

Econ 133 – Global Inequality and Growth

What is Capital?

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Roadmap

1. Capital and wealth: definitions
2. The changing nature of wealth since 1700
3. The link between capital and income

1 Capital and wealth: definition

Reference for this section: Piketty (2014), p. 45–51

1.1 Private wealth

- Private wealth $W = \text{assets} - \text{liabilities}$ of households
- Assets = all non-financial (housing, land...) and financial assets (equities, bonds, bank deposits...)
- Recorded in national balance sheets

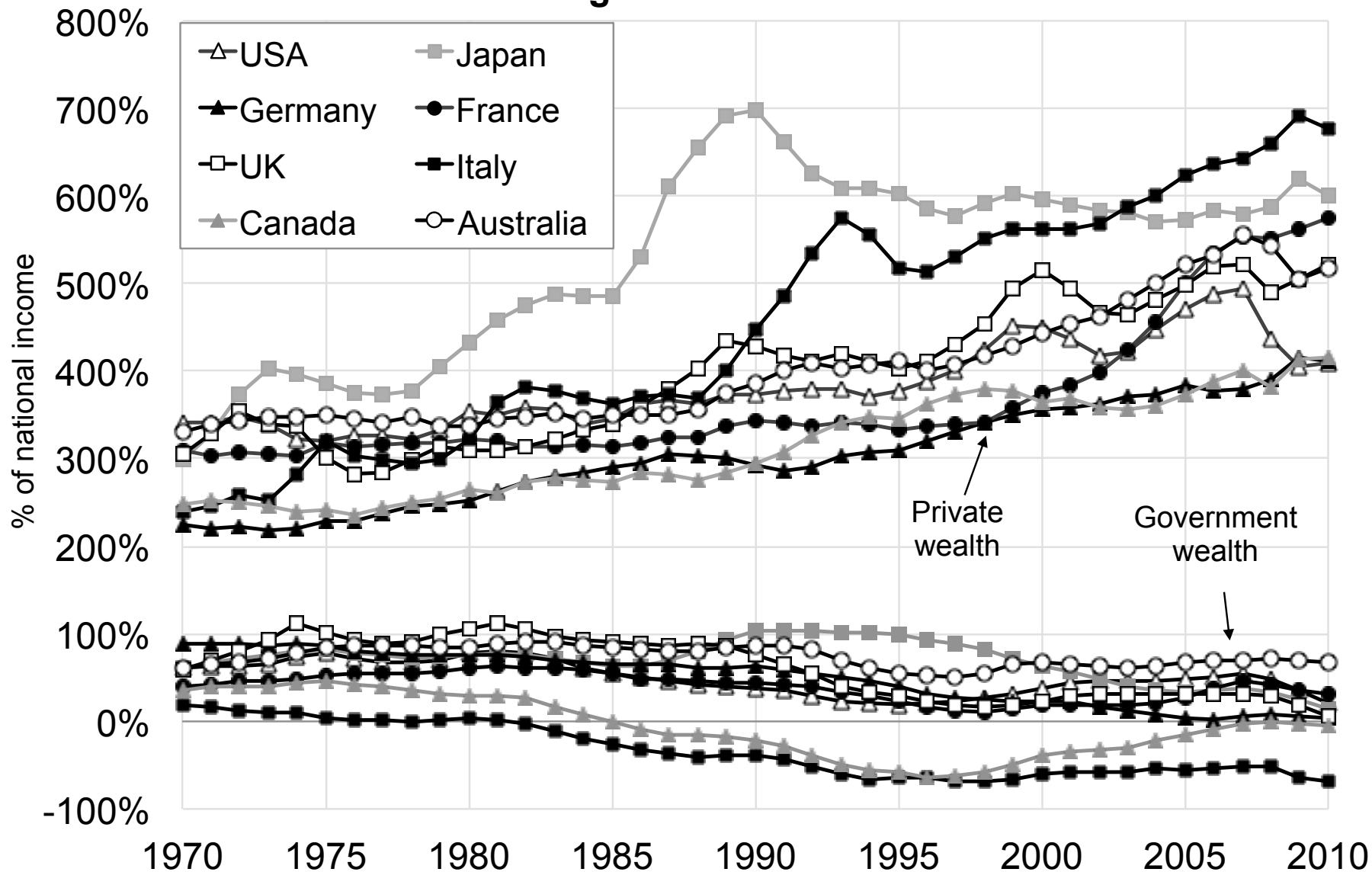
1.2 Public wealth

- Public wealth $W_g = \text{assets} - \text{liabilities of the government}$
- Liabilities = public debt; assets = schools, roads, barracks...

1.3 National wealth

- National wealth = private wealth + public wealth
- Notation: $\beta = \text{wealth} / \text{national income}$

Private vs. government wealth 1970-2010



National wealth can be decomposed as follows:

- National wealth = domestic capital K + net foreign assets
- K = domestic capital = land + housing + other domestic capital
- At world level: wealth = capital
- Key reference for data on wealth and its decomposition: World Wealth and Income Database, <http://wid.world>

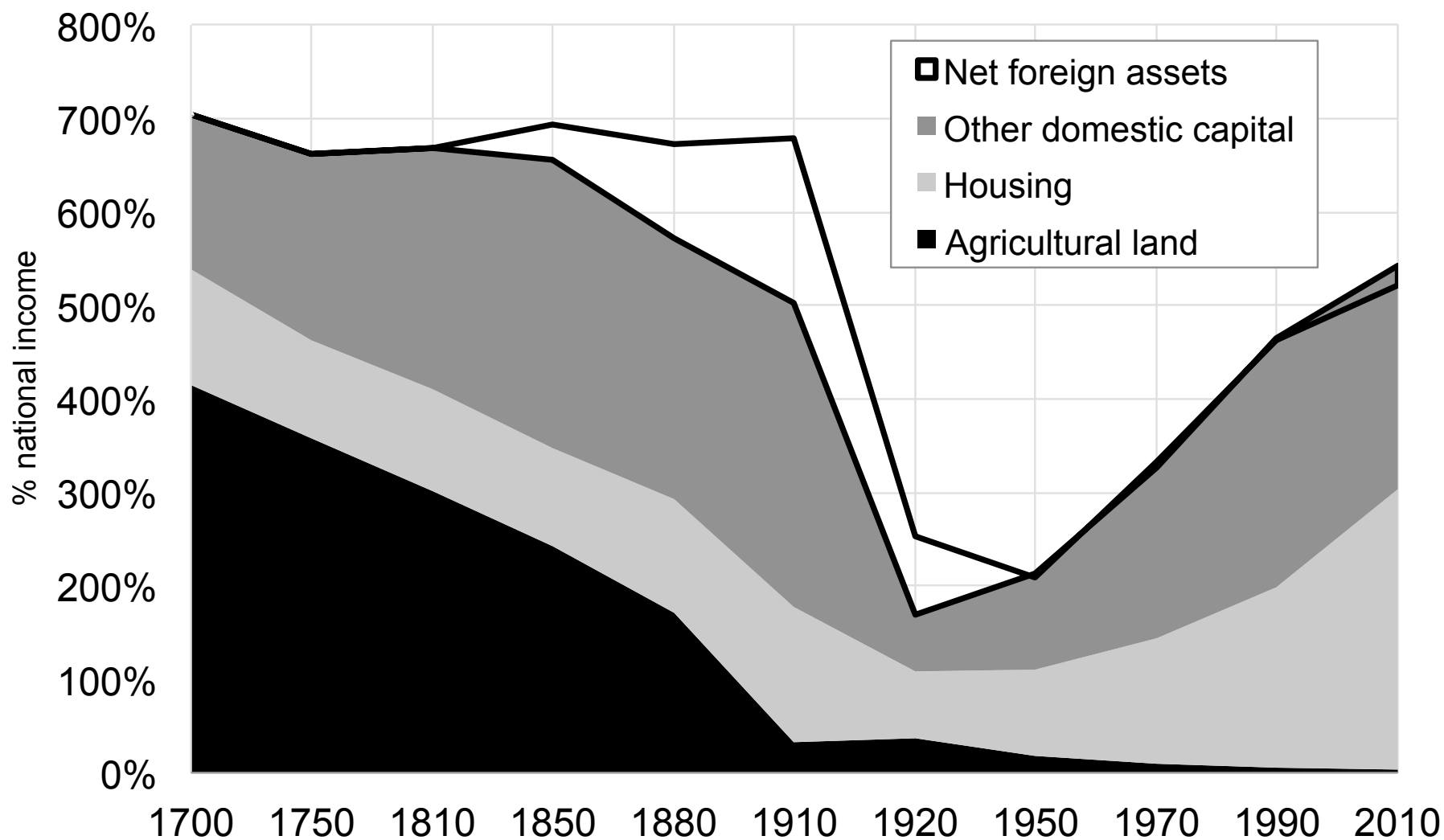
2 The changing nature of wealth in the long run

Reference for this section: Piketty (2014), p. 113–139

2.1 Data sources

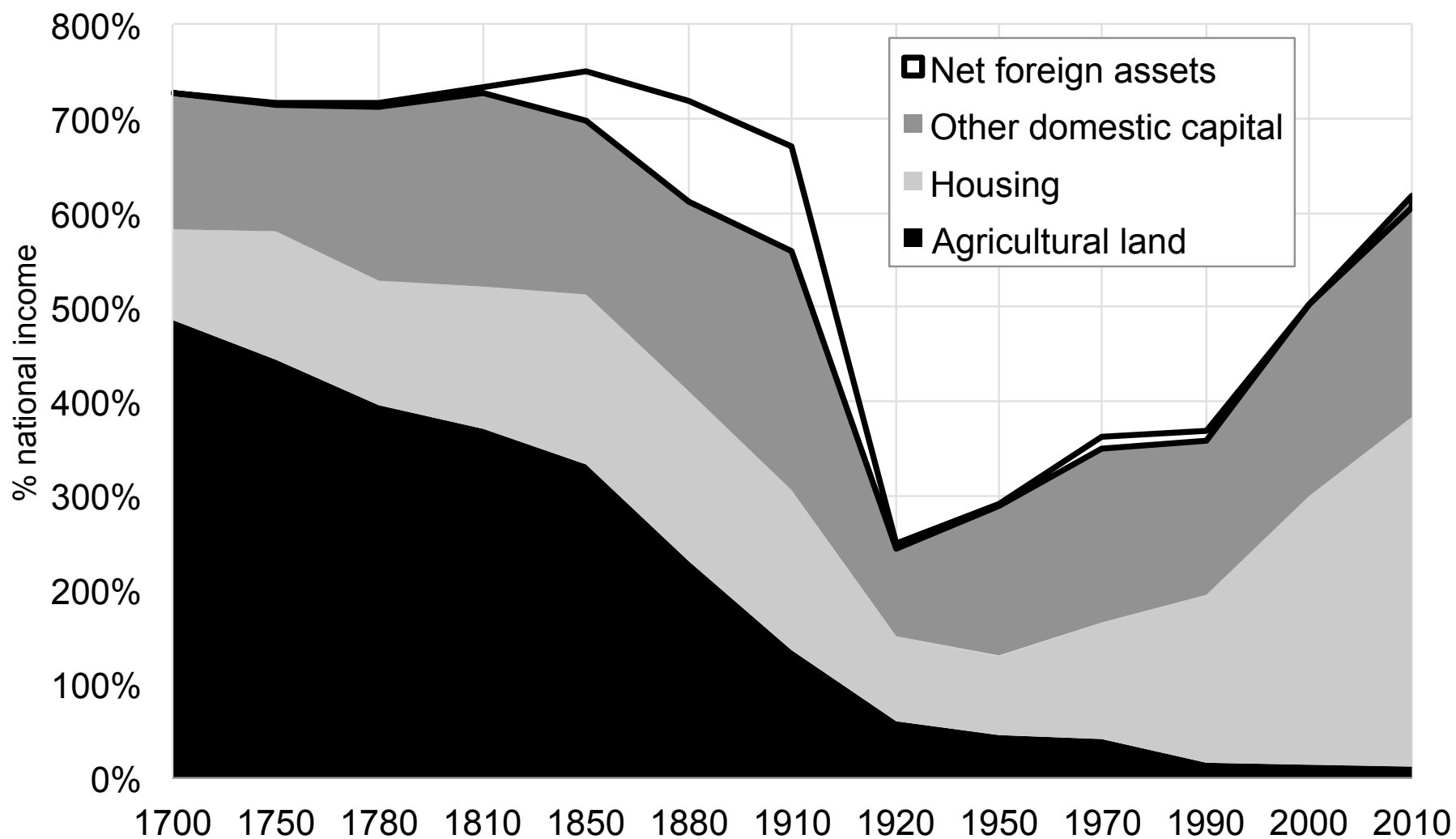
- Long tradition of national wealth estimates in Britain (Petty, King, Giffen) and France (Vauban, Lavoisier, Colson) in 18th-19th cent.
- Not sufficiently precise to study short-run fluctuations; but fine to study broad orders of magnitudes and long-run evolutions

The changing nature of national wealth: UK 1700-2010



Source: Piketty and Zucman (2014). National wealth = agricultural land + housing + other domestic capital goods + net foreign assets

The changing nature of national wealth: France 1700-2010



Source: Piketty and Zucman (2014). National wealth = agricultural land + housing + other domestic capital goods + net foreign assets

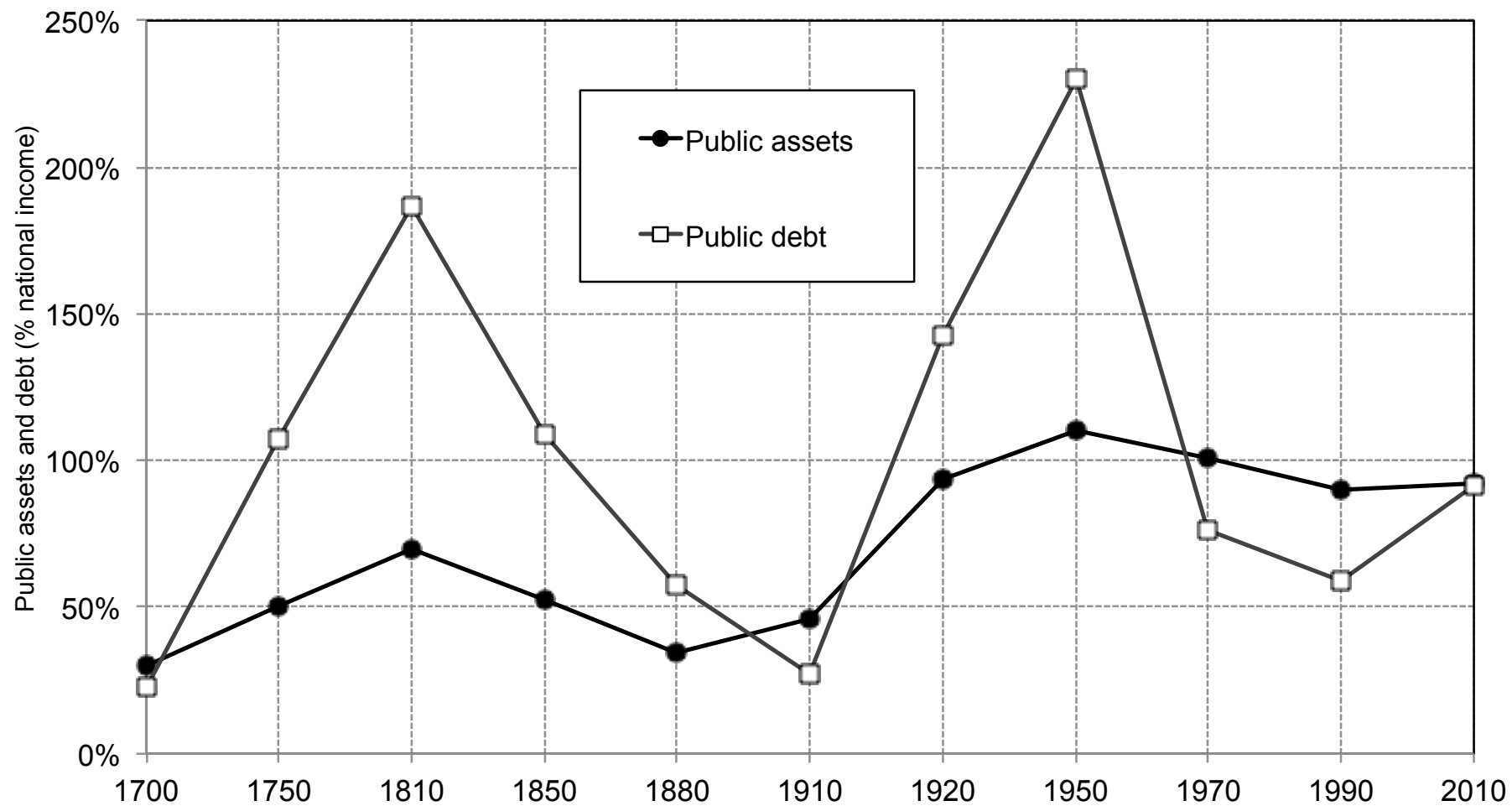
2.2 The rise and fall of foreign wealth

- Large NFA in 1870-1910: “first globalization” & colonial empires
- High NFA allows to have permanent trade deficits (Fr, UK: about 2% of Y in 1870-1910) and still run a current account surplus
- Today, NFA rising fast in Germany, and some dev. countries
- But more important is rise of gross foreign assets and liabilities \approx 30-40% of total financial assets and liabilities in Europe
- This is the “second globalization”: Lane & Milesi-Ferretti (2007)

2.3 Public vs. private wealth

- In many countries today public wealth close to 0 (public assets \approx public debt), and private wealth \approx 100% of national wealth
- But not always the case: 1950-60s Europe, USSR vs. 19c UK.
- Britain: public debt: \approx 200% of Y after Napoleonic wars. Did not crowd out private inv. See Ricardo (1817) and Barro (1974)
- Took a century to reduce it below 50%. Britain always paid back its debt (except 1950-1960) \neq most countries

Public wealth in Britain, 1700-2010



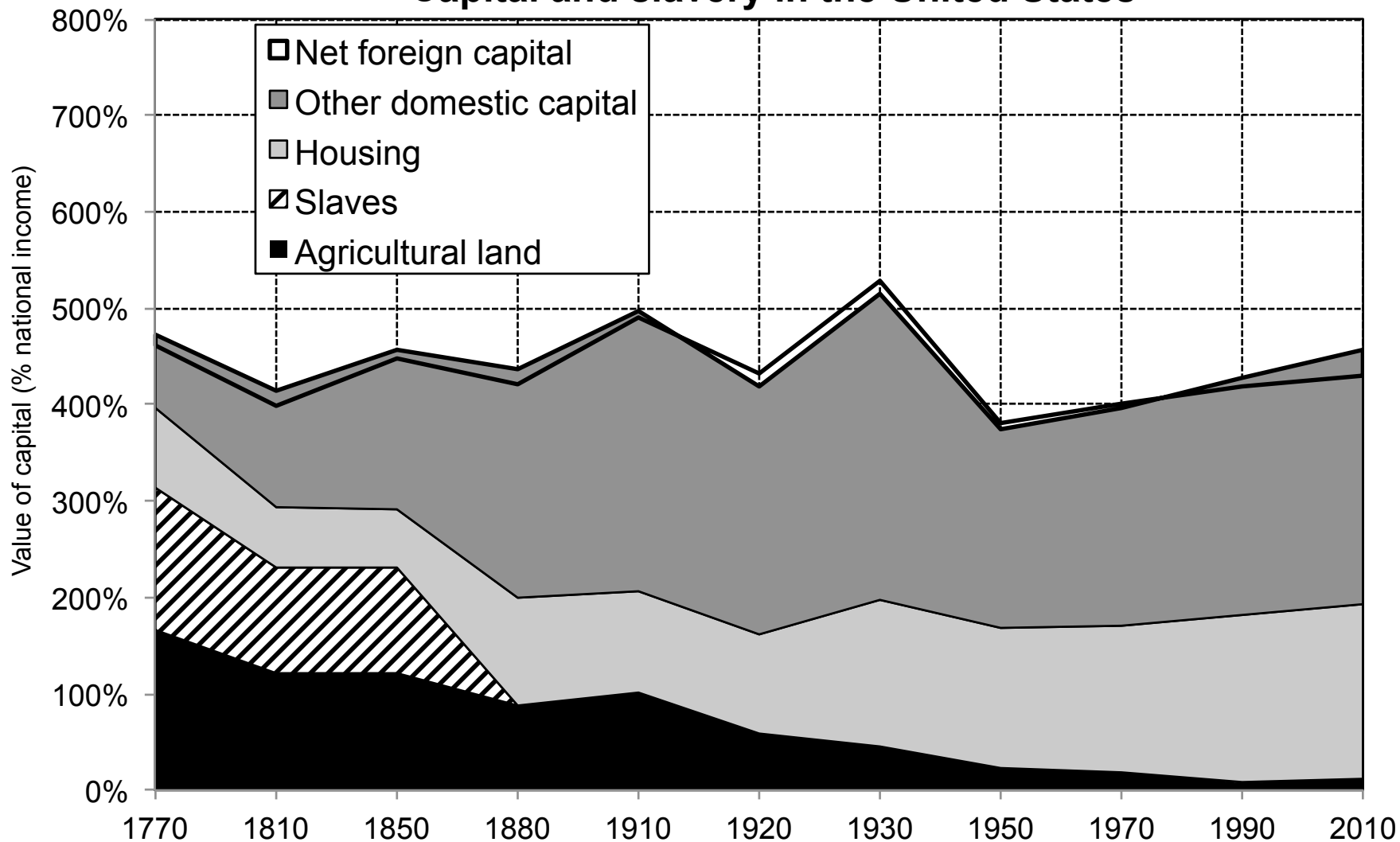
Public debt surpassed 2 years of national income in 1950 (vs. 1 year for public assets).

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

2.4 Capital in slave societies

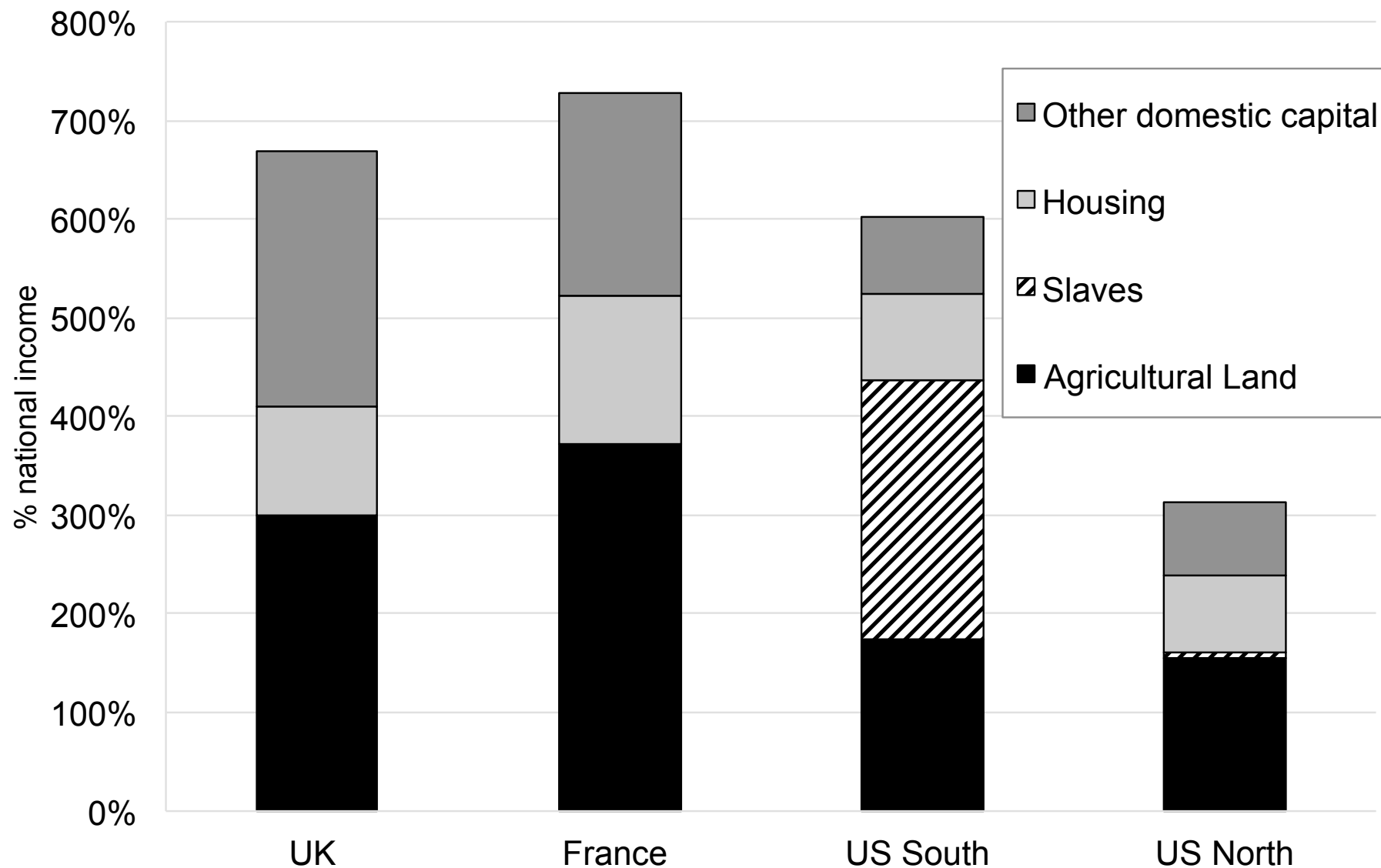
- Slavery = most extreme form of inequality
- Slavery exists in many societies, but main *slave societies*:
 1. Ancient Greece and Rome: slaves \approx 30%-50% of pop.
 2. Brazil in 18th-19th cent.: slaves \approx 30%-35% of pop. until 1887
 3. West Indies 17th to mid-19th cent. (as much as $>90\%$ of pop.)
 4. US South before Civil War: slaves \approx 40% of pop. 1800–1865

Capital and slavery in the United States



Source: Piketty and Zucman (2014). The market value of slaves was about 1.5 years of U.S. national income around 1770 (as much as land).

National wealth in 1770-1810: Old vs. New world



3 The link between income and wealth

Reference for this section: Piketty (2014), p. 52-55

- Define r = average rate of return to wealth = Y_K/K
- **Basic accounting law:** $\alpha = r \times \beta$
- Typical values: $\beta = 600\%$, $r = 5\%$, $\alpha = 30\%$
- In practice, average rate of return to capital r varies a lot across assets and over individuals

References

Barro, Robert, "Are government bonds net wealth?", *Journal of Political Economy* 1974 (web)

Lane, Philip and Gian Maria Milesi-Feretti, "The External Wealth of Nations Mark II," *Journal of International Economics*, 2007, 73 (web)

Piketty, Thomas, and Gabriel Zucman, "Capital is back: wealth-income ratios in rich countries 1700-2010", *Quarterly Journal of Economics*, 2014 (web)

Ricardo, David *On the principles of political economy and taxation*, 1817