Should the Rich Pay for Fiscal Adjustment? Income and Capital Tax Options

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This talk: two points

- **1. The rise of European wealth-income ratios**

 - Top income shares ↑ much more in US than in Europe

 - But wealth-income ratios ↑ much more in Europe

(EU GDP: 12tr €; net private wealth: 60tr € = 500% GDP)

   (memo: China's reserves < 3tr €: 20 times smaller)

→ In Europe, main fiscal reserve = wealth taxation
    (while in US, main reserve = top income taxation)

- **2. A proposal for a European wealth tax**

 - A comprehensive wealth tax with rate 1% above 1m€
    and 2% above 5m€ would raise ≈ 2% of EU GDP

 - Other options (top income tax, corporate tax, FTT) are
    also useful, but raise less revenue

1. The Rise of European wealth-income ratios

- **Top income shares ↑ much more in US than in Europe**
- **World Top Incomes Database**: 25 countries, annual series over most of 20^C, largest existing historical data set on income inequality
- In US, top 10% income share rose from 35% to 50% of national income (top 1% share rose from <10% to >20%) and absorbed 70% of macro growth over 1980-2010
- In Continental Europe, there was also a rise in top income shares, but it started later (mid 1990s rather than early 1980s) and was quantitatively much smaller
- F Hollande's 75% top rate above 1m€ would be much more useful in US than in France

THE WORLD TOP INCOMES DATABASE

TOP INCOMES GLOBAL PERSPECTIVE

TOP INCOMES OVER THE 20TH CENTURY
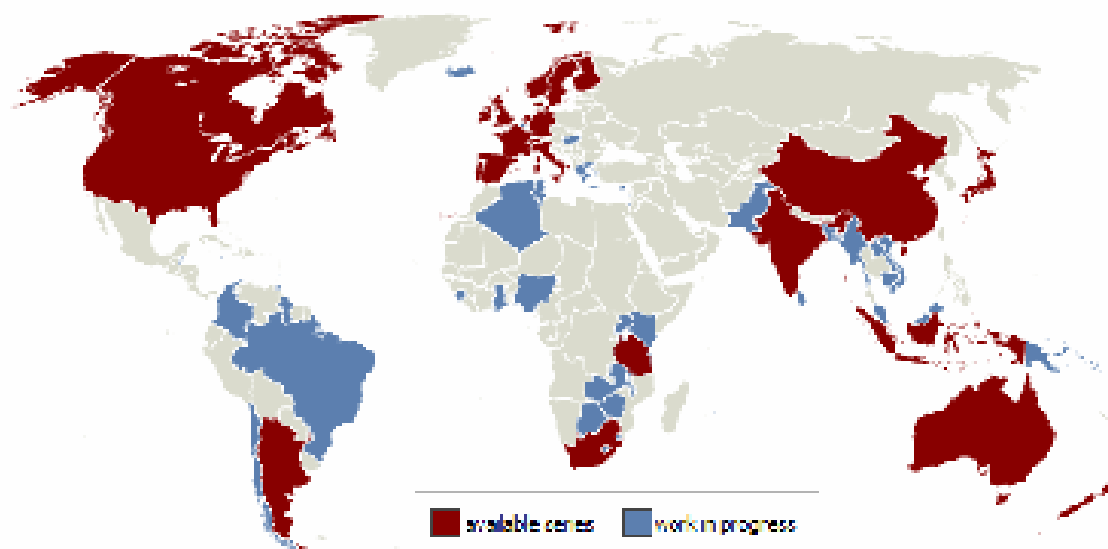
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The Database

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Acknowledgments

available series   work in progress

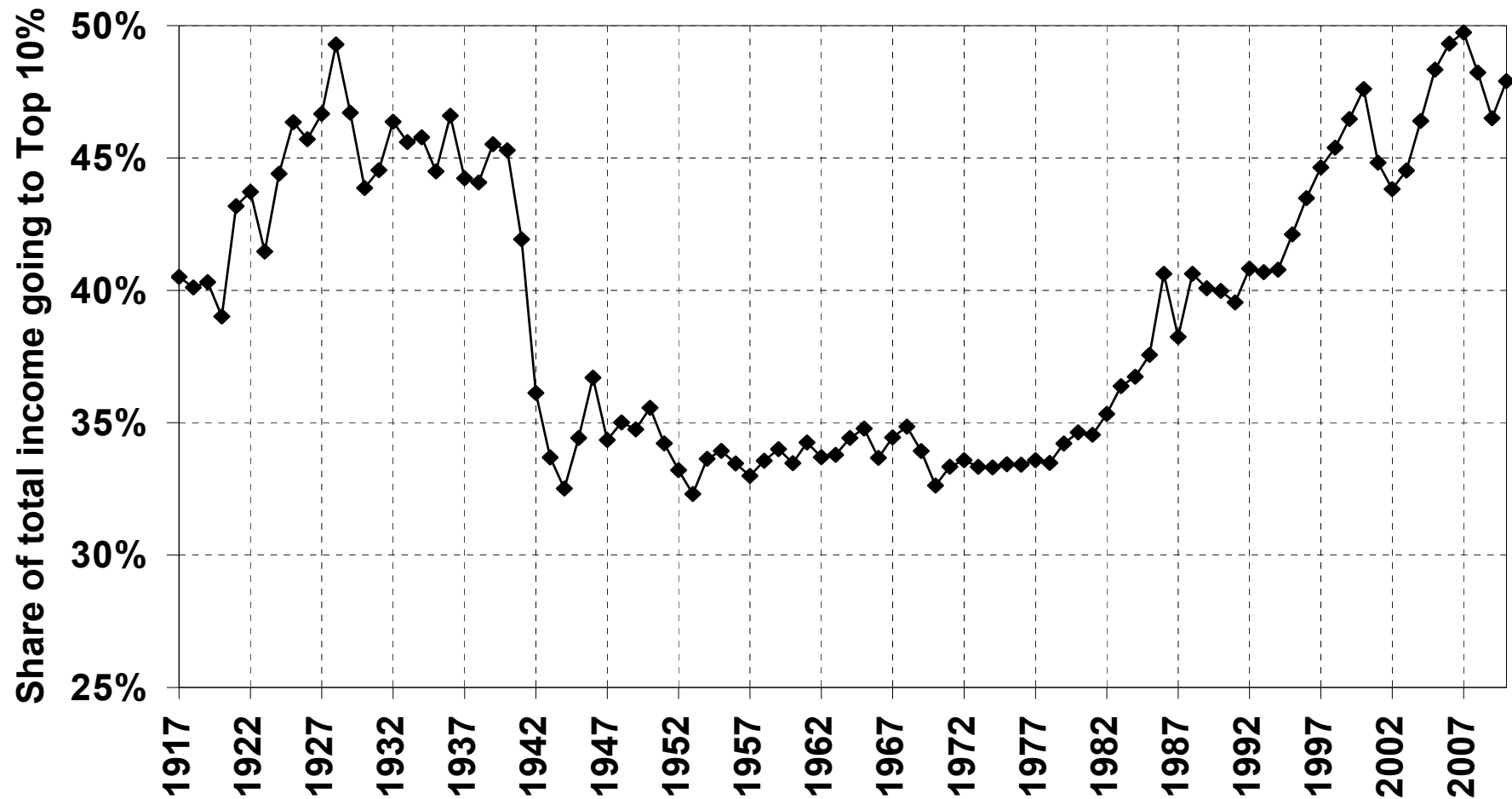Institute for New Economic Thinking

CENTER FOR EQUITABLE GROWTH

FIGURE 1

The Top Decile Income Share in the United States, 1917-2010

Source: Piketty and Saez (2003), series updated to 2010.
Income is defined as market income including realized capital gains (excludes government transfers).
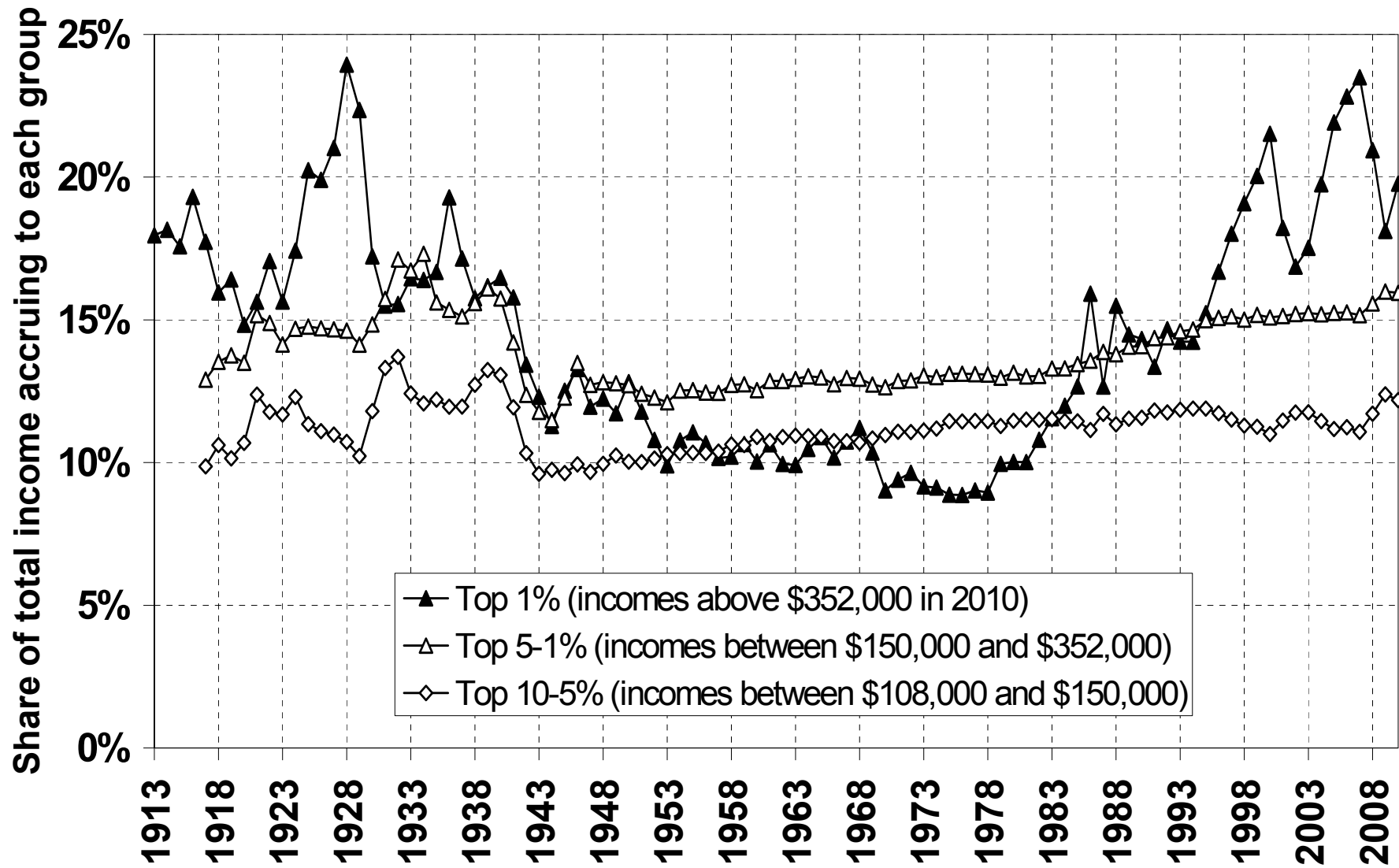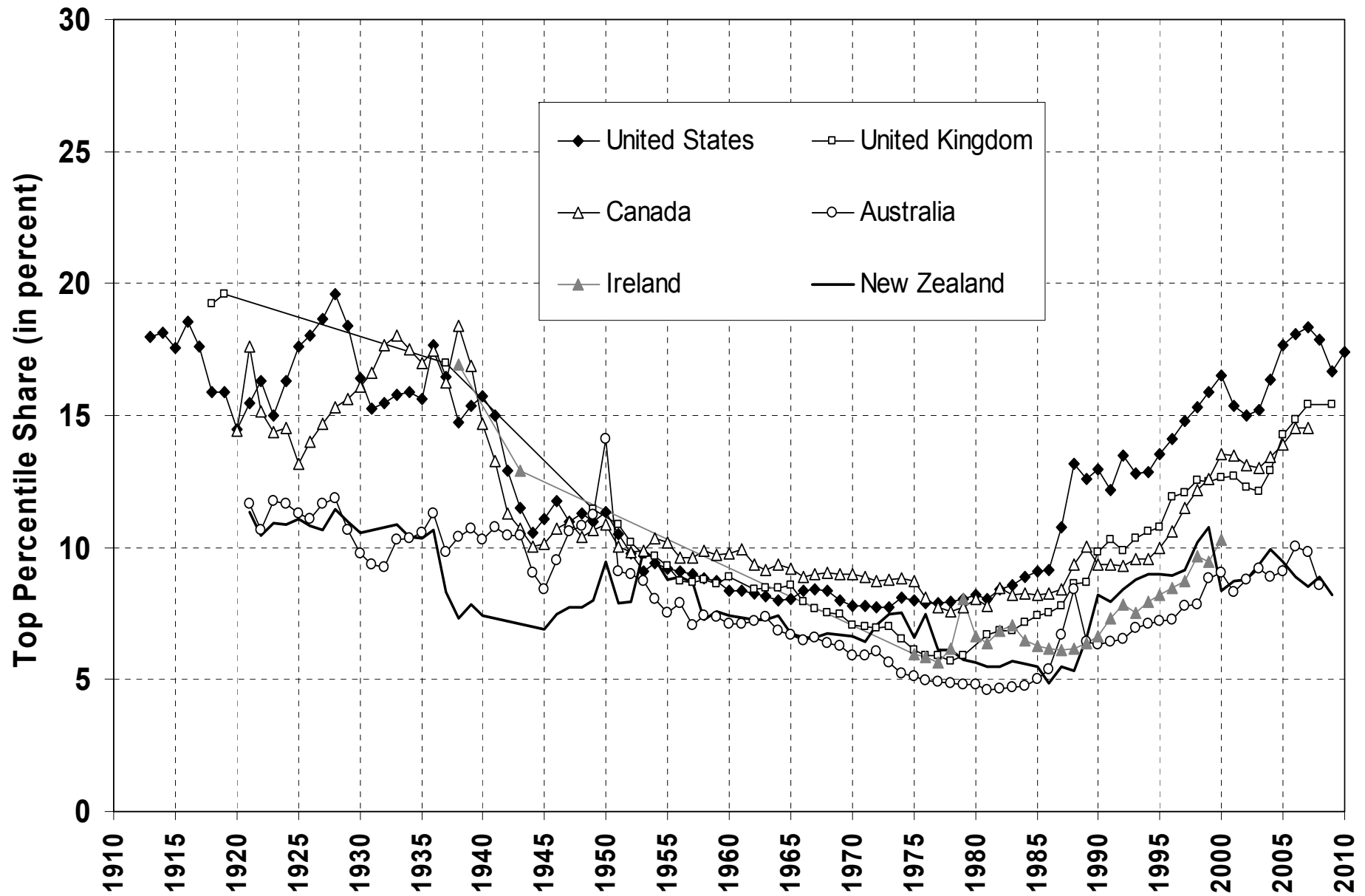
FIGURE 2

Decomposing the Top Decile US Income Share into 3 Groups, 1913-2010

Top 1% share: English Speaking countries (U-shaped), 1910-2010

Legend:
- ◆ United States
- □ United Kingdom
- △ Canada
- ○ Australia
- ▲ Ireland
- — New Zealand

Y-axis: Top Percentile Share (in percent)
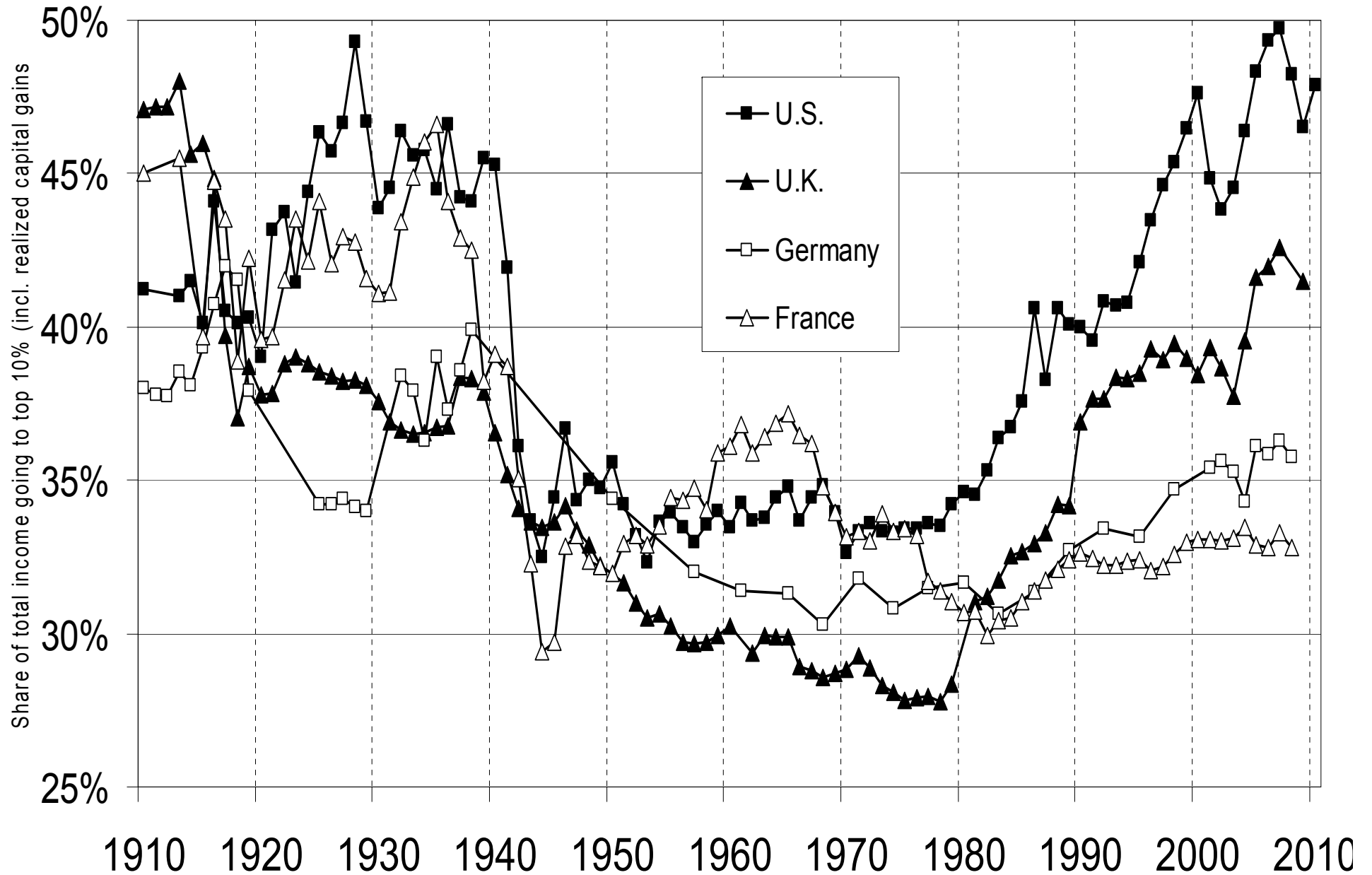
Top 1% share: Continental Europe and Japan (L-shaped), 1900-2010
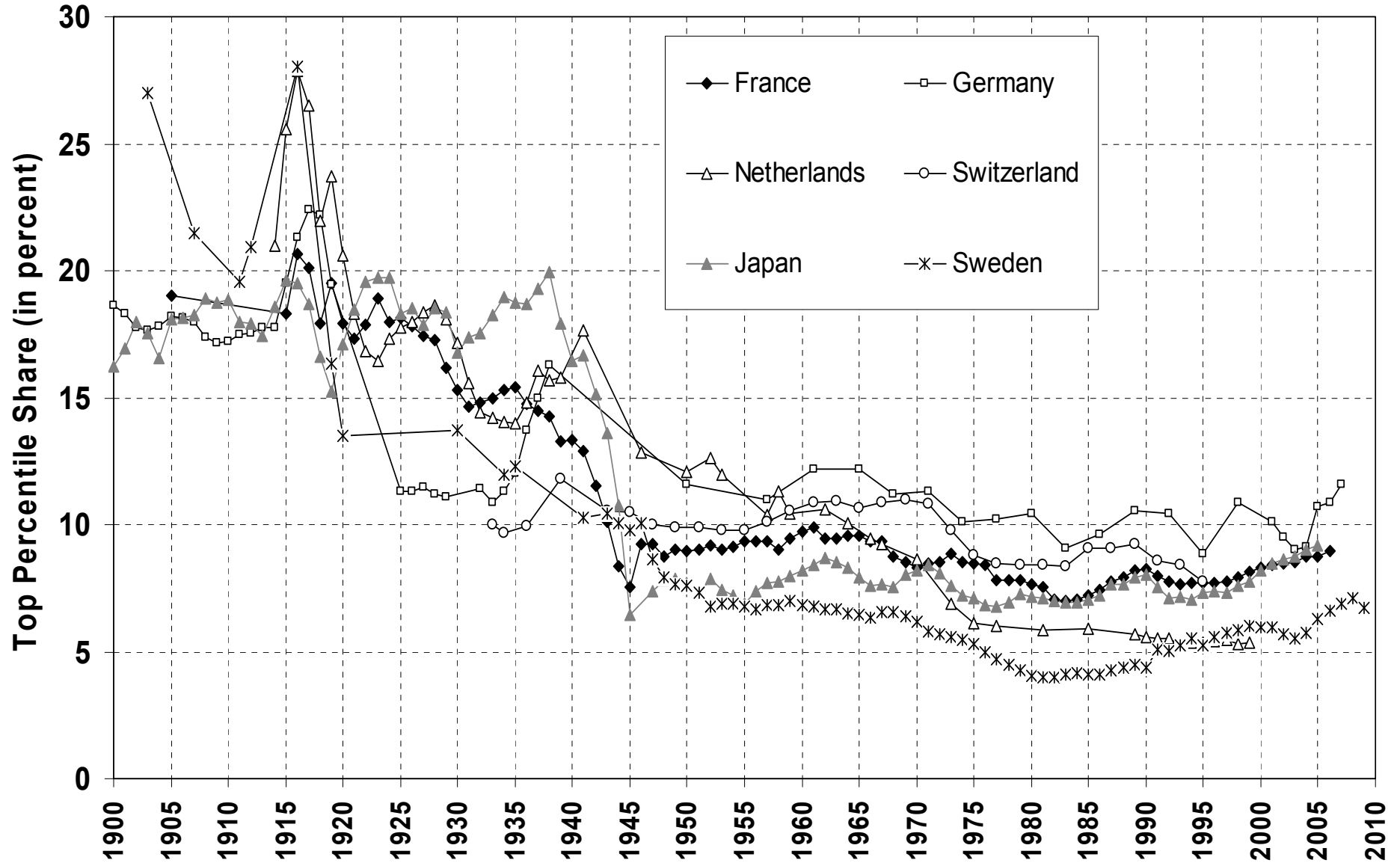
Top 1% share: Continental Europe, North vs South (L-shaped), 1900-2010
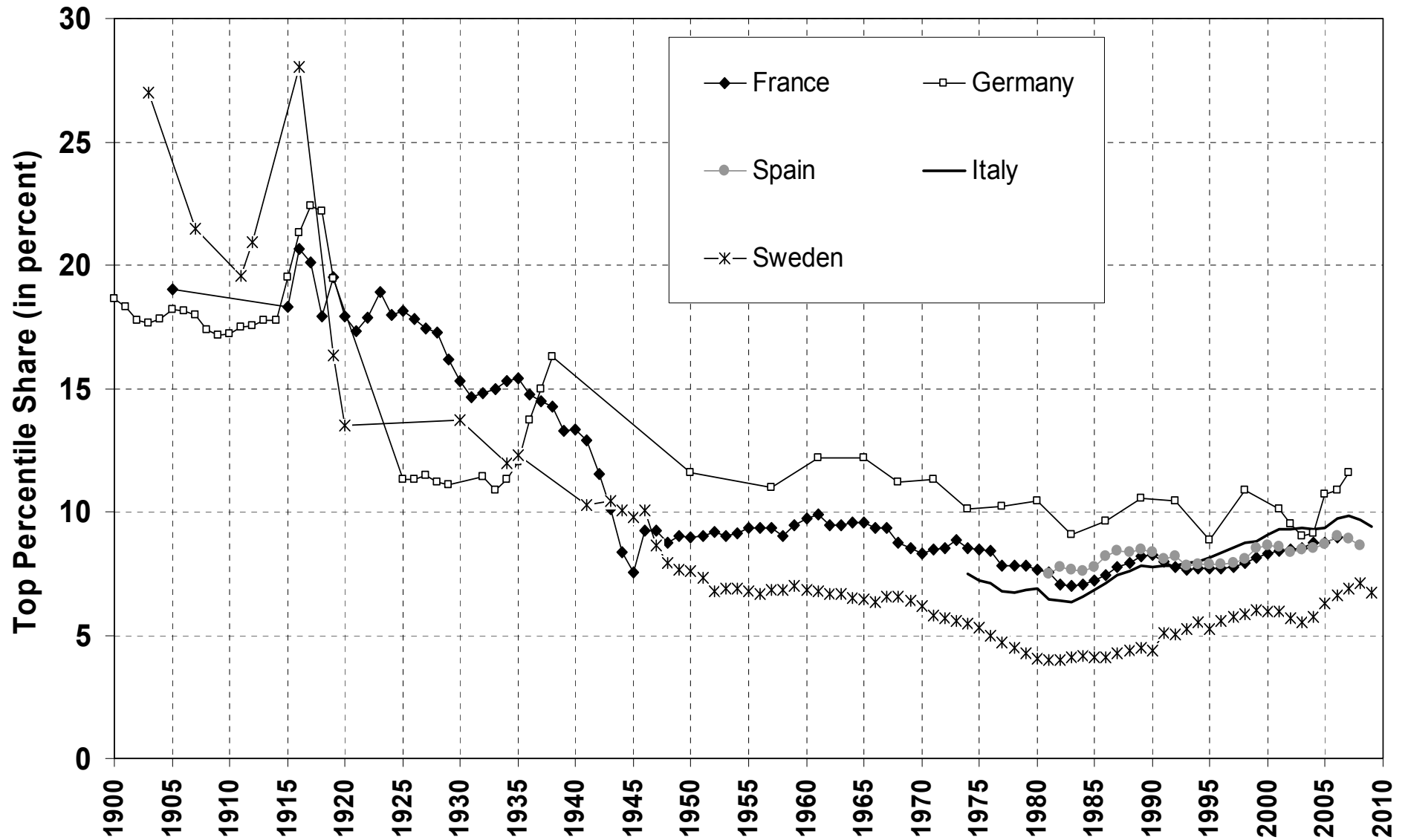
Top Decile Income Shares 1910-2010

Source: World Top Incomes Database, 2012. Missing values interpolated using top 5% and top 1% series.

- **But wealth-income ratios ↑ much more in Europe**

- Results from Piketty-Zucman, « Capital is Back: Wealth-Income Ratios in Rich Countries 1870-2010 »
- **How do aggregate wealth-income ratios evolve in the long run, and why?**
- Until recently, it was impossible to adress properly this basic question: national accounts were mostly about flows on income, output, savings, etc., and very little about stocks of assets and liabilities
- **In this paper we compile a new data set of national balance sheets in order to adress this question:**
- 1970-2010: US, Japan, Germany, France, UK, Italy, Canada, Australia (= top 8 rich countries)
- 1870-2010: US, Germany, France, UK

   (official national accounts + historical estimates)

- **Result 1**: we find in every country a gradual rise of wealth-income ratios over 1970-2010 period, from about 200%-300% in 1970 to 400%-600% in 2010
- **Result 2**: in effect, today's ratios seem to be returning towards the high values observed in 19^c Europe (600%-700%)
- This can be accounted for by a combination of factors:
- Politics: long run asset price recovery effect (itself driven by changes in capital policies since WWs)
- Economics: slowdown of productivity and pop growth

Harrod-Domar-Solow: wealth-income ratio **β = s/g**

If saving rate s=10% & growth rate g=3%, then β≈300%

But if s=10% & g=1.5%, then β≈600%

Explains long run change & level diff Europe vs US

Private wealth / national income ratios, 1970-2010
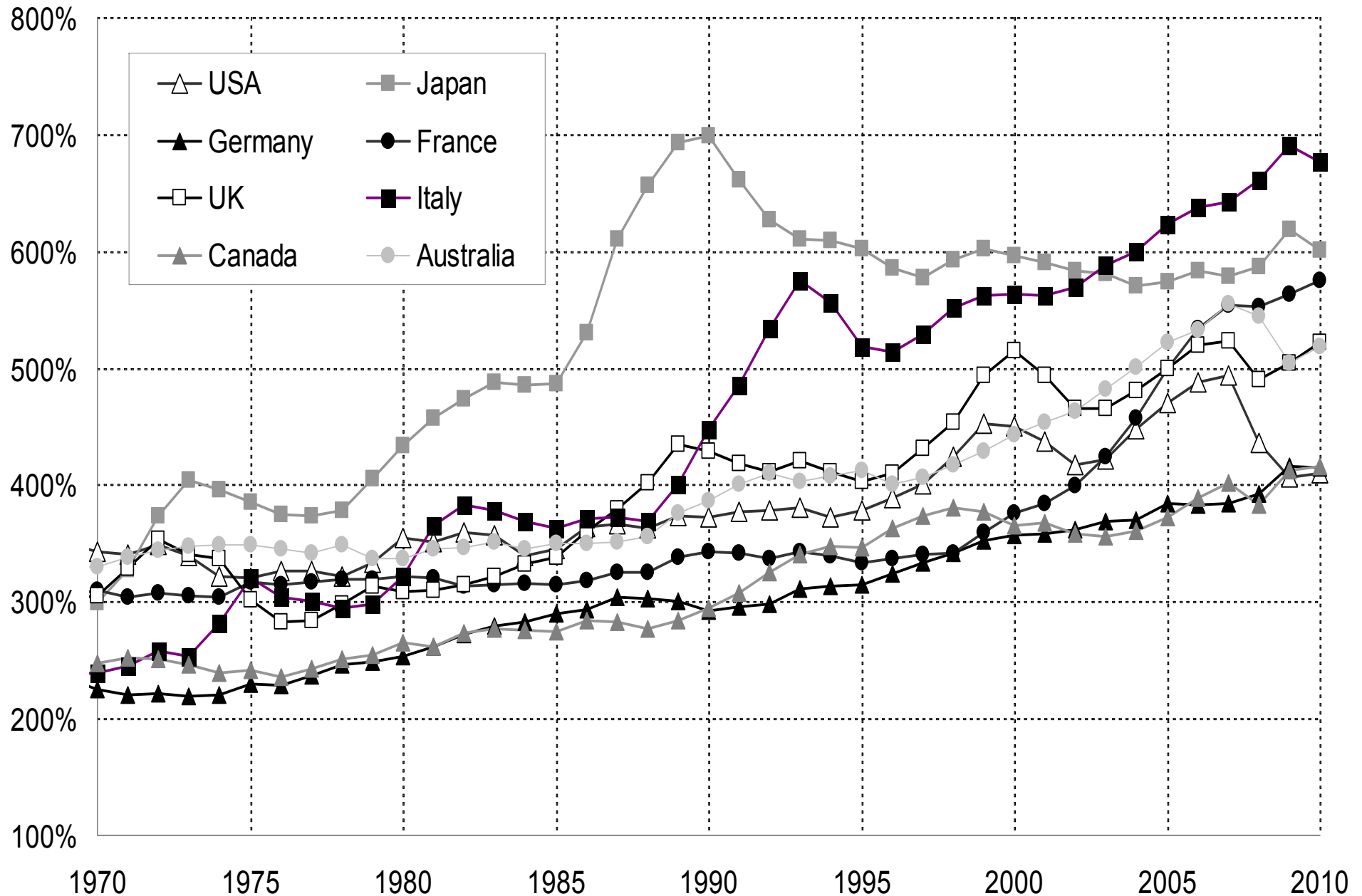
Legend:
- USA
- Germany
- UK
- Canada
- Japan
- France
- Italy
- Australia

Authors' computations using country national accounts. Private wealth = non-financial assets + financial assets - financial liabilities (household & non-profit sectors)

Private wealth / national income ratios, 1970-2010 (incl. Spain)
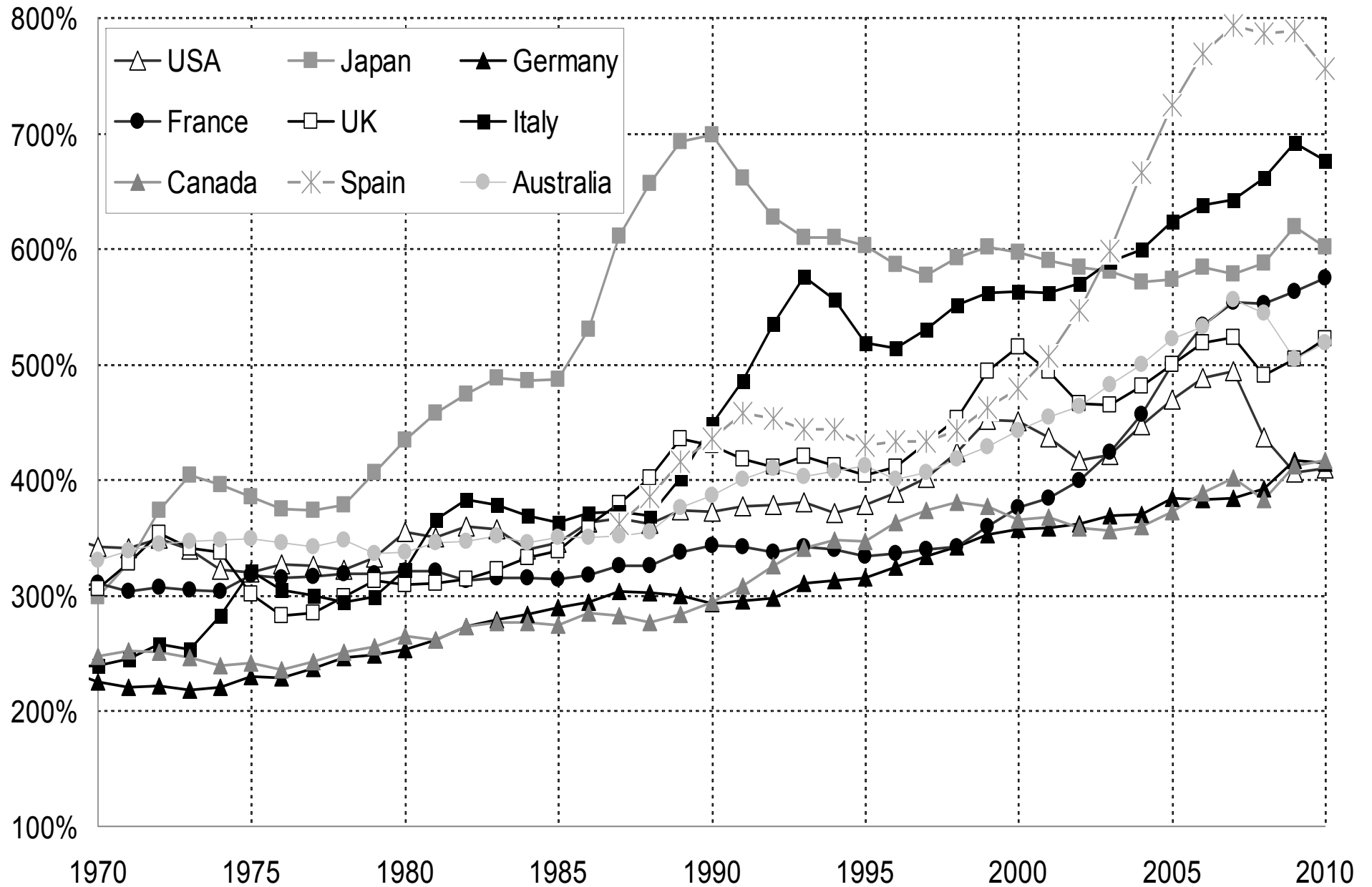
Authors' computations using country national accounts. Private wealth = non-financial assets + financial assets - financial liabilities (household & non-profit sectors)

Private wealth / national income ratios in Europe, 1870-2010

Authors' computations using country national accounts. Private wealth = non-financial assets + financial assets - financial liabilities (household & non-profit sectors)

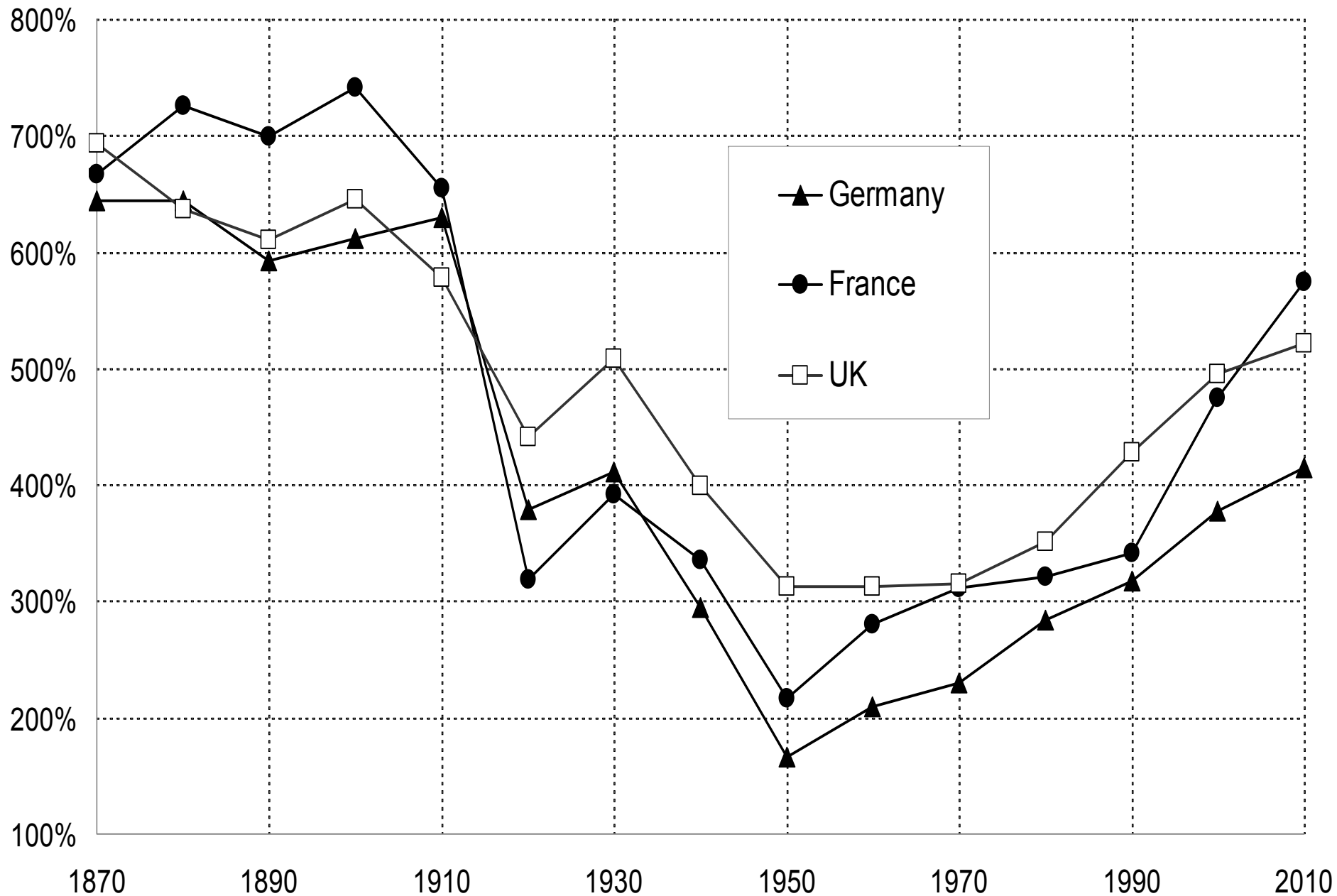# Private wealth / national income ratios 1870-2010
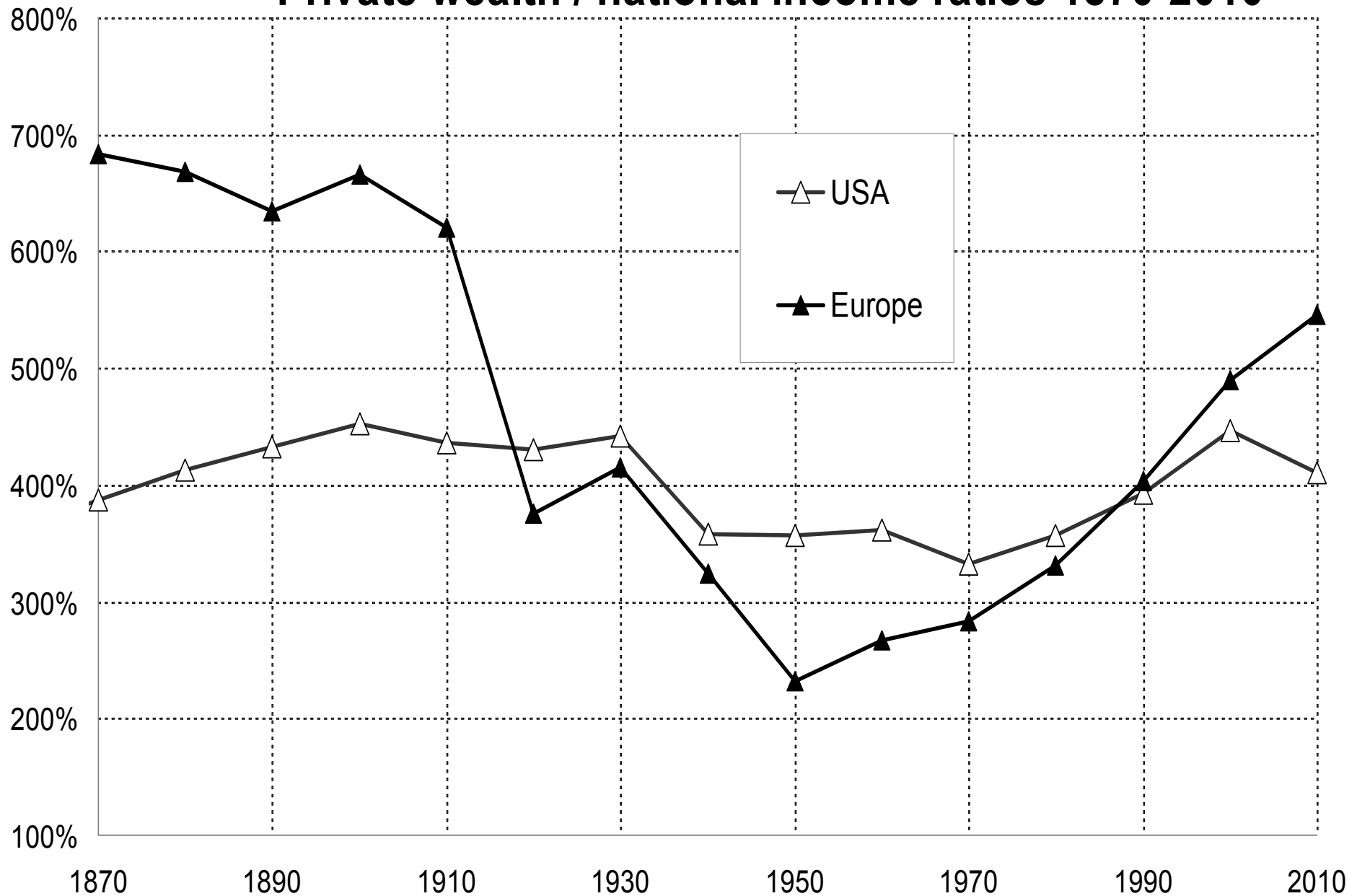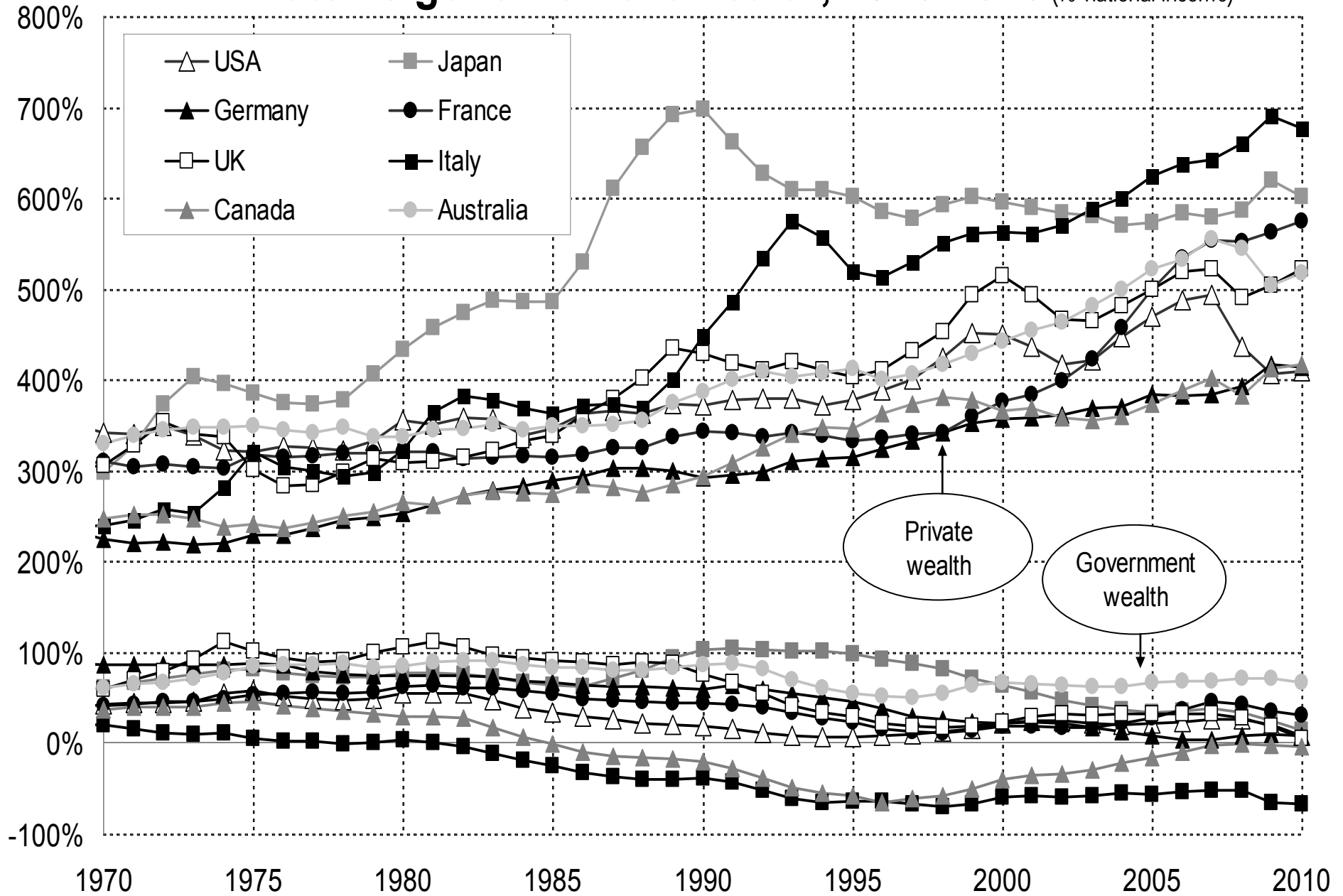

Authors' computations using country national accounts. Private wealth = non-financial assets + financial assets - financial liabilities (household & non-profit sectors)

Private vs governement wealth, 1970-2010 (% national income)

Authors' computations using country national accounts. Government wealth = non-financial assets + financial assets - financial liabilities (govt sector)

2. A Proposal for a European Wealth Tax

- **Comprehensive wealth tax** based upon market-value personal net worth = non-fin. + financial assets – liabilities
- Very different from 19^c style wealth tax based upon cadastral values (→repealed in Germany, Spain, Sweden..)
- Closer to French ISF (annual wealth returns with assets valued at market prices; ISF created in late 20^c: inflation)
- But with a broader tax base than ISF, and with returns prefilled by tax administration on the basis of information transmitted by banks
- It requires a lot of information, but this is technically doable
- Key is political: we should not have free trade agreements without automated cross-border information exchange on financial assets and financial flows

- **An illustrative tax schedule**:
- Marginal tax rate = 1% if net wealth > 1m €

  (about 2,5% of EU pop)

- Marginal tax rate = 2% if net wealth > 5m €

  (about 0,2% of EU pop)

- Simulations: this would raise ≈ 2% of EU GDP
- Why so much revenue? For two reasons:
- (1) Aggregate private wealth is very large : 500% GDP
- (2) Wealth is highly concentrated: top 10% wealth holders have 60% of aggregate wealth, and top 1% have 25%
- I.e. top 1% wealth tax base = 125% of GDP

(top 2.5% wealth tax base = 200% GDP, top 0.1% = 50%)

Shares in aggregate labor income or wealth	Labor income 1910-2010	Wealth	
		1910	2010
Top 10% "Upper Class"	30%	90%	60%
incl. Top 1% "Very Rich"	6%	50%	25%
incl. Other 9% "Rich"	24%	40%	35%
Middle 40% "Middle Class"	40%	5%	35%
Bottom 50% "Poor"	30%	5%	5%

Inequality in Europe 1910-2010

- **Other options raise less revenue**

- FTT: less than 0,5% GDP (much less if successful) (double dividend illusion)

- Top income tax: about 0,5% GDP with a 20% supplementary tax rate on top 1% incomes (100 000+)

  (top 1% income tax base = 5% GDP)

- Corporate tax: about 1% GDP with a 10% supplementary tax rate on corporate profits

  (corporate tax base = 10%-12% GDP)

→ all these options are useful, especially corporate tax, given tax competition and large decline in rates; but in the long run the wealth tax is even more useful

Corporate tax competition in the EU
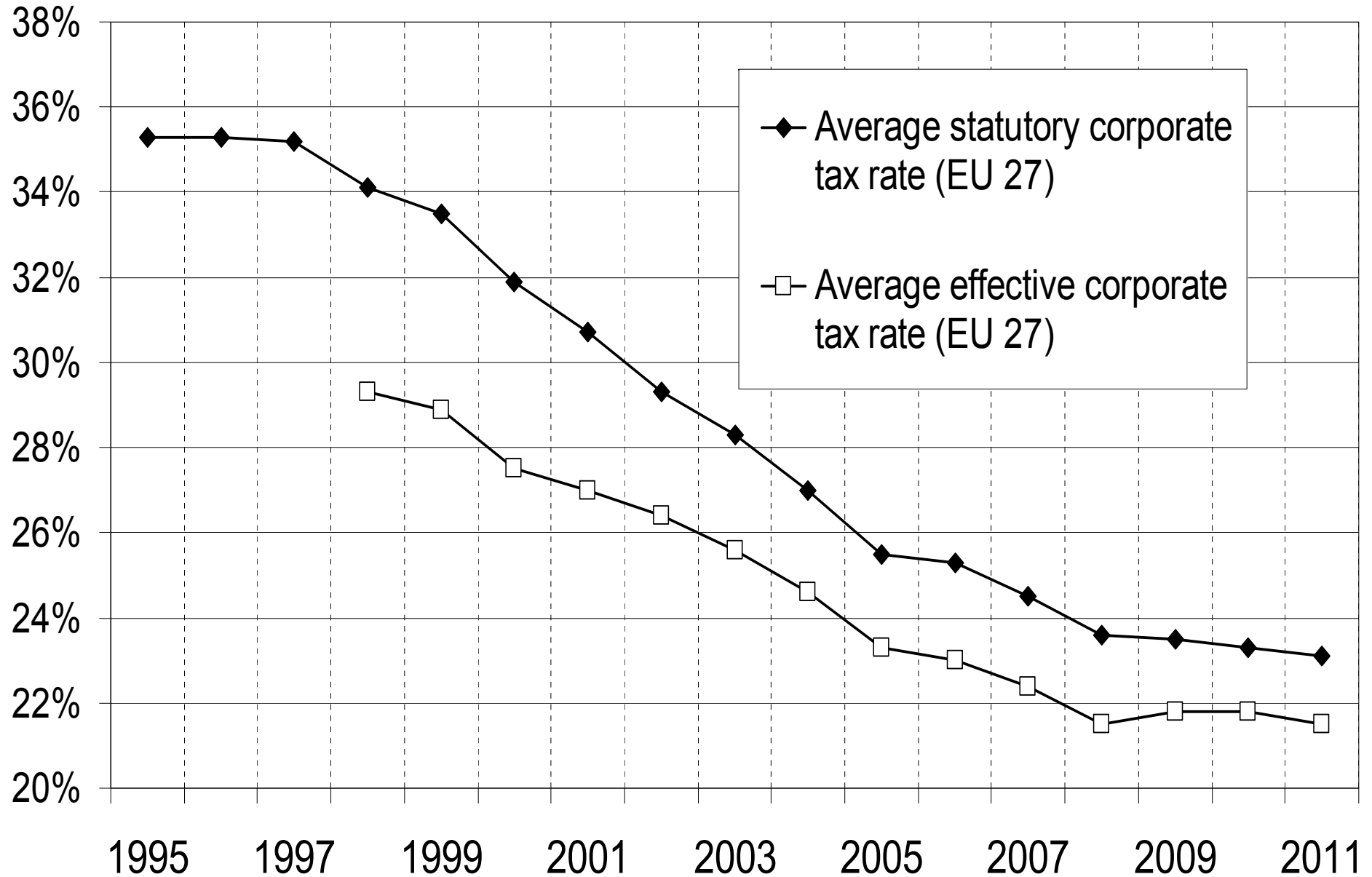
Source: Taxation trends in the EU, Eurostat 2011

Personal income tax competition in the EU

Legend:
- ■ Average top personal income tax rate (Euro zone)
- ◇ Average top personal income tax rate (EU 27)
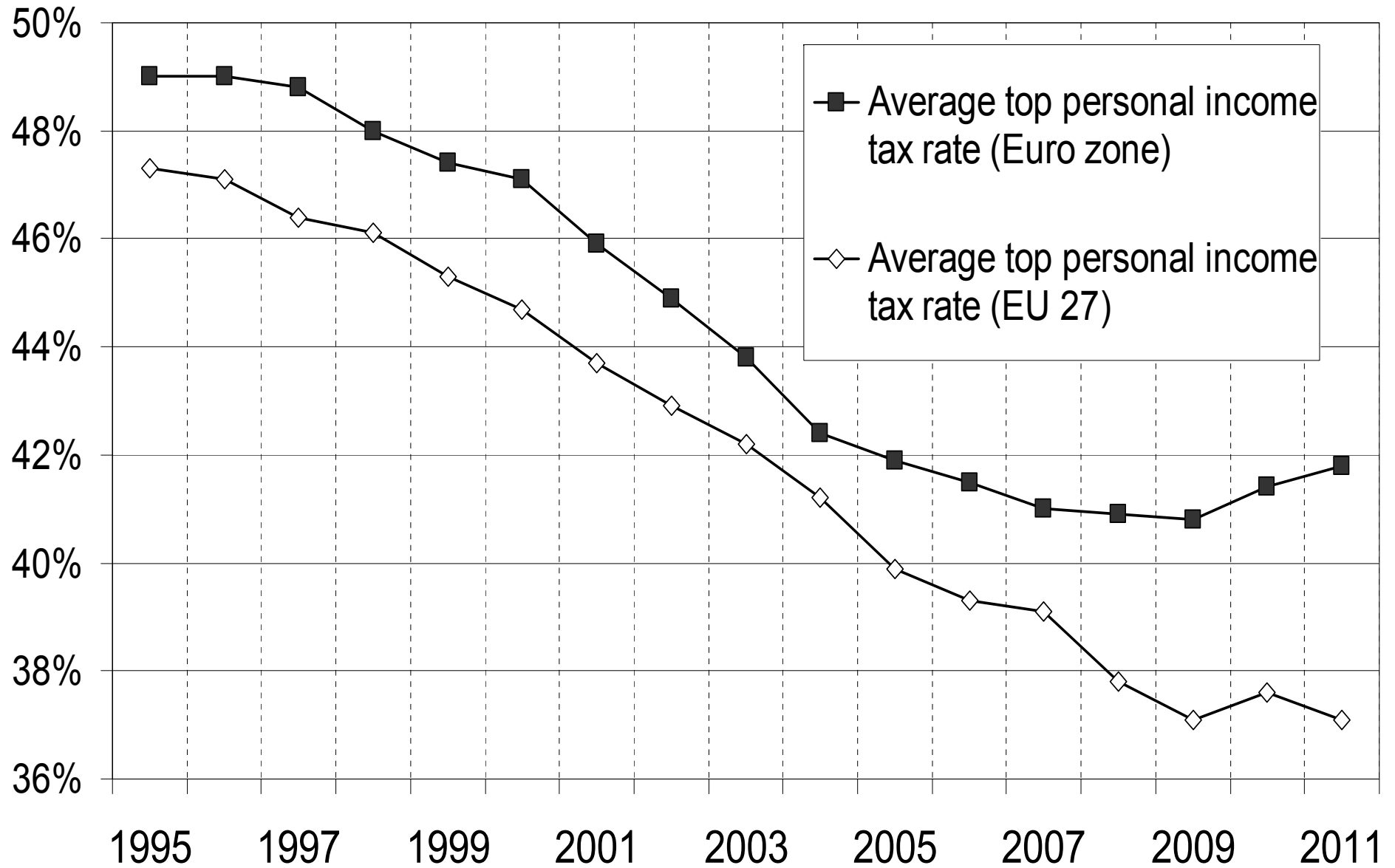
Source: Taxation trends in the EU, Eurostat 2011

Summing up

- Eurotax can be useful if it helps member countries raise the tax revenue (1) that are adapted to their economic fundamentals; (2) which they cannot raise on their own

- Wealth tax meets the two criteria

- Top income or corporate tax meets also the two criteria; corporate tax is a tempting and useful option, especially given large decline in tax rate; but in the long run wealth tax is even more useful: it raises more revenue, and in a more efficient manner (better to tax stock rather than flow)

- VAT or general income or payroll tax increase meets none of the criteria: it is not adapted to economic fundamentals, and countries can easily raise them alone

Supplementary slides
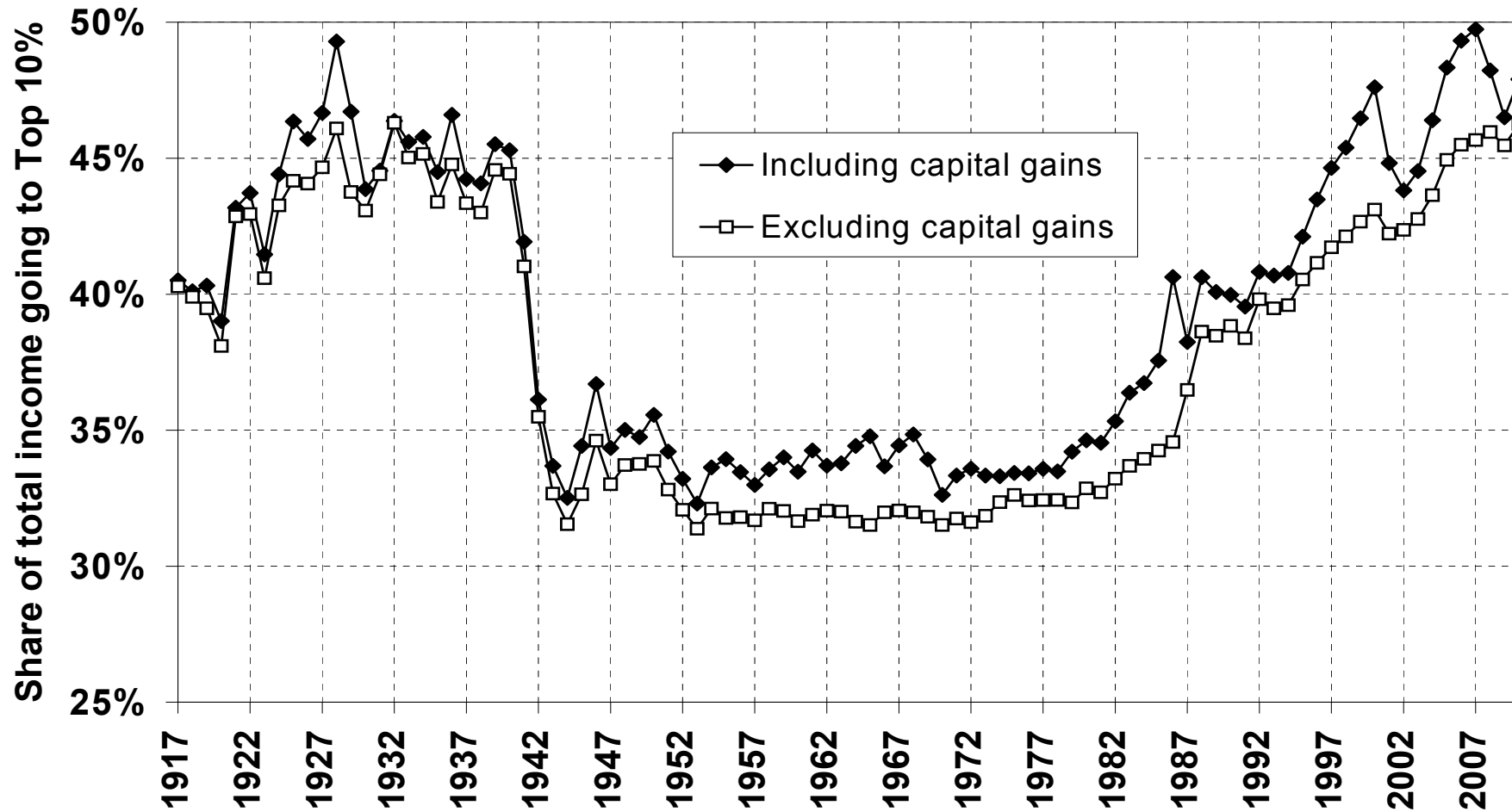
FIGURE 1

The Top Decile Income Share in the United States, 1917-2010

Source: Piketty and Saez (2003), series updated to 2010.
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Top 1% share: Developing and emerging countries, 1920-2010

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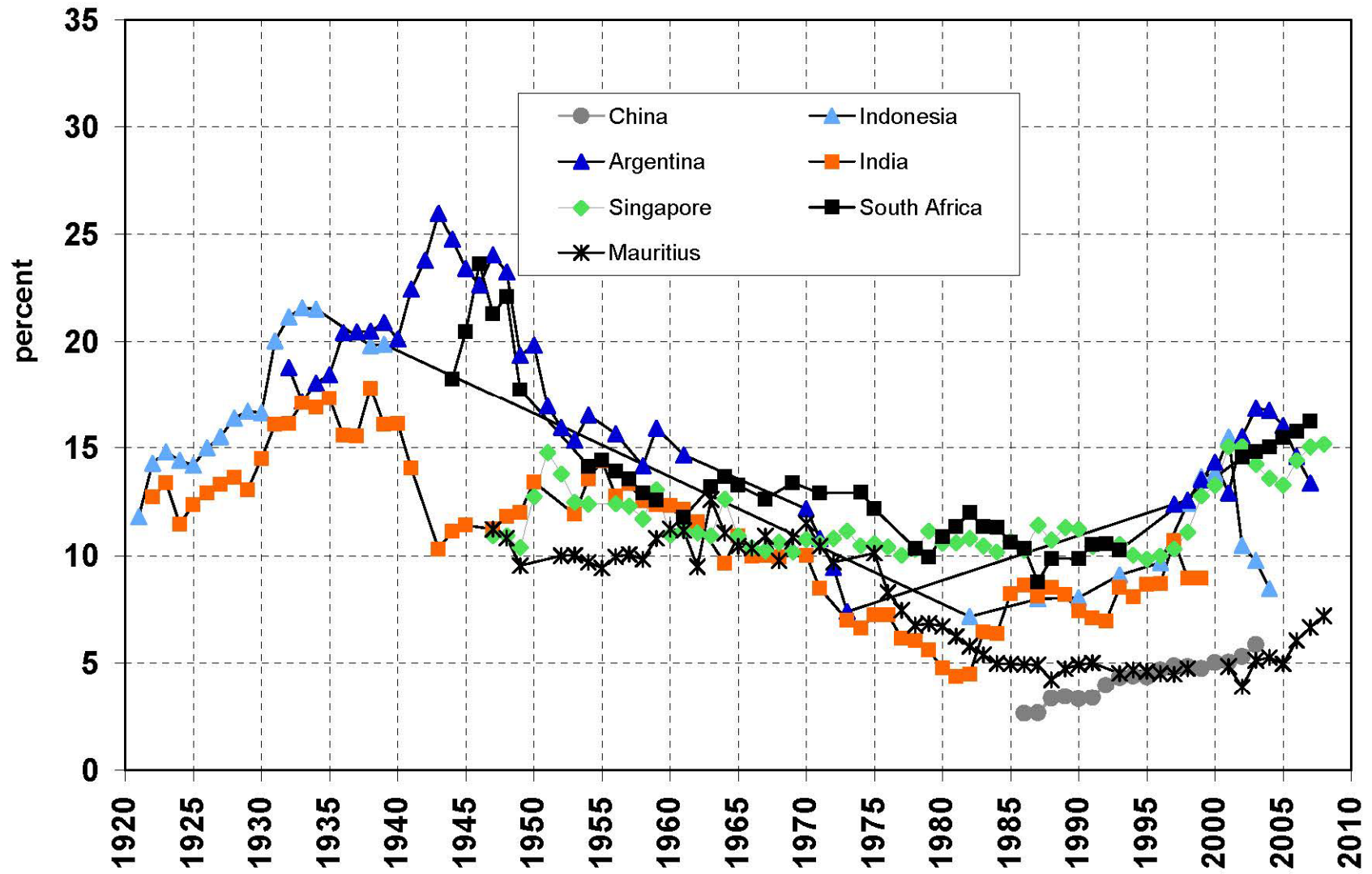
Top Income Tax Rates 1910-2010
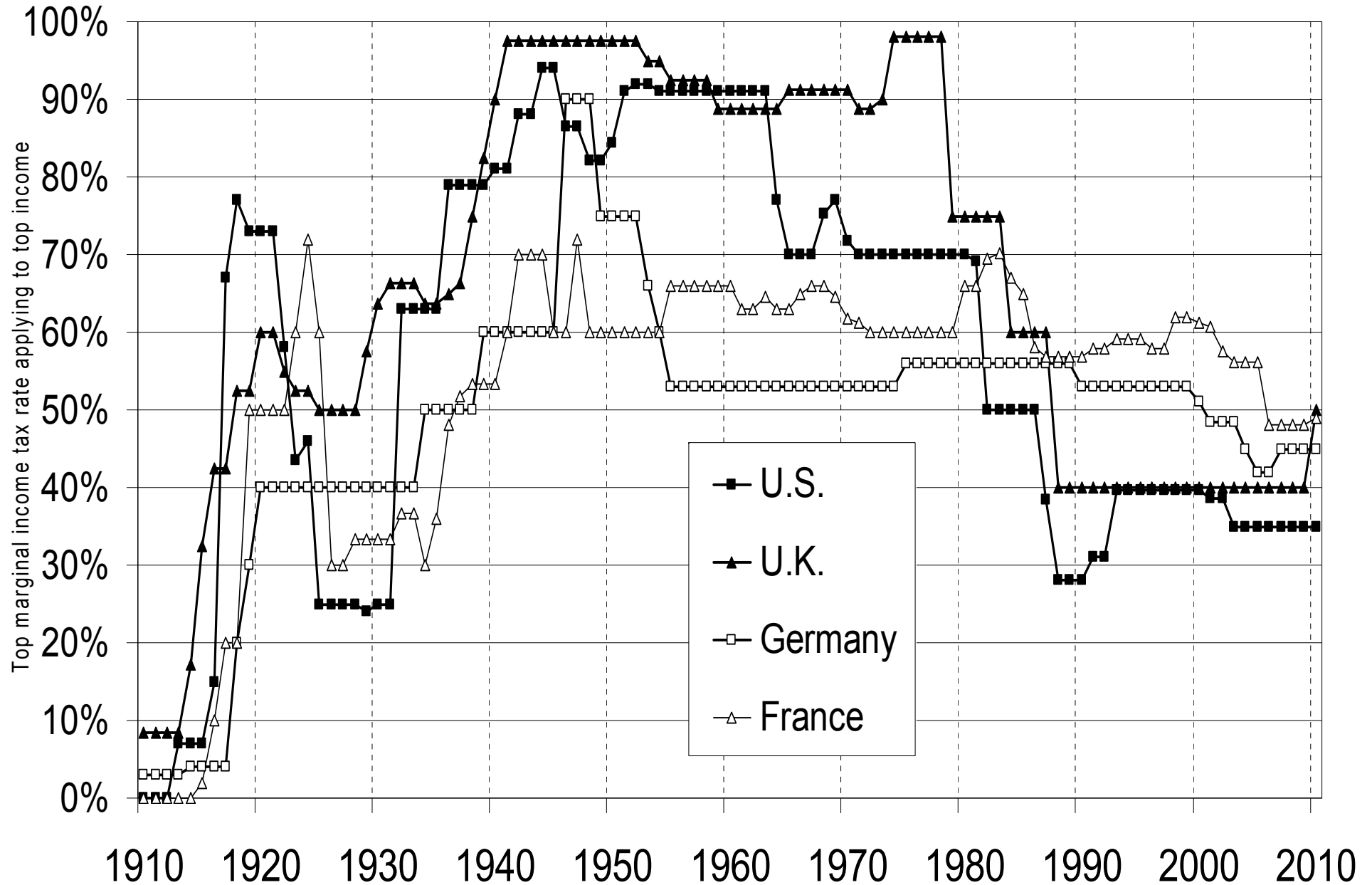
Source: World Top Incomes Database, 2012.

The changing nature of national wealth, UK 1700-2010

Legend:
- Net foreign assets
- Other domestic capital
- Housing
- Agricultural land

Y-axis: (% national income) — 0%, 100%, 200%, 300%, 400%, 500%, 600%, 700%, 800%

X-axis: 1700, 1750, 1810, 1850, 1880, 1910, 1920, 1950, 1970, 1990, 2010
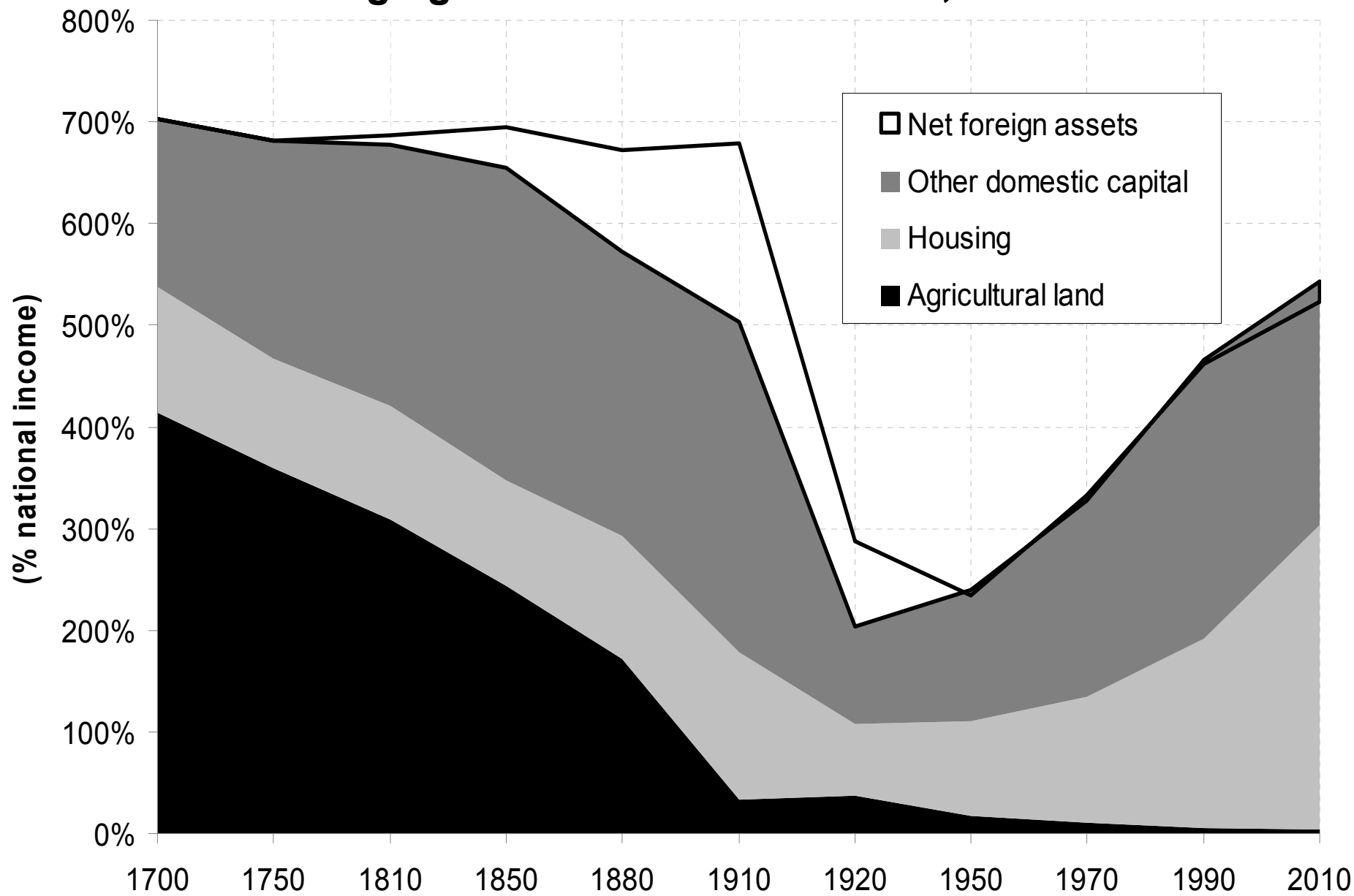
National wealth = agricultural land + housing + other domestic capital goods + net foreign assets

Concepts & methods

- National income Y = domestic output Y_d + r NFA
- Private wealth W = non-financial assets + financial assets – financial liabilities   (household & non-profit sector)
- $\beta = W/Y$ = private wealth-national income ratio

- Govt wealth W_g = non-fin + fin assets - fin liab (govt sector)
- National wealth $W_n = W + W_g = K +$ NFA

with K = domestic capital (= land + housing + other domestic k)
   NFA = net foreign assets

- $\beta_n = W_n/Y$ = national wealth-national income ratio

- Domestic output $Y_d = F(K,L)$ (L = labor input) (e.g. $K^\alpha L^{1-\alpha}$)
- Capital share $\alpha = r\,\beta$ (r = average rate of return to wealth)

Table 2: Growth rate vs private saving rate in rich countries, 1970-2010

	Real growth rate of national income	Population growth rate	Real growth rate of per capita national income	Net private saving rate (personal + corporate) (% national income)
U.S.	2.8%	1.0%	1.8%	7.7%
Japan	2.5%	0.5%	2.0%	14.6%
Germany	2.0%	0.2%	1.8%	12.2%
France	2.2%	0.5%	1.7%	11.1%
U.K.	2.2%	0.3%	1.9%	7.3%
Italy	1.9%	0.3%	1.6%	15.0%
Australia	3.2%	1.4%	1.7%	9.9%

Observed vs predicted private wealth / national income ratio (2010)

Y-axis: Observed wealth / income ratio 2010 (700%, 650%, 600%, 550%, 500%, 450%, 400%, 350%, 300%)

X-axis: 300%, 350%, 400%, 450%, 500%, 550%, 600%, 650%, 700%

Data points: Italy, Japan, France, U.K., Australia, U.S., Canada, Germany
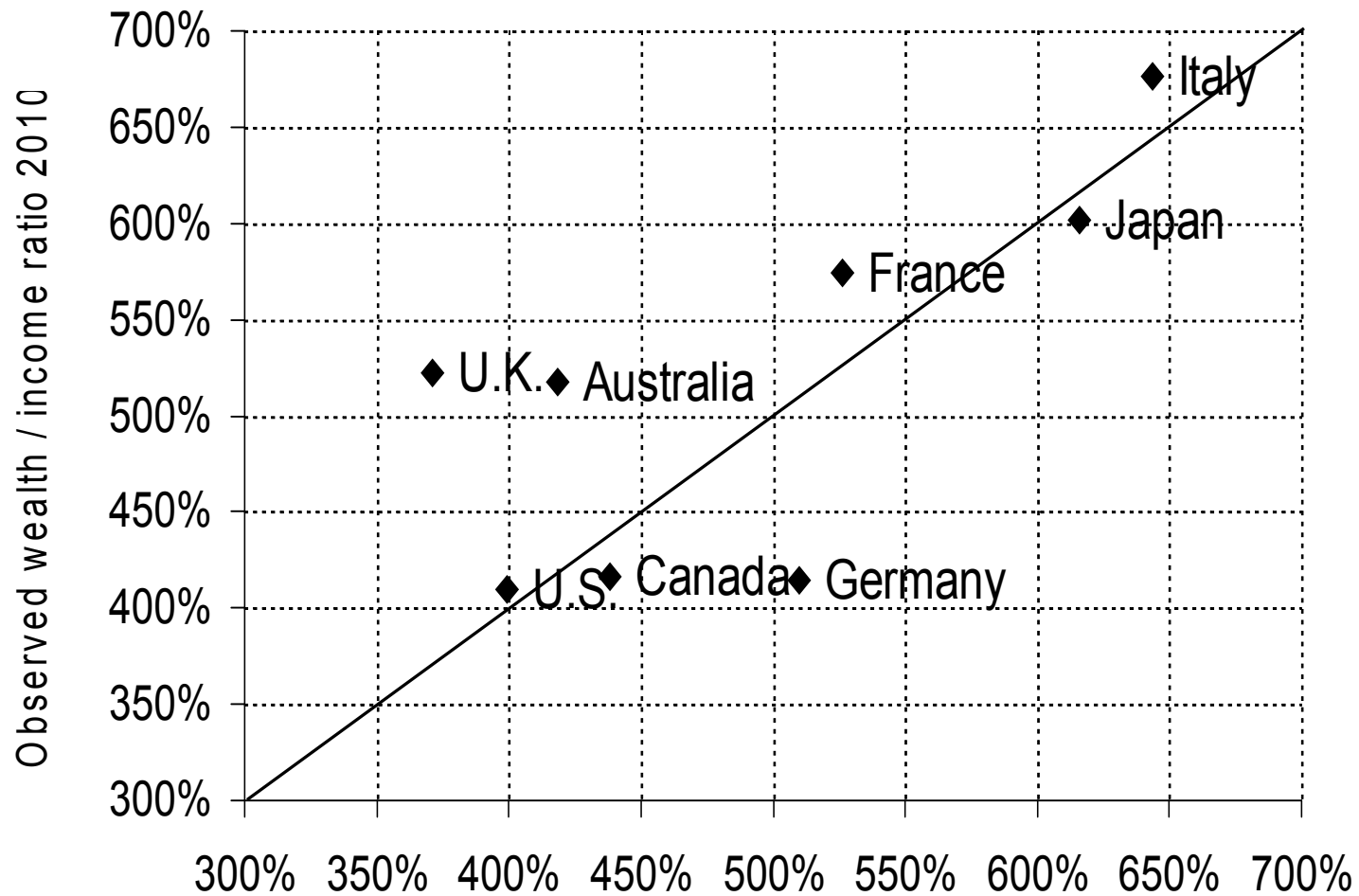
Predicted wealth / income ratio 2010 (on the basis of 1970 initial wealth and 1970-2010 cumulated saving flows) (additive decomposition, incl. R&D)

Table 6: Private savings 1970-2010: personal vs corporate

Average saving rates 1970-2010 (% national income)	Net private savings (personal + corporate)	incl. personal savings	incl. corporate savings (retained earnings)
U.S.	7.7%	4.6% 60%	3.1% 40%
Japan	14.6%	6.8% 47%	7.8% 53%
Germany	12.2%	9.4% 76%	2.9% 24%
France	11.1%	9.0% 81%	2.1% 19%
U.K.	7.3%	2.8% 38%	4.6% 62%
Italy	15.0%	14.6% 97%	0.4% 3%
Canada	12.1%	7.2% 60%	4.9% 40%
Australia	9.9%	5.9% 60%	3.9% 40%

Table 9: National saving 1970-2010: private vs government

Average saving rates 1970-2010 (% national income)	Net national saving (private + government)	incl. private saving	incl. government saving
U.S.	5.2%	7.7%	-2.4%
Japan	14.6%	14.6%	0.0%
Germany	10.2%	12.2%	-2.1%
France	9.2%	11.1%	-1.9%
U.K.	5.3%	7.3%	-2.0%
Italy	8.5%	15.0%	-6.5%
Canada	10.1%	12.1%	-2.0%
Australia	8.9%	9.9%	-0.9%

National vs foreign wealth, 1970-2010 (% national income)
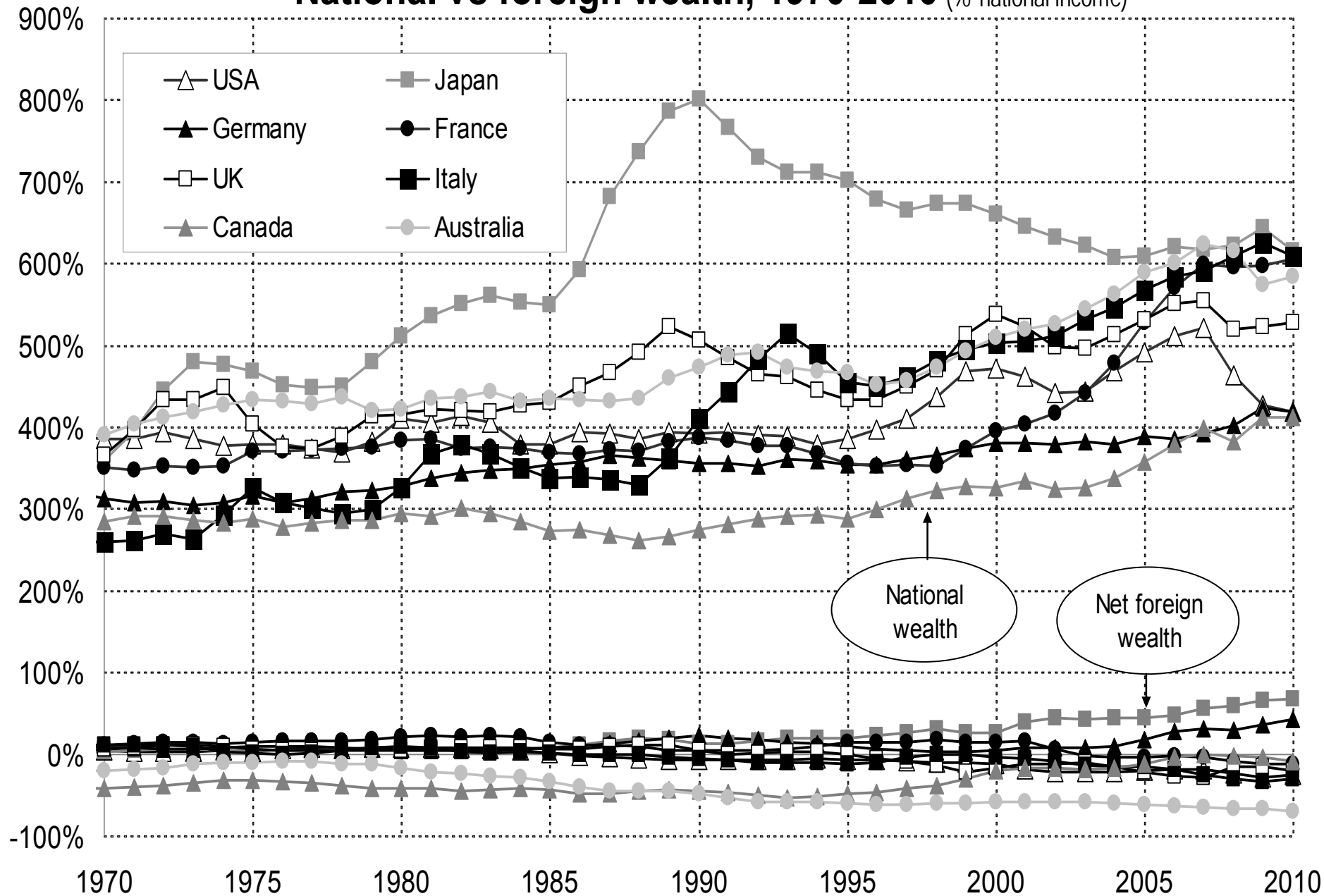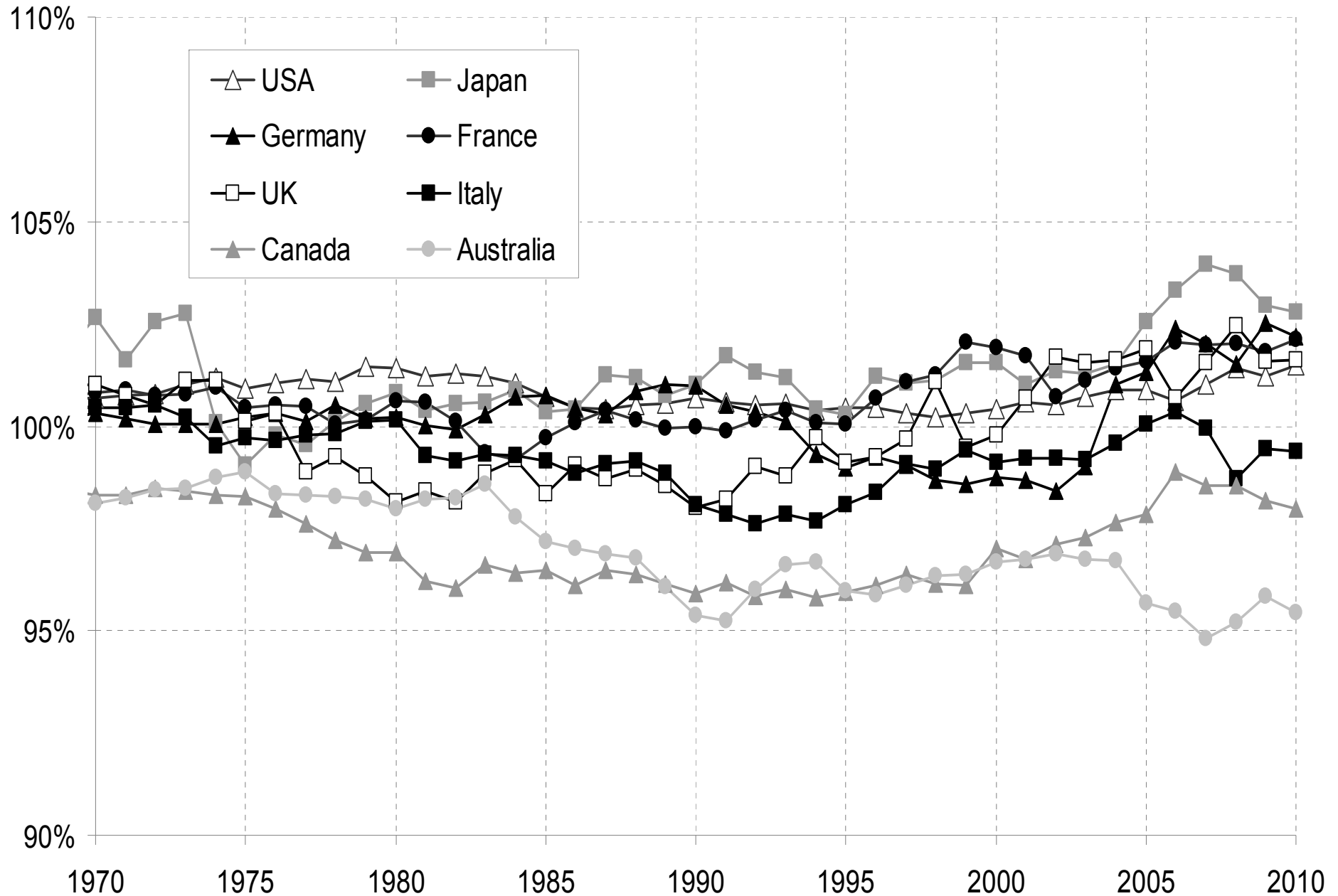

Authors' computations using country national accounts. Net foreign wealth = net foreign assets owned by country residents in rest of the world (all sectors)

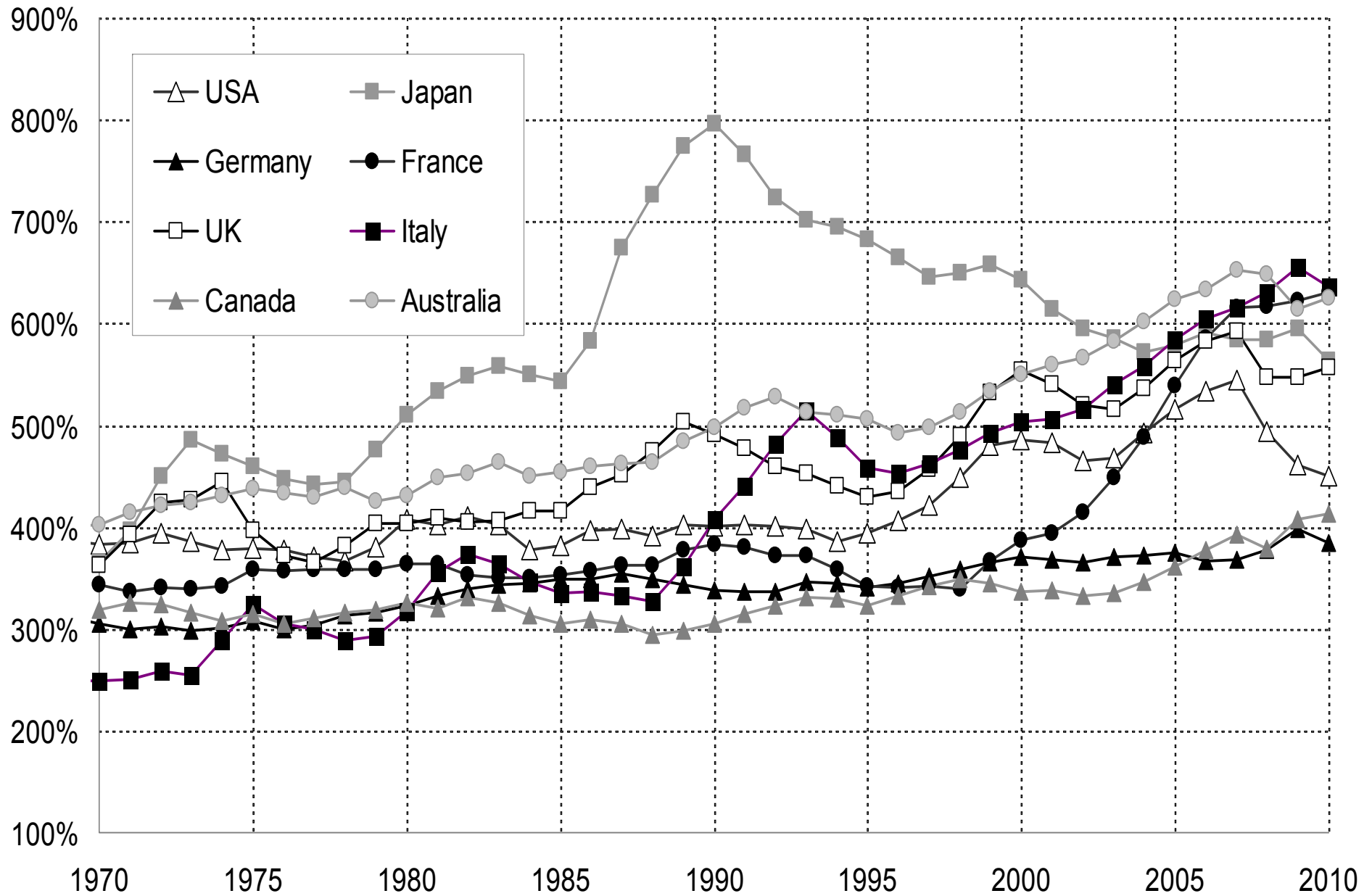## Table 12: National wealth accumulation in rich countries, 1970-2010: domestic capital vs foreign wealth

	National wealth / national income ratio (1970)		National wealth / national income ratio (2010)		Rise in national wealth / national income ratio (1970-2010)	
	incl. Domestic capital	*incl. Foreign wealth*	*incl. Domestic capital*	*incl. Foreign wealth*	*incl. Domestic capital*	*incl. Foreign wealth*
U.S.	385%		419%		33%	
	381%	4%	444%	-25%	63%	-30%
Japan	359%		616%		256%	
	356%	3%	548%	67%	192%	64%
Germany	312%		418%		106%	
	304%	8%	376%	42%	72%	34%
France	351%		605%		254%	
	340%	11%	618%	-13%	278%	-24%
U.K.	365%		527%		163%	
	359%	6%	548%	-20%	189%	-26%
Italy	259%		609%		350%	
	247%	12%	640%	-31%	392%	-42%
Canada	284%		412%		128%	
	325%	-41%	422%	-10%	97%	31%
Australia	391%		584%		194%	
	410%	-20%	655%	-70%	244%	-50%

National income / domestic product ratios, 1970-2010

Authors' computations using country national accounts. National income = domestic product + net foreign income

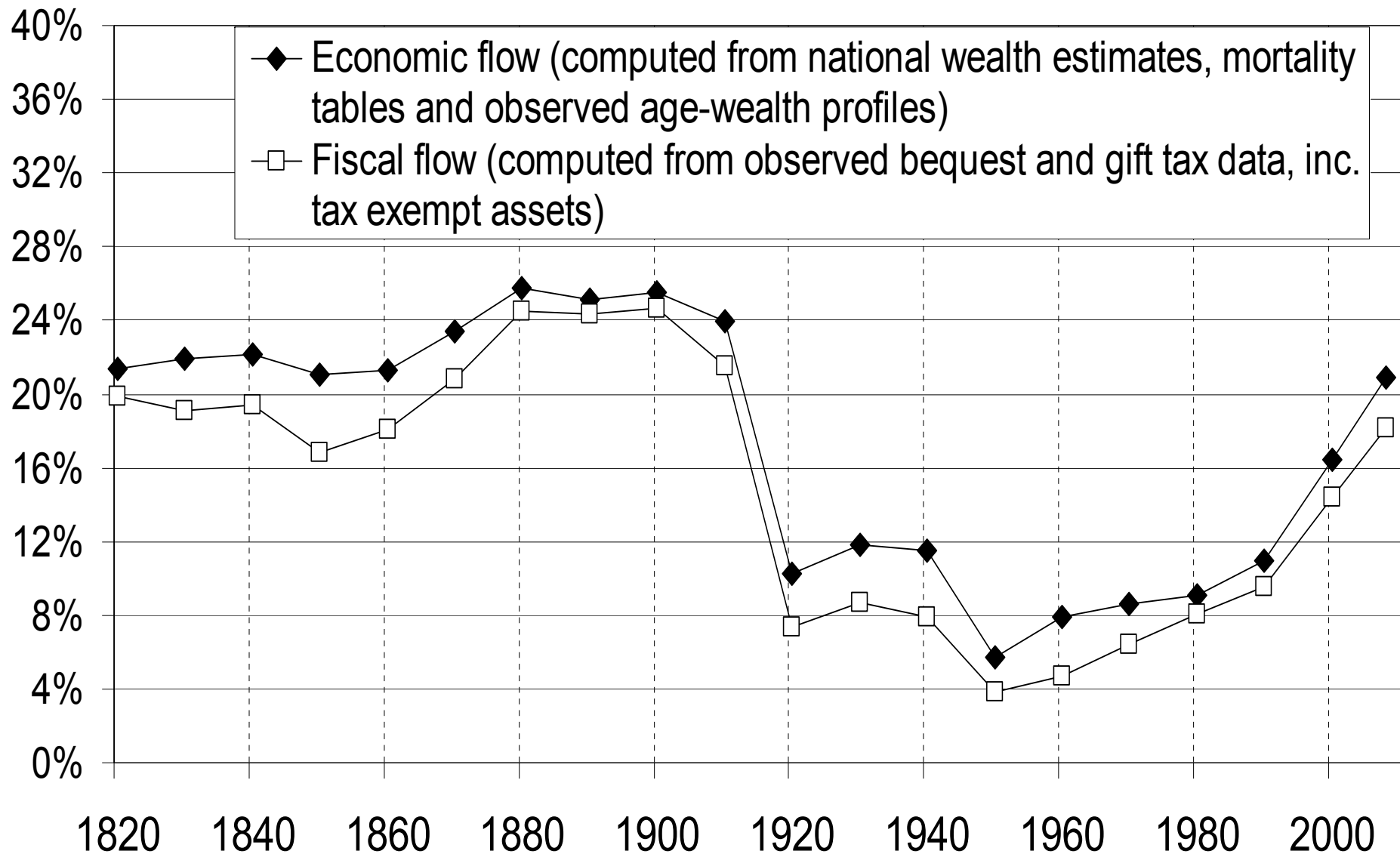**Domestic capital / output ratios, 1970-2010**

Legend:
- USA
- Japan
- Germany
- France
- UK
- Italy
- Canada
- Australia

Authors' computations using country national accounts. Domestic capital/output ratio = (national wealth - foreign wealth)/domestic product

Table 16: Domestic capital accumulation in rich countries, 1970-2010: housing vs other domestic capital

	Domestic capital / national income ratio (1970)		Domestic capital / national income ratio (2010)		Rise in domestic capital / national income ratio (1970-2010)	
	incl. Housing	*incl. Other domestic capital*	*incl. Housing*	*incl. Other domestic capital*	*incl. Housing*	*incl. Other domestic capital*
U.S.	381%		444%		63%	
	142%	239%	182%	262%	41%	23%
Japan	356%		548%		192%	
	131%	225%	220%	328%	89%	103%
Germany	304%		376%		72%	
	129%	175%	241%	135%	112%	-40%
France	340%		618%		278%	
	104%	236%	371%	247%	267%	11%
U.K.	359%		548%		189%	
	98%	261%	300%	248%	202%	-13%
Italy	247%		640%		392%	
	107%	141%	386%	254%	279%	113%
Canada	325%		422%		97%	
	108%	217%	208%	213%	101%	-4%
Australia	410%		655%		244%	
	172%	239%	364%	291%	193%	52%

Annual inheritance flow as a fraction of disposable income, France 1820-2008

Economic flow (computed from national wealth estimates, mortality tables and observed age-wealth profiles)

Fiscal flow (computed from observed bequest and gift tax data, inc. tax exempt assets)

Source: T. Piketty, "On the long-run evolution of inheritance", QJE 2011

Figure 1: Annual inheritance flow as a fraction of national income, France 1820-2008
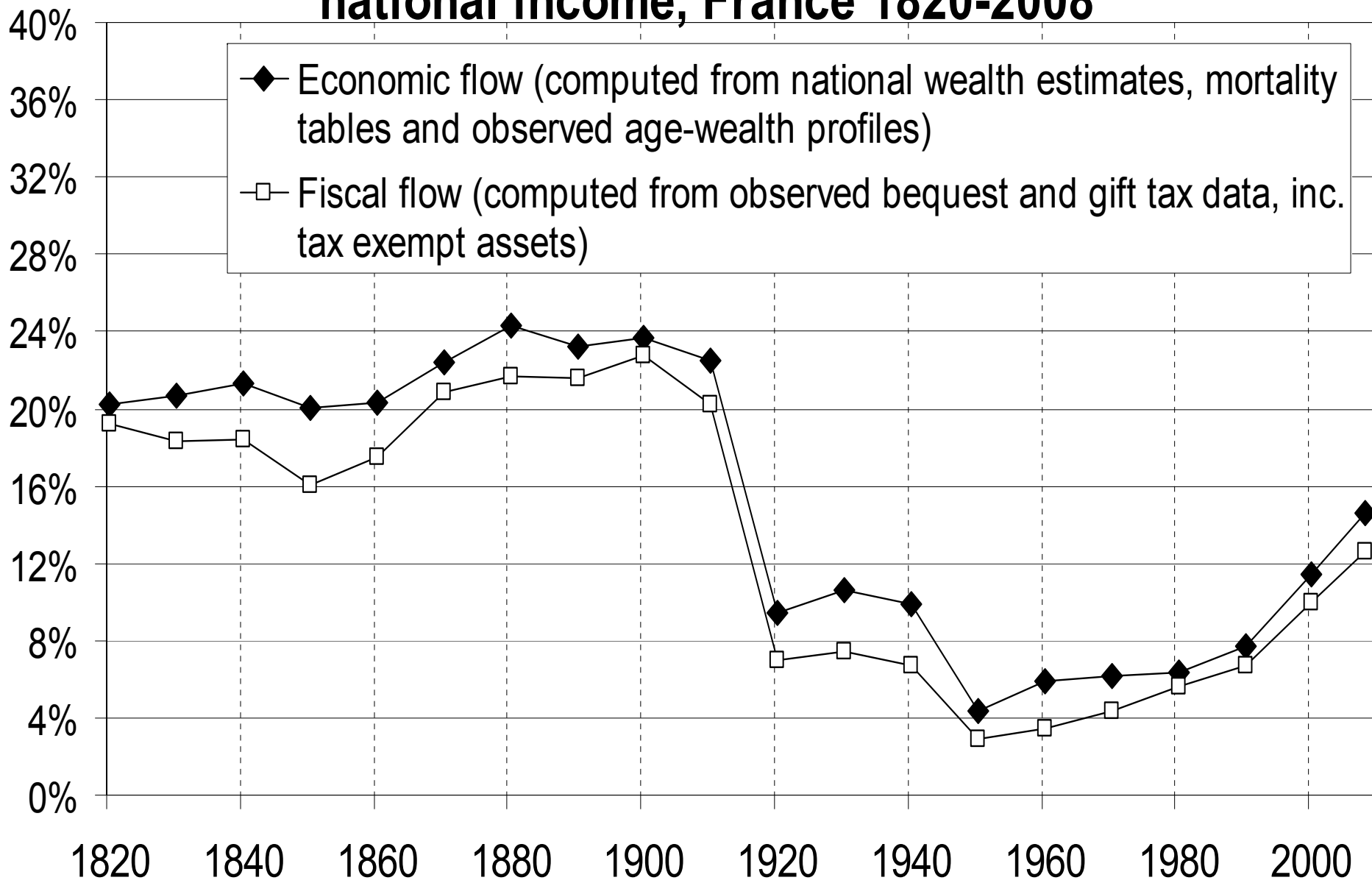
Legend:
- Economic flow (computed from national wealth estimates, mortality tables and observed age-wealth profiles)
- Fiscal flow (computed from observed bequest and gift tax data, inc. tax exempt assets)

Table 3: Intra-cohort distributions of labor income and inheritance, France, 1910 vs 2010

Shares in aggregate labor income or inherited wealth	Labor income 1910-2010	Inherited wealth	
		1910	2010
Top 10% "Upper Class"	**30%**	**90%**	**60%**
incl. Top 1% "Very Rich"	*6%*	*50%*	*25%*
incl. Other 9% "Rich"	*24%*	*40%*	*35%*
Middle 40% "Middle Class"	**40%**	**5%**	**35%**
Bottom 50% "Poor"	**30%**	**5%**	**5%**

Top Inheritance Tax Rates 1900-2011

Legend:
- U.S.
- U.K.
- France
- Germany