Reflections on Inequality and Capital in the 21st century

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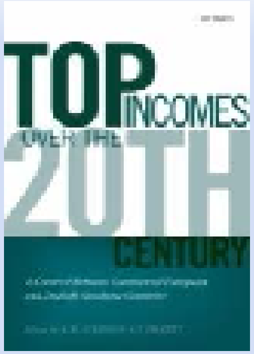
- This presentation is partly based upon ***Capital in the 21st century*** (HUP, 2014)
- In this book, I study the global dynamics of income and wealth distribution since 18c in 20+ countries. I use historical data collected over the past 15 years with Atkinson, Saez, Postel-Vinay, Rosenthal, Alvaredo, Zucman, and 30+ others. Aim is to put distribution back at the center of political economy.
I attempt to develop a multidimensional approach to capital ownership and property relations, and to study beliefs systems about inequality

- **Today I will present a number of selected historical evolutions & attempt to draw lessons for South Africa**
- All series available at http://piketty.pse.ens.fr/capital21c
& the World Top Incomes Database: collective, on-going project

The World Top Incomes Database



- Home
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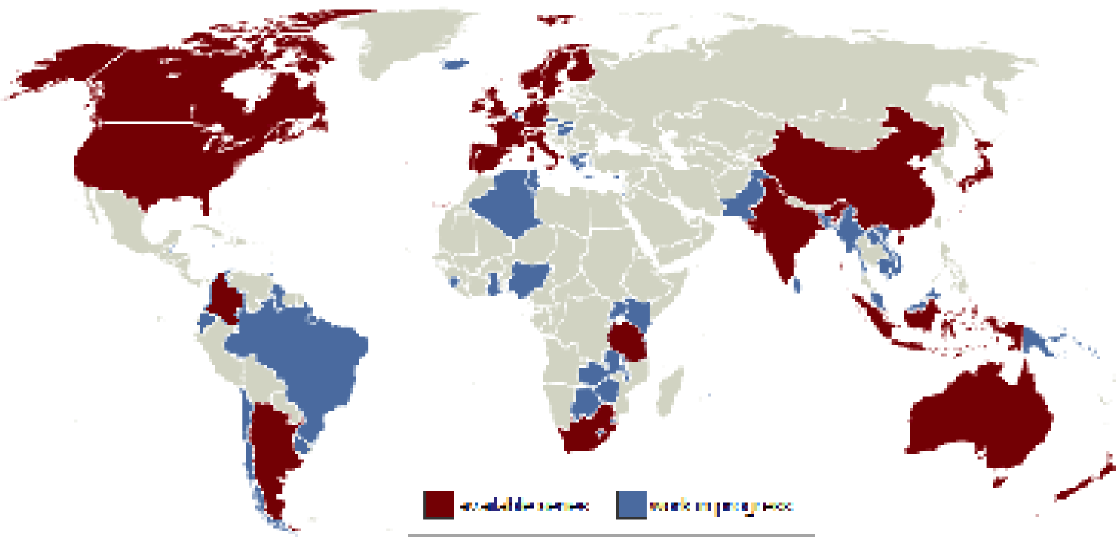
- The Database
- Graphics
- Country Information
- Work In Progress
- Acknowledgments



This presentation: three points

- **1. The long-run dynamics of income inequality**. The end of the Kuznets curve, the end of universal laws. Institutions and policies matter: education, labor, tax, etc.

- **2. The return of a patrimonial (or wealth-based) society**. Wealth-income ratios seem to be returning to very high levels in rich countries. The metamorphosis of capital. The key role of the legal and political system.

- **3. The future of wealth concentration**. With high r - g during 21^{c} (r = net-of-tax rate of return, g = growth rate), then wealth inequality might reach or surpass 19^{c} oligarchic levels. Need for more transparency about wealth. Need for progressive taxation of net wealth.

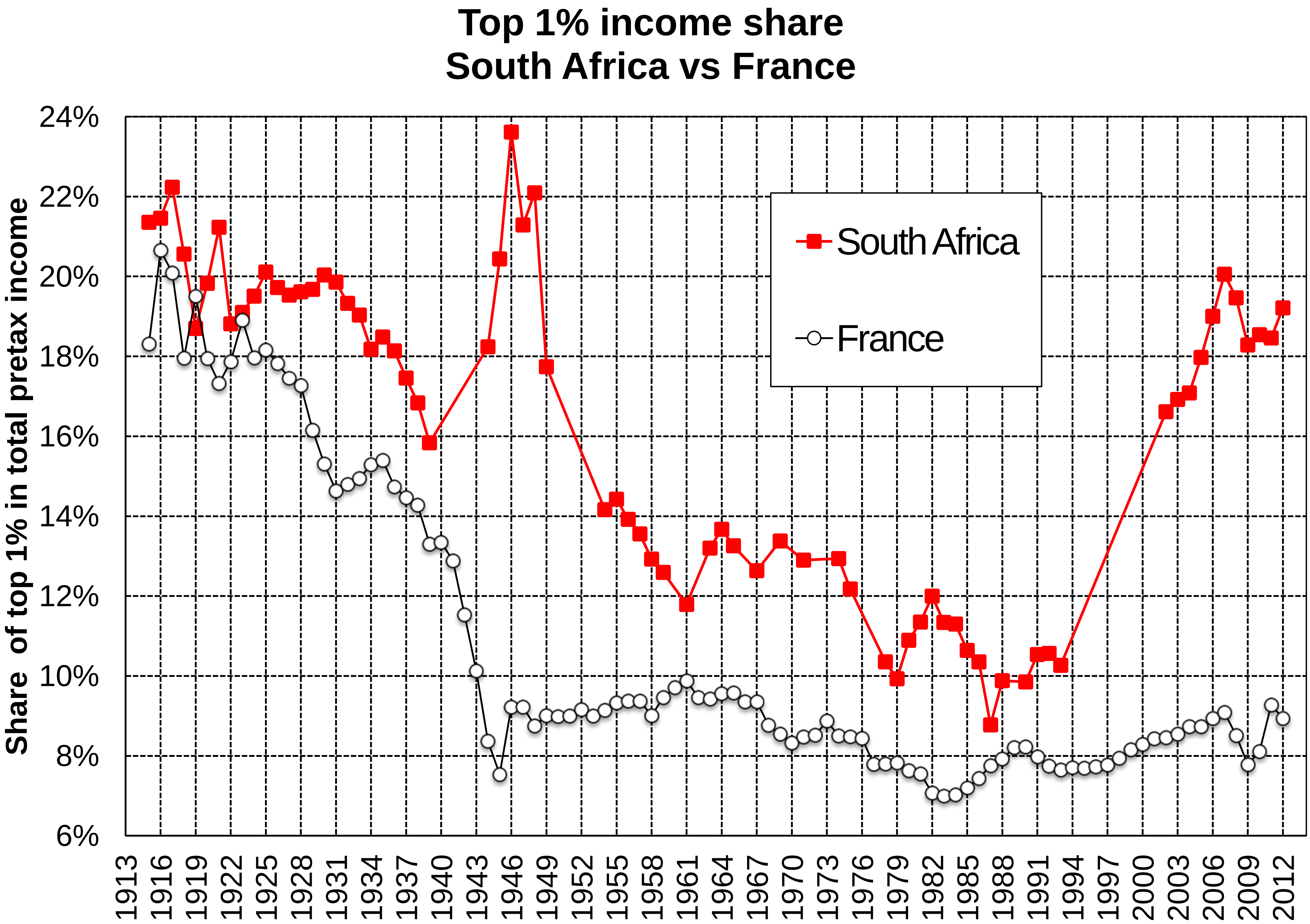
Inequality in South Africa

- **Income inequality** = extremely high by international and historical standards. Legacy of Apartheid.

  Top 10% income share ≈ 60-65% of total income (vs 30-35% in Europe, 45-50% in US, 55-60% in Brasil).

- **Wealth inequality** = probably very high as well, but we know very little. No access to estate tax data. No annual wealth tax.

- **Like other countries, & probably even more than others, South Africa needs more transparency about income and wealth dynamics.** Progressive wealth tax = powerful way to produce information & to limit concentration of property.
- BEE polices based upon voluntary market transactions are probably not enough. Progressive wealth tax = equivalent of permanent land reform. Wealth redistribution played a key role in successful development experience in Asia & Europe.


Top 1% income share
South Africa vs France
Share of top 1% in total pretax income
24%
22%
20%
18%
16%
14%
12%
10%
8%
6%
South Africa
France
1913
1916
1919
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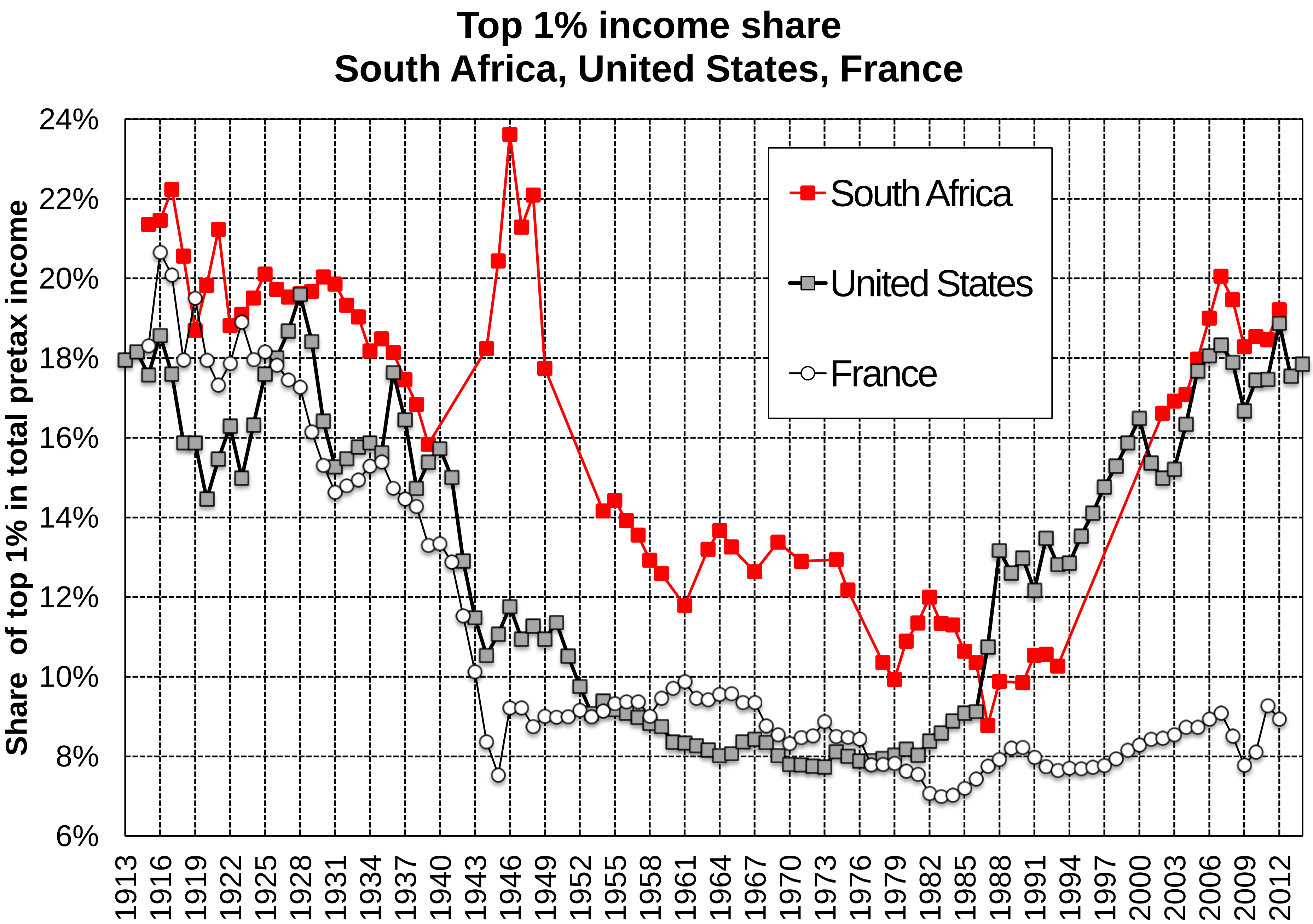
Top 1% income share
South Africa, United States, France
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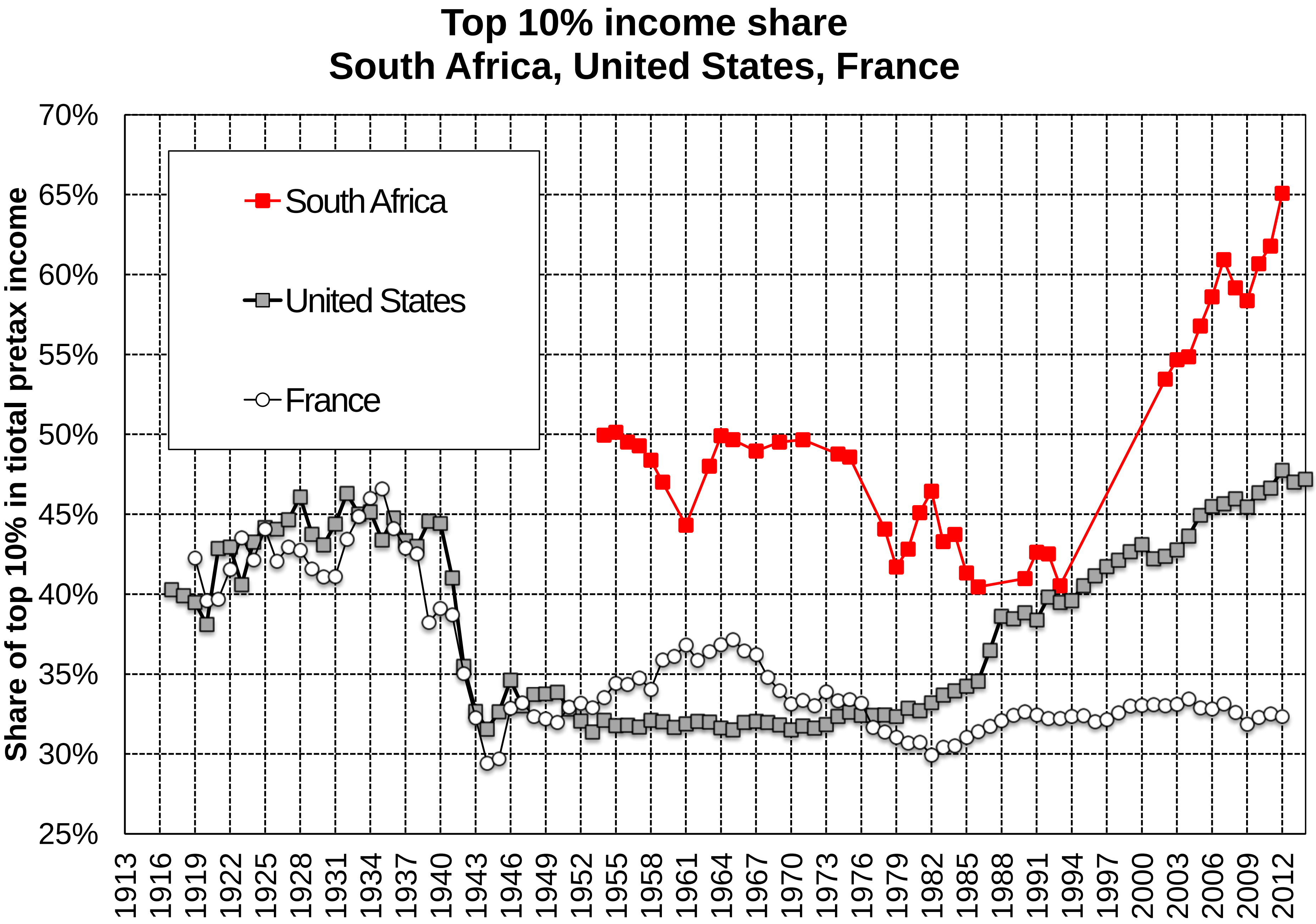
Top 10% income share
South Africa, United States, France
South Africa
United States
France
Share of top 10% in tiotal pretax income
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
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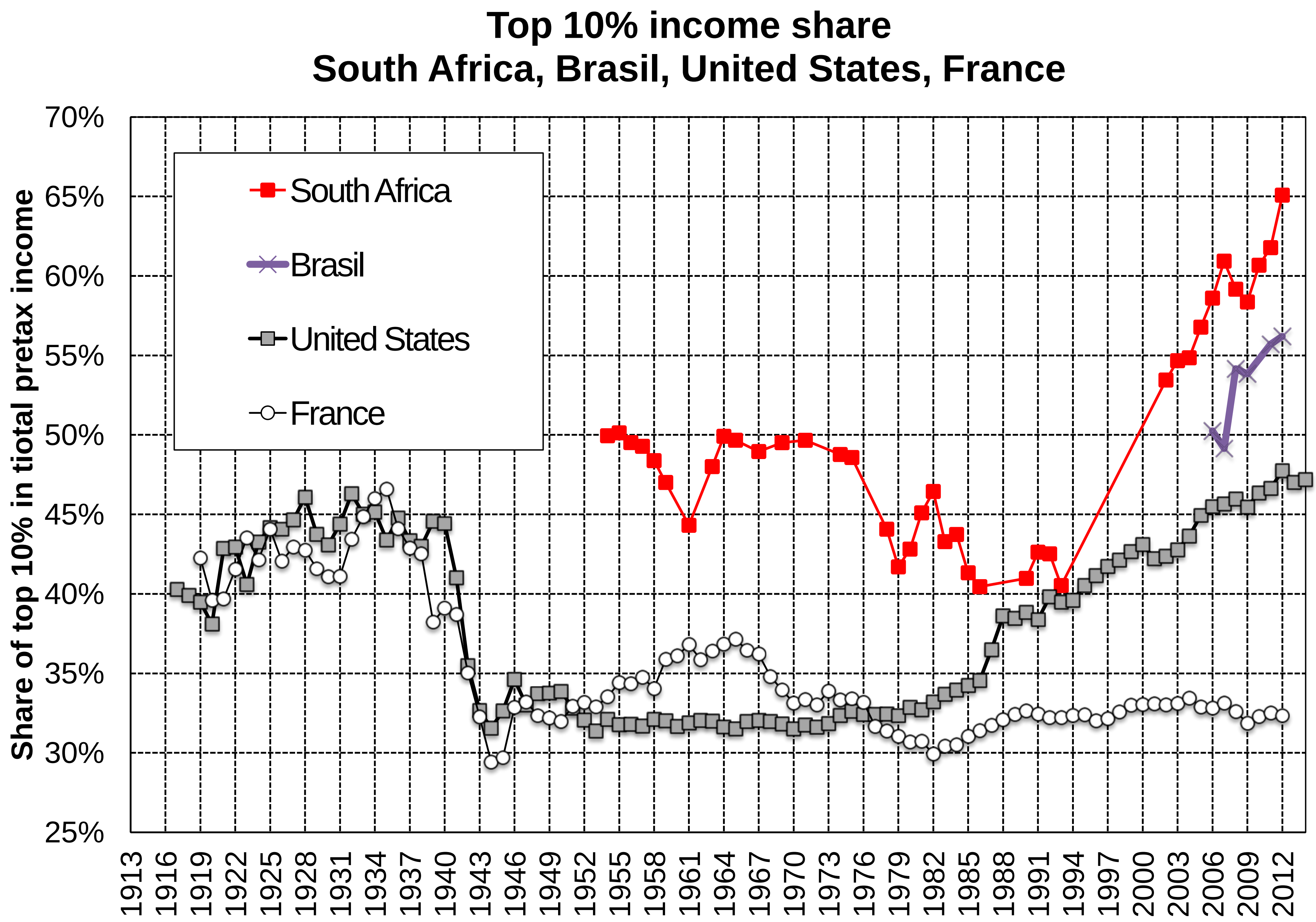
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Share of top 10% in tiotal pretax income
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2000
2003
2006
2009
2012

This presentation: three points

- **1. The long-run dynamics of income inequality**. The end of the Kuznets curve, the end of universal laws. Institutions and policies matter: education, labor, tax, etc.

- **2. The return of a patrimonial (or wealth-based) society**. Wealth-income ratios seem to be returning to very high levels in rich countries. The metamorphosis of capital. The key role of the legal and political system.

- **3. The future of wealth concentration**. With high $r - g$ during 21^c (r = net-of-tax rate of return, g = growth rate), then wealth inequality might reach or surpass 19^c oligarchic levels. Need for more transparency about wealth. Need for progressive taxation of net wealth.

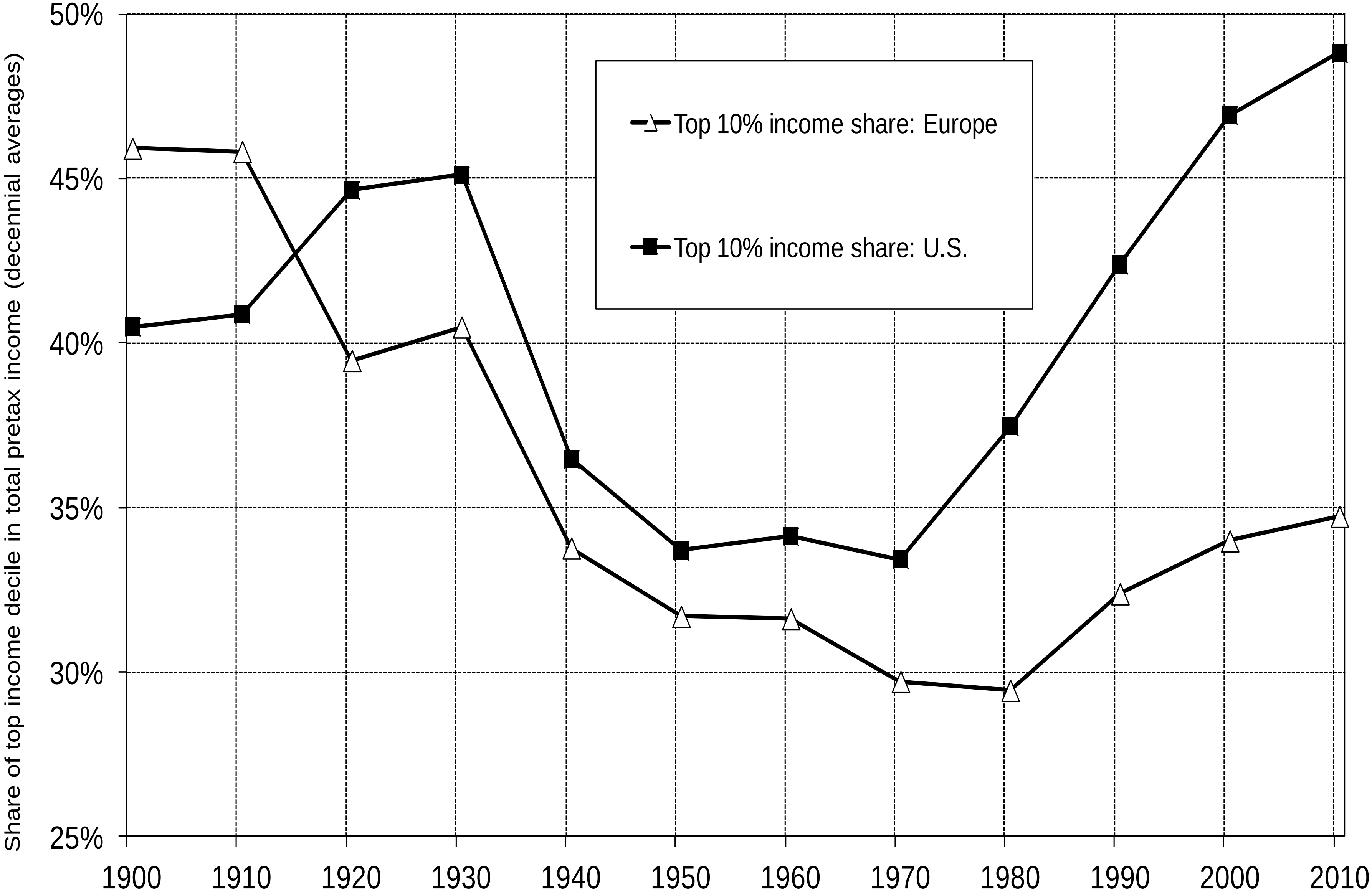
- **1. The long-run dynamics of income inequality**.
  The end of the Kuznets curve, the end of universal laws.
  Institutions and policies matter: education, labor, tax, etc.

- Three facts about inequality in the long-run: income inequality, wealth-inequality, wealth-income ratios

(Piketty-Saez, « Inequality in the long run », Science 2014)

- Fact n°1: in 1900-1910, income inequality was higher in Europe than in the United States; in 2000-2010, it is a lot higher in the United States

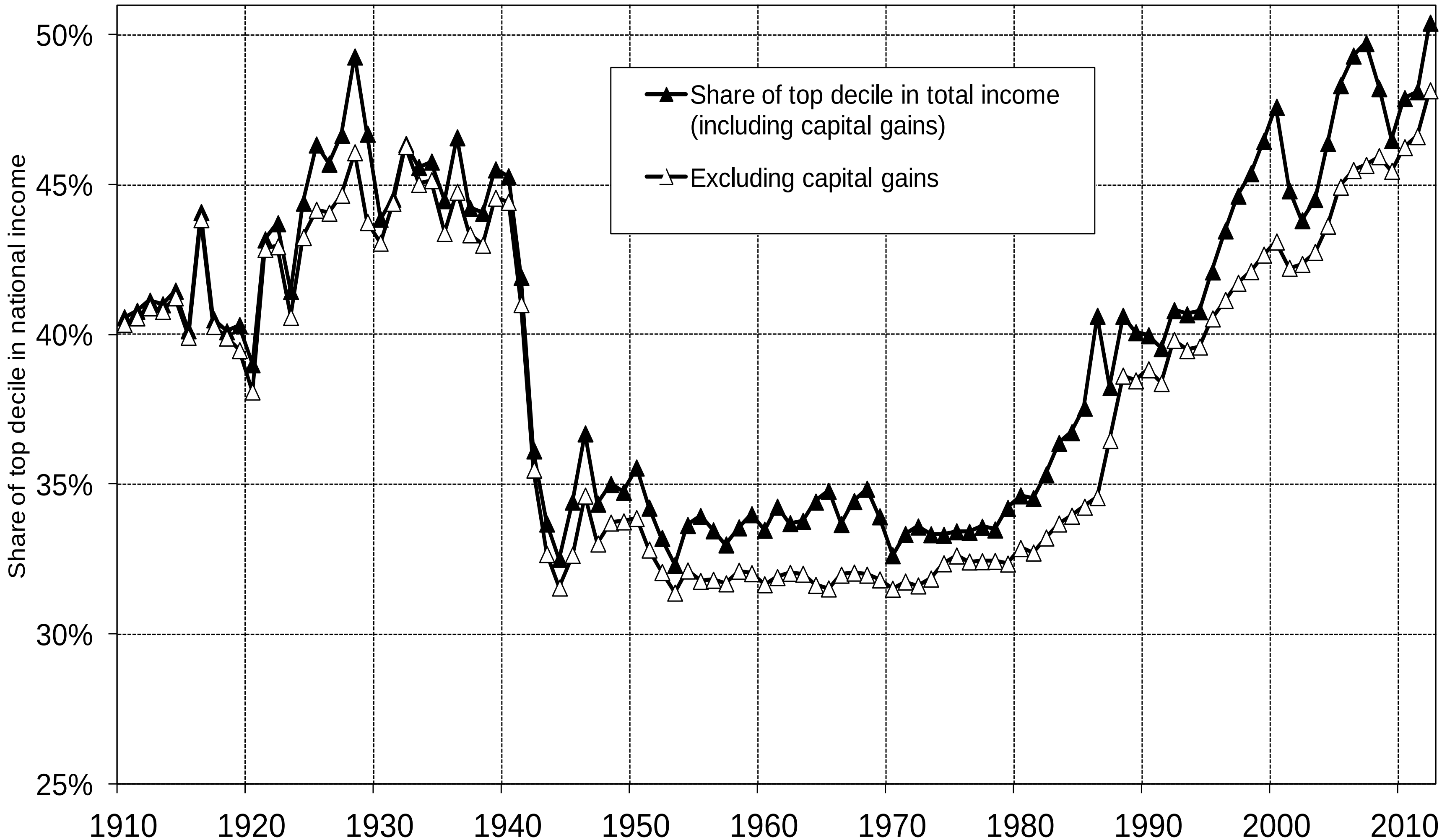
Figure 1. Income inequality: Europe and the U.S., 1900-2010



The share of total income accruing to top decile income holders was higher in Europe than in the U.S. around 1900-1910; it is a lot higher in the U.S. than in Europe around 2000-2010.

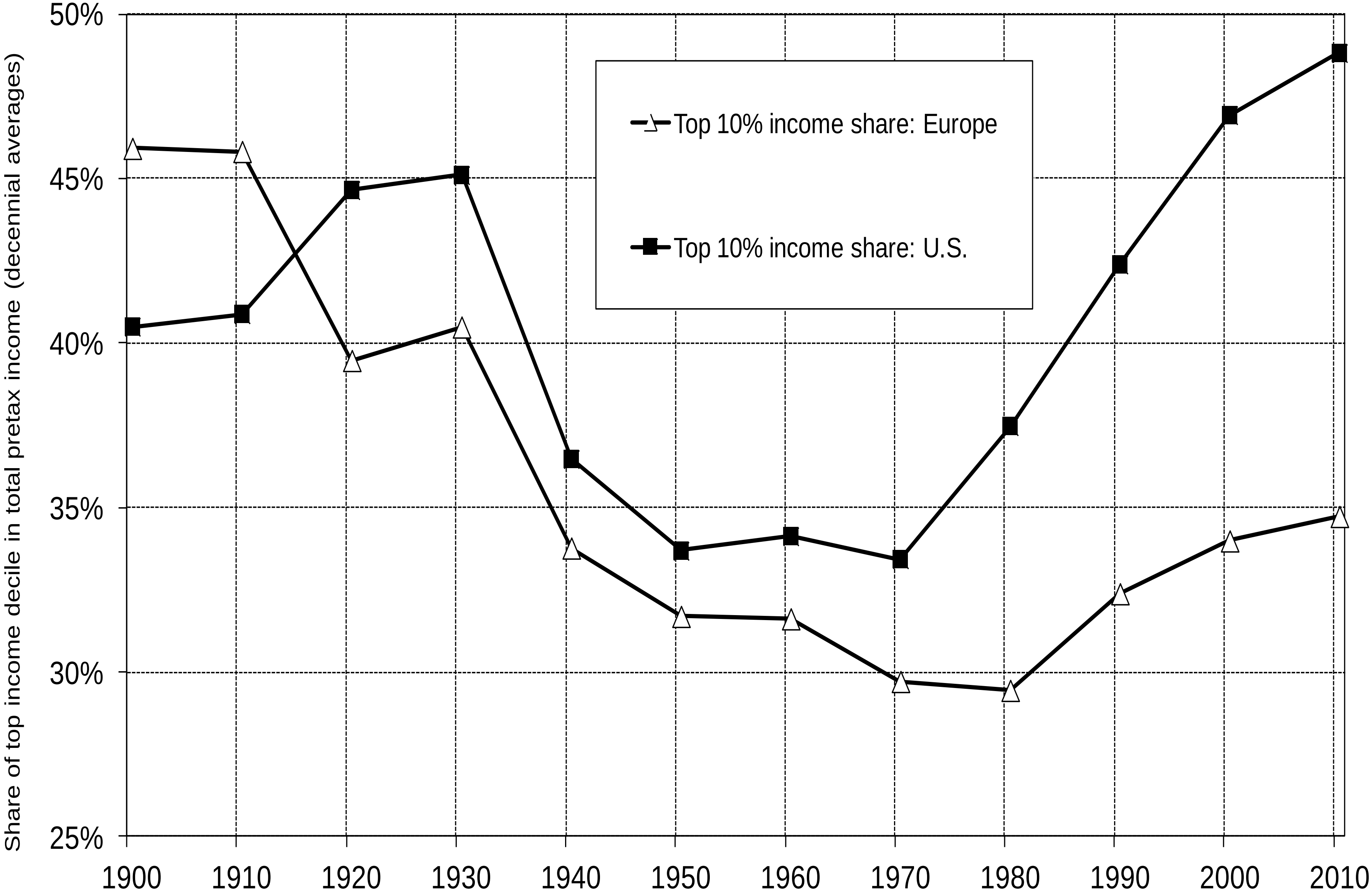
Sources and series: see piketty.pse.ens.fr/capital21c (fig.9,8)

Figure I.1. Income inequality in the United States, 1910-2012



The top decile share in U.S. national income dropped from 45-50% in the 1910s-1920s to less than 35% in the 1950s (this is the fall documented by Kuznets); it then rose from less than 35% in the 1970s to 45-50% in the 2000s-2010s.
Sources and series: see

Figure 1. Income inequality: Europe and the U.S., 1900-2010



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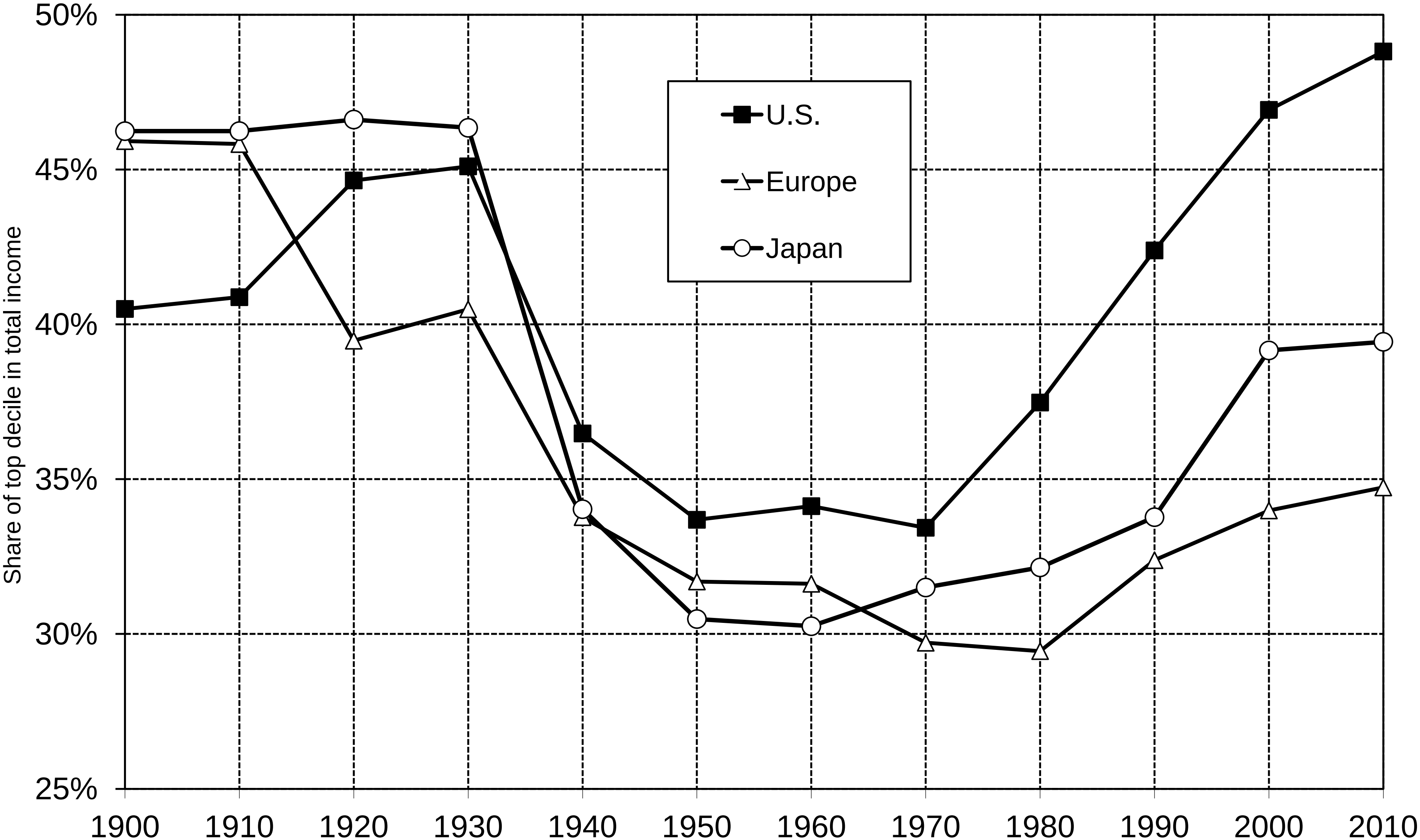
Sources and series: see piketty.pse.ens.fr/capital21c (fig.9,8)

Top 10% Income Share: Europe, U.S. and Japan, 1900-2010



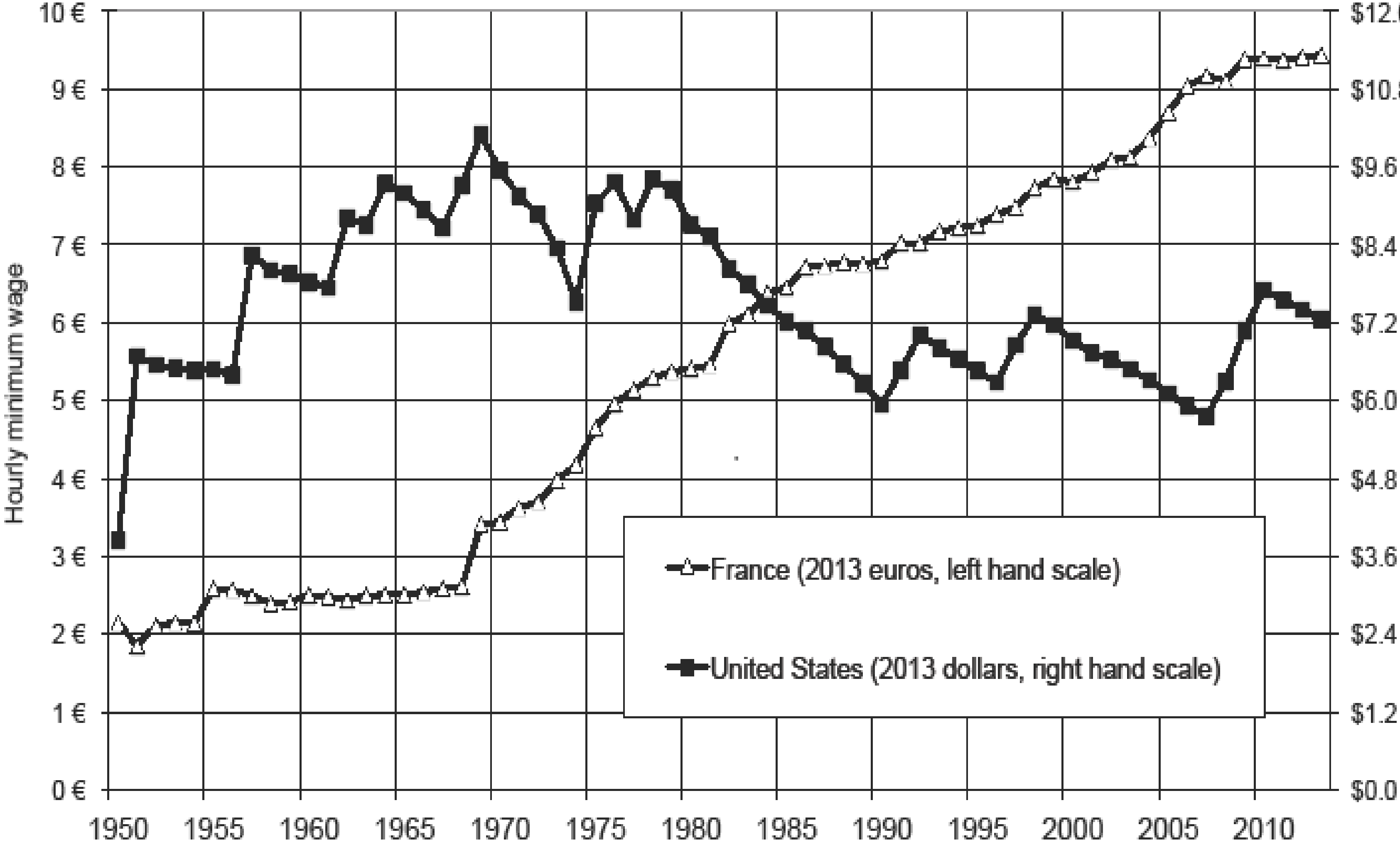
The top decile income share was higher in Europe than in the U.S. in 1900-1910; it is a lot higher in the U.S. in 2000-2010. Sources and series: see piketty.pse.ens.fr/capital21c.

- The rise in US inequality in recent decades is mostly due to rising inequality of labor income

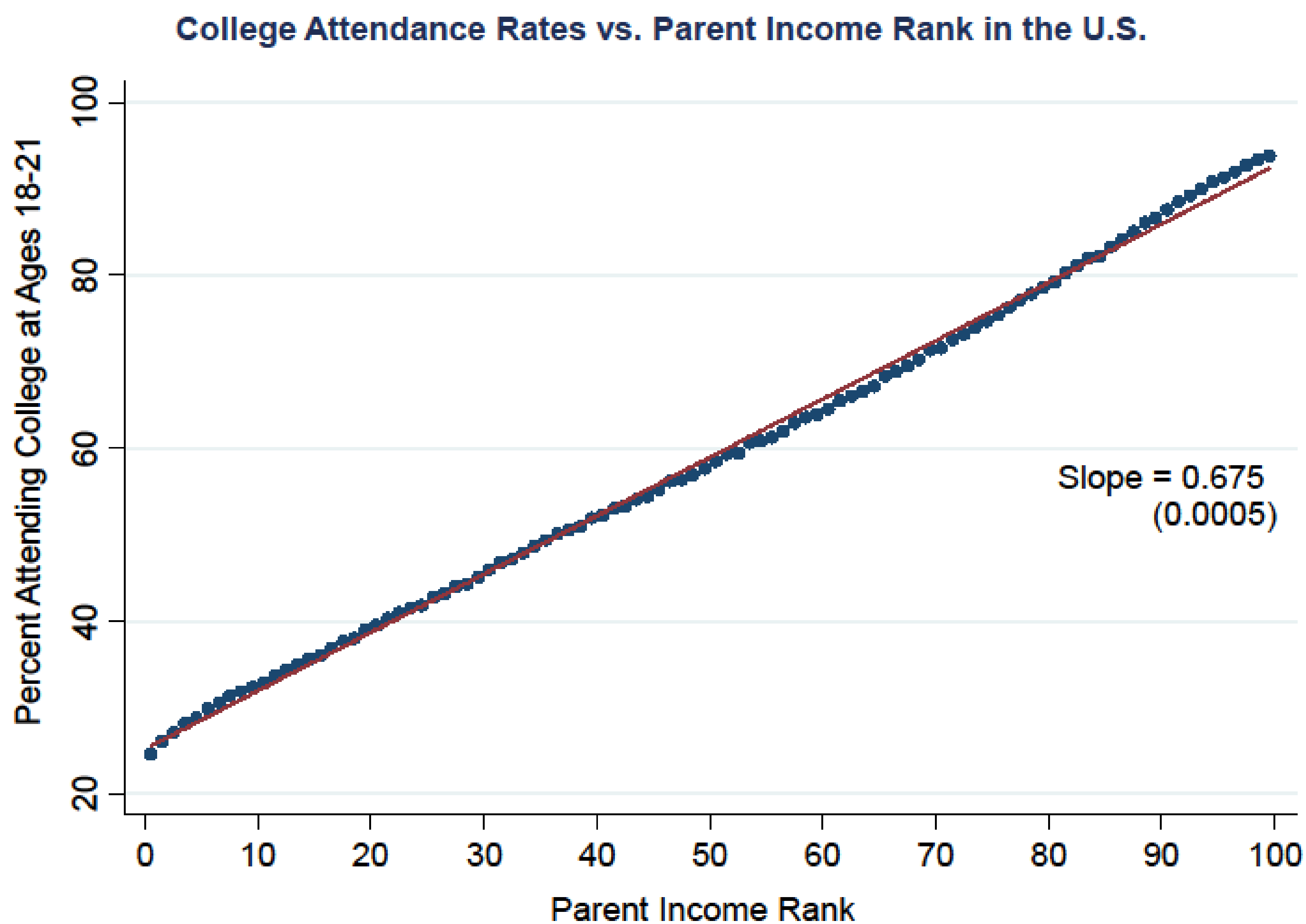
- It is due to a mixture of reasons: changing supply and demand for skills; race between education and technology; globalization; more unequal to access to skills in the US (rising tuitions, insufficient public investment); unprecedented rise of top managerial compensation in the US (changing incentives, cuts in top income tax rates); falling minimum wage in the US

  ➔ institutions and policies matter

Figure 9.1. Minimum wage in France and the U.S., 1950-2013



Expressed in 2013 purchasing power, the hourly minimum wage rose from $3.8 to $7.3 between 1950 and 2013 in the U.S., and from €2.1 to €9.4 in France. Sources and series: see piketty.pse.ens.fr/capital21c.

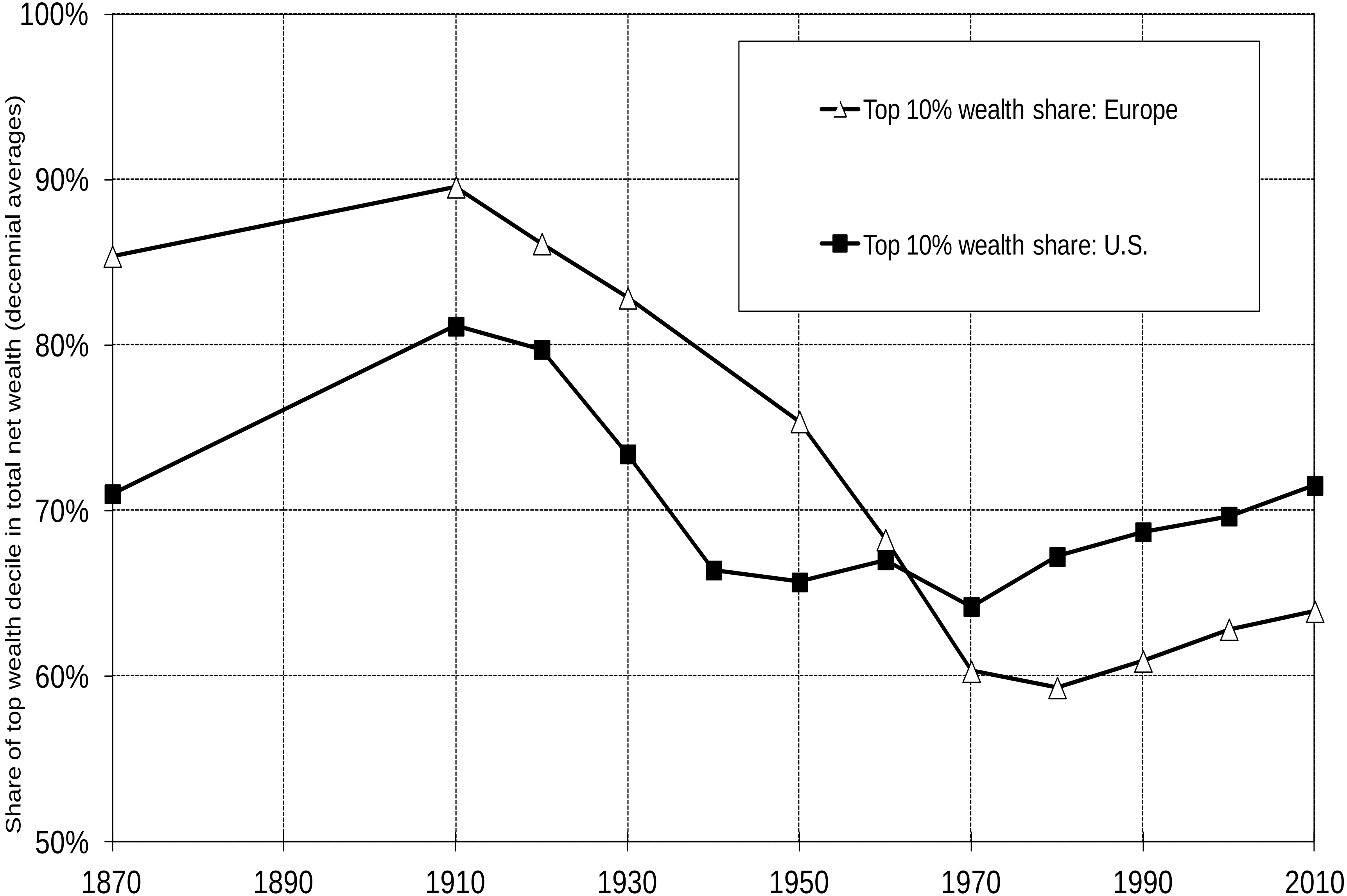

College Attendance Rates vs. Parent Income Rank in the U.S.
Percent Attending College at Ages 18-21
Parent Income Rank
20
40
60
80
100
0
10
20
30
40
50
60
70
80
90
100
Slope = 0.675
(0.0005)

- **2. The return of a patrimonial (or wealth-based) society**. Wealth-income ratios seem to be returning to very high levels in rich countries. Intuition: in a slow-growth society, wealth accumulated in the past can naturally become very important. In the very long run, this can be relevant for the entire world. Not bad in itself, but new challenges. **The metamorphosis of capital call for new regulations of property relations**. The key role of the legal and political system. Democratizing capital: worker codetermination, patent laws, etc.

- Fact n°2: wealth inequality is always a lot higher than income inequality; it is now higher in the US than in Europe

- Fact n°3: wealth inequality is less extreme today than a century ago in Europe, although the total capitalization of private wealth relative to national income has now recovered from the 1914-1945 shocks

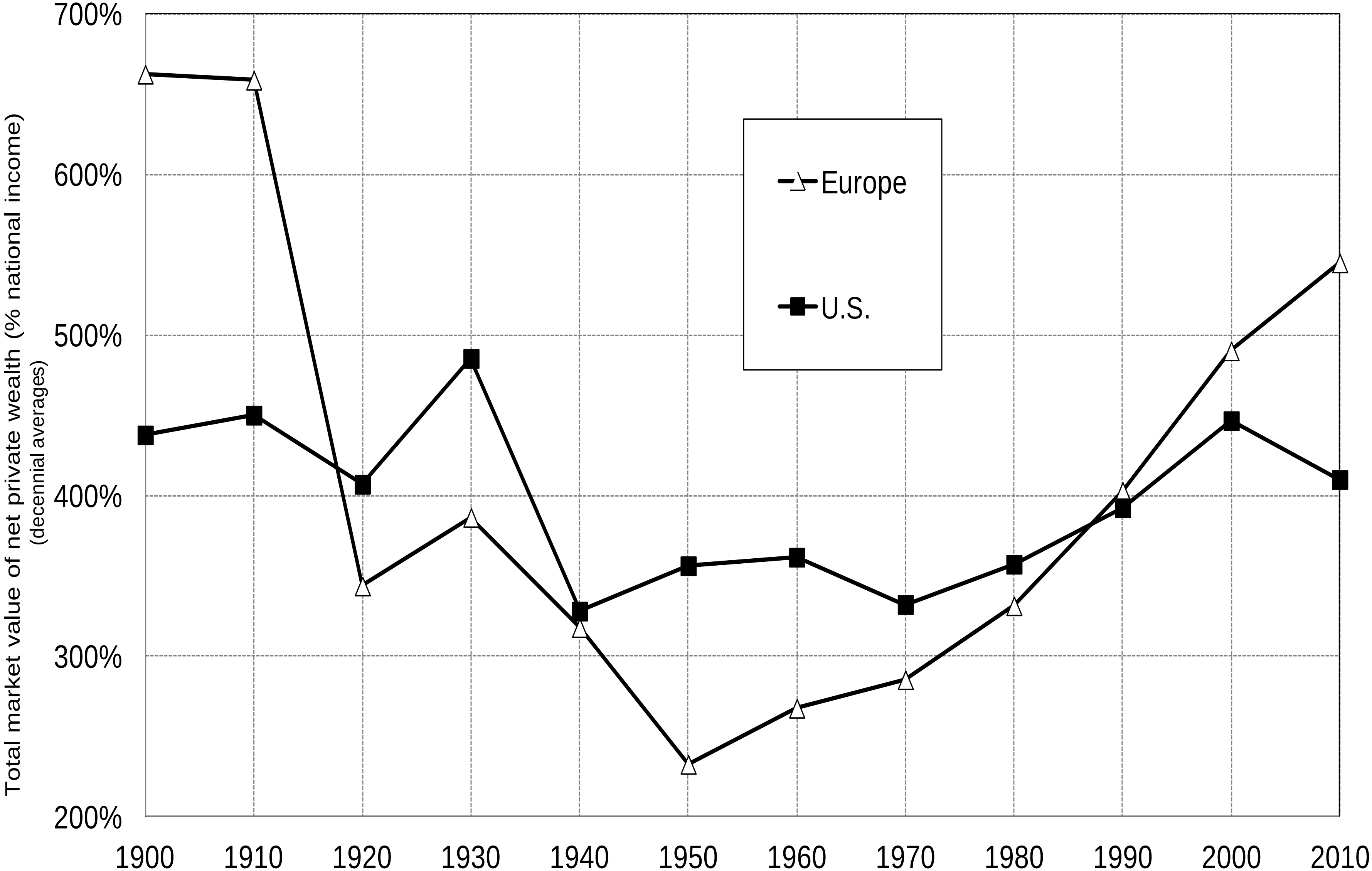
Figure 2. Wealth inequality: Europe and the U.S., 1870-2010



The share of total net wealth belonging to top decile wealth holders has become higher in the US than in Europe over the course of the 20th century. But it is still smaller than what it was in Europe before World War 1.

Sources and series: see piketty.pse.ens.fr/capital21c (fig.10,6)

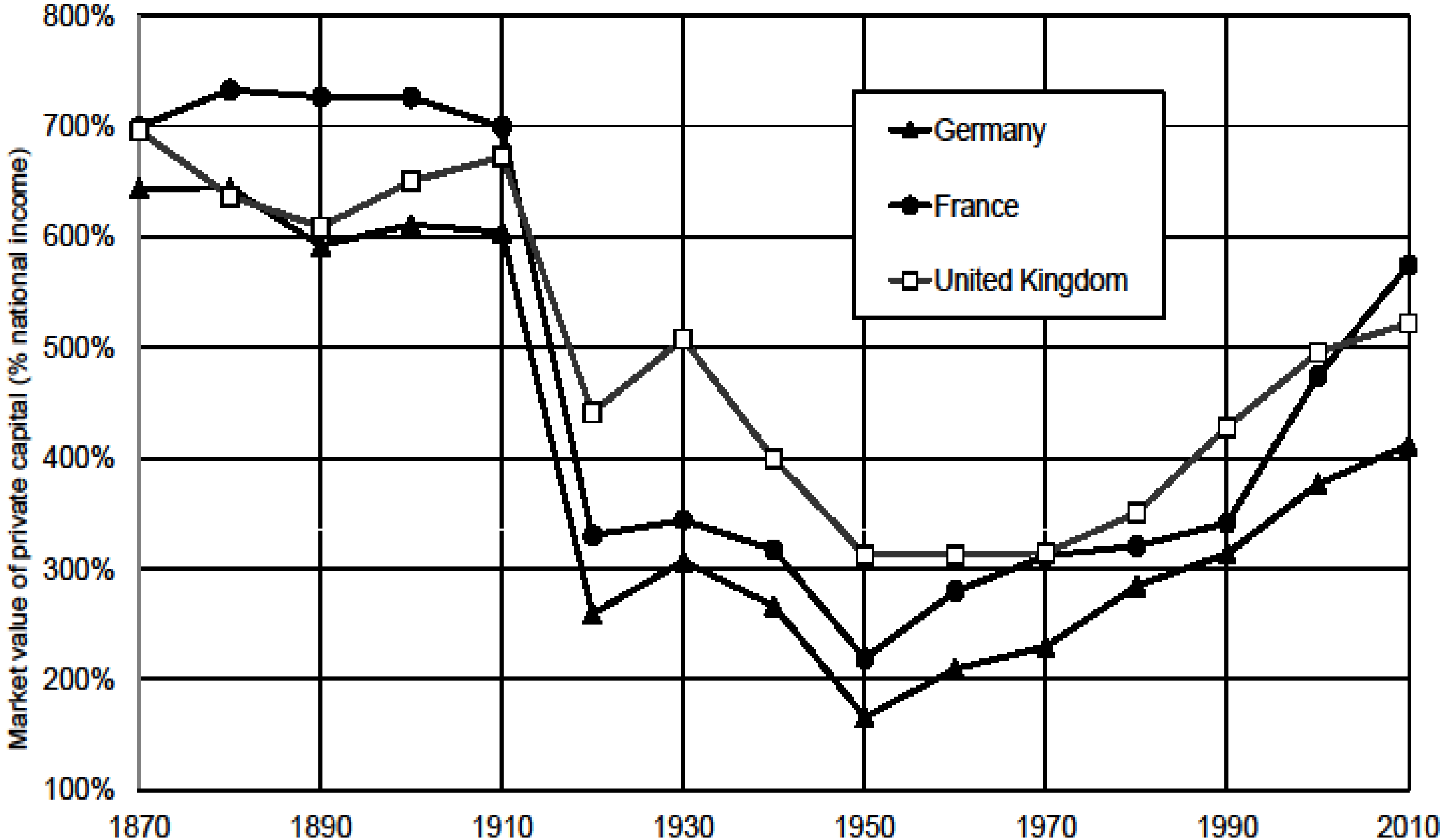
Figure 3. Wealth-income ratios: Europe and the U.S., 1900-2010



Total net private wealth was worth about 6-7 years of national income in Europe prior to World War 1, down to 2-3 years in 1950-1960, back up to 5-6 years in 2000-2010. In the US, the U-shapped pattern was much less marked.

Sources and series: see piketty.pse.ens.fr/capital21c (fig.5,1)

Figure I.2. The capital/income ratio in Europe, 1870-2010

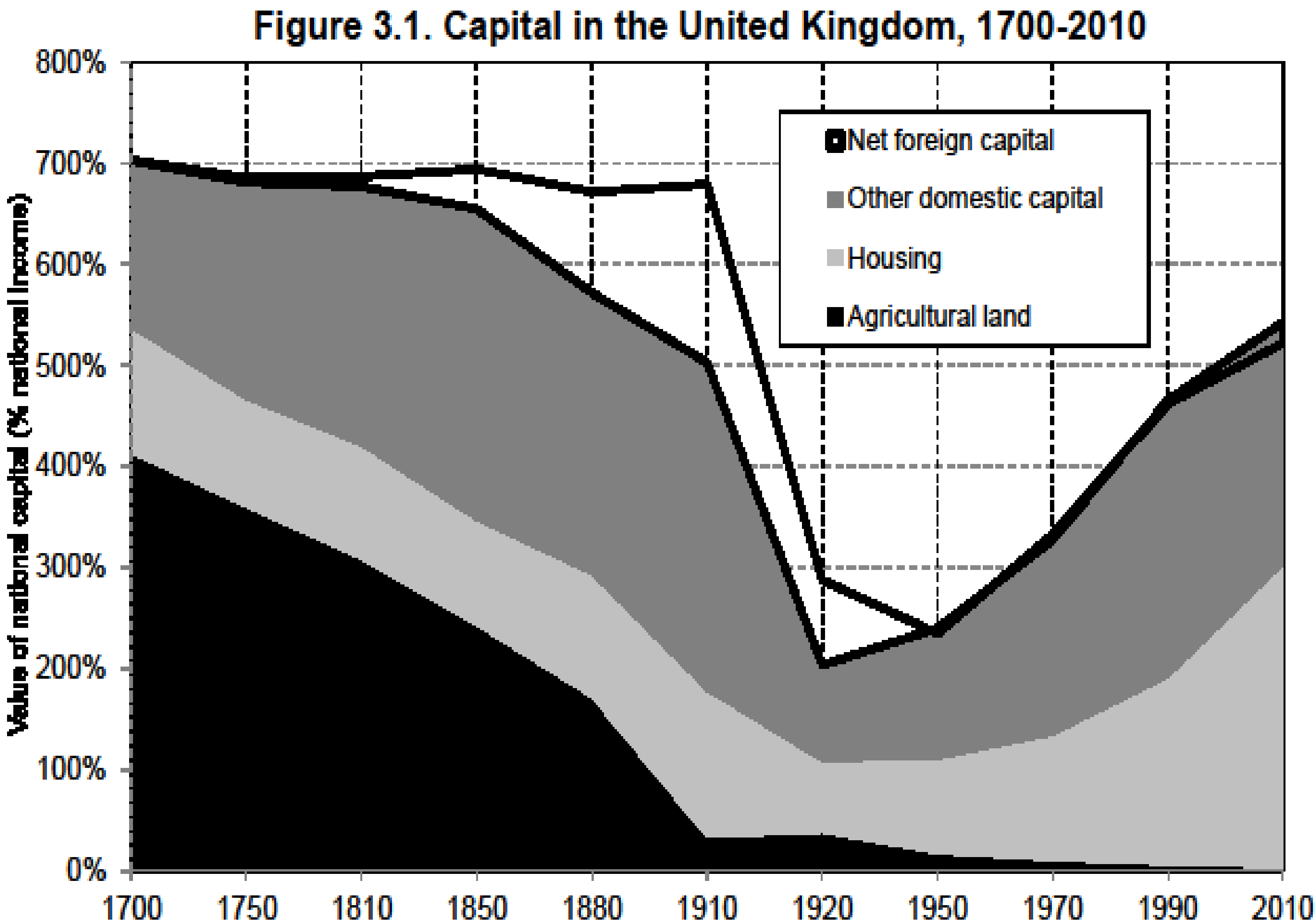


Aggregate private wealth was worth about 6-7 years of national income in Europe in 1910, between 2 and 3 years in 1950, and between 4 and 6 years in 2010. Sources and series: see piketty.pse.ens.fr/capital21c.

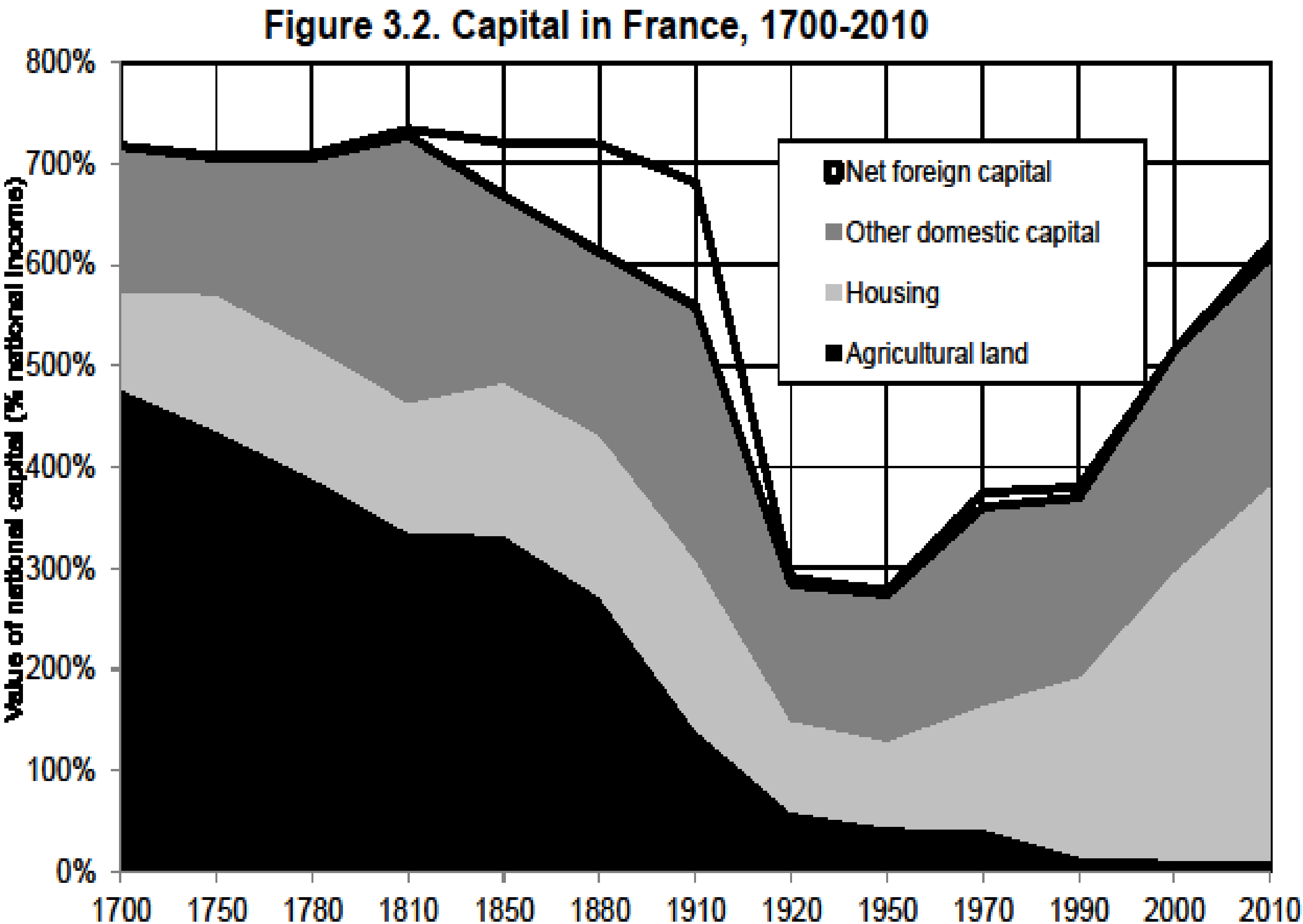
The metamorphosis of capital

- There's nothing bad with high wealth-income ratios (**postwar reconstruction**, **growth slowdown**), but this creates new policy challenges: financial regulation, real estate bubbles, return of inheritance

➔ **A multidimensional approach to the history of capital and property relations**: from land to business assets, foreign assets, real estate, public debt, immaterial capital, etc.



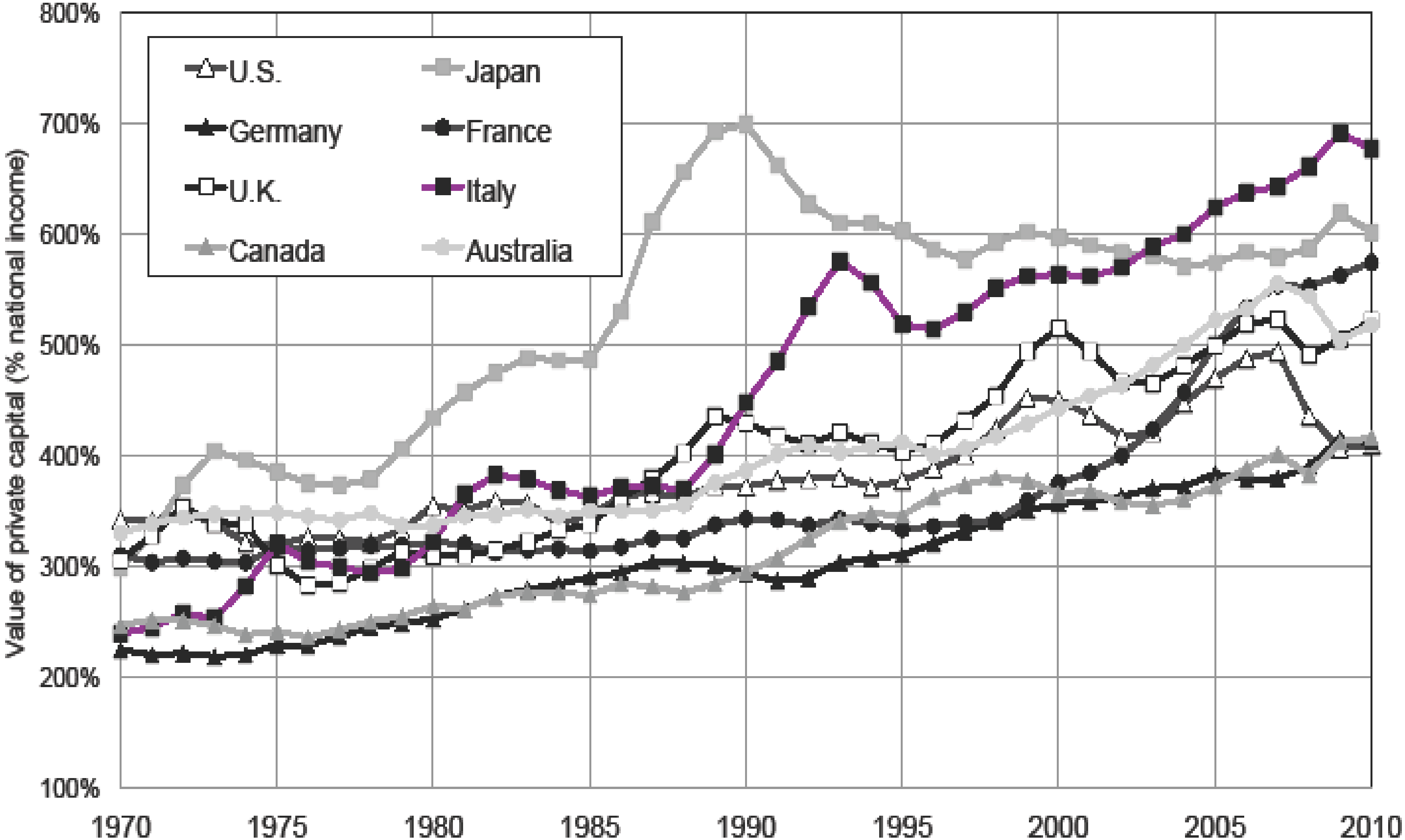
National capital is worth about 7 years of national income in the United Kingdom in 1700 (including 4 in agricultural land). Sources and series: see piketty.pse.ens.fr/capital21c.



National capital is worth almost 7 years of national income in France in 1910 (including 1 invested abroad).

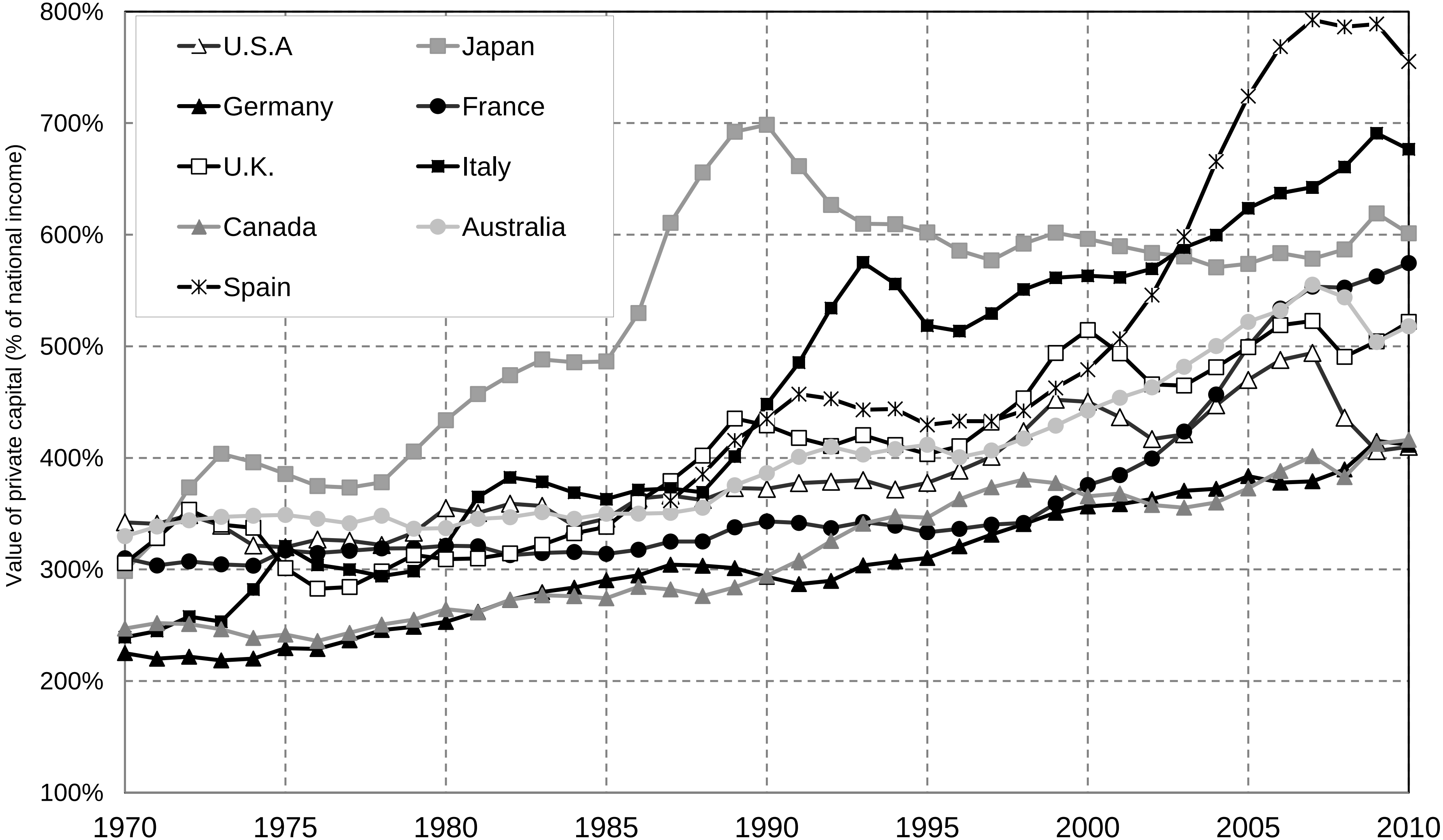
Sources and series: see piketty.pse.ens.fr/capital21c.

Figure 5.3. Private capital in rich countries, 1970-2010



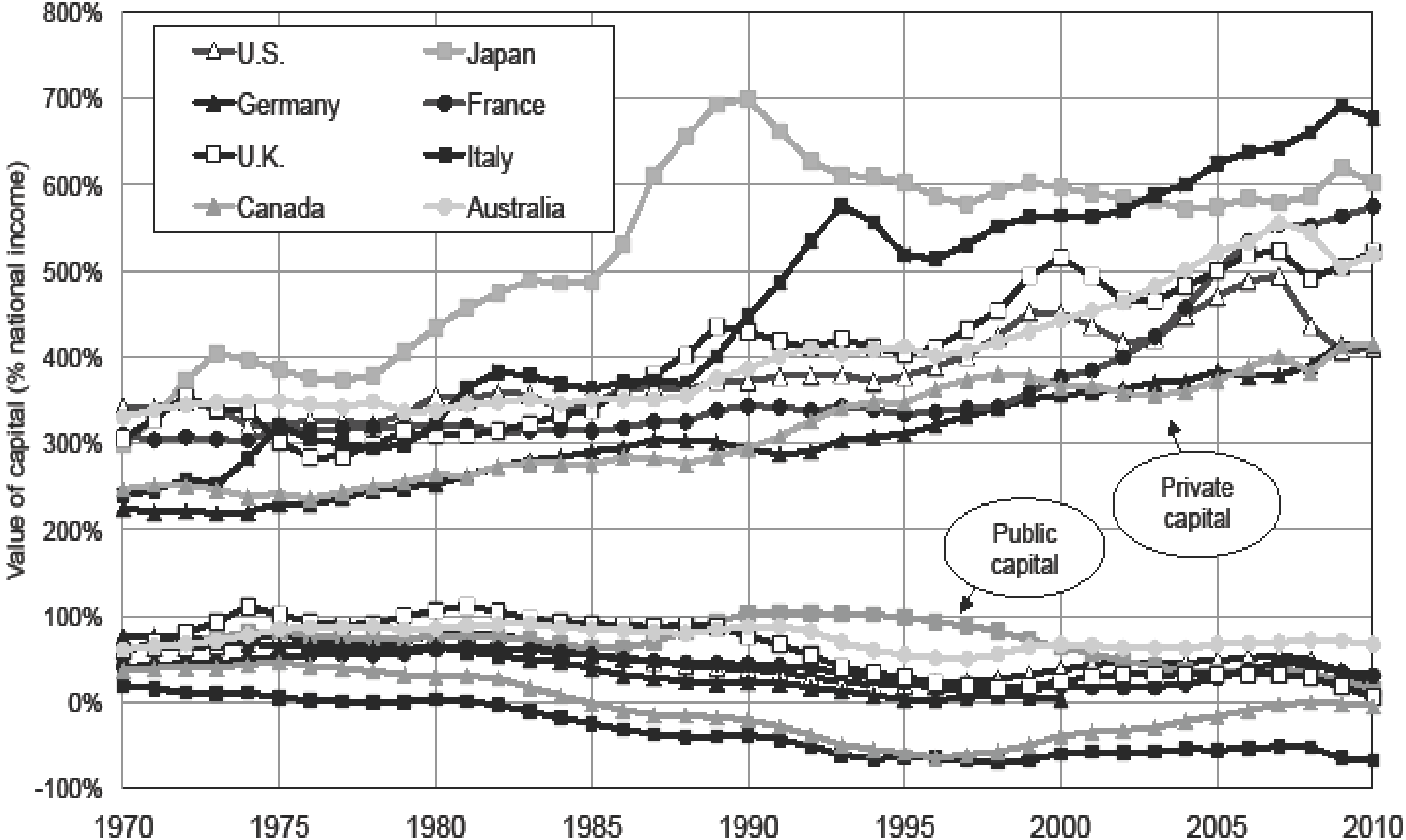
Private capital is worth between 2 and 3.5 years of national income in rich countries in 1970, and between 4 and 7 years of national income in 2010. Sources and series: see piketty.pse.ens.fr/capital21c.

Figure S5.2. Private capital in rich countries: from the Japanese to the Spanish bubble



Private capital almost reached 8 years of national income in Spain at the end of the 2000s (ie. one more year than Japan in 1990). Sources and series: see piketty.pse.ens.fr/capital21c.

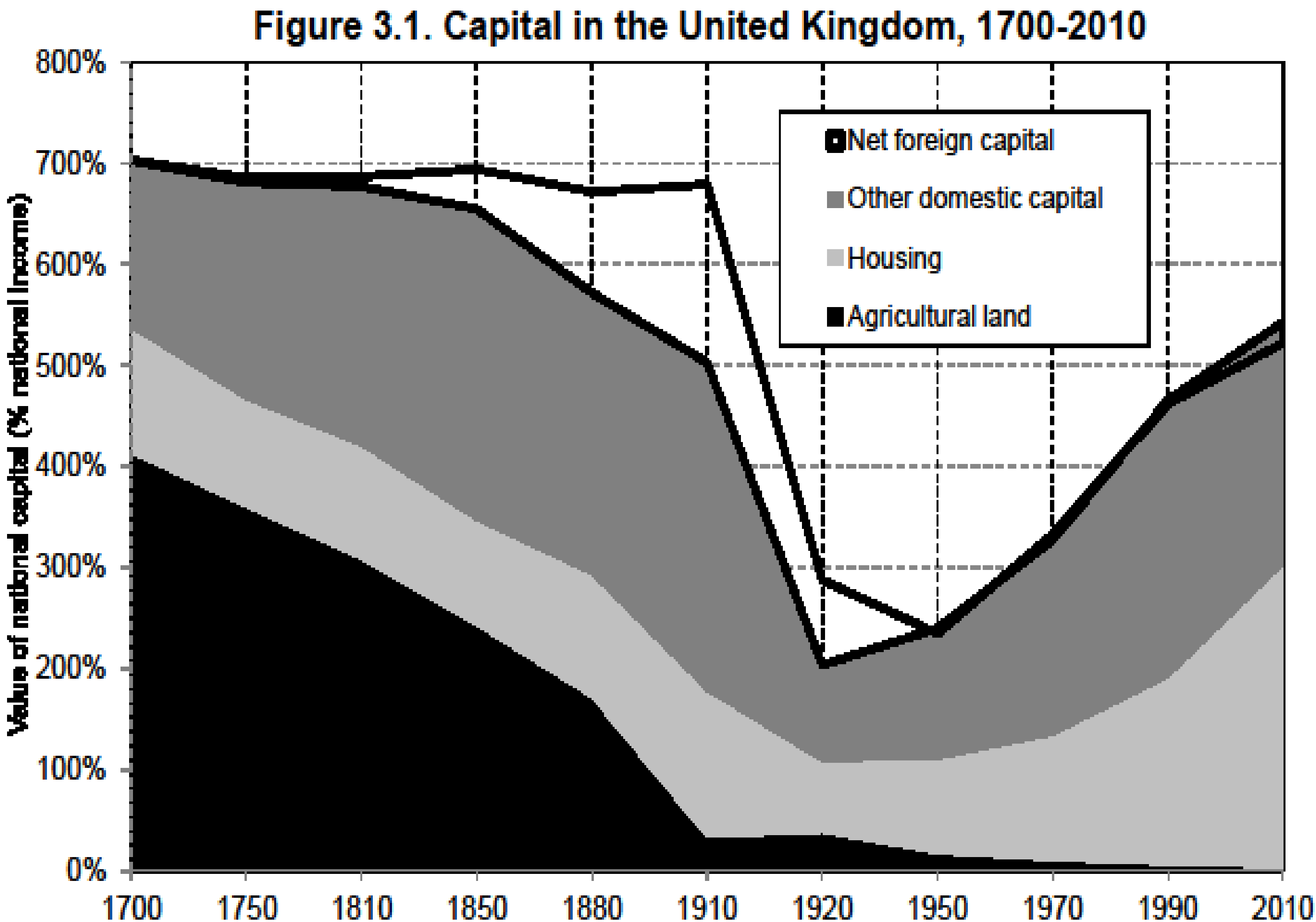
Figure 5.5. Private and public capital in rich countries, 1970-2010



In Italy, private capital rose from 240% to 680% of national income between 1970 and 2010, while public capital dropped from 20% to -70%. Sources and series: see piketty.pse.ens.fr/capital21c.

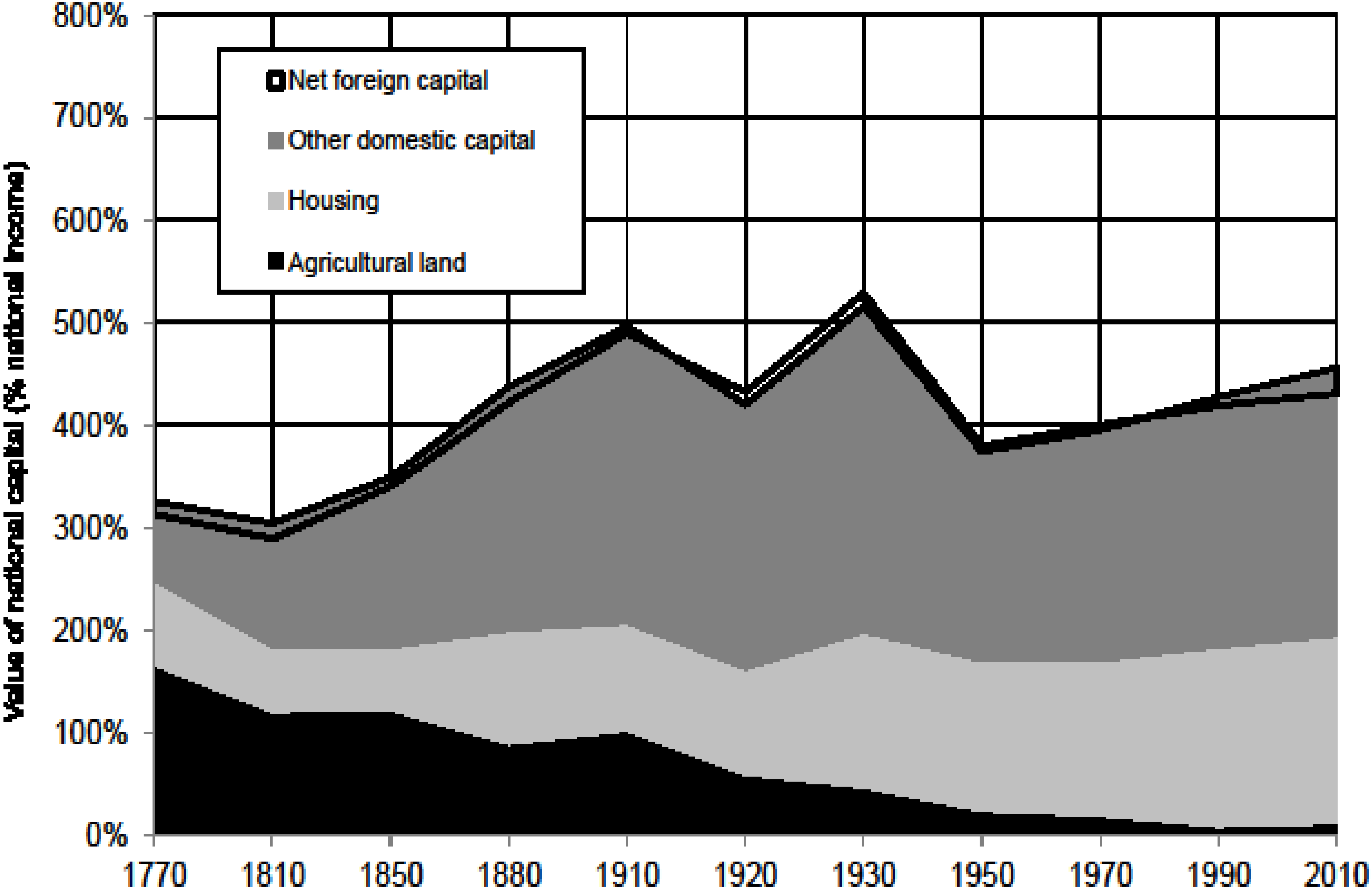
Capital & inequality in America

- Inequality in America = a different structure as in Europe: more egalitarian in some ways, more inegalitarian in others
- The New World in the 19th century: **the land of opportunity** (capital accumulated in the past matters less than in Europe; perpetual pop. growth as a way to reduce the level of inherited wealth and wealth concentration)… **and also the land of slavery: extreme form of property relation**
- Northern US were in many ways more egalitarian than Old Europe; but Southern US were more inegalitarian
- We still have the same ambiguous relationship of America with inequality today: in some ways more merit-based; in other ways more violent (« meritocratic extremism »)



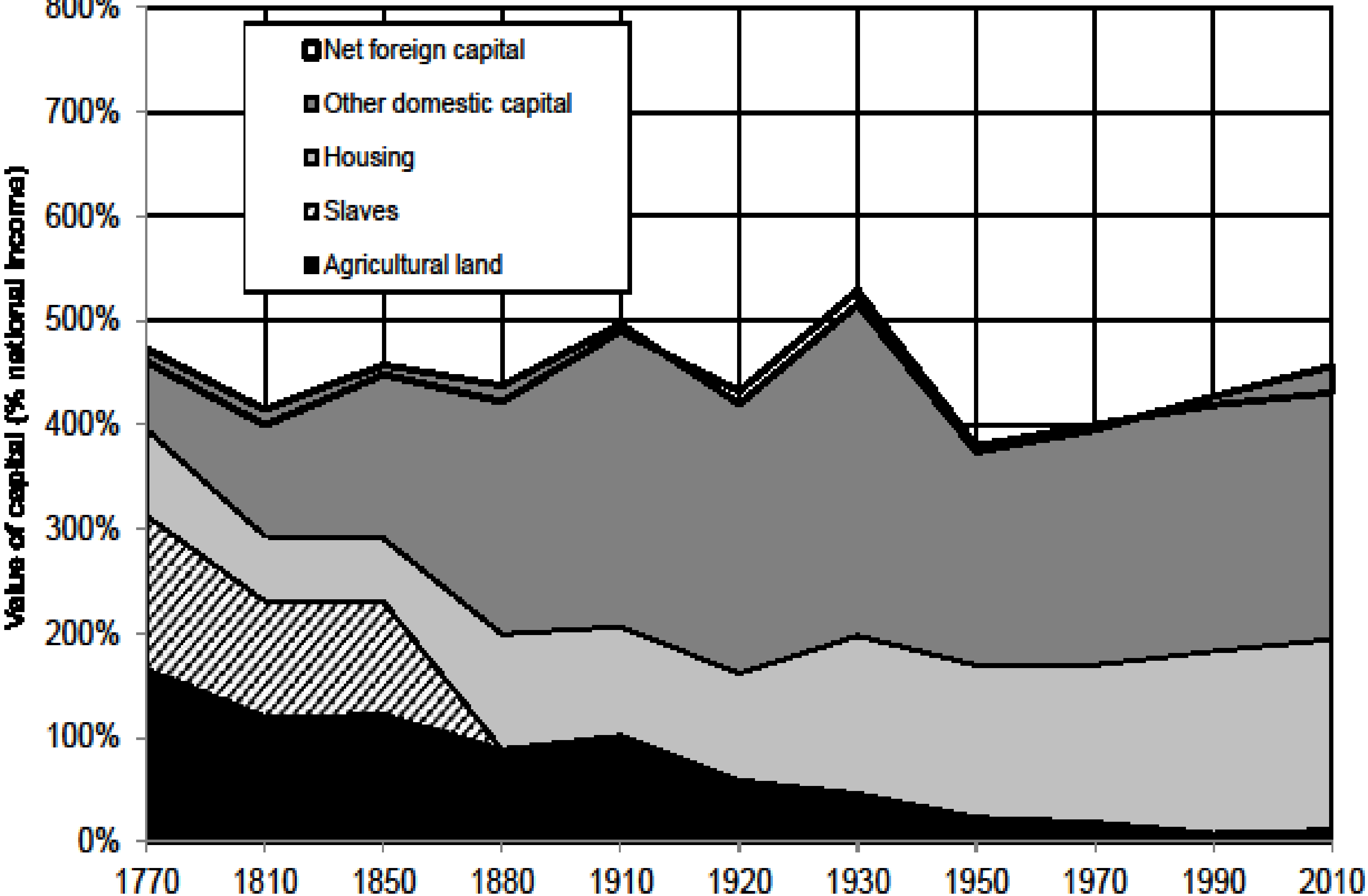
National capital is worth about 7 years of national income in the United Kingdom in 1700 (including 4 in agricultural land). Sources and series: see piketty.pse.ens.fr/capital21c.

Figure 4.6. Capital in the United States, 1770-2010



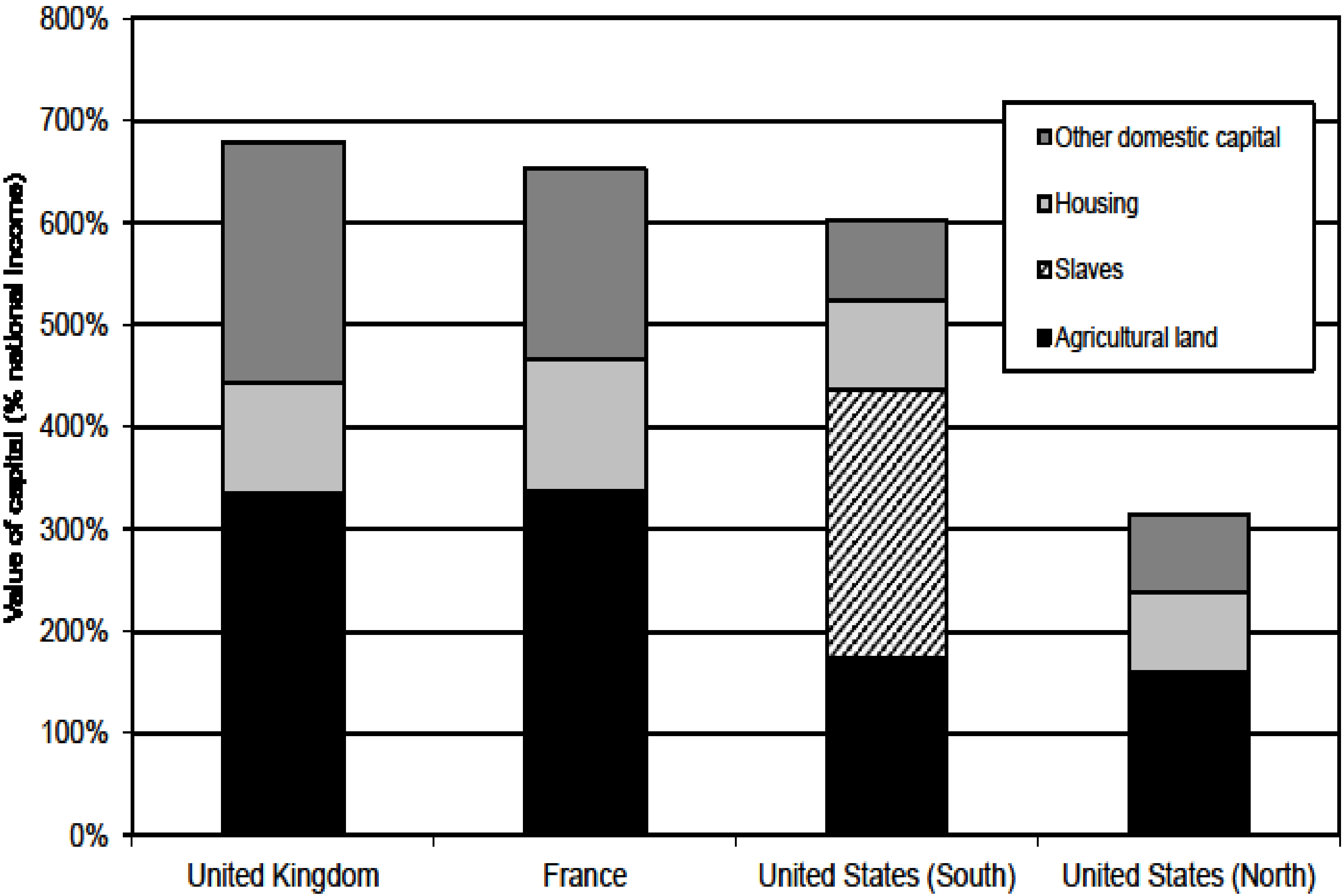
National capital is worth 3 years of national income in the United States in 1770 (incl. 1,5 years in agricultural land). Sources and series: see piketty.pse.ens.fr/capital21c.

Figure 4.10. Capital and slavery in the United States



The market value of slaves was about 1,5 years of U.S. national income around 1770 (as mush as land).
Sources and series: see piketty.pse.ens.fr/capital21c.

Figure 4.11. Capital around 1770-1810: Old an New World



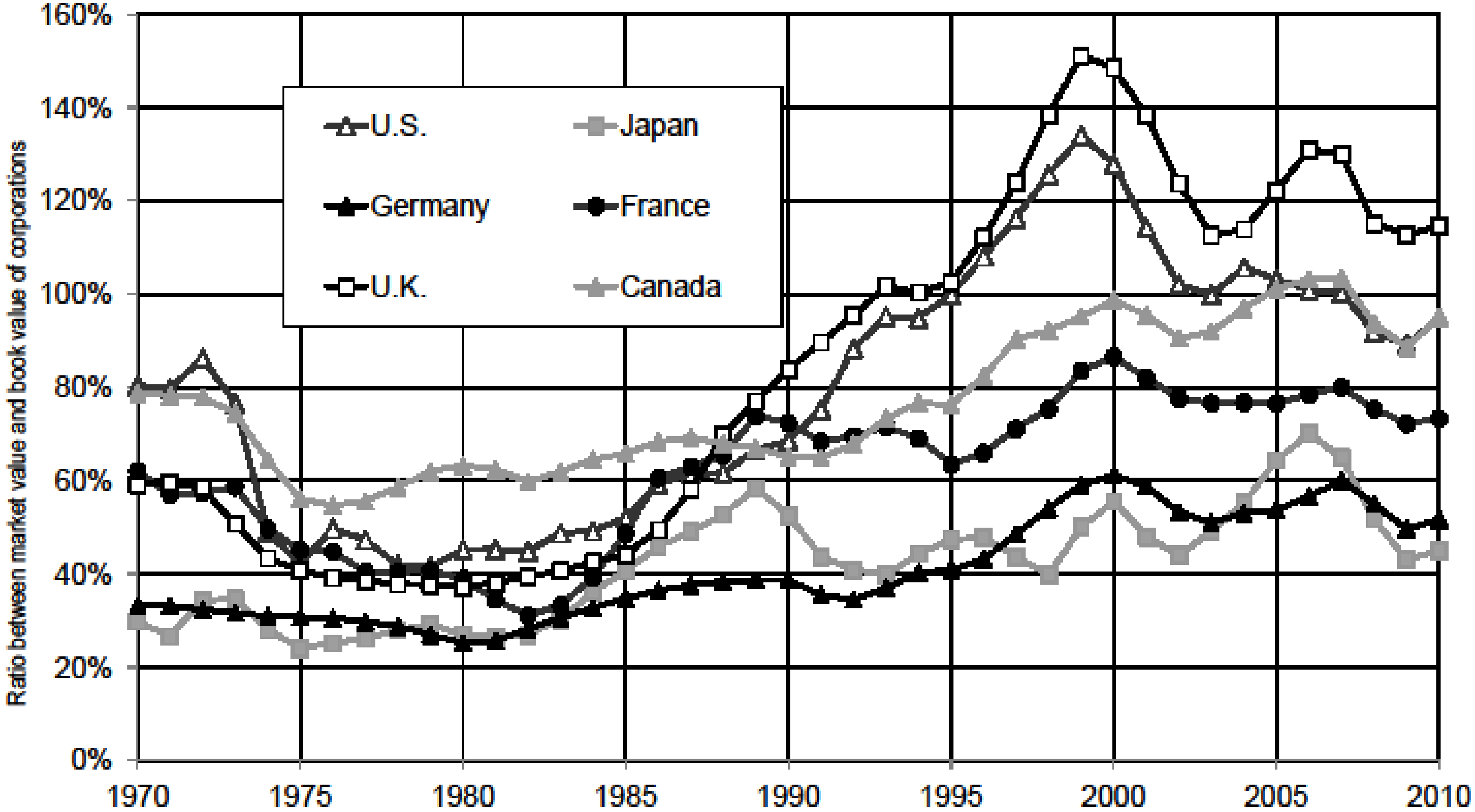
The combined value of agricultural land and slaves in Southern United States surpassed 4 years of national income around 1770-1810. Sources and series: see piketty.pse.ens.fr/capital21c.

Capital & inequality in Germany

- Lower market values of capital assets in Germany: lower real estate prices, and lower stock market capitalization of corporations
- Stakeholder capitalism: shareholders have to share power with worker representatives, regional govt, etc., so that the market value is much less than book value of corporation
- Apparently this does not prevent German companies from producing good cars

- **This clearly illustrates that market and social values of capital can differ; property relations are socially, legally and historically determined**

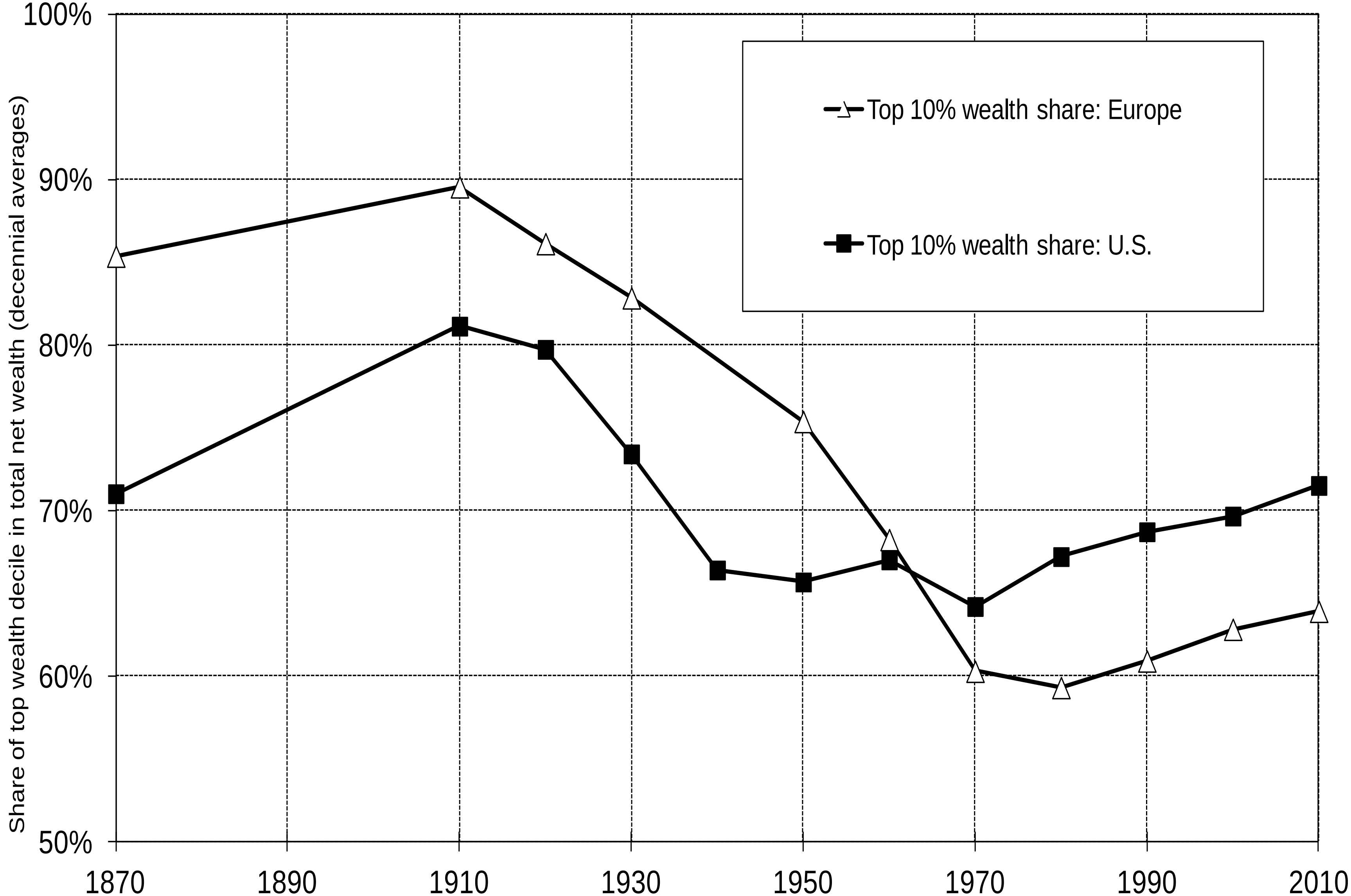
Figure 5.6. Market value and book value of corporations



Tobin's Q (i.e. the ratio between market vaue and book value of corporations) has risen in rich countries since the 1970s-1980s. Sources and series: see piketty.pse.ens.fr/capital21c.

- **3. The future of wealth concentration**. With high r - g during 21^c (r = net-of-tax rate of return, g = growth rate), then wealth inequality might reach or surpass 19^c oligarchic levels. Need for more transparency about wealth. Need for progressive taxation of net wealth.

Figure 2. Wealth inequality: Europe and the U.S., 1870-2010



The share of total net wealth belonging to top decile wealth holders has become higher in the US than in Europe over the course of the 20th century. But it is still smaller than what it was in Europe before World War 1.

Sources and series: see piketty.pse.ens.fr/capital21c (fig.10,6)

Table 12.1. The growth rate of top global wealth, 1987-2013

Average real growth rate per year *(after deduction of inflation)*	1987-2013
The top 1/(100 million) highest wealth holders (about 30 adults out of 3 billions in 1980s, and 45 adults out of 4,5 billions in 2010s)	6,8%
The top 1/(20 million) highest wealth holders (about 150 adults out of 3 billions in 1980s, and 225 adults out of 4,5 billions in 2010s)	6,4%
Average world wealth per adult	2,1%
Average world income per adult	1,4%
World adult population	1,9%
World GDP	3,3%

Between 1987 and 2013, the highest global wealth fractiles have grown at 6%-7% per year, vs. 2,1% for average world wealth and 1,4% for average world income. All growth rates are net of inflation (2,3% per year between 1987 and 2013). Sources: see piketty.pse.ens.fr/capital21c.

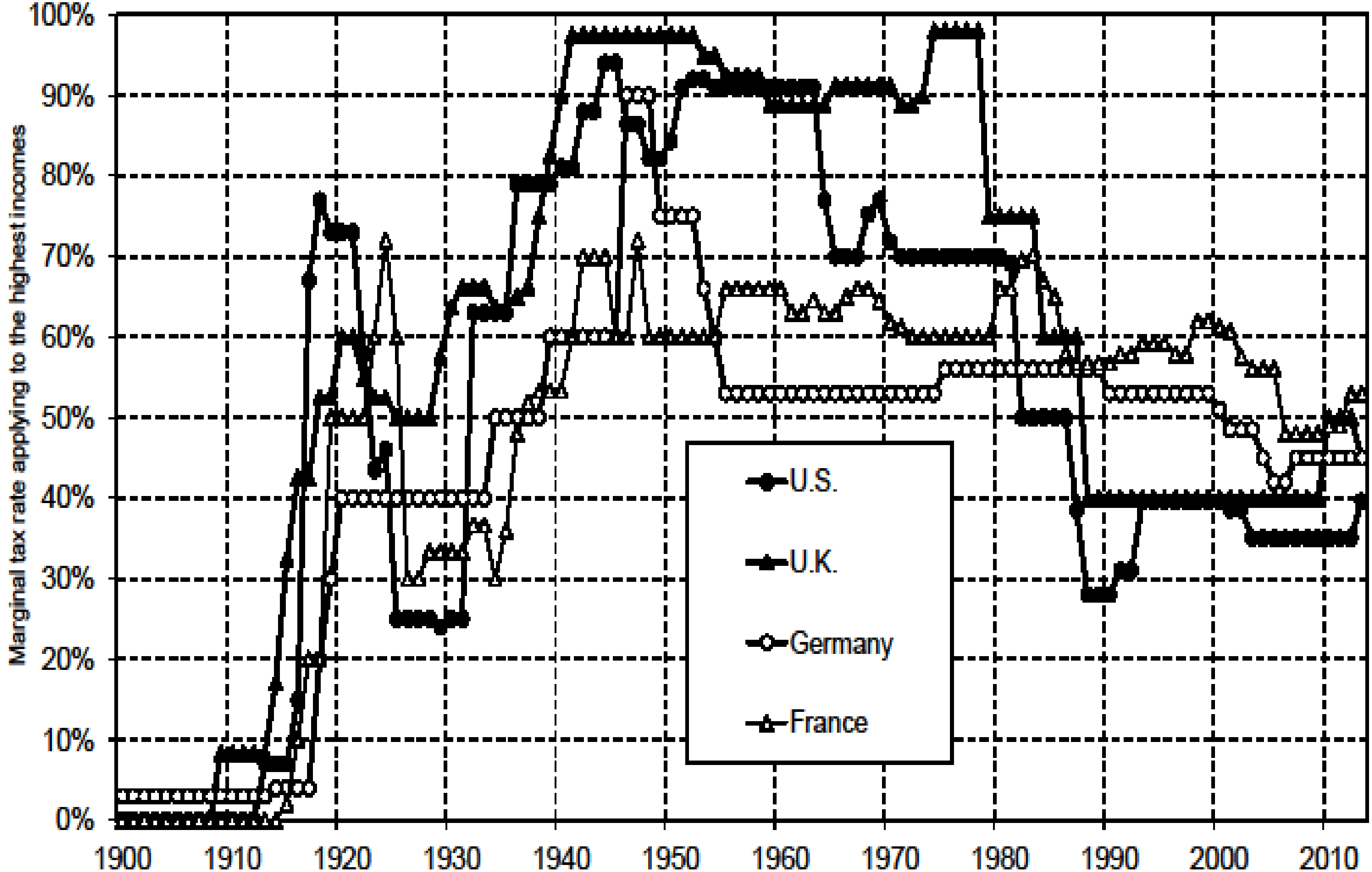
Table 12.2. The return on the capital endowments of U.S. universities, 1980-2010

Average real annual rate of return *(after deduction of inflation and all administrative costs and financial fees)*	Période 1980-2010
All universities (850)	8.2%
incl.: Harvard-Yale-Princeton	10.2%
incl.: Endowments higher than 1 billion $ (60)	8.8%
incl. Endowments between 500 millions and 1 billion $ (66)	7.8%
incl. Endowments between 100 and 500 million $ (226)	7.1%
dont: Endowments less than 100 million $ (498)	6.2%

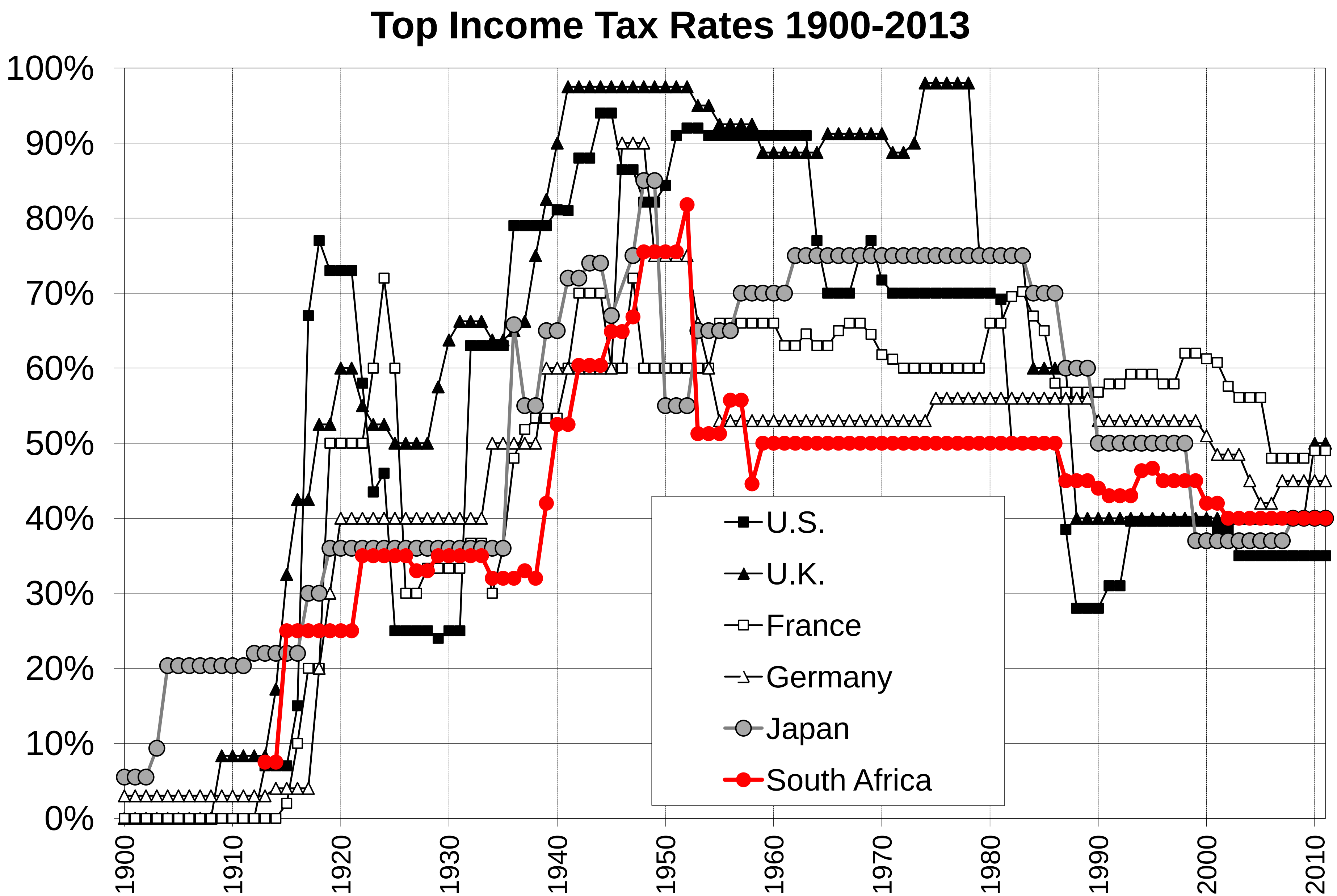
Between 1980 and 2010, U.S. universities earned an average real return of 8.2% on their capital endowments, and all the more so for higher endowments. All returns reported here are net of inflation (2.4% per year between 1980 and 2010) and of all administrative costs and financial fees.

Sources: see piketty.pse.ens.fr/capital21c.

Figure 14.1. Top income tax rates, 1900-2013

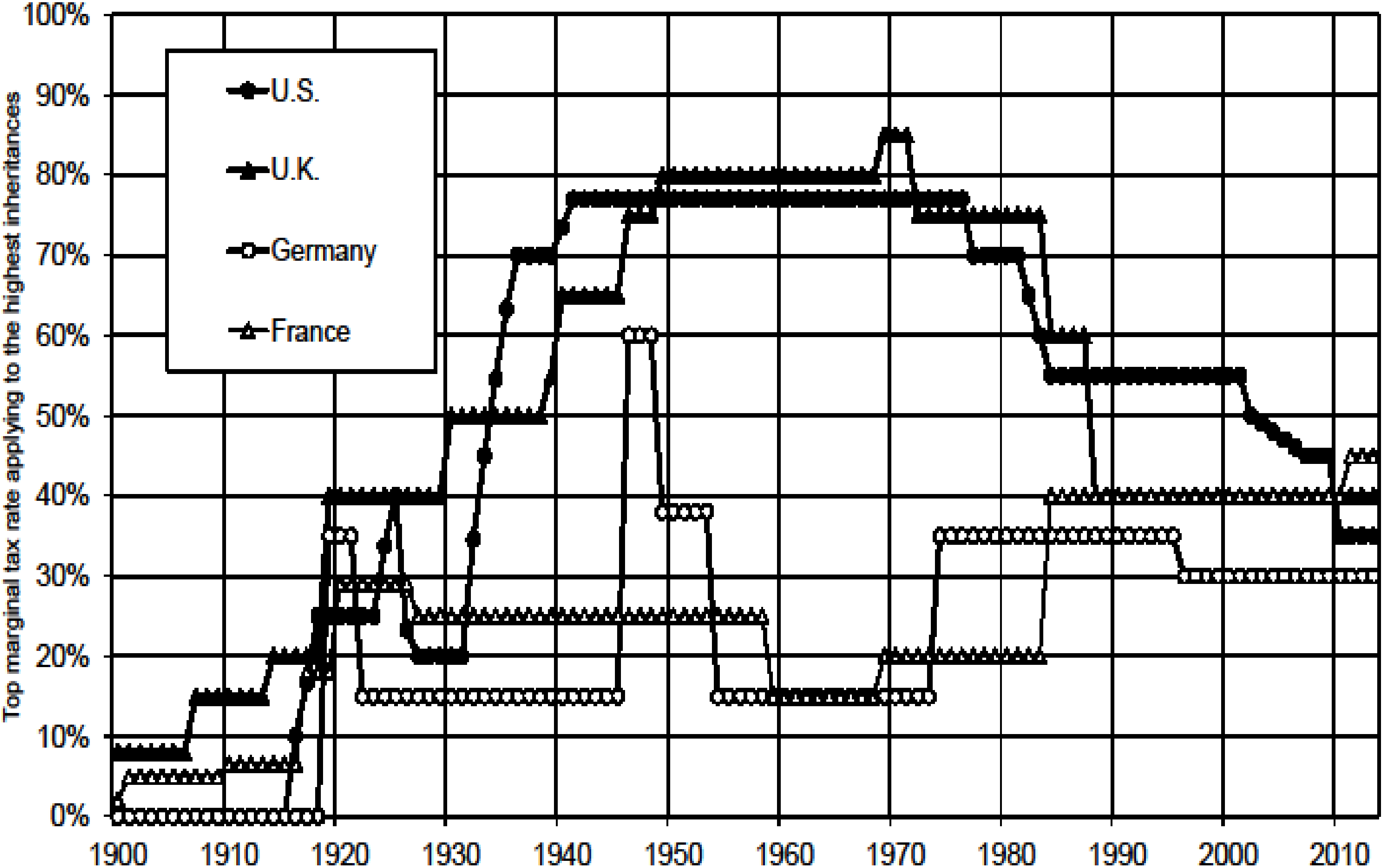


The top marginal tax rate of the income tax (applying to the highest incomes) in the U.S. dropped from 70% in 1980 to 28% in 1988. Sources and series: see piketty.pse.ens.fr/capital21c.



Top Income Tax Rates 1900-2013
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
2010
U.S.
U.K.
France
Germany
Japan
South Africa

Figure 14.2. Top inheritance tax rates, 1900-2013



The top marginal tax rate of the inheritance tax (applying to the highest inheritances) in the U.S. dropped from 70% in 1980 to 35% in 2013. Sources and series: see piketty.pse.ens.fr/capital21c.

Conclusions

- **The history of income and wealth inequality is deeply political, social and cultural; it involves beliefs systems, national identities and sharp reversals**
- In a way, both Marx and Kuznets were wrong: there are powerful forces pushing in the direction of rising or reducing inequality; which one dominates depends on the institutions and policies that different societies choose to adopt
- High r-g can push toward high wealth concentration, but many other forces are also important
- The ideal solution involves a broad combination of inclusive institutions, including progressive taxation, education, social & labor laws, financial transparency, economic democracy
- Other solutions involve authoritarian political controls (China, Russia), but this may not be sustainable