

Inequality and Sustainability: A Comparative & Historical Perspective

Thomas Piketty

PSE-CEPR Policy Forum, June 27 2023

- **1. Sustainable development in 21c will require a drastic compression in inequality.** Lower and middle classes in the North & the South will never accept to change their lifestyles if we do not implement a massive reduction of top-end living standards and wealth concentration.
- **2. Sustainable development in 19c-20c did already rely on a drastic compression in inequality.** The long-run movement toward more political and socioeconomic equality played a central role in the rise of modern economic prosperity and political stability.

- **3. There is a lot to learn from the past trajectories toward more equality.**
- Crisis and wars can play a role, but such shocks are not necessary nor sufficient
- **The key force behind the rise of equality in 19c-20c was the rise of the labor movement** and the successful political mobilization around the social-democratic platform (rise of social state, democratisation of education, progressive taxation)
- **What we need is a new social-democratic platform:** democratic socialism for the 21c, with a more global perspective than 20c social-democracy

A
BRIEF
HISTORY
of
EQUALITY
THOMAS
PIKETTY

*Author of the New York Times Bestsellers
Capital and Ideology and Capital in the Twenty-First Century*


WORLD
INEQUALITY
REPORT
2022



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WORLD
INEQUALITY
LAB

wir2022.wid.world

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WORLD

BY COUNTRY ▾

DATA

WORLD
INEQUALITY
DATABASE

METHODOLOGY ▾

ABOUT US ▾

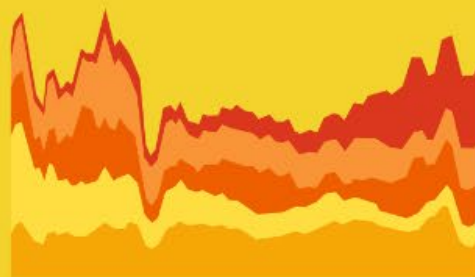
NEWS

WORLD VIEW



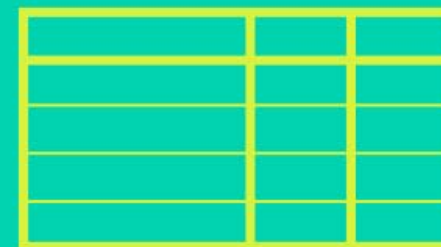
Compare inequality between countries on an interactive world map

COUNTRY GRAPHS



Follow the evolution of inequality within countries with user-friendly graphs

DATA TABLES



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COUNTRY & REGION >

KEY INDICATORS ▾

AVERAGE INCOME

- Per adult national income
- Per adult GDP

INCOME INEQUALITY

- Top 10% share
- Bottom 50% share
- Top 1% share

AVERAGE WEALTH

- Per adult national wealth
- Wealth-income ratio

WEALTH INEQUALITY

- Top 10% share
- Bottom 50% share
- Top 1% share

CARBON INEQUALITY [NEW]

- Top 10% carbon emitters

GENDER INEQUALITY [NEW]

- Female labor income share

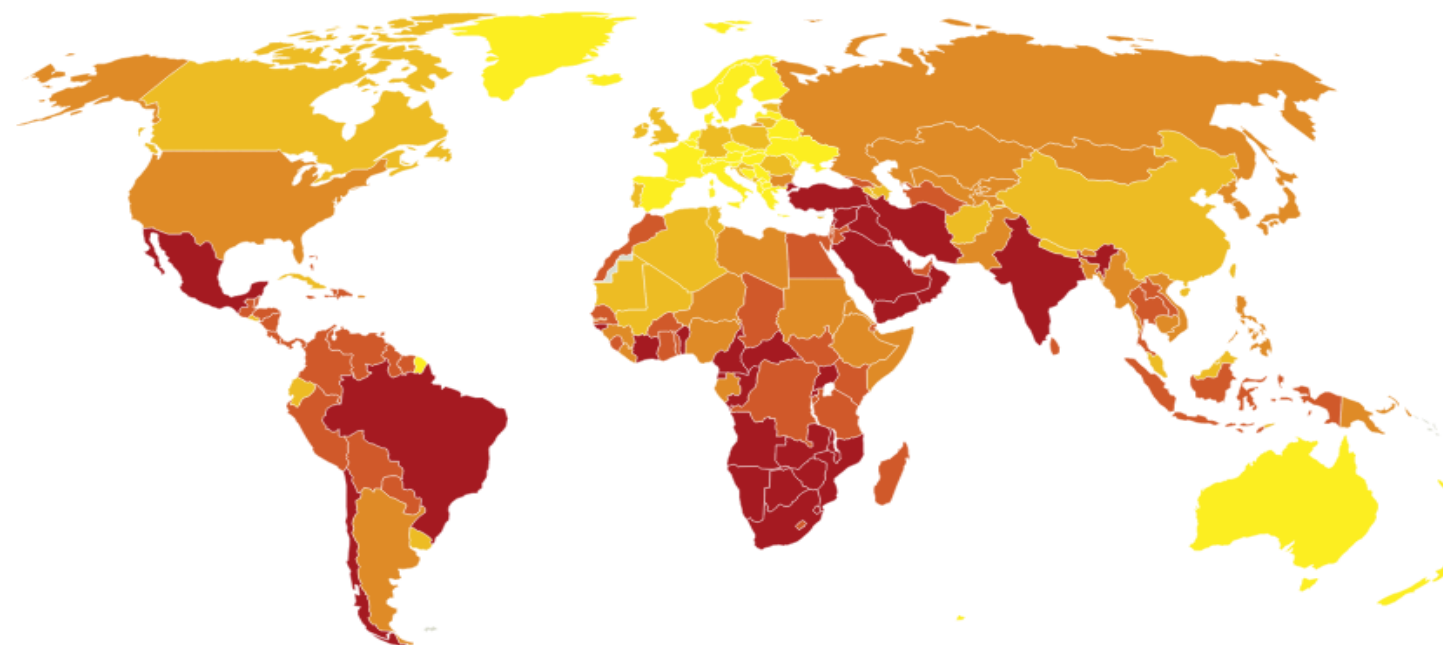
MORE INDICATORS >

Top 10% national income share

Region View

Country View

Latest year ▾



Share of total (%)

21 - 35
 35 - 42
 42 - 47
 47 - 51
 51 - 67



COUNTRY & REGION >

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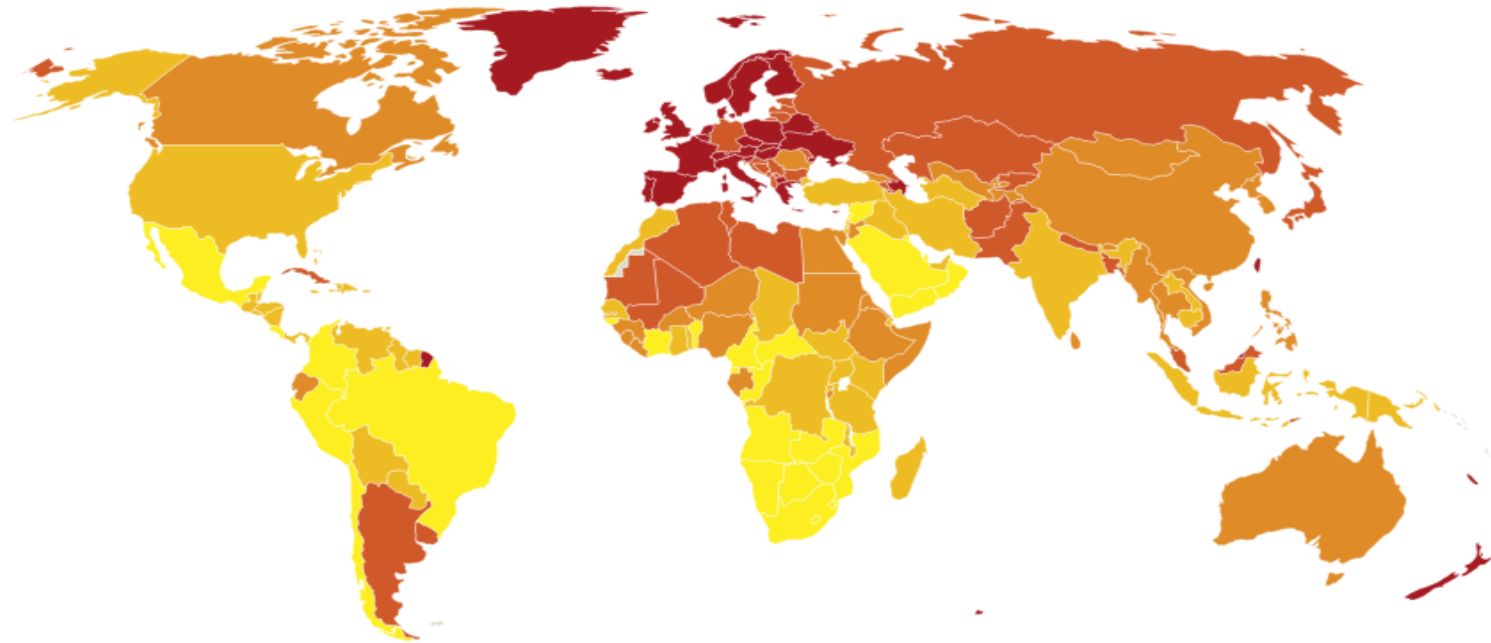
MORE INDICATORS >

Bottom 50% national income share

Region View

Country View

Latest year ▾

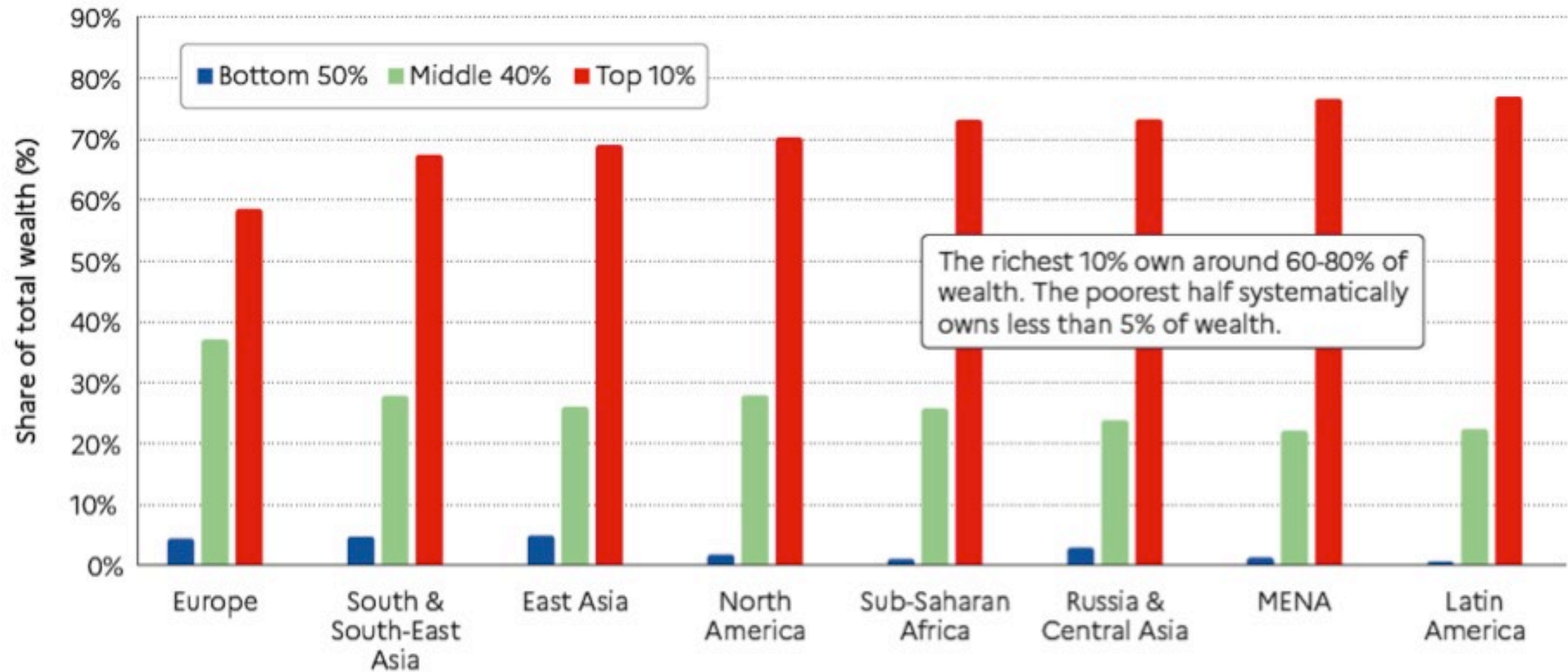


Share of total (%)



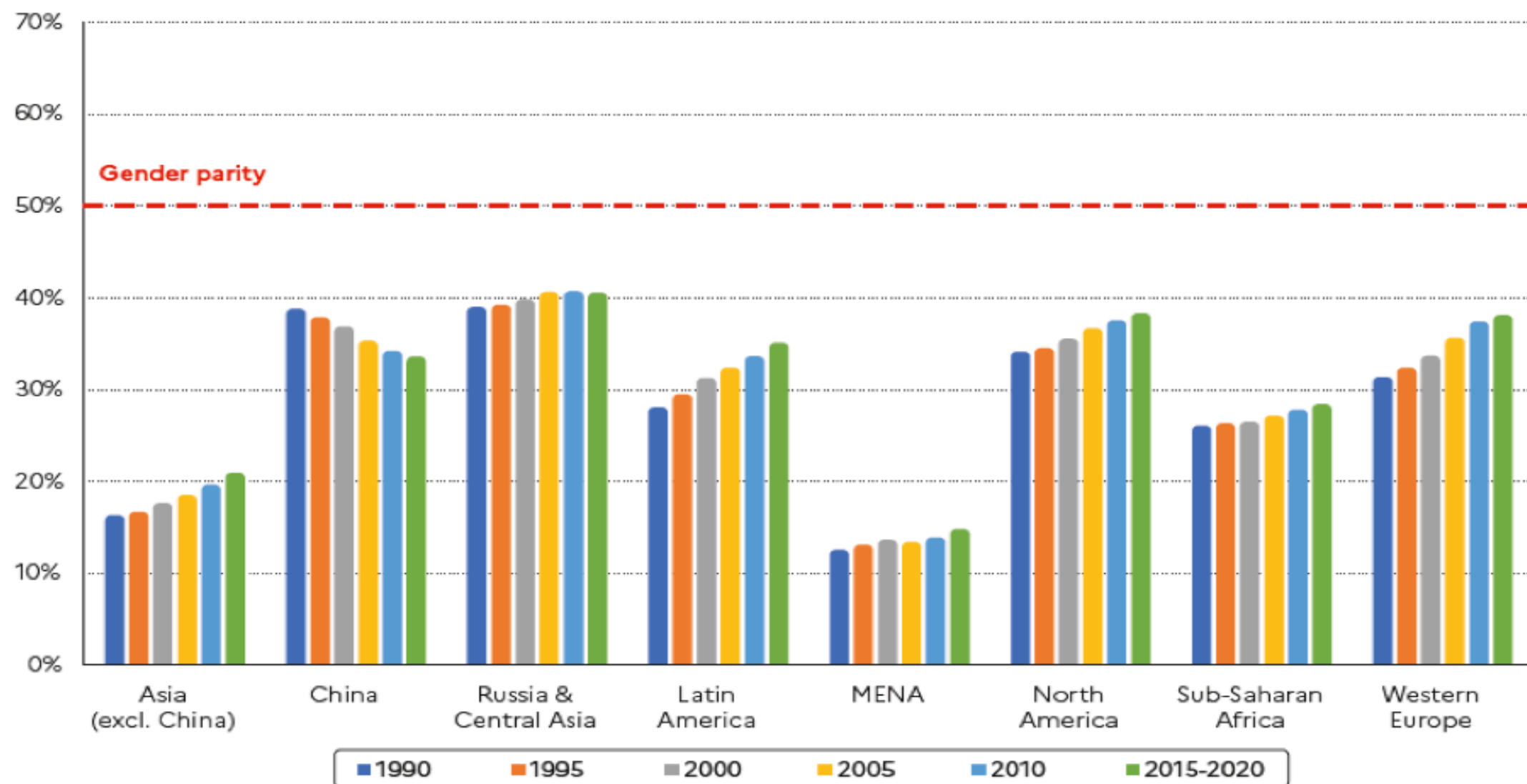
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Figure 4 The extreme concentration of capital: wealth inequality across the world, 2021



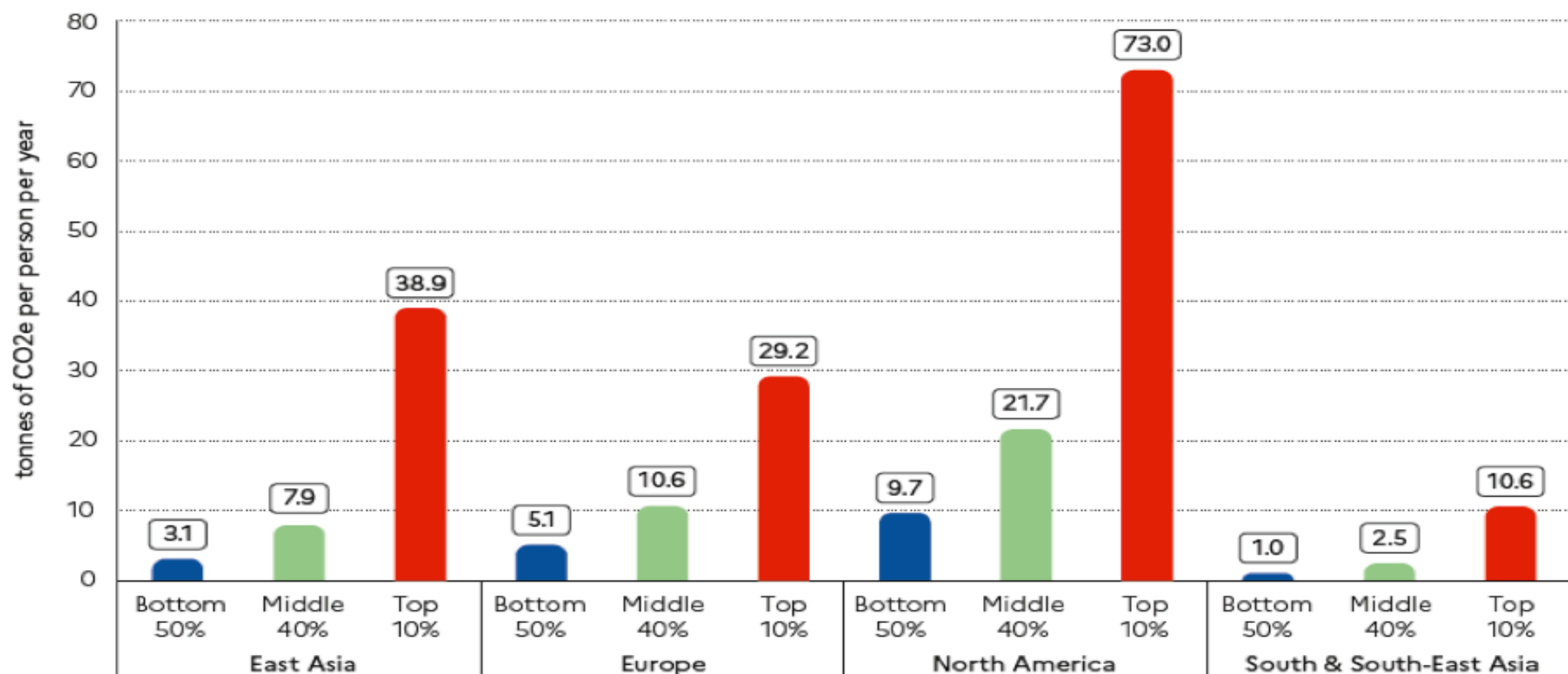
Interpretation: The Top 10% in Latin America captures 77% of total household wealth, versus 22% for the Middle 40% and 1% for the Bottom 50%. In Europe, the Top 10% owns 58% of total wealth, versus 38% for the Middle 40% and 4% for the Bottom 50%. **Sources and series:** wir2022.wid.world/methodology.

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

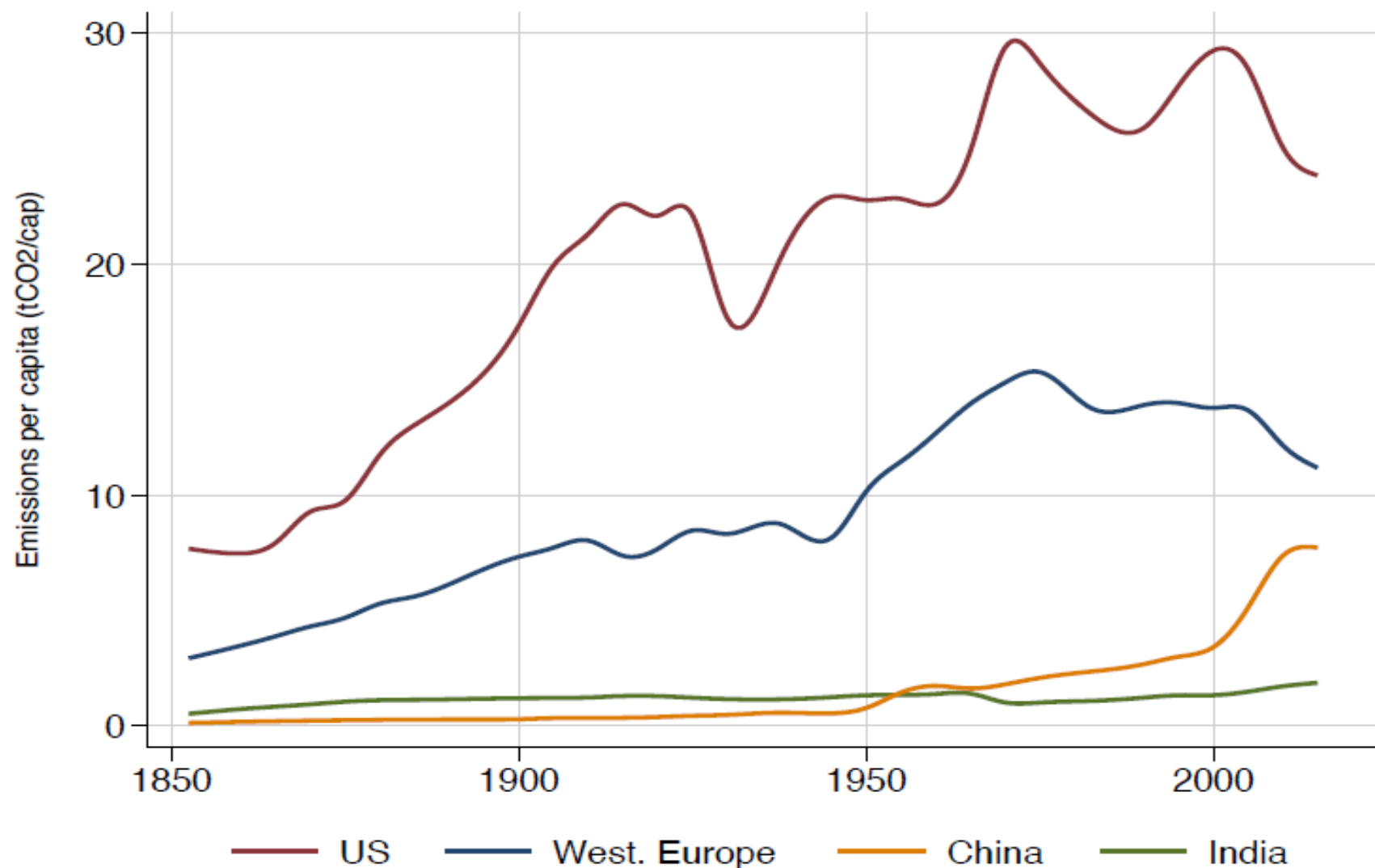


Interpretation: The female labour income share rose from 34% to 38% in North America between 1990 and 2020. **Sources and series:** wir2022.wid.world/methodology and Neef and Robilliard (2021).

Figure 15 Per capita emissions across the world, 2019

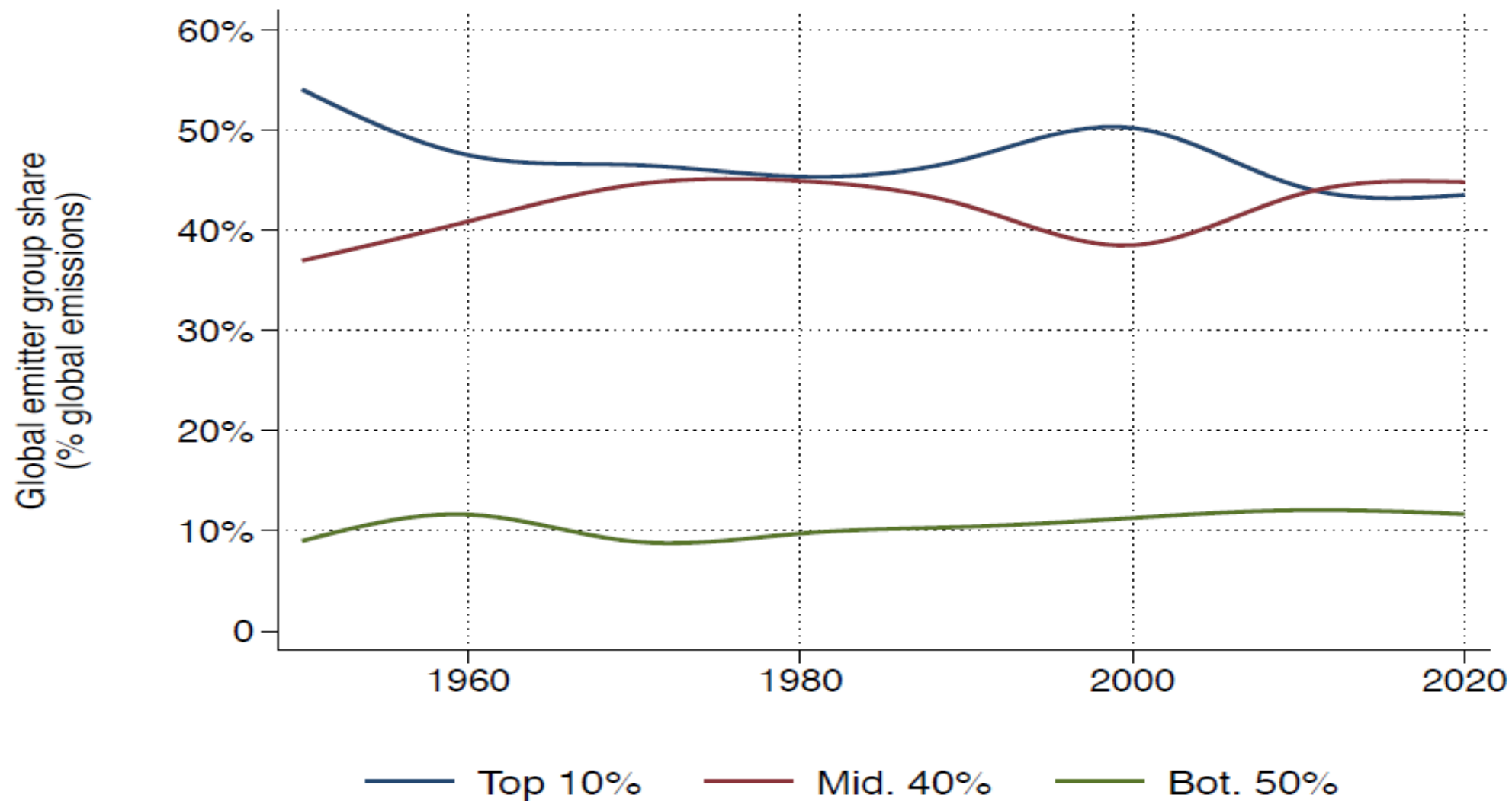


Interpretation: Personal carbon footprints include emissions from domestic consumption, public and private investments as well as imports and exports of carbon embedded in goods and services traded with the rest of the world. Modeled estimates based on the systematic combination of tax data, household surveys and input-output tables. Emissions split equally within households. **Sources and series:** wir2022.wid.world/methodology and Chancel (2021).



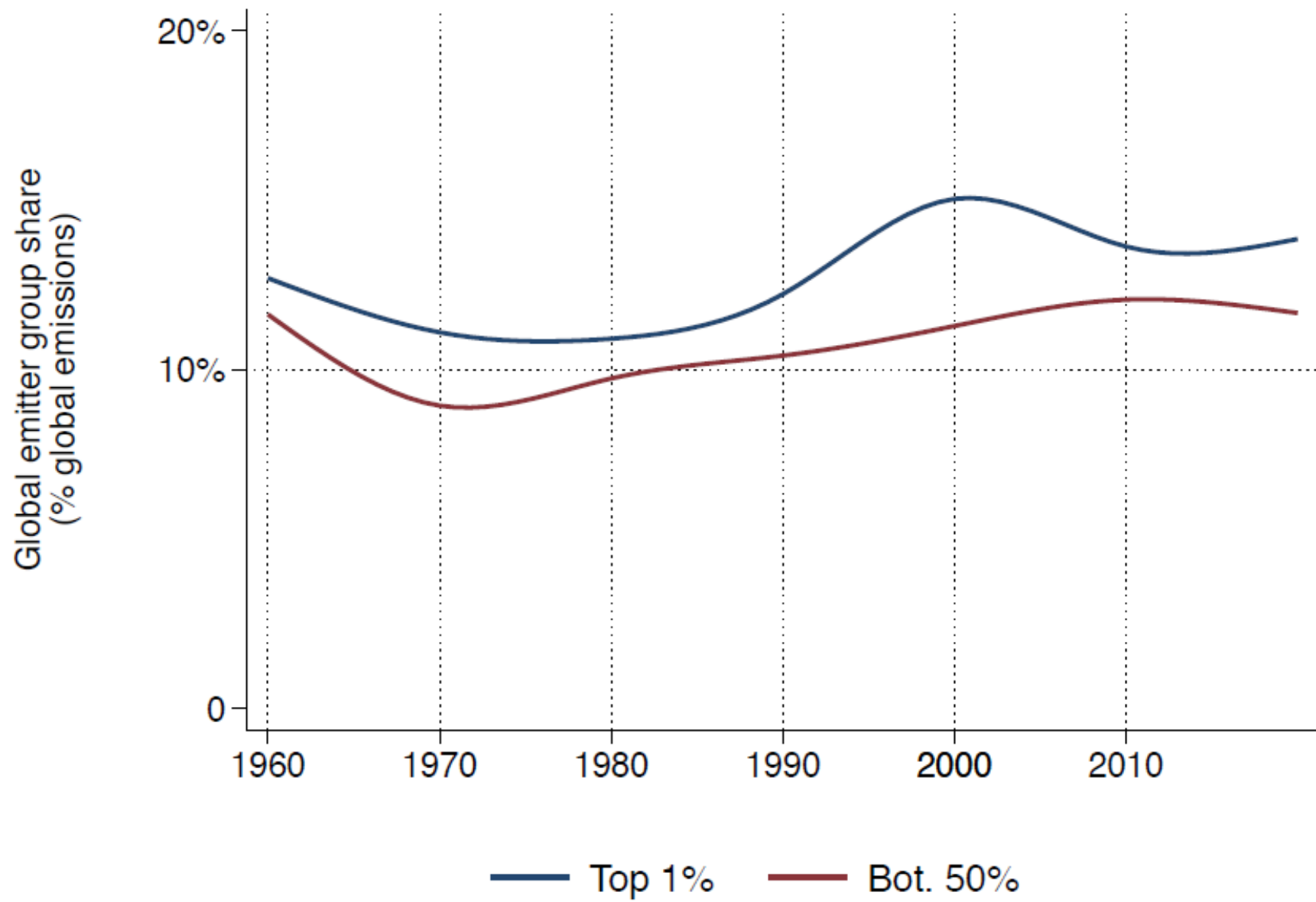
GHG emissions per capita

Source: Author's estimates based on WID.world, PRIMAP and EORA. GHG footprints (i.e. net of imports and exports) excl. LULUCF. See methodological appendix for details. [Methodology]



Global GHG emissions inequality, 1950-2020

Source: Author's estimates based on PRIMAP, EORA, WID.world and own estimations



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TOP INCOMES
IN FRANCE
IN THE
TWENTIETH
CENTURY

INEQUALITY AND REDISTRIBUTION, 1901-1998

THOMAS PIKETTY

TRANSLATED BY SETH ACKERMAN

—
CAPITAL

in the Twenty-First Century

—
**THOMAS
PIKETTY**

TRANSLATED BY ARTHUR GOLDHAMMER

CAPITAL
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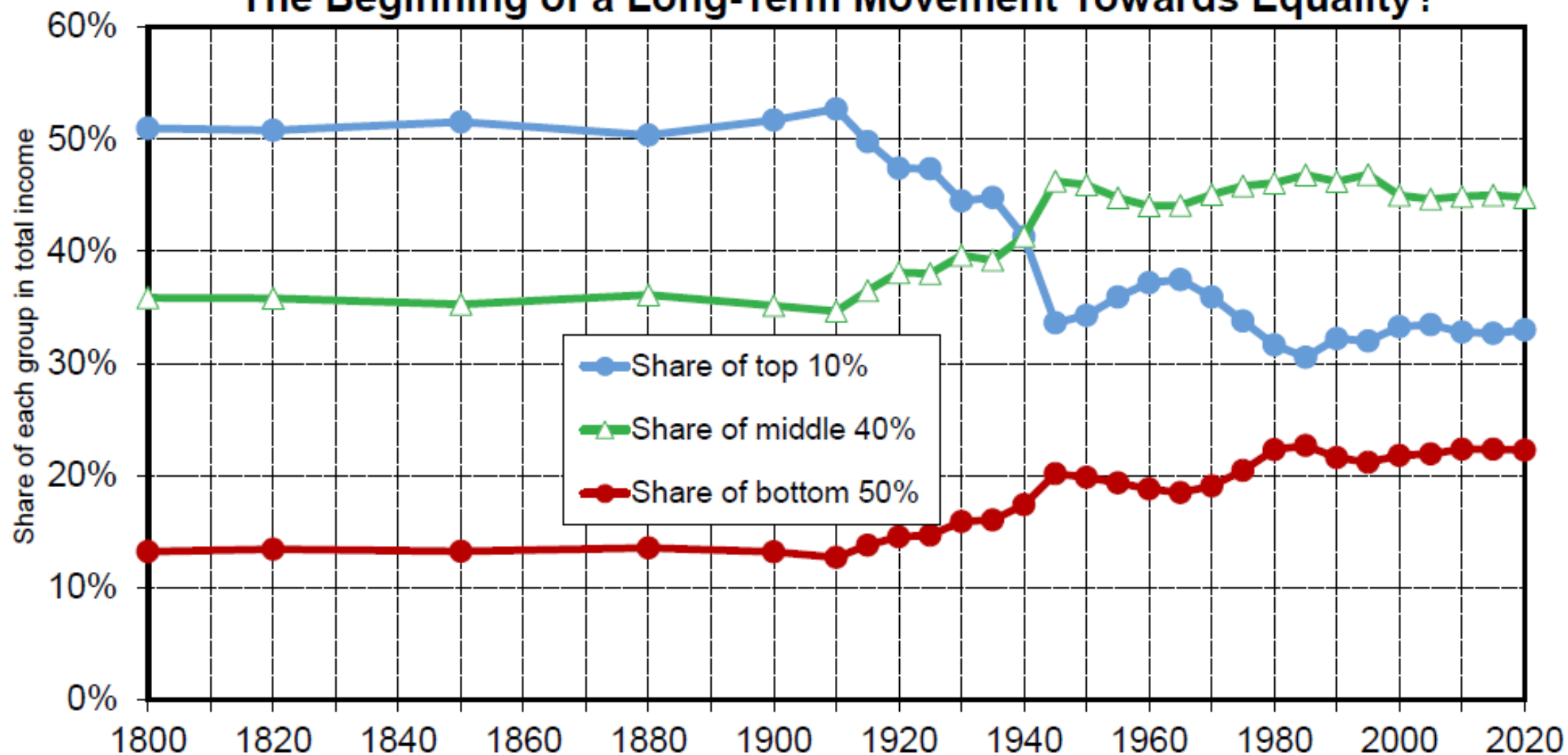
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Contents of « A Brief History of Equality »

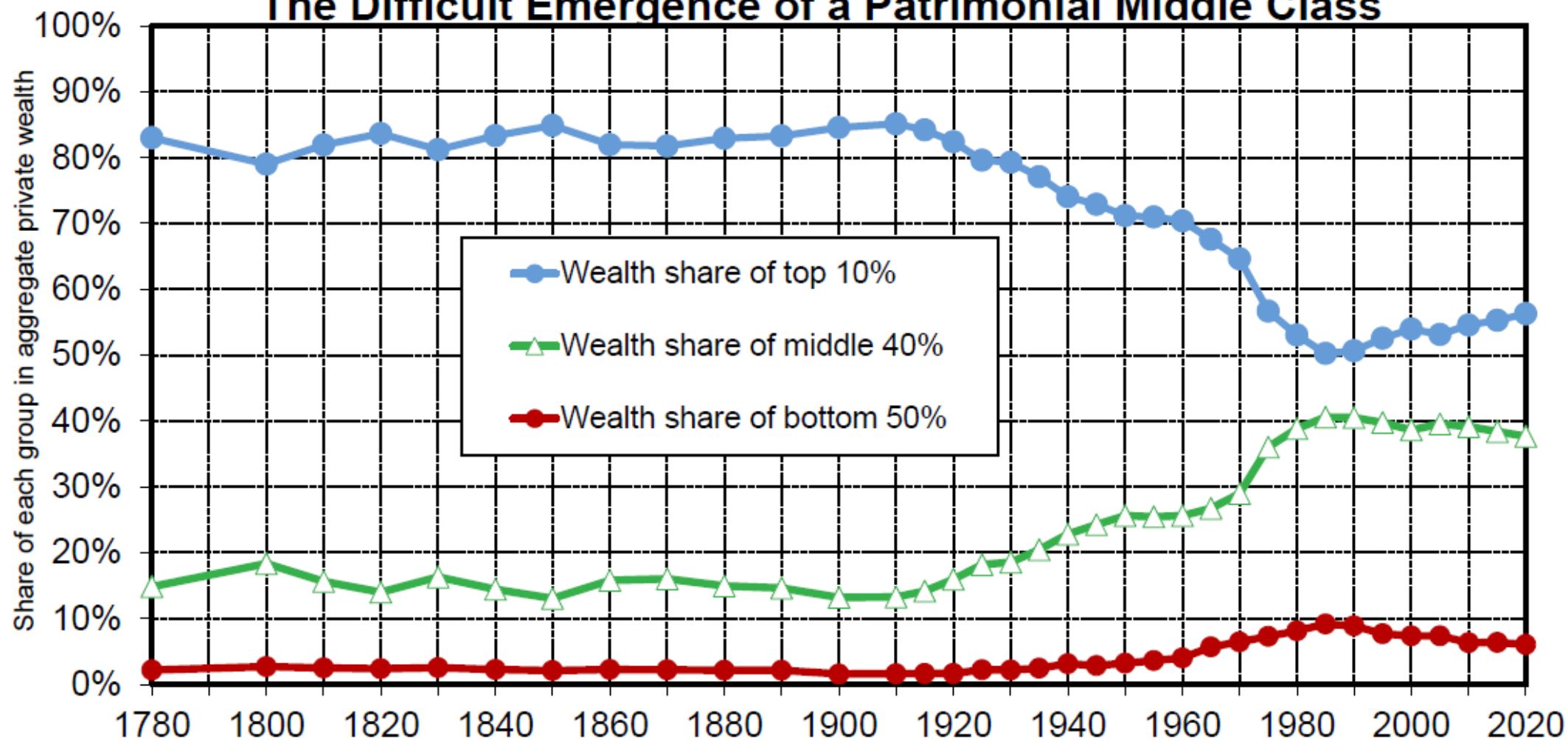
- **Chapter 1. The Movement toward Equality: The First Milestones**
- **Chapter 2. The Slow Deconcentration of Power and Property**
- **Chapter 3. The Heritage of Slavery and Colonialism**
- **Chapter 4. The Question of Reparations**
- **Chapter 5. Revolution, Status, and Class**
- **Chapter 6. The “Great Redistribution”: 1914–1980**
- **Chapter 7. Democracy, Socialism, and Progressive Taxation**
- **Chapter 8. Real Equality against Discrimination**
- **Chapter 9. Exiting Neocolonialism**
- **Chap. 10. Toward a Democratic, Ecological & Multicultural Socialism**

Income Distribution in France, 1800-2020: The Beginning of a Long-Term Movement Towards Equality?



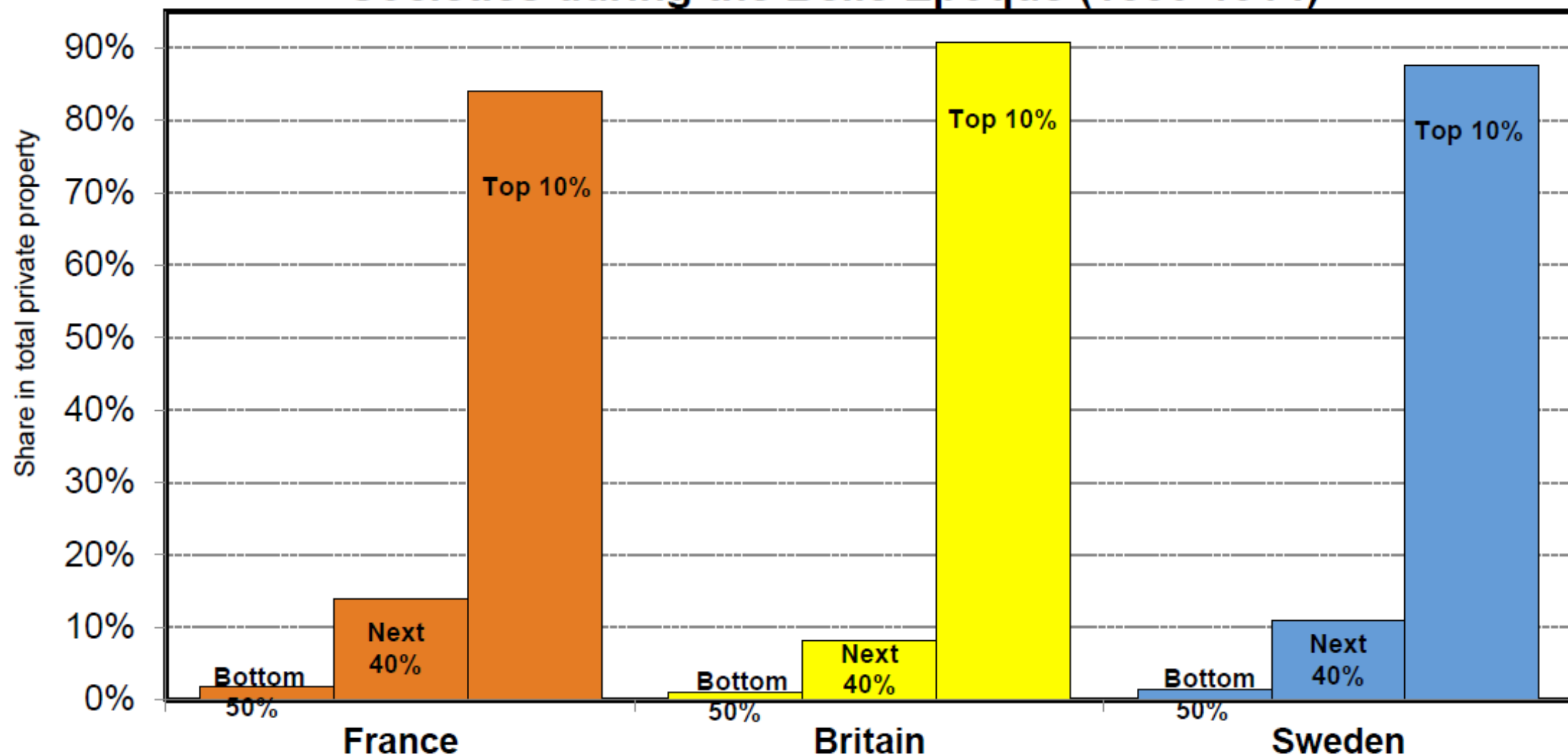
Interpretation. The share of the top 10% highest incomes in total income (including capital income - rent, dividends, interest, profits - & labour income - wages, self-employment income, pensions, unemployment benefits) was about 50% in France from the 1780s to the 1910s. The fall in the concentration of income started after World War 1 and occurred to the benefit of the "lower classes" (the bottom 50% lowest incomes) and the "middle classes" (the next 40%), at the expense of the "upper classes" (the top 10%). **Sources and series:** see piketty.pse.ens.fr/equality (figure 7)

Wealth Distribution in France, 1780-2020: The Difficult Emergence of a Patrimonial Middle Class



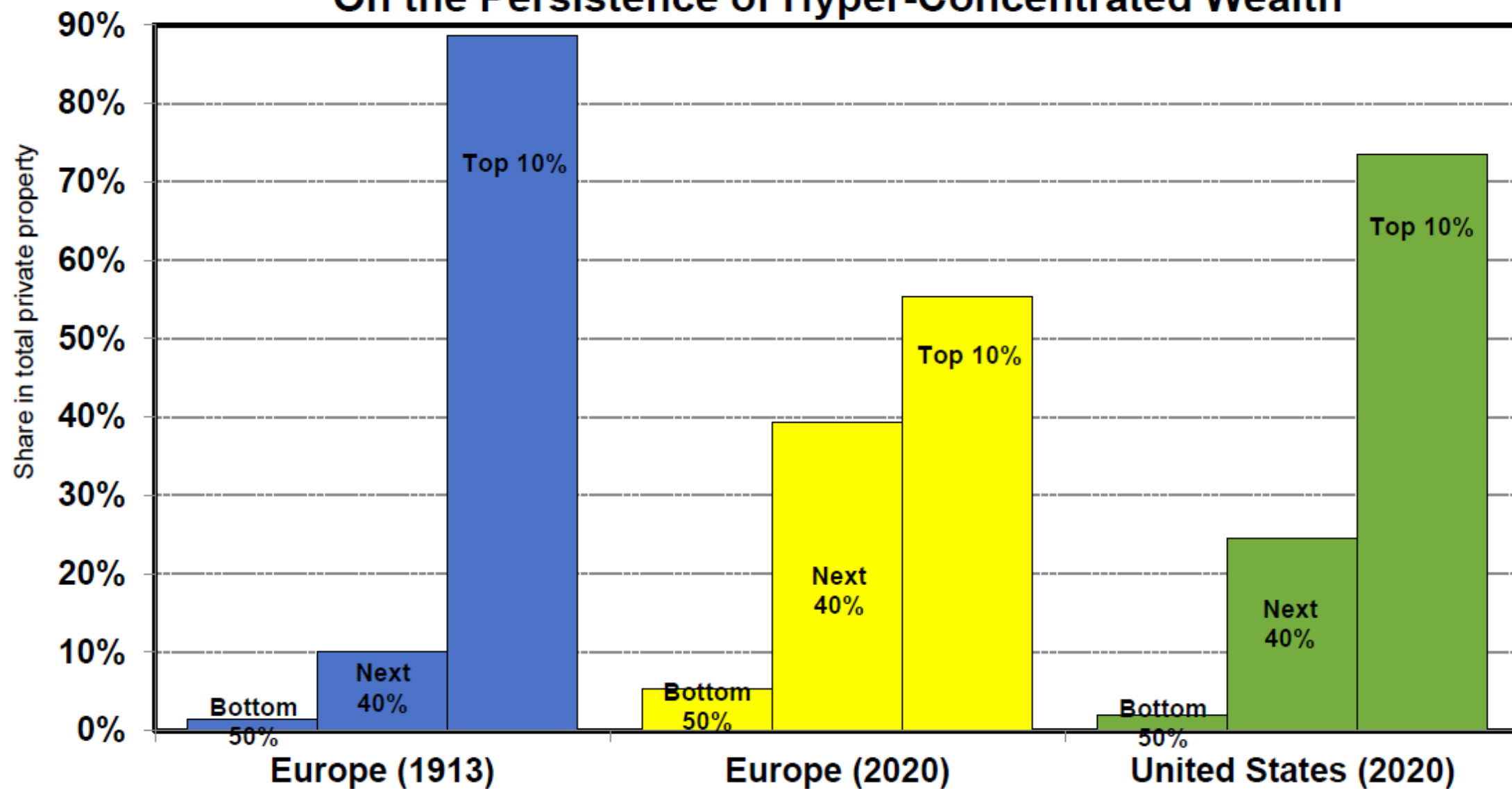
Interpretation. The share of top 10% wealth holders in aggregate private wealth (real estate, business and financial assets, net of debt) was around 80%-90% in France between 1780 and 1910. The decline in wealth concentration begins with World War I and stops in the 1980s. It benefited mostly to the "patrimonial middle class" (the middle 40%), which is defined here as the intermediate group between the top 10% and the bottom 50% of the wealth distribution. **Sources and series:** see piketty.pse.ens.fr/equality (figure 6)

Extreme Patrimonial Inequality: Europe's Proprietarian Societies during the Belle Epoque (1880-1914)



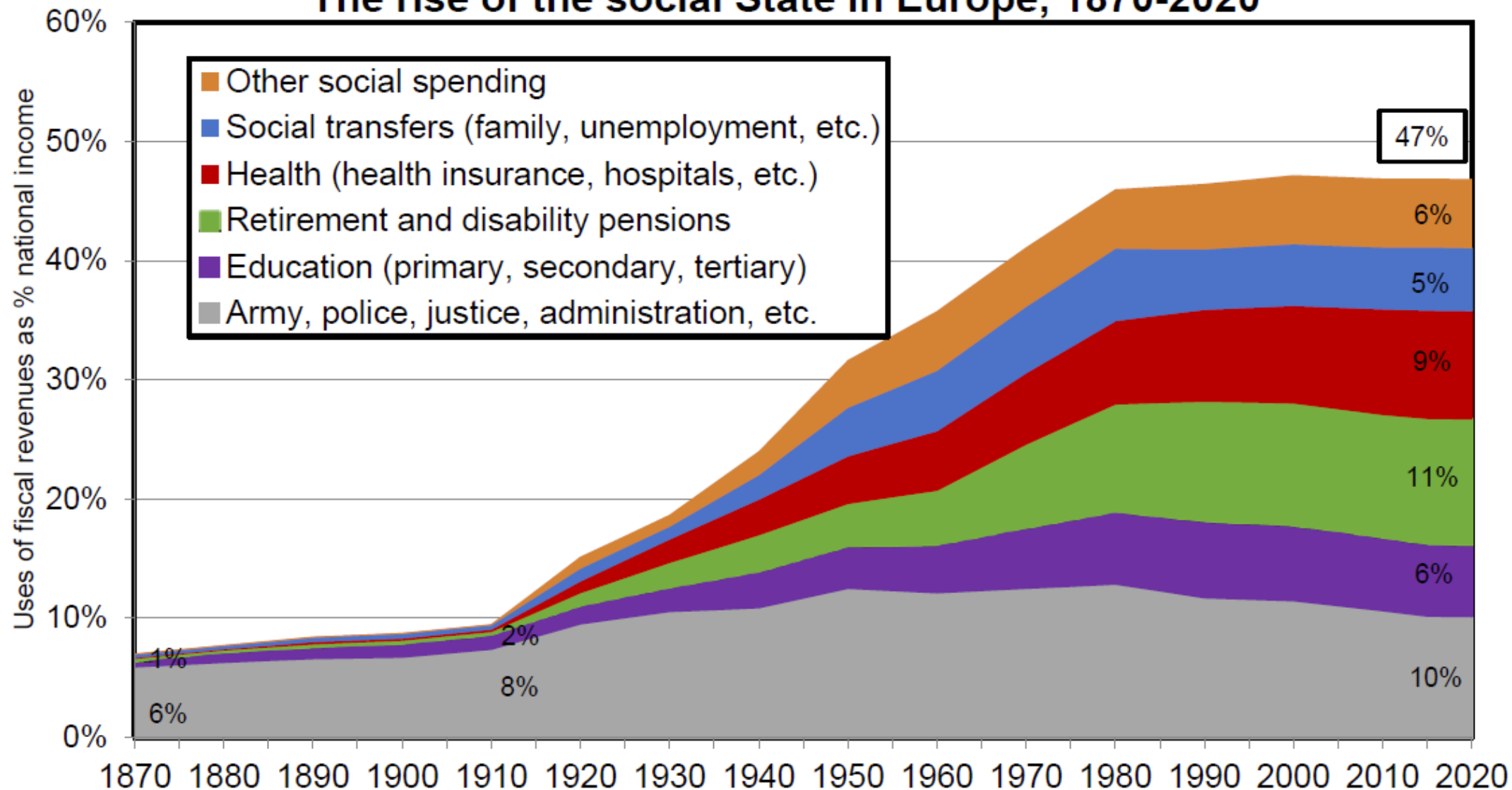
Interpretation. The share the richest 10% in total private property (all assets combined: real estate, business and financial assets, net of debt) was on average 84% in France between 1880 and 1914 (vs. 14% for the next 40% and 2% for the bottom 50%), 91% in Britain (vs 8% and 1%) and 88% in Sweden (vs 11% and 1%). **Sources and series:** see piketty.pse.ens.fr/equality (figure 17)

On the Persistence of Hyper-Concentrated Wealth



Reading. The share of the richest 10% in total private property was 89% in Europe (average of Britain, France and Sweden) in 1913 (compared with 1% for the bottom 50%), 55% in Europe in 2020 (compared to 5% for the bottom 50%) and 74% in the United States in 2020 (compared to 2% for the bottom 50%). **Sources and series:** see piketty.pse.ens.fr/equality (figure 27)

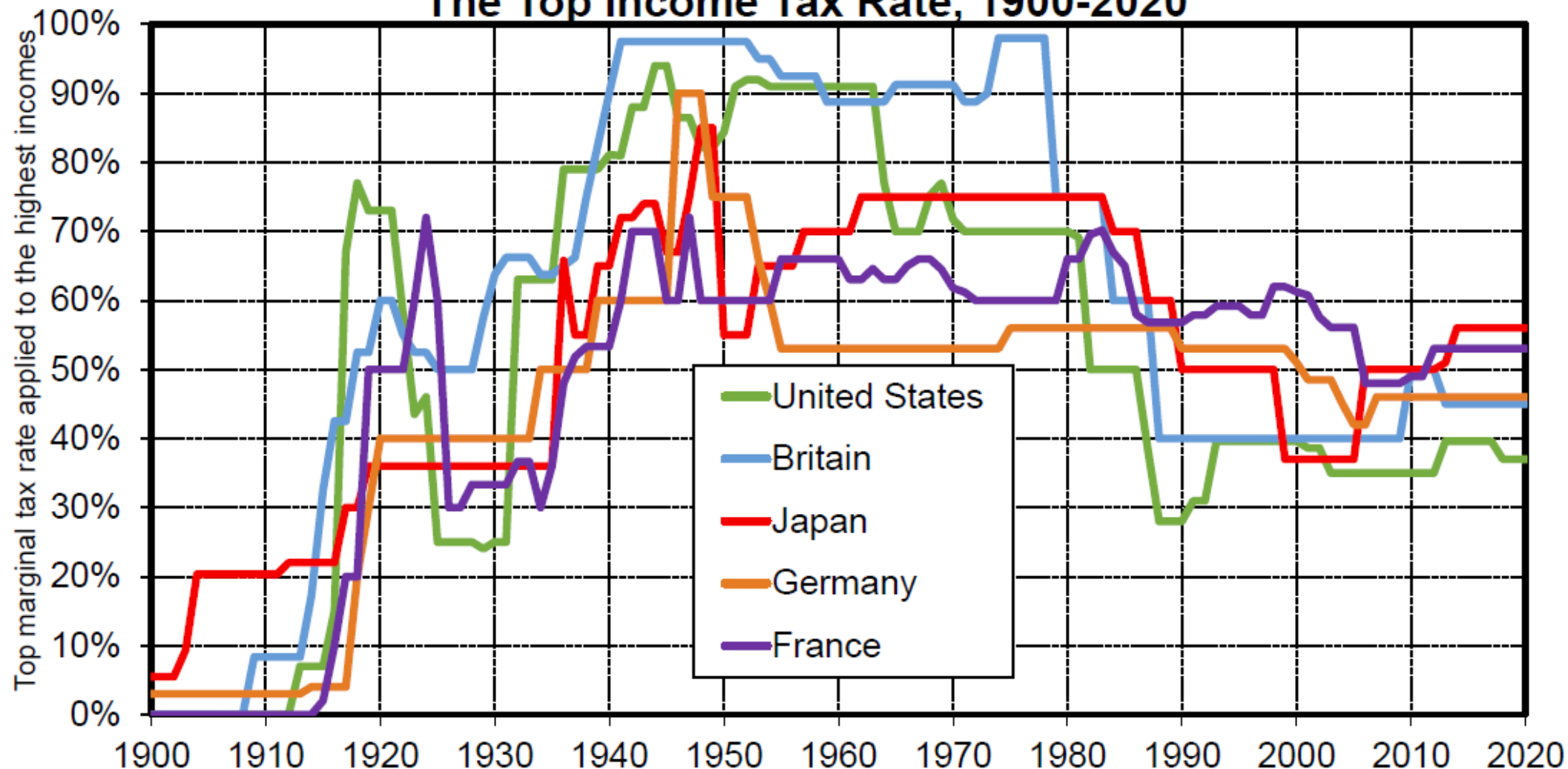
The rise of the social State in Europe, 1870-2020



Interpretation. In 2020, 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.

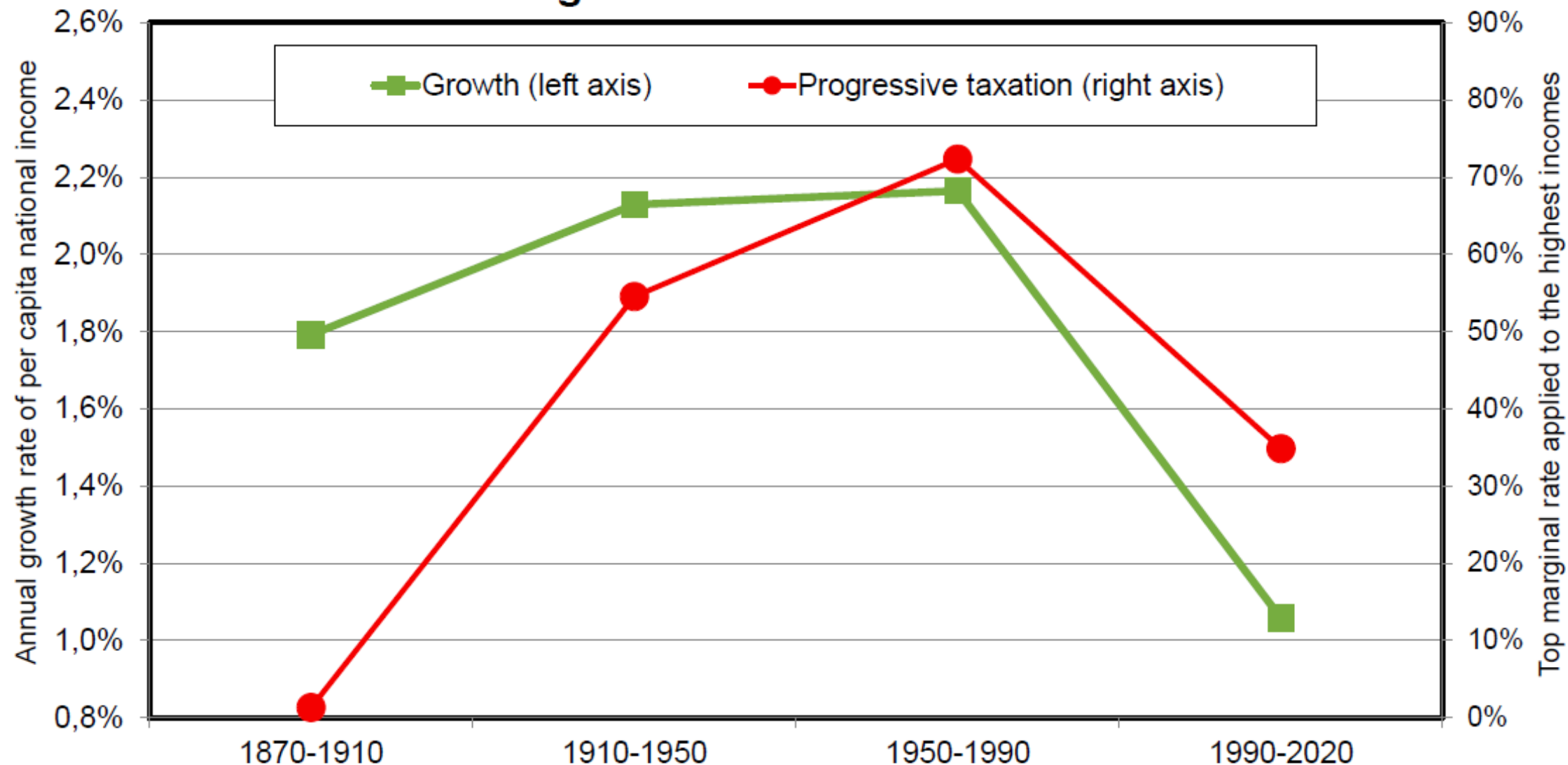
Note. The evolution depicted here is the average of Germany, France, Britain and Sweden. **Sources and séries:** see piketty.pse.ens.fr/equality (figure 19)

The Invention of Progressive Taxation: The Top Income Tax Rate, 1900-2020



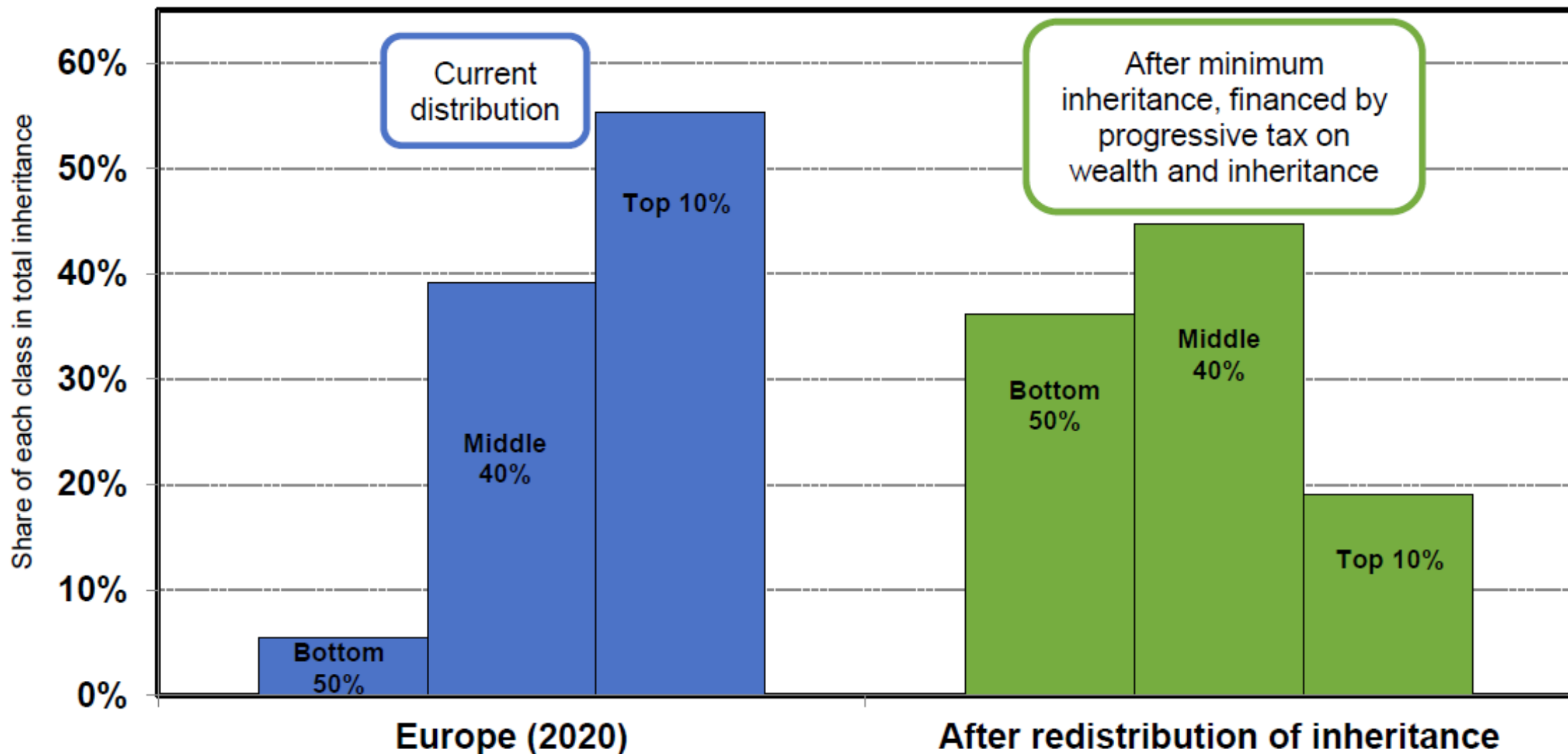
Interpretation. The marginal income tax rate applied to the highest incomes was on average 23% in the U.S. from 1900 to 1932, 81% from 1932 to 1980 and 39% from 1980 to 2018. Over these same periods, the top rate was equal to 30%, 89% and 46% in Britain, 26%, 68% and 53% in Japan, 18%, 58% and 50% in Germany, and 23%, 60% and 57% in France. Progressive taxation peaked in mid-century, especially in the U.S. and in Britain. **Sources and series:** see piketty.pse.ens.fr/equality (figure 20)

Growth and Progressive Taxation in the U.S. 1870-2020



Interpretation. in the U.S., the growth rate of per capita national income dropped from 2,2% per year between 1950 and 1990 to 1,1% between 1990 and 2020, while the top marginal tax rate applied to the highest incomes dropped from 72% to 35% over the same period. The promised resurgence of growth following the cut in top tax rates did not occur. **Sources and series:** see piketty.pse.ens.fr/equality (figure 23)

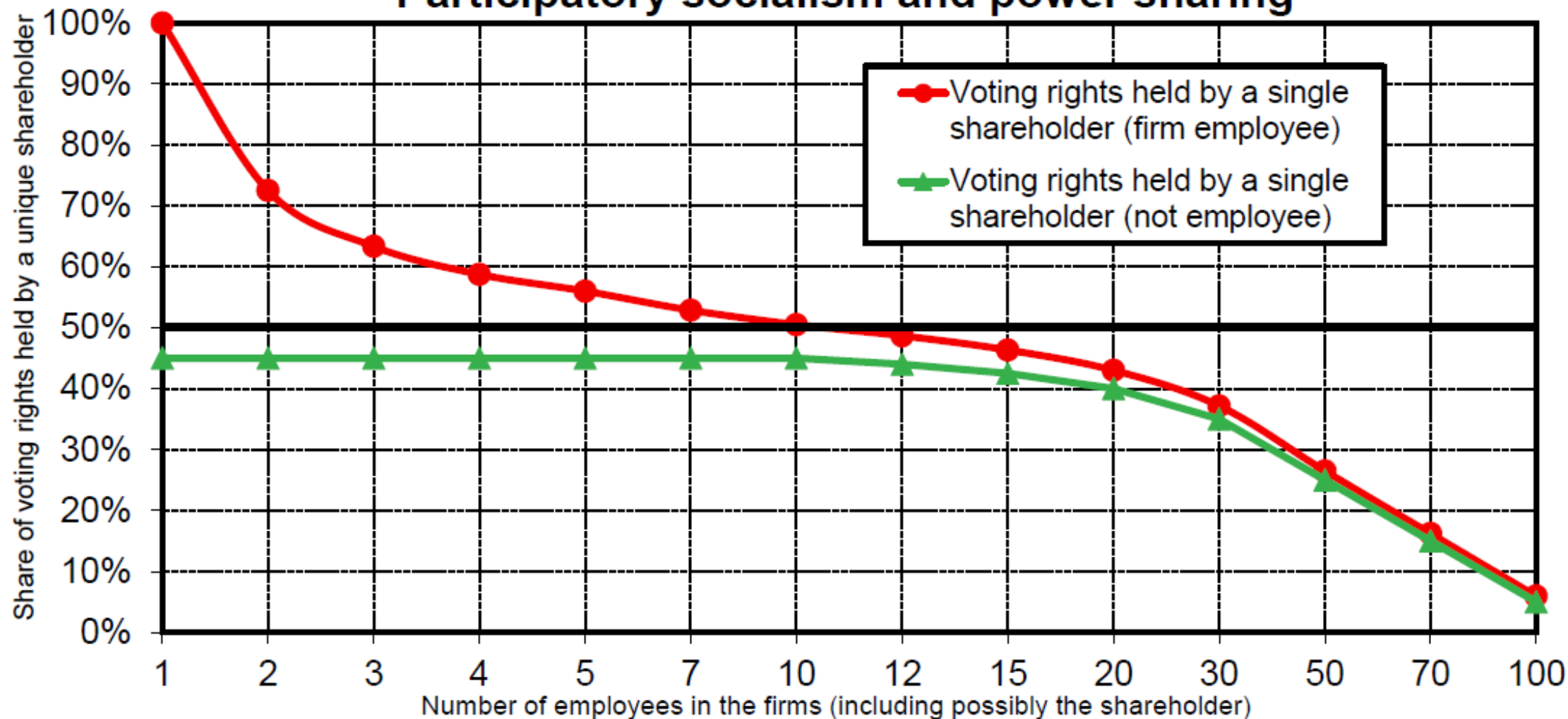
The Redistribution of Inheritance



Interpretation. The share of the poorest 50% in total inheritance is 6% in Europe in 2020, vs 39% for the next 40% and 55% for the richest 10%. After implementation of inheritance for all (minimum inheritance equal to 60% of average wealth, allocated at 25-year-old), financed by a progressive tax on wealth and inheritance, this share would be equal to 36% (vs 45% and 19%).

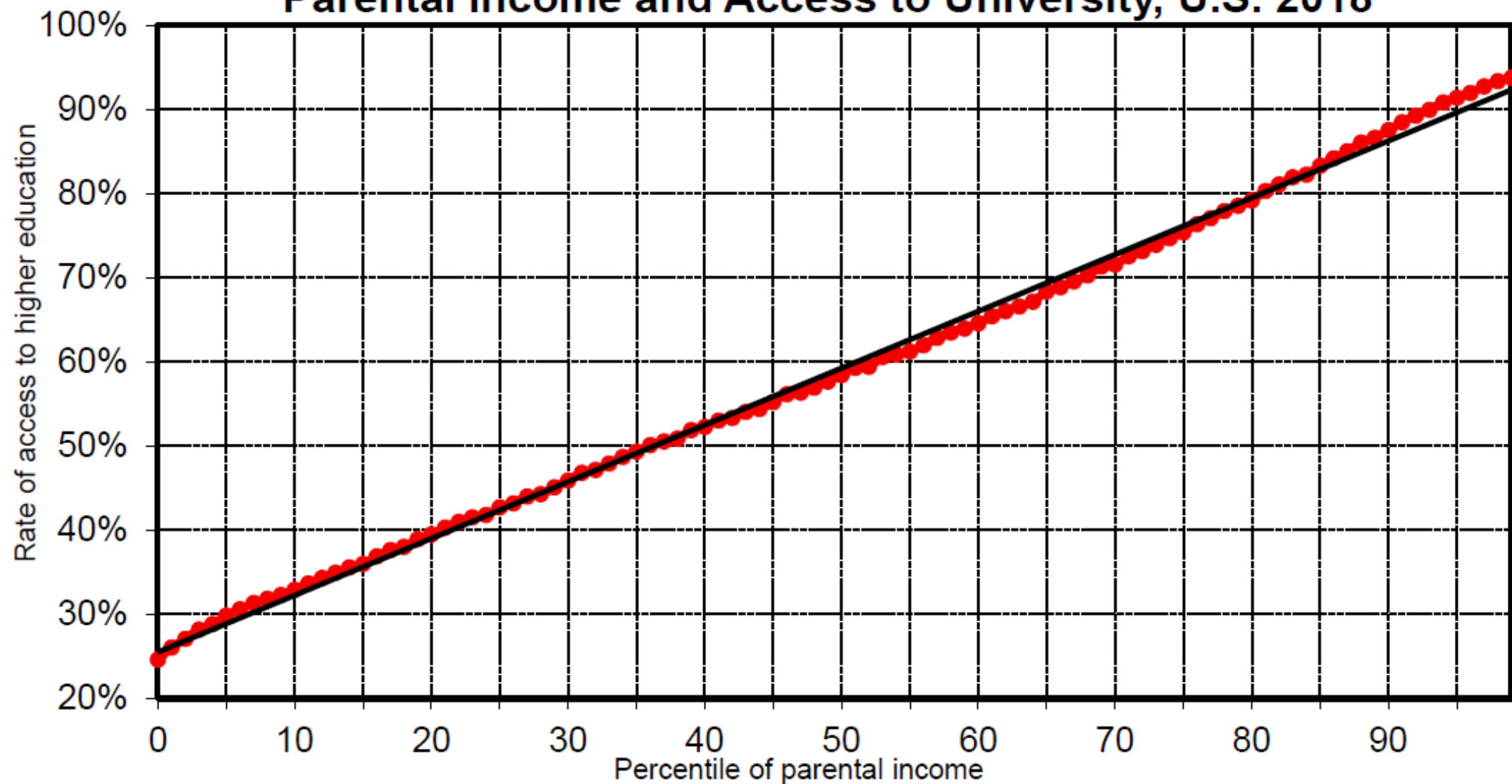
Note: Europe: average Britain-France-Sweden. **Sources and series:** see piketty.pse.ens.fr/equality (figure 30)

Participatory socialism and power sharing



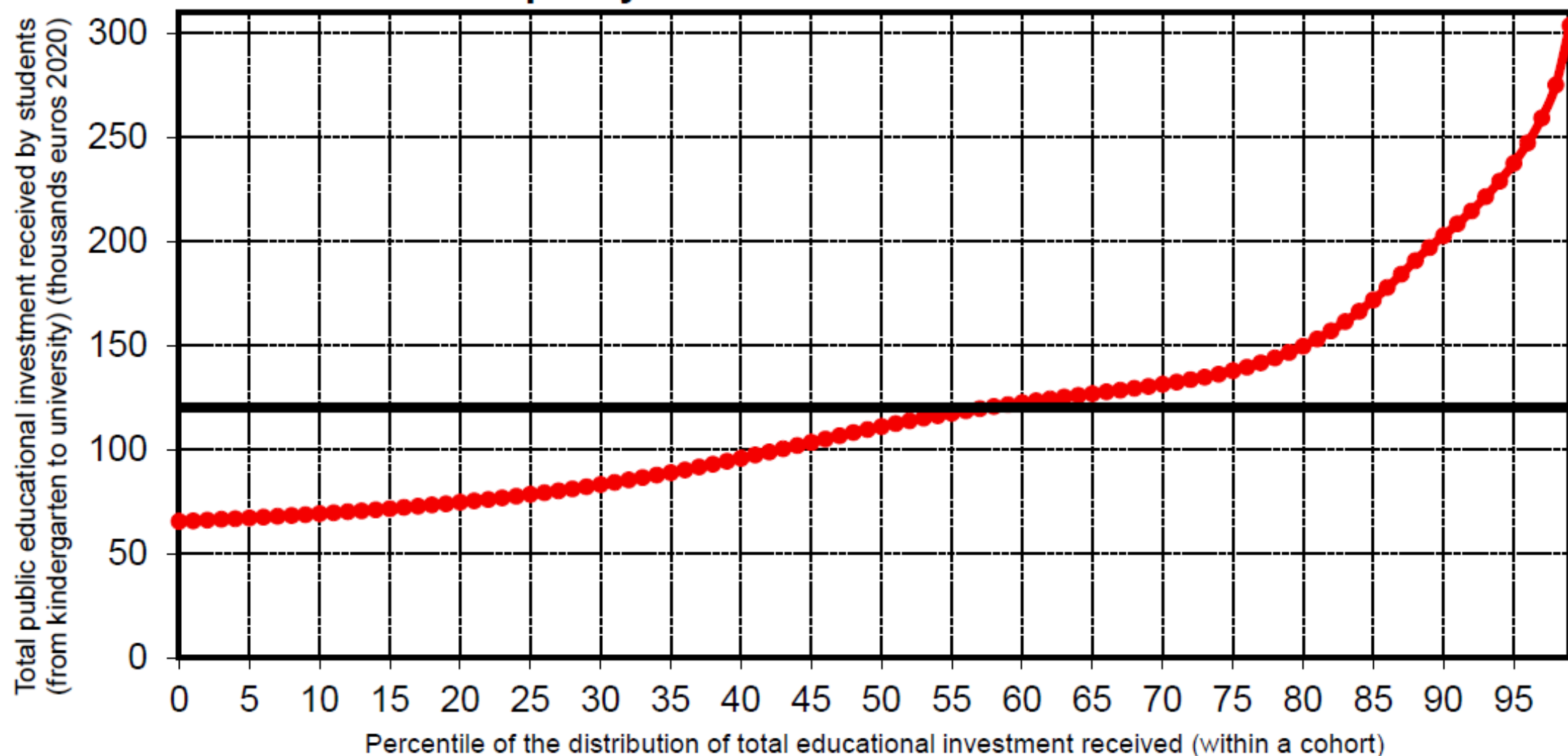
Reading. In the system of participatory socialism, a single shareholder holding 100% of the firm's capital stock holds 73% of voting rights if the firm has 2 employees (including himself), 51% if the firm has 10 employees (including himself), and loses the majority beyond 10 employees (including himself). A single shareholder who is not a firm employee holds 45% of the voting rights if the firm has less than 10 employees; this share then declines linearly and reaches 5% with 100 employees. **Note:** The parameters used here are the following: (i) employees (whether or not they are also shareholders) hold 50% of voting rights; (ii) within the 50% of voting rights going to shareholders, no single shareholder can hold more than 90% of them (i.e. 45% of voting rights) in a firm with less than 10 employees; this fraction declines linearly to 10% (i.e. 5% of voting rights) in firms with more than 90 employees (shareholder voting rights that are not allocated are reallocated to employees). **Sources and series:** see piketty.pse.ens.fr/equality (figure 18)

Parental Income and Access to University, U.S. 2018



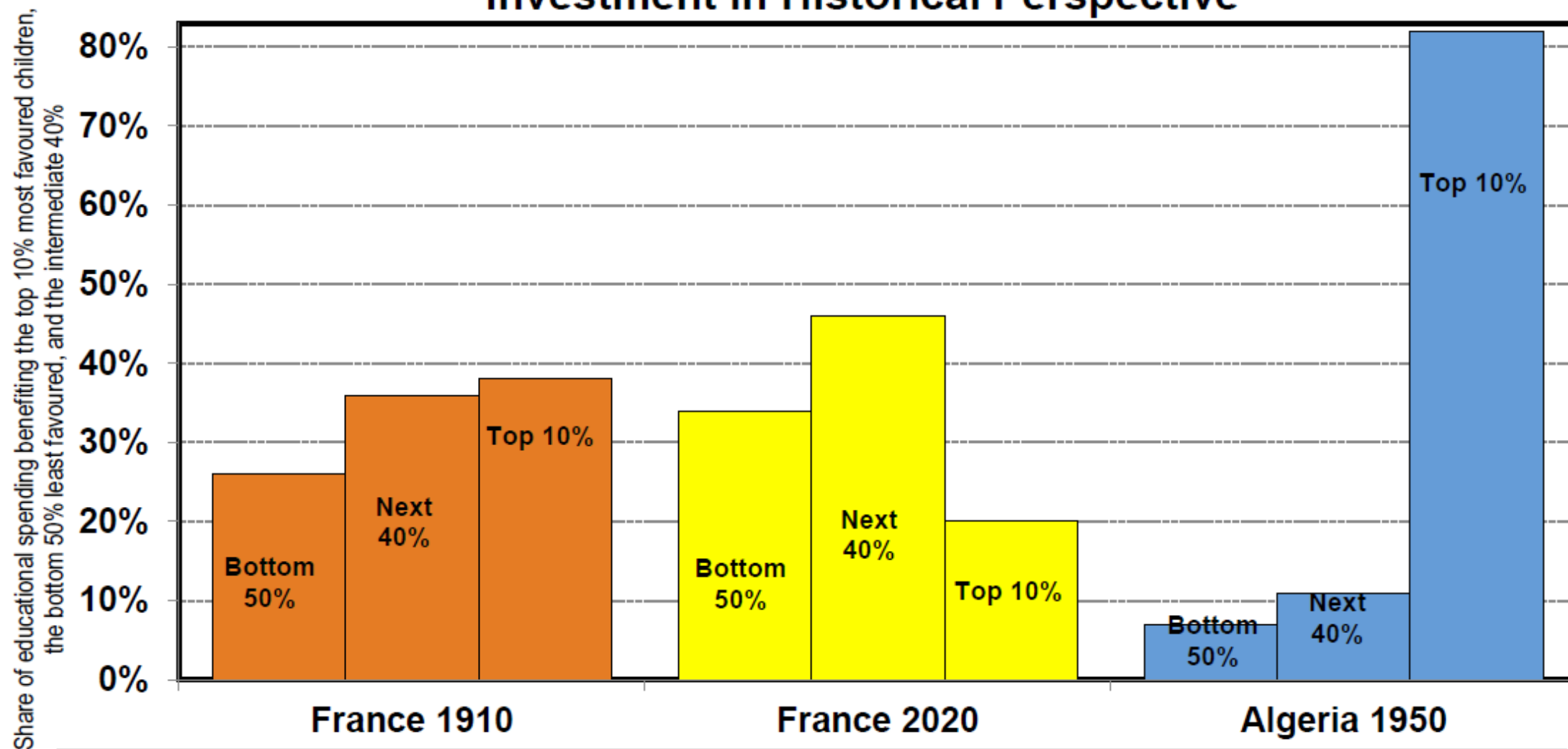
Interpretation. In 2018, the rate of access to higher education (percentage of individuals aged 19-21 enrolled in a university, college or any other institution of higher education) was barely 30% among the bottom 10% poorest children in the United States, and over 90% among the top 10% richest children. **Sources and series:** see piketty.pse.ens.fr/equality (figure 31).

The Inequality of Educational Investment: France 2020



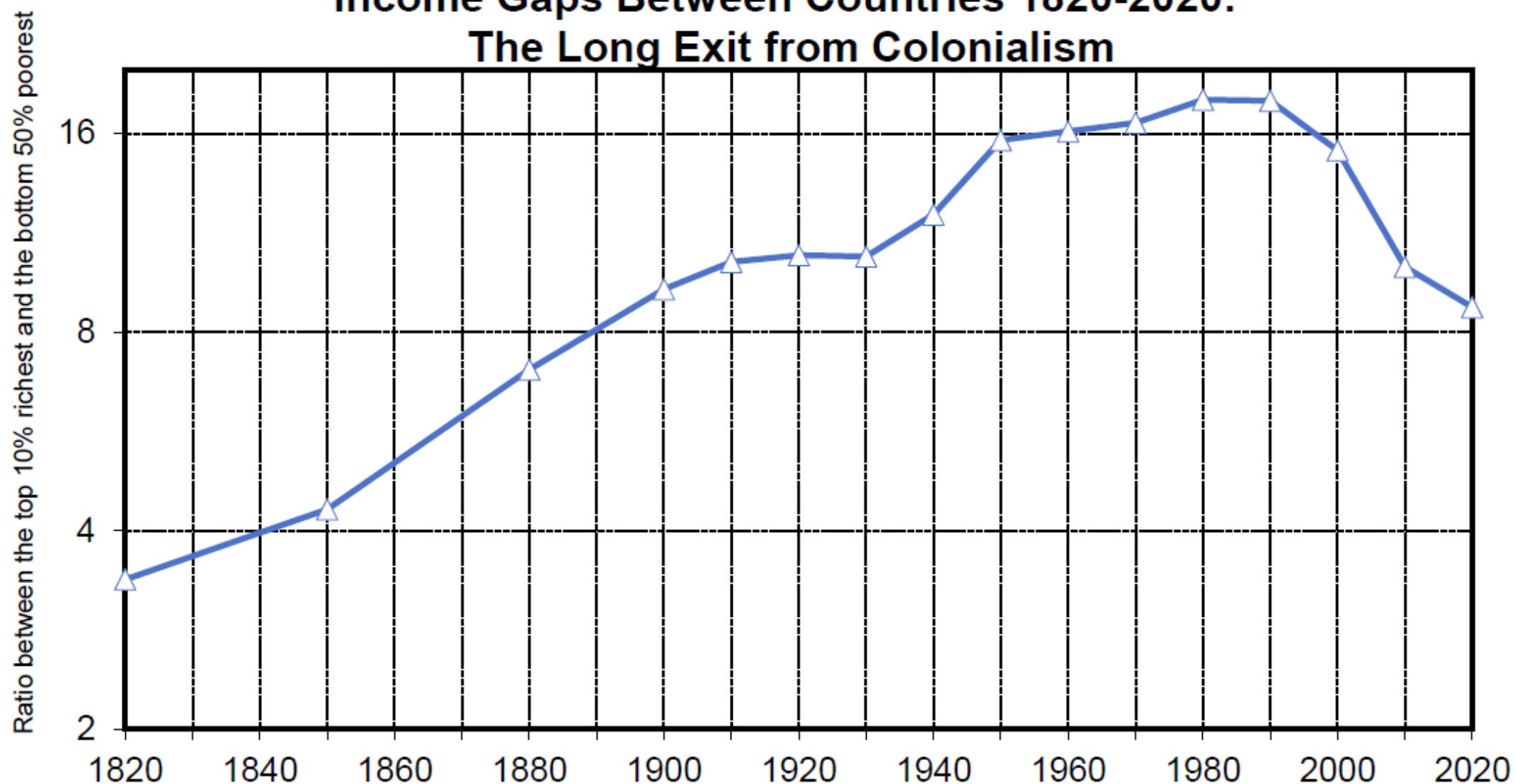
Interpretation. Total public educational investment received during their studies (from kindergarten to university) by the students of the cohort reaching 20-year-old in 2020 will be about 120 k€ (i.e. approximately 15 years of studies for an average cost of 8000€ per year). Within this generation, the 10% of students receiving the smallest educational investment receive about 65-70 k€, while the 10% receiving the most receive between 200 k€ and 300 k€. **Note:** average costs per year of study in the French educational system in 2015-2020 rank from 5-6 k€ in kindergarten-primary to 8-10 k€ in secondary, 9-10 k€ in universities and 15-16 k€ in preparatory classes to *grandes écoles* (elite tracks). **Sources and series:** see piketty.pse.ens.fr/equality (figure 32)

Colonies for the Colonizers: The Inequality of Educational Investment in Historical Perspective



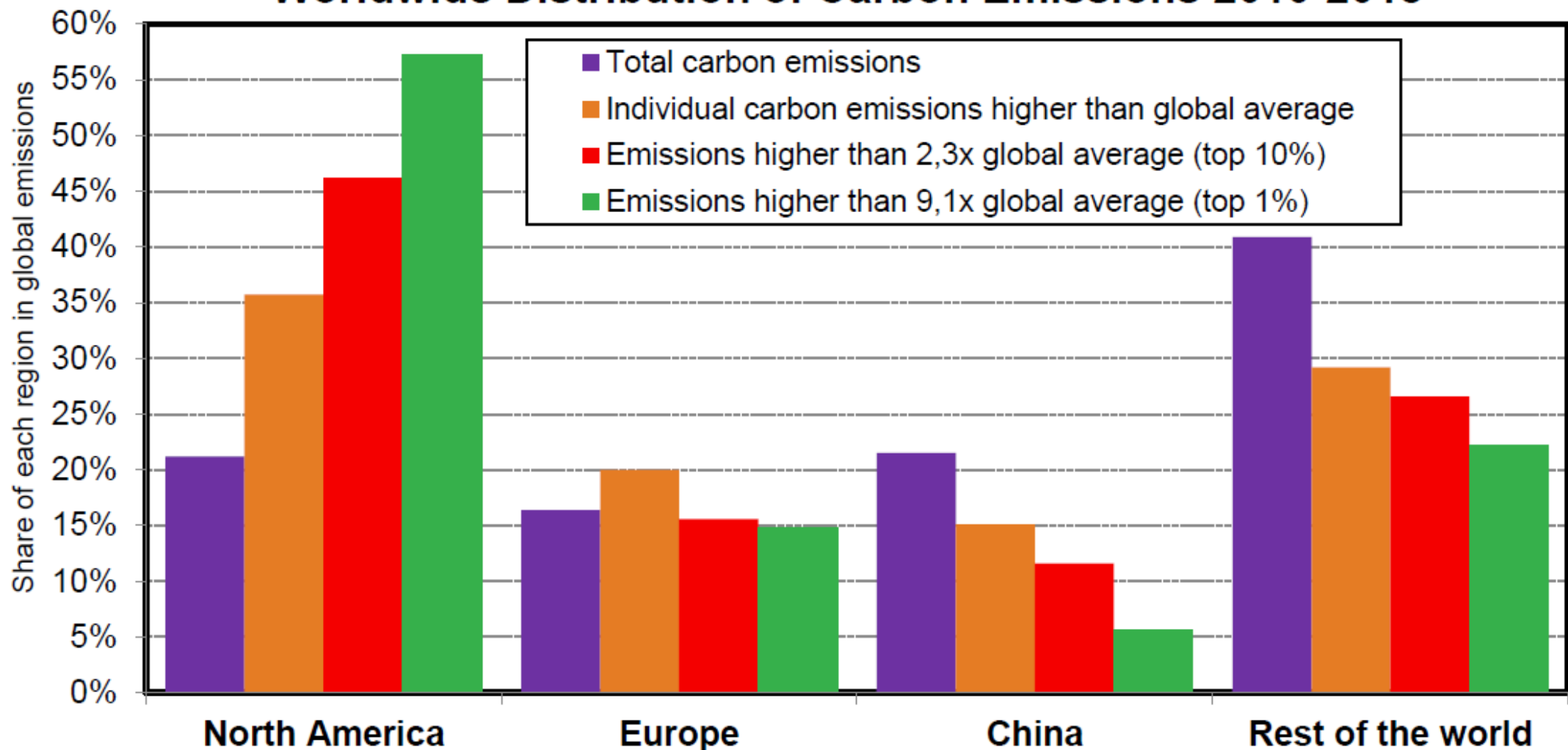
Interpretation. In Algeria in 1950, the 10% the most favoured (the settlers) benefited from 82% of total educational spending. By comparison, the share of total educational spending benefiting the top 10% of the population which benefited from the highest educational investment (i.e. those children which did the longest and most expensive studies) was 38% in France in 1930 and 20% in 2020 (which is still twice as much as their population share). **Sources and series:** voir piketty.pse.ens.fr/equality (figure 14).

Income Gaps Between Countries 1820-2020: The Long Exit from Colonialism



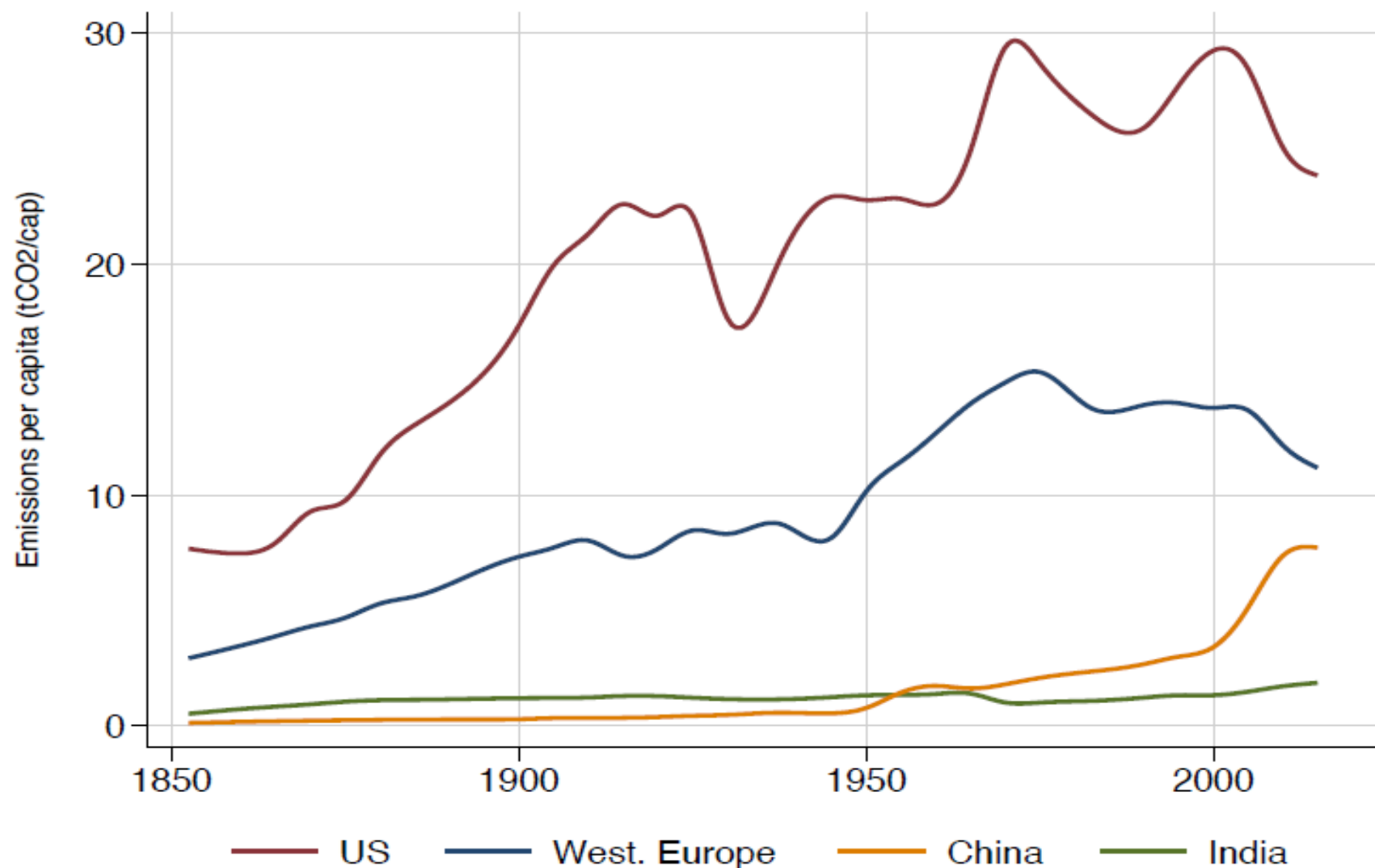
Lecture. Income gaps between countries, as measured by the ratio between the average income of the top 10% of the world population living in the richest countries and the bottom 50% of the population living in the poorest countries, have increased significantly between 1820 and 1960-1980, before beginning a period of reduction. **Note.** For the computation of this ratio, the population of overlapping countries has been divided between deciles as if they were multiple countries. **Sources and series:** see piketty.pse.ens.fr/equality (figure 36)

Worldwide Distribution of Carbon Emissions 2010-2018



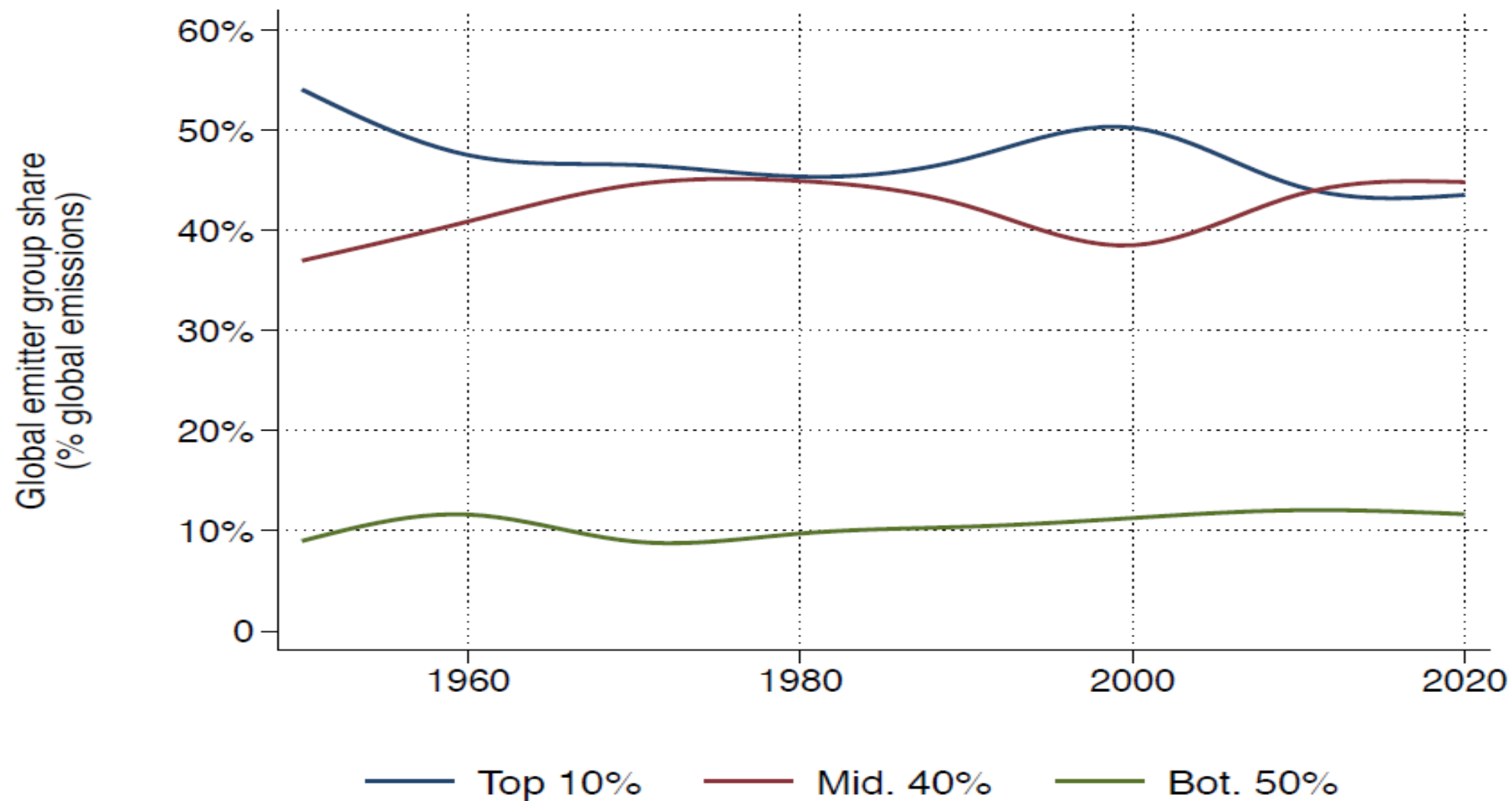
Interpretation. The share of North America (U.S.-Canada) in total global emissions (direct and indirect) was 21% on average in 2010-2018; this share rises to 36% if one looks at emissions greater than global average (6,2t CO₂e per year), 46% for emissions above 2,3 times the global average (i.e. the top 10% of world emitters, accounting for 45% of total emissions, compared to 13% for the bottom 50% of world emitters), and 57% of those emitting over 9,1 times the global average (i.e. the top 1% of world emitters, accounting for 14% of total emissions).

Sources and series: see piketty.pse.ens.fr/equality (figure 3)



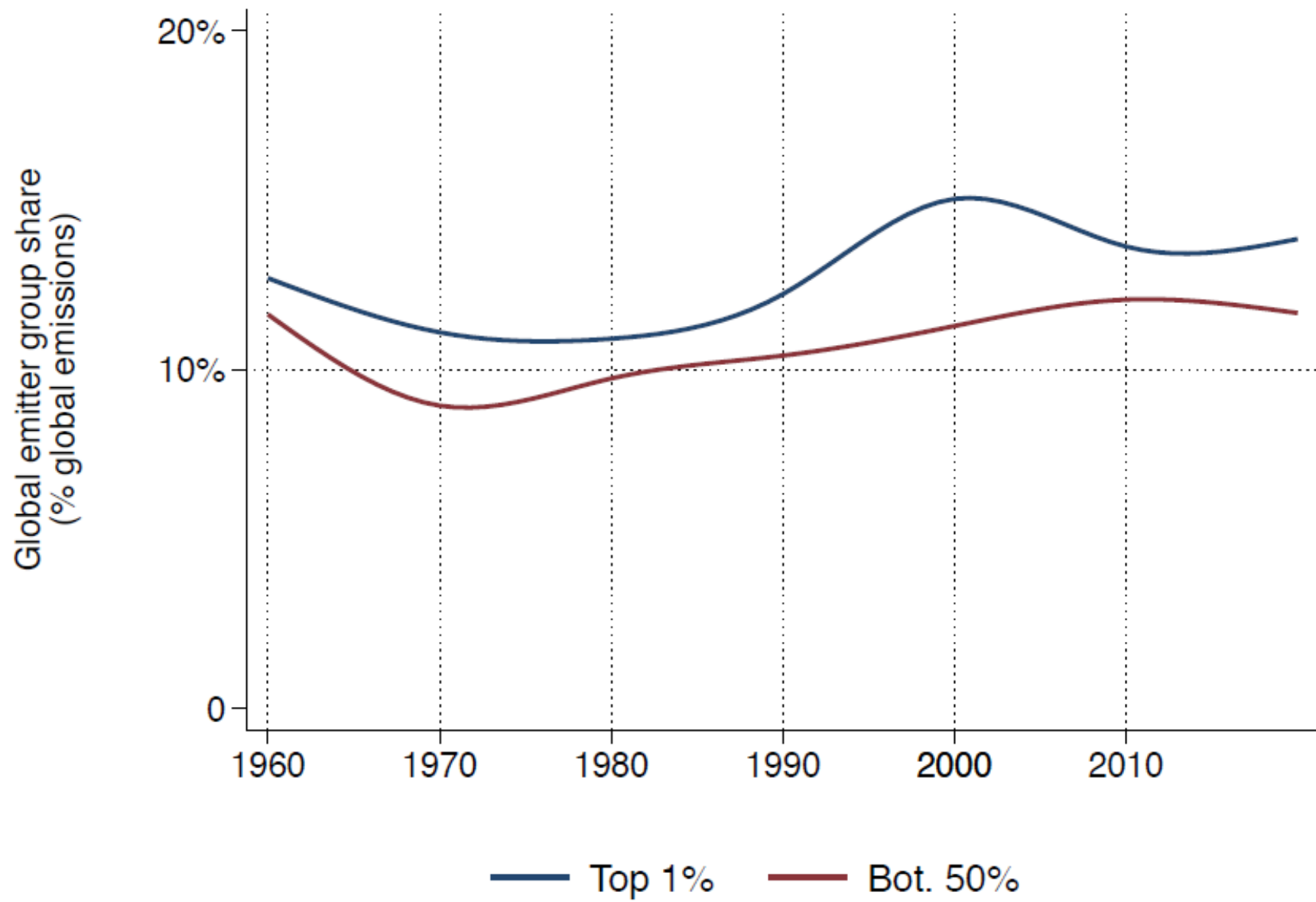
GHG emissions per capita

Source: Author's estimates based on WID.world, PRIMAP and EORA. GHG footprints (i.e. net of imports and exports) excl. LULUCF. See methodological appendix for details. [Methodology]



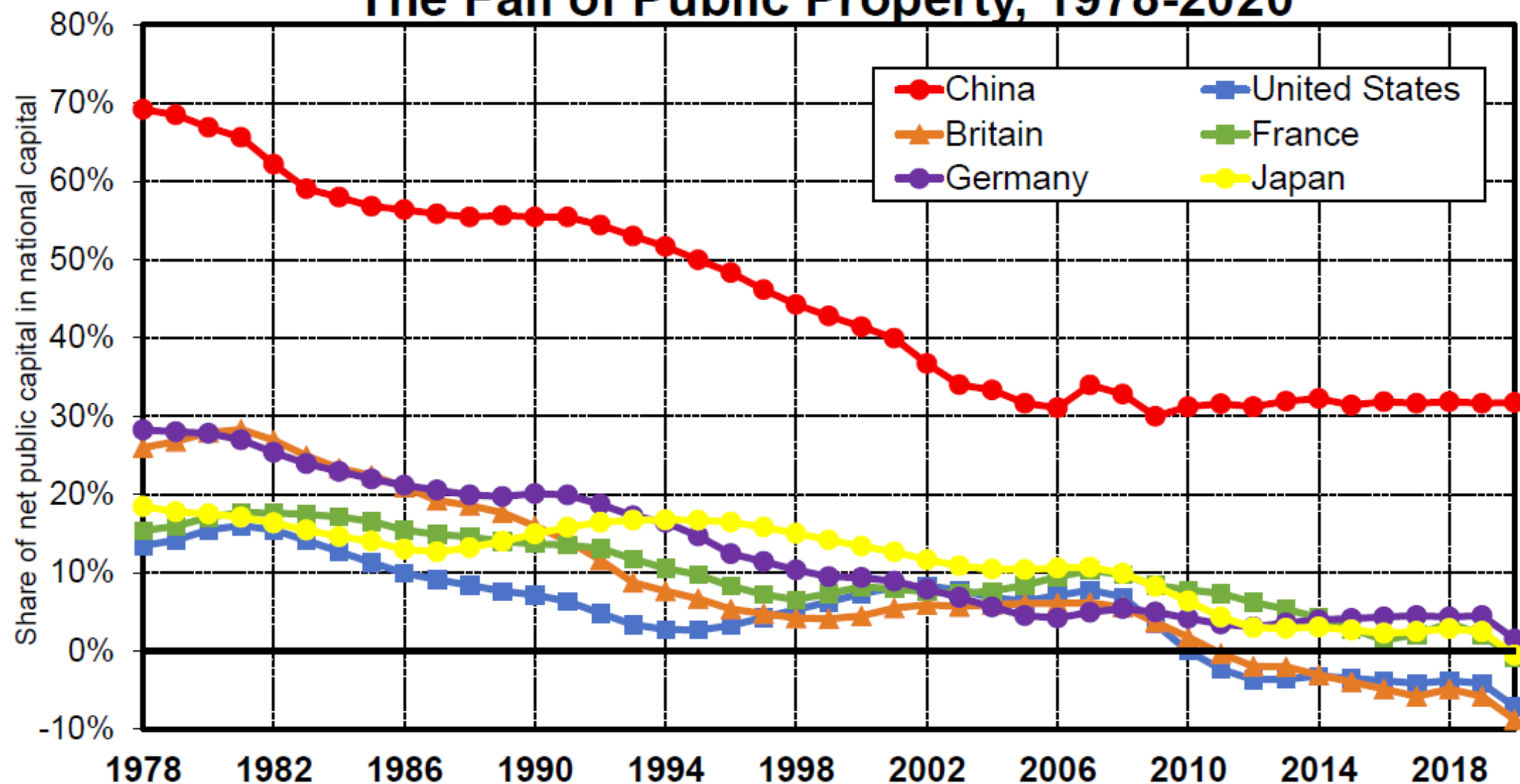
Global GHG emissions inequality, 1950-2020

Source: Author's estimates based on PRIMAP, EORA, WID.world and own estimations



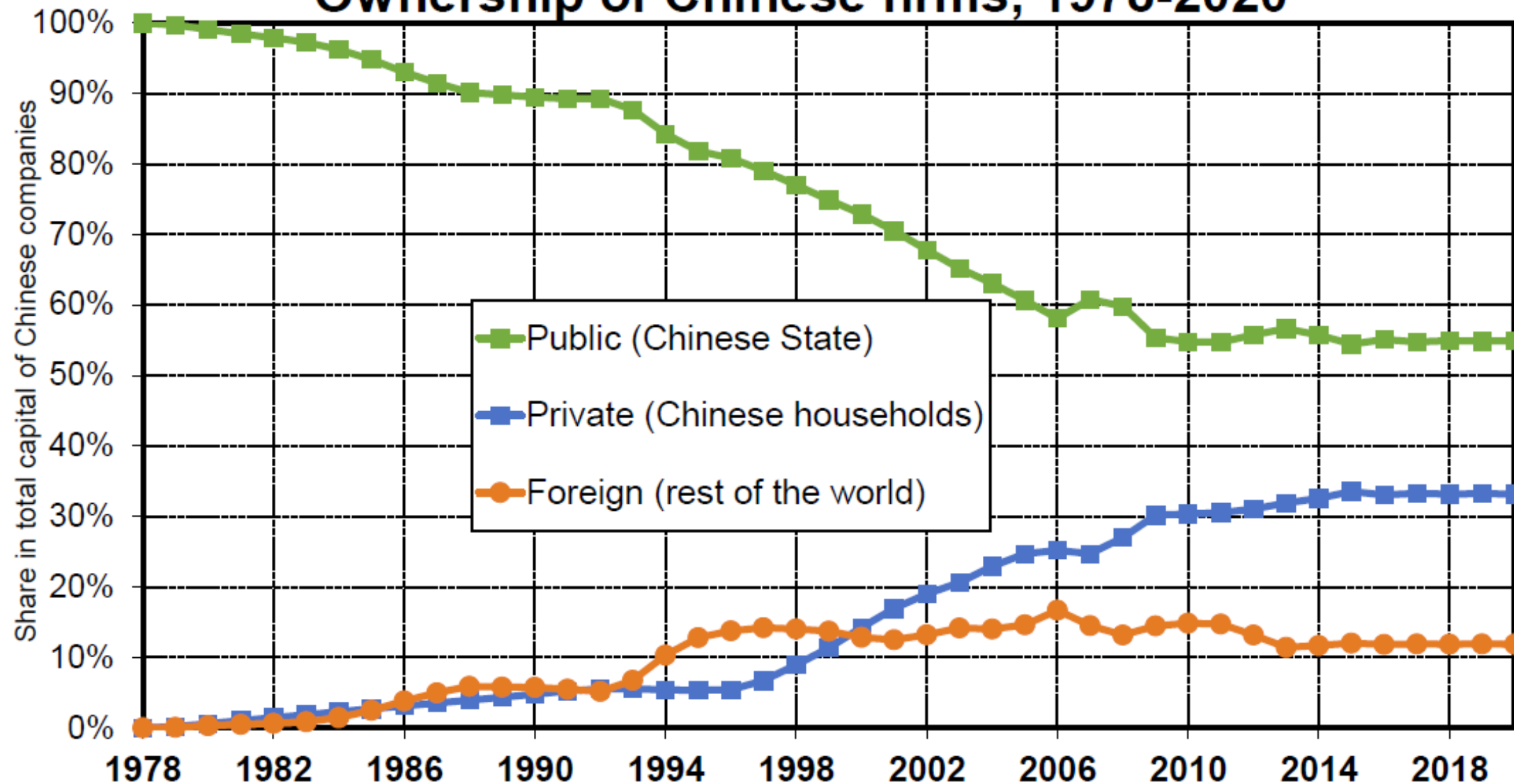
- Pomeranz The Great Divergence 2000: **global economic integration, slavery & colonial domination played a central role in the rise of Europe and the industrial revolution.**
In 1860, 75% of cotton used in European textile came from US South slavery plantations
- **Key role of « ecological constraint ».** Very fast deforestation 1500-1800. Globalization & colonialism allowed to relax the constraint.
In 1830s, total British imports = 10 millions ha land, i.e. the equivalent of 1.5-2 additional Britain in arable land.
Ecological accounting more suitable than monetary accounting for the study of long run development: relative price fallacy

The Fall of Public Property, 1978-2020



Interpretation. The share of public capital (public assets net of debt, all government levels and asset categories combined: companies, buildings, land, financial assets, etc.) in national capital (i.e. the sum of public and private capital) was about 70% in China in 1978, and it has stabilized around 30% since the mid-2000s. This share was around 15%-30% in capitalist countries in the 1970s and is near zero or negative in 2020. **Sources and series:** see piketty.pse.ens.fr/equality (figure 39)

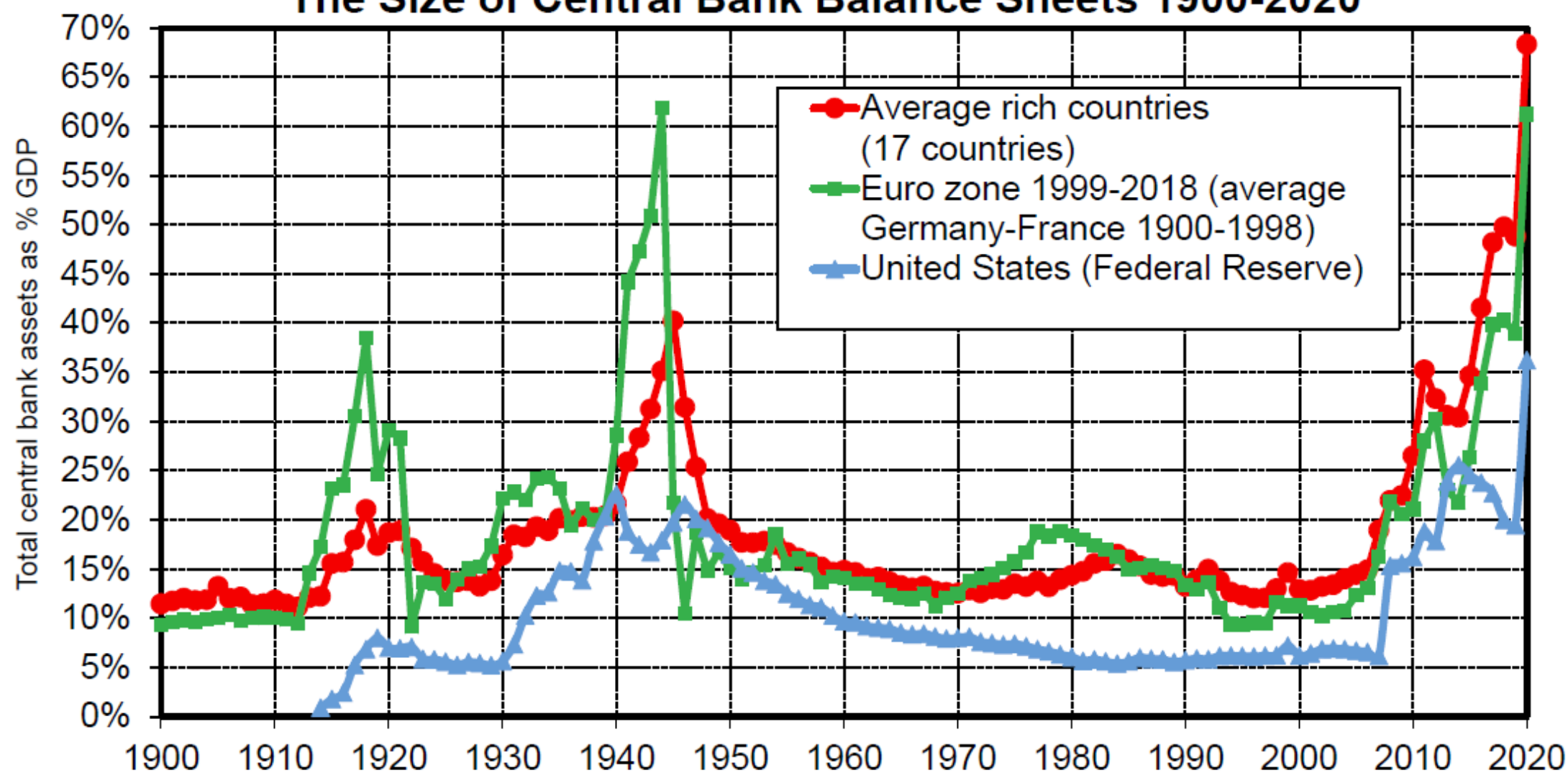
Ownership of Chinese firms, 1978-2020



Interpretation. The Chinese State (all government levels combined) owned in 2017 about 55% of total capital of Chinese firms (both listed and unlisted, of all sizes and all sectors), vs 33% for Chinese households and 12% for foreign investors. The foreign share has diminished since 2003, and that of Chinese households increased, while that of the Chinese State stabilized around 55%.

Sources and series: see piketty.pse.ens.fr/equality (figure 40)

The Size of Central Bank Balance Sheets 1900-2020



Interpretation. Total assets of the European Central Bank (ECB) rose from 11% of euro zone GDP on 31/12/2004 to 61% on 31/12/2020. The evolution 1900-1998 indicates the average obtained for the balance sheets of the German and French central banks (with peaks equal to 39% in 1918 and 62% in 1944). Total assets of the Federal Reserve (created in 1913) rose from 6% of GDP in 2007 to 36% at the end of 2020.

Note. The average of rich countries is the arithmetic average of the 17 following countries: Australia, Belgium, Britain, Canada, Denmark, France, Finland, Germany, Holland, Italy, Japan, Norway, Portugal, Spain, Sweden, Switzerland, U.S.). **Sources and series:** see piketty.pse.ens.fr/equality (figure 41)

- **There is a lot to learn from the past trajectories toward more equality.**
- Crisis and wars can play a role, but such shocks are not necessary nor sufficient
- **The key force behind the rise of equality in 19c-20c was the rise of the labor movement** and the successful political mobilization around the social-democratic platform (rise of social state, democratisation of education, progressive taxation)
- **What we need is a new social-democratic platform:** democratic socialism for the 21c, with a more global perspective than 20c social-democracy