Introduction to Economic History : Capital, Inequality, Growth

(Master APE & PPD)

(EHESS & Paris School of Economics)

Thomas Piketty

Academic year 2023-2024

Lecture 5: The Great Transformation of the 20th century: from proprietarian to social-democratic societies

(check on line for updated version)

Roadmap of the lecture

- K. Polanyi and the « Great Transformation » (1944)
- The fall of inequality and private property (1914-1950)
- The removal of 20c public debt: inflation & exceptional wealth taxes
- Progressive taxation & the deconcentration of property
- The rise of social and fiscal state
- Social-democratic societies (1950-1980): incomplete equality
- Codetermination & power sharing: success, limits & incomplete diffusion
- Social-democracy and the challenge of tertiary education
- The challenge of tax competition and financial deregulation (1990-2020)

K. Polanyi and the « Great Transformation » (1944)

- **K. Polanyi, *The Great Transformation: The Political and Economic Origins of our Time* (1944)**: the 19^{c} capitalist system was inherently unstable; this finally led to the self-destruction on European societies in 1914-1945 & the death of 19c economic liberalism and laissez-faire ideology
- Hungarian economic historian, took refuge in London 1933 & NYC 1940-1944
- 19c regime: sacralisation of market system and private property + generalized competition between individuals and between European nations-states
→ very unequal & unstable system, both within and between countries
→ wars, revolutions, monetary chaos, fascism
- Key pb = **myth of self-regulated markets for labor, land and money**

The solution is democratic socialism, i.e. the “social embeddedness of markets” (market economy with democratic regulation of the markets for labor, land and money/capital) (but the book focuses mostly on historical analysis)
(+over-optimistic view of pre-industrial restrictions on labor mobility?)

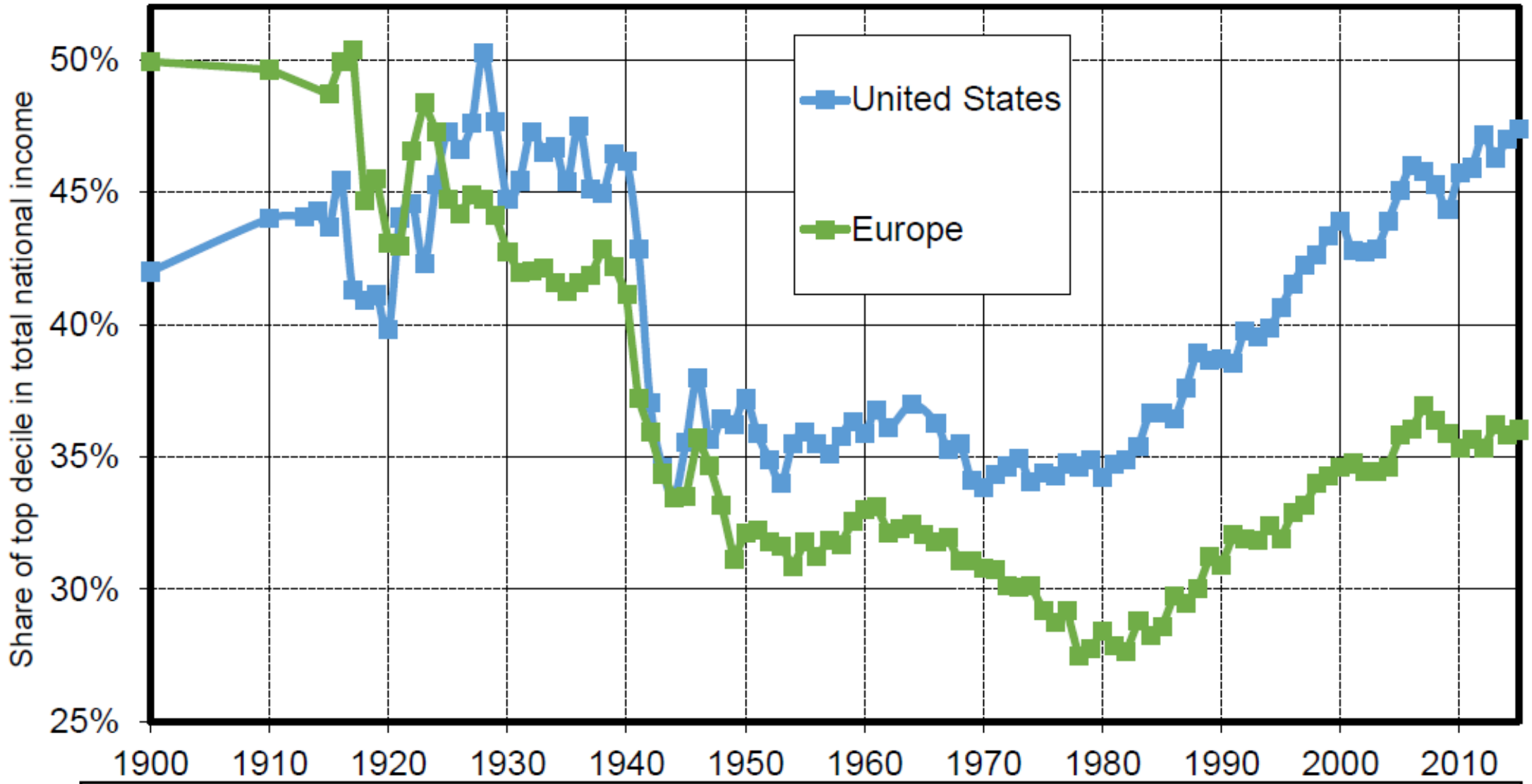
- **H. Arendt, The Origins of Totalitarianism 1951**:
same basic premises as Polanyi 1944: generalized market competition 1815-1914 led to self-destruction of European nation-states in 1914-1945
- Arendt stresses **the need for post-national federations to regulate globalized capitalism** = what colonial British & French empires did in a hierarchical way; what Bolsheviks and Nazis did in a totalitarian manner; what the US do in a constitutional & relatively democratic manner
- **European social-democratic nation-states were too small to control & regulate global economic forces**. European social-democratic parties (SPD, Labour, French socialists, etc.) were internationalist in their discourse but not in their political project (nation-centered, lack of federalist dimension).
- This 1951 analysis seems quite relevant for 2019-2020

- O. Rosenboim, ***The Emergence of Globalism. Visions of World Order in Britain and the United States 1939-1950***. Princeton UP 2017
- Between colonial empires and the cold war: new federal visions of world orders emerge (UN 1945: less ambitious version of these discusions)
- **UK movement Federal Union**: very active in 1938-1940
- April 1940 meeting in Paris between British & French economists to prepare a possible federal union between Britain, France and beyond
- **But wide disagreements about the economic content of federal union**:
- Beveridge, Wooton: social insurance, federal progressive tax on high incomes and inheritance (*Socialism and Federation*, 1941)
- Robbins: ok for federal progressive taxation in case the free movement of labour and trade within the federation is not sufficient to reduce inequality
- Hayek: the only objective of the federation must be to constitutionalize property rights & prevent redistribution (*The Road to Serfdom*, 1944; *Law, legislation and liberty*, 1982; pro-Pinochet in 1973-1990)

The fall of inequality and private property (1914-1950)

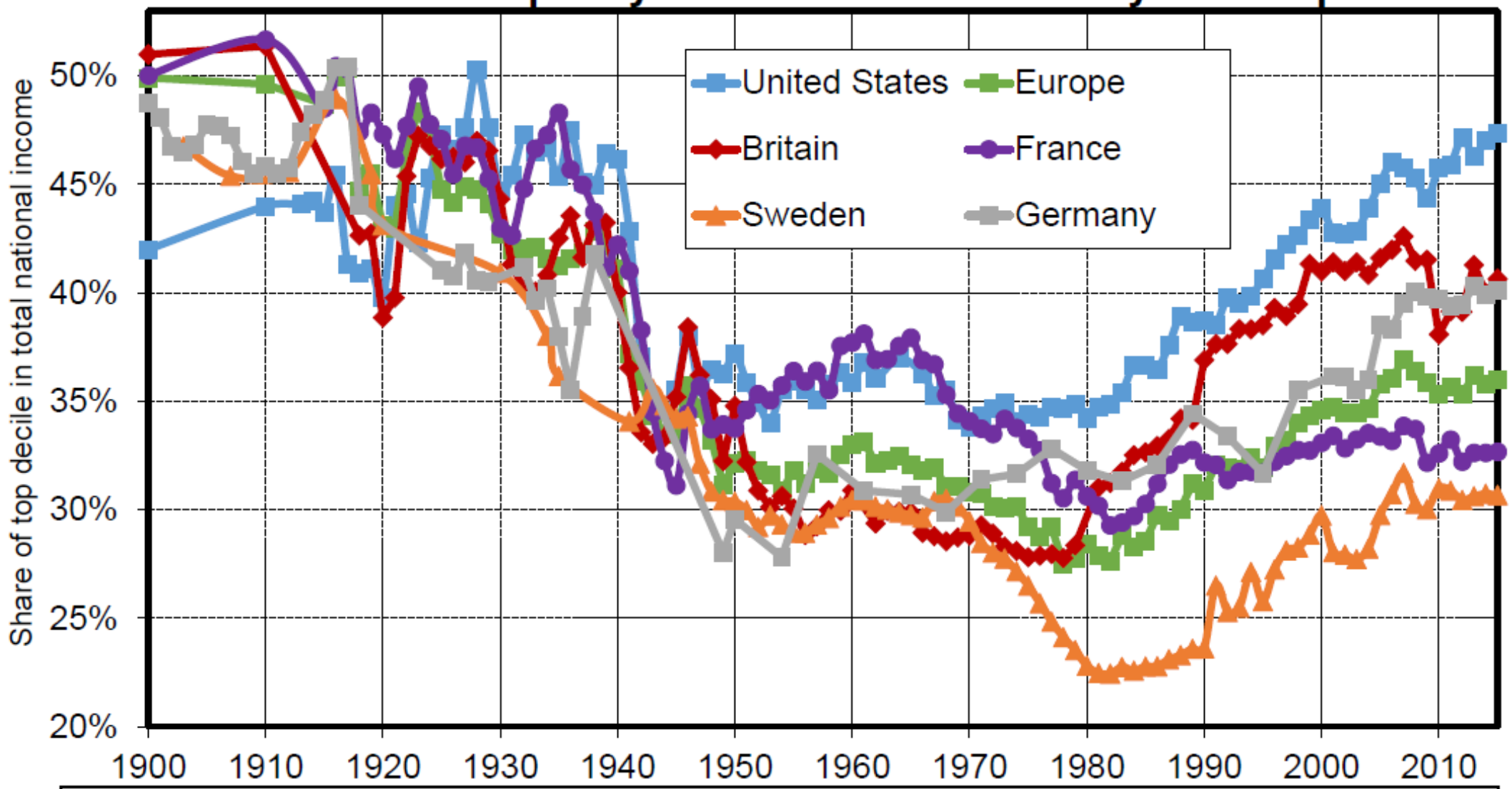
- **Fall of top income shares 1914-1950, particularly in Europe**
- Rebound of inequality since 1980, especially in the US
- But inequality levels in Europe in 2010s are still much below pre-WW1 levels
- **The decline in income inequality during the 20c is largely due to the fall of top capital incomes**
- In contrast, the inequality of labour income has been relatively stable in the long-run, particularly in Europe (≠ sharp rise in US since 1980s)
- Basic orders of magnitude. **Top 10% income share declined from 50% to 30-35% of total income. Top 10% wealth share declined from 90% to 50-60% of total wealth**. Bottom & middle incomes are made of labour income, top incomes are made of capital income. Bottom wealth = liquidities, middle wealth = housing, top wealth = financial & business assets.

Income inequality: Europe and the U.S. 1900-2015



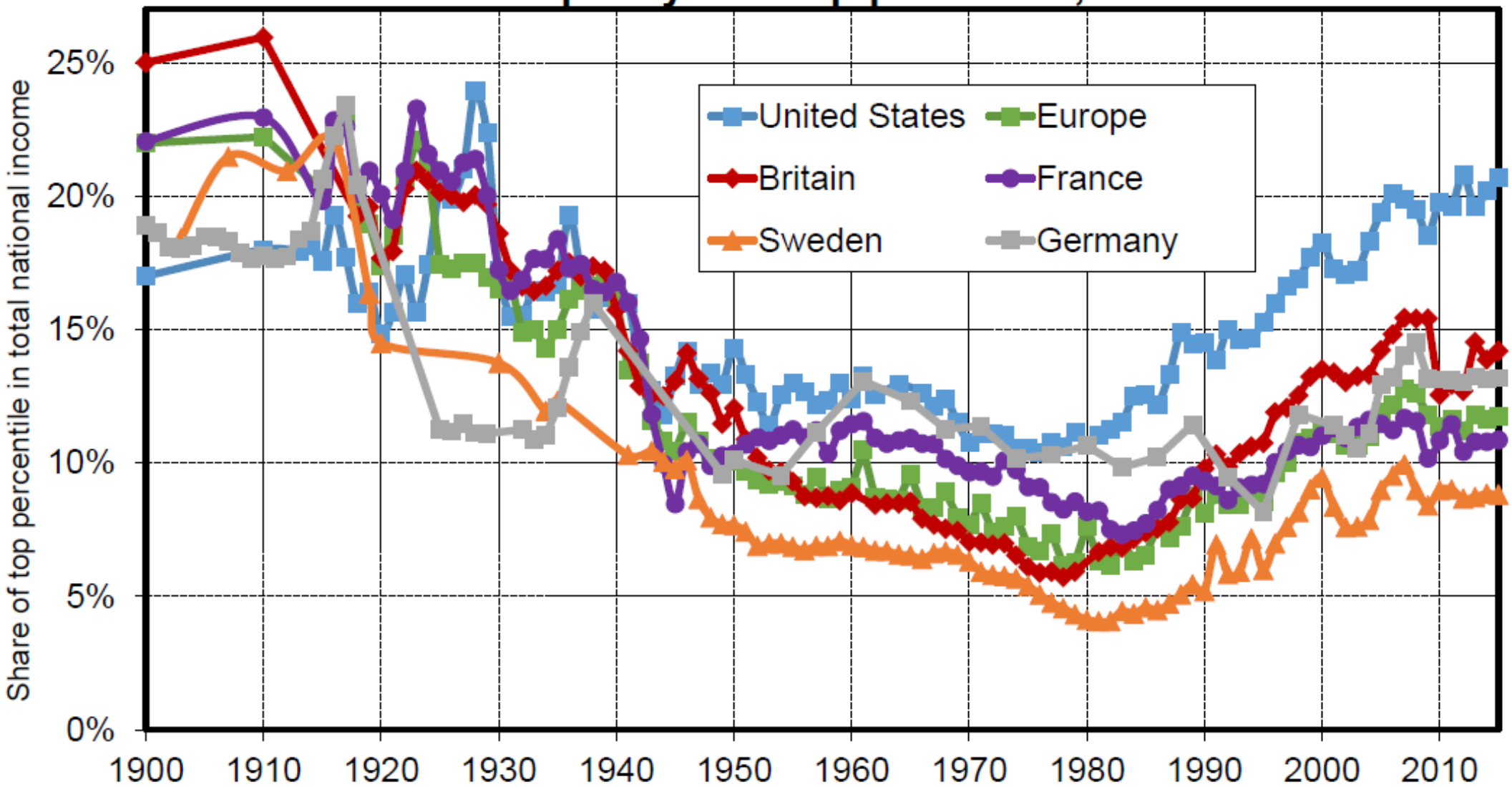
Interpretation. The share of the top decile (the top 10% highest incomes) in total national income was on average about 50% in Western Europe in 1900-1910, before dropping to about 30% in 1950-1980, and rising again above 35% by 2010-2015. The rebound of inequality was much strong in the U.S., where the top decile income share is about 45%-50% in 2010-2015 and exceeds the level observed in 1900-1910. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.1).

Income inequality 1900-2015: the diversity of Europe



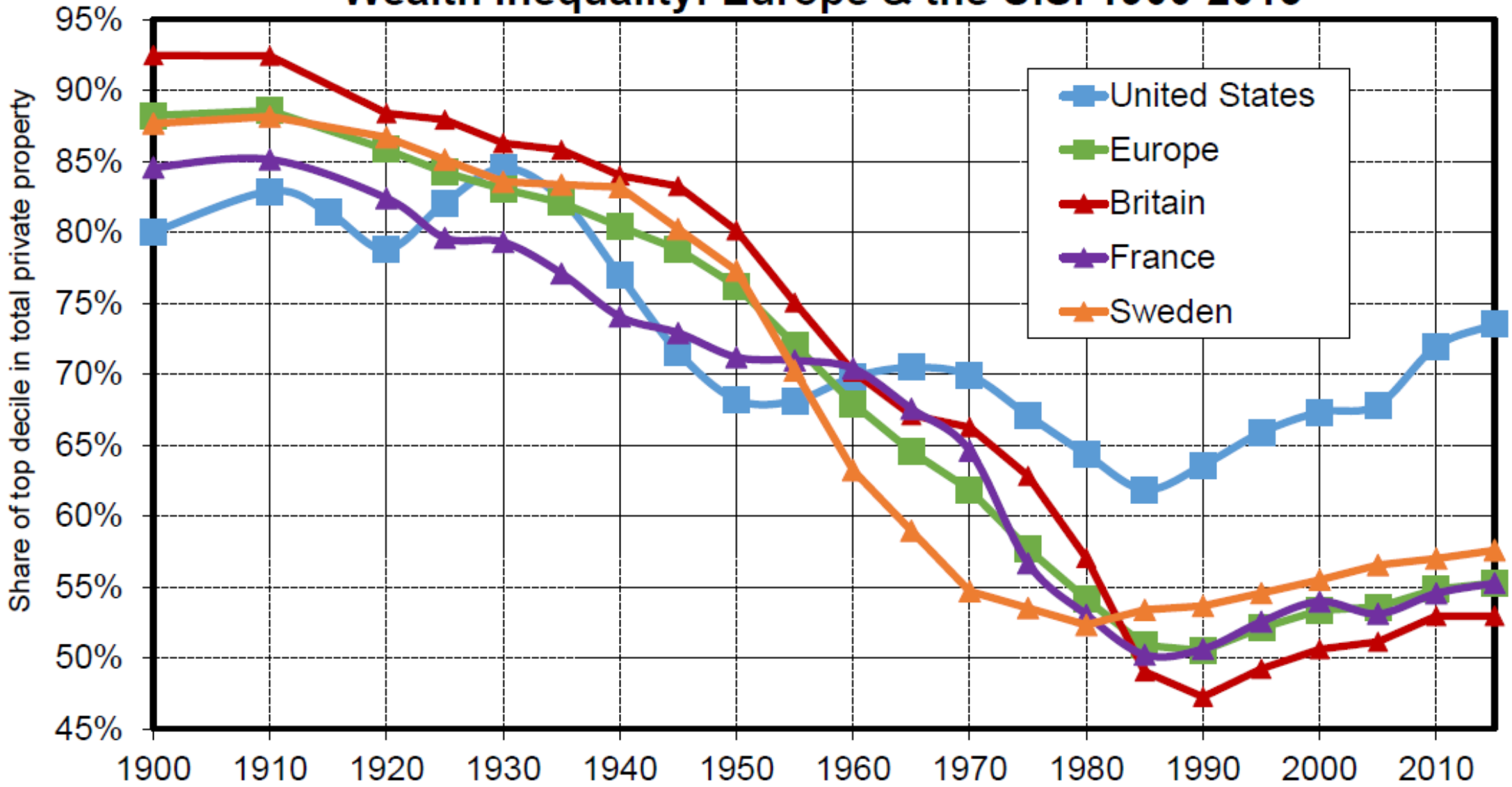
Interpretation. The share of the top decile (the top 10% highest incomes) in total national income was on average about 50% in Western Europe in 1900-1910, before dropping to about 30% in 1950-1980 (or even below 25% in Sweden), and rising again above 35% by 2010-2015 (or even above 40% in Britain). In 2015, Britain and Germany appear to be above European average, while France and Sweden are below average. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.2).

Income inequality: the top percentile, 1900-2015



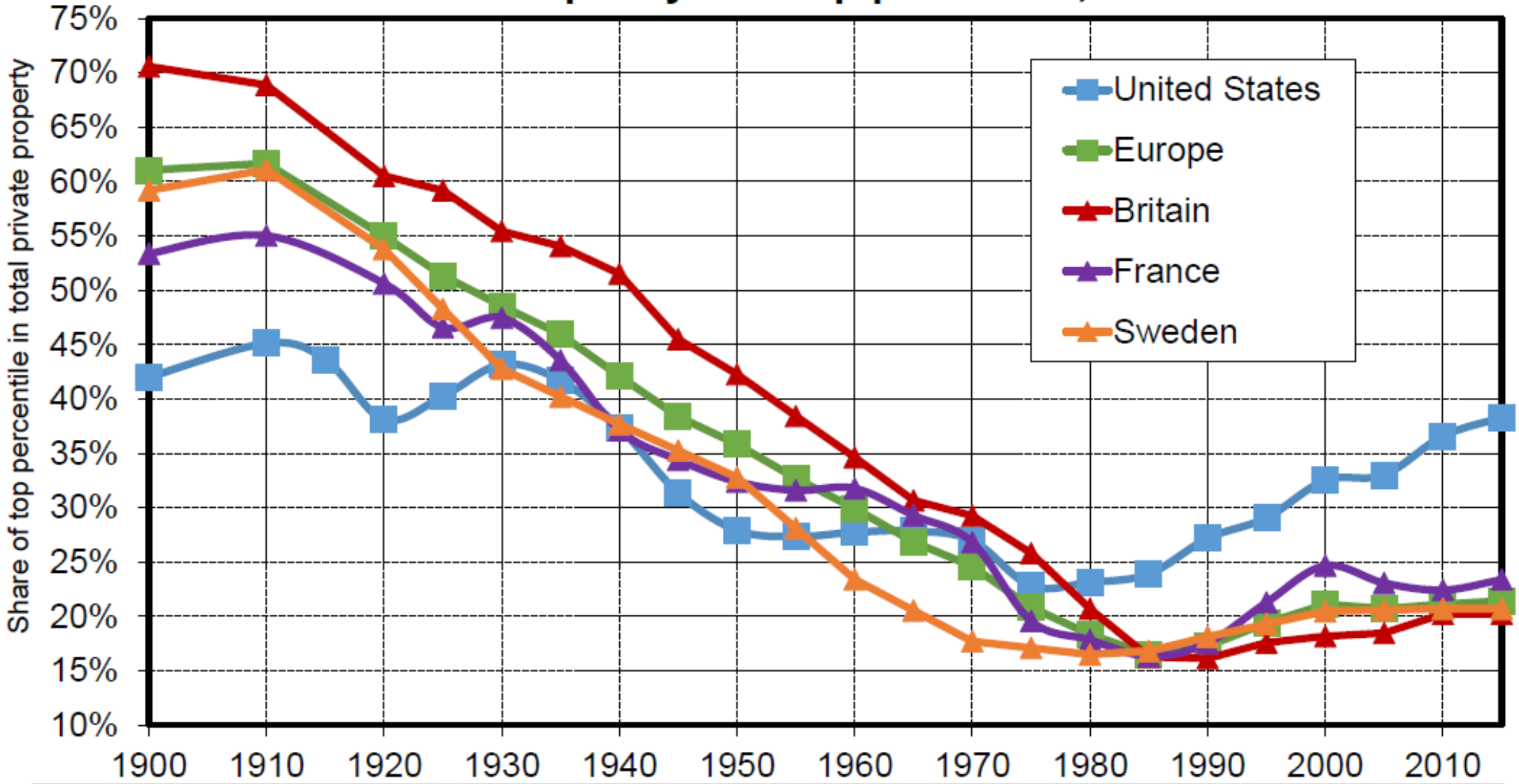
Interpretation. The share of the top percentile (the 1% highest incomes) in total national income was about 20%-25% in Western Europe in 1900-1910, before dropping to 5%-10% in 1950-1980 (or even less than 5% in Sweden), and rising again around 10%-15% in 2010-2015. The rebound of inequality was much stronger in the U.S., where the top percentile share reaches 20% in 2010-2015 and exceeds the level of 1900-1910. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.3).

Wealth inequality: Europe & the U.S. 1900-2015



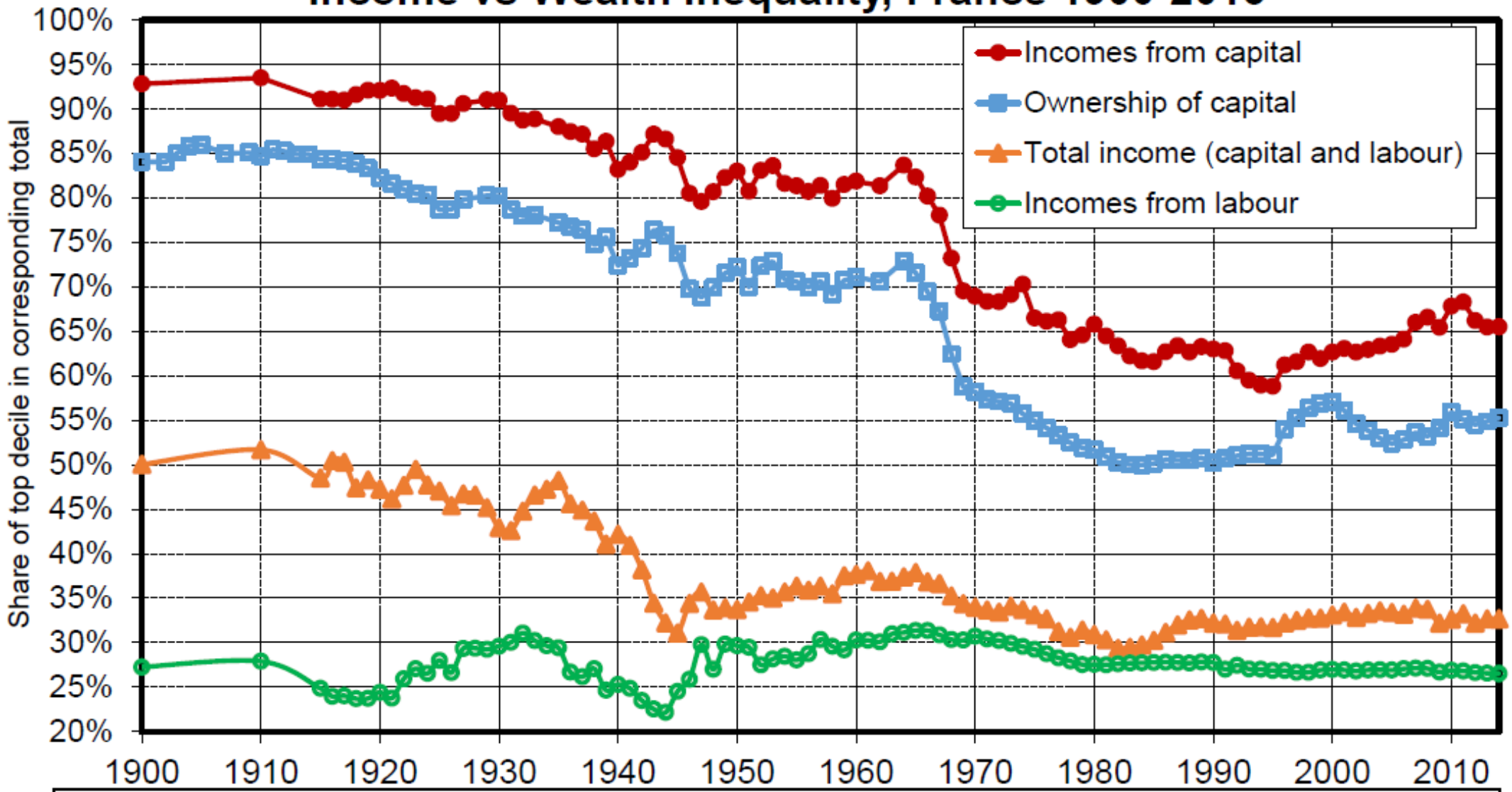
Interpretation. The share of the top decile (the 10% highest wealth holders) in total private property (all assets combined: real estate, business and financial assets, net of debt) was about 90% in Western Europe in 1900-1910, before dropping to 50%-55% in 1980-1990, and rising since then. The rebound of inequality was much stronger in the United States, where the top decile share is close to 75% in 2010-2015 and resembles the level of 1900-1910 . **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.4).

Wealth inequality: the top percentile, 1900-2015



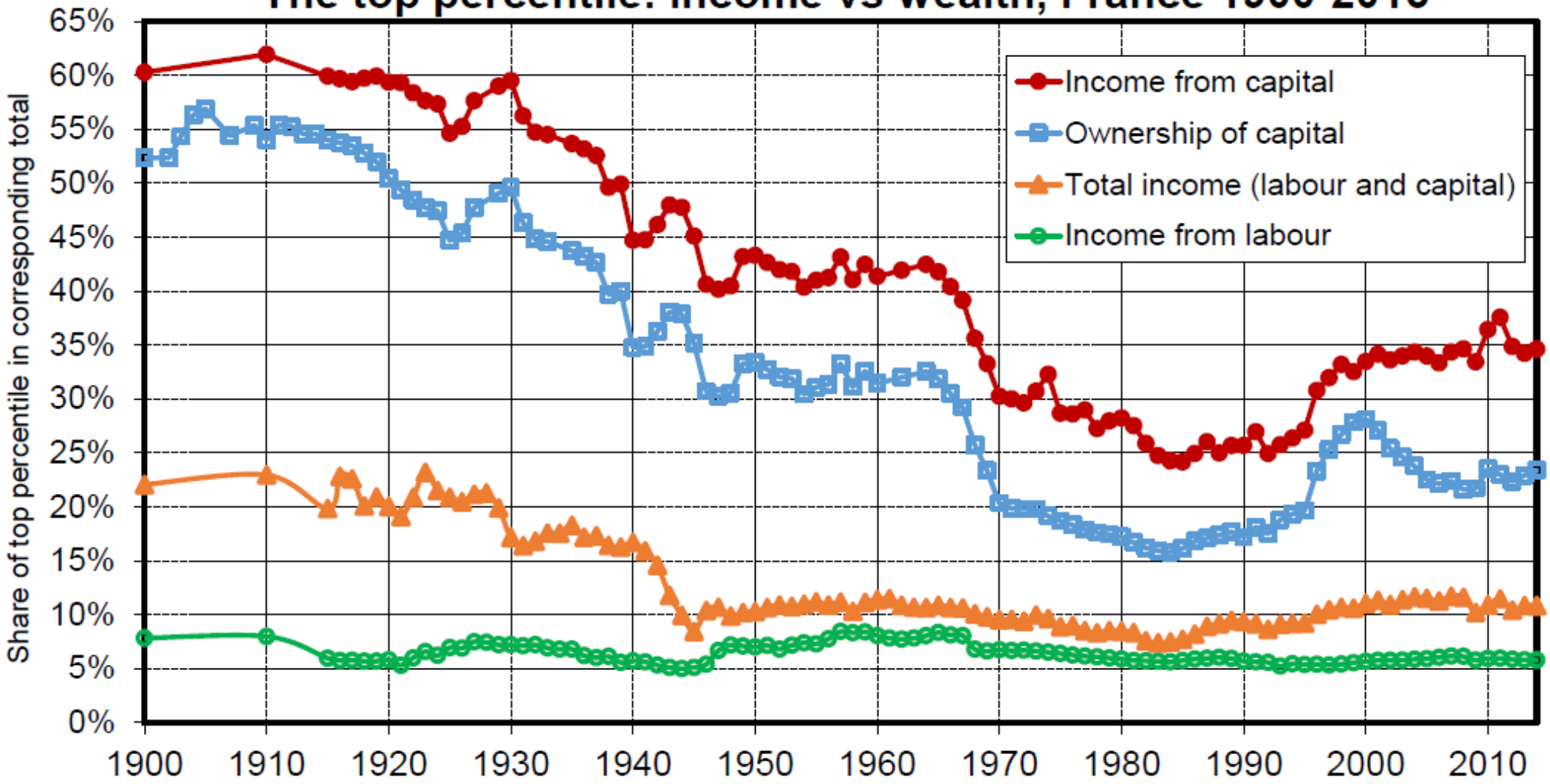
Interpretation. The share of the top percentile (the 1% highest wealth holders) in total private property (all assets combined) was about 60% in Western Europe in 1900-1910 (55% in France, 70% in Britain), before dropping to less than 20% in 1980-1990, and to rise since then. The rebound of inequality was much stronger in the U.S., where the top percentile share approaches 40% in 2010-2015 and is close to the level of 1900-1910 . **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.5).

Income vs Wealth Inequality, France 1900-2015



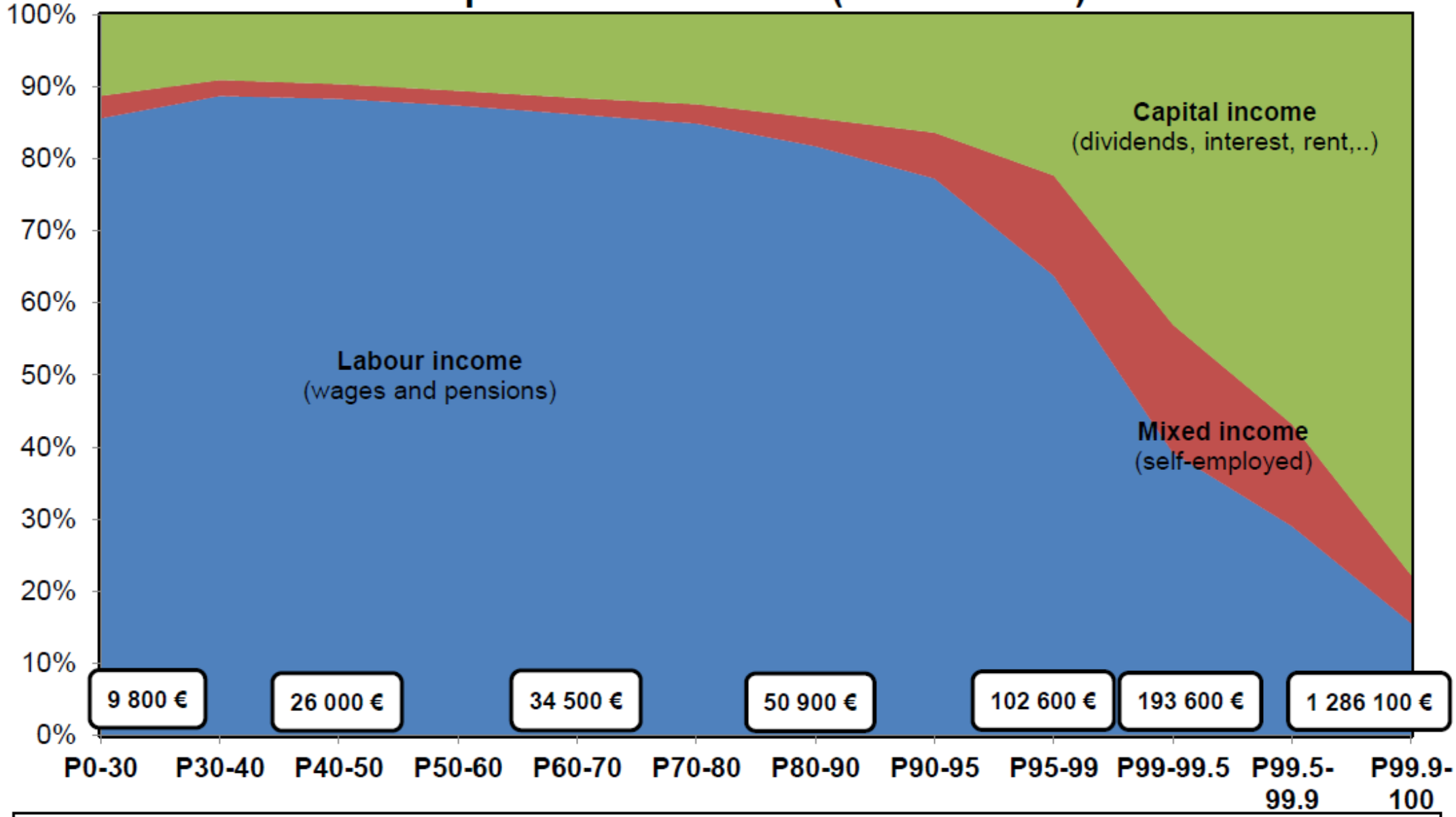
Interpretation. In 1900-1910, the 10% highest capital incomes (rent, profit, dividend, interest, etc.) received about 90%-95% of total capital incomes; the 10% highest labour incomes (wages, self-employment income, pensions) received about 25%-30% of total labour incomes. The reduction of inequalities during the 20th century came entirely from the fall in the concentration of property, while the inequality of labour incomes changed little. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.6).

The top percentile: income vs wealth, France 1900-2015



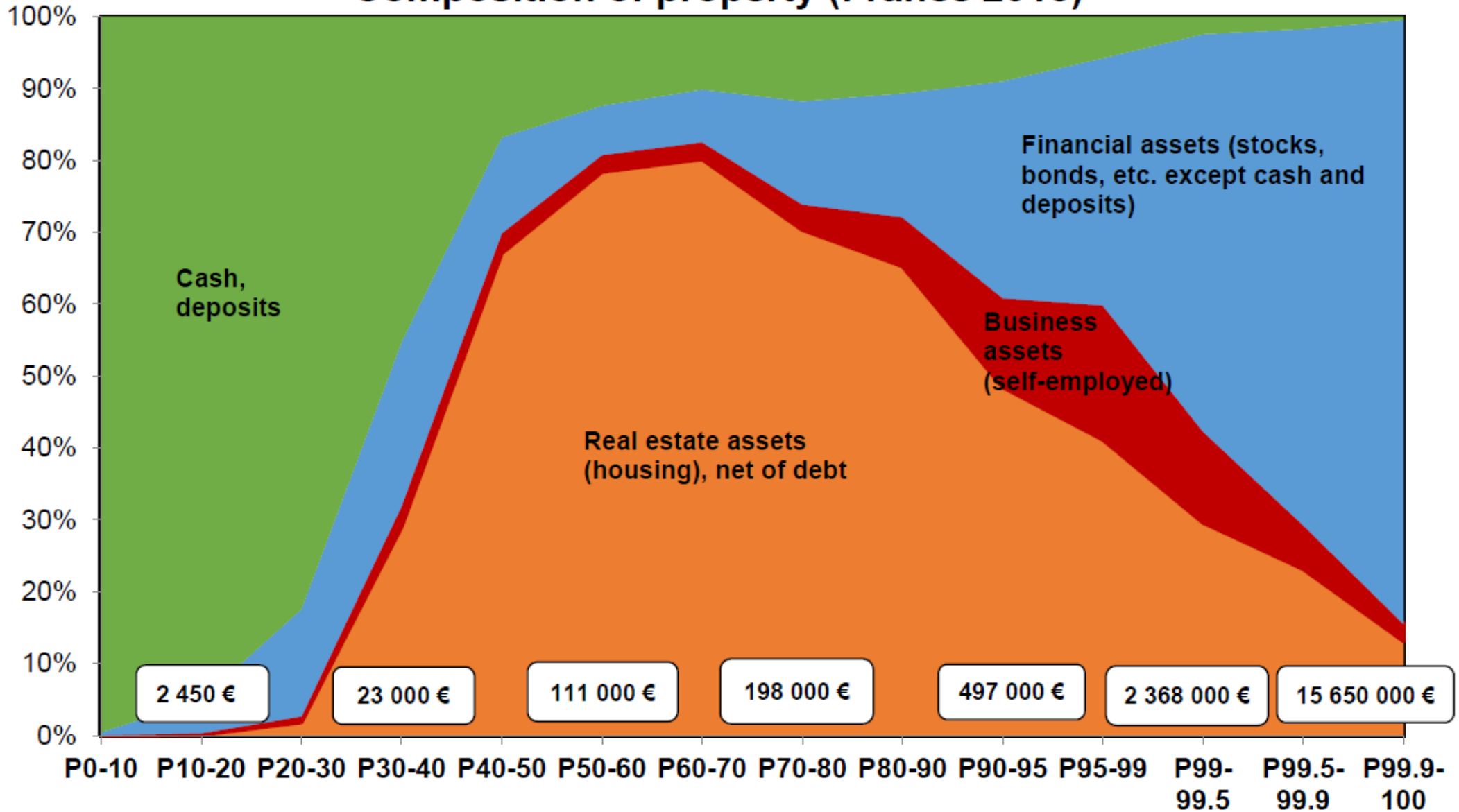
Interpretation. In 1900-1910, the 1% highest capital incomes (rent, profit, dividend, interest, etc.) received about 60% of total capital incomes; the 1% highest capital owners (real estate, business and financial assets, net of debt) owned about 55% of total private property; the 1% highest total incomes (labour and capital) received about 20%-25% of total income; the 1% highest labour incomes (wages, self-employment income, pensions) received about 5M-10% of total labour incomes. In the long-run, the fall of inequality is entirely due to the fall in the concentration of property and incomes from capital. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.7).

Composition of income (France 2015)



Interpretation. In France in 2015 (as in most countries where data are available), bottom and middle incomes are mostly made of labour income, while the highest incomes mostly consist of capital income (especially dividends). **Note**: the distribution shown here is annual income per adult, before taxes but pensions and unemployment insurance. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.16).

Composition of property (France 2015)



Interpretation. In France in 2015 (as in most countries where data are available), small fortunes consist primarily cash and bank deposits, medium fortunes of real estate, and large fortunes of financial assets (mainly stocks). **Note**: the distribution shown here is per adult wealth (wealth of couples divided by two). **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.17).

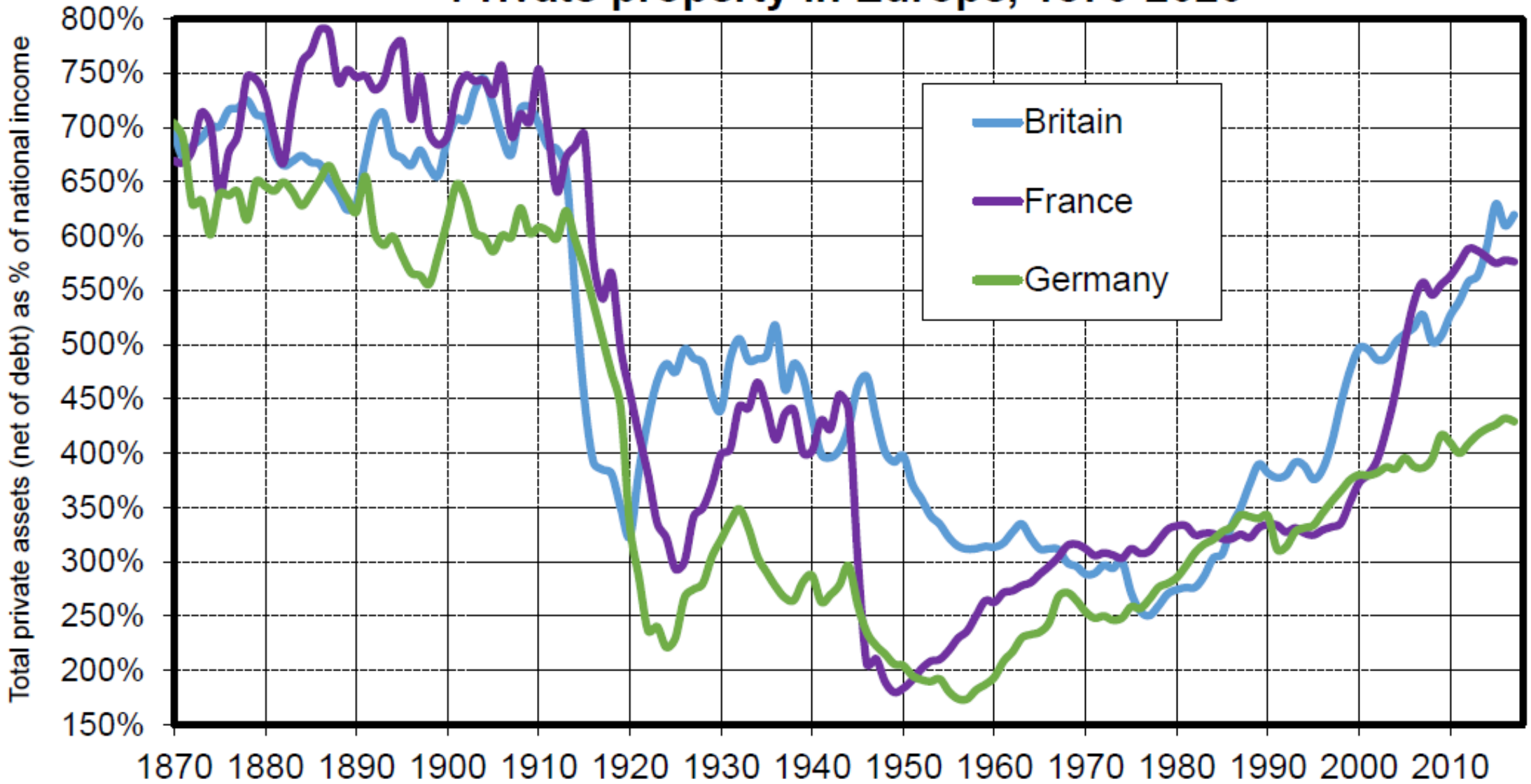
In order to understand the fall in top capital incomes during 20c, one needs to distinguish between two mechanisms:

1. The fall (& recovery) in aggregate private property. From 600%-800% of national income in 1880-1914, down to 200%-300% in 1950-1970, back up to 500%-600% by 2000-2020. But wealth concentration did not recover (yet).

2. The fall (& incomplete recovery) of the concentration of private property. In principle, the fall in aggregate private property could have affected all wealth levels in the same proportion, with unchanged wealth shares by decile.

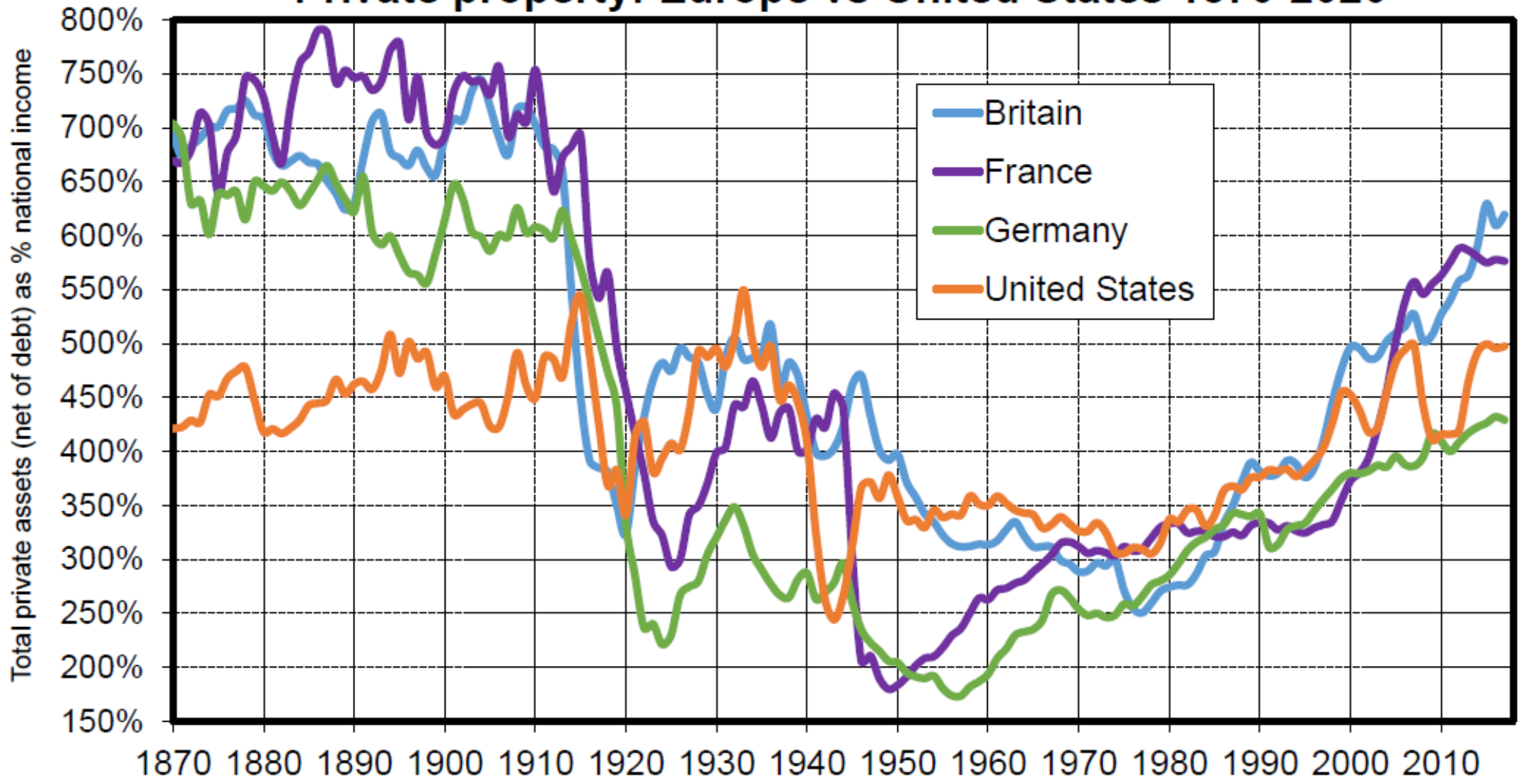
But: (i) Assets held at the top (e.g. foreign wealth) were particularly affected.
(ii) Top wealth holders need their capital income to finance their savings & living standards; 20c shocks led to a collapse of their saving capacity; some even started to sell some of their assets so as maintain their living standards.
(iii) Progressive taxation of top income and top inheritance made it virtually impossible to return to the previous concentration.

Private property in Europe, 1870-2020



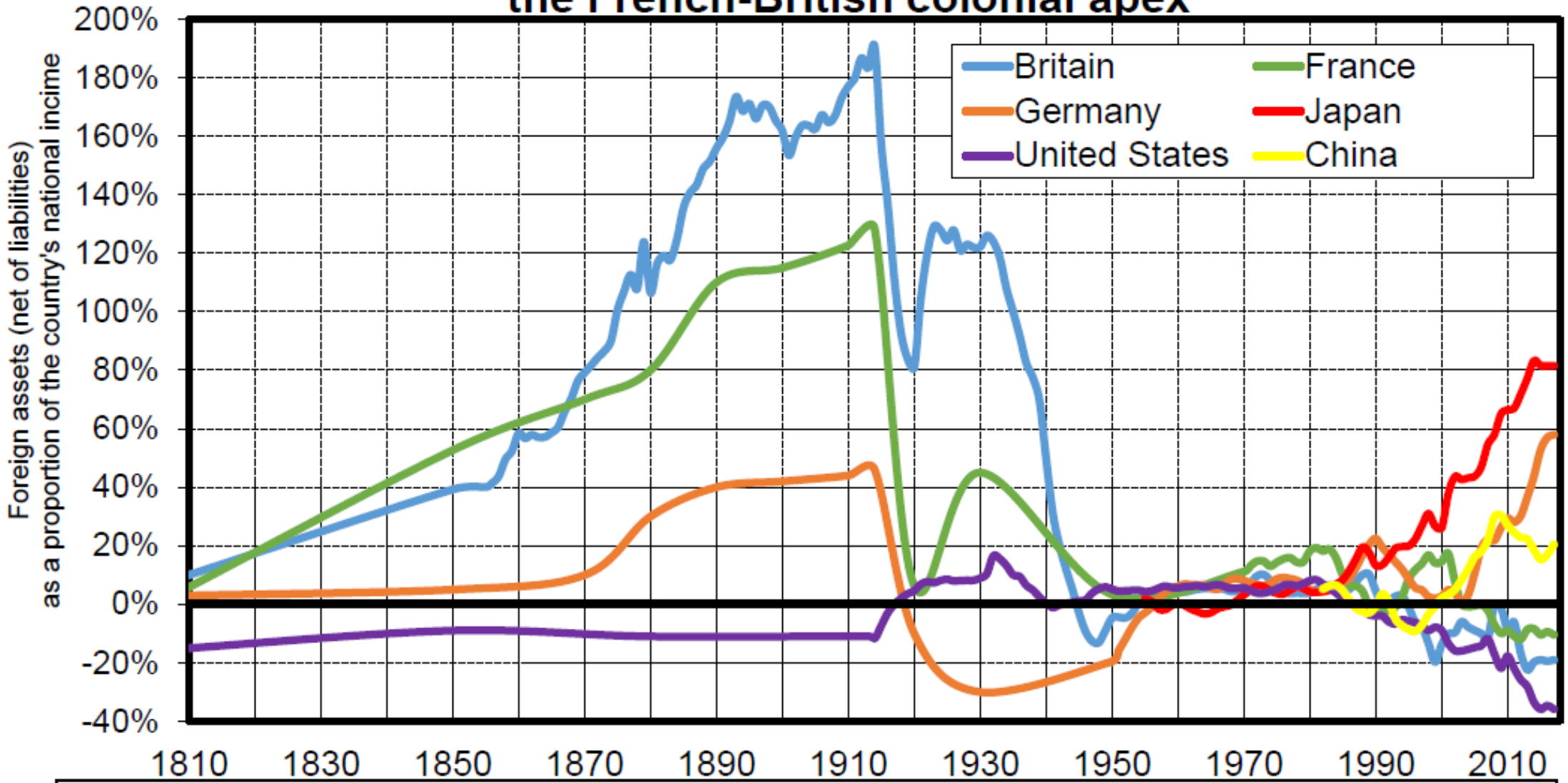
Interpretation. The market value of private property (all assets combined: real estate, business and financial assets, net of debt) was about 6-8 years of national income in Western Europe in 1870-1914, before falling from 1914 to 1950 and reaching about 2-3 years of national income in 1950-1970, and then rising again around 5-6 years in 2000-2020. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.8).

Private property: Europe vs United States 1870-2020



Interpretation. The market value of all private assets (real estate, business and financial assets, net of debt) was about 6-8 years of national income in Western Europe in 1870-1914, before falling between 1914 and 1950 (2-3 years during the 1950s-1970s), and rising again to about 5-6 years in 2000-2020. In the US, the historical variations have been less massive (the market value of private property has generally fluctuated around 4-5 years of national income). **Sources and series**: see piketty.pse.ens.fr/ideology (figure S10.8).

Foreign assets in historical perspective: the French-British colonial apex



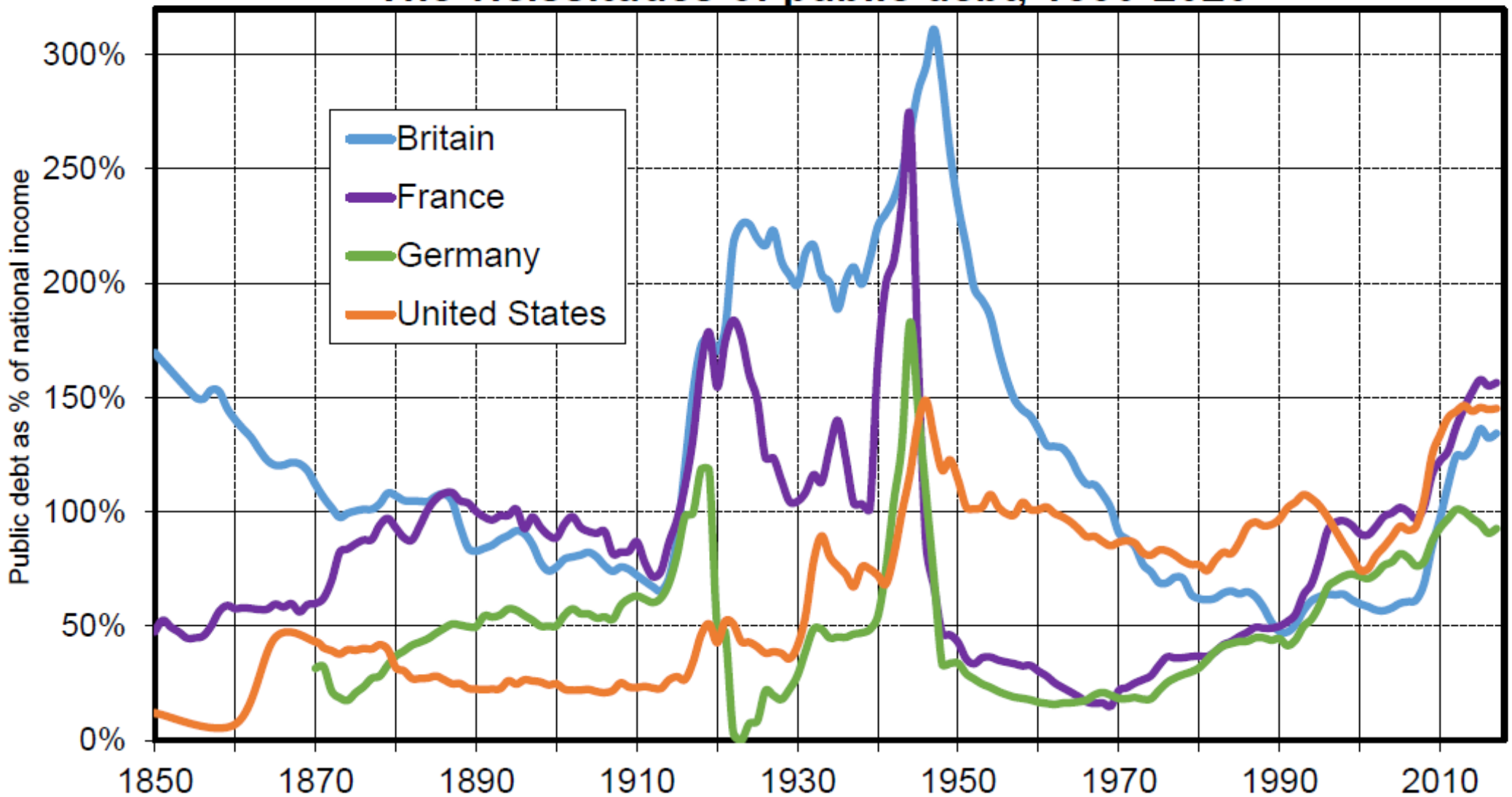
Interpretation. Net foreign assets, i.e. the difference between assets owned abroad by resident owners (including in some cases the governement) and liabilities (i.e. assets owned in the country by foreign owners), amounted in 1914 to 191% of national income in Britain and 125% in France. In 2018, net foreign assets reach 80% of national income in Japan, 58% in Germany and 20% in China.
Sources and series: see piketty.pse.ens.fr/ideology (figure 7.9).

- For detailed decompositions of the fall in aggregate private property between 1914 and 1945, see Piketty-Zucman,Capital is Back: Wealth-Income Ratios in Rich Countries, 1700-2010, QJE 2014 (database) (and *Capital in the 21st century*, chapters 3-5)
- **Physical destructions** of capital: 25-30% of the 1914-1945 fall in France and German, <5% in Britain
- Other two main components explaining the fall (about 50-50):
- **Lack of investment** (low private savings, most of which were absorbed to finance the public debt used to pay for the war)
- **Change in legal property regime**: nationalization, financial regulation, codetermination (power sharing beween shareholders and worker representative in companies), rent control, etc. → decline in the market value of assets (companies, real estate) for property owners, but not necessarily of the real economic value of capital

The removal of 20c public debt: inflation & exceptional wealth taxes

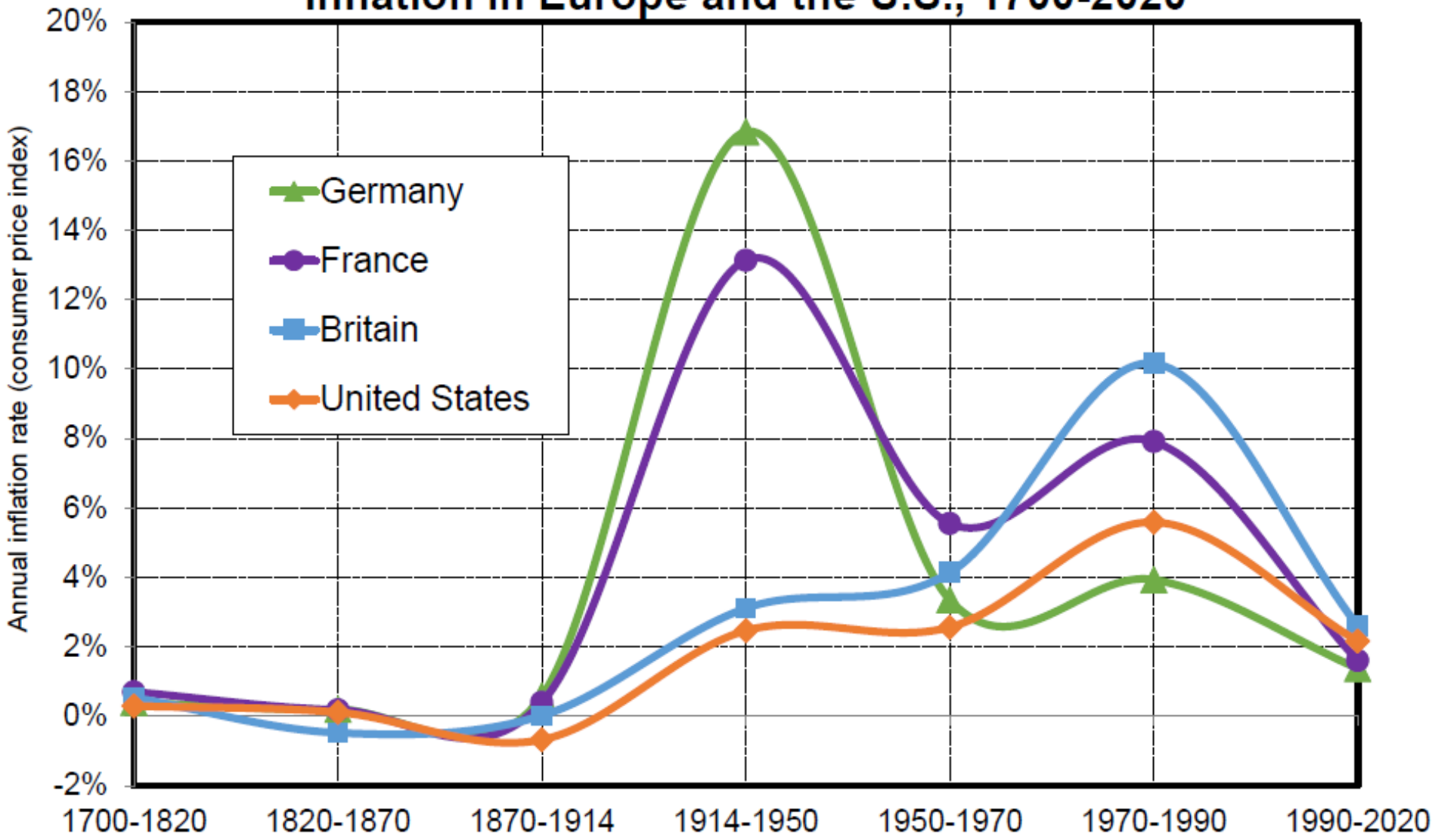
- In 1945-1950, public debt was about 200%-300% of national income in Britain, France and Germany.
  In effect, between 1914 and 1945, private wealth holders have put a large part of their assets into public debt in order to finance the war.
- This large public debt was never repaid to bond holders
- **Britain: gradual erosion by inflation 1945-1980**
- **France: very fast erosion by inflation in 1945-1950**
- **Germany: exceptionnal progressive taxes of large private wealth** (real estate + financial, incl. public debt) were put in place in 1949-1952
  → very fast reduction of public debt (<20% national income in 1950s-1960s), without the negative distributional consequences of inflation (≈ regressive wealth tax)

The vicissitudes of public debt, 1850-2020



Interpretation. Public debt rose strongly after each world war and reached between 1500% and 300% of national income in 1945-1950, before falling sharply in Germany and France (debt cancellations, high inflation) and more gradually in Britain and the U.S. (moderate inflation, growth). Public assets (especially real estate and financial assets) have fluctuated less strongly over time and generally represent around 100% of national income. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.9).

Inflation in Europe and the U.S., 1700-2020



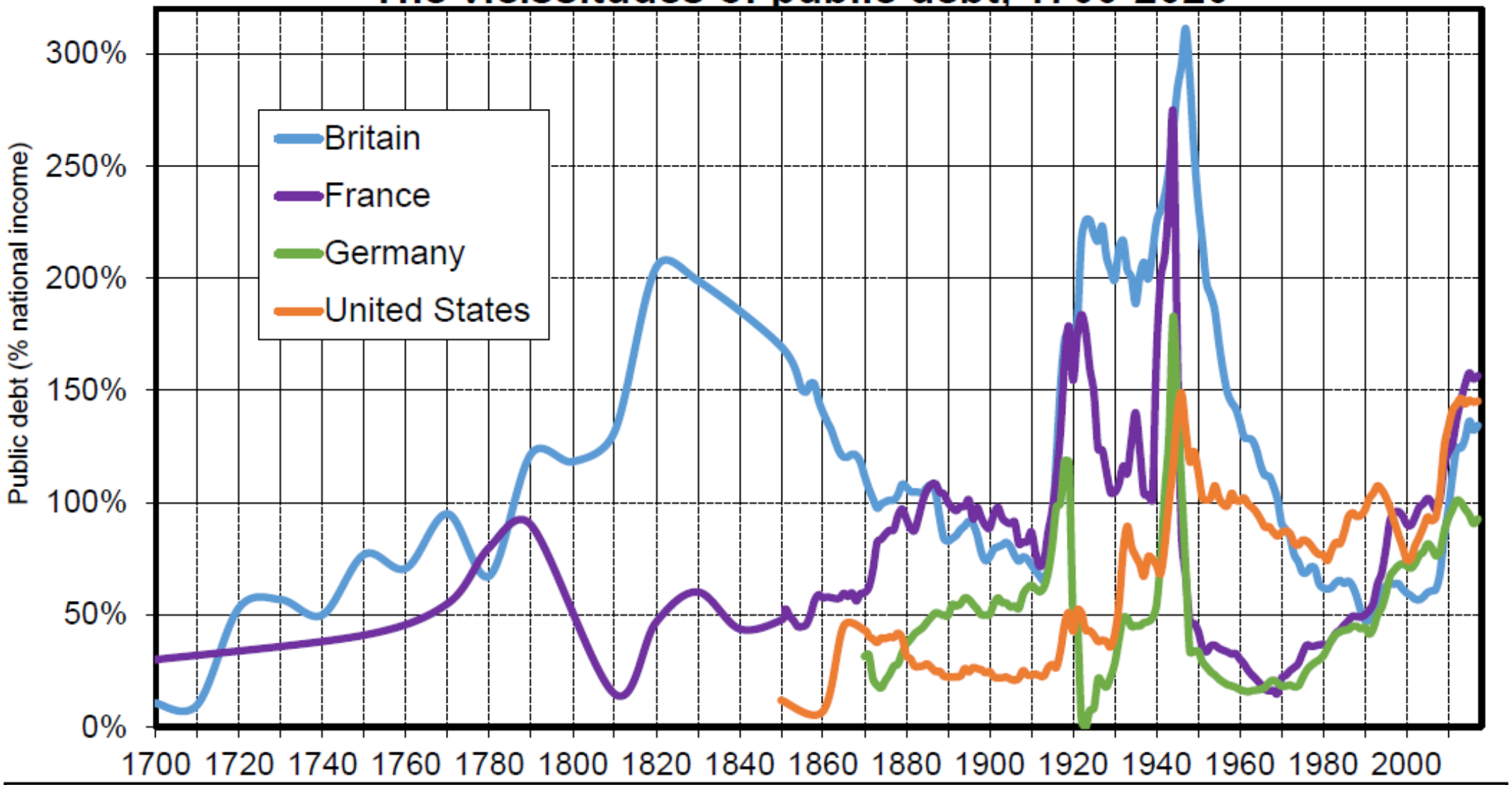
Interpretation. Inflation was quasi-null in the 18th-19th centuries, before rising in the 20th century. It is about 2% per year since 1990. Inflation was particularly high in Germany and France between 1914 and 1950, and to a lesser extent in Britain, France and the U.S. during the 1970s. **Note**. German inflation reached 17% per year between 1914 and 1950 without taking into account the hyper-inflation of 1923. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.10).

- **Germany's public debt removal 1949-1953: mixture of inflation** (much more moderate than Germany 1920s or France 1945-1949), **exceptionnal wealth taxes**, and **foreign debt cancellation** (London 1953, final cancellation 1991)
- See L. Hughes, *Shouldering the Burdens of Defeat: West Germany and the Reconstruction of Social Justice*, U. N.Carolina Press 1999
- See Galogre-Vila et al, « The economic consequences of the 1953 London Debt Agreement », EREH 2018
- **Large levies (one-off taxes) on private capital** (up to 90% on top wealth) were **also used in Japan 1946-1947** in order to reduce large public debt
- See Eichengreen, « The Capital levy in theory and practice », in Dornbush-Draghi, Public debt management: theory and history, CUP 1990

→ the fast removal of public debt following WW2 was a big success in Germany, Japan, France, etc.: it facilitated post-war growth by giving more fiscal capacity for investment in public infrastructure, education, health, etc.

- **A very different historical experiment with large public debt: Britain 1815-1914.** Over 200% of national income in public debt in 1815. Gradually repaid by primary budget surplus during 1815-1914 period. Possible but slow.
- Did not prevent industrial investment and development (Ricardo, 1817)
- See R. Barro, "Are governement bonds net wealth?", JPE 1974 : in a representative agent model, rational agents should anticipate that they will pay more taxes in the future if today's public deficit increase, so they save more in order to make reserves (for themselves or their successors) so as to pay these taxes in the future → the timing of taxes is irrelevant, « debt neutrality » (« Ricardian equivalence »)
- See also R. Barro « Governement spending, interest rates, prices and budget deficits in the UK 1701-1918 », JME 1987 ; G. Clark, «Debt, deficits and crowding out: England 1727-1840", EREH 2001
- Pb: these works neglect the fact that public debt also has huge distributional consequences (whether it is repaid or not), and that this matters for accumulation and growth. **I.e. full debt repayment in 19c Britain was highly beneficial to top wealth holders** (see Amoureux 2014), **while debt cancellation in mid-20c Europe and Japan contributed to the emergence of a more inclusive development model.**

The vicissitudes of public debt, 1700-2020

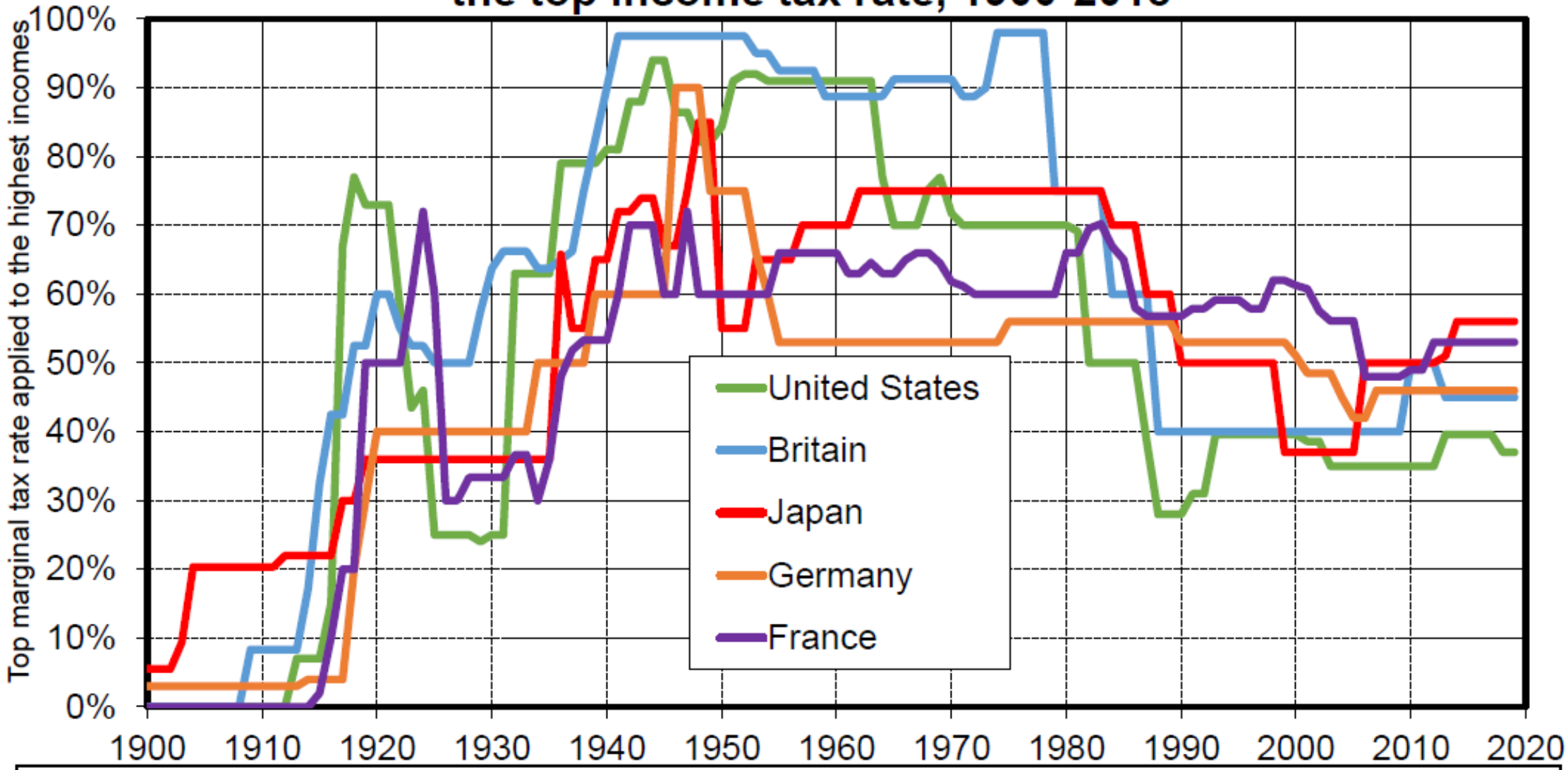


Interpretation. During the 18th century, public debt was quickly rising in France and Britain (without even taking into account *charges et offices*). It was quickly reduced during the Revolution in the case of France (assignats, banqueroute des deux tiers), but rose strongly following revolutionary and napoleonic wars in the case of Britain (where debt was very gradually reduced after a century of primary budget surpluses between 1815 and 1914). **Sources and series**: see piketty.pse.ens.fr/ideology (figure S10.9).

Progressive taxation & the deconcentration of property

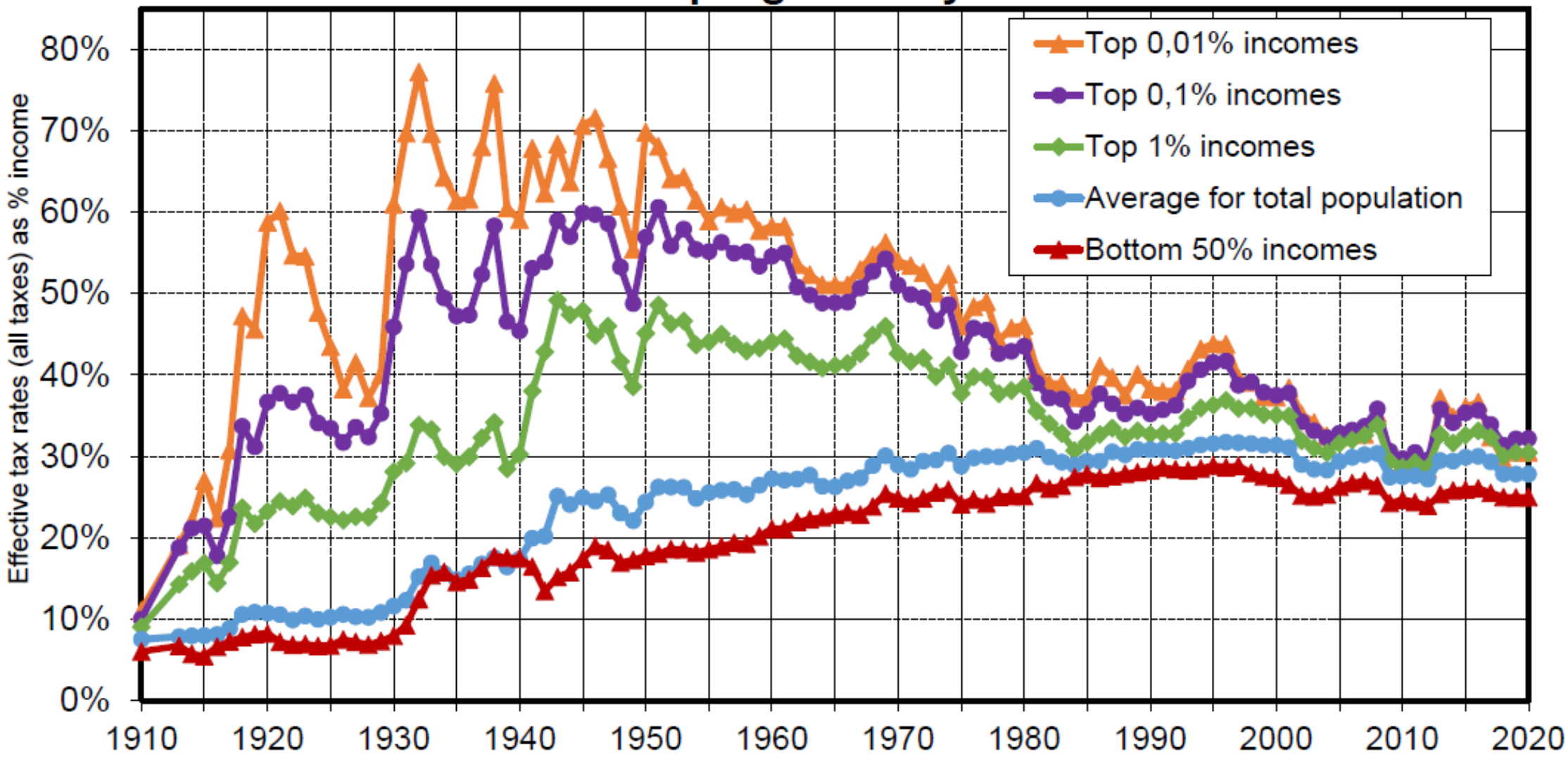
- **Progressive taxation of top income and inheritance contributed to reduce the long-run concentration of property** (less accumulation at the top, but more accumulation within middle class) (see e.g. The End of Rentiers: Paris 1842-1957) (with G. Postel-Vinay, J.L. Rosenthal, WID.world WP 2018/1)
- **Rise of progressive taxation was accelerated by WW1 & WW2**, but also by other events, including Bolshevik revolution (huge impact on European politics), the Great depression (major impact in the US). The role of wars as such should not be exagerrated (& wars were themselves partly due to inequality).
- **Key role of long-run ideological changes and socio-political mobilization**:
  1909-1910 People's Budget in Britain (fall of House of Lords)
  1911 constitutional change in Sweden (end of hyper-censitary regime)
  1913 constitutional amendment in the US (rising demand for redistribution)
  Rise of progressive taxation in Japan also started much before WW1, etc.

The invention of progressive taxation: the top income tax rate, 1900-2018



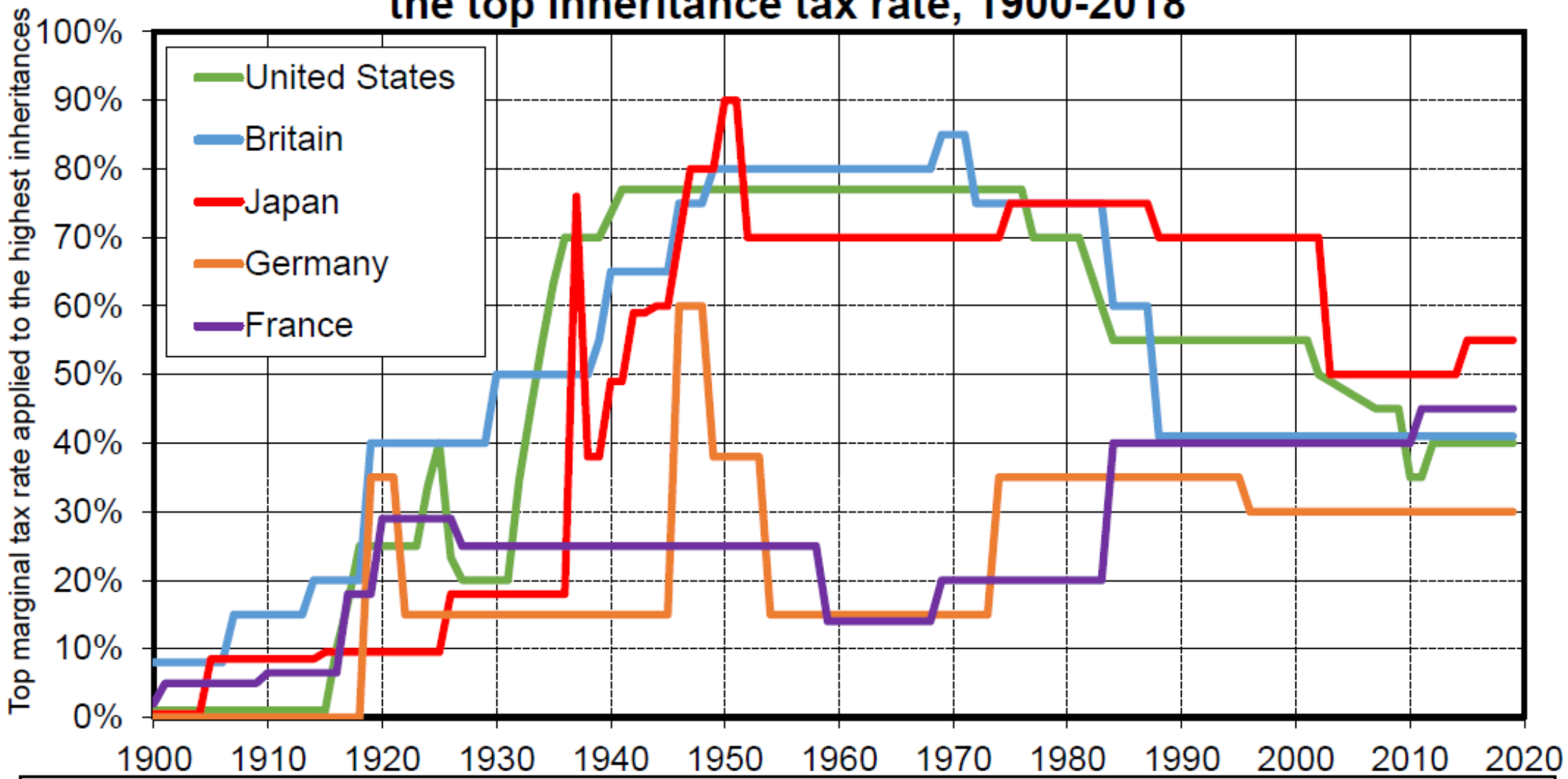
Interpretation. The marginal income tax rate applied to the highest incomes was on average 23% in the U.S. from 1900 to 1932, 81% from 1932 to 1980 and 39% from 1980 to 2018. Over these same periods, the top rate was equal to 30%, 89% and 46% in Britain, 26%, 68% and 53% in Japan, 18%, 58% and 50% in 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/ideology (figure 10.11).

Effective rates and progressivity in the U.S. 1910-2020



Interpretation. From 1915 to 1980, the tax system was highly progressive in the U.S., in the sense that effective tax rates paid by the highest income groups (all taxes included, and as % of pretax income) was significantly larger than the average effective tax rate paid by the the total population (and particularly by the bottom 50% incomes). Since 1980, the tax system has not been very progressive, with little differences in effective tax rates across groups. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.13).

The invention of progressive taxation: the top inheritance tax rate, 1900-2018

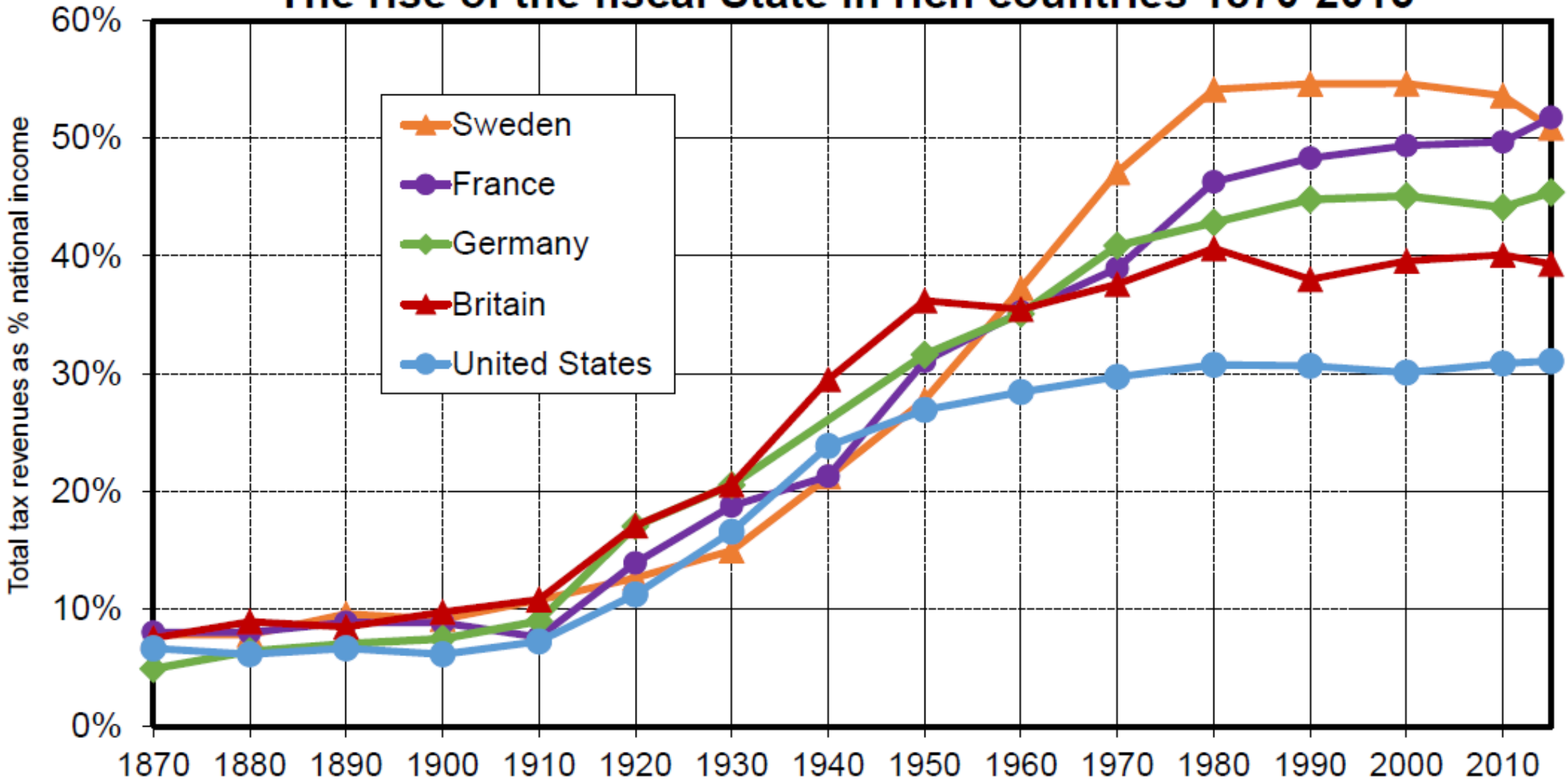


Interpretation. The marginal inheritance tax rate applied to the highest inheritances was on average 12% in the U.S. from 1900 to 1932, 75% from 1932 to 1980 and 50% from 1980 to 2018. Over these same periods, the top rate was equal to 25%, 72% and 46% in Britain, 9%, 64% and 63% in Japan, 8%, 23% and 32% in Germany, and 15%, 22% and 39% in France. Progressivity was maximal in mid-century, especially in the U.S. and in Britain. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 10.12).

The rise of the social and fiscal state

- **Tax progressivity at the top played an important role for reducing top-end inequality** and for making the rise of the social and fiscal state acceptable for the average taxpayer
- **But what was even more important was the overall rise of total fiscal capacity, which was used to finance pro-equality and pro-growth spending** (education, health, public infrastructures, etc.)
- **Rise of educational investement in Europe & the US :**
  <1% national income until 1910s, 5%-6% since 1980s
- See P. Lindert, *Growing Public - Social Spending and Economic Growth since the 18th Century*, OUP 2004

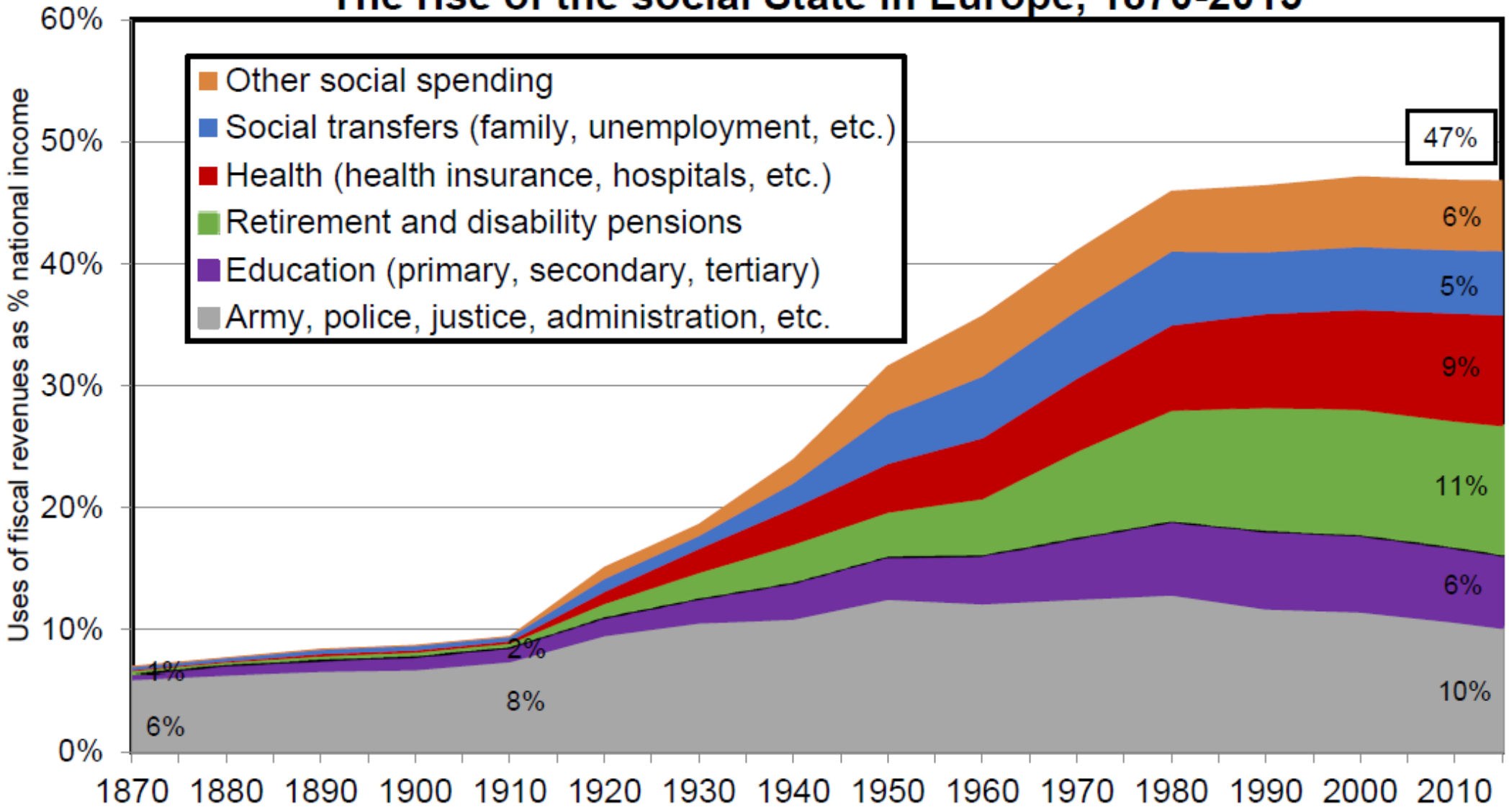
The rise of the fiscal State in rich countries 1870-2015



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 10.14).

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 10.15).

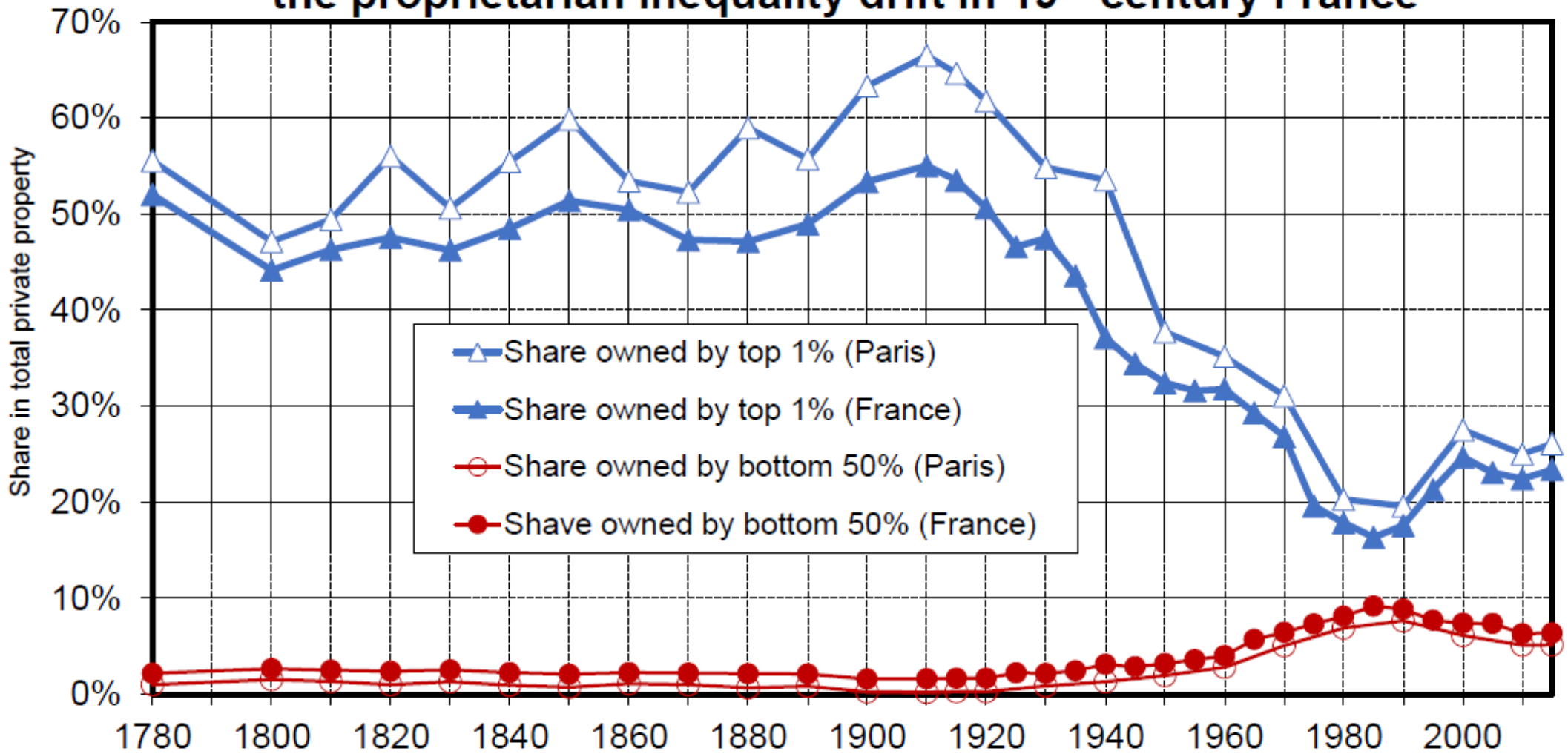
Social-democratic societies (1950-1980): incomplete equality

- Despite their many achievements, social-democratic societies (1950-1980) were unable to prevent the **global rise of inequality since 1980-1990**
- **Also, the magnitude of the decline of inequality achieved during 20c in social-democratic societies should not be exagerated**:

- the bottom 50% wealth share has always remained very small (5% or less): **very limited diffusion of property and economic democracy**
- the bottom 50% income share has increased more (from 10% to 20%) but has always remained below top 10% share

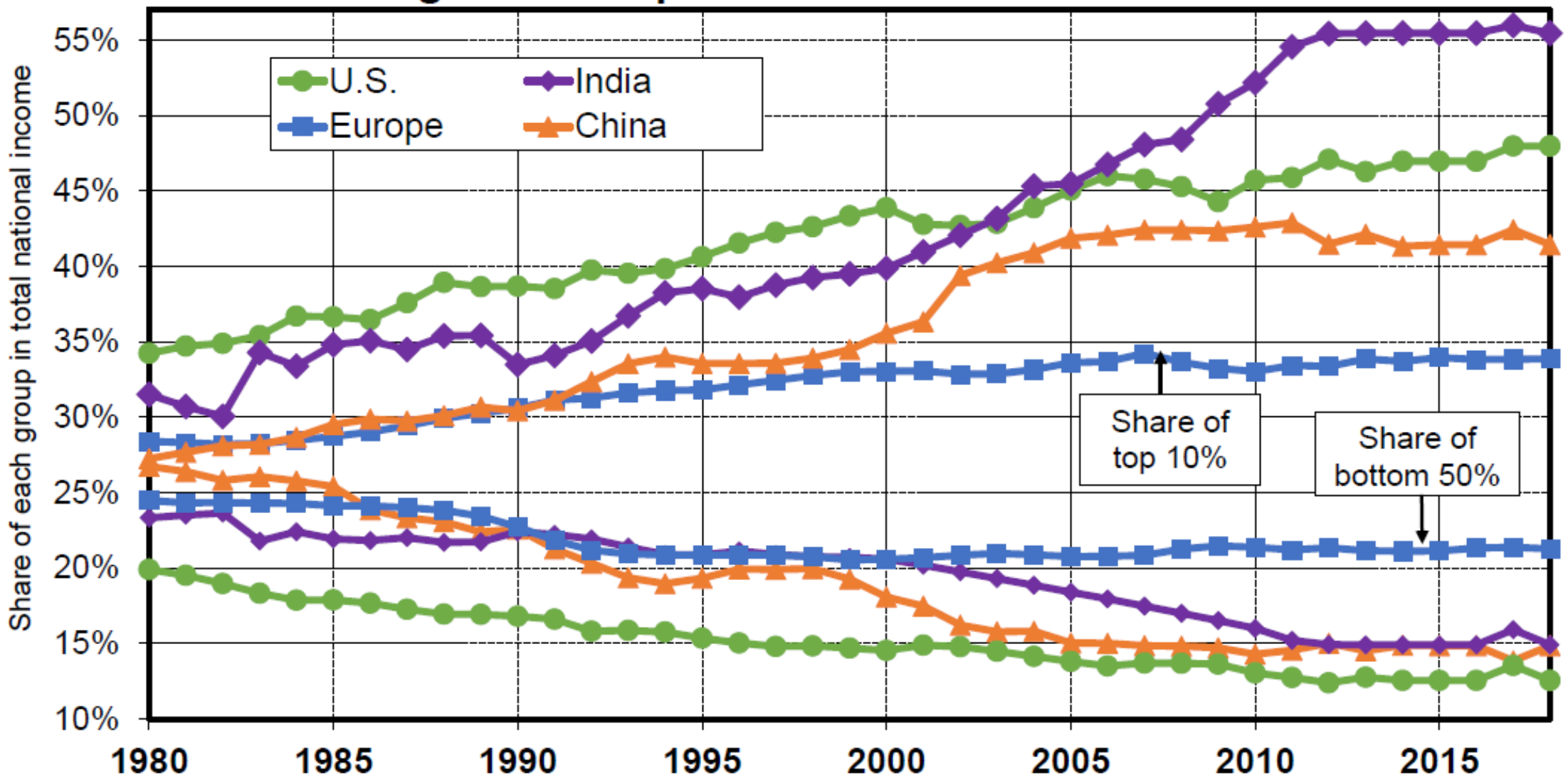
- **In the US, rising inequality since 1980s has taken enormous proportions (bottom 50% income share back to 10%)**. Strong anti-globalization feeling, rise of nationalist movements, Trump, Brexit, etc. Is this is the common future?

The failure of the French Revolution: the proprietarian inequality drift in 19th century France



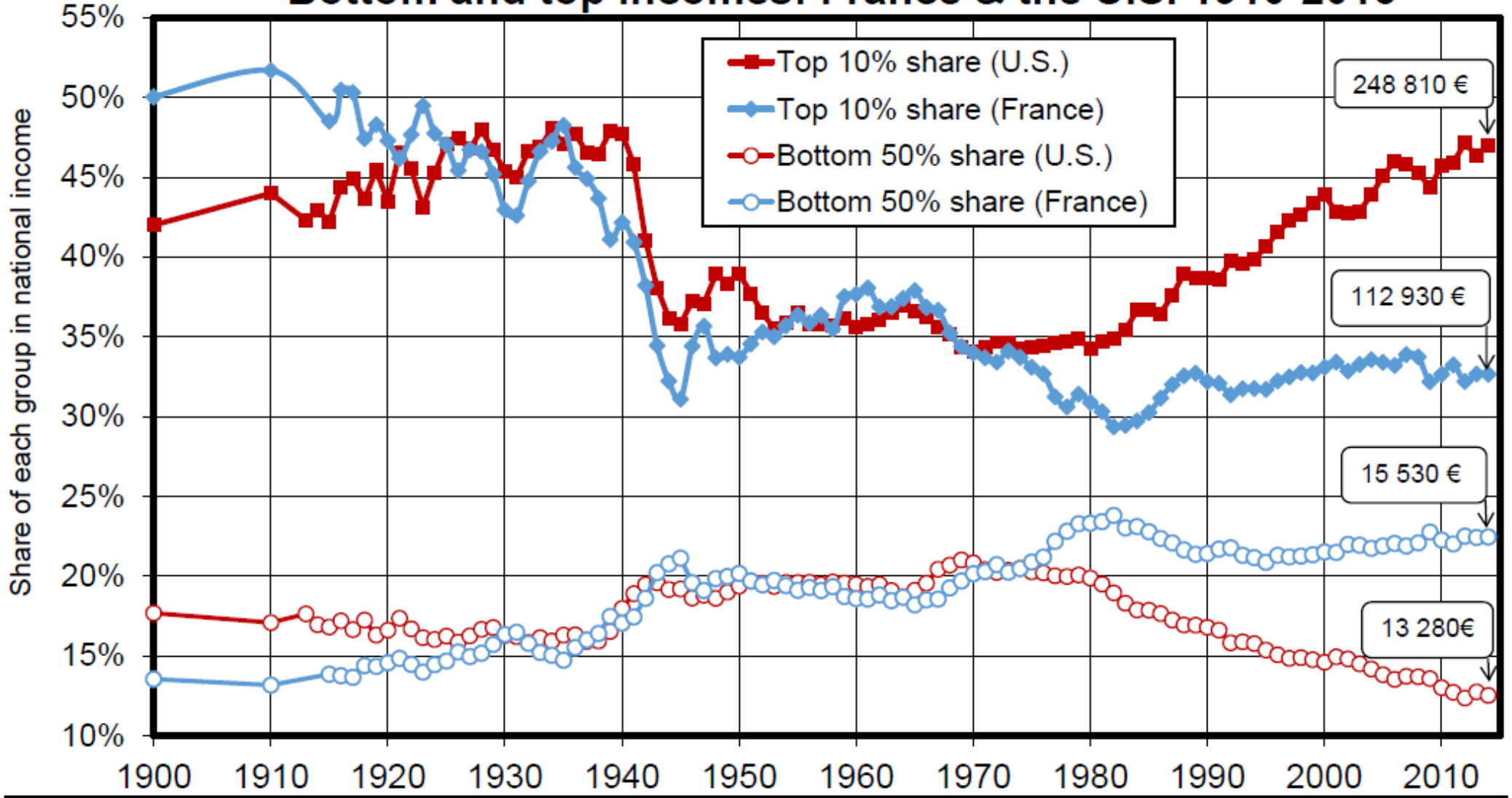
Interpretation. In Paris, the richest 1% owned about 67% of total private property in 1910 (all assets combined: real, financial, business, etc.), vs. 49% in 1810 and 55% in 1780. After a small drop during the French Revolution, the concentration of property rose in France (and particularly in Paris) during the 19th century and until World War 1. In the long run, the fall in inequality occurred following the world wars (1914-1945), rather than following the Revolution of 1789. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 4.1)..

Divergence of top and bottom incomes 1980-2018



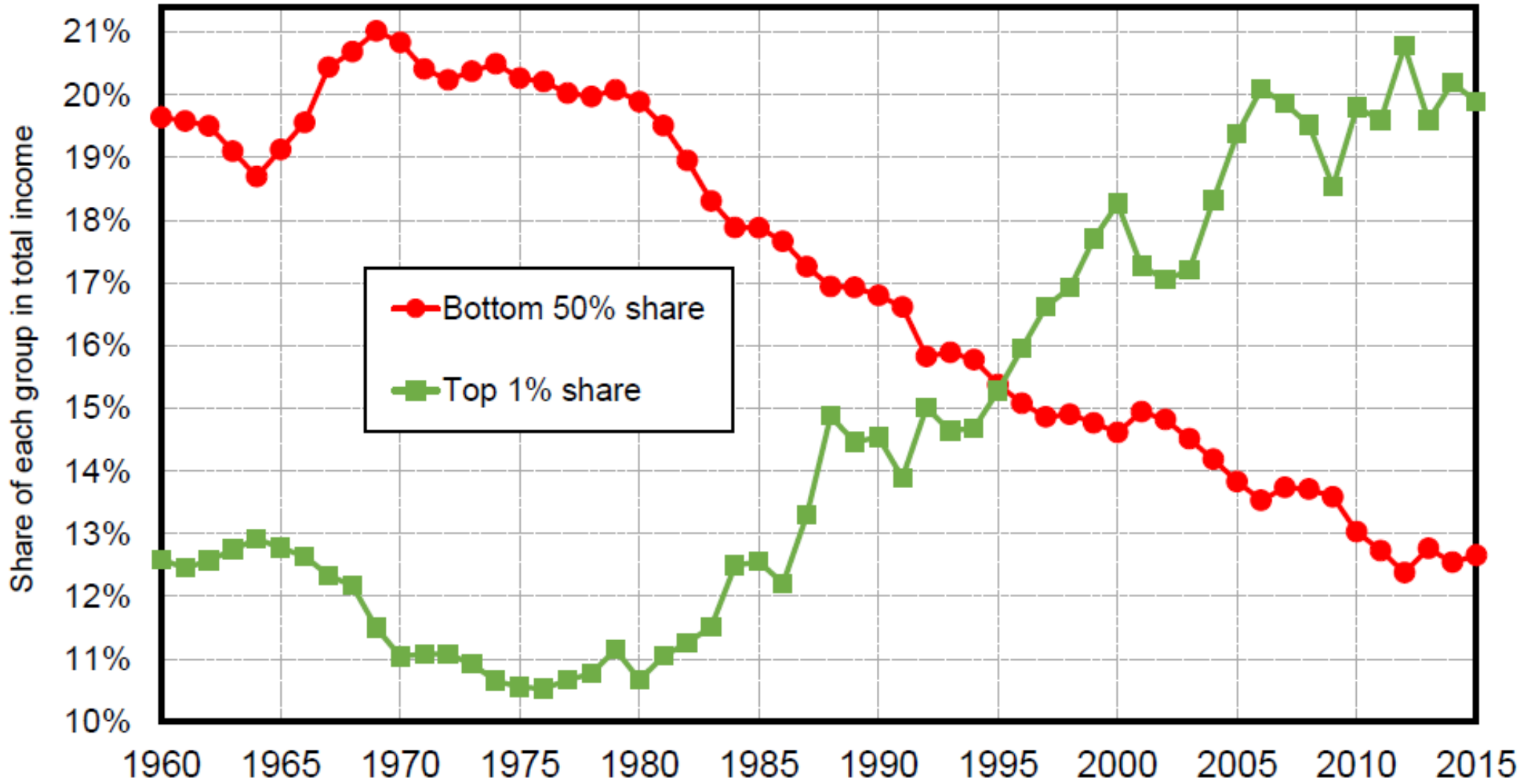
Interpretation. The share of the top decile (the 10% highest incomes) rose in all world regions: it was between 27% and 34% in 1980; it is between 34% and 56% in 2018. The share going to the bottom 50% dropped: it was between 20% and 27%; it is now between 12% and 21%. The divergence between bottom and top incomes is general, but its magnitude varies across countries: it is larger in India and in the U.S. than in China and in Europe. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.1).

Bottom and top incomes: France & the U.S. 1910-2015



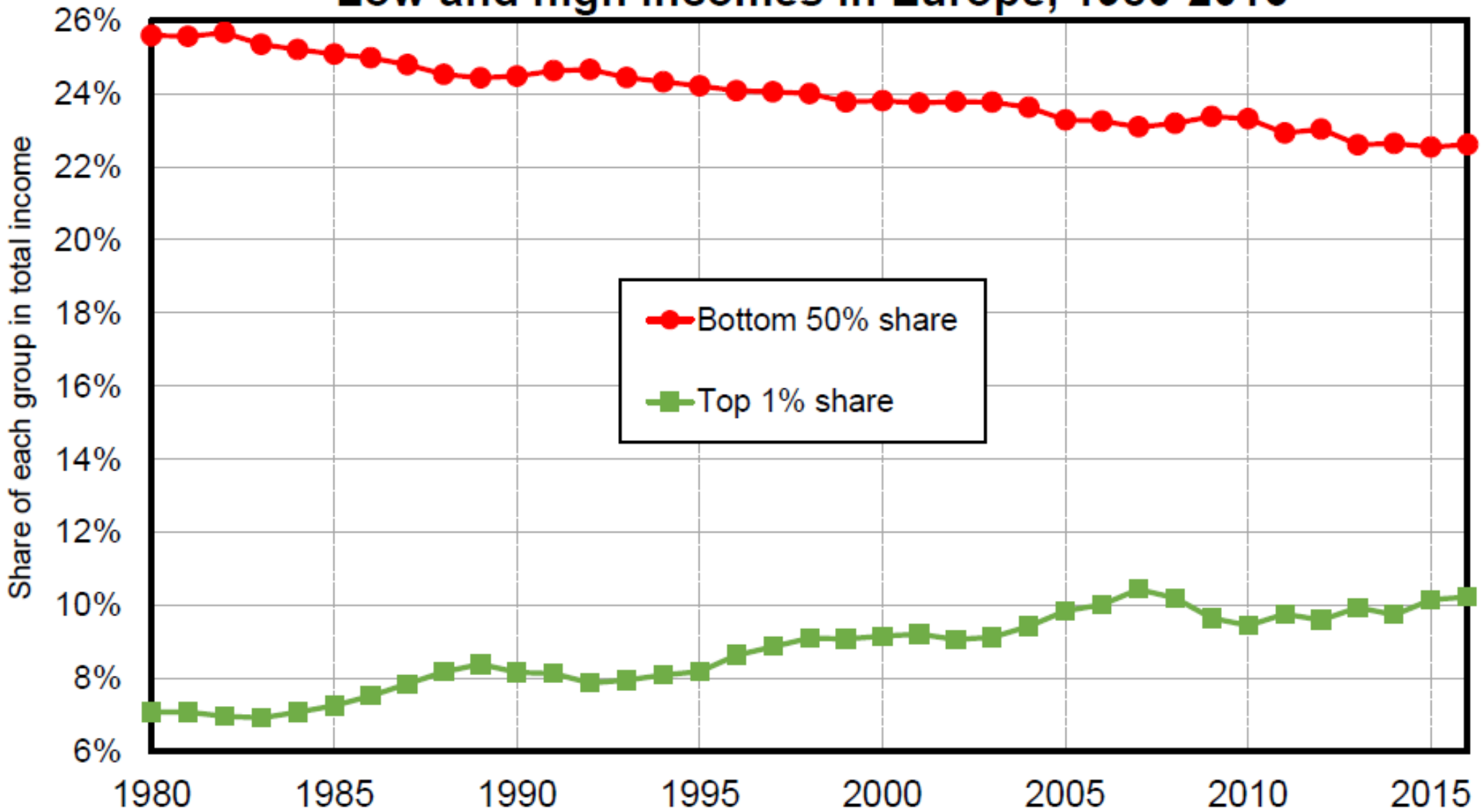
Interpretation. Income inequality in the U.S. in 2010-2015 exceeded its level in 1900-1910, whereas it was reduced in France (and Europe). In both cases, however, inequality remains high: the top decile, one-fifth the size of the bottom 50 percent, still receives a much larger income share. The income levels reported here are the average annual incomes of each group in 2015 (at purchasing power parity).
Sources and series: see piketty.pse.ens.fr/ideology (figure 11.2).

The fall of the bottom 50% share: U.S. 1960-2015



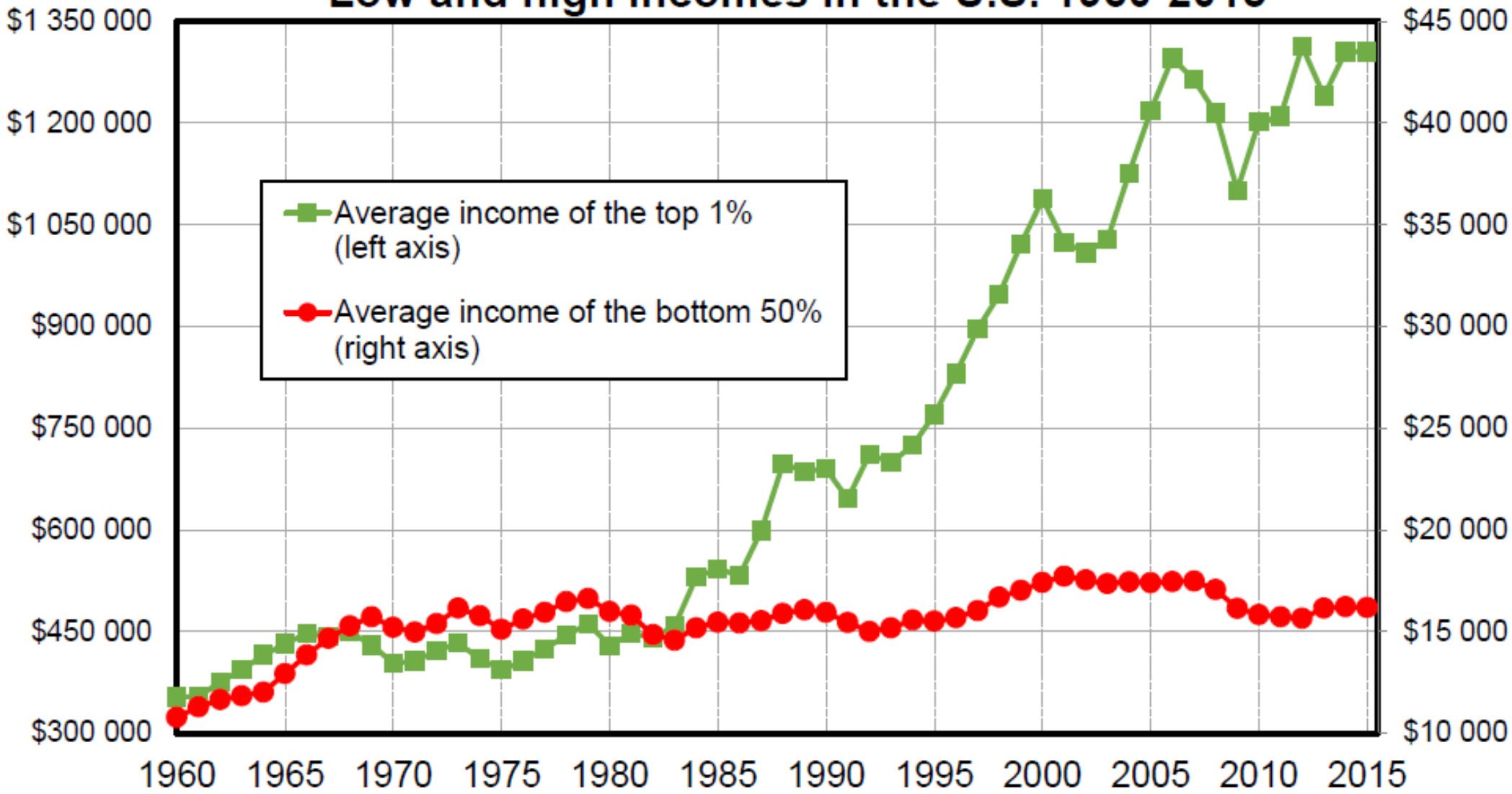
Interpretation. The share of the bottom 50% lowest incomes in the U.S. dropped from about 20% of total income in the 1970s to about 12%-13% in the 2010s. Over the same period, the share going to the top 1% highest incomes rose from 11% of total income to 20%-21% **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.5).

Low and high incomes in Europe, 1980-2016



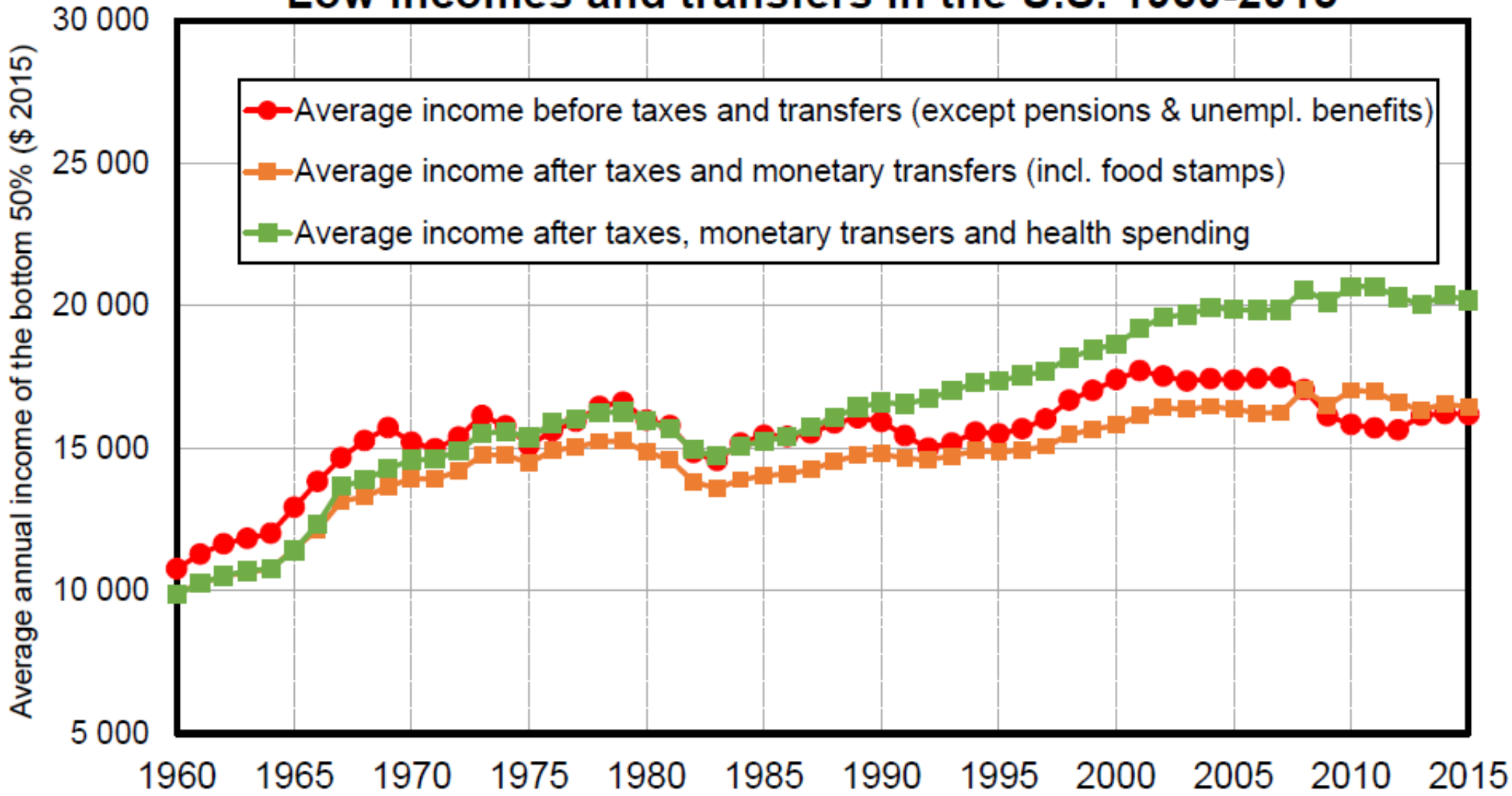
Interpretation. The share of the bottom 50% lowest incomes in Europe dropped from about 26% of total income in the early 1980s to 23% in the 2010s. Over the same period, the share going to the top 1% highest incomes rose from 7% of total income to 10% **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.6).

Low and high incomes in the U.S. 1960-2015



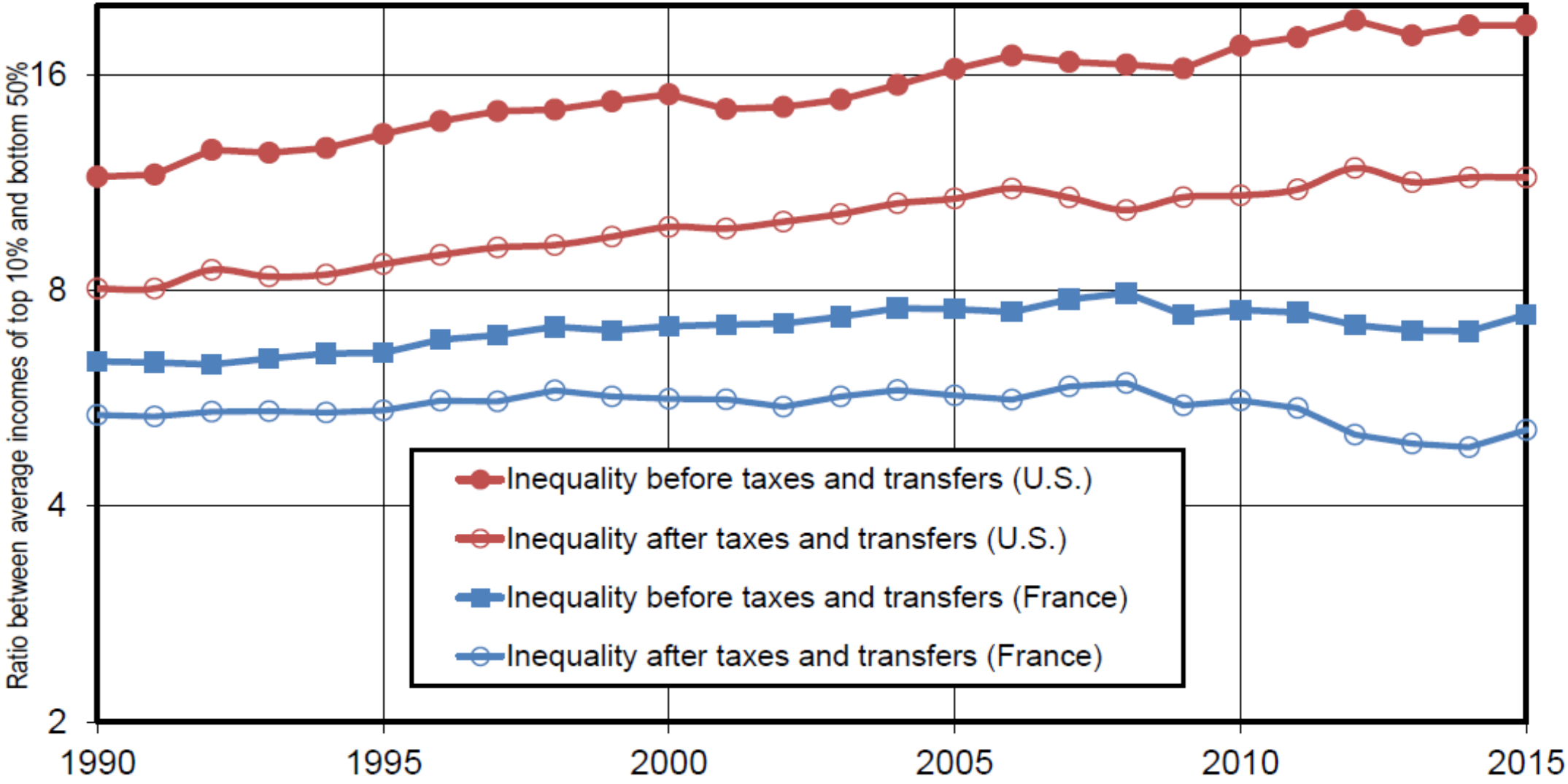
Interpretation. In 1970, the average income of the bottom 50% was 15 200$ per year and per adult, and that of the top 1% was 403 000$, i.e. a ratio of 1 to 26. In 2015, the average income of the bottom 50% was 16 200$ and that of the top 1% was 1 305 000$, i.e. a ratio of 1 to 81. All amounts are expressed in 2015 $. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.7).

Low incomes and transfers in the U.S. 1960-2015



Interpretation. Expressed in constant 2015 dollars, the average annual income before taxes and transfers of the bottom 50% stagnated around 15 000$ per adult between 1970 and 2015. The same is true after taxes (incl. indirect taxes) and monetary transfers (incl. food stamps), taxes and transfers roughly balancing each other out. It rises to about 20 000$ in 2010-2015 if one includes in-kind transfers in the form of health spending. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.8).

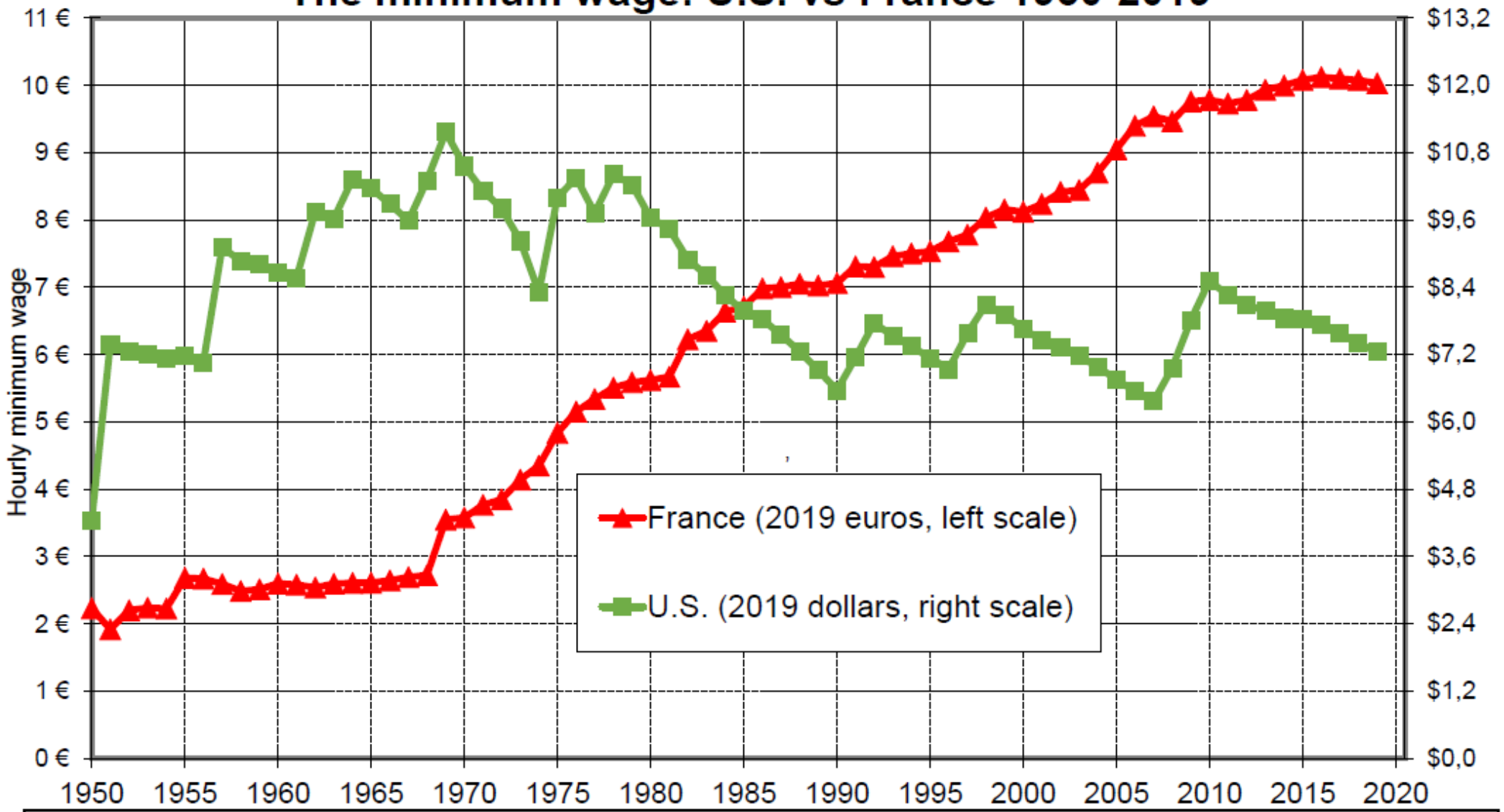
Primary inequality and redistribution: U.S. vs France



Interpretation. In France, the ratio between the average income before taxes and transfers of the top decile (the 10% highest incomes) and of the bottom half (the 50% lowest incomes) rose from 6,4 in 1990 to 7,4 in 2015. In the U.S., this same ratio rose from 11,5 to 18,7. In both countries, taking into account taxes and monetary transfers (incl. food stamps and housing benefits) reduces inequality by about 20%-30%.
Note: the distribution is that of annual income per adult. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.9).

- More on **predistribution** (public policies affecting pretax income inequality: education, bargaining power, capital endowments, minimum wages, etc.) **vs redistribution** (public policies reducing disposable income inequality, for a given level of pretax income inequality: i.e. redistributive taxes and transfers):
- Inequality and Redistribution in France 1900-2018: Evidence from Post-tax Distributive National Accounts (DINA) (with Bozio,Garbinti,Goupille,Guillot, WID.world WP 2018/10)
- The lower inequality level in France vs US in 1990-2018 is entirely due to lower pretax inequality levels: more attention should be given to predistribution (including the impact of progressive income and wealth taxes on predistribution)

The minimum wage: U.S. vs France 1950-2019



Interpretation. Converted into 2019 purchasing power, the federal minimum wage increased from 4,25$ per hour in 1950 to 7,25$ in 2019 in the U.S., while the national minimum wage (Smig in 1950 and then Smic beginning in 1970) rose from 2,23€ per hour in 1950 to 10,03€ in 2019. Both scales are based upon purchasing power parity (1,2$ for 1€ in 2019). **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.10).

The limitations of social-democratic societies

- **Incomplete diffusion of property and power sharing.**
  Bottom 50% wealth share has always remained very low.
  German and Swedish laws on codetermination (workers voting rights vs shareholders voting rights) were not generalized (until recently).
- **Insufficient investment in education.** Challenges of tertiary education: it was easier to design an egalitarian platform with primary-secondary education.
- **Challenge of financial deregulation and tax competition**.
  Reagan-Thatcher tax cuts put strong pressure on other countries.
  Adoption of free capital flows treaties in the 1980s-1990s, with no common regulation, taxation, or automatic exchange of information.

Codetermination & power sharing: success, limits & incomple diffusion

- German codetermination laws 1951-1952 (reinforced in 1976): half of the seats in board of large companies (>2000 employees) go to elected worker representatives (one third of the seats in companies with 500-2000 employees
- This implies that with a minority capital stake (say 10%) employees can take control of the companies: **major challenge to the one-share one-vote principle and to the traditional notion of private property** (major innovation made by Weimar Constitution 1919 and German Fundamental Law in 1949)
- Sweden (1974 law extended in 1980-1987): one third of seats for workers in all companies with 25 employees or more
- **Codetermination/comanagement seems to have had a positive impact on overall productivity (while limiting the rise of inequality and very top pay)**
- E. McGaughey, The Codetermination Bargains: History of German Corporate and Labour Law, Columbia Journal of European Law 2017

- **Failed extensions 1970s-1980s**:
- UK 1978: “2x+y” project, following Bullock commission
- EC Company Law Directive project, multiple versions 1972-1988

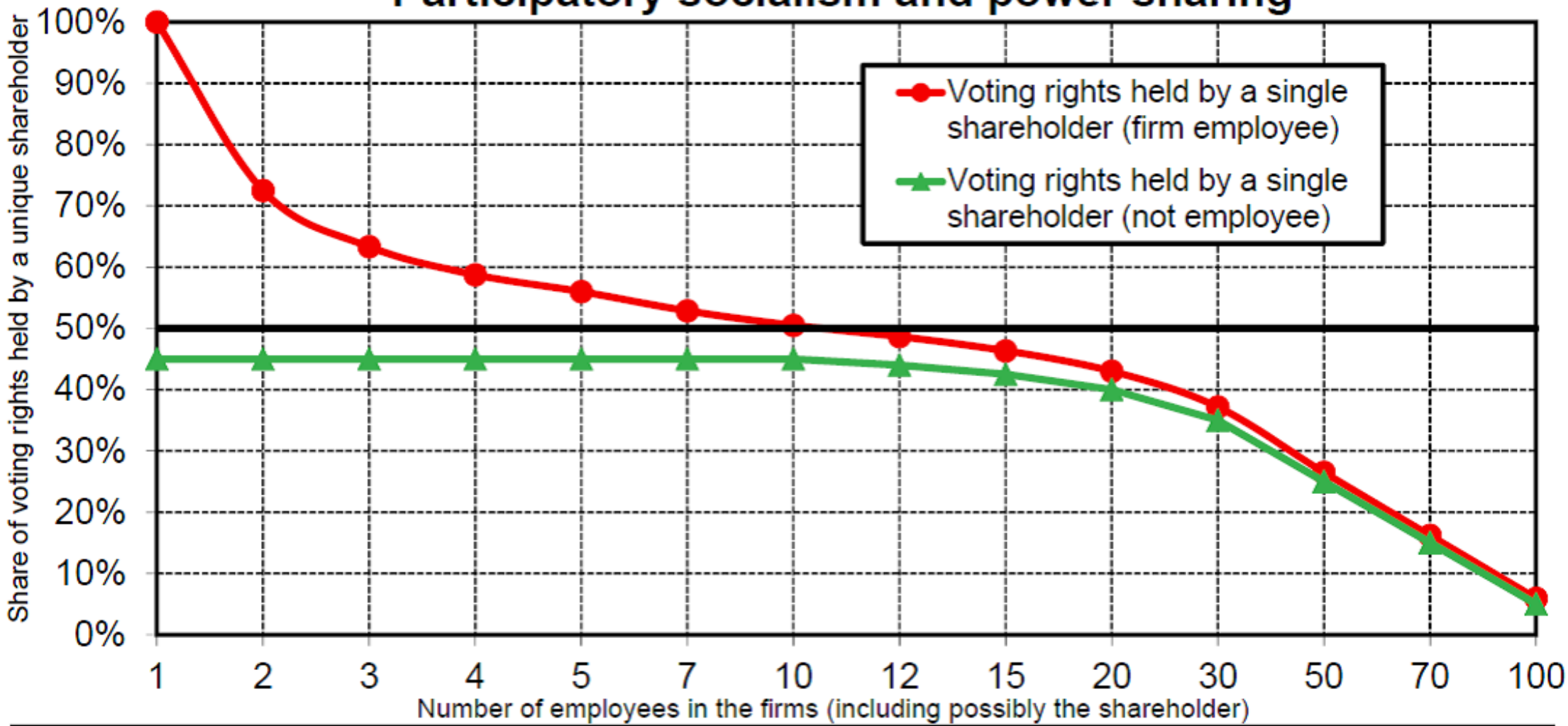
- **New attempts 2010s**:
- 2013 French law: one worker seat if board < 12 members (firms > 5000 employees) (extended in 2018)
- UK Labour Law Manifesto 2018
- US Accountable Capitalism Act 2018

- **Power sharing & participatory socialism**:

  50% voting rights for workers representatives

  + cap on individual shareholders voting rights in large companies

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 looses the majority beyond 10 employees (including himself). A single shareholer 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

Social-democracy and the challenge of tertiary education

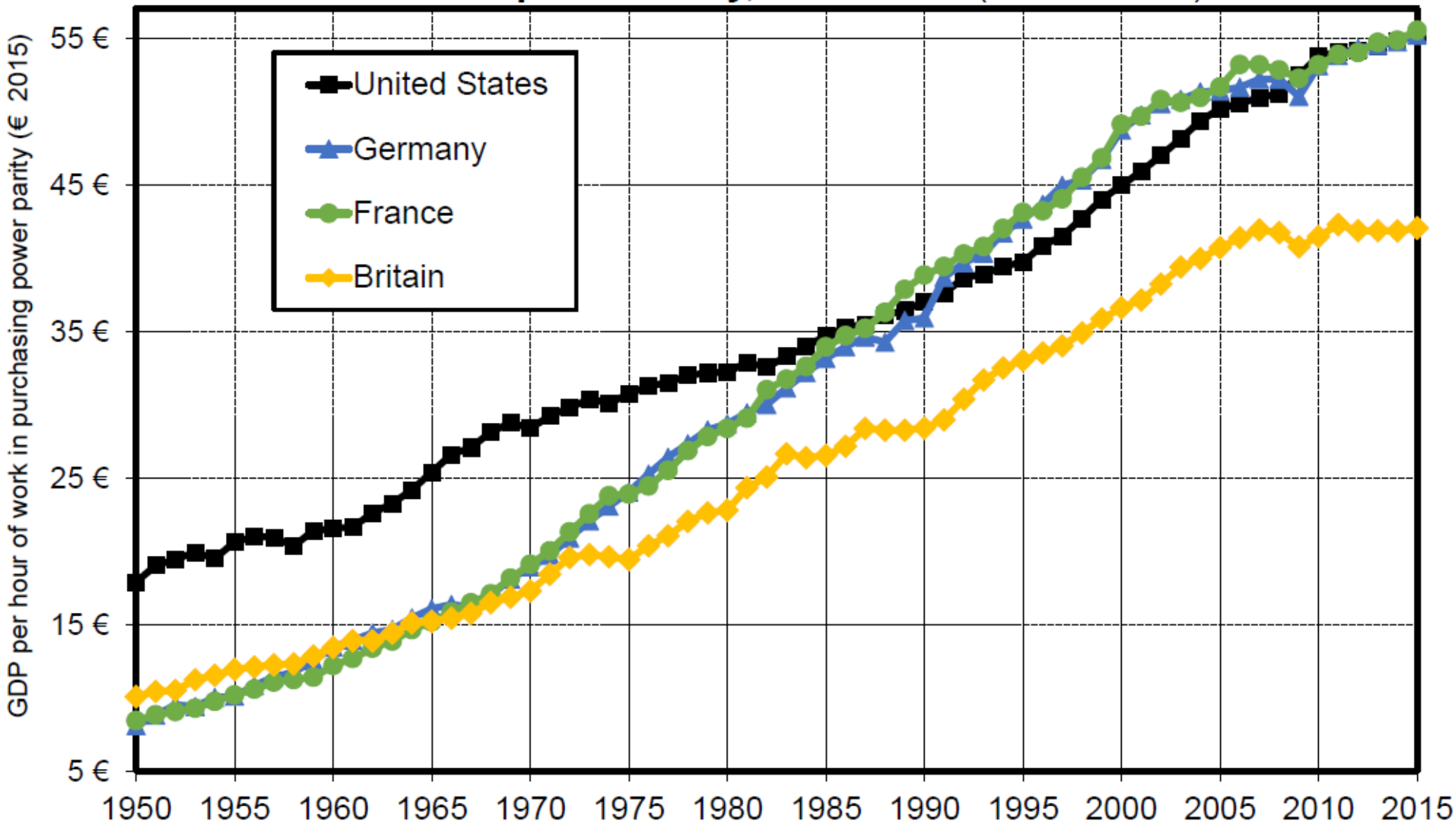
- US historical educational advance:
  90% primary enrollment 1840s (vs 20%-30% Britain-France-Germany)
  80% secondary enrollment 1950s (vs 20%-40% Britain-Fr-Germany)

→ **key reason for US productivity advance**

- Goldin, The Human Capital Century and American Leadership: Virtues of the Past, Journal of Economic History 2001
- **But since 1980s-1990s, all rich countries have reached quasi-universal primary & secondary enrollment and productivities converged**
- New challenge: access and funding of higher education.
- Major impact on rising inequality.
- **Stagnation of total educational investment since 1980s-1990s: most natural explanation for growth slowdown**

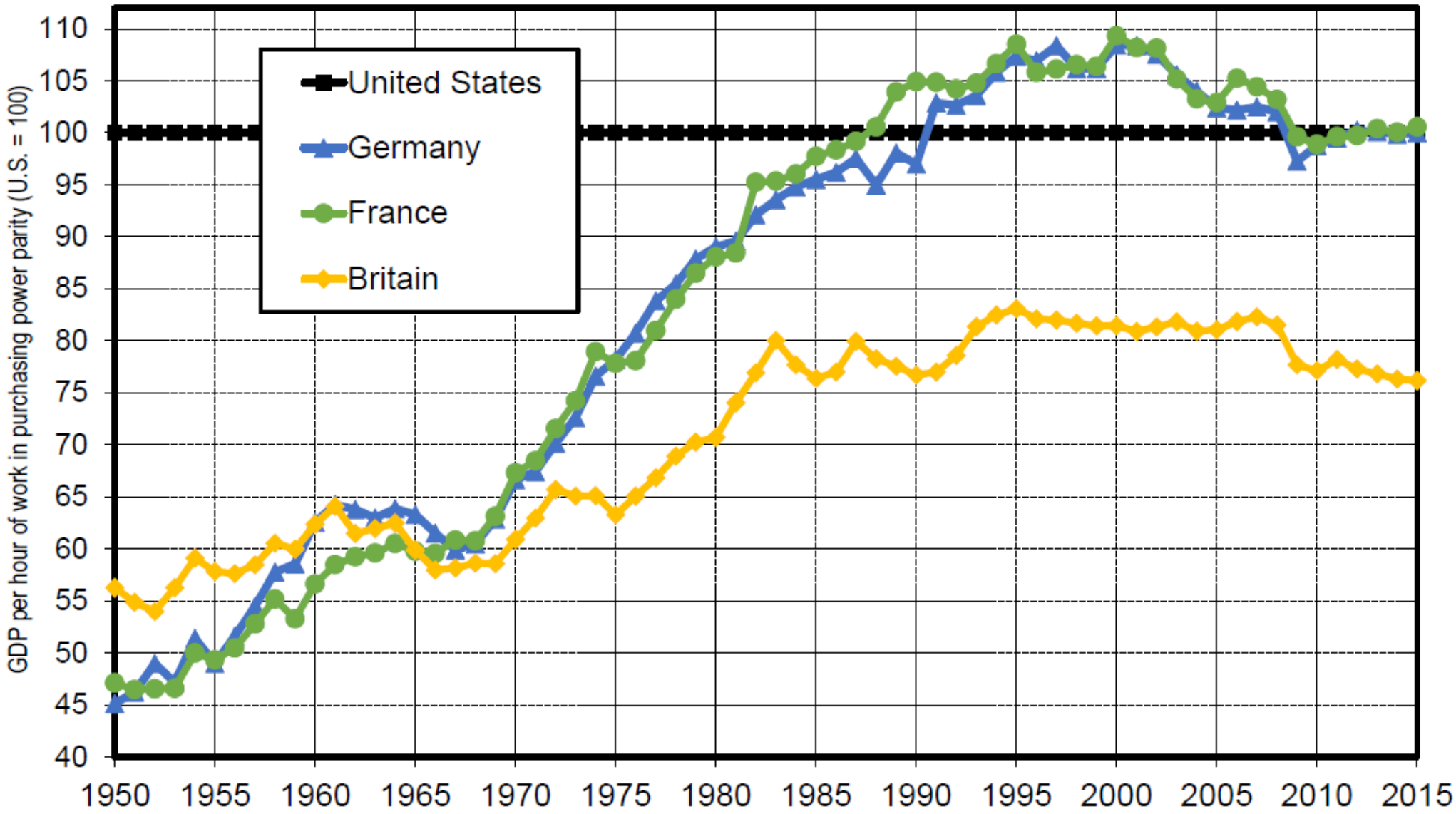
(see also lecture 7 on reversal of electoral cleavages on education)

Labour productivity, 1950-2015 (euros 2015)



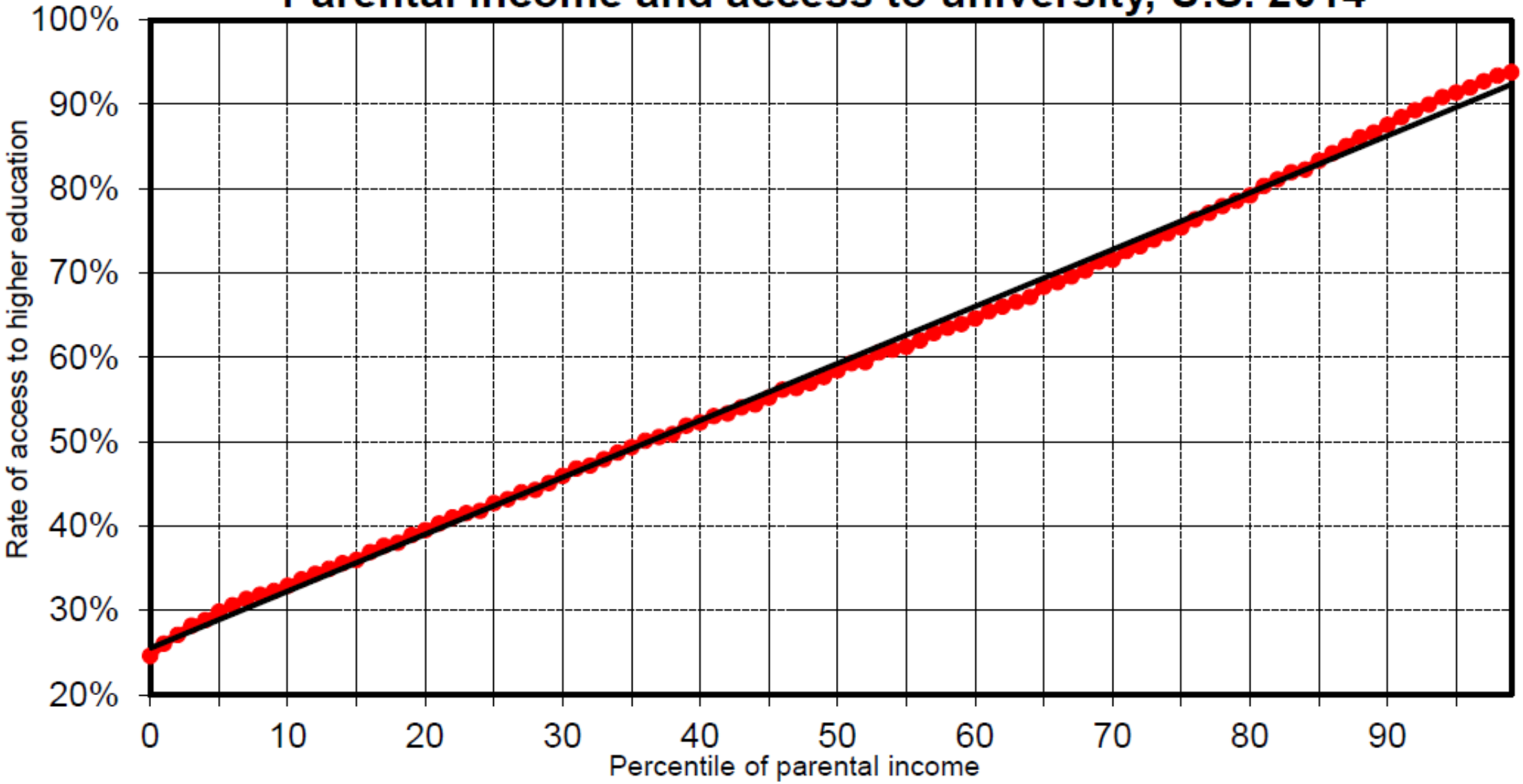
Interpretation. Labour productivity, measured by GDP per hour of work (in euros 2015 and at purchasing power parity) rose from 8 euros in Germany and in France in 1950 to 55 euros in 2015. Germany and France caught up (or slightly passed) the U.S. in 1985-1990, while Britain remains about 20% lower. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.3).

Labour productivity : Europe vs United States



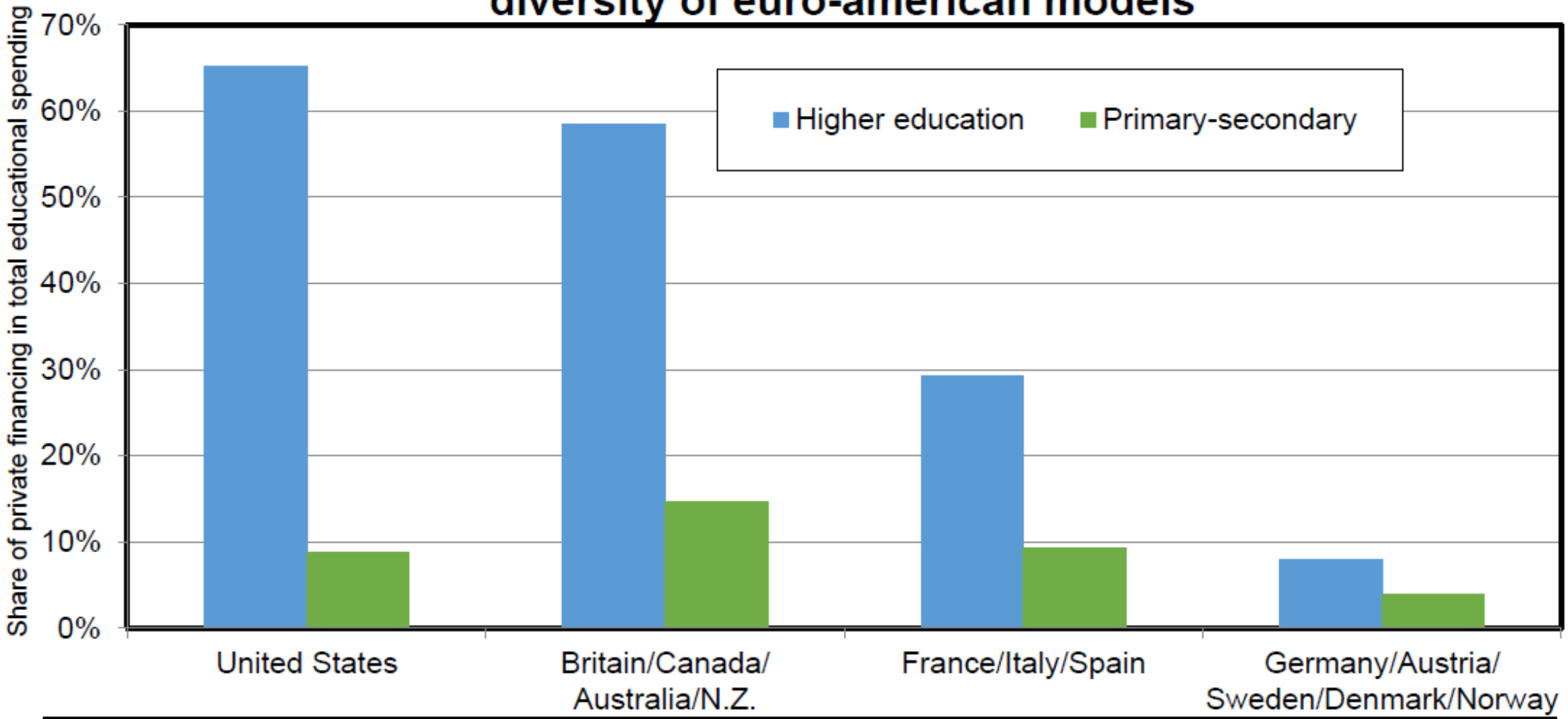
Interpretation. Labour productivity, measured by GDP per hour of work (in euros 2015 and at purchasing power parity), was twice as small in Europe than in the United States in 1950. Germany and France caught up (or slightly passed) the U.S. in 1985-1990, while Britain remains 20% lower. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.4).

Parental income and access to university, U.S. 2014



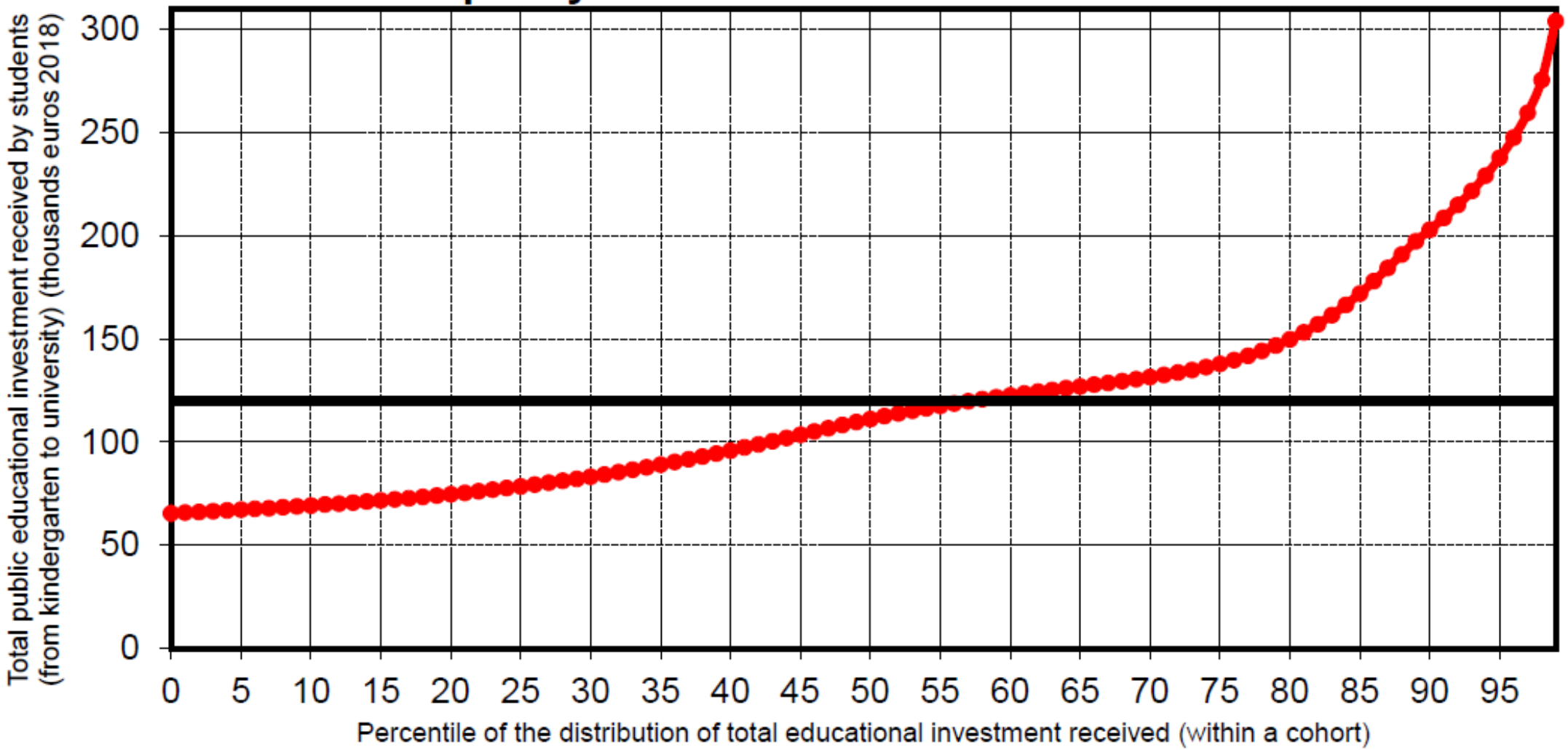
Interpretation. In 2014, the rate of access to higher education (percentage of individuals aged 19-21 enrolled in a university, college or any other institution of higher education) was barely 30% among the bottom 10% poorest children in the United States, and over 90% among the top 10% richest children. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 0.8).

The share of private financing in education: diversity of euro-american models



Interpretation. In the U.S., private financing make 65% of total financing (private and public) of higher education, and 9% of total financing of primary and secondary education. The share of private financing in higher education varies substantially across countries, with an anglo-american model, a south-european model and a north-european model. The share of private financing is everywhere relatively small regarding primary and secondary education (2014-2016 figures). **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.11).

The inequality of educational investment: France 2018



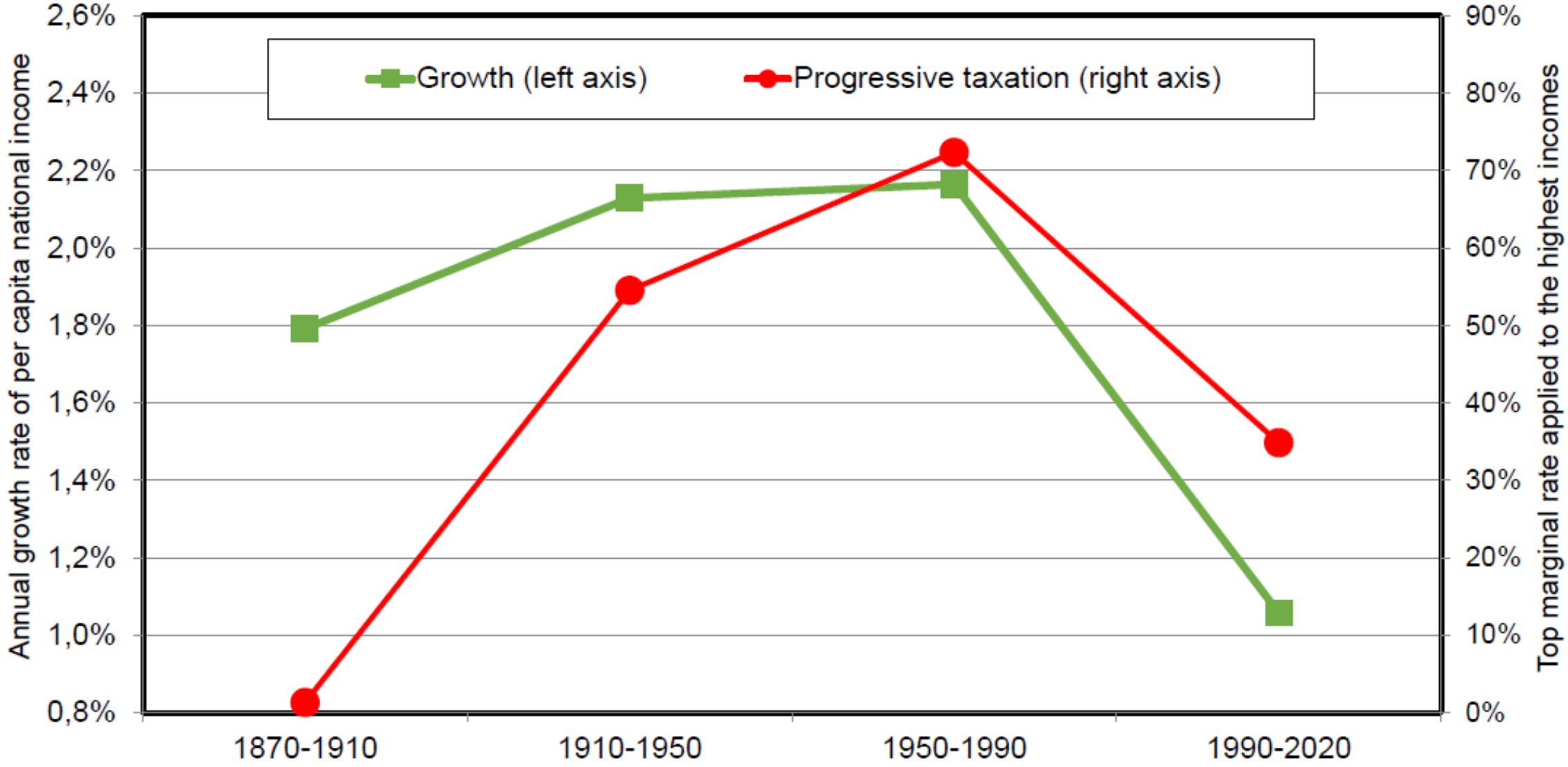
Interpretation.Total public educational investment received during their studies (from kindergarten to university) by students of the cohort reaching 18 in 2018 will be about 120 k€ (i.e. about 15 years of studies for an average cost of 8000€ per year). Within this generation, the 10% of students receiving 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 2015-2018 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 ecoles* (etlite tracks).**Sources and series**: see piketty.pse.ens.fr/ideology (figure 17.1).

The challenge of tax competition and financial deregulation

- **Reagan-Thatcher tax cuts of the 1980s and financial deregulation have put strong pressure on social-democratic fiscal compacts**
- R. Abdelal, *Capital Rules. The Construction of Global Finance*, HUP 2007. **The origins of unregulated capital flows are not only in US-UK, but also in France-Germany**: this was the deal made by the two countries in the 1980s in order to create a common currency (→Maastricht Treaty 1992)

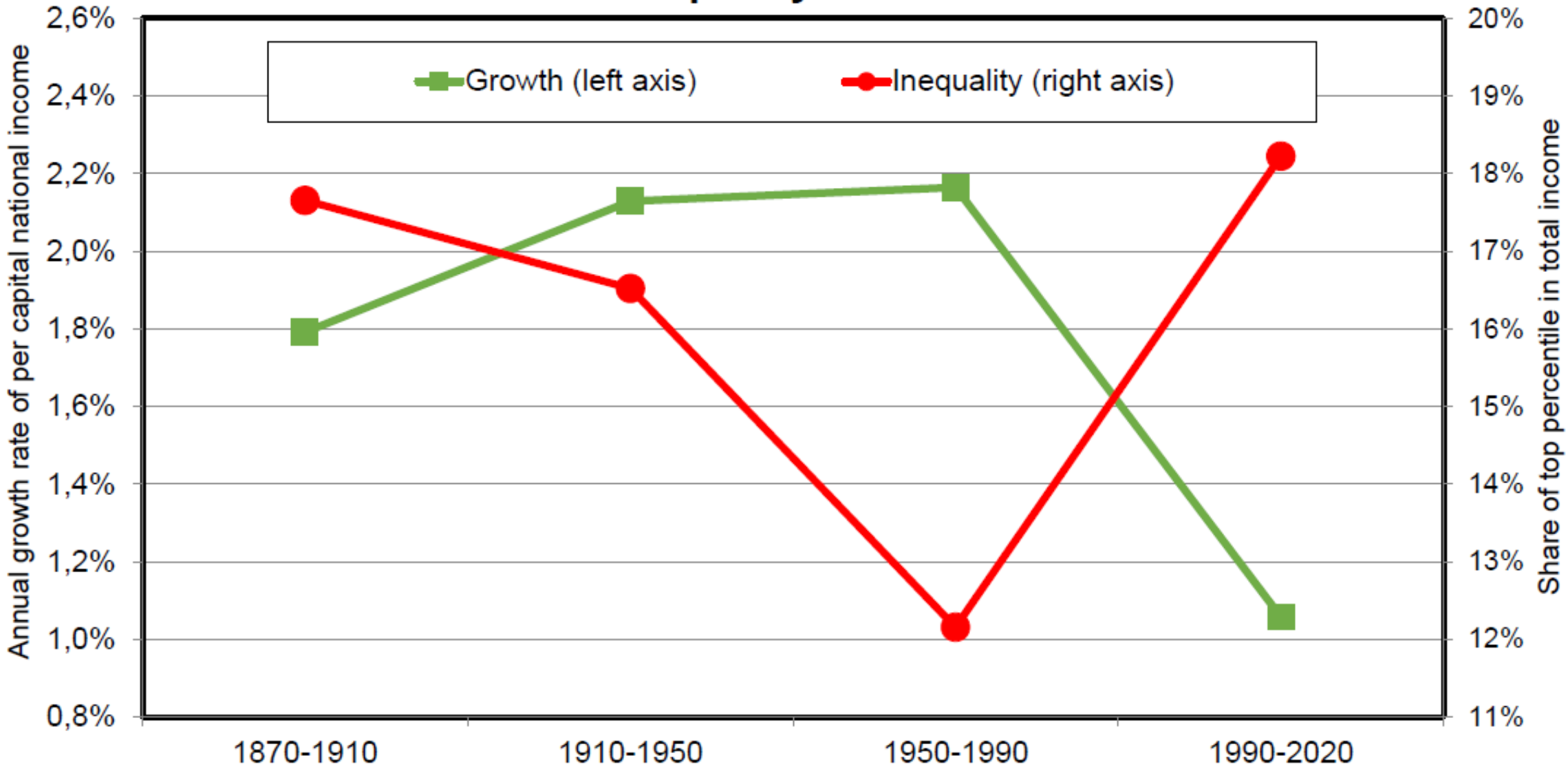
- Poor growth performance in rich countries since 1980s-1990s has raised strong doubts about the virtues of globalization and economic liberalism. At the same time collapse of communism (**see lecture 6**) has raised strong doubts about the possibility of an alternative economic system.
- This can contribute to explain the rise of nationalist-protectionnist-xenophobic political movements in the 2000s-2010s: National Front, Trump, Brexit, etc. (**see lectures 7-8**)

Growth and progressive taxation in the U.S. 1870-2020



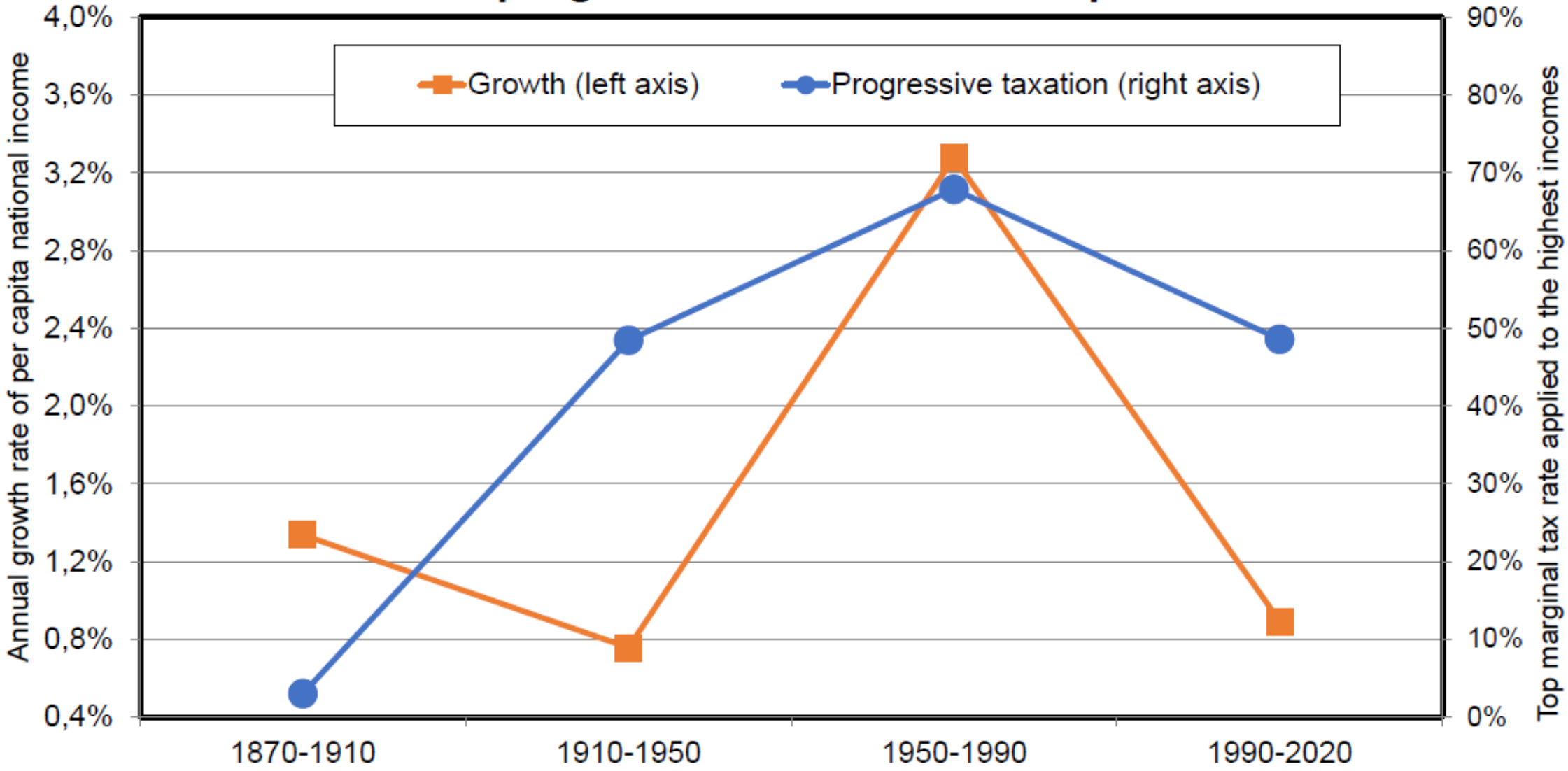
Interpretation. in the U.S., the growth rate of per capita national income dropped from 2,2% per year between 1950 and 1990 to 1,1% between 1990 and 2020, while the top marginal tax rate applied to the highest incomes dropped from 72% to 35% over the same period.
Sources and series: see piketty.pse.ens.fr/ideology (figure 11.13).

Growth and inequality in the U.S. 1870-2020



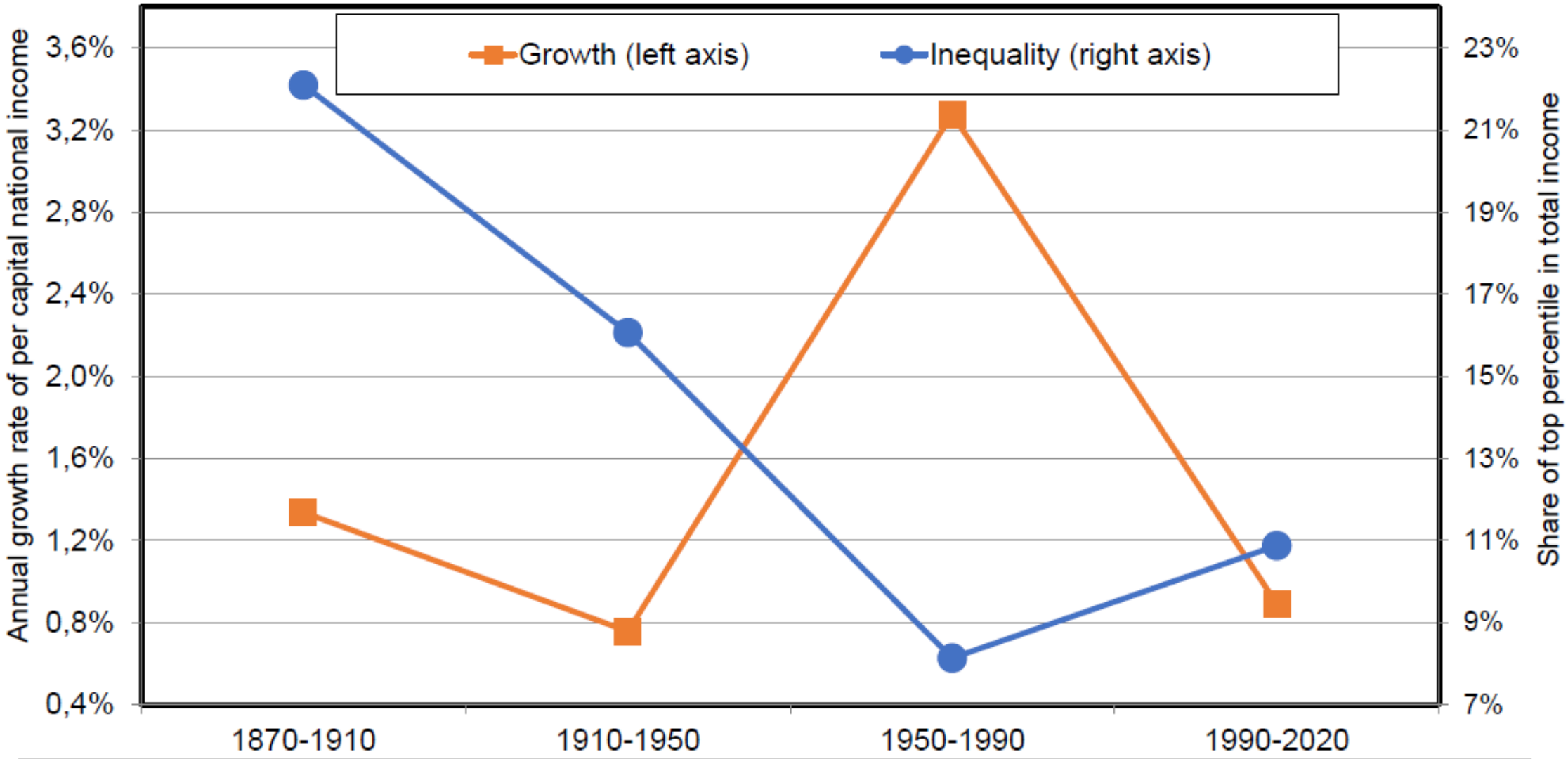
Interpretation. in the U.S., the growth rate of per capita national income dropped from 2,2% per year between 1950 and 1990 to 1,1% between 1990 and 2020, while the share of the top percentile (the 1% highest incomes) in national income rose from 12% to 18% over the same period. **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.12).

Growth and progressive taxation in Europe 1870-2020



Interpretation. In Western Europe, the growth rate of per capita national income dropped from 3,3% per year between 1950 and 1990 to 0,9% per year between 1990 and 2020, while the top marginal tax rate applied to the highest incomes dropped from 98% to 49% over the same period (average Germany-Britain-France). **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.15).

Growth and inequality in Europe 1870-2020



Interpretation. In Western Europe, the growth rate of per capita national income dropped from 3,3% per year between 1950 and 1990 to 0,9% per year between 1990 and 2020, while the share of the top percentile (the 1% highest incomes) in national income rose from 8% to 11% over the same period (average Germany-Britain-France). **Sources and series**: see piketty.pse.ens.fr/ideology (figure 11.14).