

Is increasing inequality inevitable?

Reflections on Capital in the 21st century

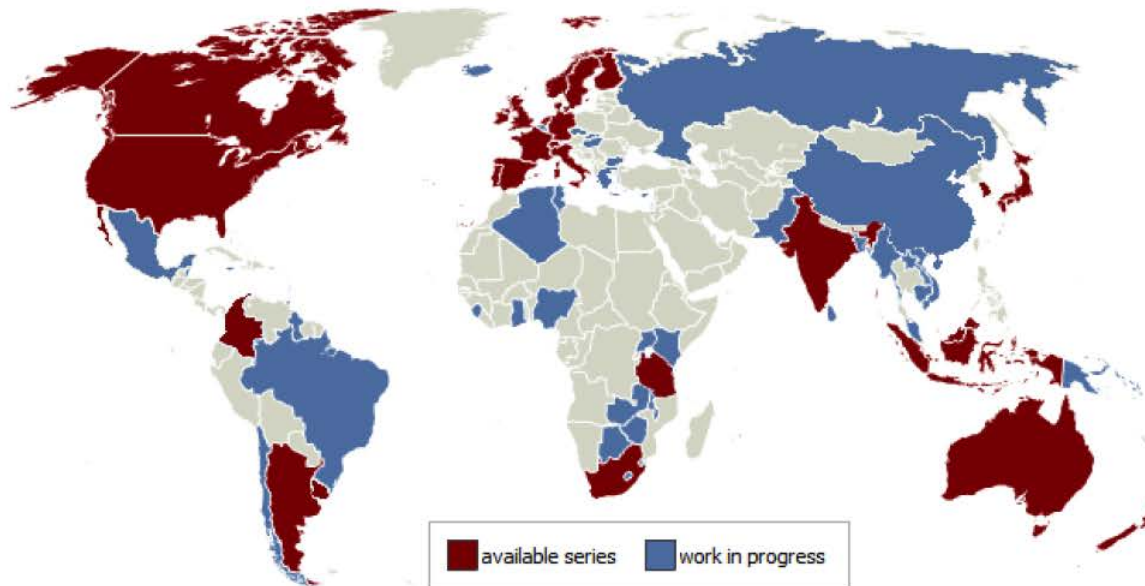
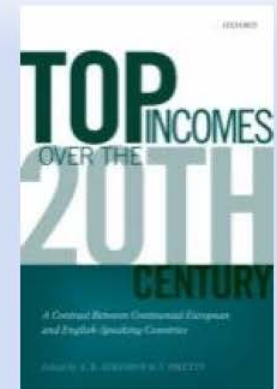
Thomas Piketty

Paris School of Economics

Melbourne, October 28 2016

- This presentation is partly based upon my book ***Capital in the 21st century*** (HUP, 2014)
- In this book, I study the global dynamics of income and wealth distribution since 18^c 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 the future**
- All series available at <http://piketty.pse.ens.fr/capital21c> & the [World Wealth and Income Database](#)

THE WORLD WEALTH AND INCOME DATABASE



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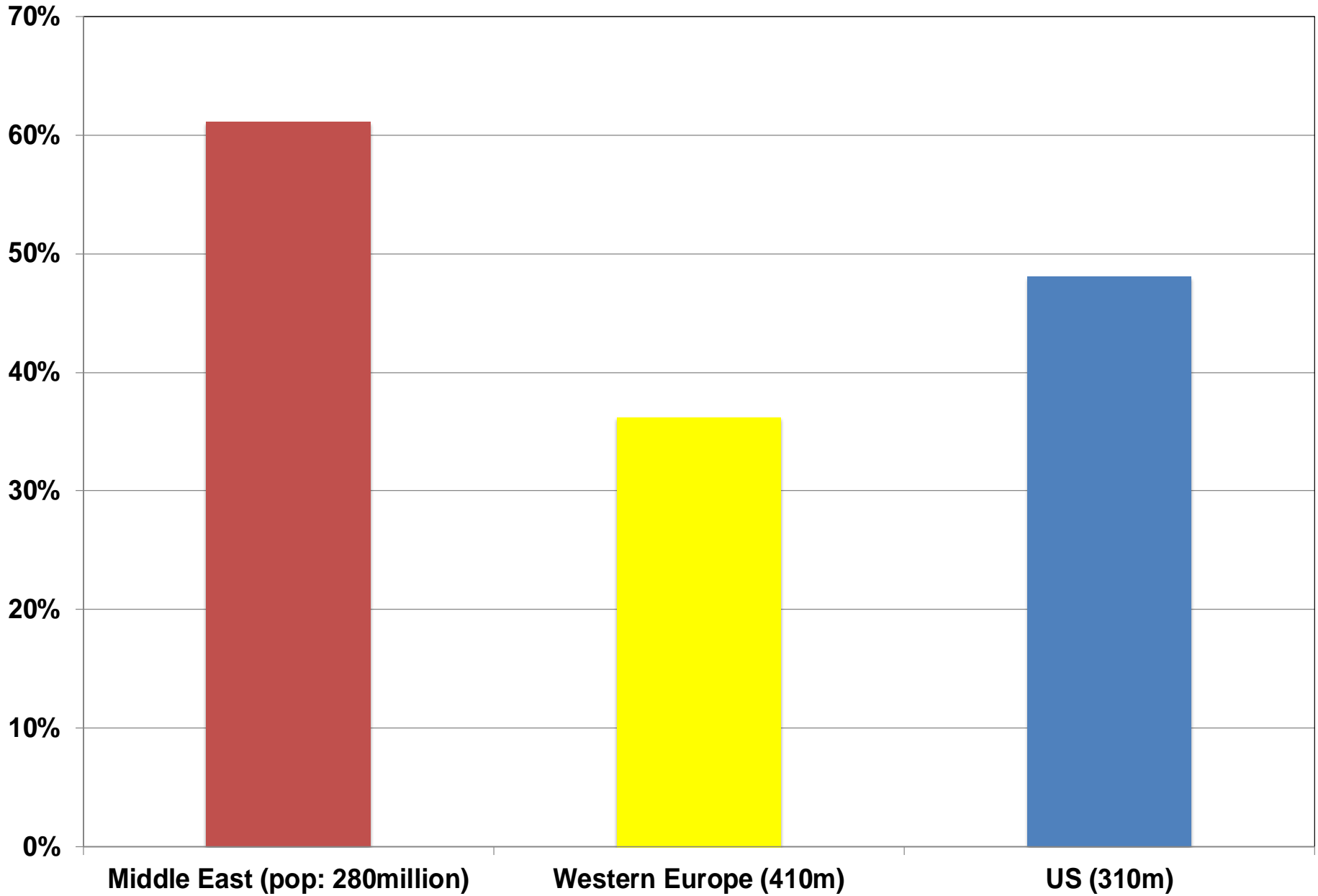


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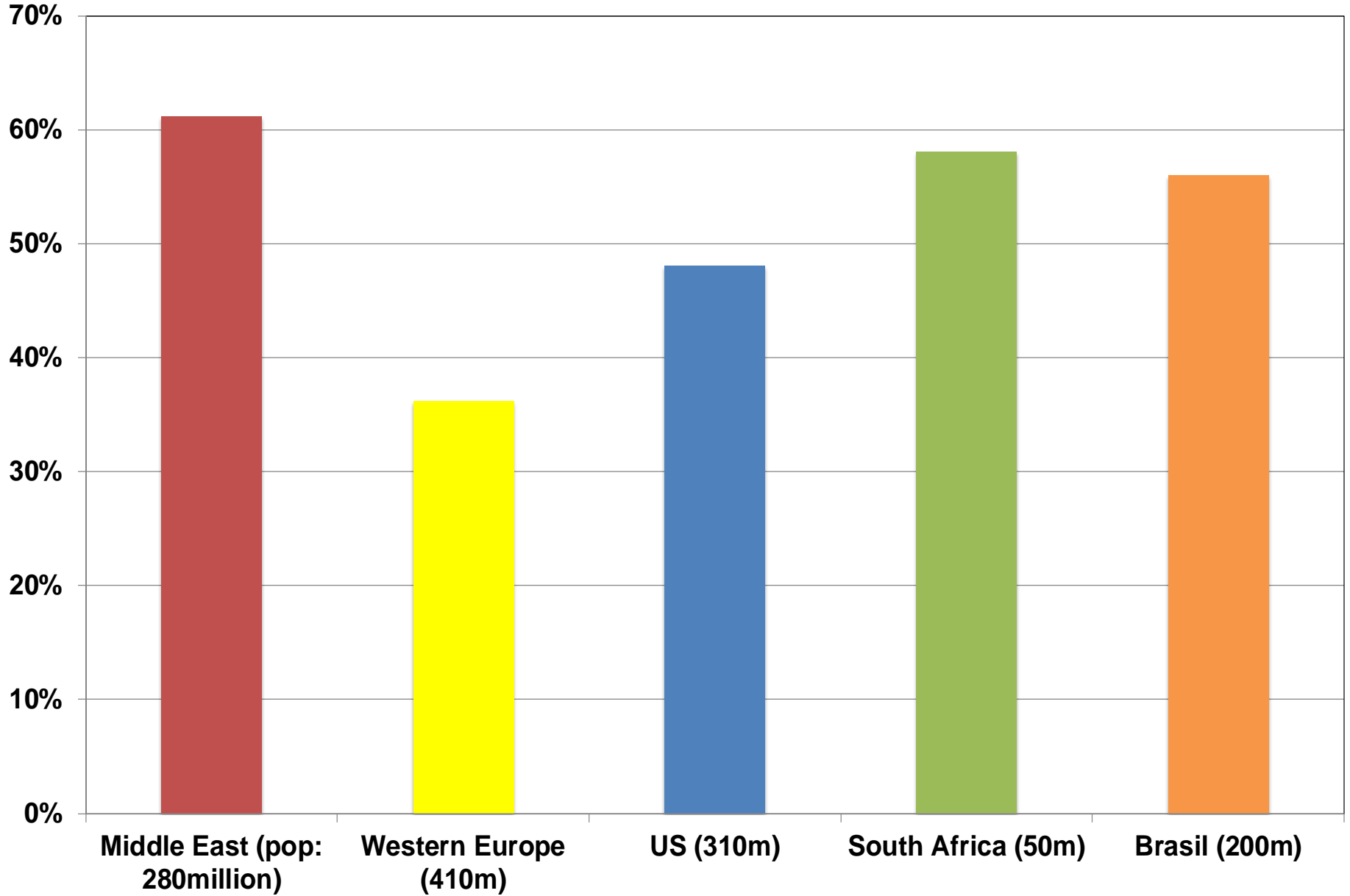
This presentation: three points

- **1. The long-run dynamics of income inequality.**
The end of the Kuznets curve. Institutions and policies matter: education, labor, tax. **In the West, it took major shocks for elites to accept social and fiscal reforms in 20c.**
- **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.**
With high $r - g$ during 21^c, then wealth inequality might rise again. **Need for more democratic transparency on wealth.**
- **3. Inequality in developing countries & in the post-colonial world.** Need for more data access. Extreme inequality: Middle East vs Brazil or South Africa. **Need to go beyond the Western-centered perspective on inequality regimes.**

Top 10% income share



Top 10% income share

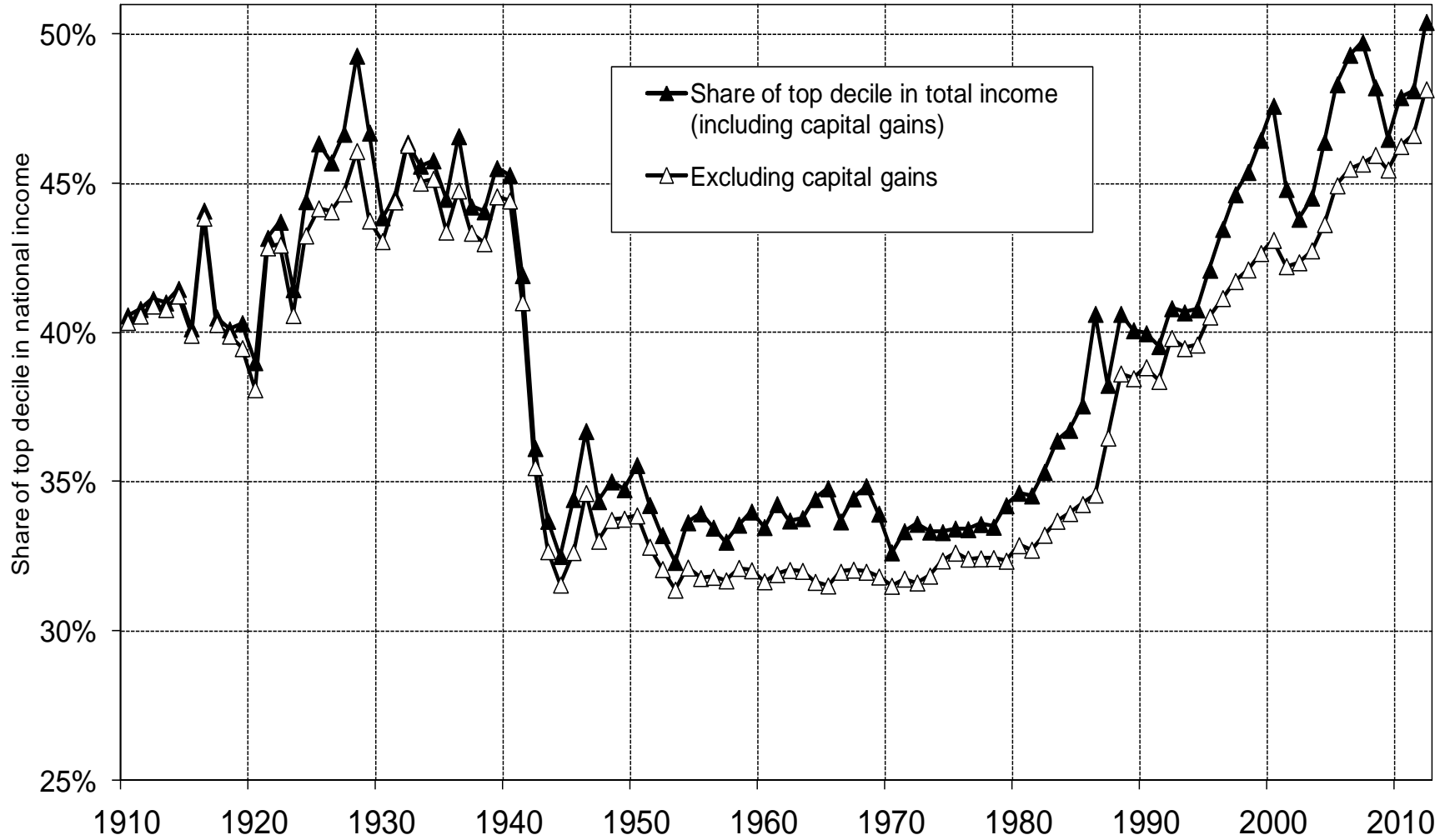


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- **1. The long-run dynamics of income inequality.**
The end of the Kuznets curve, the end of universal laws.
Institutions and policies matter: education, labor, tax, etc.
- During 20c, major shocks – wars, depressions, revolutions – played a major role in the reduction of inequality.
It took these major shocks to force elites to accept the new social and fiscal institutions which they refused until then.
- Political determinants of inequality are more important than pure economic determinants

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

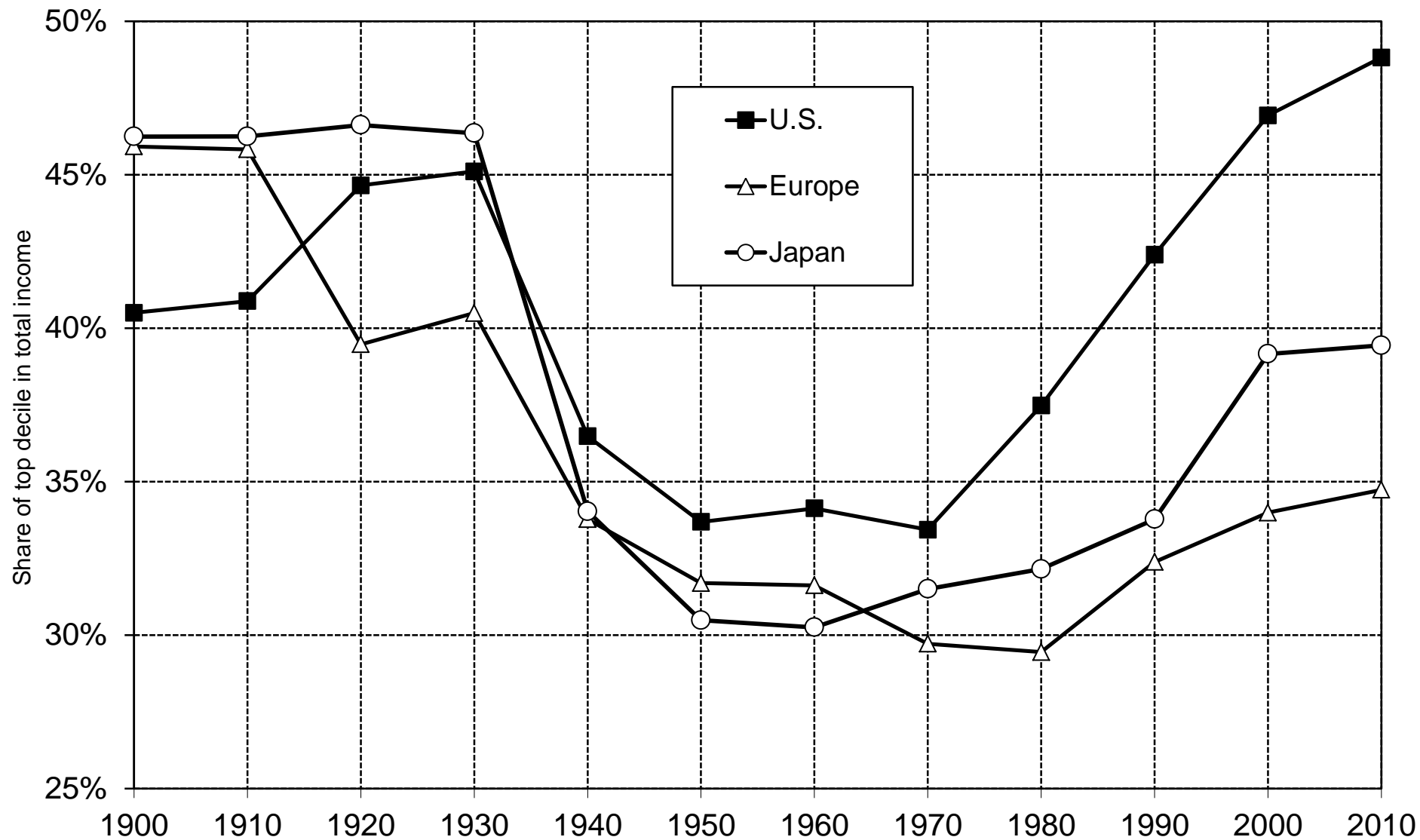
Figure 1. Income inequality: Europe and the U.S., 1900-2010



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.

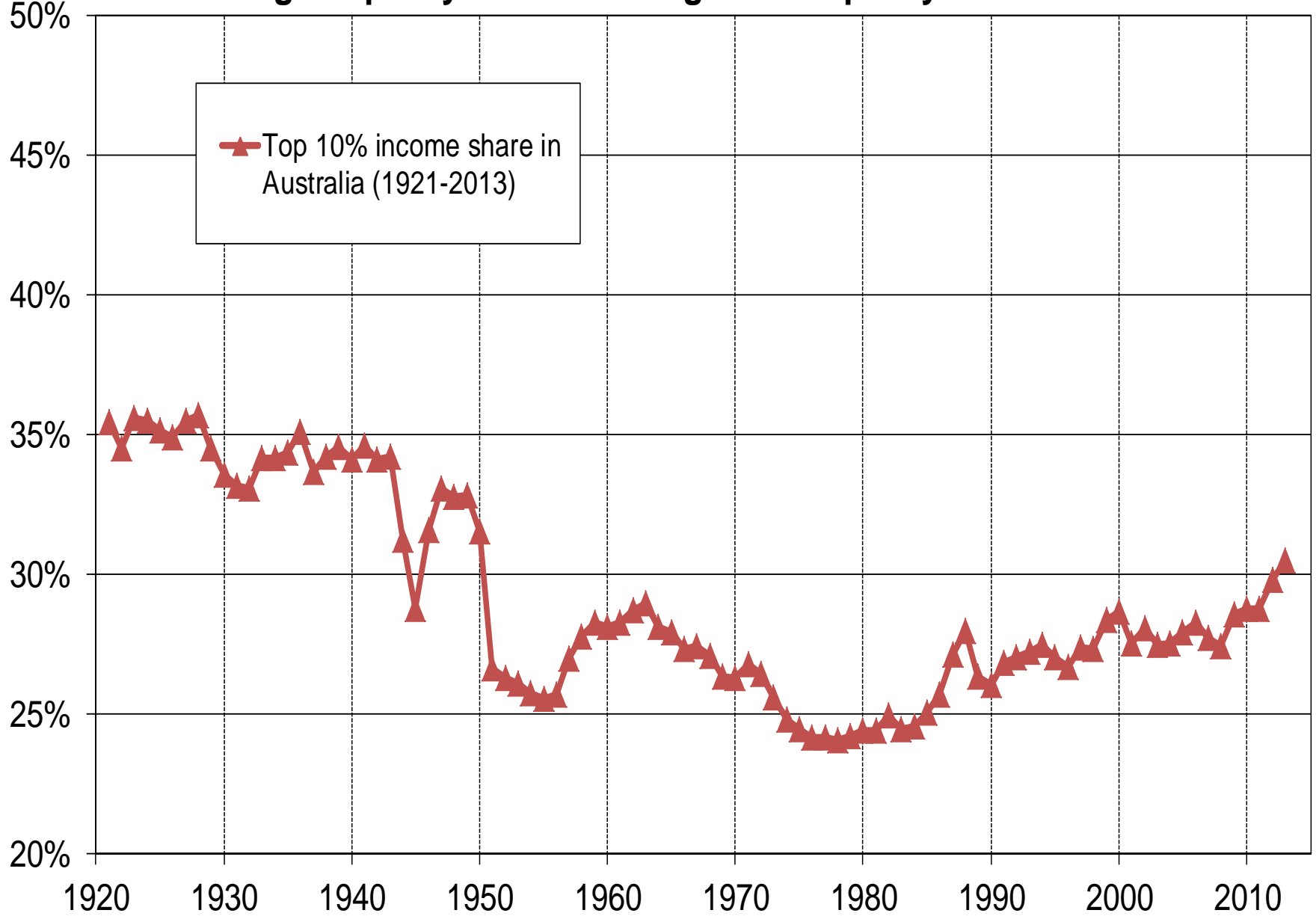
Sources and series: see piketty.pse.ens.fr/capital21c (fig.9,8)

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

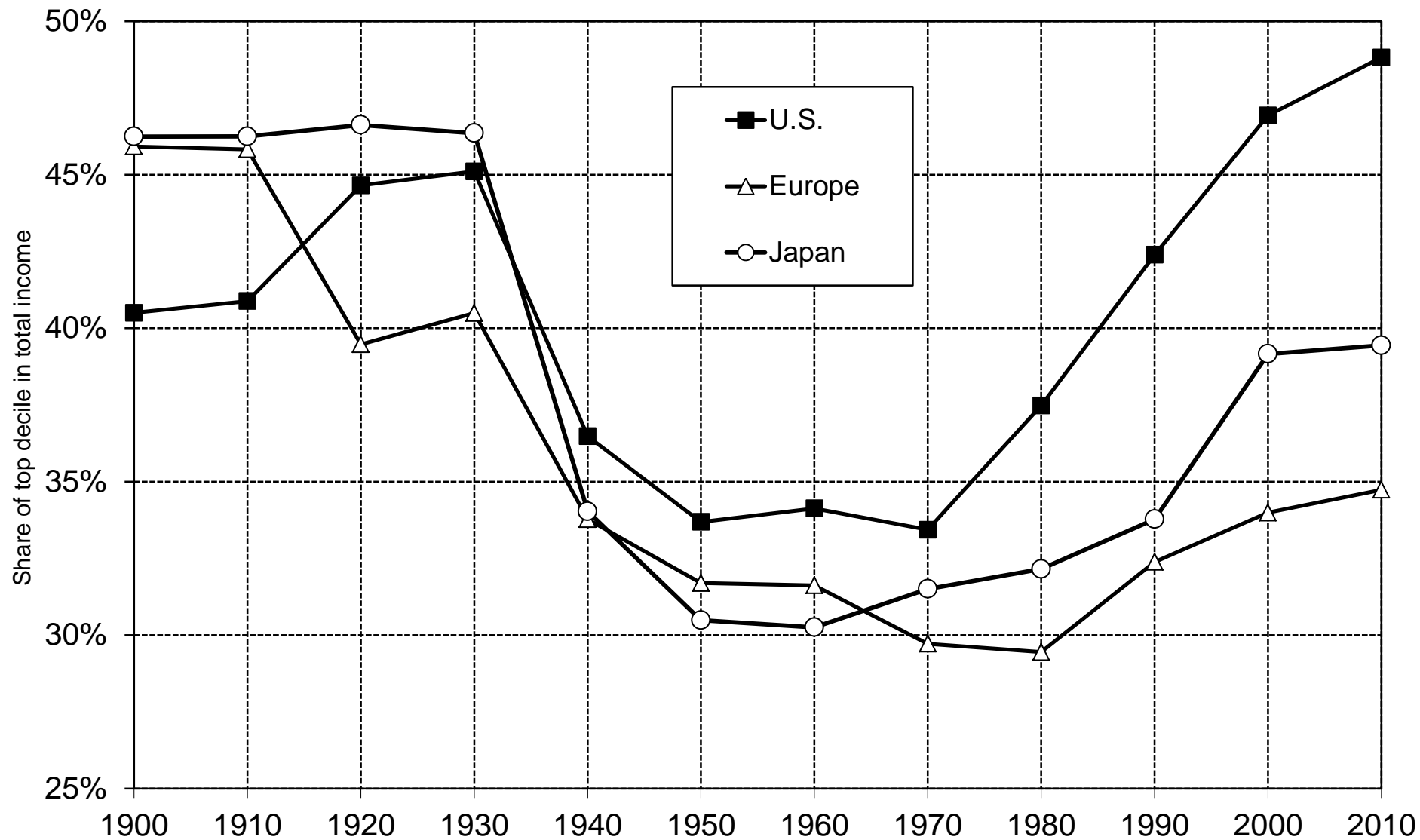


The top decile income share was higher in Europe than in the U.S. in 1900-1910; it is a lot higher in the U.S. in 2000-2010. Sources and series: see piketty.pse.ens.fr/capital21c.

Australia: a country with a strong egalitarian tradition, but with rising inequality. 2013 = the highest inequality level since 1951



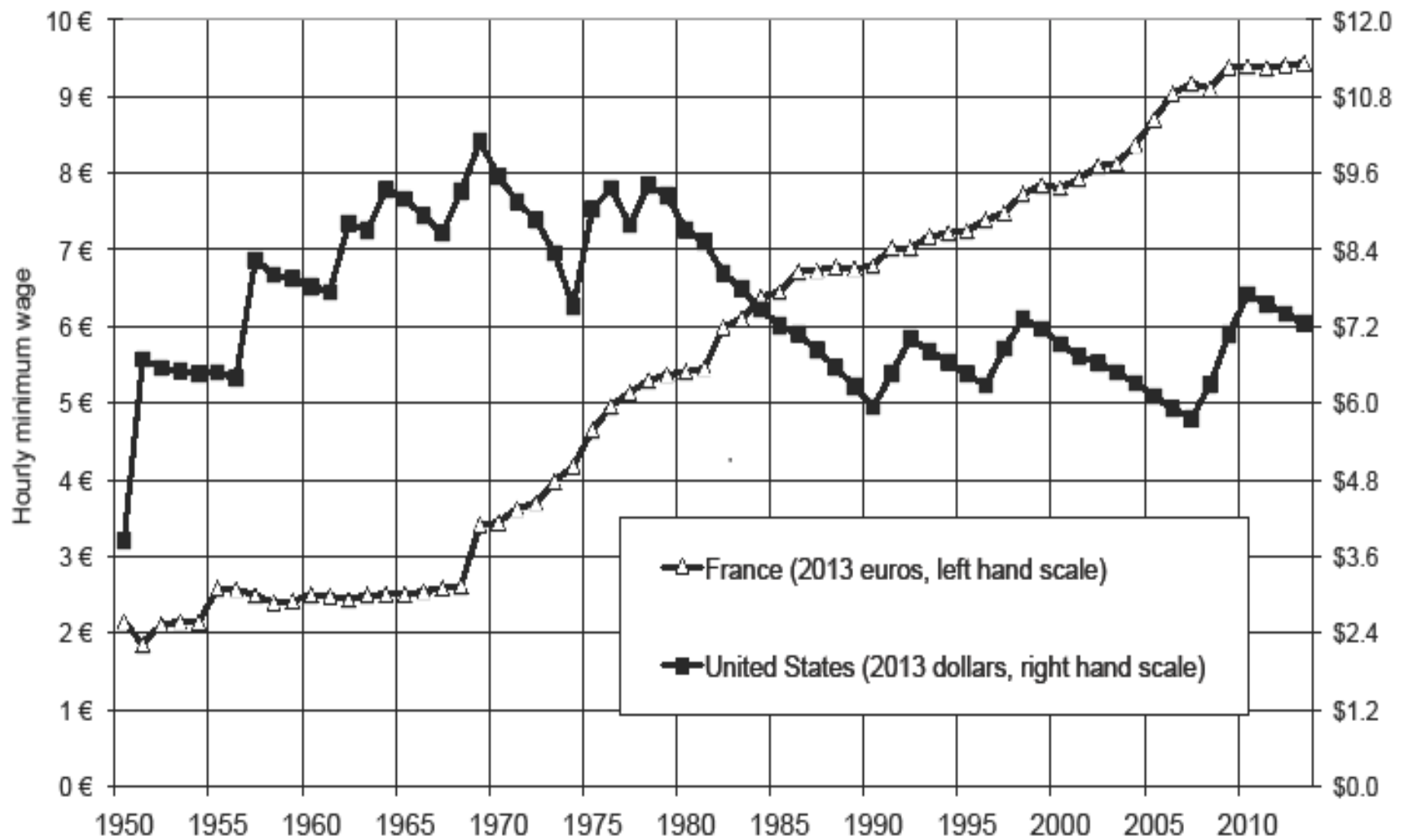
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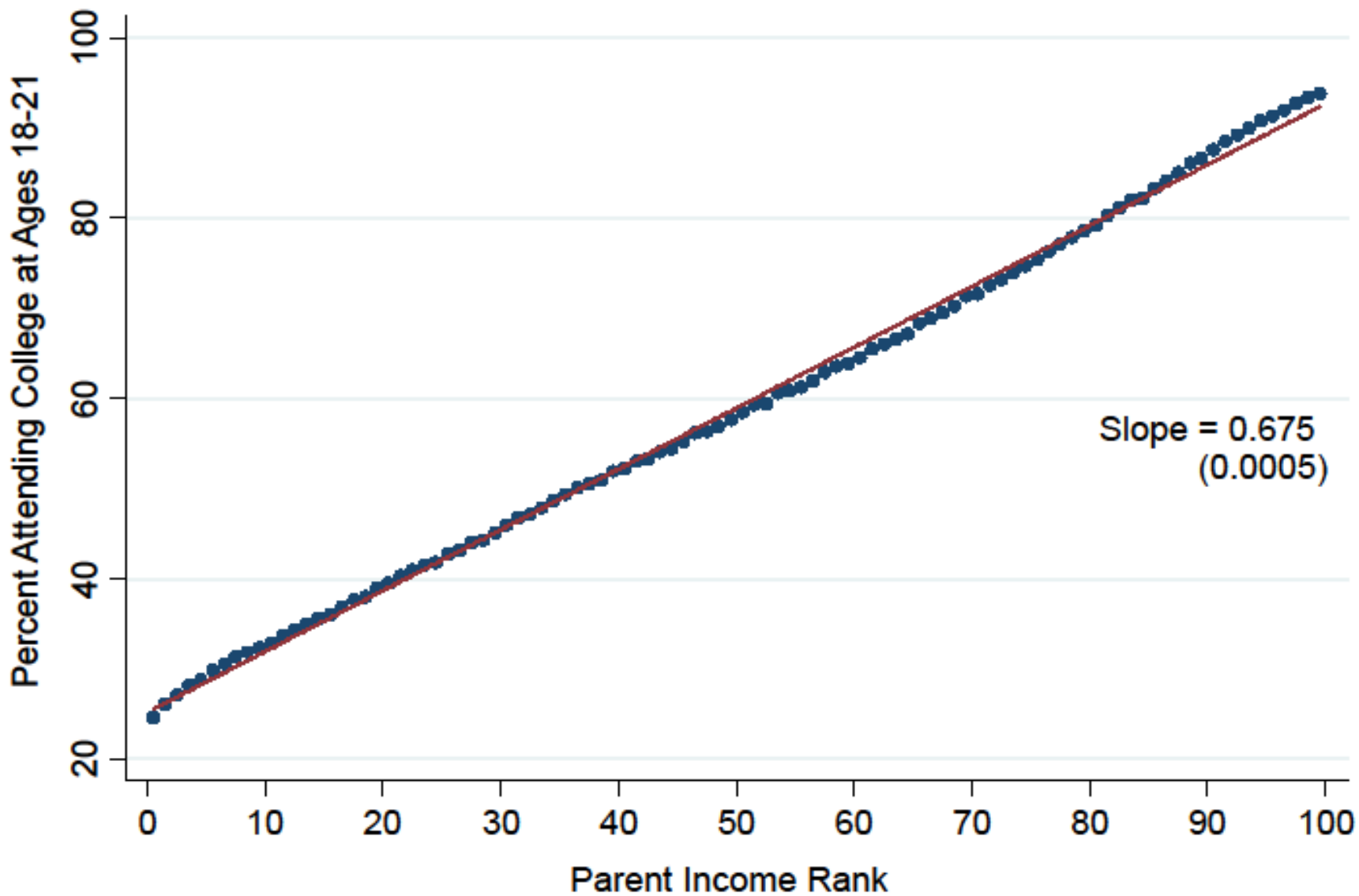
- The rise in US inequality in recent decades is mostly due to rising inequality of labor income
- It is due to a mixture of reasons: changing supply and demand for skills; race between education and technology; globalization; more unequal to access to skills in the US (rising tuitions, insufficient 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



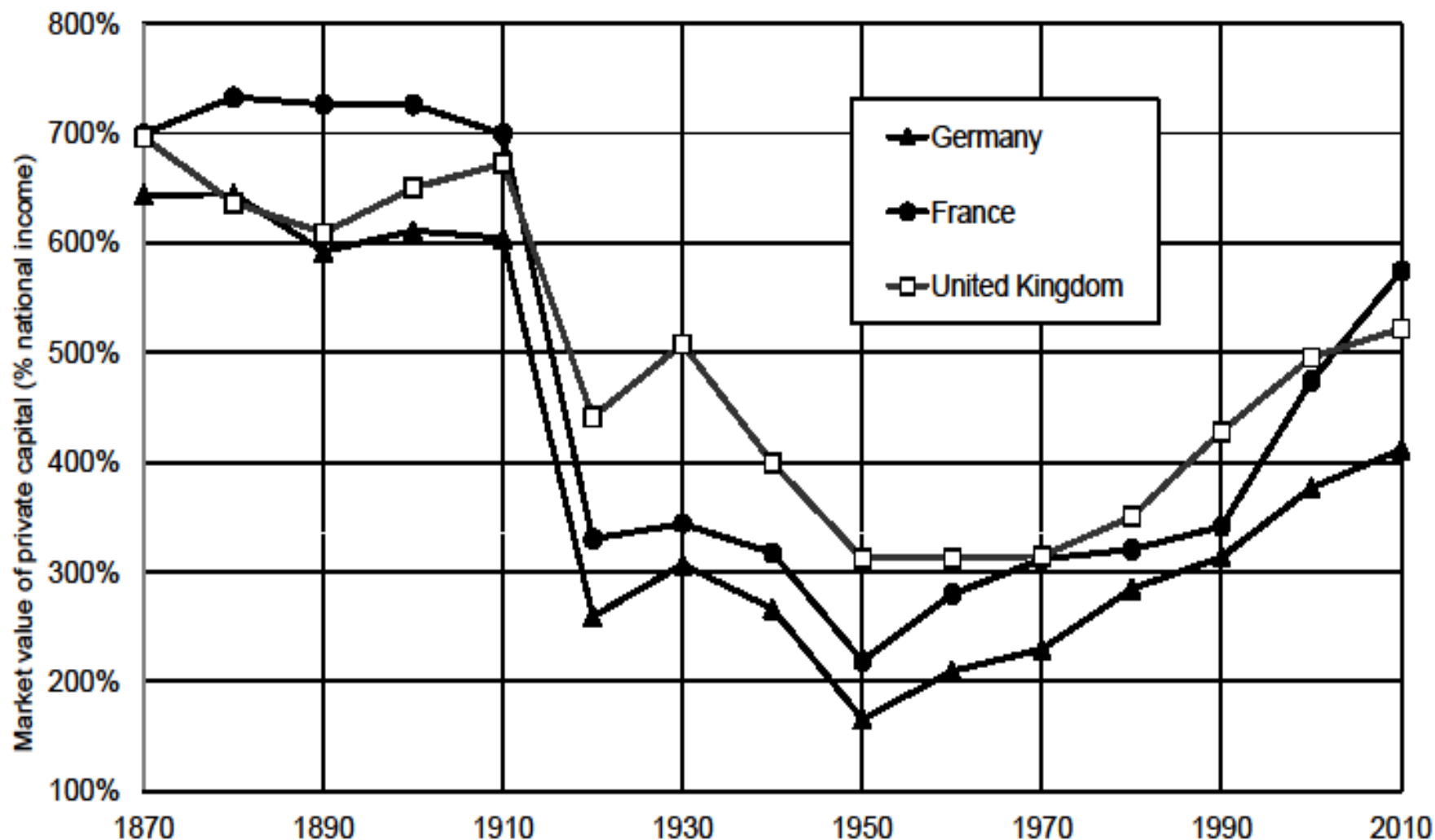
Expressed in 2013 purchasing power, the hourly minimum wage rose from \$3.8 to \$7.3 between 1950 and 2013 in the U.S., and from €2.1 to €9.4 in France. Sources and series: see piketty.pse.ens.fr/capital21c.

College Attendance Rates vs. Parent Income Rank in the U.S.



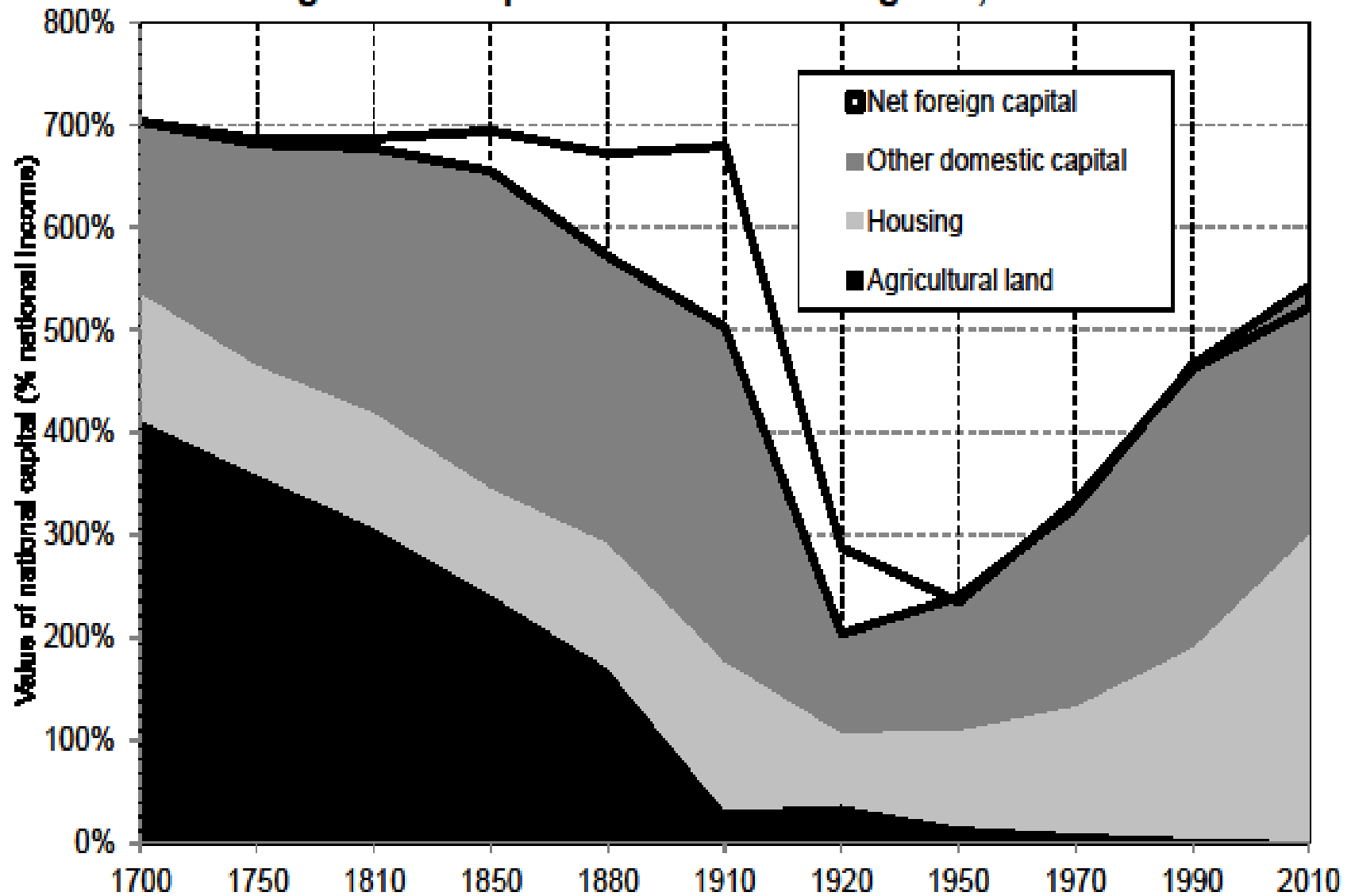
- **2. The return of a patrimonial (or wealth-based) society.** Wealth-income ratios seem to be returning to very high levels in rich countries. Intuition: in a slow-growth society, wealth accumulated in the past can naturally become very important. In the very long run, this can be relevant for the 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.

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



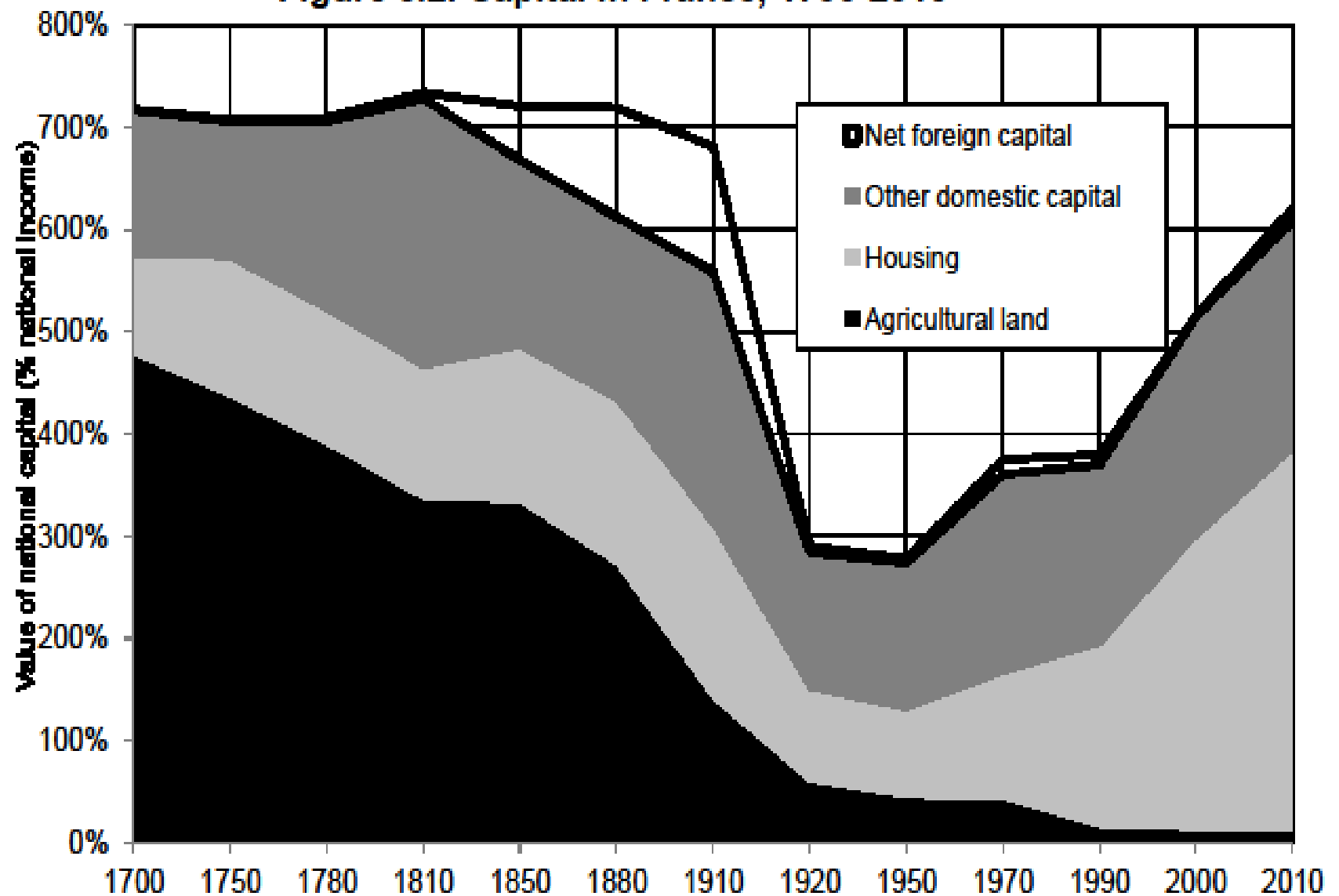
Aggregate private wealth was worth about 6-7 years of national income in Europe in 1910, between 2 and 3 years in 1950, and between 4 and 6 years in 2010. Sources and series: see piketty.pse.ens.fr/capital21c.

Figure 3.1. Capital in the United Kingdom, 1700-2010



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.

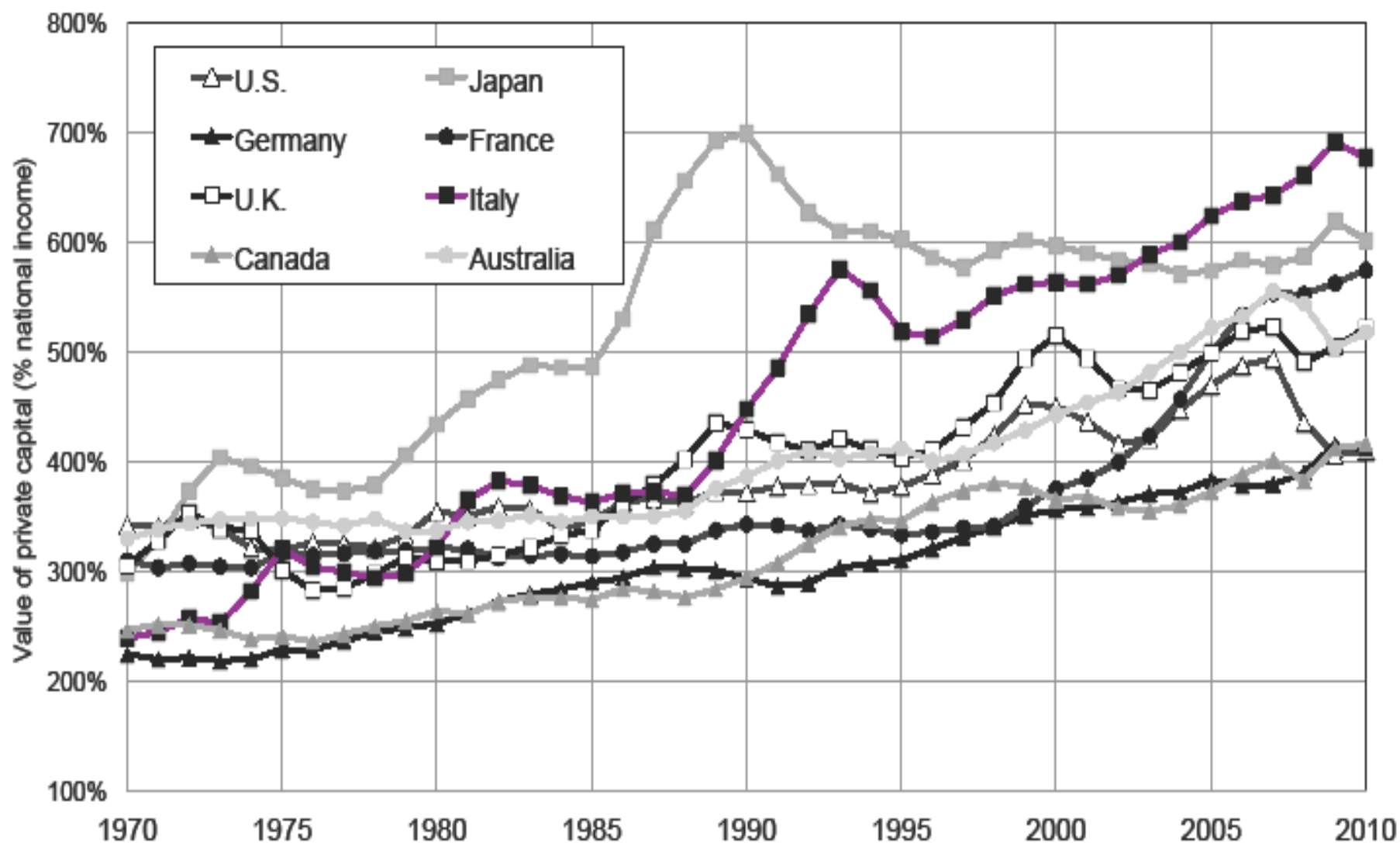
Figure 3.2. Capital in France, 1700-2010



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

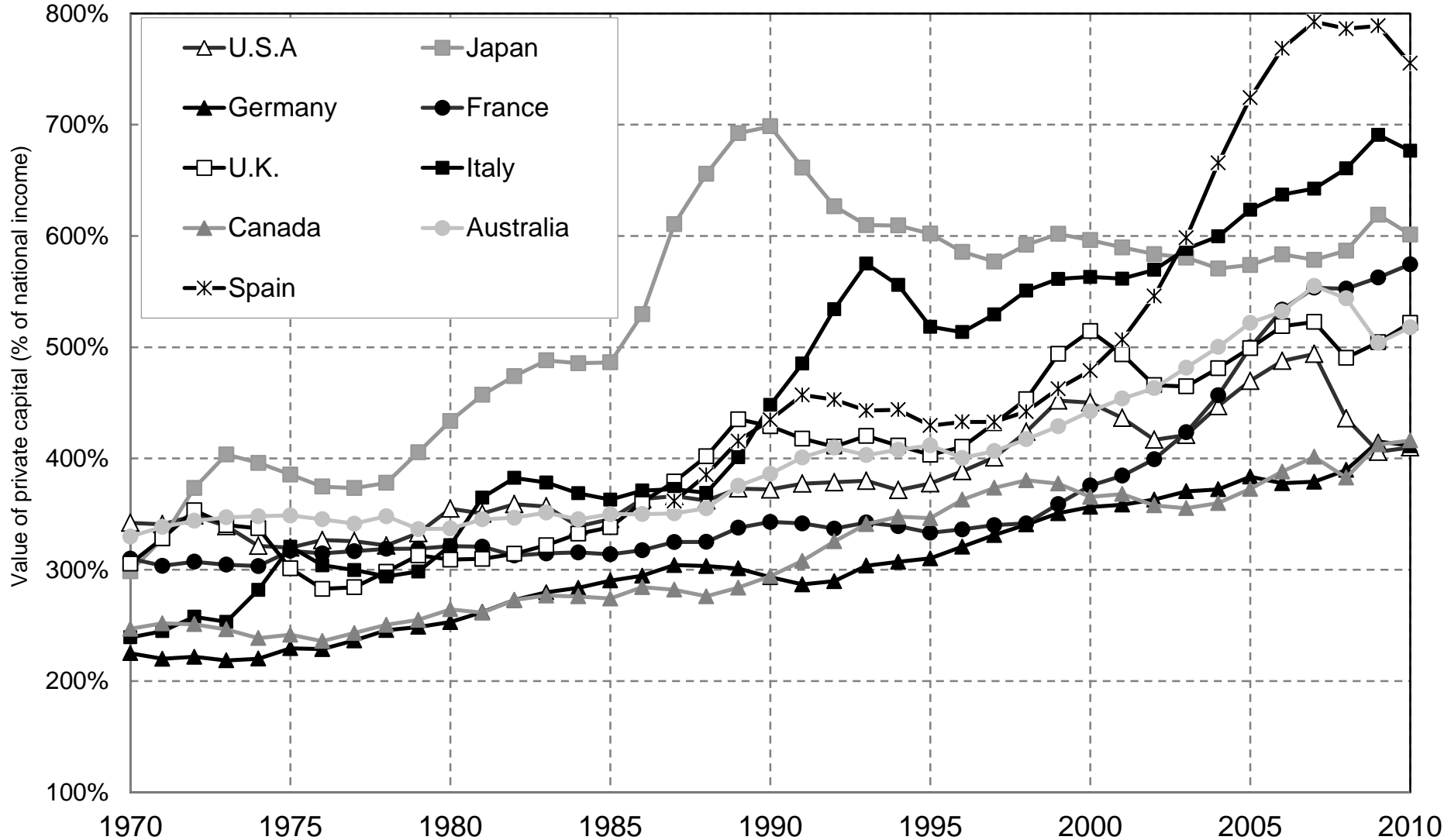
Sources and series: see piketty.pse.ens.fr/capital21c.

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



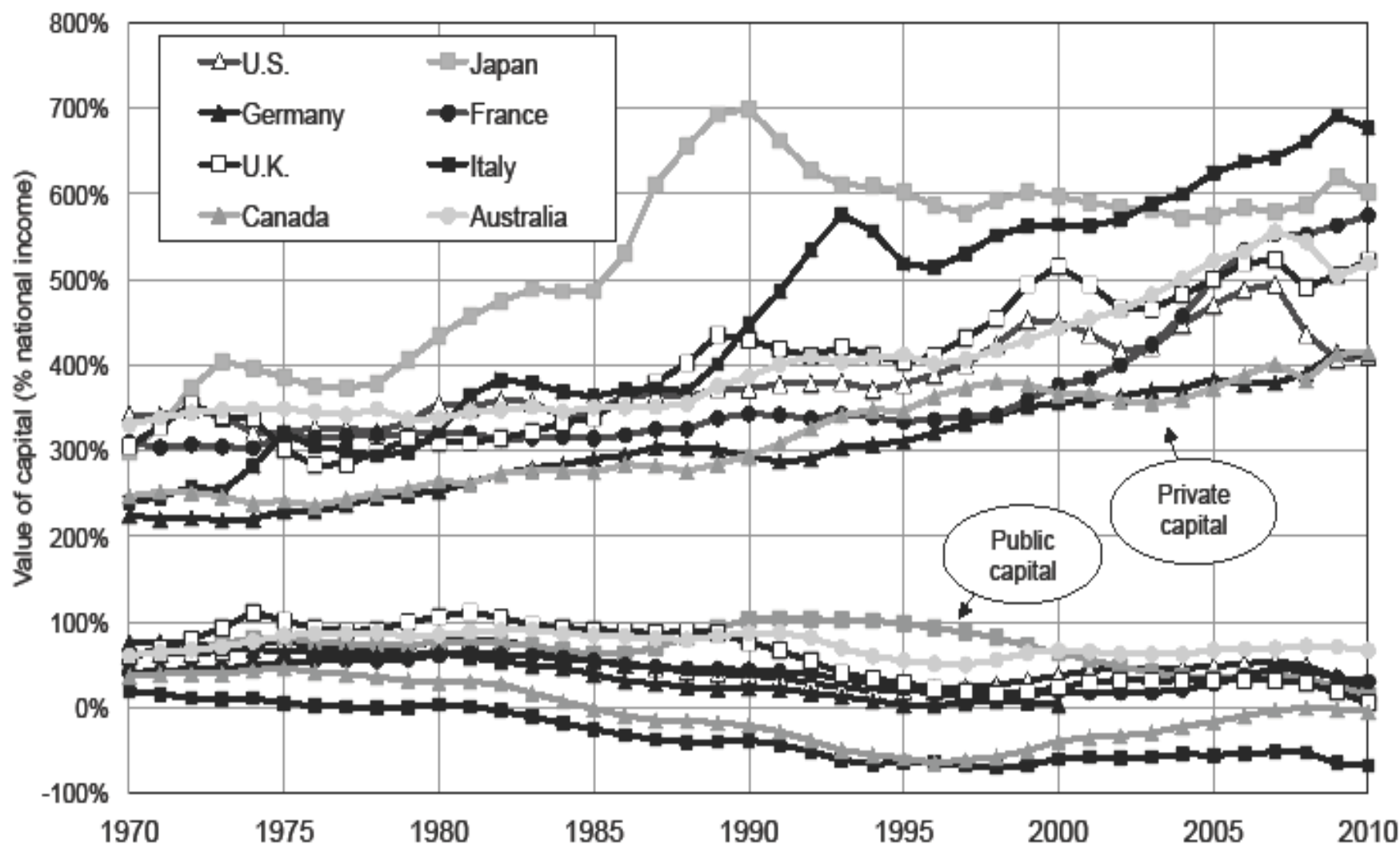
Private capital is worth between 2 and 3.5 years of national income in rich countries in 1970, and between 4 and 7 years of national income in 2010. Sources and series: see piketty.pse.ens.fr/capital21c.

**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.

- **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.

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

<i>Average real growth rate per year (after deduction of inflation)</i>	1987-2013
The top 1/(100 million) highest wealth holders <small>(about 30 adults out of 3 billions in 1980s, and 45 adults out of 4,5 billions in 2010s)</small>	6,8%
The top 1/(20 million) highest wealth holders <small>(about 150 adults out of 3 billions in 1980s, and 225 adults out of 4,5 billions in 2010s)</small>	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%

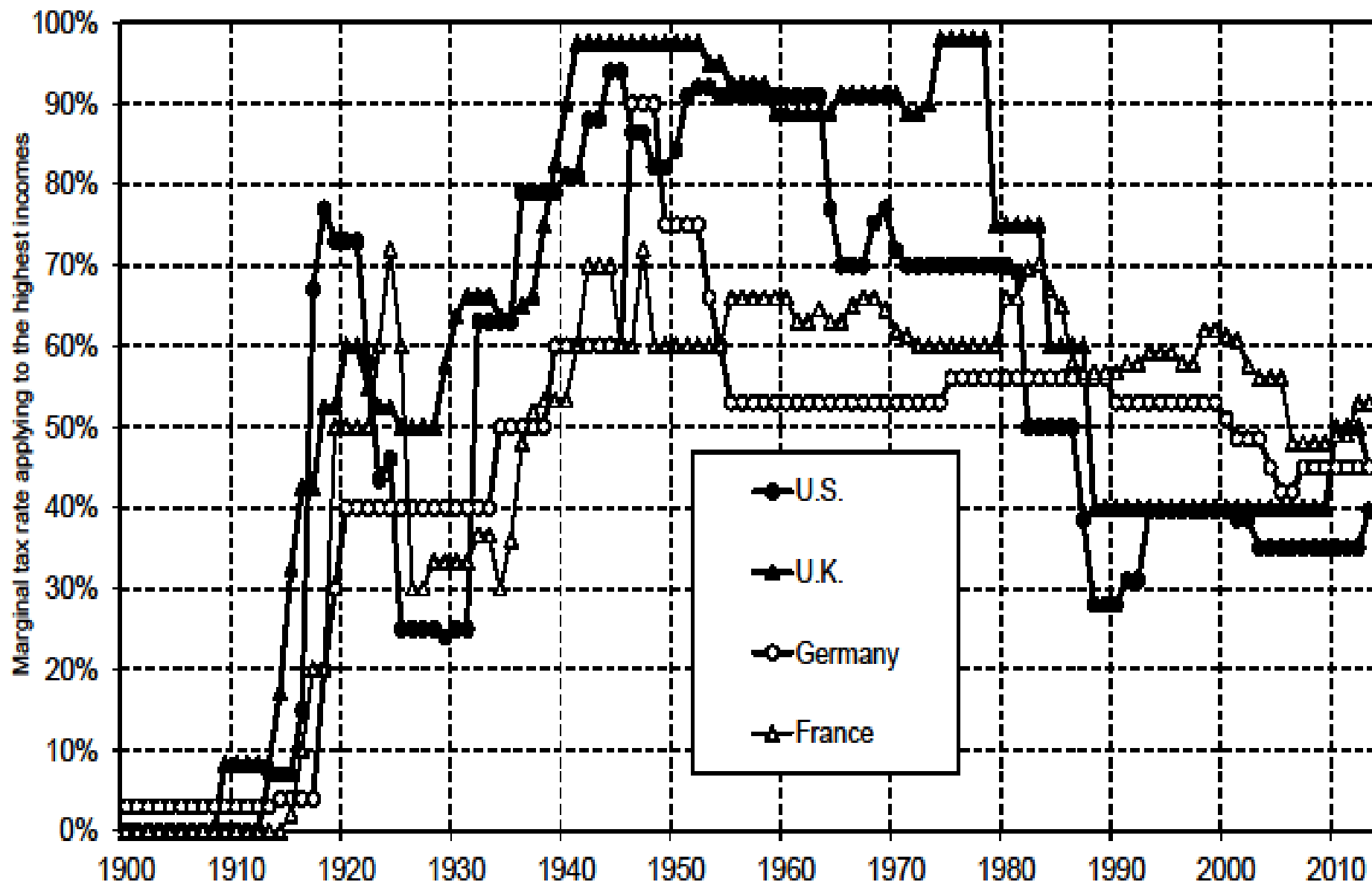
Between 1987 and 2013, the highest global wealth fractiles have grown at 6%-7% per year, vs. 2,1% for average world wealth and 1,4% for average world income. All growth rates are net of inflation (2,3% per year between 1987 and 2013). Sources: see piketty.pse.ens.fr/capital21c.

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

Average real annual rate of return <i>(after deduction of inflation and all administrative costs and financial fees)</i>	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%

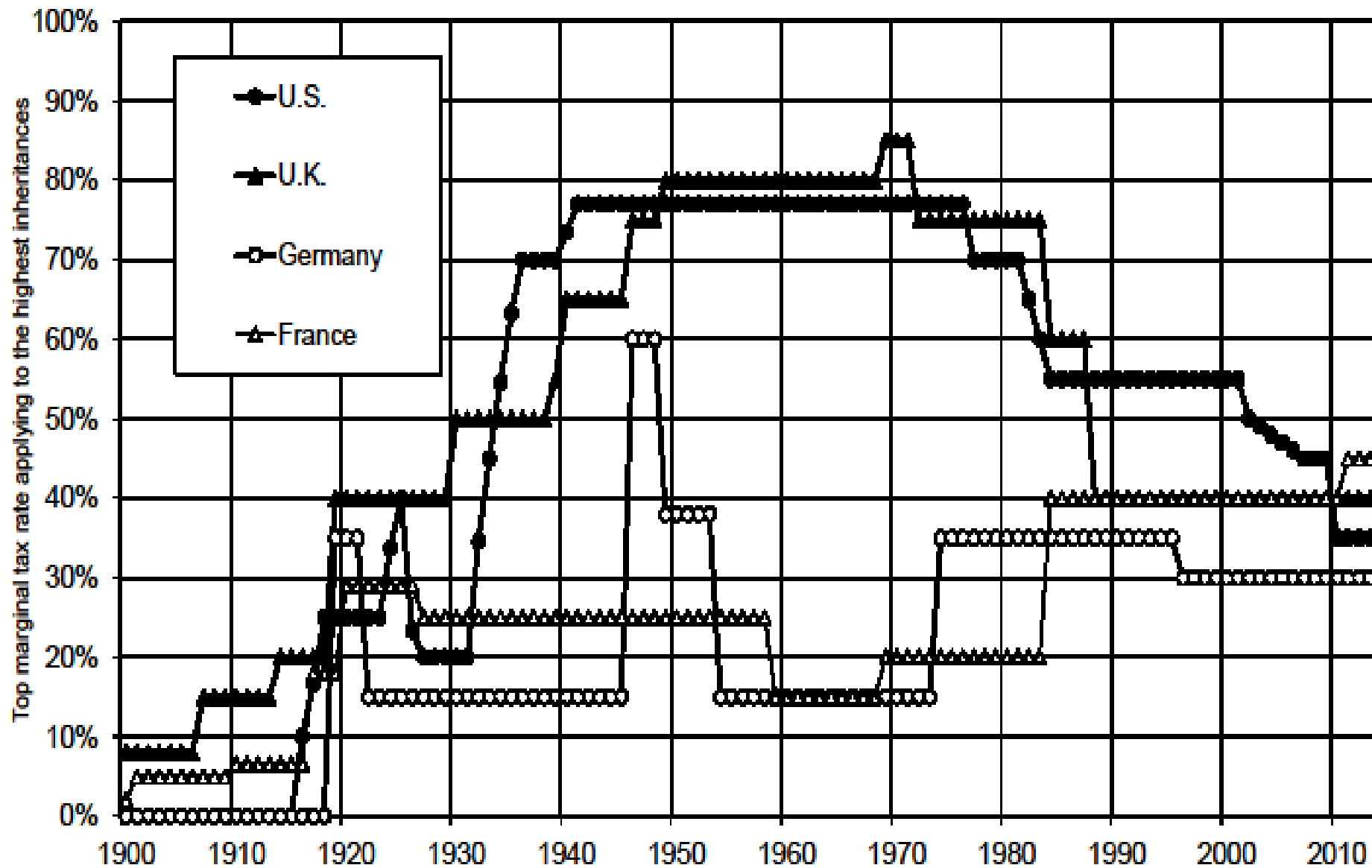
Between 1980 and 2010, U.S. universities earned an average real return of 8.2% on their capital endowments, and all the more so for higher endowments. All returns reported here are net of inflation (2.4% per year between 1980 and 2010) and of all administrative costs and financial fees.
Sources: see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

Figure 14.2. Top inheritance tax rates, 1900-2013

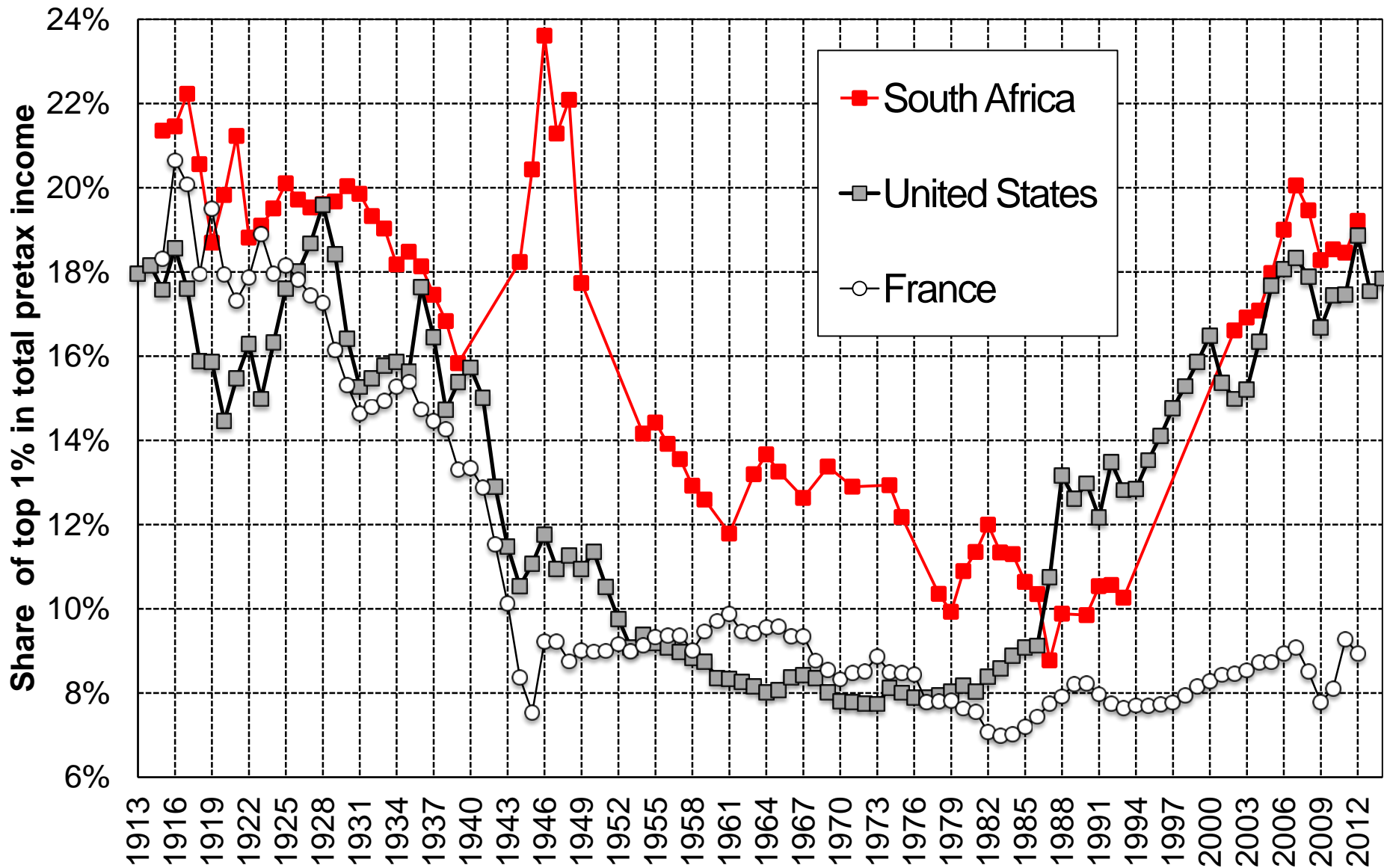


The top marginal tax rate of the inheritance tax (applying to the highest inheritances) in the U.S. dropped from 70% in 1980 to 35% in 2013. Sources and series: see piketty.pse.ens.fr/capital21c.

- **3. Inequality in developing countries & in the post-colonial world.** Need for more data access. Need to go beyond the Western-centered perspective on inequality.
- On-going work on inequality work on inequality using newly accessible data in South Africa, Brasil, Middle East, India, China suggest that official measures vastly underestimate inequality.

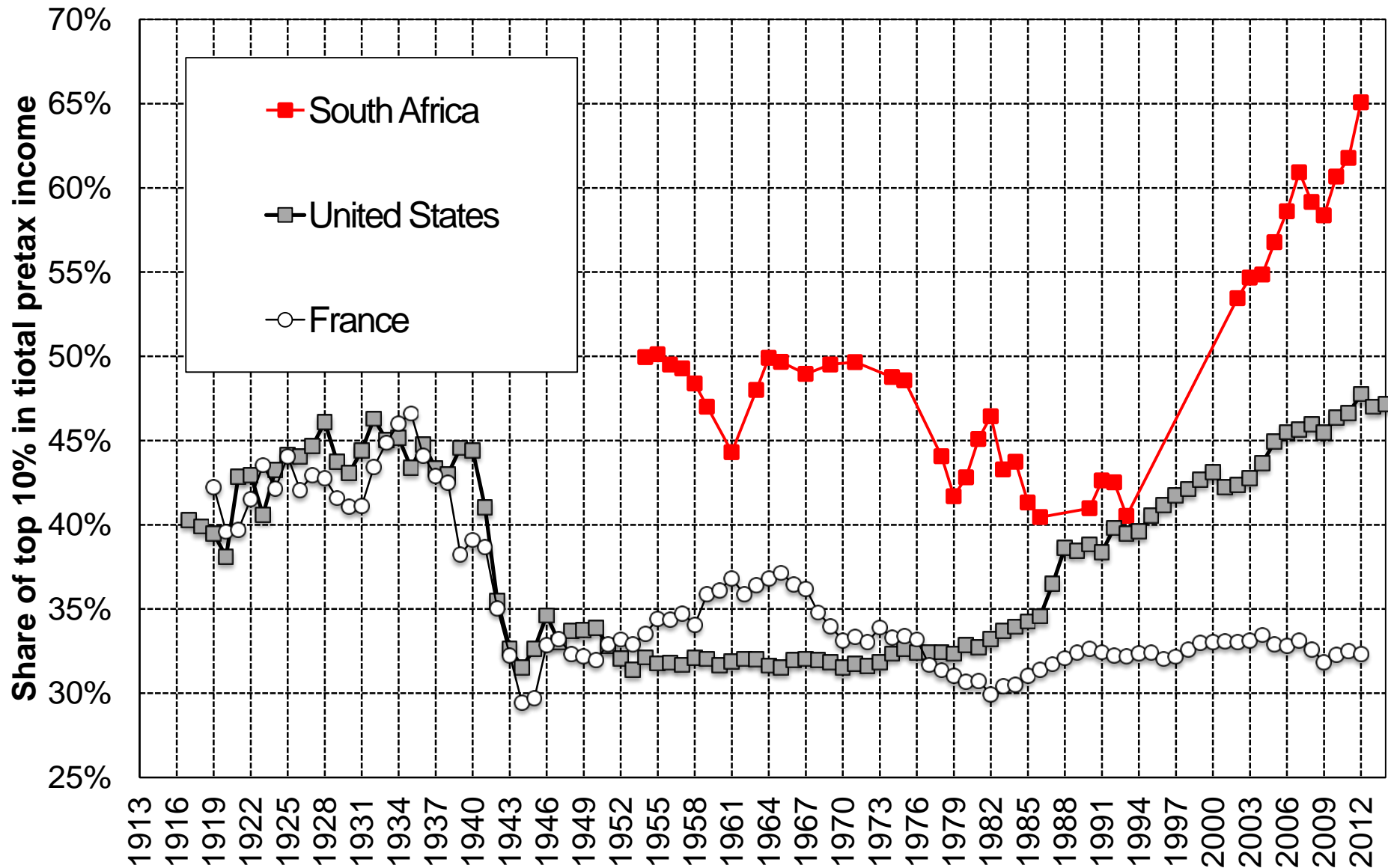
Top 1% income share

South Africa, United States, France

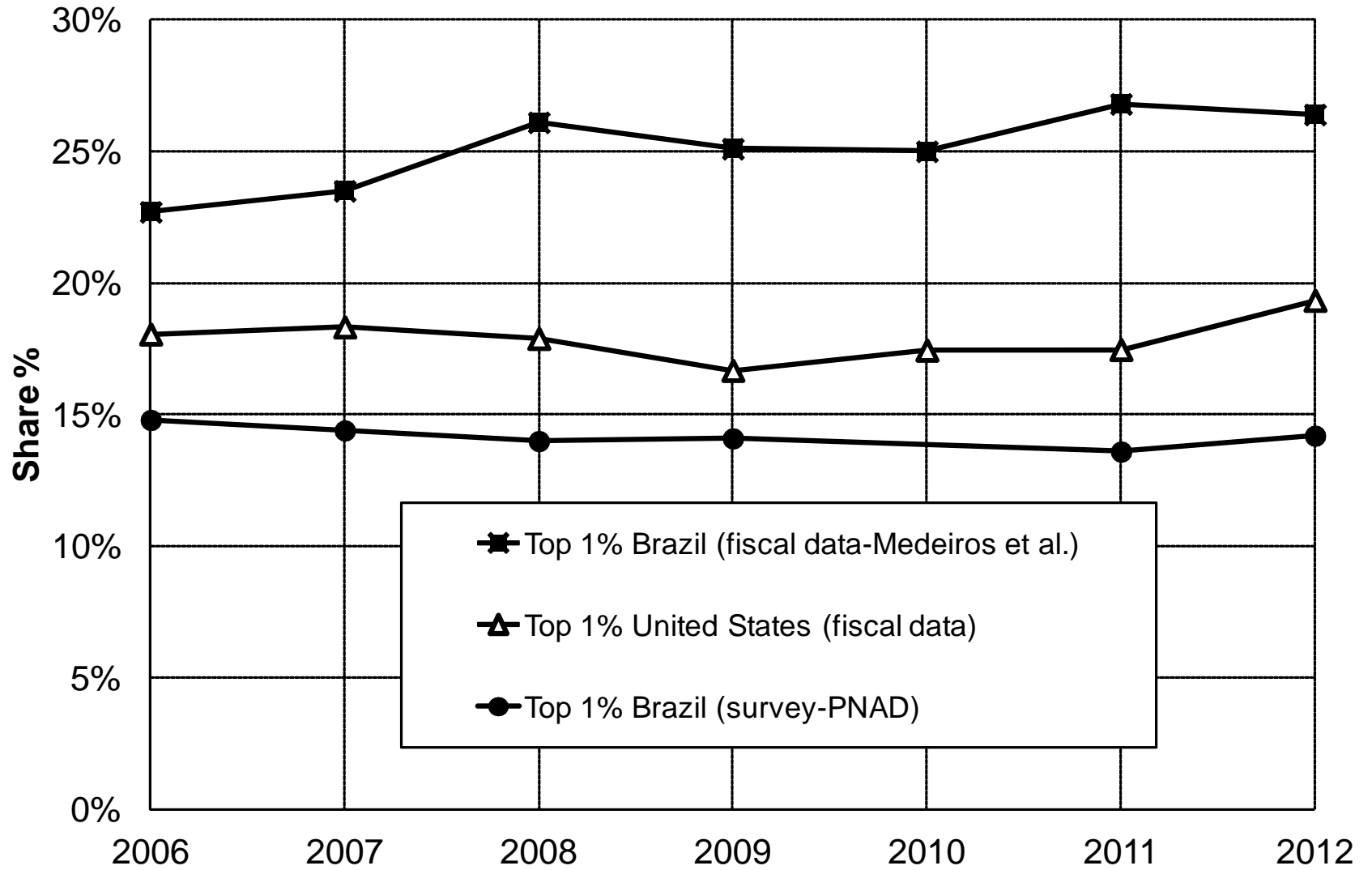


Top 10% income share

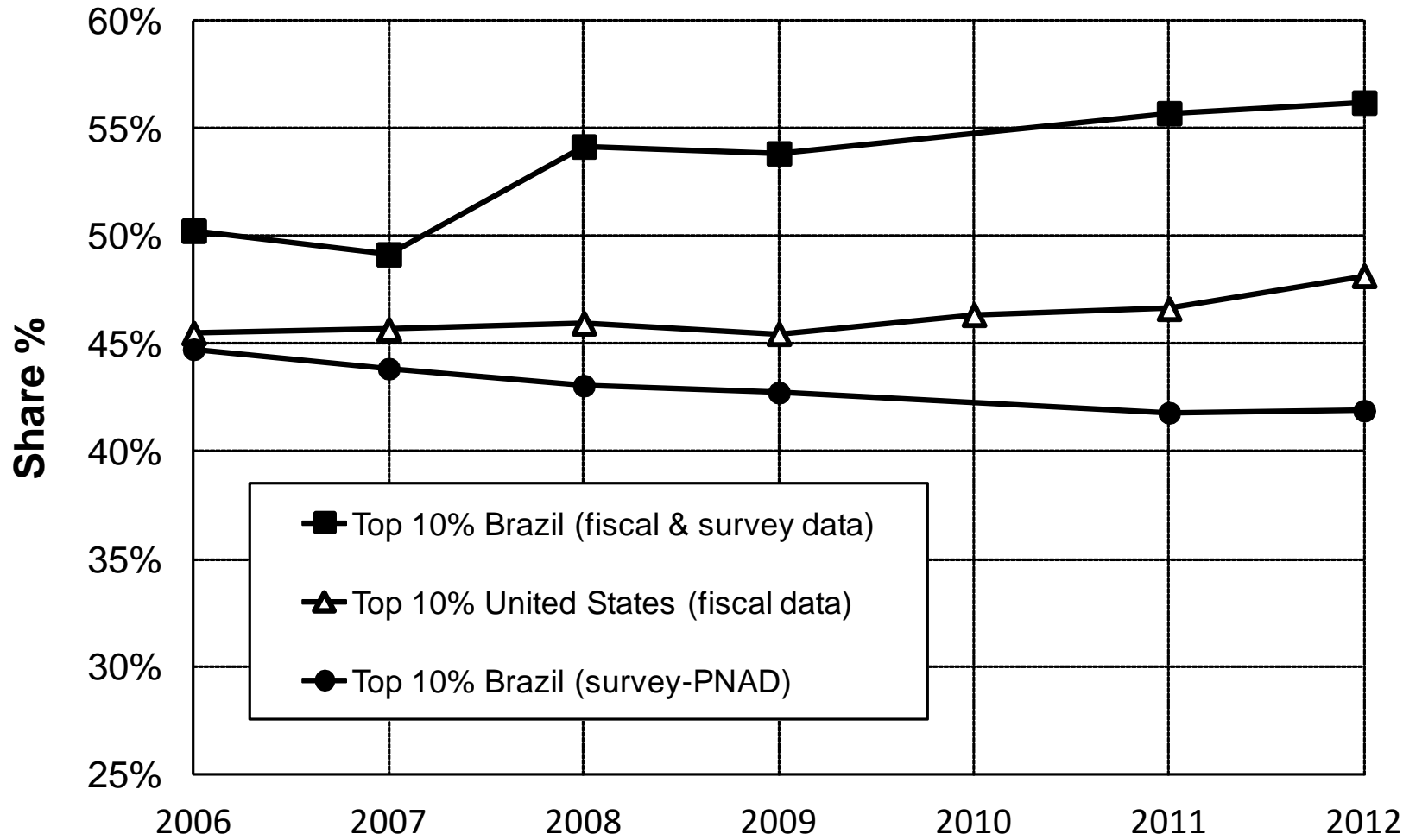
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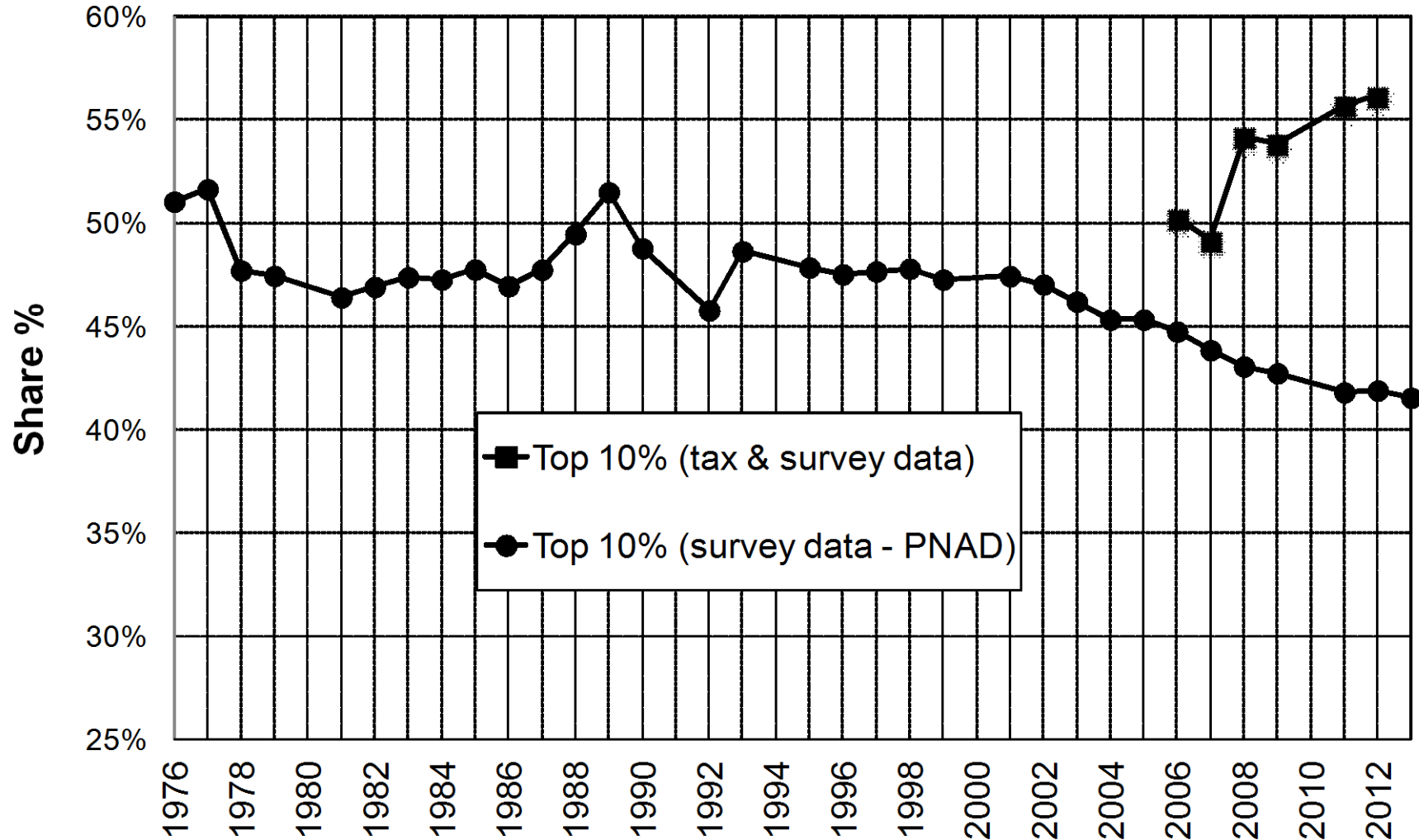
Top 1% income share: Brazil and US, 2006-2012



Top 10% income share: Brazil and US, 2006-2012



Income inequality in Brazil: 1976-2013

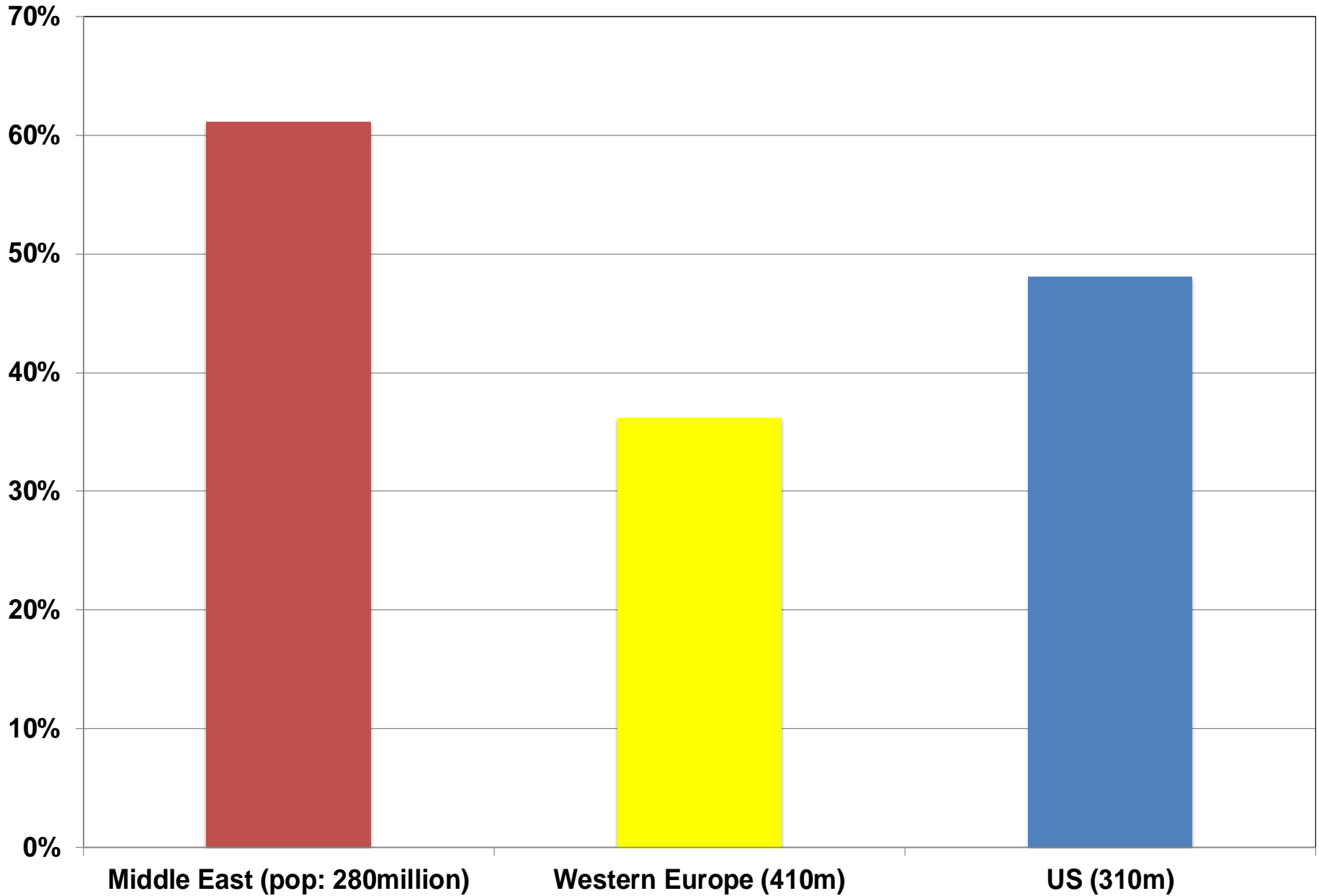


Extreme inequality regimes

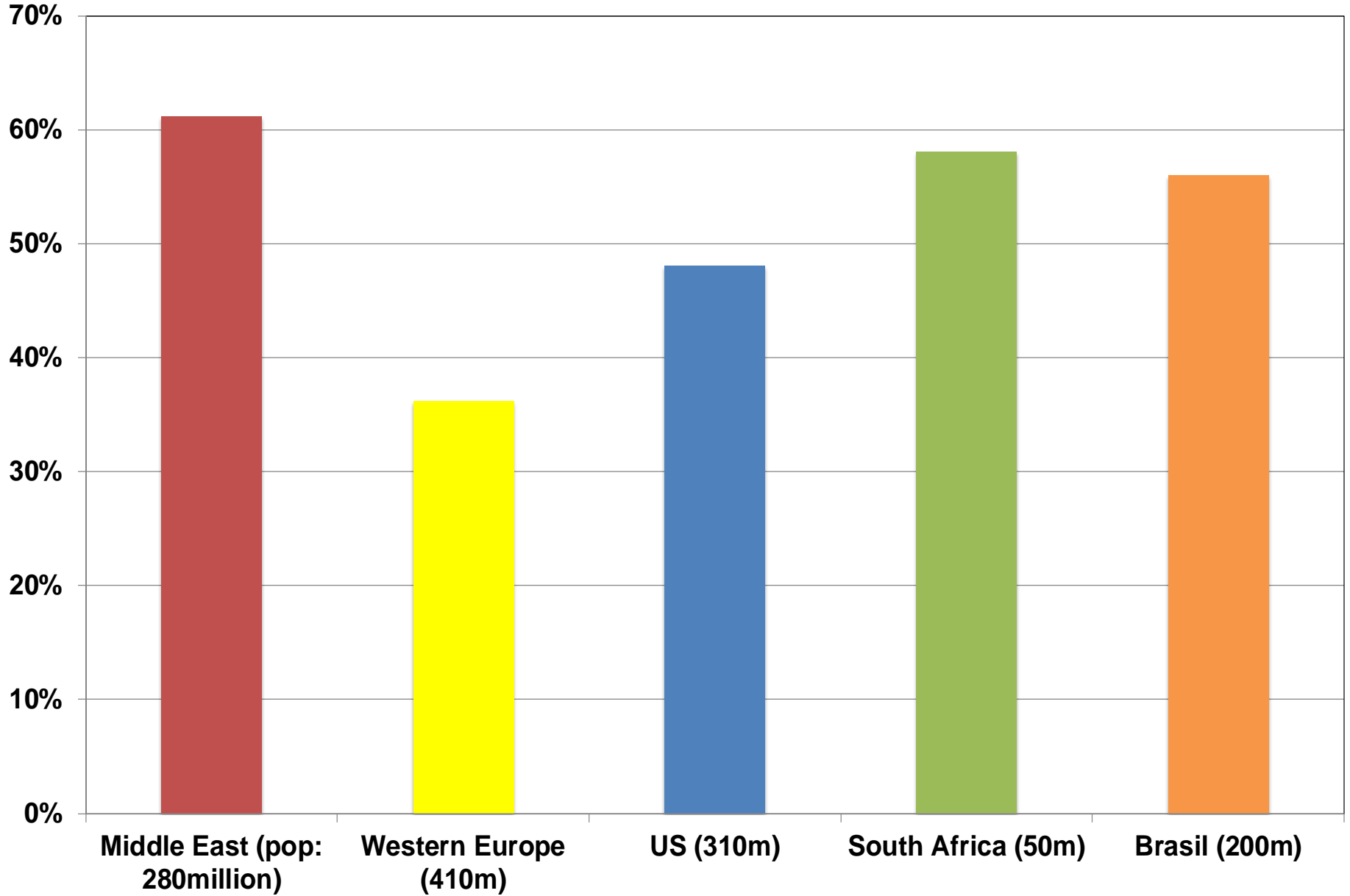
- **Extreme inequality is usually associated by an historical legacy of racial discrimination and rigid inequality of status.**
- **South Africa.** Apartheid until 1994, no right to property or mobility for 90% of the population, no redistribution since the end of Apartheid (no land reform, no wealth redistribution).
- **Brasil.** Slavery until 1887 (last country to abolish slavery, with slaves = 30% of pop in 1887), huge regional disparities.
- **US.** Slavery until 1865 in the South (40% of pop), legal racial discrimination until 1960s.
- But there are exceptions. E.g. **Middle East:** the most unequal region in the world, due to different factors: geographical concentration of oil resources, arbitrary frontiers drawn and protected by the West since 1916 (until recently...), role of sovereign wealth funds and global financial markets to transform oil rent into perpetual financial rent.
Oil and finance can be more powerful inequality-generating mechanisms than slavery and racial discrimination.

- **If we measure income inequality at the level of the region taken as a whole, then the Middle East appears as the most unequal region in the world.**
Top 10% income share \approx 60% of total income in Middle East (lower bound, i.e. assuming low within-country inequality)
 \approx 35% in Europe, 45-50% in USA, 55-60% in South Africa or Brasil
- **This is due to huge inequality between Middle East countries, itself due to concentration of oil resources in small territories with limited population.**
E.g. total educational investment of Egypt (80m pop) is 100 times smaller than oil revenues in UAE-Qatar (1m pop).

Top 10% income share



Top 10% income share



- **Ideally, the Middle East would also need regional political integration and redistribution of oil and other resources.**
- Very difficult to organize peacefully... especially if Western countries do everything they can to preserve the high-inequality status quo.
- Regional European funds: some redistribution from Western and Northern Europe to Eastern and Southern Europe. But Brexit...

- **Western illusion about modern inequality (supposedly based upon social harmony, equality of rights, meritocracy, etc.) vs ancient inequality regimes (based upon rigid inequality of status, castes, etc.).**
- But meritocracy is largely a myth invented by the winners: in practice there is very little equality of rights in access to high-quality education or good-paying jobs. Real vs formal rights.
- Huge discrimination in all post-colonial societies: see e.g. muslim names in France.
- **Indian debates about caste-based vs gender-based vs parental-income-based reservations & quotas: very relevant for Western countries & the world.**

Conclusions

- **The history of income and wealth inequality is deeply political. It involves beliefs systems, national identities and sharp reversals. Wars and revolutions played a key role in 20^c reduction in inequality. Let's try to do better in 21^c.**
- 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
- The ideal solution involves a broad combination of inclusive institutions, incl. progressive tax on income & wealth; education & labor laws; economic democracy, incl. new forms of property, power structure and participatory governance.
- **Inequality regimes need to be put into a broad historical and comparative perspective, so as to invent new solutions.**