Public Economics

(Master PPD & APE)

(EHESS & Paris School of Economics)

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Academic year 2021-2022

Lecture 9: Capital income, inheritance & wealth taxes over time & across countries

(check on line for updated versions)

Roadmap of lecture 9

- Basic notions & notations
- Reminder: what is capital?
- Key distinction: taxes on flow vs taxes on stock
- Inheritance taxes
- Progressive wealth taxes
- Property taxes

Basic notions & notations

- National income $Y = F(K,L) = Y_K + Y_L = rK + vL$
  with r = average rate of return
  v = average wage rate
- Individual income $y_i = y_{Ki} + y_{Li} = r_i k_i + v_i l_i$
  with r_i = individual rate of return, v_i = individual wage rate
- Individual capital (wealth) k_i comes from past savings and/or from inheritance (or sometime from various forms of appropriations or privatization processes, e.g. for natural ressources: land, oil, gold, etc.)
- In order to study capital taxation, one needs to specify where k_i comes from, i.e. one needs a dynamic, multi-period model: static, one-period model are fine to study labor income taxation, but cannot be used to study capital taxation → **see next lecture for explicit dynamic models; today = mostly a description of existing capital taxes**

Reminder: what is capital?

- K = real-estate (housing, offices..), machinery, equipment, patents, immaterial capital,..

(housing assets + financial/business assets: about 50-50)

(but large variations in portfolio comp. across distribution)

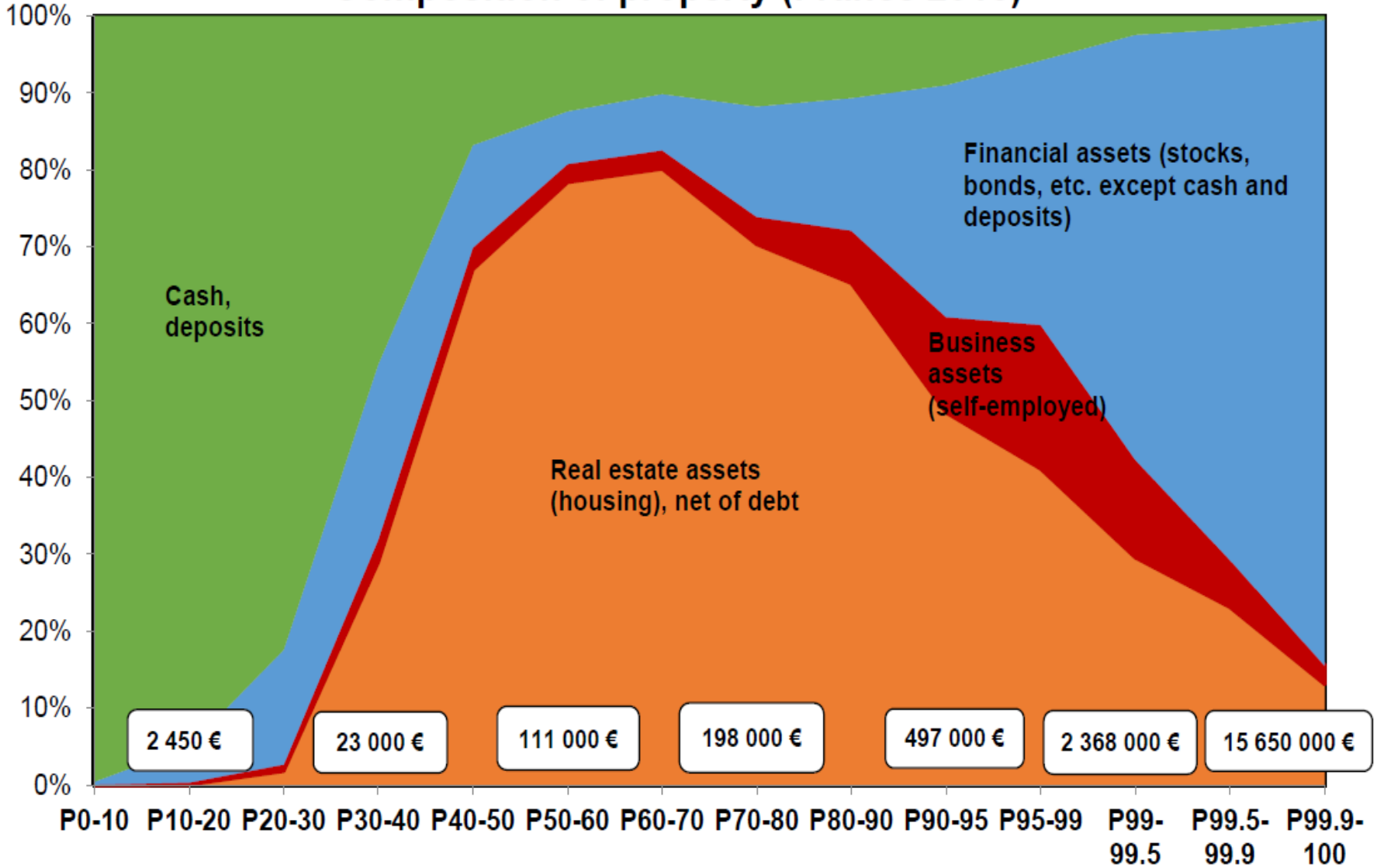
Y_K = capital income = rent, dividend, interest, profits,..

- In rich countries, $\beta = K/Y = 5\text{-}6$ ($\alpha = Y_K/Y = 25\text{-}30\%$)

(i.e. average rate of return $r = \alpha/\beta = 4\text{-}5\%$)

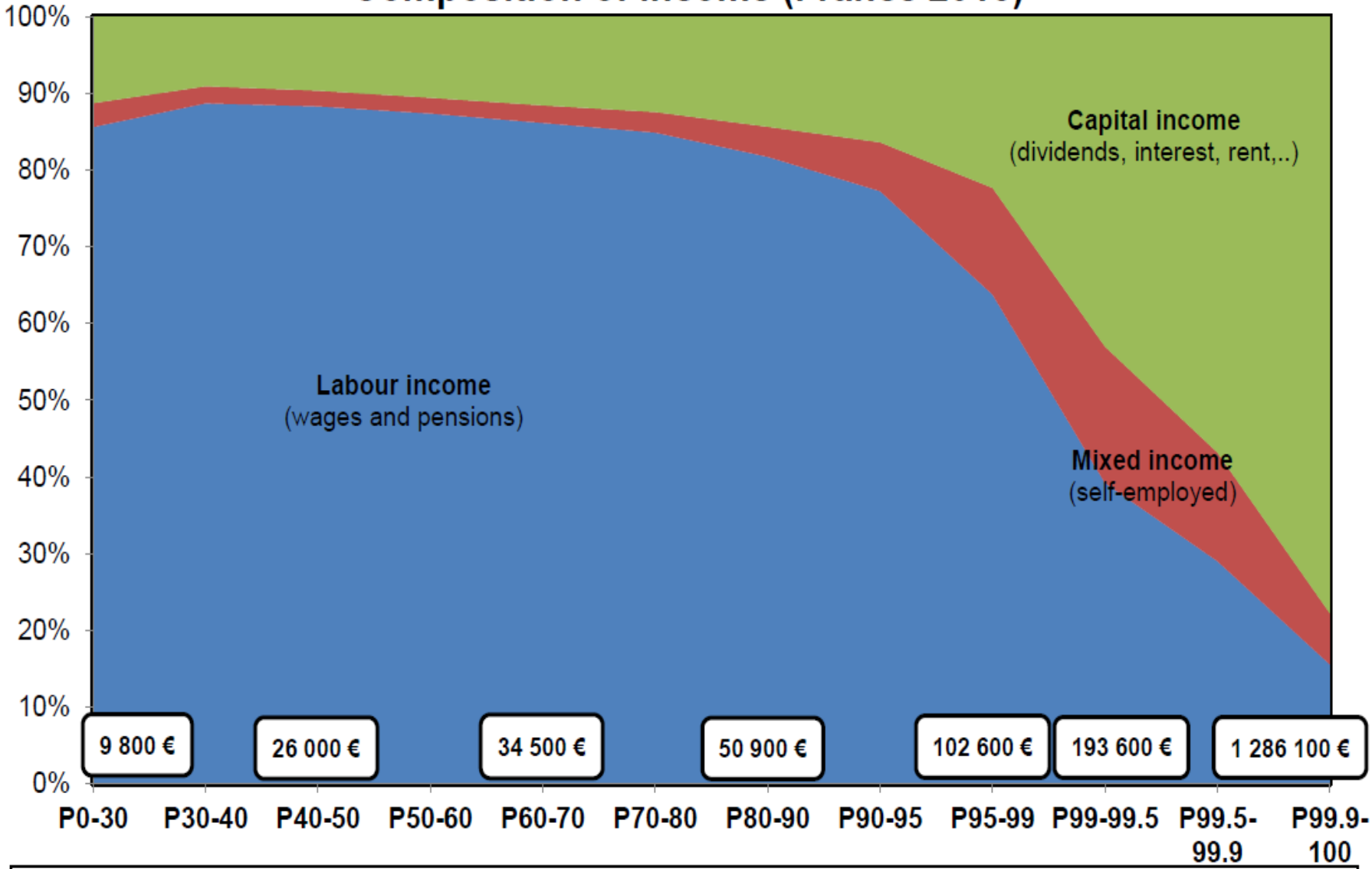
- Typically, in France, Germany, UK, Italy, US, Japan: $Y \approx 30\,000$€ (pretax average income, i.e. national income /population), $K \approx 150\,000\text{-}180\,000$€ (average wealth, i.e. capital stock/population); net foreign asset positions small in most coutries (but rising); see Piketty-Zucman, QJE 2014 for more details

Composition of property (France 2015)

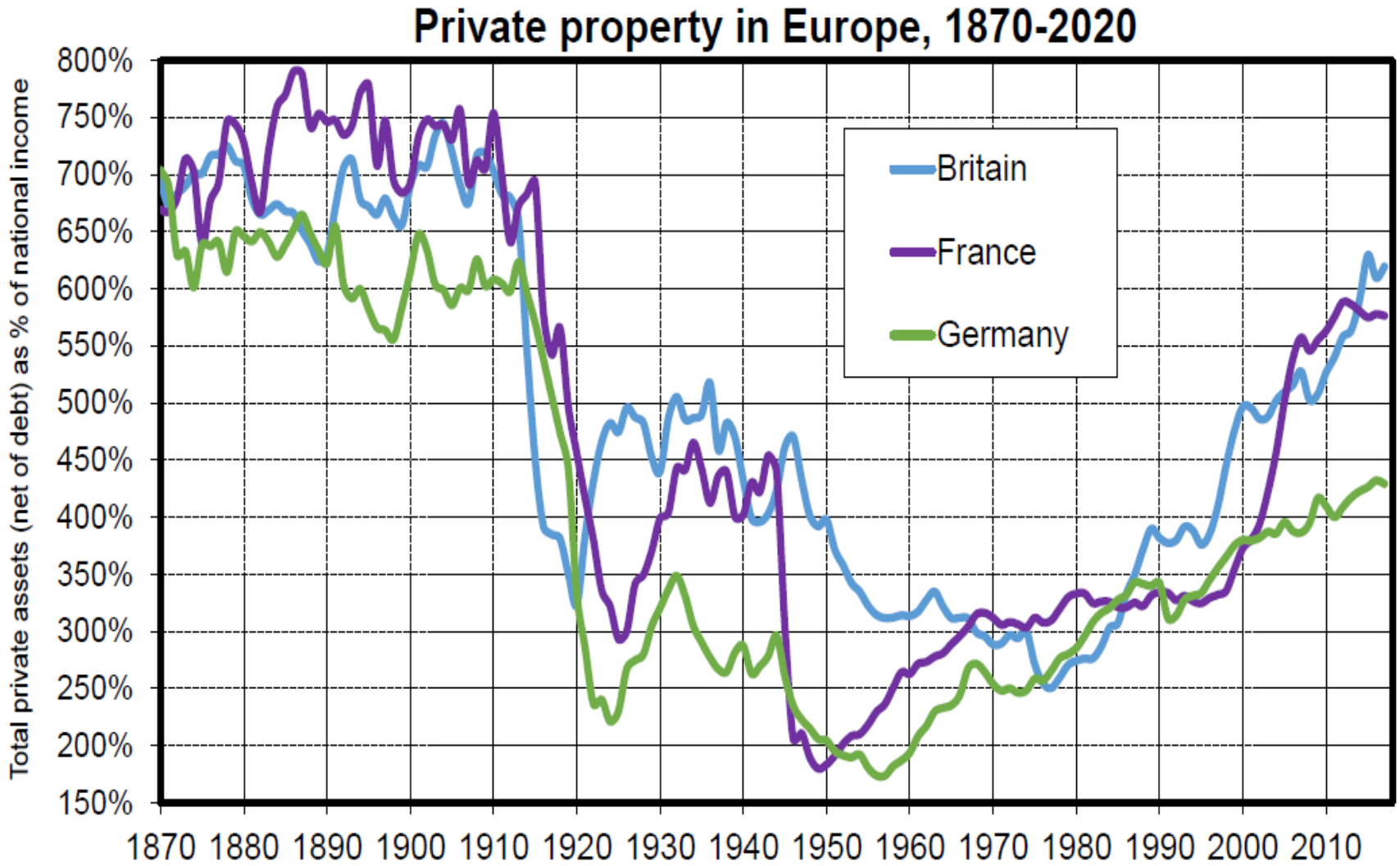


Interpretation. In France in 2015 (as in most countries where data are available), small fortunes consist primarily cash and bank deposits, medium fortunes of real estate, and large fortunes of financial assets (mainly stocks). **Note**: the distribution shown here is per adult wealth (wealth of couples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

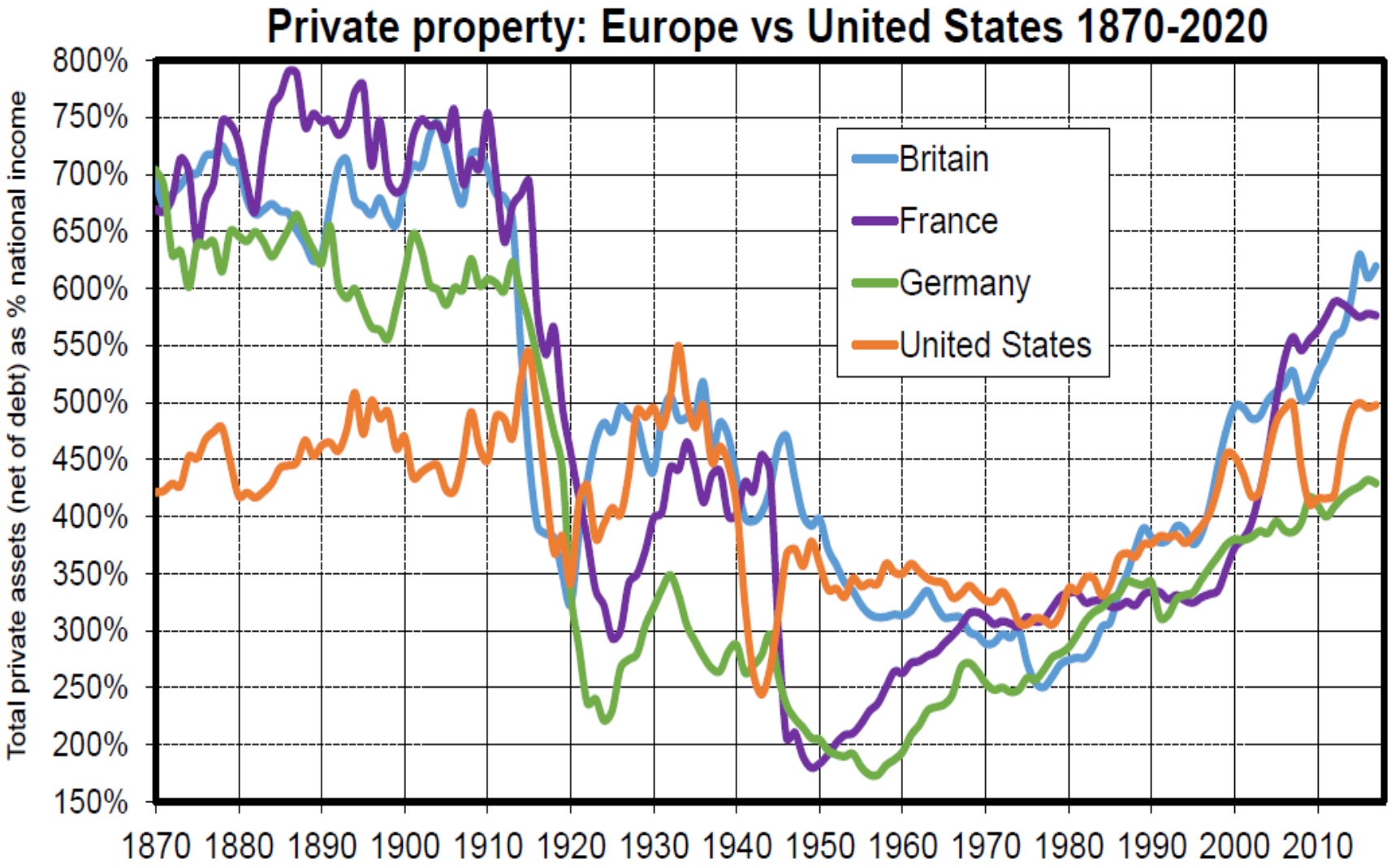
Composition of income (France 2015)



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).

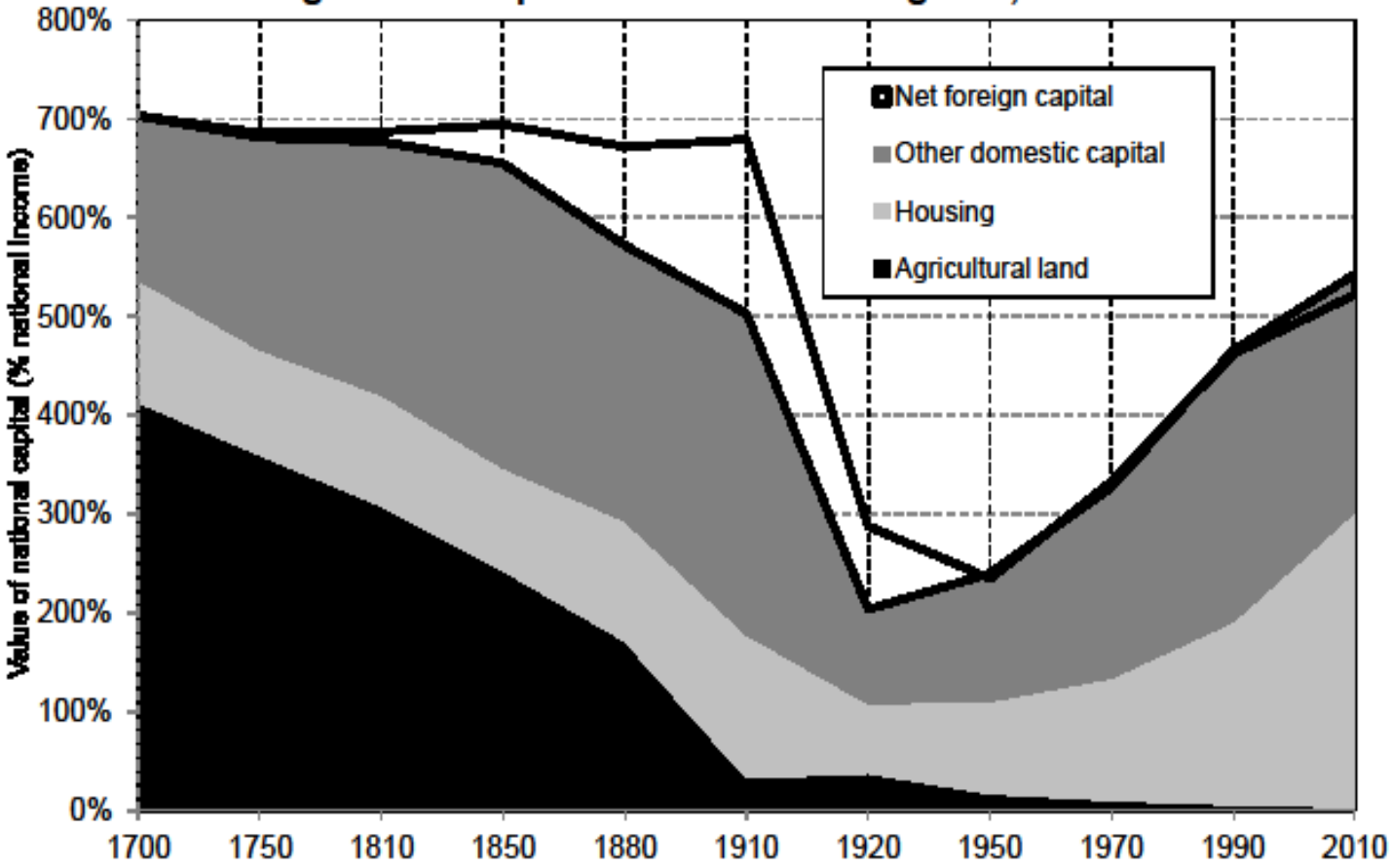


Interpretation. The market value of private property (all assets combined: real estate, business and financial assets, net of debt) was about 6-8 years of national income in Western Europe in 1870-1914, before falling from 1914 to 1950 and reaching about 2-3 years of national income in 1950-1970, and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



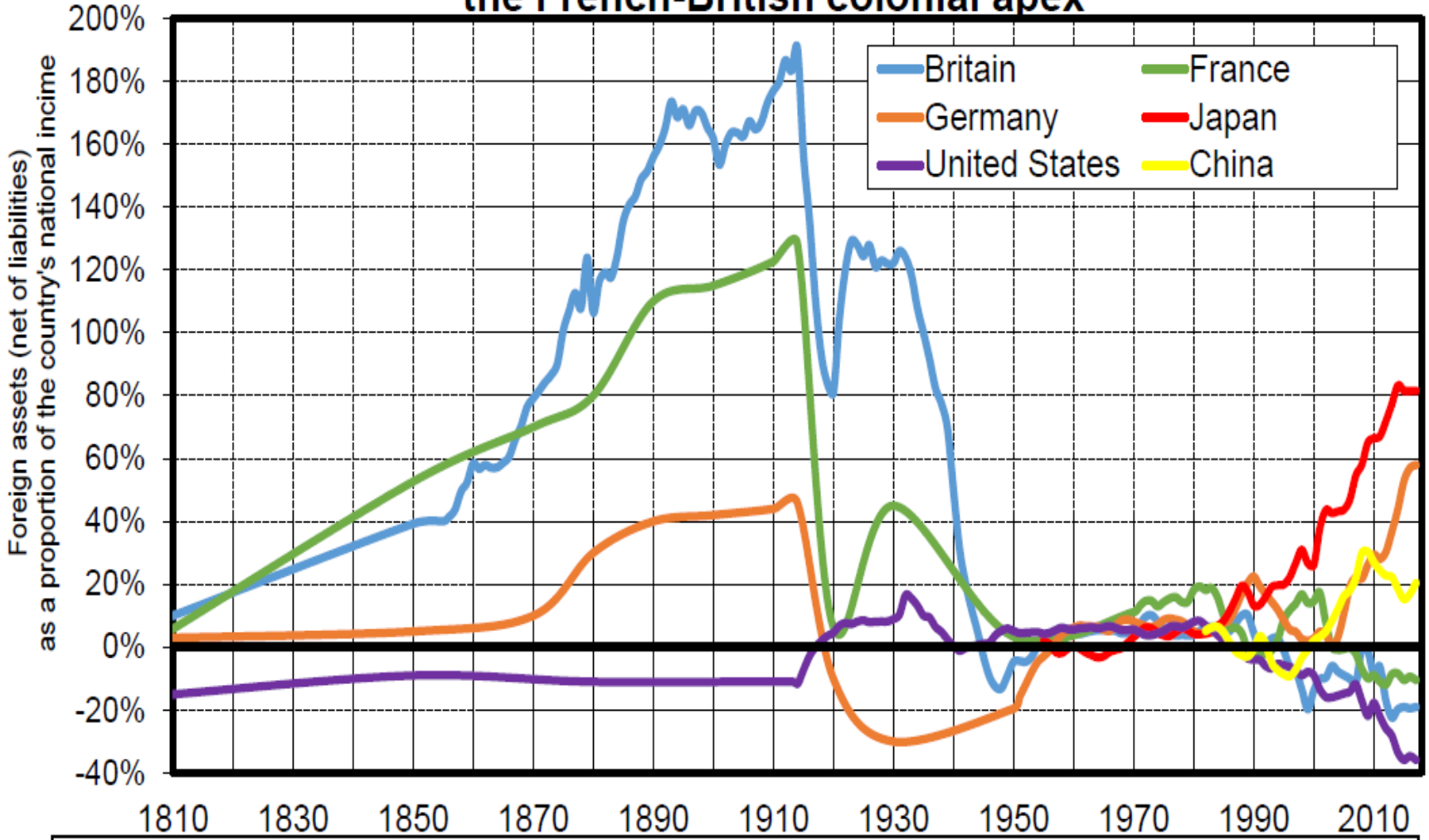
Interpretation. The market value of all private assets (real estate, business and financial assets, net of debt) was about 6-8 years of national income in Western Europe in 1870-1914, before falling between 1914 and 1950 (2-3 years during the 1950s-1970s), and rising again to about 5-6 years in 2000-2020. 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).

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.

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

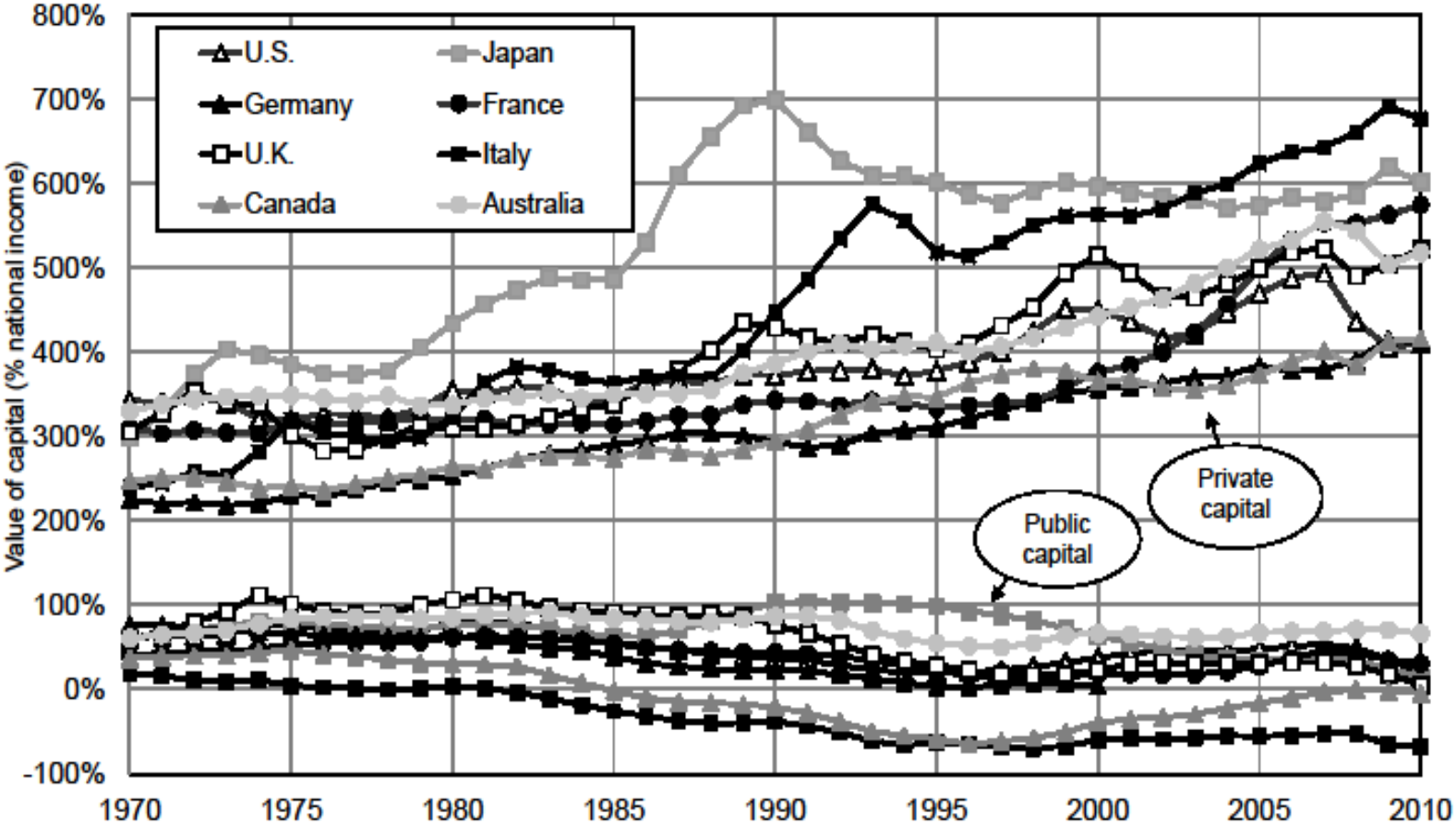


Interpretation. Net foreign assets, i.e. the difference between assets owned abroad by resident owners (including in some cases the governement) and liabilities (i.e. assets owned in the country by foreign owners), amounted in 1914 to 191% of national income in Britain and 125% in France. In 2018, net 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).

The changing share of public ownership

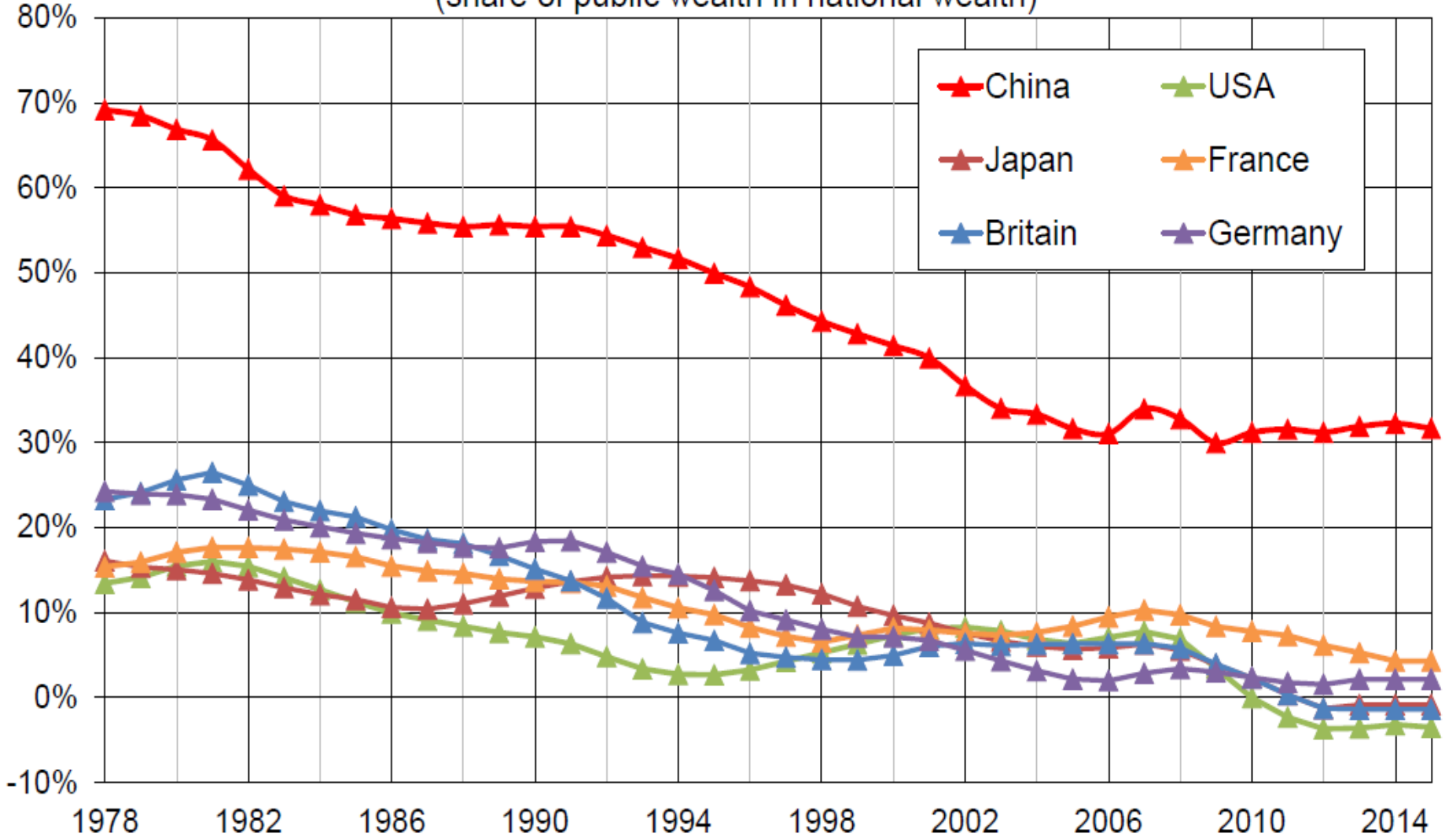
- During the 1950-1980 period, the share of net public wealth in net national wealth was as large as 25-30% in many Western countries = mixed property regime
- By 2015, the share of net public wealth is negative not only in Italy but also in US, UK and Japan (and only slightly positive in France and Germany)
- In China, public share seems stabilize around 30%
- See Alvaredo et al 2017 Global Inequality Dynamics: New Findings from WID.world ;Piketty-Yang-Zucman Capital Accumulation, Private Property and Rising Inequality in China, 1978-2015 ; Novokmet-Piketty-Zucman 2017 From Soviets to Oligarchs: Inequality and Property in Russia 1905-2016
- Changing ideology on efficiency of private vs public property
- Rising public debt: more difficulties to agree about fair tax burden with growth slowdown and globalization? And/or structural myopa in absence of strong rules or ideology?

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



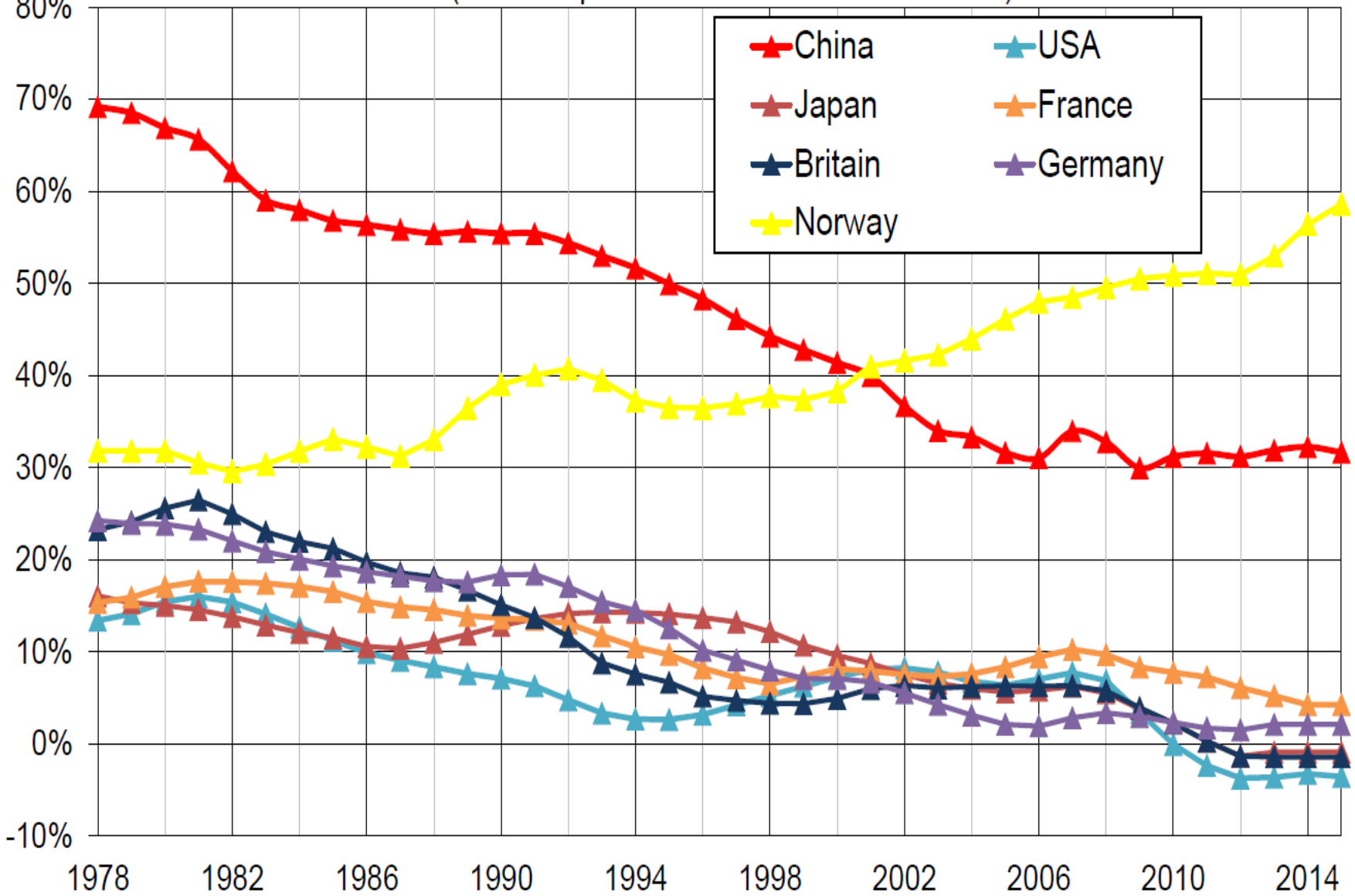
In Italy, private capital rose from 240% to 680% of national income between 1970 and 2010, while public capital droptped from 20% to -70%. Sources and series: see piketty.pse.ens.fr/capital21c.

Figure 2b. The decline of public property
(share of public wealth in national wealth)



Share of net public wealth (public assets minus public debt) in net national wealth (private + public).
China: Piketty, Yang and Zucman (2016). Other countries: Piketty and Zucman (2014) and WID.world updates.

Figure 2c. The decline of public property vs. the rise of sovereign funds
(share of public wealth in national wealth)



Share of net public wealth (public assets minus public debt) in net national wealth (private + public).
China: Piketty, Yang and Zucman (2016). Other countries: Piketty and Zucman (2014) and WID.world updates.

Key distinction: taxes on capital income flows versus taxes on capital stock

- Total tax burden EU27 ≈ 39% of GDP, incl. 9% in capital taxes (US: 28%, incl. 8% in capital taxes). See Eurostat 2013
- With a capital share $\alpha=Y_k/Y\approx30\%$, this is equivalent to an average tax rate ≈ 30% on all capital income flows
- With a capital/income ratio $\beta=K/Y\approx600\%$, this is equivalent to an average tax rate ≈ 1,5% on the capital stock

→ both forms of capital taxes raise ≈9% of GDP

- In practice, there is a large diversity of capital taxes: **stock-based** (one-off inheritance and transfer taxes, annual property or wealth taxes) or **flow-based** (corporate income taxes, taxes on capital income: rental income, interest, dividend, k gains etc.); why are they not all equivalent ?

- In the simplest economic models, we have a general equivalence result: if the rate of return on capital is equal to r and is the same across all individuals & over all assets (=perfect capital markets), then a tax at rate t_k on the capital income flow is exactly equivalent to a tax at rate τ_k on the capital stock, with:

$$\tau_k = r \times t_k \text{ , or } t_k = \tau_k / r$$

- If r=5%, it is equivalent to tax capital stock at τ_k=1% per year or to tax capital income flow at t_k=20% per year
- If r=4%, then τ_k=1% on stock $\leftrightarrow$ t_k=25% on income flow

- Exemple: assume that you own an appartement worth k=1 million €, and that its annual rental value is equal to y_k=40 000€, i.e. r = 4%
- Assume you have to pay a property tax (taxe foncière) at a rate τ_k=1%: 1% of k=10 000€ in tax
- It is equivalent to pay a tax at rate t_k=25% on the rental income (real or imputed):

  25% of y_k=40 000€ = 10 000€ in tax
- Same computations with k=100 000€, y_k=4 000€

- Note: in France, average rate of property tax ≈0,5%; in the US or UK, it is closer to ≈1%

- In practice, the key reason why taxes on the capital stock and taxes on the capital income flow are not equivalent is the existence of capital market imperfections: the rate of return r_i varies across assets & individuals
- For individuals with r_i > average r, then it is better to have stock taxes than flow taxes (& conversely for individuals with r_i < average r)
- If r_i=10%, τ_k=1% on stock $\leftrightarrow$ t_k=10% on income flow
- If if r_i=2%, τ_k=1% on stock $\leftrightarrow$ t_k=50% on income flow

- Key argument in favor of taxes on capital stock rather than on flow (i.e. capital tax rather than income tax): they put incentives to get a high return on k (Allais)

  (see also "Use it lose it: efficiency gains from wealth taxation", Guvenen et al 2019)

- Popular perceptions about capital tax:
  see Fisman et al 2016, “Do Americans Want to Tax Capital? Evidence from on-line surveys”
- Experiment: show hypothetical individuals with income y= 10 000$, 50 000$, 100 000$, 300 000$, etc. and net wealth w=50 000$, 500 000$,5M $, etc., and ask how much total tax (income tax + property tax + all taxes) they shoud pay
- Result: for given income y, everybody want individuals with higher net wealth w to pay more taxes. Implicit wealth tax rates are pretty high.
- Common-sense reaction: if some individuals have very high wealth but very low income, there’s no reason to exempt them from taxation; they should just sell some of their under-used assets to pay their taxes

The diversity of capital taxes

- In the EU & US, capital taxes = 8%-9% GDP
- Typical structure:
- inheritance taxes <1% GDP

  (say, 5%-10% of a 10% tax base)
- + annual wealth & property taxes 1%-2% GDP

  (say, 0,5% of a 200%-400% tax base)
- + corporate profits tax 2%-3% GDP

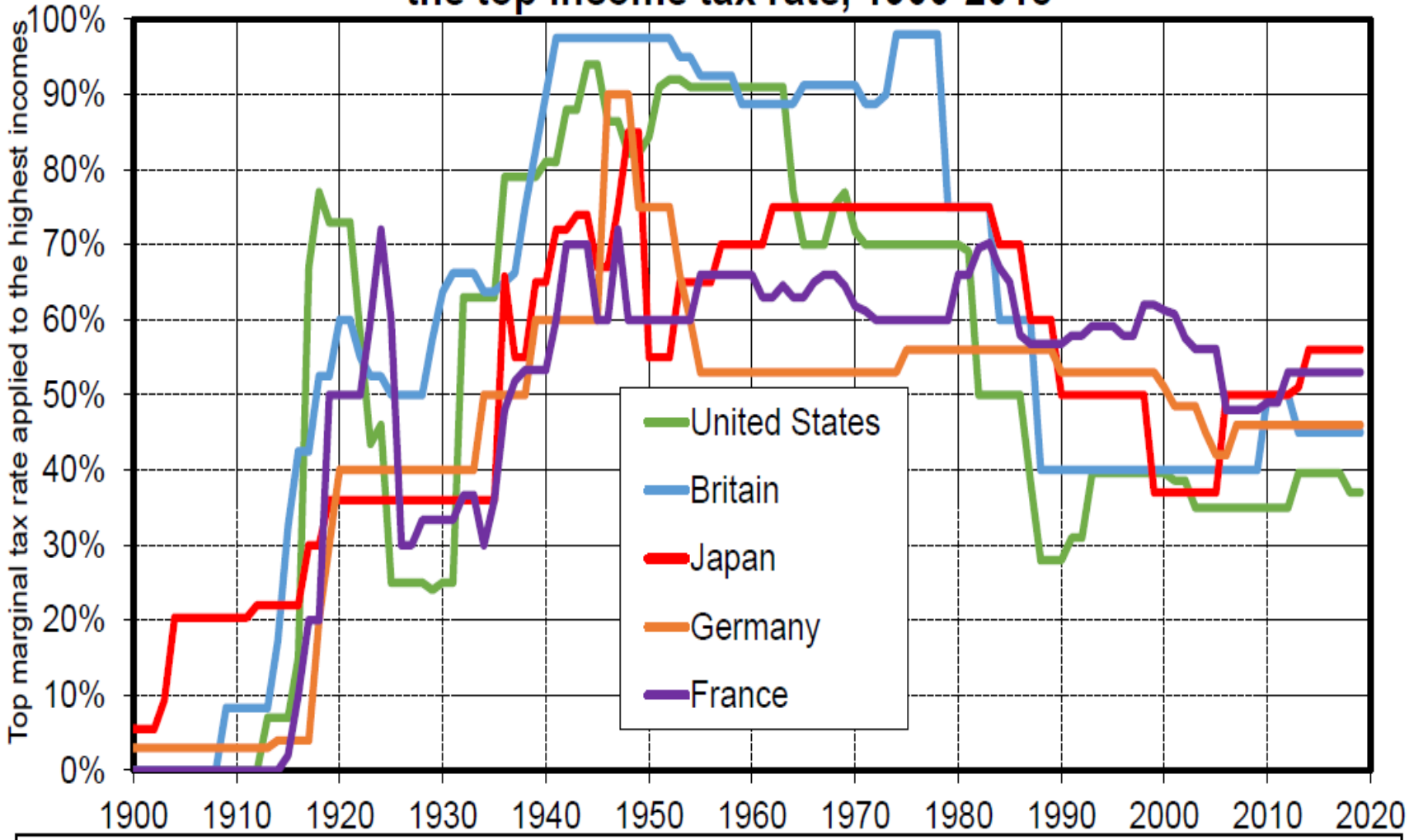
  (say, 20%-30% of a 10% tax base)
- + personal capital income tax 2%-3% GDP

  (say, 20%-30% of a 10% tax base)

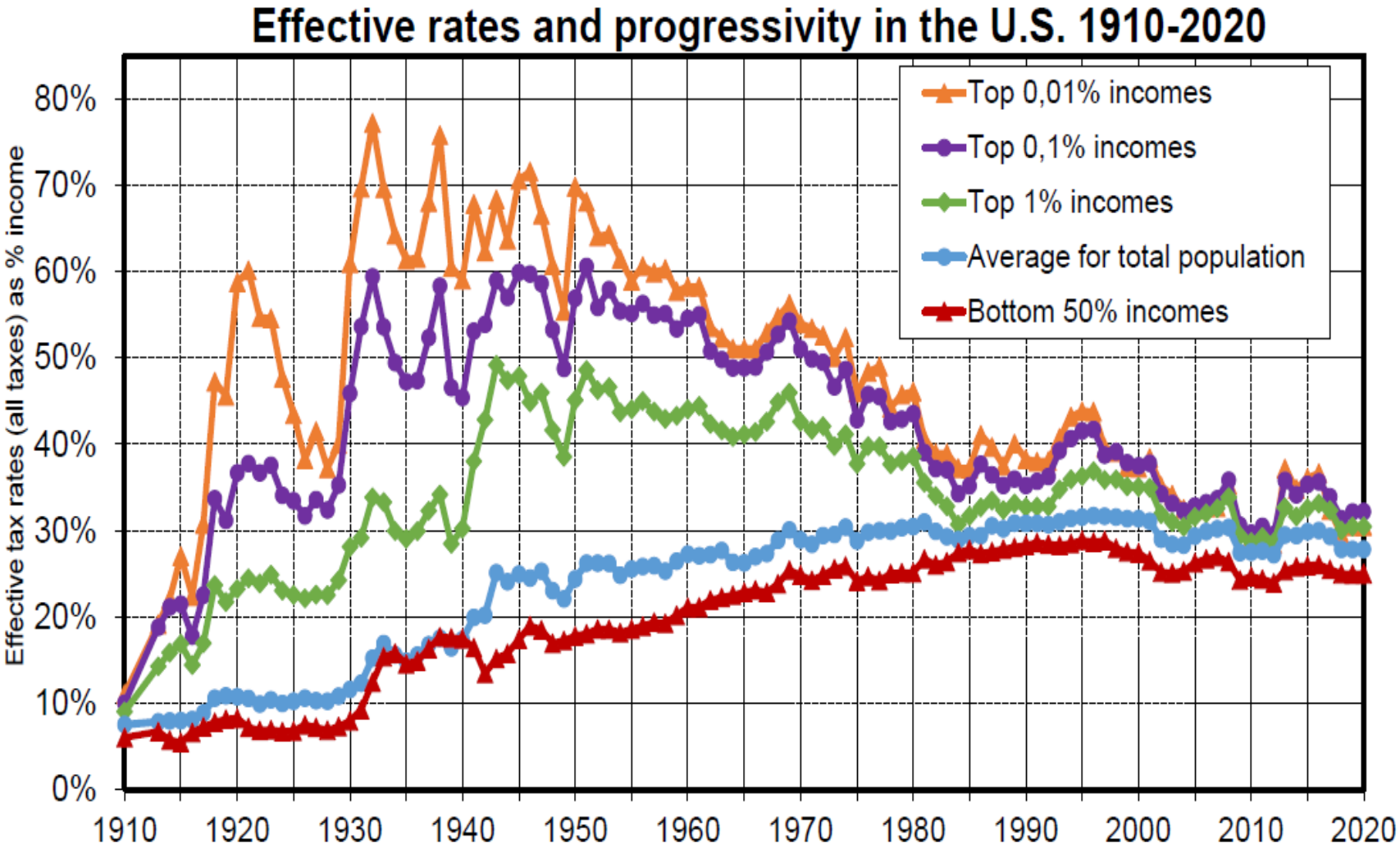
The progressive tax triptyc: income, inheritance and wealth

- Most developed countries introduced between 1870 and 1920 modern progressive taxes on income and inheritance: first Germany-Sweden-Japan in 1870s-1890s, then UK 1892-1908, US 1913-1916, France 1901-1914, etc.
- General reaction to the perception of high inequality in late 19c and early 20c; international diffusion process; rise of universal suffrage
- But it is really after WW1 that these taxes became steeply progressive, particularly in the US-UK… until the progressive retreat of the 1980s-1990s (changing ideology, rising tax competition)

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

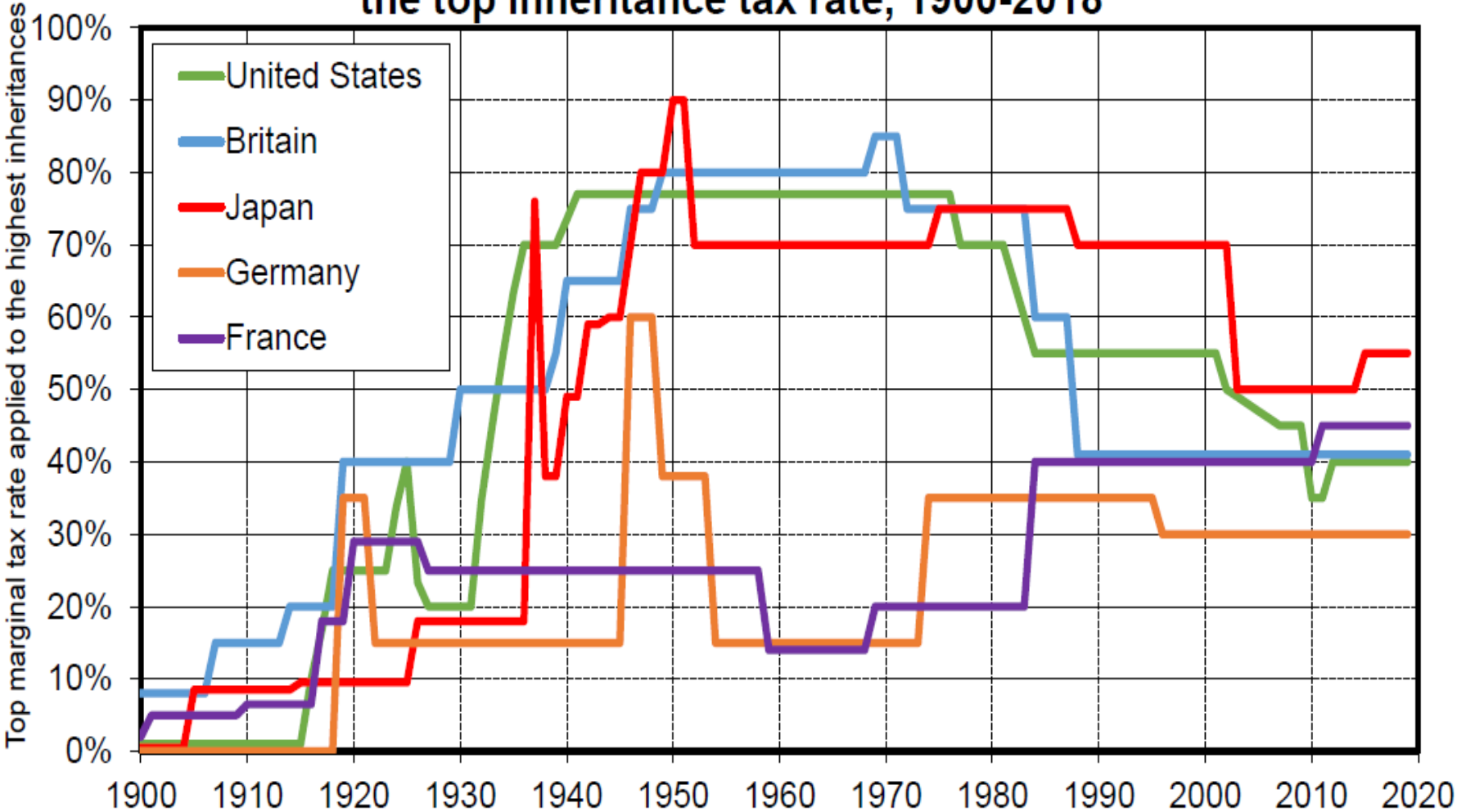


Interpretation. The marginal income tax rate applied to the highest incomes was on average 23% in the U.S. from 1900 to 1932, 81% from 1932 to 1980 and 39% from 1980 to 2018. Over these same periods, the top rate was equal to 30%, 89% and 46% in Britain, 26%, 68% and 53% in Japan, 18%, 58% and 50% in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



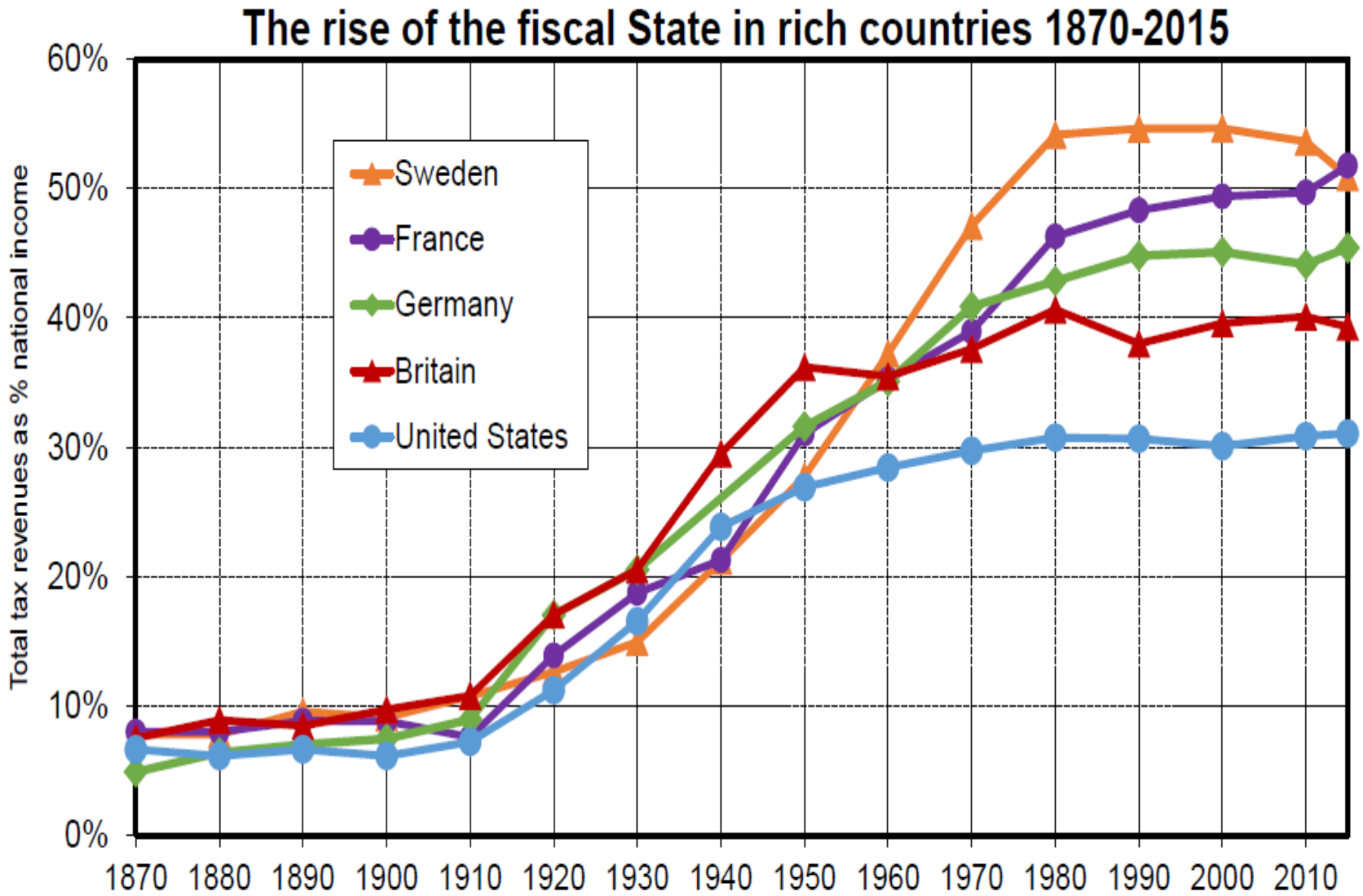
Interpretation. From 1915 to 1980, the tax system was highly progressive in the U.S., in the sense that effective tax rates paid by the highest income groups (all taxes included, and as % of pretax income) was significantly larger than the average effective tax rate paid by the the total population (and 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).

- **General decline in tax progressivity since 1980s, in spite of the rise (or stabilisation) in total tax burden**
- Progressive income tax: basic pillar for financing public goods and social spendings (together with social contributions)
- Progressive inheritance tax: lower tax revenue than income tax (say, <1% Y vs 10% Y), but important role to limit perpetuation & concentration of wealth & power in the same families
- **The US invented very steeply progressive taxation of income and inherited wealth in the 1920s-1930s, partly because the US did not want to become as unequal as Europe**
- See Fisher 1919 about the "undemocratic" concentration of wealth (top 2% owned 50% of US wealth at the time: less than in Europe, but already too much according to mainstream US economists of the time)



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).

- Over 1930-1980 period, top marginal income tax rate = 82% in the US
- Extreme income tax progressivity at the very top is critical not so much to raise revenue, but mostly to keep top labor incomes and rent extraction under control
- Top US & UK inheritance tax rates also reached 70-80% during 1930-1980 period, much more than in Germany and France (where wealth redistribution was largely carried out via other means: destruction, inflation, nationalization)
- Progressive taxation = a US-UK invention
- On the social, political and cultural history of taxation in the US and France, see Huret, *American Tax Resisters*, HUP 2014, and Delalande, *Les batailles de l'impôt – Consentement et résistance de 1789 à nos jours*, 2011
- See also Beckert, *Inherited wealth*, PUP 2008

- Many European countries also created annual progressive taxes on net wealth (total assets minus debt) in the early 20th century (Germany, Sweden, Norway, Switzerland, etc.).
- Germany: creation of annual wealth tax in 1893 in Prussia (after income tax 1891), 1902 in Saxony, etc. See Dell 2008.
- Sweden: creation of annual wealth tax in 1911. See G. Du Rietz, M. Henrekson, « Swedish Wealth Taxation (1911–2007) », in *Swedish Taxation: Developments since 1862*, Palgrave 2015, Chap. 6
- Switzerland: local and federal wealth taxes since 1913. See Dell et al 2007

- But no progressive tax on wealth was created at that time in UK, US, France.
- Why? Maybe because these countries already had well developed, old-style annual proportional taxes on real-estate property (land, housing and buildings), like “taxe foncière” in France (created by French Revolution). Maybe it is more difficult to reform such taxes than to create brand new system.
- On the other, Swiss wealth taxes did evolve from old-style local property taxes.
- Anyway, UK-US-France in early 20c focused upon progressive taxes and income and inheritance (=so as to make new industrial and financial sectors contribute to tax) rather than wealth taxes.

- Wealth tax debate came back later in the 1970s in UK and France. See H. Glennester, “A Wealth Tax Abandonned: The Role of UK Treasury 1974-1976”, LSE 2011
- France: first annual wealth tax created in 1981 (IGF), repealed in 1986, reintroduced in 1988 (ISF), repealed/transformed in IFI in 2018 (see below).
- Exceptionnal wealth taxes in France 1945 (up to 25%, or even 100% for those whose wealth had increased between 1940 and 1944), a little bit like the exceptional wealth taxes in Germany 1949-1985 to repay public debt; but no annual wealth tax until 1981

- Wealth tax created in France in 1980s (IGF-ISF): based upon market values of all assets (but no automatic pre-filled declaration).

- Very different from the wealth taxes created around 1900-1910 in Germany or Sweden, at a time with no inflation: wealth taxes were based not on market values, but on cadastral values, which created huge valuation problems when inflation became important (a little bit like property tax in France and other countries, but with tax progressivity this is even more problematic).

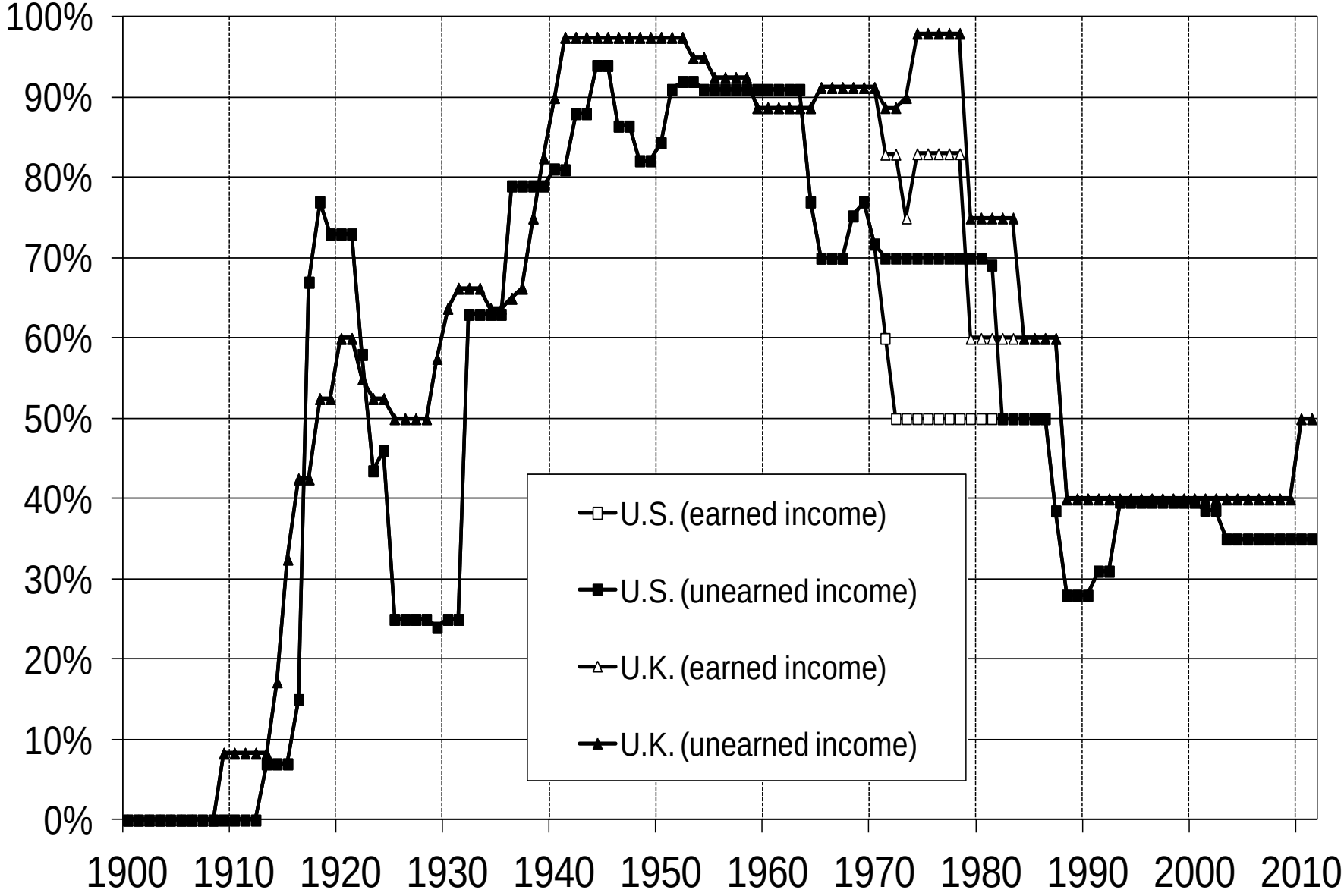
- Germany 1997: suspension of wealth tax due to valuation problems (constitutional/legal decisions on lack of horizontal equity).
- In Sweden: top wealth tax rates up to 4% in the 1980s, but applied to mismeasured tax base. Repeal 2007. Partly due to valuation problems, partly due to ideological/political change + small-country syndrom (repeal inheritance tax 2005) + welfare-state success.

- New discussions on European wealth taxes have been growing since 2011-12, in the context of Euro debt crisis and rising Euro discontent. See e.g. Kreneck et al 2017.

- No annual progressive wealth tax in UK and US, but during many decades higher income tax progressivity than in all other countries
- See Sanders-Warren 2019-2020 proposals for a federal wealth tax (up to 8% on billionaires + 40% exit tax)
- See Saez-Zucman « Progressive wealth taxes » BPEA 2019
- See ProPublica 2021 Report showing that US billionaires pay virtually no income tax as a proportion of their wealth
- See Saez-Zucman « How to get 1 trillion $ from 1000 billionaires? Tax their gains now », 2021

- Also, during the 1970s, higher top income tax rates on capital income (« unearned income ») than on labour income (« earned income »). The opposite is true today, in the name of pragmatism (tax evasion, offshore financial accounts, although it would be technically simple to have automatic cross-country reporting and information transmission as counterpart to free capital flows), or sometime in the name of innovation (it is unclear however why interest or dividend income would have more innovative content than wage or self-emplt income)

Figure 3: Top Income Tax Rates: Earned (Labor) vs Unearned (Capital)



Exemple of inheritance taxes

- Basic distinction:
- **Estate taxes** : tax rates depend on the total “estate” (real estate: immobilier + personal estate: mobilier, incl. financial), i.e. the total wealth left by the decedent, irrespective of how it is split between successors

  = **applied in US & UK** (complete testamentary freedom… but egalitarian default rules if no testament)
- **Inheritance taxes**: tax rates depend on the wealth received by each successor (part successorale) and the kin relationship (children vs stangers)

  = applied in **France & Germany** (limited testamentary freedom; rigid transmission rules)

  → in order to understand how the tax is computed, one first needs to understand how the wealth is divided

- Rigid transmission rules in France: the 1/n+1 rule
- « Réserve héréditaire » (this has to go the children, no matters what) = n/n+1
- « Quotité disponible » (what you can transmit to individuals other than your children) = 1/n+1 , with n = number of children
- With n = 1, free disposal of 50% of your wealth
- With n =2, free disposal of 33% of your wealth
- With n=3 or more, free disposal of 25% of your wealth; the other 75% is divided equally among children
- These basic rules were unchanged since 1804

- Default matrimonial regime: « community of acquisition » (« communauté réduite aux acquêts »)
- Married couple wealth $w = w_c + w_1 + w_2$
- with w_c = community assets = assets acquired during marriage

w_1 , w_2 = own assets (biens propres) = inherited by each spouse (or acquired before marriage)

- Only w_c is split 50-50

- Other matrimonial regimes: separate property (more & more common); universal community (very rare)
- Inheritance data can be used to study family strategies with wealth, porfolio reallocation during marriage, etc.

(see historical Parisian inheritance data project)

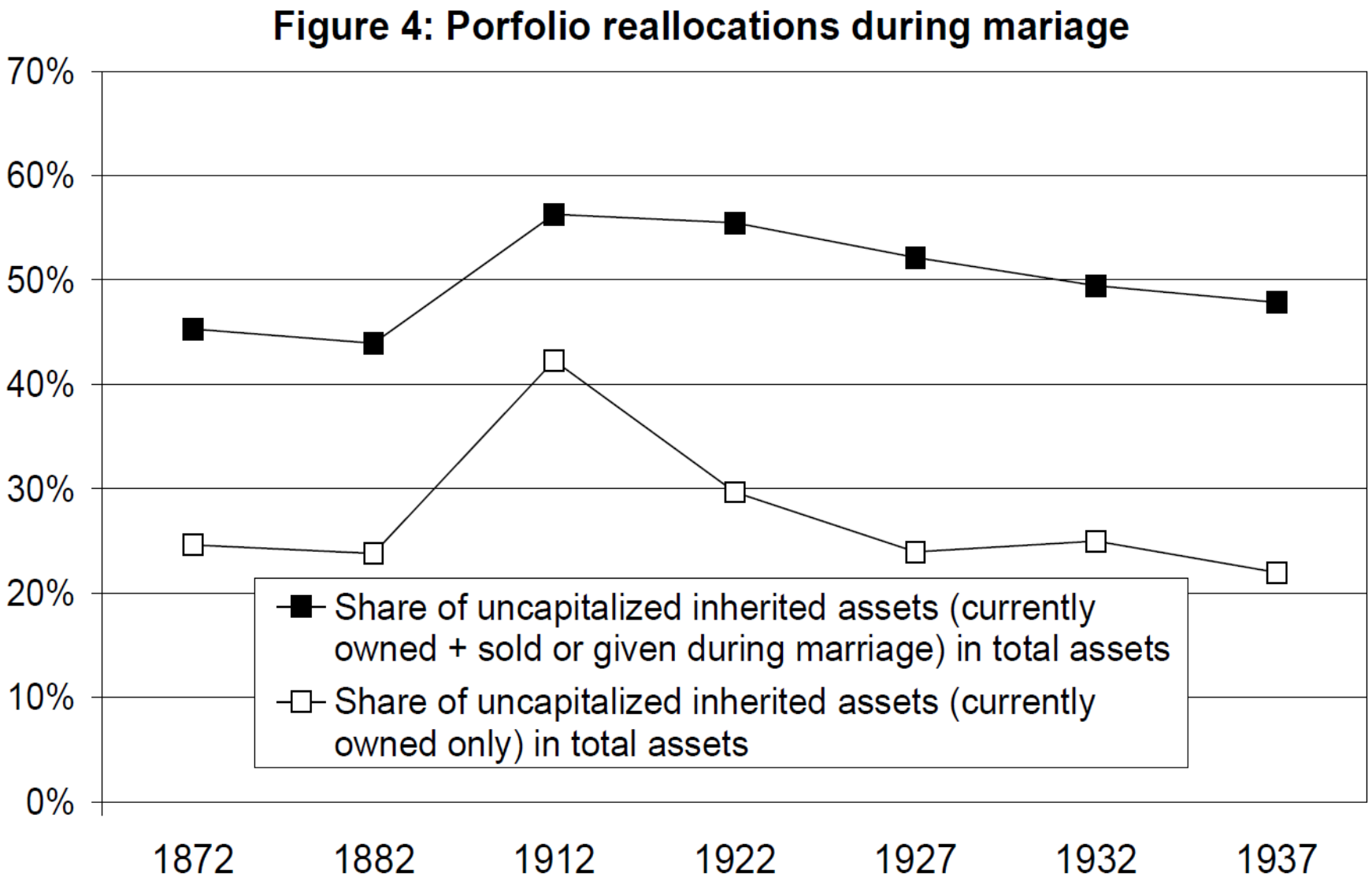


Figure 4: Porfolio reallocations during mariage
70%
60%
50%
40%
30%
20%
10%
0%
1872
1882
1912
1922
1927
1932
1937
Share of uncapitalized inherited assets (currently owned + sold or given during marriage) in total assets
Share of uncapitalized inherited assets (currently owned only) in total assets

Marginal vs average tax rates: illustration with French 2012-2013 Inheritance Tax

French 2012-2013 tax schedule (applied to 2012-2013 decedents):
(barème des droits de successions)
(see www.impots.gouv.fr)

This tax schedule applies "in direct line", i.e. for transmissions from parents to children, on individual estate shares ("parts successorales")

The exemption for children is equal to: 100 000

Inter vivos gift: exemption every 15 year

Spouses: tax exempt

Note: until 2011, top rate = 40% instead of 45%

Inheritance brackets (in excess of exemption)		**Marginal tax rate**
(€)		(%)
0	8 072	5,0%
8 072	12 109	10,0%
12 109	15 932	15,0%
15 932	552 324	20,0%
552 324	902 838	30,0%
902 838	1 805 677	40,0%
1 805 677		45,0%

Key change in 2012: in 2007-2011, children exemption = 150 000€, every 6 year

I.e. if they start giving to their children at age 50 and die at age 80, each parent could transmit 6 x 150 000€ = 900 000€ to each children with zero tax; i.e. a couple with two children could transmit 3,6 millions € with zero tax.

Since 2012, such parents can "only" transmit 4 x (3 x 100 000€) = 1,2 millions € with zero tax

In practice, less than 5% of direct line transmissions pay inheritance taxes (but this depends a lot on tax planning)

(in 1992-2006: children exemption = 50 000€, every 10 year)

Exemple 1: married couple with wealth w = 1 million € and two kids, no inter vivos gift

Assumption: each spouse owns 500 000€, and the couple wishes to transmit 500 000€ to each kid

Assume that the first decedent transmits the full property of 500 000€ to kids; then the second decedent transmits the remaining 500 000€ to the kids
Inheritance tax at first death: 5% x (8 072-0) + 10% x (12 109-8 072)+ 15% x (15 932-12 109) + 20% x (250 000 - 15 932 - 100 000) = 28 194€ = 11,3% of 250 000€

Estate tax at second death = same computation = 28 194€ = 11,3% of 250 000€

Total estate tax paid by each children = 56 389€ = 11,3% of 500 000€

Total inheritance tax paid = 112 777€ = 11,3% of 1 000 000€
Effective tax rate = 11,3% < Marginal tax rate=20%

Exemple 2: married couple with wealth w = 10 million € and two kids, no inter vivos gift

Assumption: each spouse owns 5 millions €, and the couple wishes to transmit 5 millions € to each kid

Assume that the first decedent transmits the full property of 5 millions € to kids; then the second decedent transmits the remaining 5 millions € to the kids

Inheritance tax at first death: 5% x (8 072-0) + 10% x (12 109-8 072)+ 15% x (15 932-12 109) + 20% x (552 324 - 15 932) + 30% x (902 838 - 552 324) + 40% x (1 805 677 - 902 838) + 45% x (2 500 000 - 1 805 677 - 100 000) = 842 394€ = 33,7% of 2 500 000€

Estate tax at second death = same computation = 842 394€ = 33,7% of 2 500 000€

Total inheritance tax paid by each children = 1 684 789€ = 33,7% of 5 000 000€

Total inheritance tax paid = 3 369 577 € = 33,7% of 10 000 000€

Effective tax rate = 33,7% < Marginal tax rate = 45%

- Other exemples of computations using tax schedules from France and the US: see excel file

- Chaotic evolution of top inheritance tax rates over time and across countries: see graph

- On the historical evolution of inheritance taxes:
- K. Scheve & D. Stasavadge, “Democracy, War & Wealth – Evidence from Two Centuries of Inheritance Taxation”, 2011 [article in pdf format]
- See also: J. Beckert, *Inherited wealth*, PUP 2008

Fisher, « Economists in Public Service », AER 1919

G. Du Rietz, M. Henrekson, D. Waldenström, « Swedish Inheritance and Gift Taxation (1885–2004) », in *Swedish Taxation: Developments since 1862*, Palgrave 2015, Chap. 5

Progressive wealth taxes

- Exemple with French ISF (impôt sur la fortune): see excel file
- Progressive tax schedule on net wealth >1.3m€ (with 30% exemption on primary residence) and top rate=1.5% above 10m€ (in 2017).
- Created in 1981 (IGF), suppressed in 1986, re-created as ISF in 1988 (ISF), suppressed/transformed into IFI in 2018 (see below).

Marginal vs average tax rates: illustration with French 2012-2016 Wealth Tax

French 2013 wealth tax schedule (applied to 1/1/2013 wealth):	threshold	Marginal tax rate
(barème de l'impôt sur la fortune (ISF))	(€)	(%)
(see www.impots.gouv.fr)	800 000	0,50%
Note 1: tax rates start at 0,8M€ but are not applied before 1,3M€	1 310 000	0,70%
Note 2: tax rates apply after deductions (in particular 30% deduction for main residence)	2 570 000	1,00%
	5 000 000	1,25%
	10 000 000	1,50%

Marginal vs average tax rates: illustration with French 2008-11 Wealth Tax

French 2008 wealth tax schedule (applied to 1/1/2008 wealth):
(barème de l'impôt sur la fortune (ISF))
(see www.impots.gouv.fr)

(no reform in 2008-2011, except small adjust. for inflation)

threshold (€)	marg. rate (%)
770 000	0,55%
1 240 000	0,75%
2 450 000	1,00%
3 850 000	1,30%
7 360 000	1,65%
16 020 000	1,80%

Exemple with wealth w = 1 million €

0,55% x (1 000 000 - 770 000) = 1 265€ = 0,13% of 1 000 000 €
>>> marginal wealth tax rate = 0,55%, average wealth tax rate = 0,13%

Implicit wealth income tax rate:
If r = 2%, i.e. rw = 20 000€, then average wealth income tax rate = 6,32%
If r = 10%, i.e. rw = 100 000€, then average wealth income tax rate = 1,26%

Exemple with wealth w = 10 million €

0,55% x (1 240 000 - 770 000) + 0,75% x (2 450 000 - 1 240 000) + 1% x (3 850 000 - 2 450 000)
+ 1,30% x (7 360 000 - 3 850 000) + 1,65% x (10 000 000 - 7 360 000) = 114 850€ = 1,15% of 10 000 000 €
>>> marginal wealth tax rate = 1,65%, average wealth tax rate = 1,15%

Implicit wealth income tax rate:
If r = 2%, i.e. rw = 200 000€, then average wealth income tax rate = 57,43%
If r = 5%, i.e. rw = 500 000€, then average wealth income tax rate = 22,96%
If r = 10%, i.e. rw = 1 000 000€, then average wealth income tax rate = 11,48%

- See Zucman, G., “Les hauts patrimoines fuient-ils l’ ISF? Une estimation sur la période 1995-2006 », PSE Master Thesis, 2008 PSE master thesis 2008 : not much evidence of capital flight (outward and inward mobility seem to balance each other, and/or to be dominated by domestic effect)

•See also Garbinti-Goupille-Piketty 2016, Accounting for Wealth Inequality Dynamics: Methods, Estimates and Simulations for France (1800-2014) (Slides): combining wealth survey, income tax capitalization, inheritance tax multiplier, wealth tax (ISF) data & national accounts: top financial wealth has increased faster than real estate wealth (& a lot faster than national income) since 1980s-90s; little evidence of k flight

•Top financial wealth increased as fast (or even faster) in France as in other European countries (e.g. UK). With capital flight, one should have seen much less growth in France

•See also IPP 2021 Report on ISF-IFI reform: no evidence of additional investment in firms benefiting from the tax cut

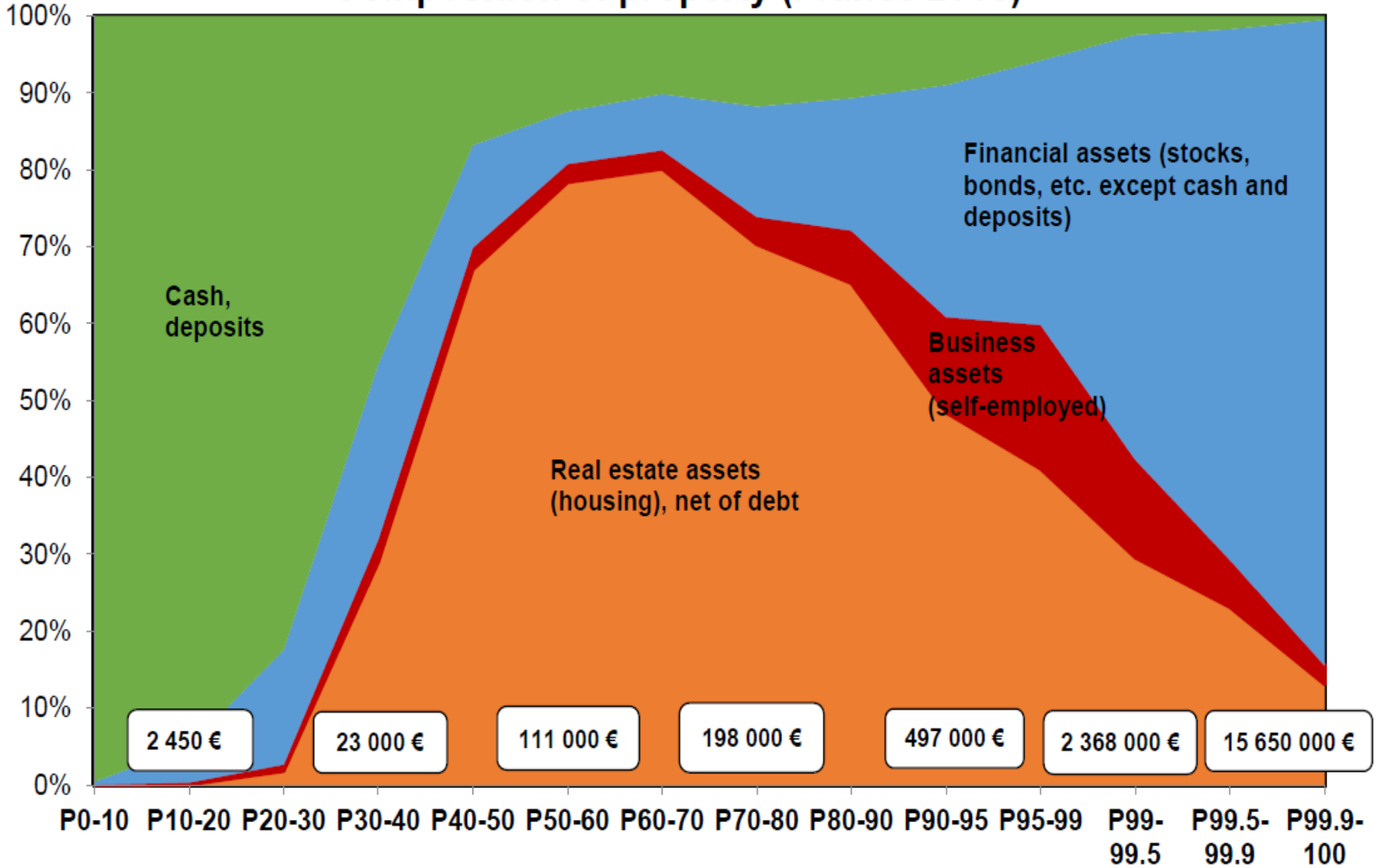
Wealth taxes vs property taxes

- Progressive taxes on net wealth (real estate + business + financial assets – debt) still exist in Switzerland, France, Spain, Norway. Abolished in Sweden and Germany during the 2000s (mostly because of valuation problems, see above)
- Most common wealth tax: « property tax » = proportional tax on real estate assets (land and housing), created in early 19c or earlier
- In 19c US, property taxes were also targetting financial assets; this changed due to lack of fiscal coordination and to the development of federal income and inheritance tax
- Proportional, non-inflation-adjusted property taxes are at the origin of US tax revolt in the late 1970s: see I. Martin, *The Permanent Tax Revolt: How the Property Tax Transformed American Politics*, SUP 2008; *After the Tax Revolt: California's Proposition 13 Turns 30*, 2008

- UK « mansion tax »: progressive tax on real estate transactions (very low rates <0.1m£, much higher rate above 1m£ or 2m£)
- Not clear why transactions should be taxed (better to have lower annual tax rates, independantly of whether you move or not), or why only real estate should be taxed rather than full net wealth

- French IFI (impôt sur la fortune immobilière) is due to replace ISF in 2018. Same progressive tax schedule on net wealth >1.3m€ (with 30% exemption on primary residence) and top rate=1.5% above 10m€. Except that only real estate assets are taken into account (not financial assets).
- Given that most wealth is financial at the top of the distribution, this is almost like a complete suppression (tax revenues are due to fall from about 5 billion to 1.5 billion €).

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).

- **Justifications for IFI vary**:
- **Either in the name of pragmatism**: « financial assets are impossible to tax because of tax evasion, offshore financial wealth ». Ok, why not, except that top financial wealth (incl. top financial assets reported to ISF) have increased more than real estate wealth. Of course, one could still improve ISF administration by having automatic transmission of information, prefilled declaration, etc. In any case, fighting tax evasion by suppression taxation seems odd.
- **Or in the name of investment**: « financial assets generate real economic activity, not real estate assets ». Impossible to understand: if I spend 10 millions euros to construct a new building, I generate more economic activity than if I purchase a financial portfolio from someone else (or abroad). Confusion between real-estate vs financial and new investment vs portfolio reallocation. These are two very different issues.