of Government Transfers



Bottom 50% Incomes (aged 20-64): The Role of Government Transfers



Bottom 50% Incomes (aged 20-64): The Role of Government Transfers



Bottom 50% Incomes (aged 20-64): The Role of Government Transfers

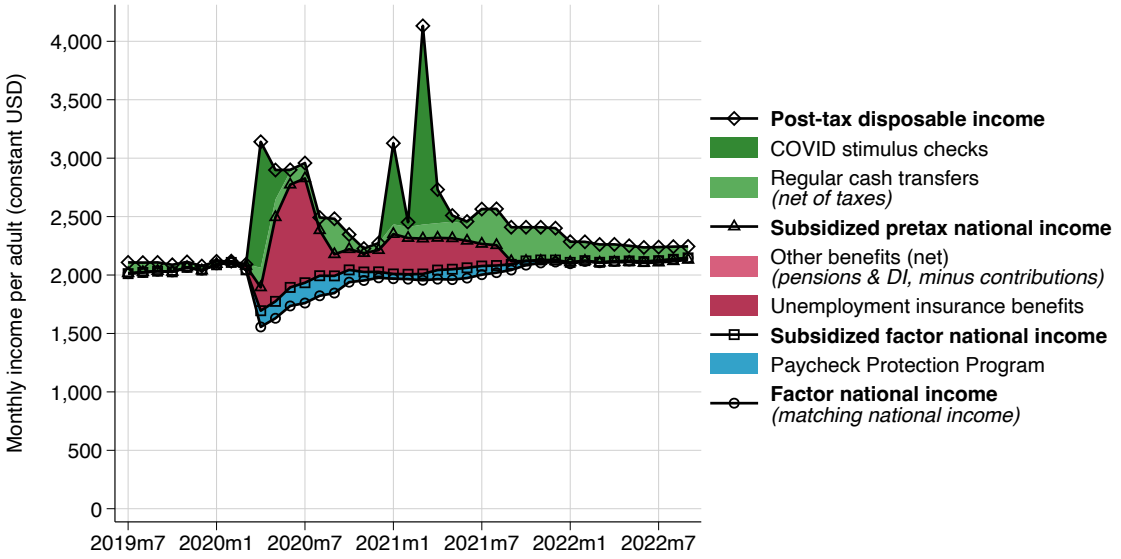
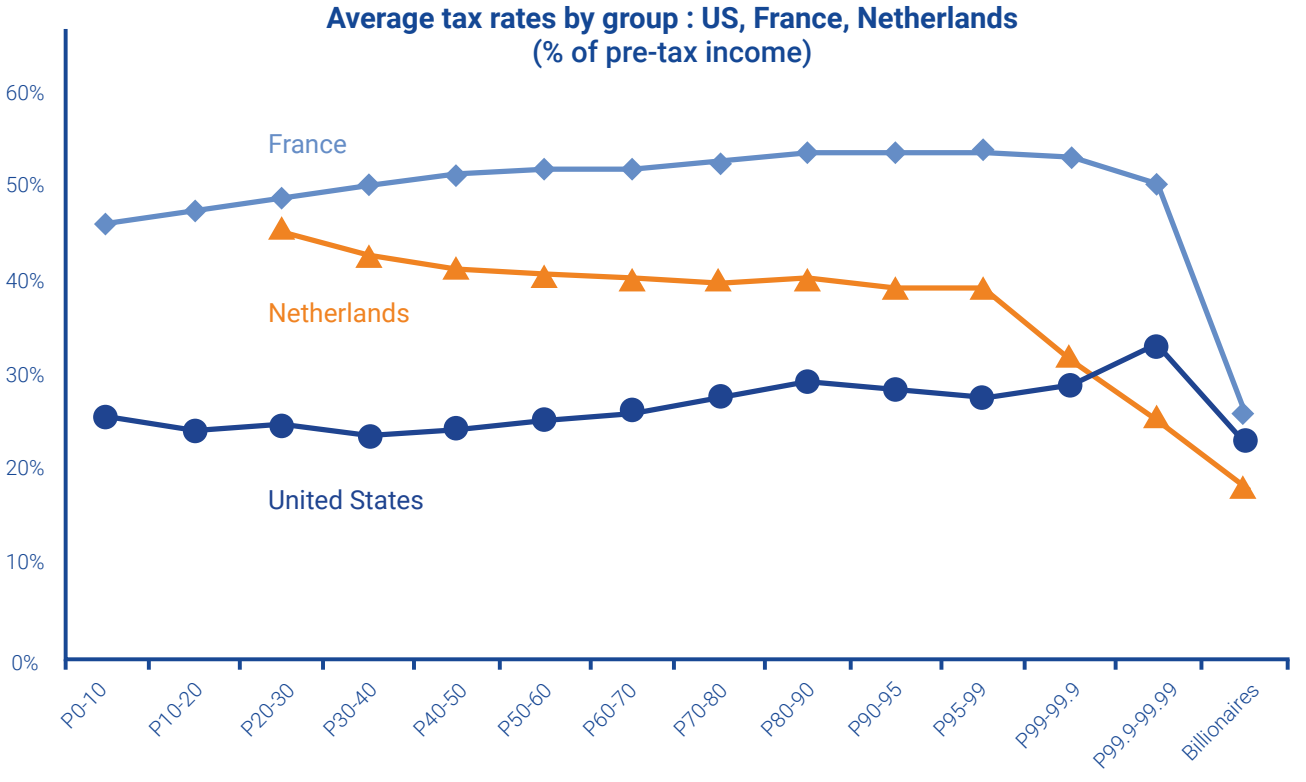


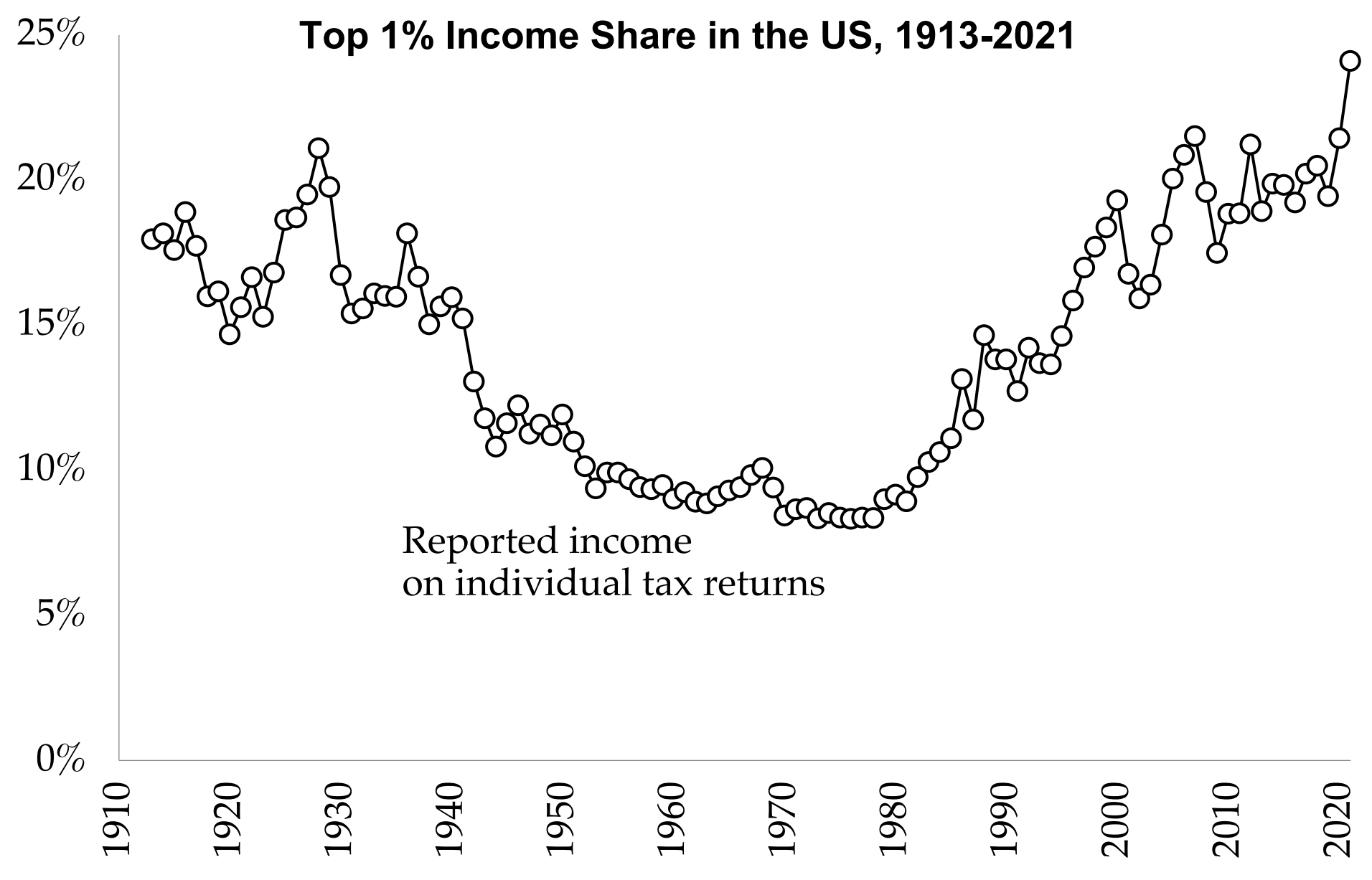
Figure 4

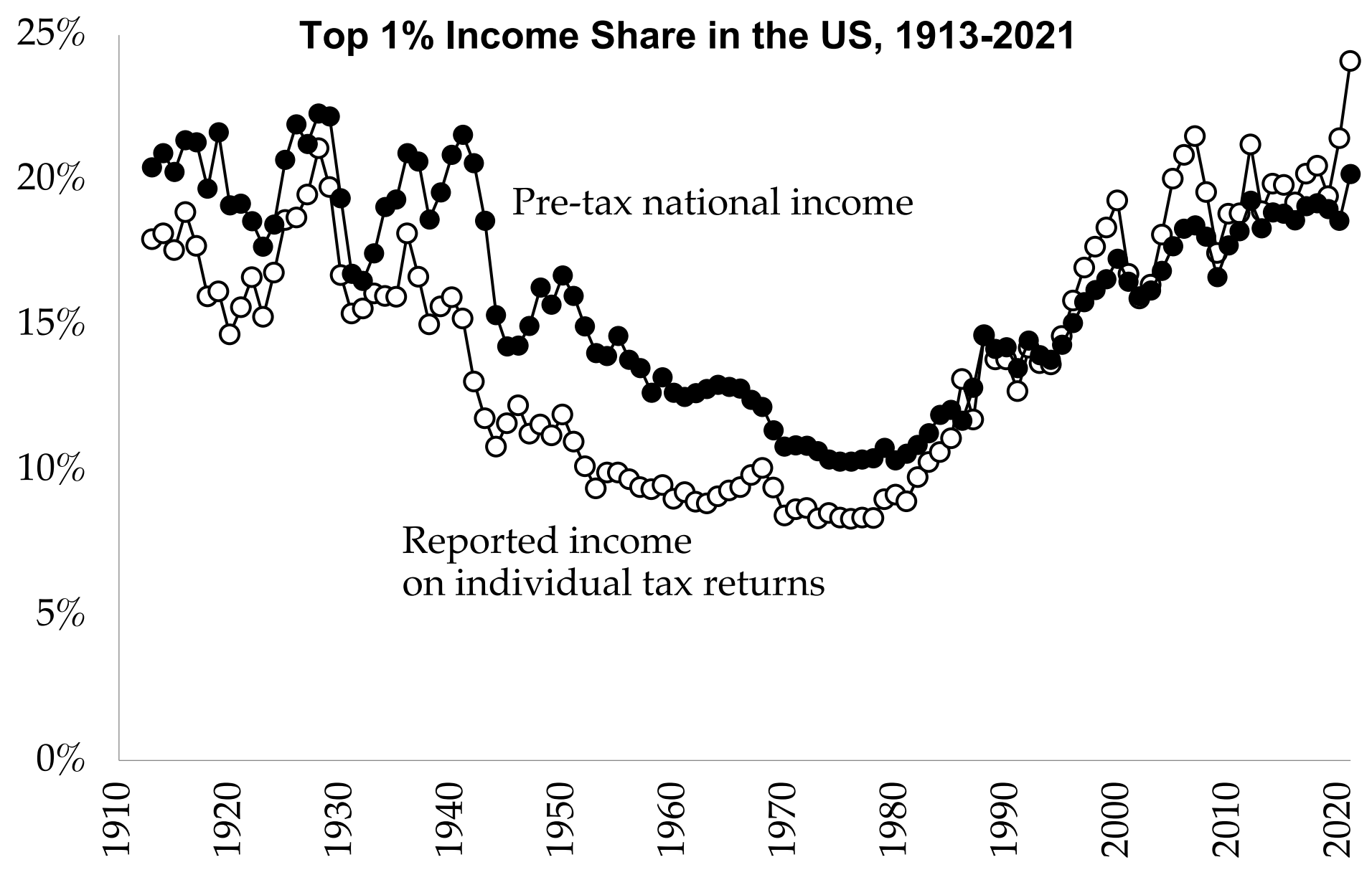
The tax deficit of billionaires

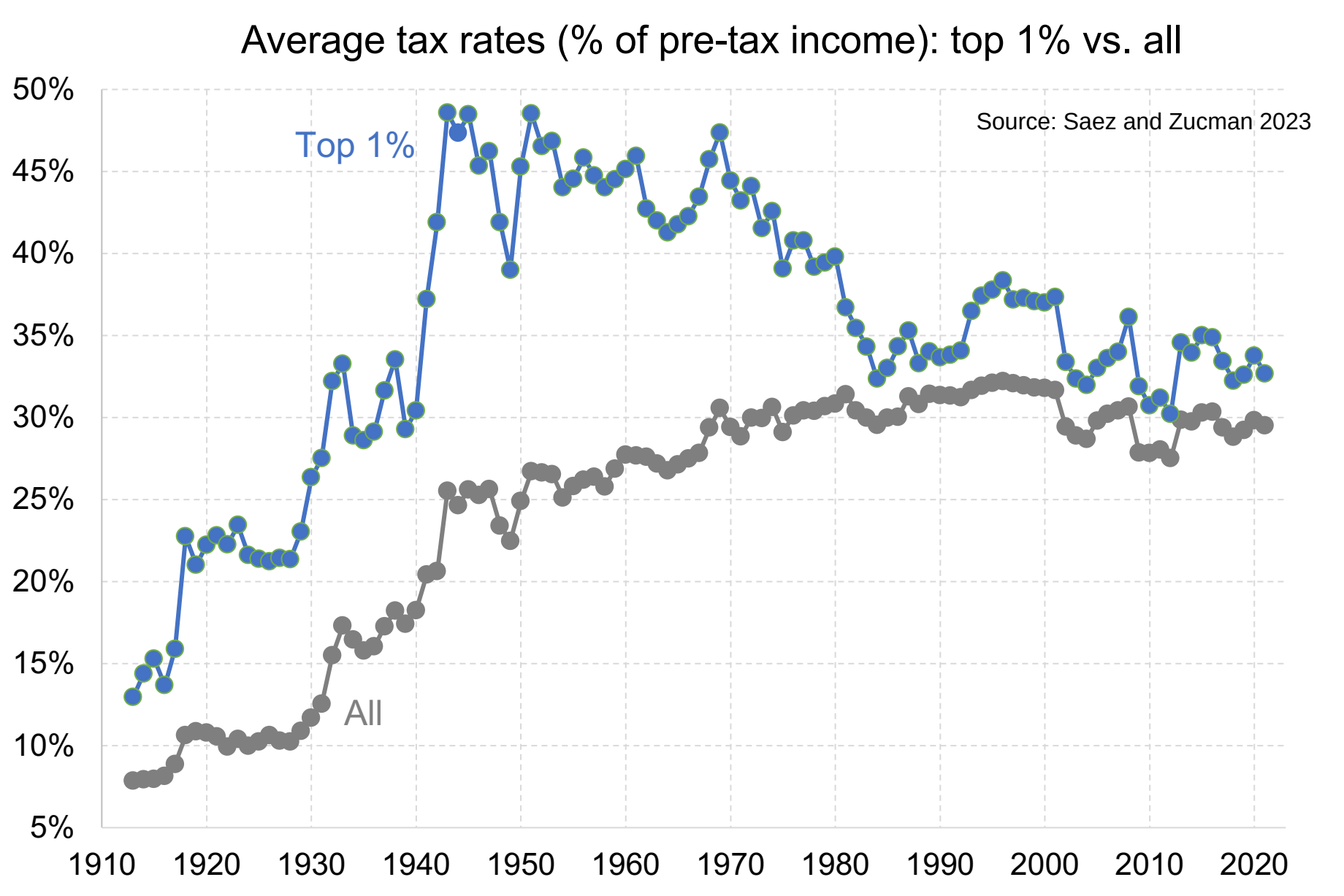
Source: Global Tax Evasion Report 2024

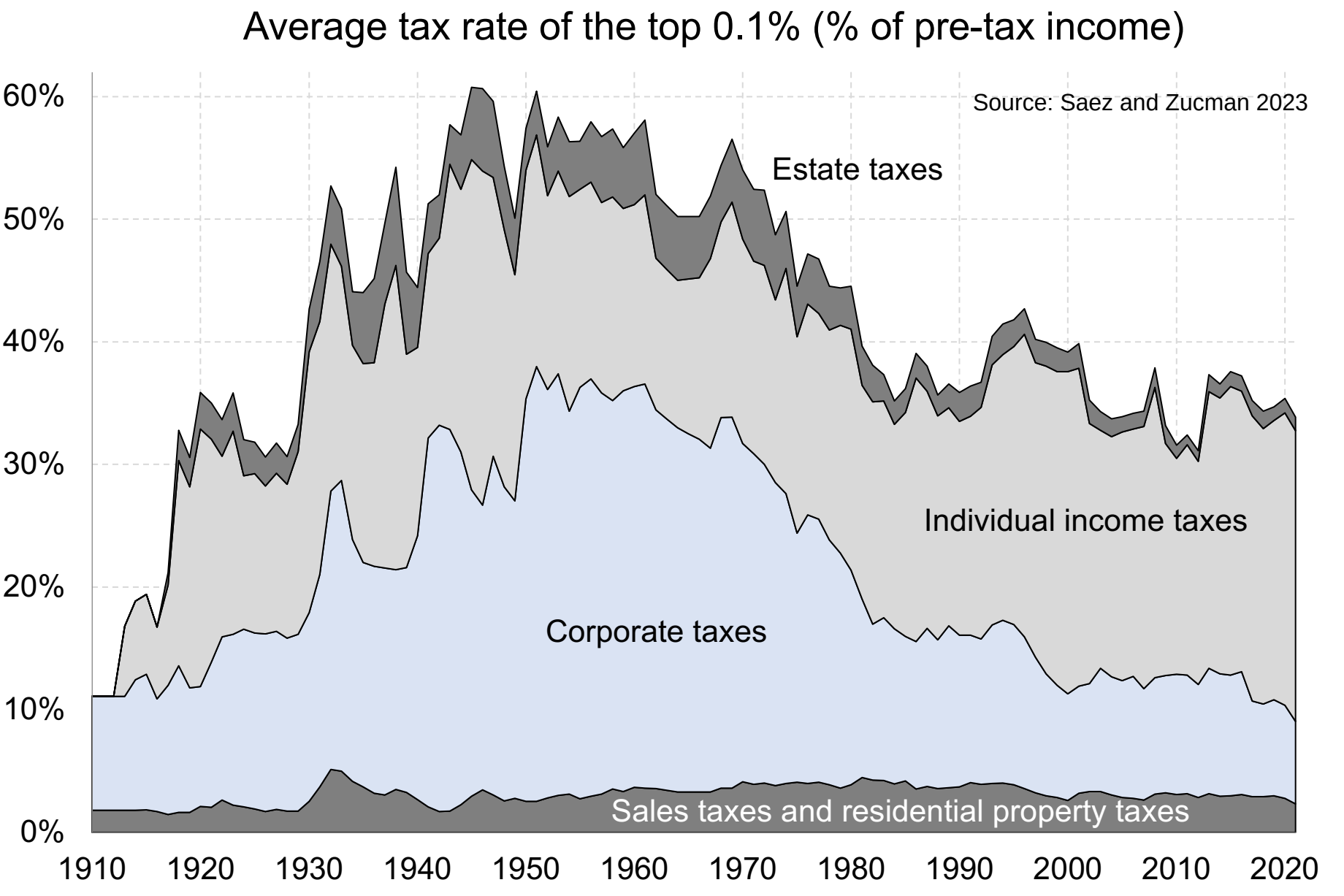


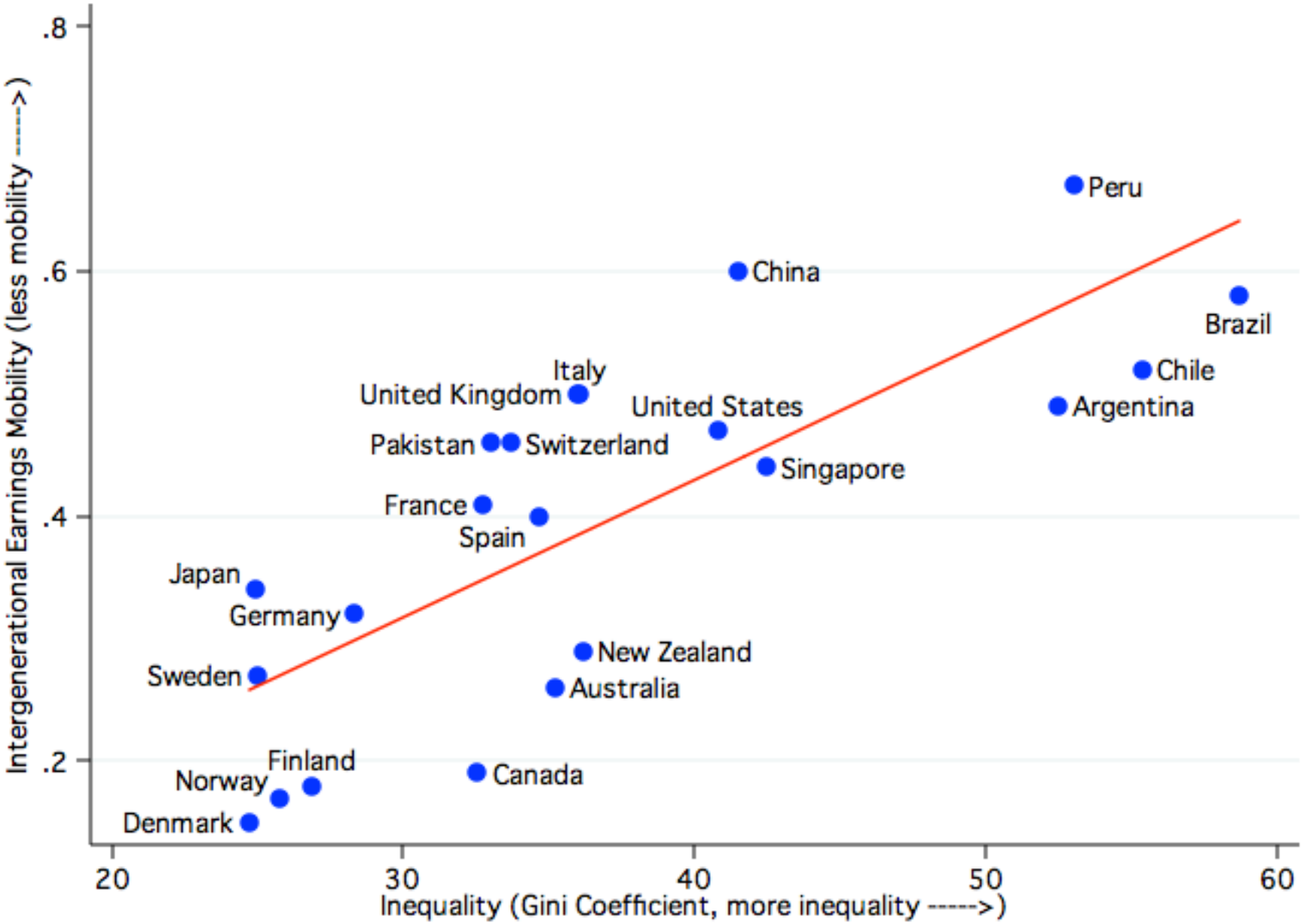
Notes: This figure reports estimates of effective tax rates by pre-tax income groups and for billionaires in France, the Netherlands, and the United States. These estimates include all taxes paid at all levels of government and are expressed as a percent of pre-tax income. P0-10 denotes the 10% of adults at the bottom of the pre-tax income distribution, P10-20 the next decile, etc. Pre-tax income includes all national income (measured following standard national account definitions) before government taxes and transfers and after the operation of the pension system. National income excludes unrealized capital gains but includes the retained earnings of companies. Sources: see chapter 4.

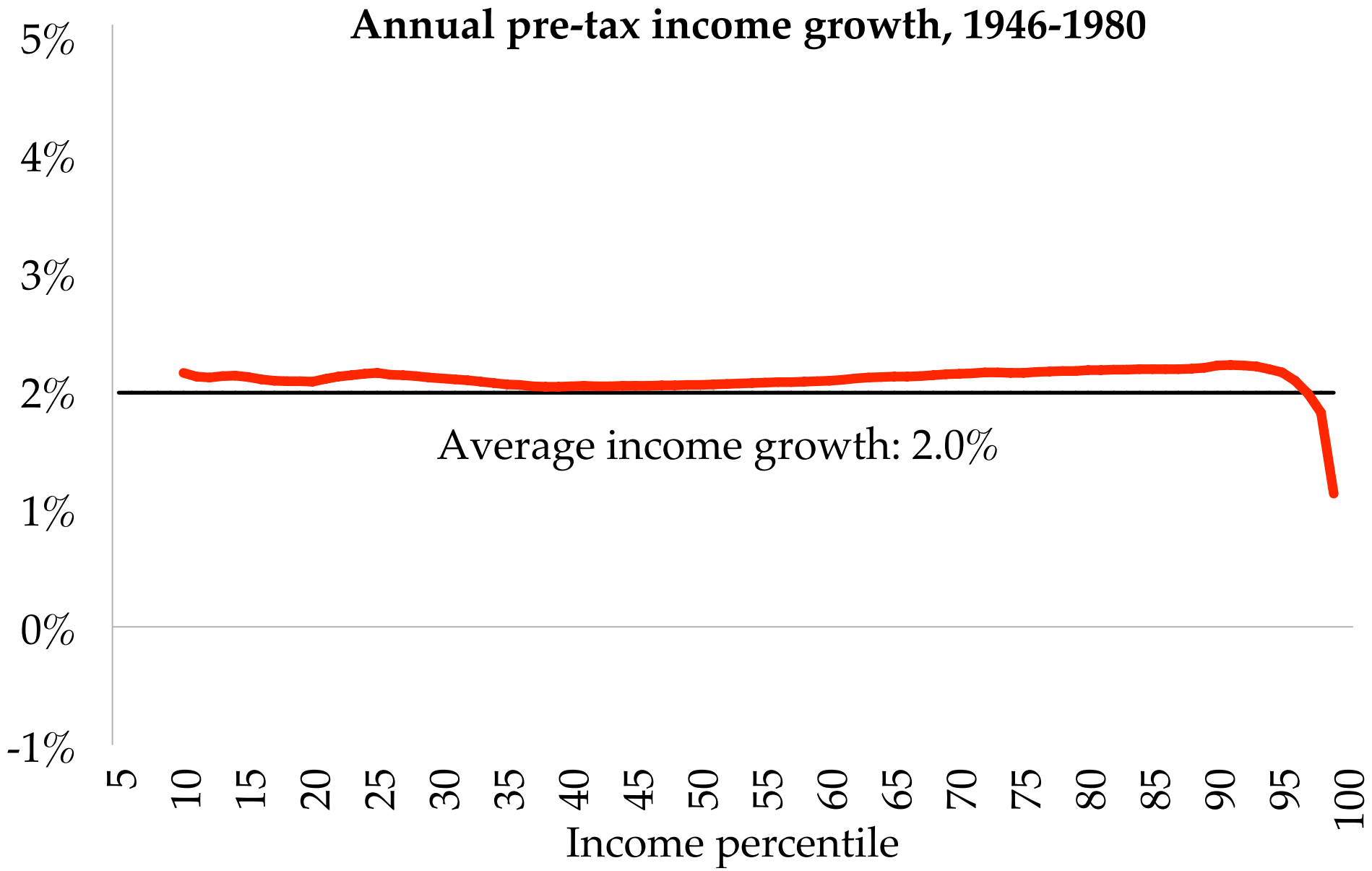

Top 1% Income Share in the US, 1913-2021
25%
20%
15%
10%
5%
0%
Reported income
on individual tax returns
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020

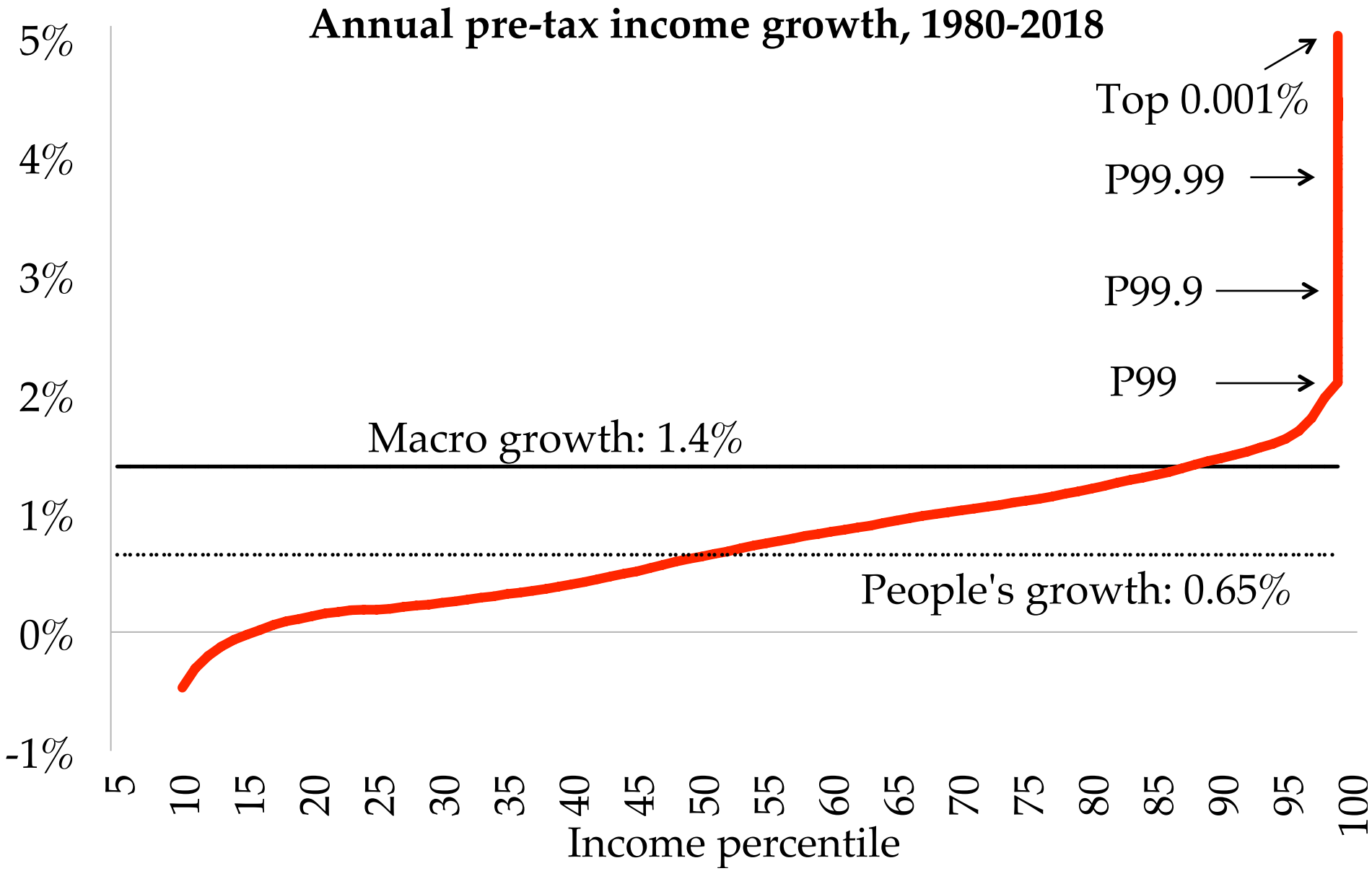

Top 1% Income Share in the US, 1913-2021
25%
20%
15%
10%
5%
0%
Pre-tax national income
Reported income
on individual tax returns
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020

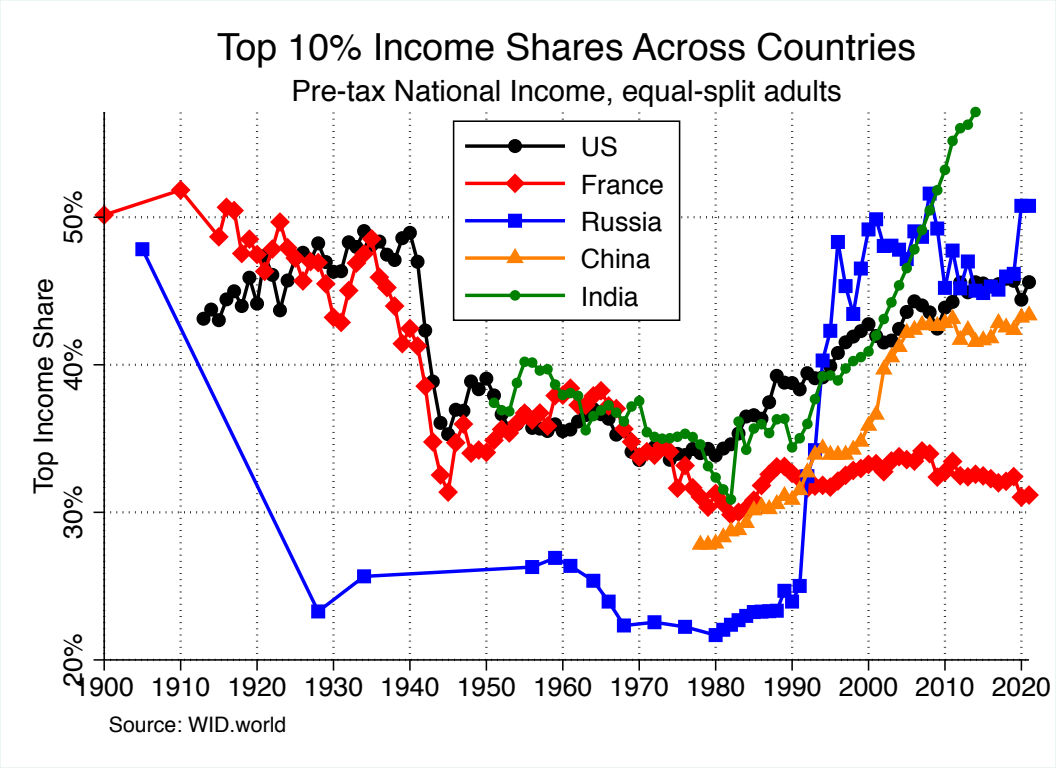

Average tax rates (% of pre-tax income): top 1% vs. all
Source: Saez and Zucman 2023
Top 1%
All
50%
45%
40%
35%
30%
25%
20%
15%
10%
5%
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020


Average tax rate of the top 0.1% (% of pre-tax income)
Source: Saez and Zucman 2023
Estate taxes
Individual income taxes
Corporate taxes
Sales taxes and residential property taxes
60%
50%
40%
30%
20%
10%
0%
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020


.8
.6
.4
.2
Intergenerational Earnings Mobility (less mobility ----->)
Peru
China
Brazil
Chile
Argentina
Italy
United Kingdom
United States
Pakistan
Switzerland
Singapore
France
Spain
Japan
Germany
New Zealand
Sweden
Australia
Finland
Norway
Canada
Denmark
20
30
40
50
60
Inequality (Gini Coefficient, more inequality ----->)


Annual pre-tax income growth, 1946-1980
5%
4%
3%
2%
1%
0%
-1%
Average income growth: 2.0%
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
Income percentile


Annual pre-tax income growth, 1980-2018
5%
4%
3%
2%
1%
0%
-1%
Top 0.001%
P99.99
P99.9
P99
Macro growth: 1.4%
People's growth: 0.65%
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
Income percentile


Top 10% Income Shares Across Countries
Pre-tax National Income, equal-split adults
US
France
Russia
China
India
Top Income Share
50%
40%
30%
20%
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020
Source: WID.world

Inequality differences after taxes are mainly due to inequality gaps before taxes: role of pre-distribution

Figure 1.10 *Inequality before and after taxes 2018-2021: Top 10/Bottom 50 income gap*

Interpretation: *Before taxes, the bottom 50% in South Africa earns 63 times less than the top 10%, whereas after taxes, the bottom 50% earns 24 times less than the top 10%. Income is measured after pension and unemployment payments and benefits received by individuals but before other taxes they pay and transfers they receive. Data for 2018-2021.* ***Sources and series:*** *wir2022.wid.world/methodology*

The Distribution of Global Economic Growth, 1980-2019

Total Per Capita Income Growth by Percentile in the World as a Whole, 1980-2019

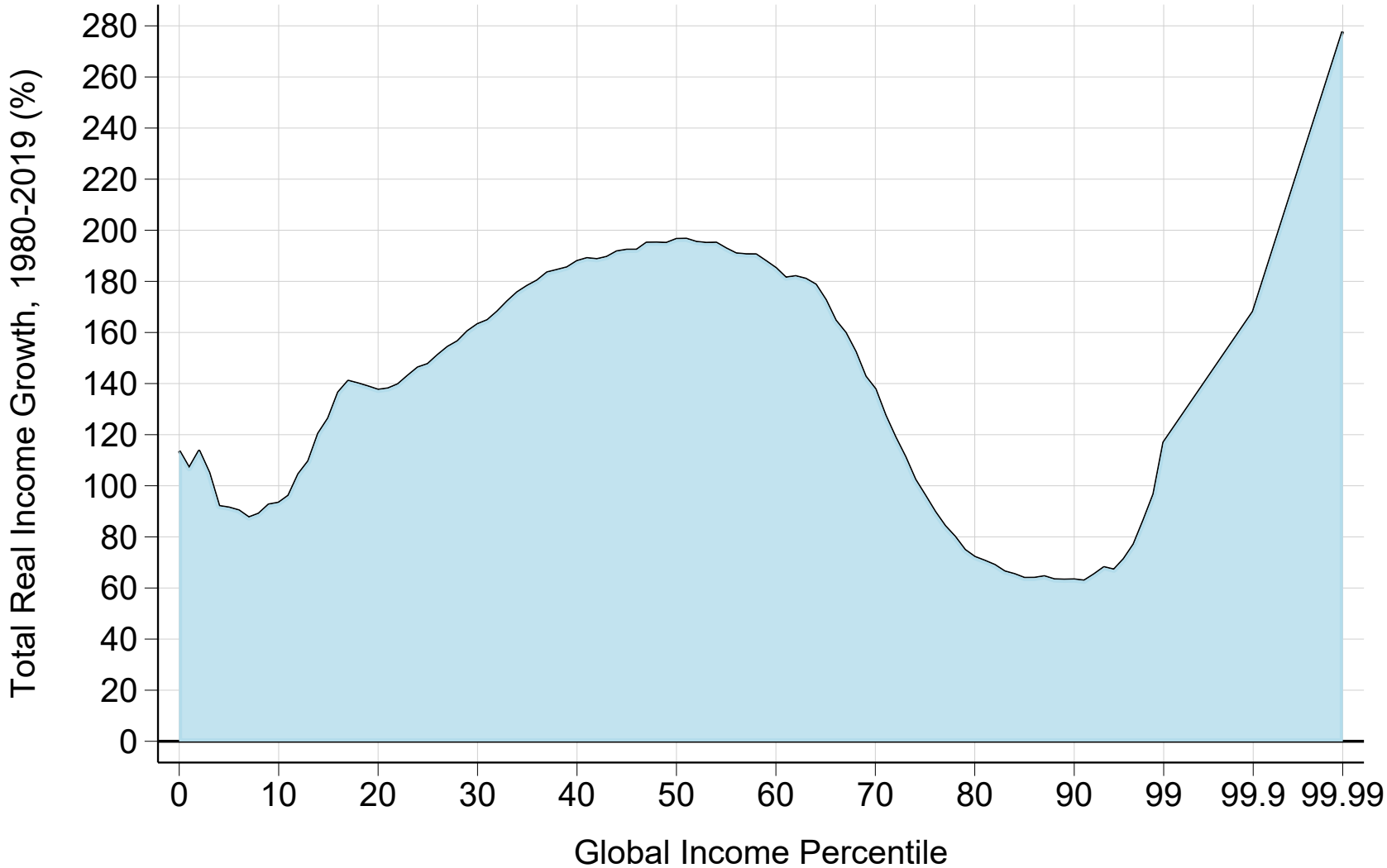
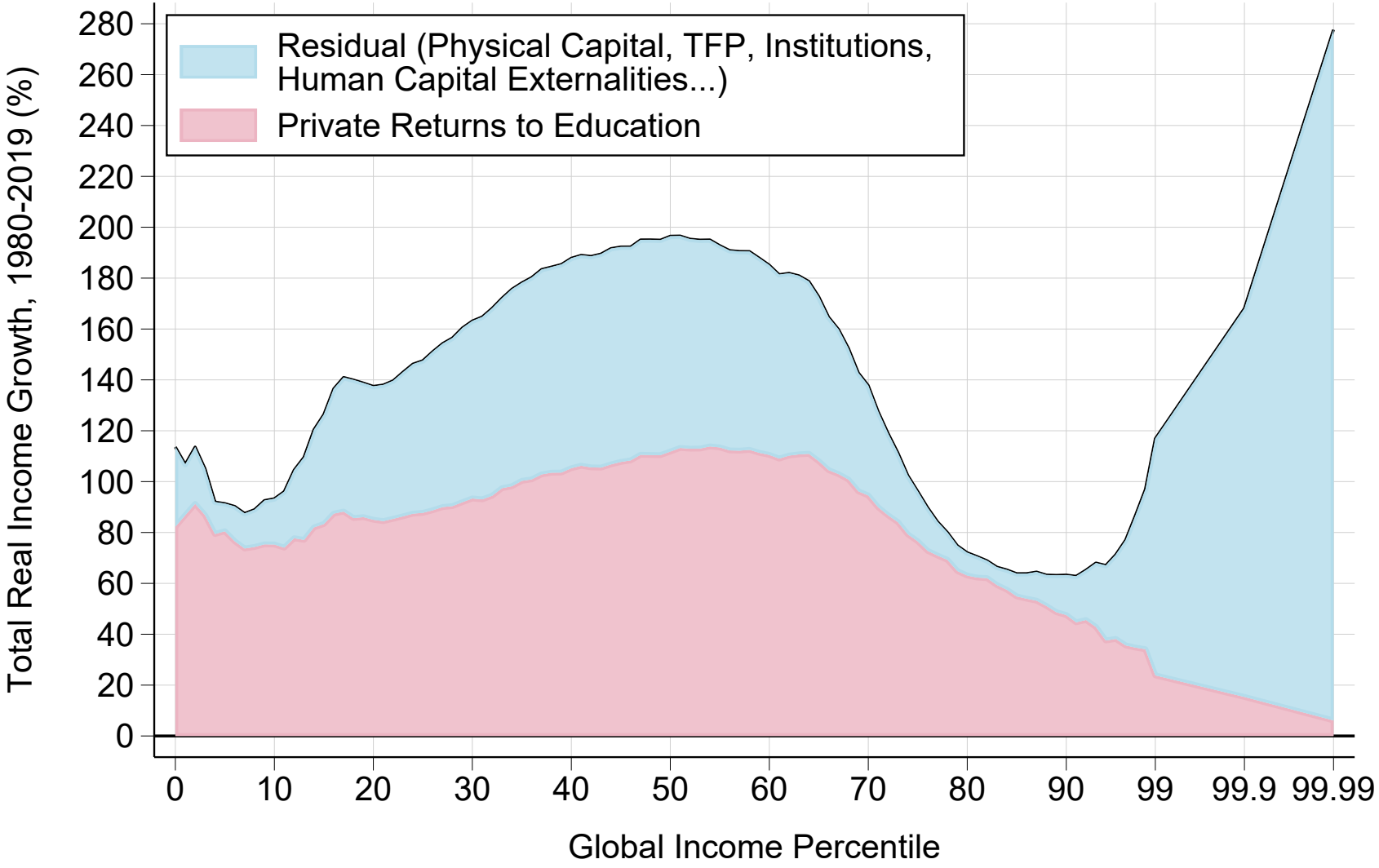


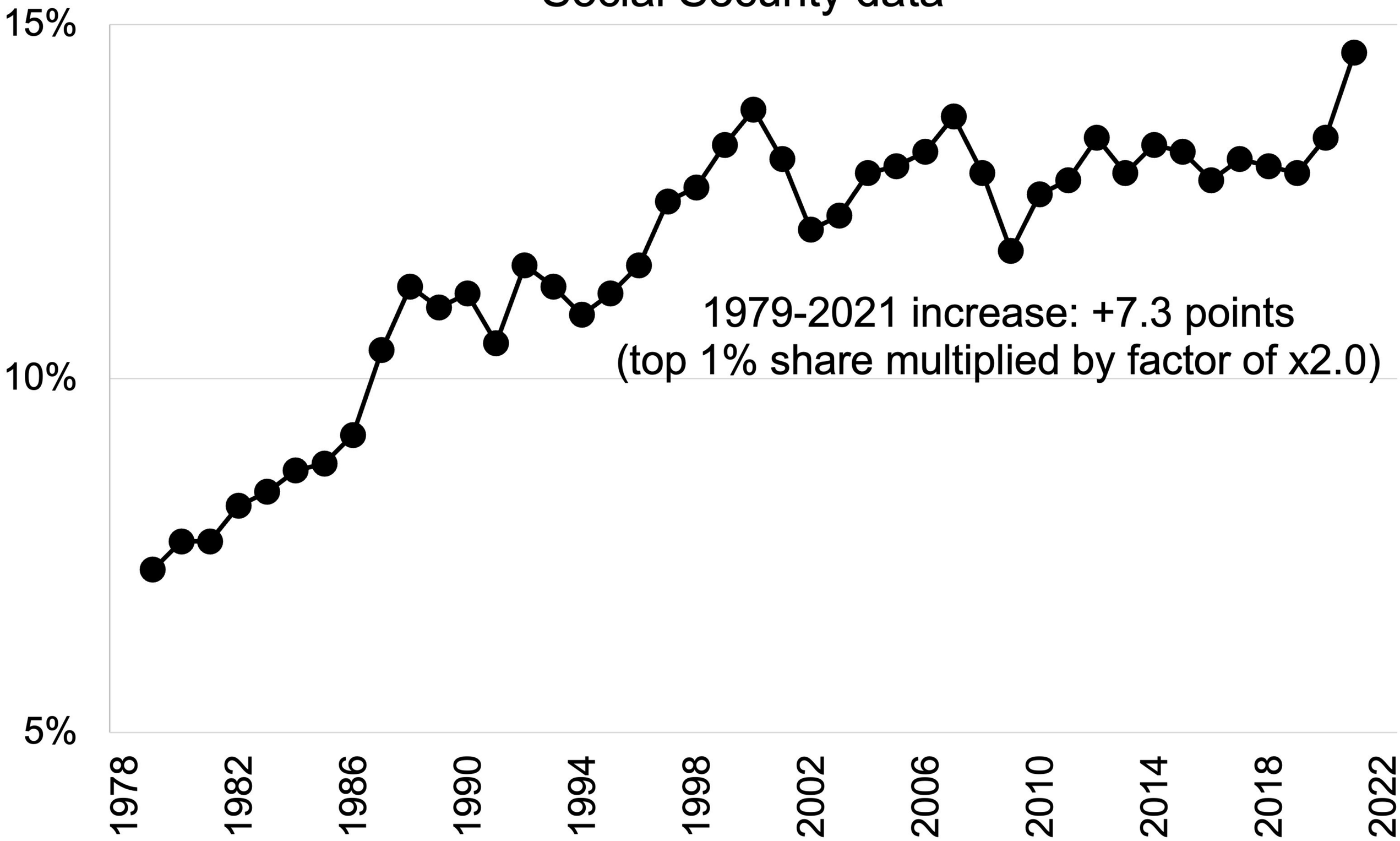
Figure 1 – Education and the Distribution of Global Economic Growth, 1980-2019



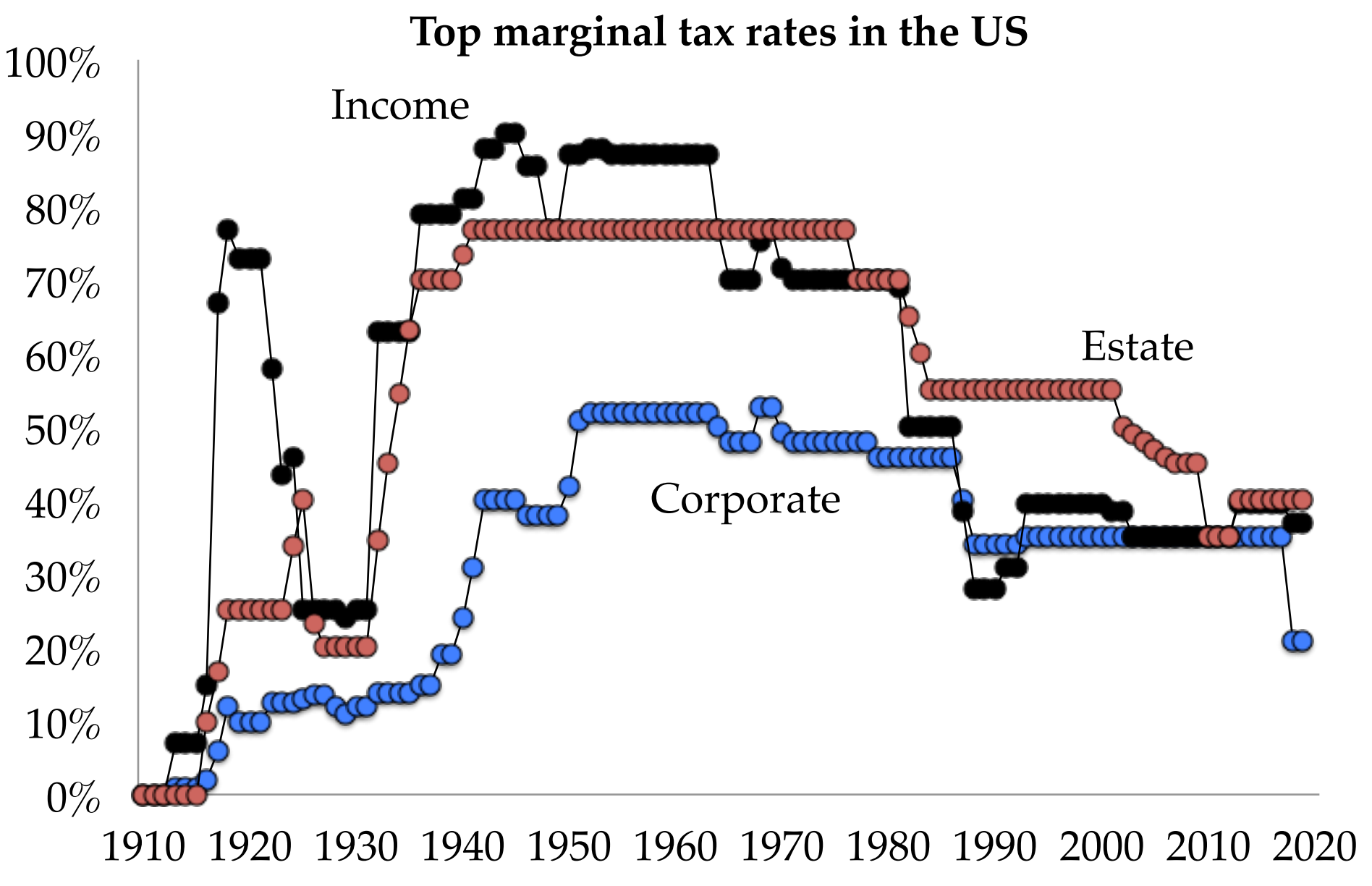
Notes. The figure plots total real income growth by global income percentile from 1980 to 2019, decomposing it into a part that can be explained by private returns to schooling and an unexplained component. The upper shaded area represents the growth rates that would have prevailed absent any improvement in the education of the world's working-age population since 1980. The lower shaded area represents the corresponding contribution of education to economic growth. From 1980 to 2019, the average income of the 20^{th} percentile of the world distribution of income grew by 140%, 80 percentage points of which can be rationalized by private returns to education. Education thus accounts for about 60% of growth among this group since 1980.

Top 1% share of earnings, 1979-2021

Social Security data



Source: Social Security wage statistics, see https://www.epi.org/publication/inequality-2021-ssa-data/#


Top marginal tax rates in the US
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Income
Estate
Corporate
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
2020