



WID.WORLD
THE SOURCE FOR
GLOBAL INEQUALITY DATA

Global economic inequality: New evidence from the World Inequality Report

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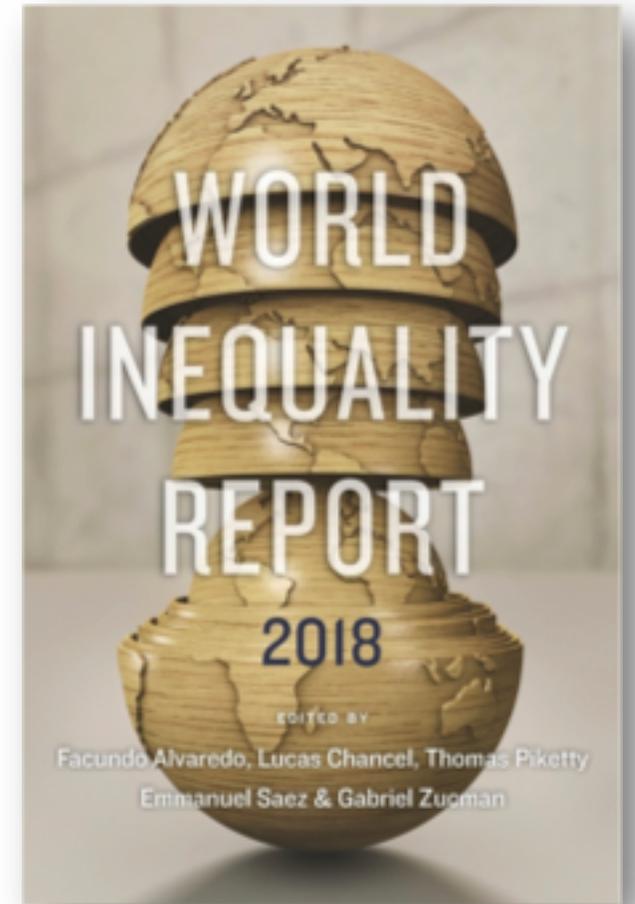
Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez, Gabriel Zucman

Harvard Kennedy School - 7 September 2018

- Reduction of global inequalities since the 1980s thanks to strong growth in the emerging world
 - Trickle down works (the higher the growth at the top, the higher at the bottom)
 - No serious alternative to rising inequality within countries (it's due to technology and trade)
- World Inequality Report revisits these claims thanks to novel data spanning over 40 years.

- Report based on **WID.world**, the **most extensive database** on the historical evolution of income and wealth distribution. Project regrouping more than **100 researchers** over 5 continents. **100% transparent**, open source, reproducible.
- The first **systematic assessment** of globalization in terms of economic **inequality**. Despite high growth in emerging countries, global inequality increased since 1980. The **top 1% captured twice as much global income growth as bottom 50%**.
- Diverging country inequality trajectories highlight the importance of **institutional changes** and **political choices rather than deterministic forces**. This suggests much can be done in the coming decades to promote more equitable growth.

1. Introduction: the WID.world project
2. Global income inequality dynamics
3. Public vs. private capital dynamics
4. Global wealth inequality dynamics
5. Conclusion: tackling inequality



PART I

THE WID.WORLD PROJECT AND THE MEASUREMENT OF ECONOMIC INEQUALITY

- The *World Inequality Report 2018* seeks to fill a democratic gap and to equip various actors of society with the necessary facts to engage in informed public debates on inequality.
- The *World Inequality Report 2018* relies on the most extensive database on the historical evolution of income and wealth inequality. Our methodology is fully transparent, open access and reproducible.

- **Continuation of pioneering work of Kuznets in the 1950s and Atkinson in the 1970s combining fiscal and national accounts data**

Kuznets, 1953 and Atkinson and Harrison, 1978

- **WID.world started with the publication of historical inequality series based on top income shares series using tax data**

Piketty 2001, 2003, Piketty-Saez 2003, Atkinson-Piketty 2007; 2010, Alvaredo et al., 2013.

- **In 2011, we released the World Top Incomes Database, gradually extended to over thirty countries and to wealth**

Alvaredo et al., 2013, Saez-Zucman , 2016, Alvaredo-Atkinson-Morelli, 2016, etc.

- New website WID.world launched January 2017: collaborative effort
- Key novelty: we combine National accounts, tax data and surveys in a **systematic manner** → Distributional National Accounts (DINA, cf. Alvaredo et al. 2016)
- **Three major extensions underway**
 1. Emerging countries
 2. Entire distribution, from bottom to top
 3. Wealth distribution and not only income distribution

- **Constantly extending database on the historical evolution of income and wealth**
 - Income shares, averages, thresholds: 80 countries
 - Wealth income ratios, wealth distribution: 30 countries
 - Net National Income, CFC, GDP: 190 countries

- **All computer codes, technical papers available online: 100% reproducible data**

- **Open access, multi-lingual website and visualization tools**
 - Chinese, English, French, Spanish : reach more than **3 billion people**

- **State of the art tools for inequality research**
 - GPINTER package: manipulate distributions online
 - Stata and R packages: access our data from Stata directly



PART II

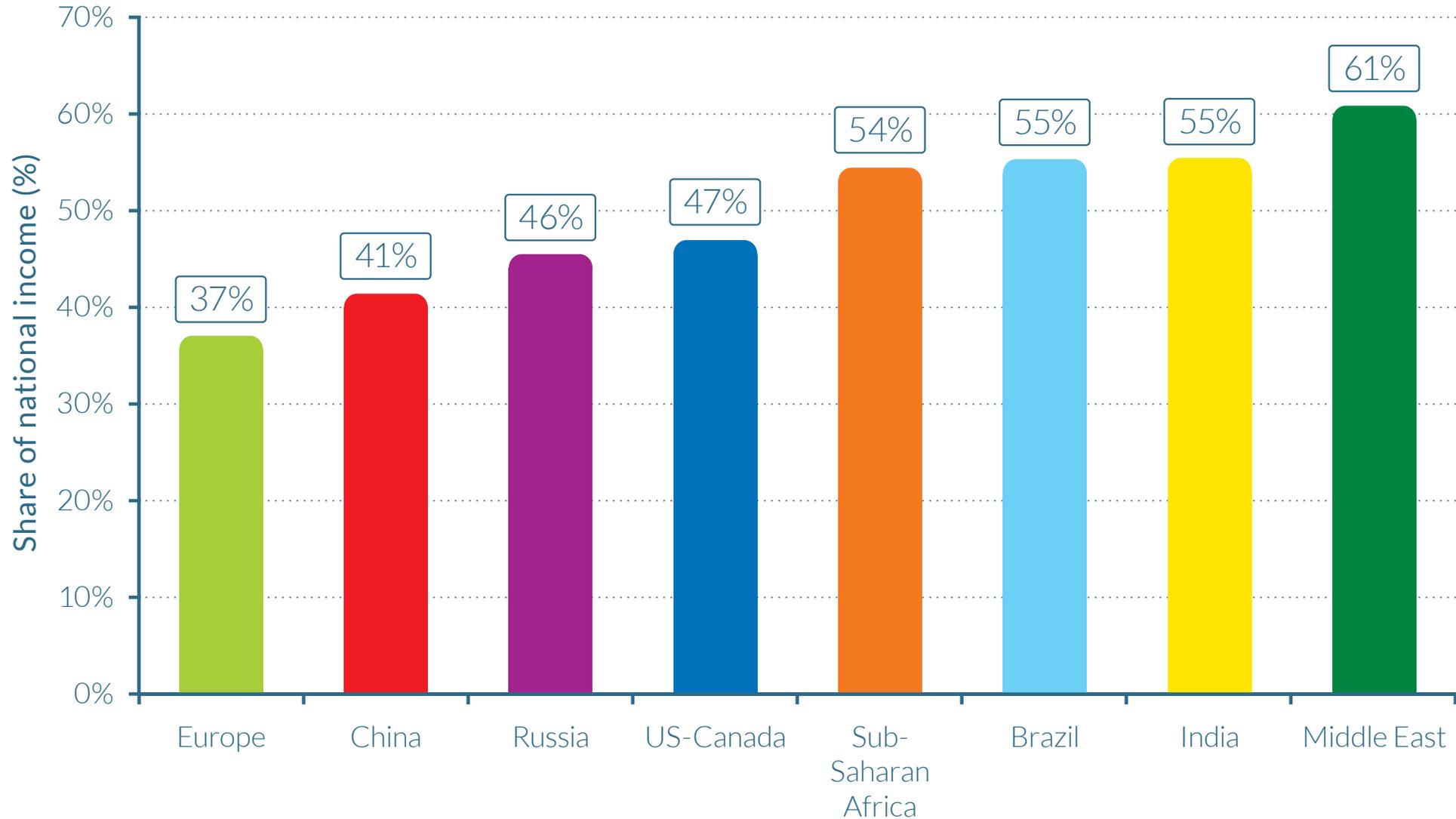
GLOBAL INCOME INEQUALITY DYNAMICS

- The top 1% captured twice as much global income growth as the bottom 50% since 1980
- We observe rising inequality between world individuals, despite growth in the emerging world
- Different national trajectories show rising global inequality is not inevitable

- **Official statistics do not provide an adequate picture of global inequality**
 - Official data mostly based on self-reported survey & underestimates inequality
 - No global distribution based on systematic combination of top and bottom income or wealth data (National accounts, tax, surveys and wealth rankings)

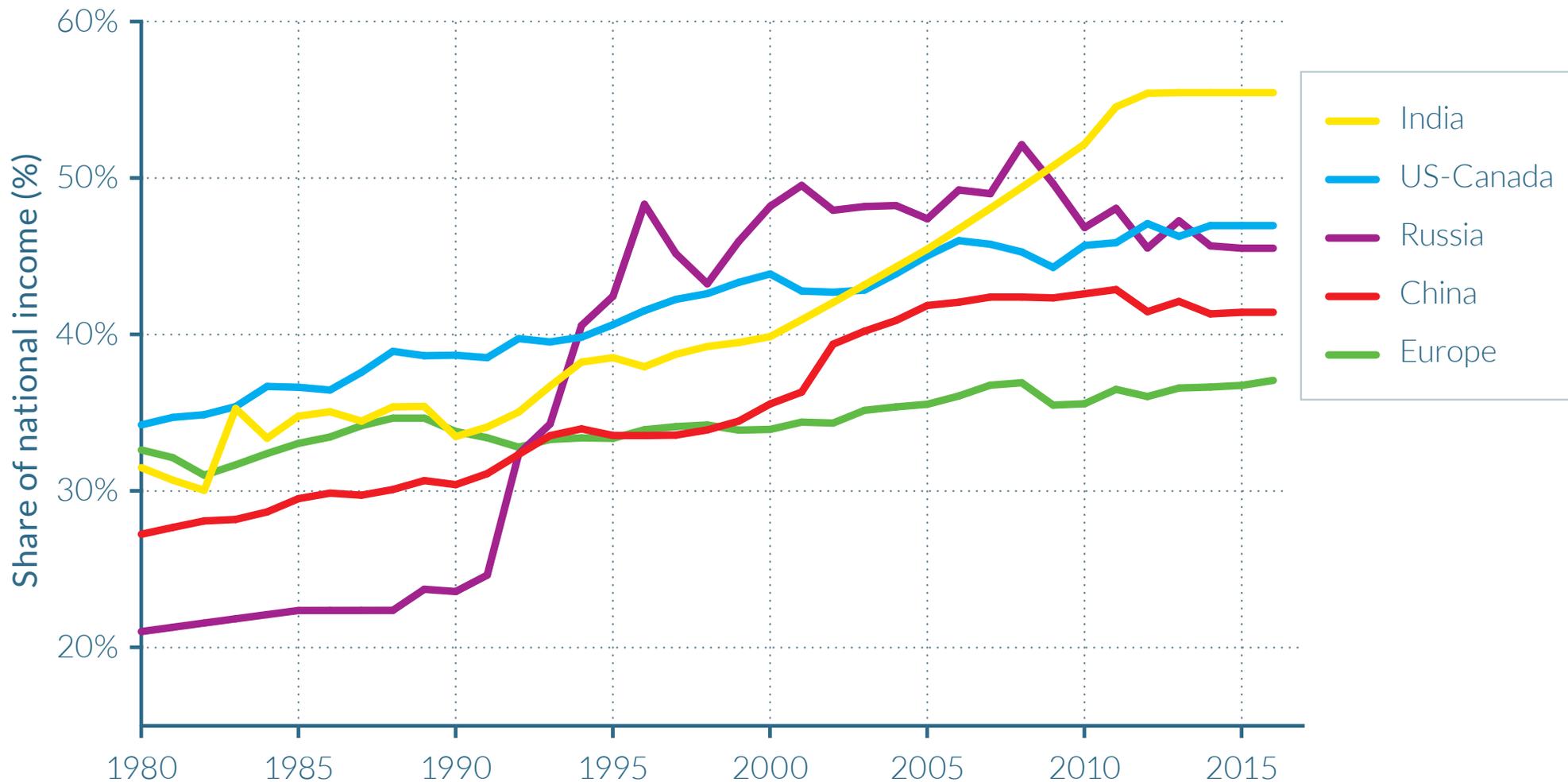
- **WID.world follows a step-by-step approach towards a consistent global distribution of income and wealth**
 - We only aggregate countries for which we have consistent series, in line with Distributional National Accounts
 - We confirm and amplify the « Elephant curve » pattern (Lakner-Milanovic) with more systematic use of tax and national accounts data.

Top 10% national income share across the world, 2016



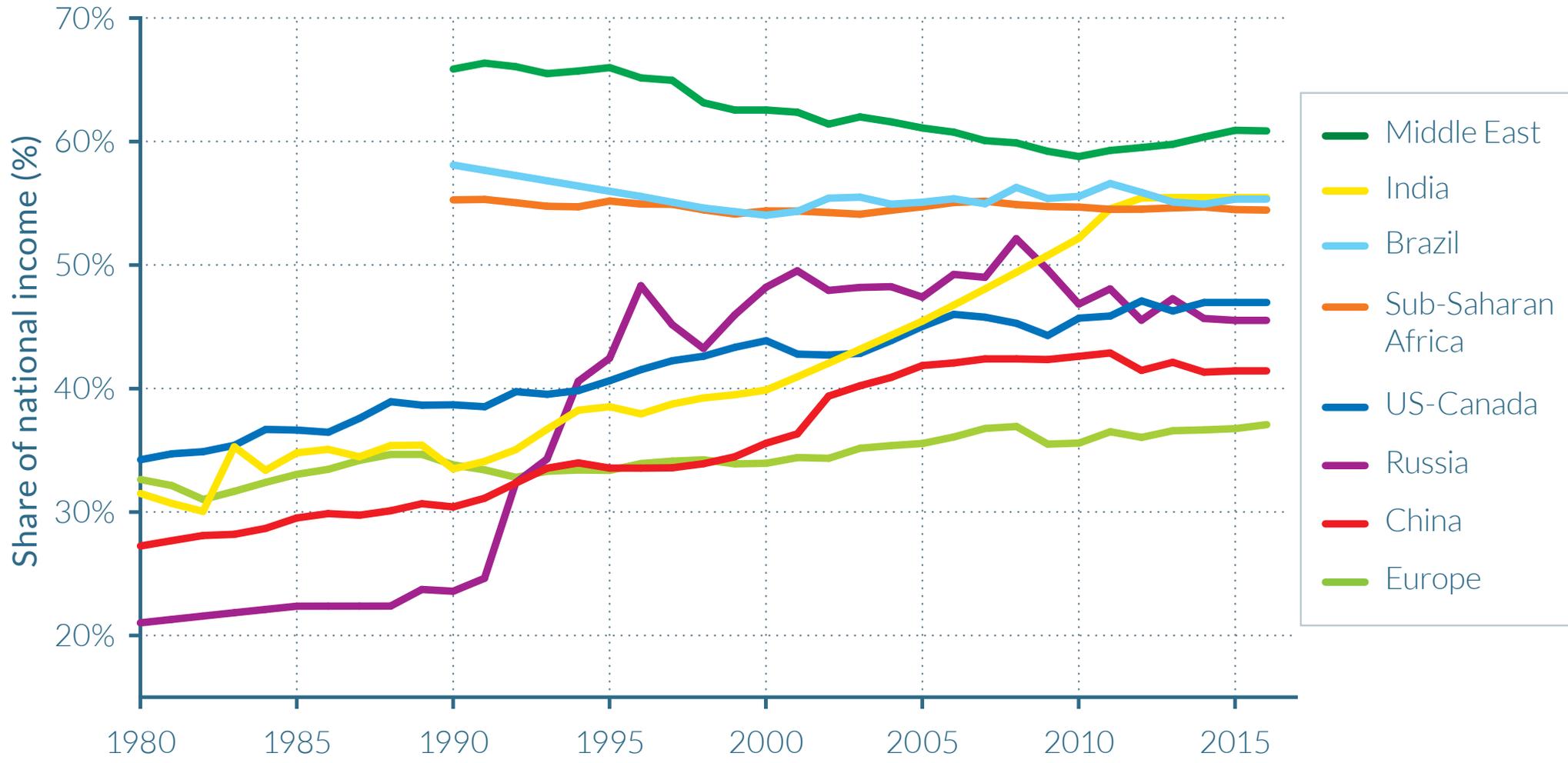
Source: World Inequality Report 2018, Figure 2.1.1. See wir2018.wid.world for data sources and notes.

Top 10% income shares across the world, 1980-2016



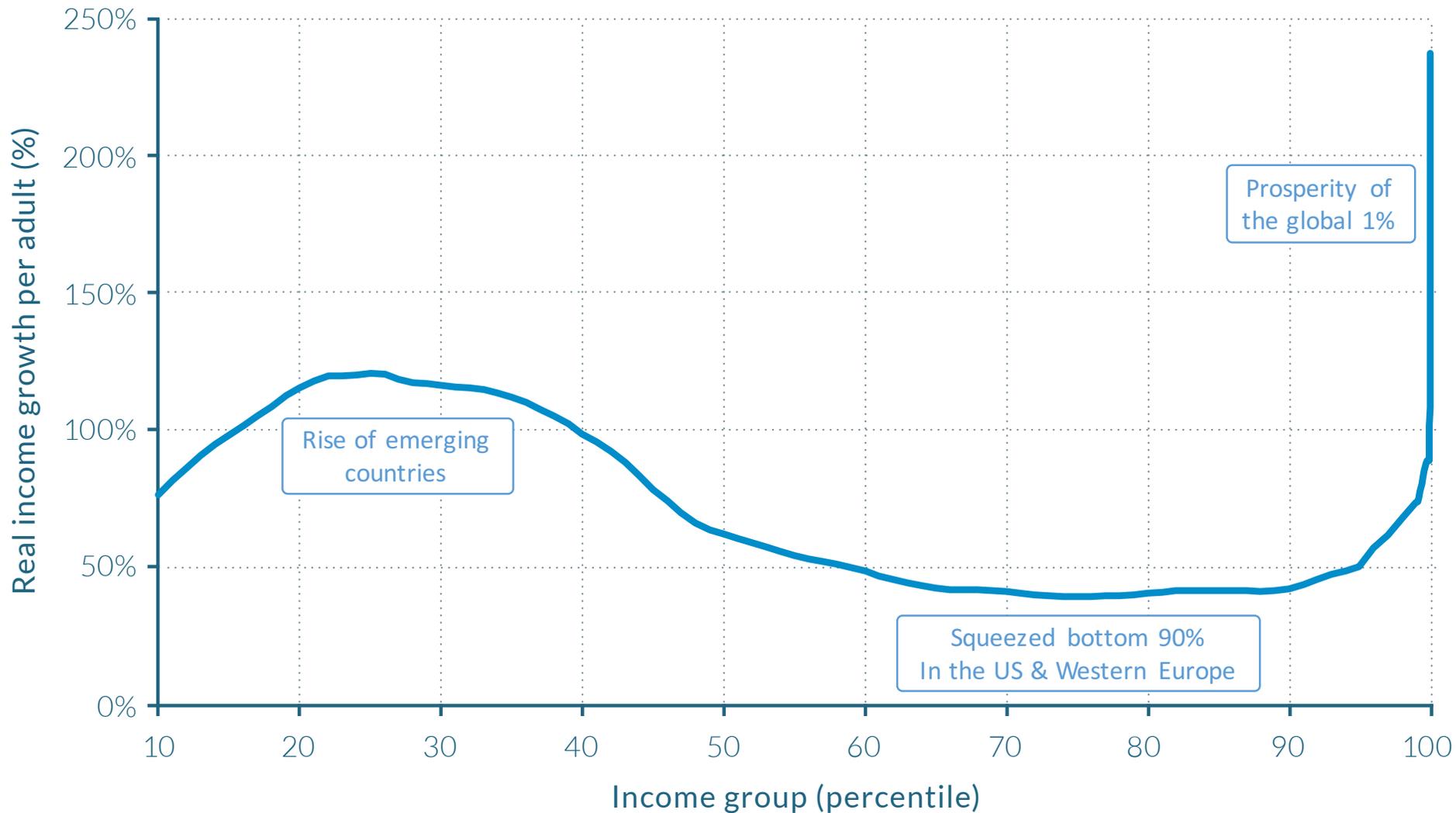
Source: World Inequality Report 2018, Figure 2.1.1. See wir2018.wid.world for data sources and notes.

Top 10% income shares across the world, 1980-2016



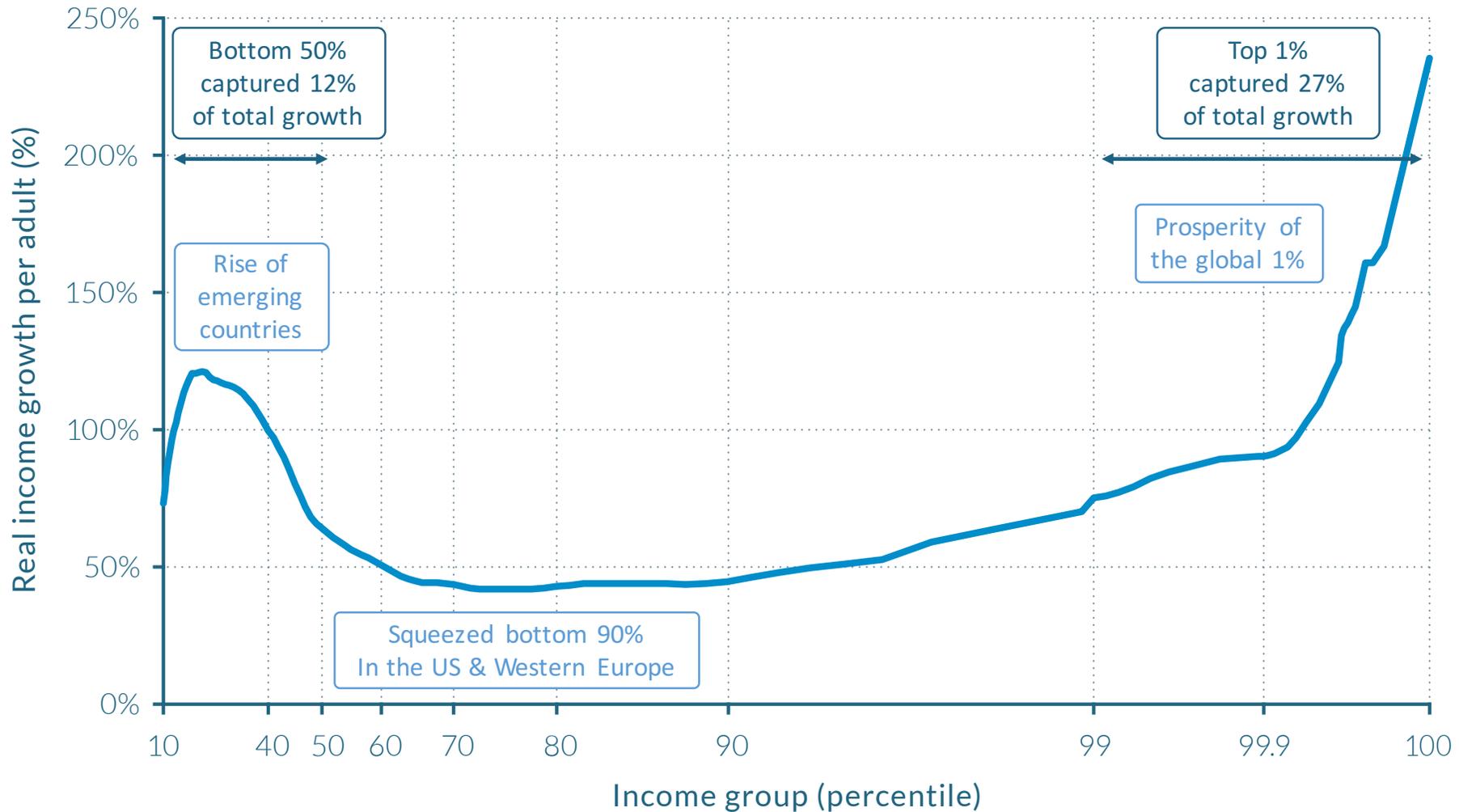
Source: World Inequality Report 2018, Figure 2.1.1. See wir2018.wid.world for data sources and notes.

Total income growth by percentile across all world regions, 1980–2016: Scaled by population



Source: World Inequality Report 2018, Appendix Figure A1. See wir2018.wid.world for data sources and notes.

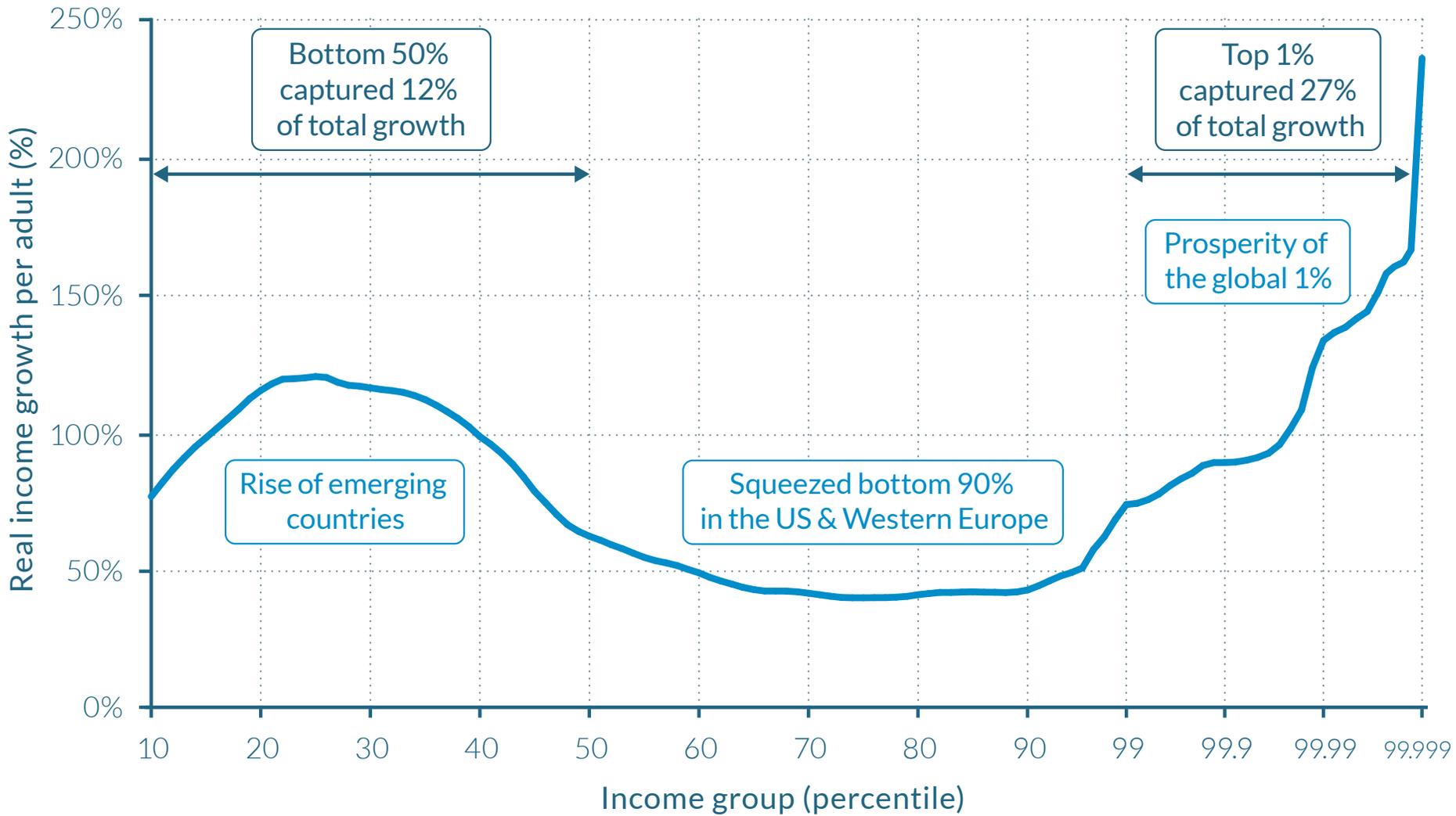
Total income growth by percentile across all world regions, 1980–2016: Scaled by share of growth captured



Source: World Inequality Report 2018, Appendix Figure A1. See wir2018.wid.world for data sources and notes.

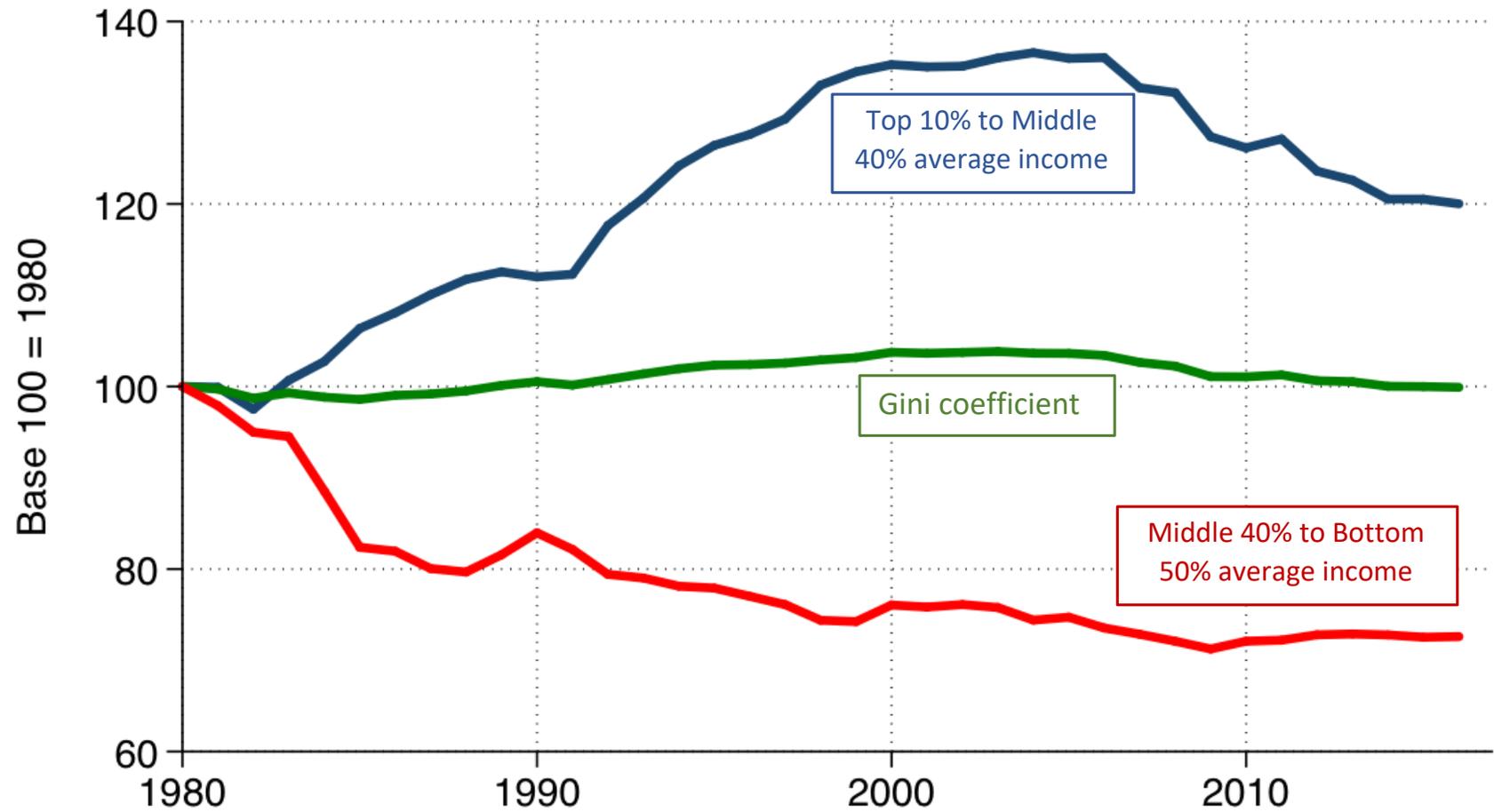
The bottom 50% grew... but the top 1% captured twice more total growth.

Total income growth by percentile across all world regions, 1980-2016



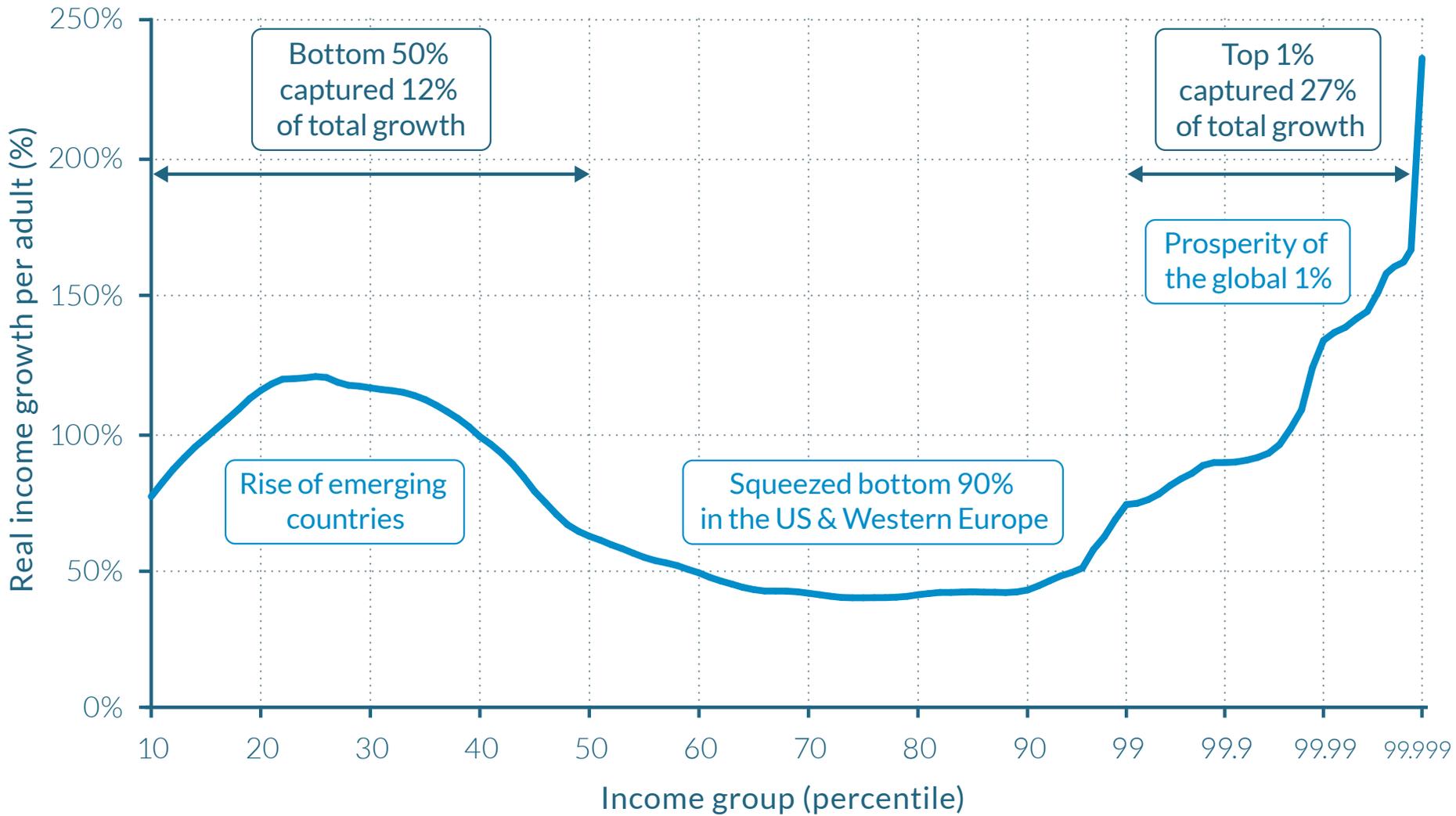
Source: World Inequality Report 2018, Figure 2.1.4. See wir2018.wid.world for data sources and notes.

Global income inequality dynamics, 1980-2016 Behind apparent Gini stability: rising Top, falling Middle



The ratio of the average income of the Top 10% to that of the Middle 40% increased by 20 percentage points (p.p.) between 1980 and 2016 (it increased from x4.5 to x5.6). The ratio of the average income of the Middle 40% to that of the Bottom 50% decreased by 27 p.p. between 1980 and 2016 (it decreased from x6.9 to x4.8). The global Gini in 2016 was at its 1980 level (65).

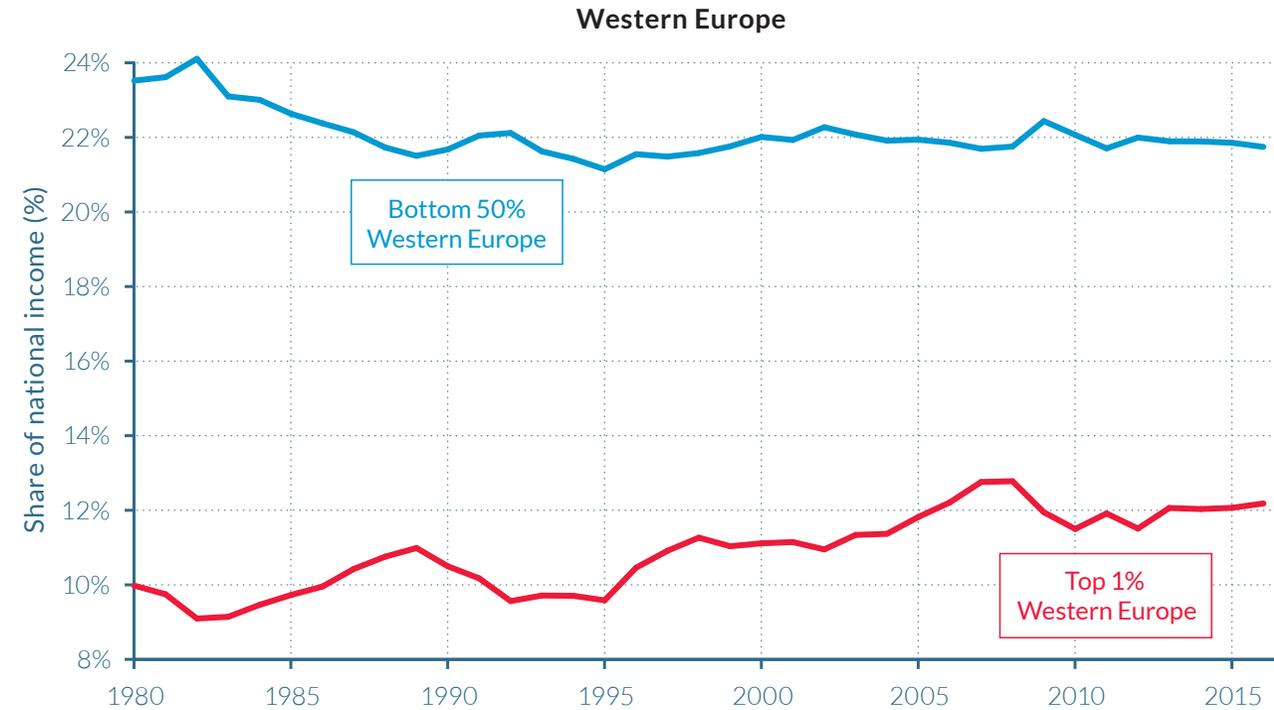
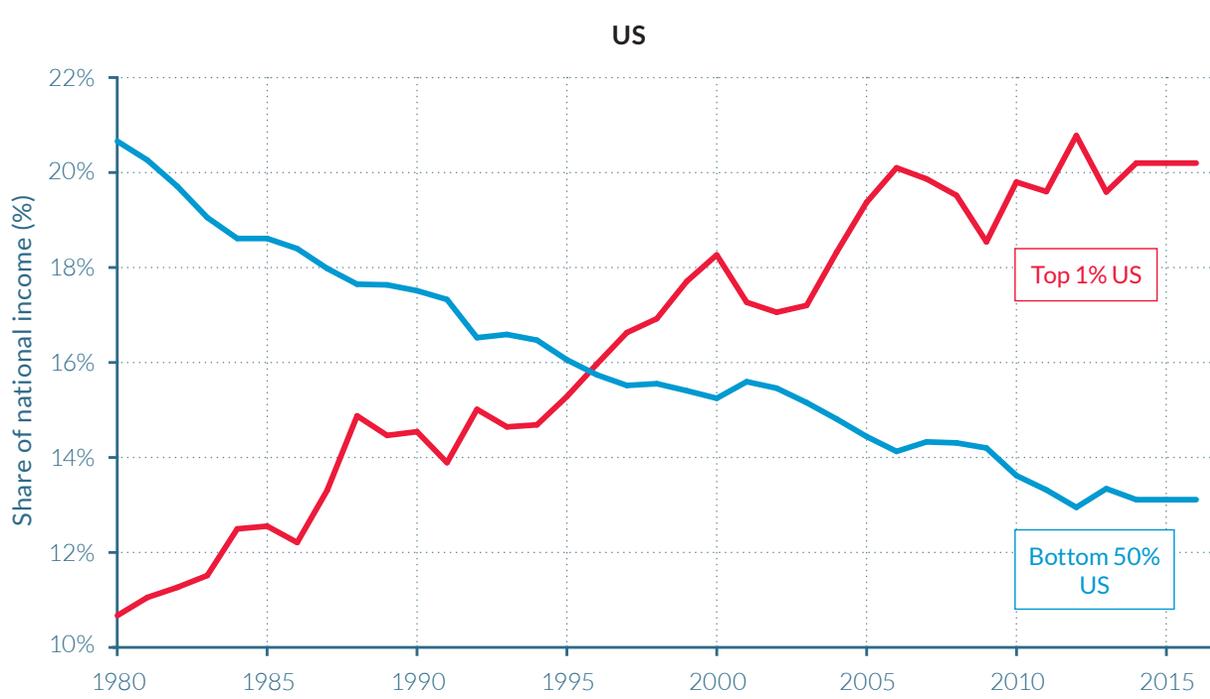
Total income growth by percentile across all world regions, 1980-2016



Source: World Inequality Report 2018, Figure 2.1.4. See wir2018.wid.world for data sources and notes.

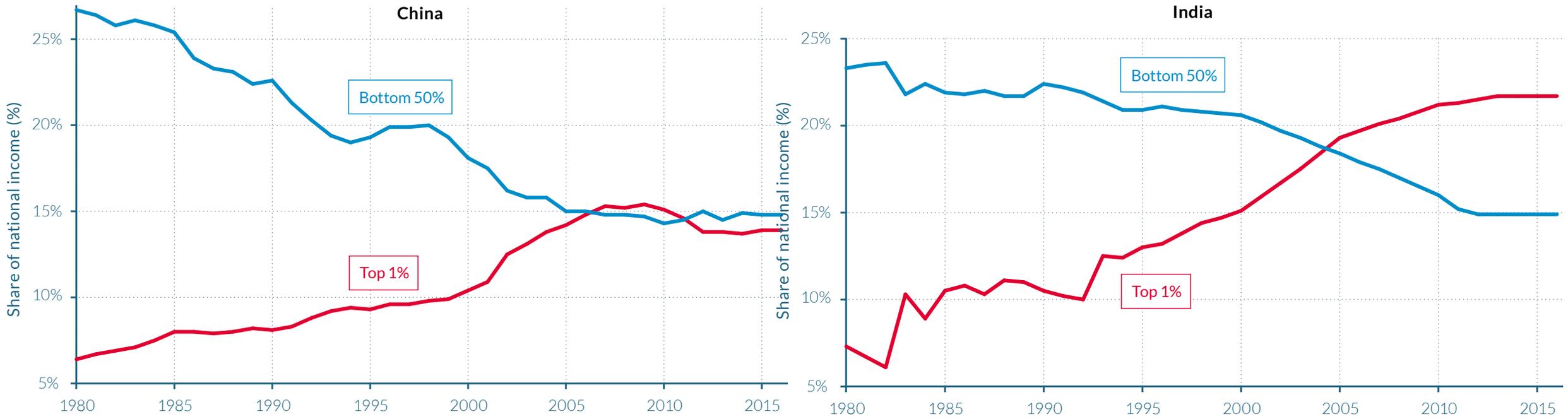
- Key question: are we sure that the **enormous** rise of the global 1% was necessary for the growth of the bottom 50%?
- Answer: No.
- A careful analysis of country-level growth and inequality trajectories suggest that it is possible to combine higher growth and lower inequality.
 - US vs Europe: huge rise of inequality in US, but stagnation of bottom 50% average income
 - India vs China: higher rise in inequality in India, but less growth

Top 1% vs. bottom 50% in the US and Western Europe, 1980-2016



Source: World Inequality Report 2018, Figure 2.1.3. See wir2018.wid.world for data sources and notes.

Top 1% vs. bottom 50% in China vs. India, 1980-2016



Source: World Inequality Report 2018, Appendix Figure A4. See wir2018.wid.world for data sources and notes.

- US vs. EU : similar levels of development, size, exposure to globalization and to new technologies since 1980. Radically diverging inequality trajectories due to different institutional and policy choices (less progressive taxation, unequal education, falling minimum wage, etc.).
 - US-Canada: average income grew by 63% btw 1980 and 2016, and bottom 50% by 5%; Europe: average income grew by 40%, and bottom 50% by 26%.

- China vs. India: rise in inequality in both countries but was extreme in India, moderate in China. More investments in education, health, infrastructure for the bottom 50% in China.
 - China: average income grew by 831%, and bottom 50% by 417%;
India: average income grew by 223%, and bottom 50% by 107%.

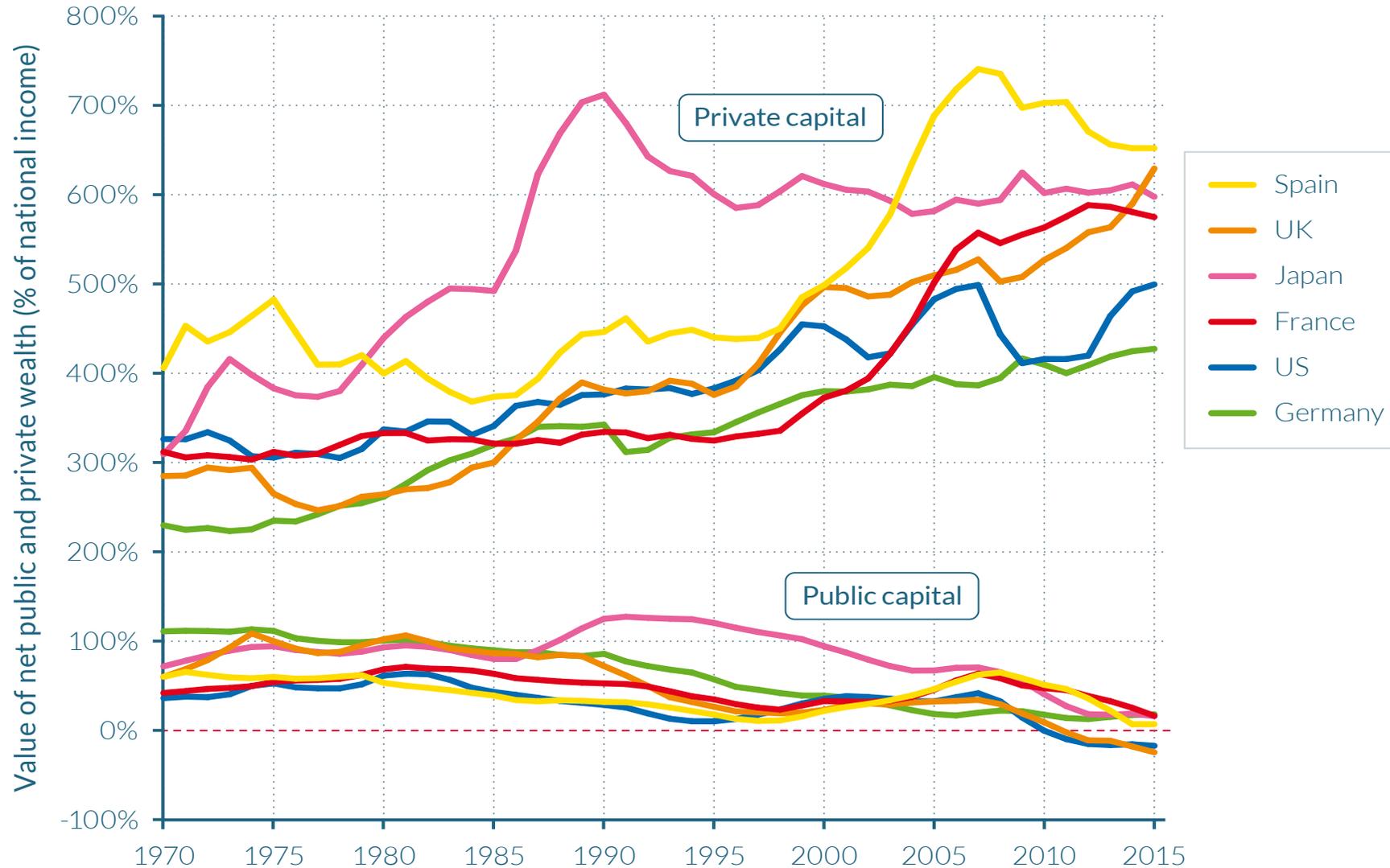
- NB: none of the above countries meets new SDG targets (bottom 40% is supposed to grow faster than the average)

Part III

PUBLIC VERSUS PRIVATE CAPITAL DYNAMICS

- Economic inequality is largely driven by the unequal ownership of capital, which can be either privately or public owned.
- We show that since 1980, very large transfers of public to private wealth occurred in nearly all countries, whether rich or emerging.
- While national wealth has substantially increased, public wealth is now negative or close to zero in rich countries. Arguably this limits the ability of governments to tackle inequality; certainly, it has important implications for wealth inequality among individuals.

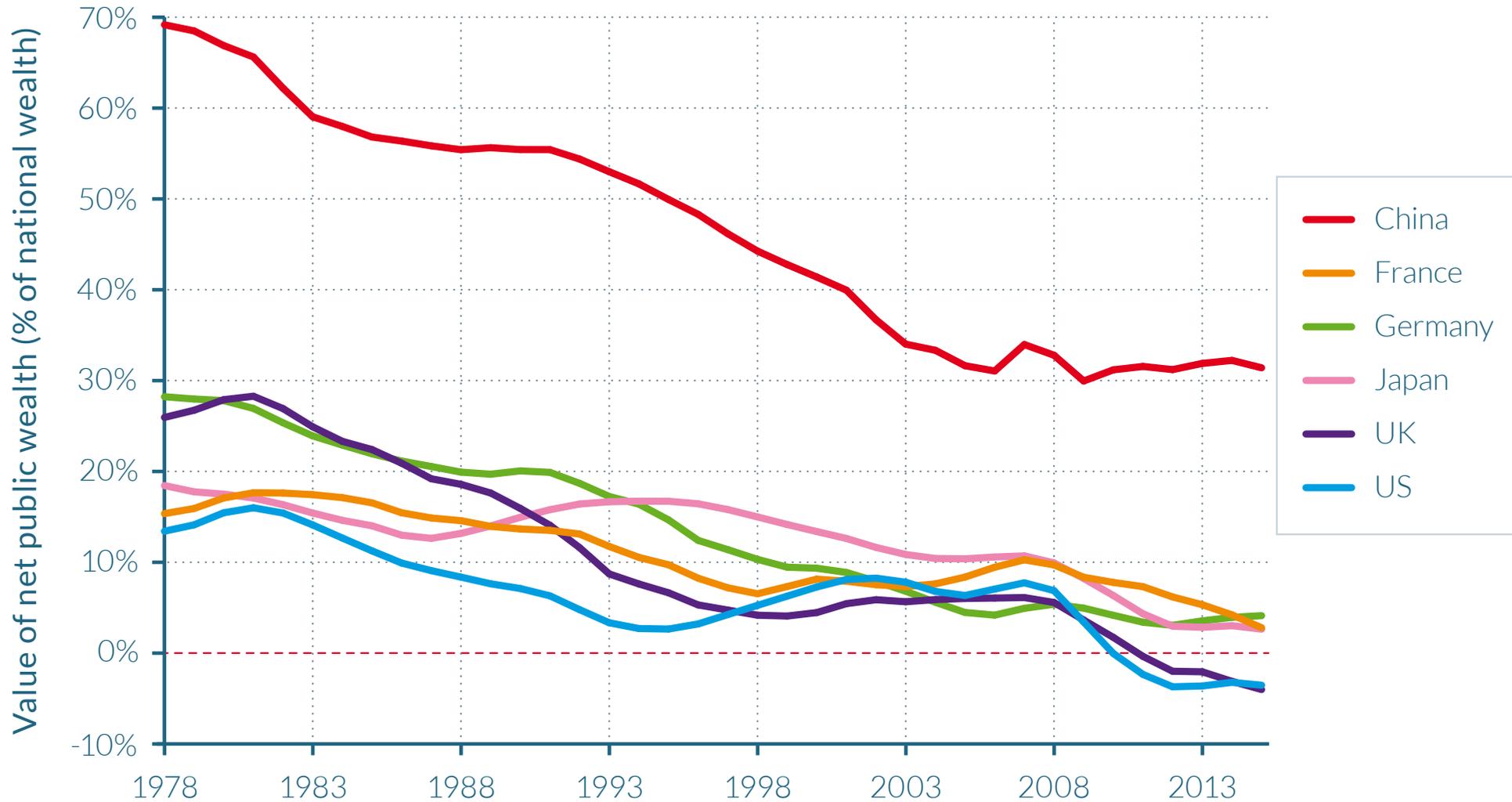
The rise of private capital and the fall of public capital in rich countries, 1970-2016



Source: World Inequality Report 2018, Figure E6. See wir2018.wid.world for data sources and notes.

... in China the share of public capital in national capital is now comparable to rich countries during the mixed-economy period (1950-1980).

The decline of public capital, 1970-2016



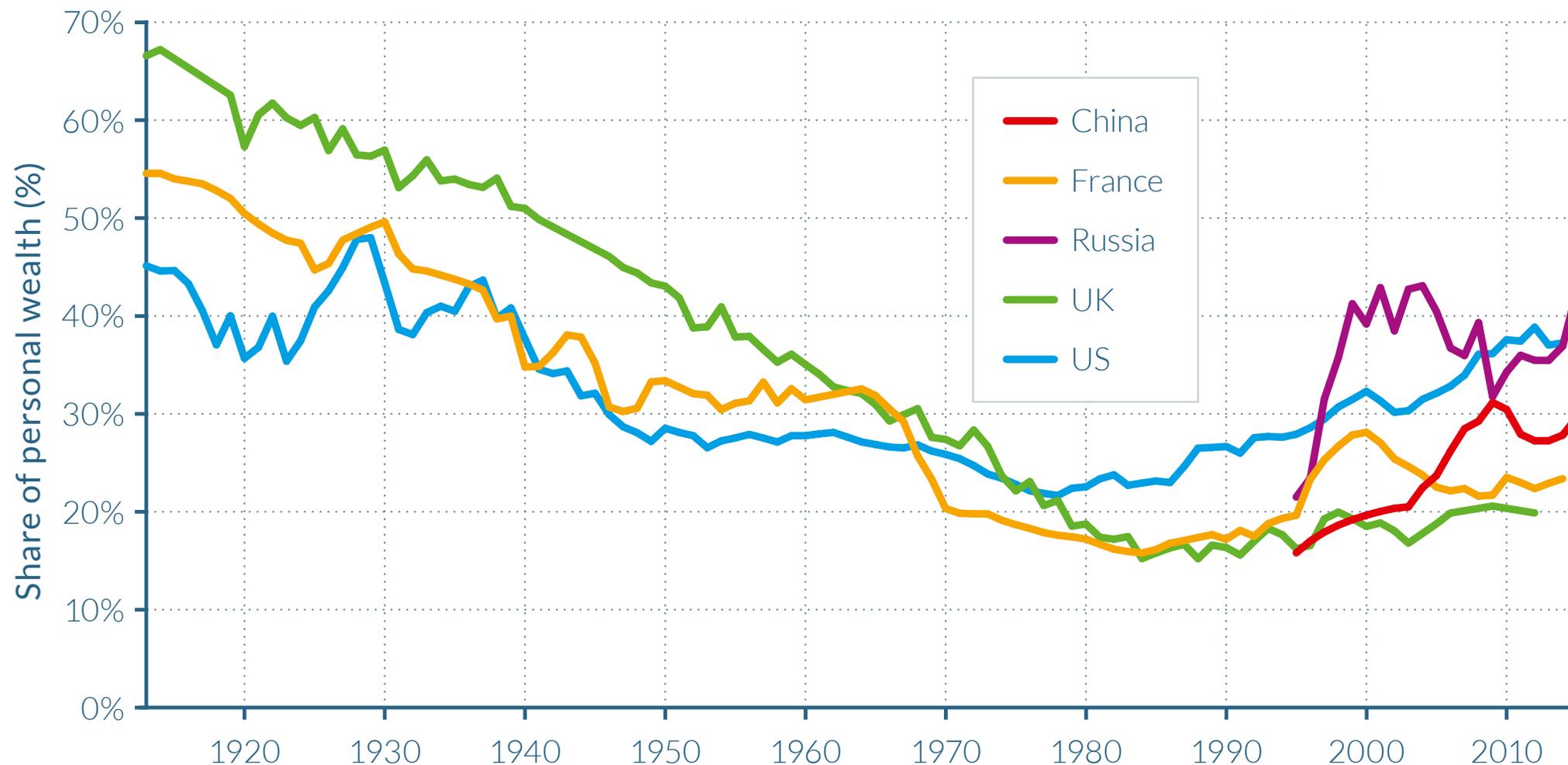
Source: World Inequality Report 2018, Figure E7. See wir2018.wid.world for data sources and notes.

Part IV

GLOBAL WEALTH INEQUALITY DYNAMICS

- Wealth data remains particularly opaque around the globe.
- The combination of rising income inequality and large transfers of public to private wealth led to a steep rise in wealth inequality in Russia, US, CN since 1980.
- Wealth inequality rose at a more moderate speed in FR, UK, partly due to dampening effect of housing prices.

Top 1% personal wealth share in emerging and rich countries, 1913-2015



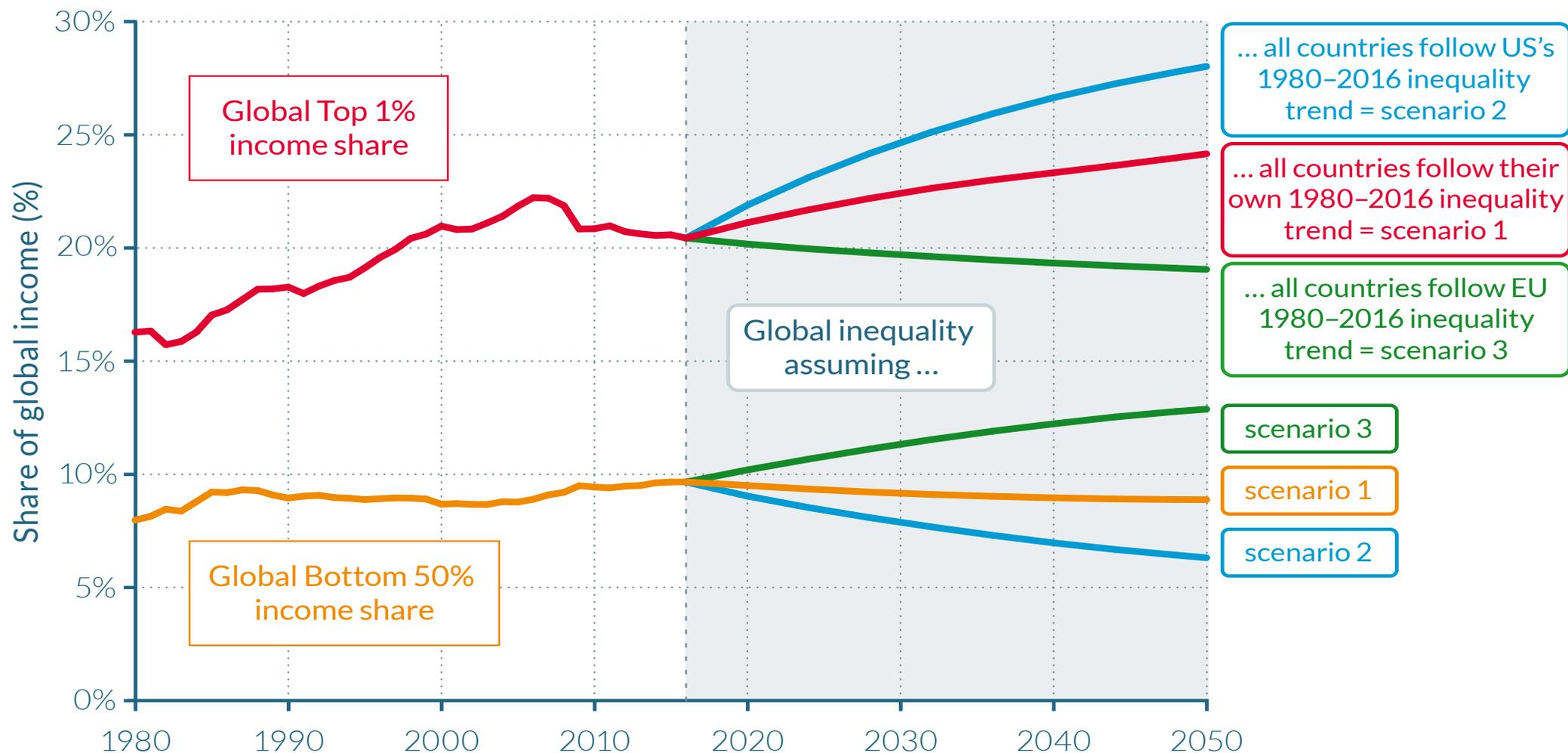
Source: World Inequality Report 2018, Figure 4.2.1. See wir2018.wid.world for data sources and notes.

Part IV

TACKLING GLOBAL INEQUALITY

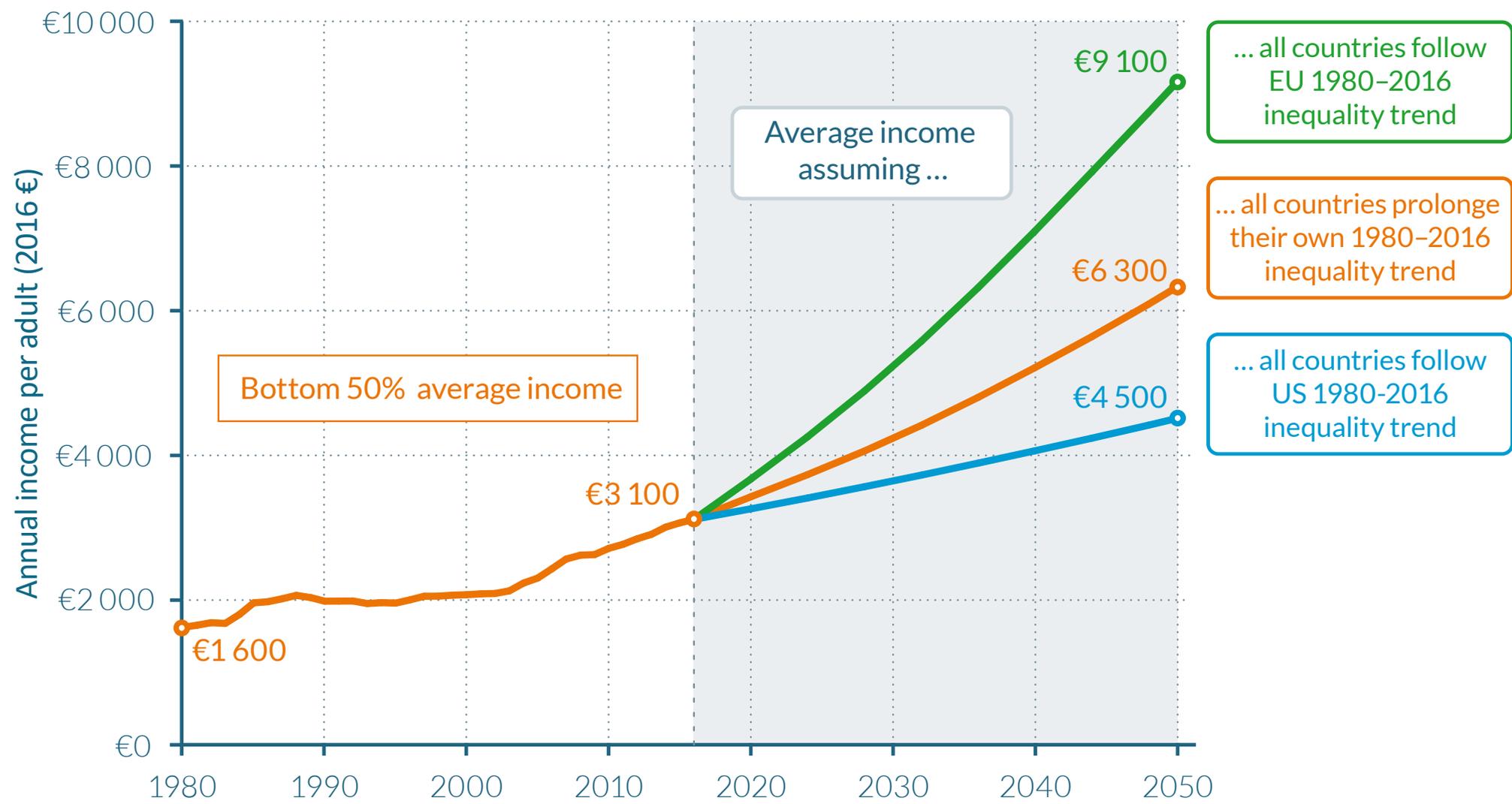
- The future of global inequality depends on convergence forces (rapid growth in emerging countries) and divergence forces (rising inequality within countries). No one knows which of these forces will dominate and whether current trends are sustainable.
- Under « Business as usual » scenario, even with high growth in the emerging world, within-country divergence will prevail. Other pathways are possible however: if all countries adopt a European inequality pathway, global inequality would decrease by 2050. This would have enormous impacts on global poverty eradication.

Global income share projections of the Bottom 50% and Top 1% , 1980–2050



Source: World Inequality Report 2018, Figures 5.1.1. See wir2018.wid.world for data sources and notes.

Global average income projections of the Bottom 50%, 1980–2050



Source: World Inequality Report 2018, Figures 5.1.3. See wir2018.wid.world for data sources and notes.

Progressive taxation

Global financial registry

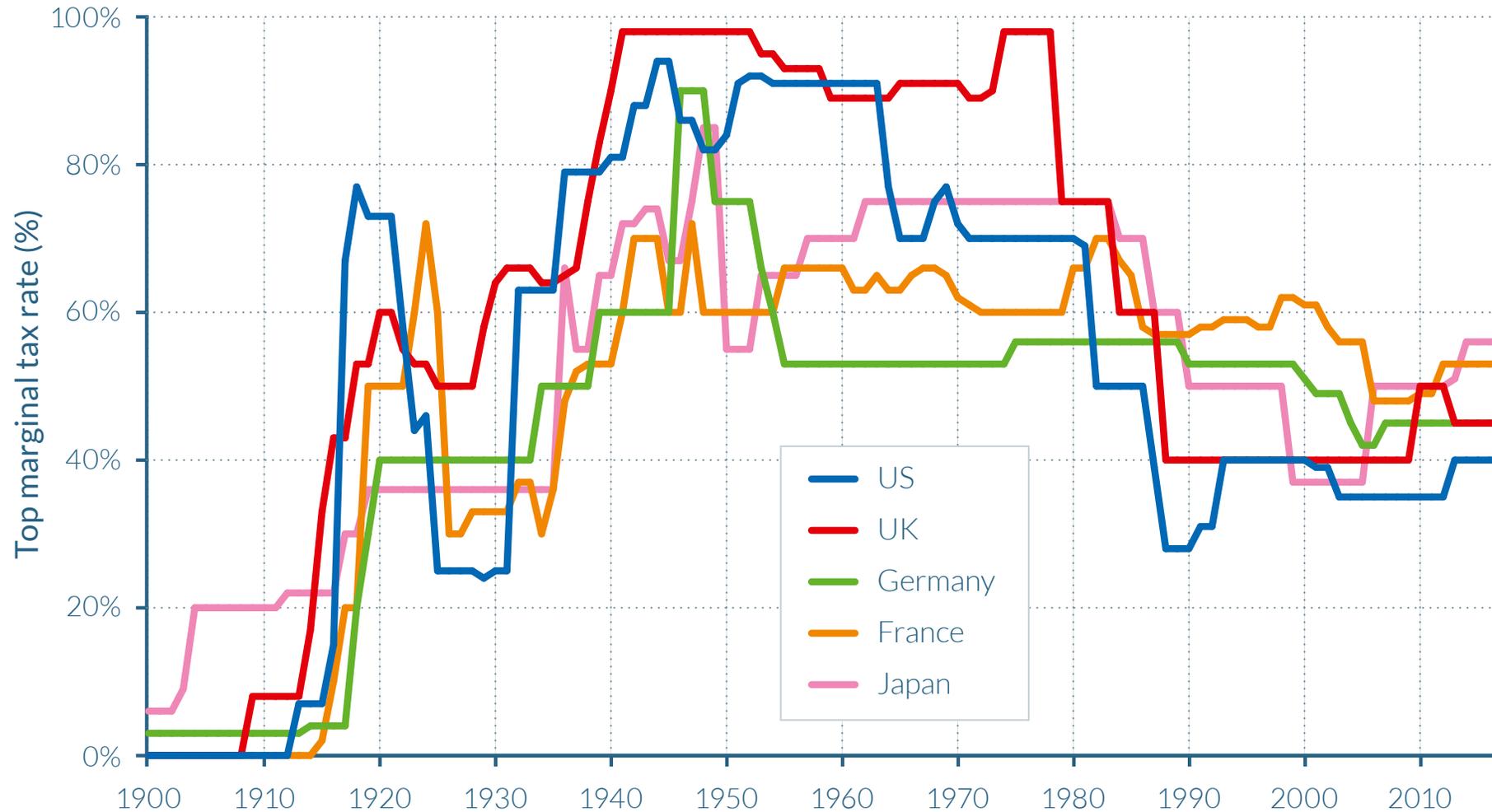
Equal access to education
and well-paying jobs

Investing in the future



Figure 5.2.2

Top income tax rates in rich countries, 1900–2017

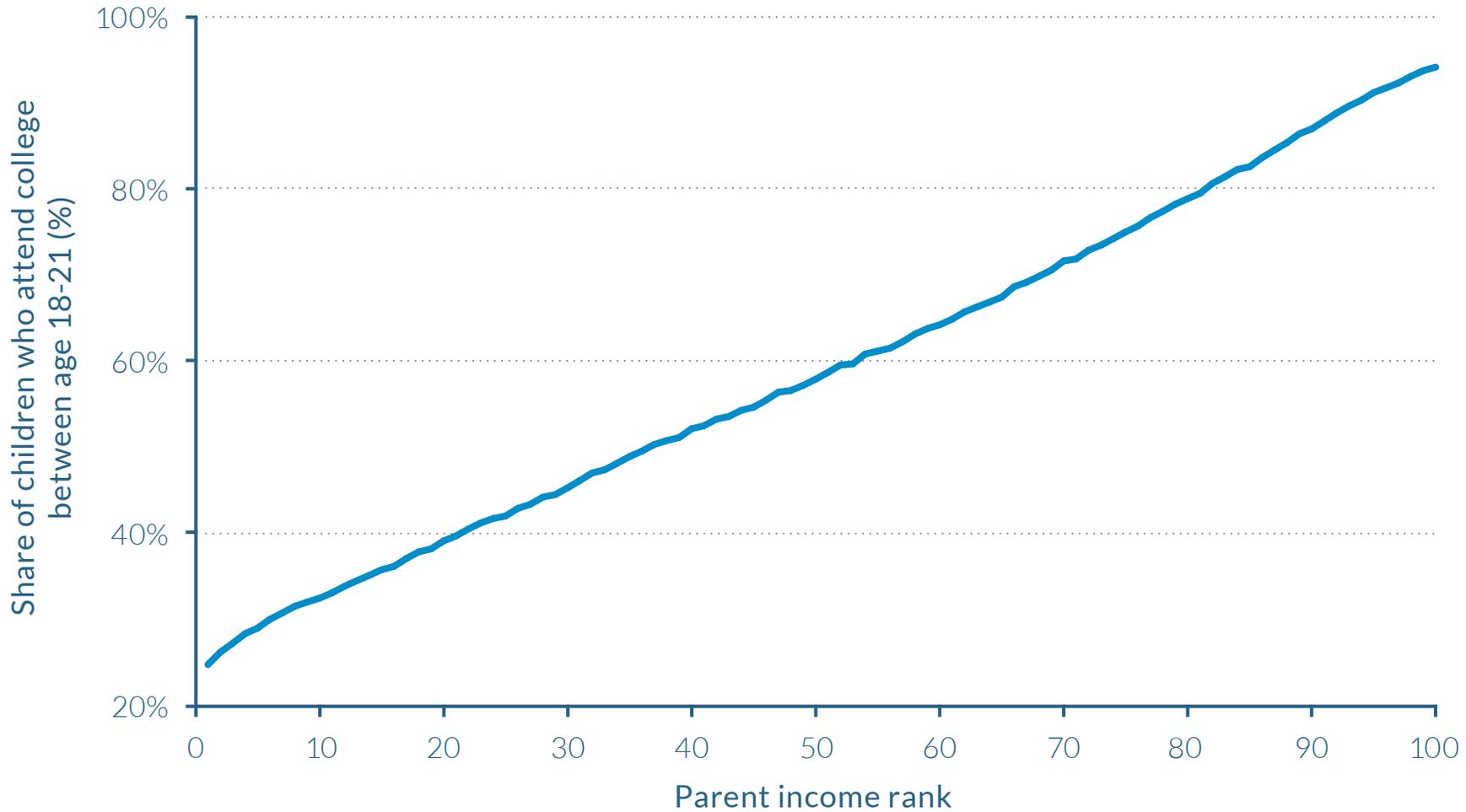


Sources: Piketty (2014) and updates. See wir2018.wid.world for data series and notes.

Between 1963 and 2017, the top marginal tax rate of income tax (applying to the highest incomes) in the US fell from 91% to 40%.

Figure 5.4.1

College attendance rates and parent income rank in the US for children born in 1980–1982



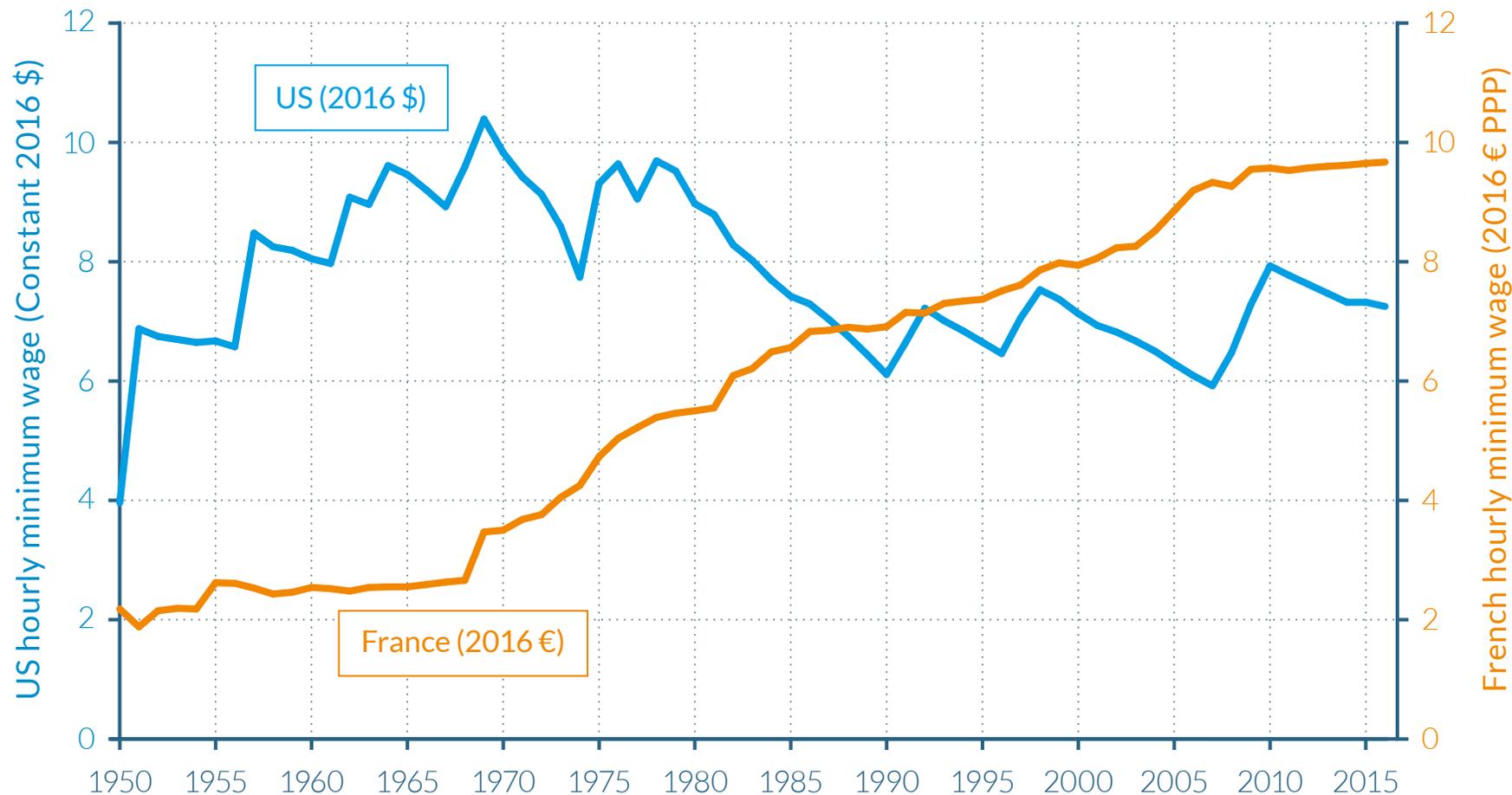
Source: Chetty, Hendren, Kline and Saez (2014). See [wir2018.wid.world](#) for data series and notes.

30% of children whose parents are in the Bottom 10% of the income distribution attend college between age 18 and 21. Almost 90% of children whose parents are in the Top 10% of the income distribution attend college between age 18 and 21.

Equal access to education essential but not sufficient: labour market regulations are also key. US minimum wage today is 30% below 1970 level.

Figure 5.4.3

Minimum wage in France and the US, 1950–2016

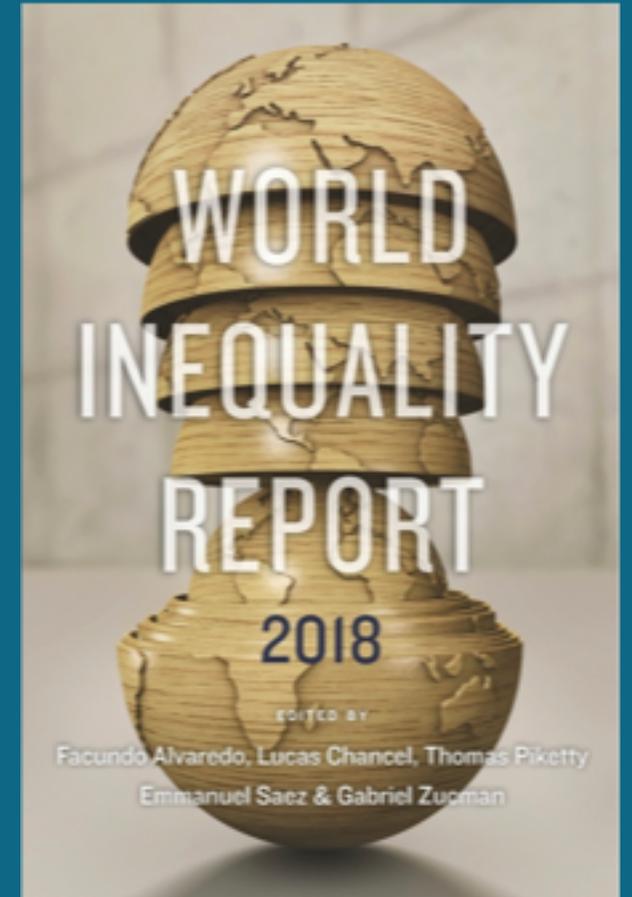


Source: Piketty (2014) and updates. See wir2018.wid.world for data series and notes.

Between 2000 and 2016, the hourly minimum wage rose from €7.9 to €9.7 in France, while it rose from \$7.13 to \$7.25 in the US. Income estimates are calculated using Purchasing Power Parity (PPP) euros for France and dollars for the US. For comparison, €1 = \$1.3 = ¥4.4 at PPP. PPP accounts for differences in the cost of living between countries. Values are net of inflation.

CONCLUSION

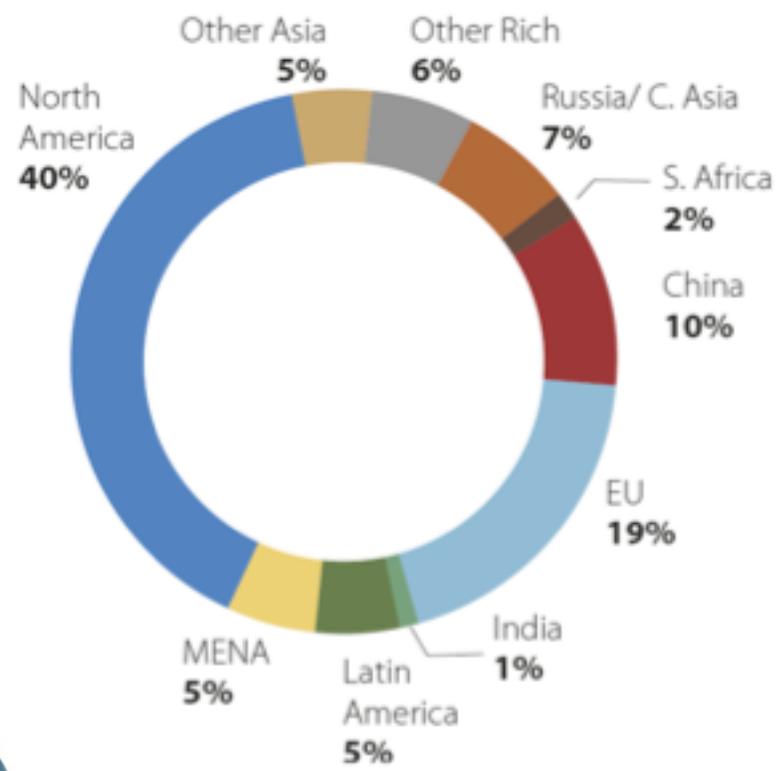
- The WID.world project: more than 100 researchers over the five continents. All the data is entirely open source + transparent to feed public debates.
- This report: first systematic assessment of globalization in terms of inequality. Global top 1% captured twice as much growth as bottom 50% since 1980. Under Business as usual, even with optimistic growth assumptions in the emerging world, global inequality will continue to rise.
- Rising inequality is not inevitable: different types of policies can be implemented to promote equitable growth pathways in the coming decades.



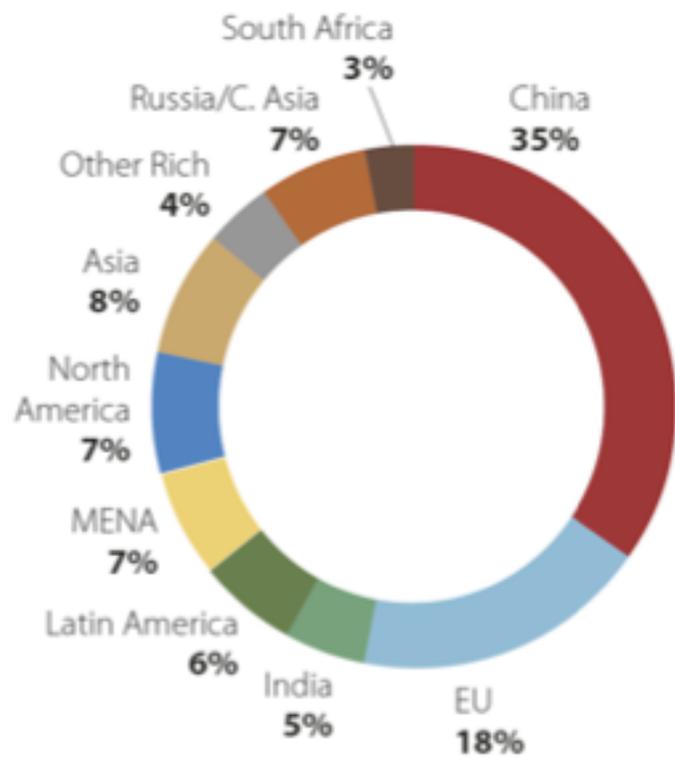
Additional slides

FIGURE E.1. BREAKDOWN OF TOP 10, MIDDLE 40 AND BOTTOM 50% CO₂e EMITTERS

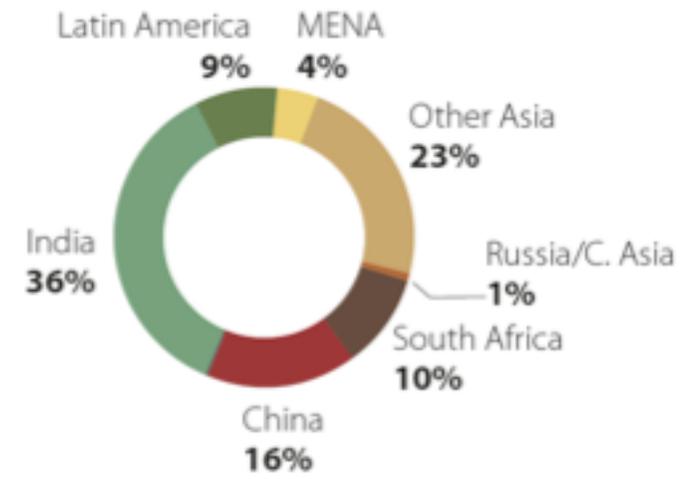
Top 10% emitters:
45% of world emissions



Middle 40% emitters:
42% of world emissions



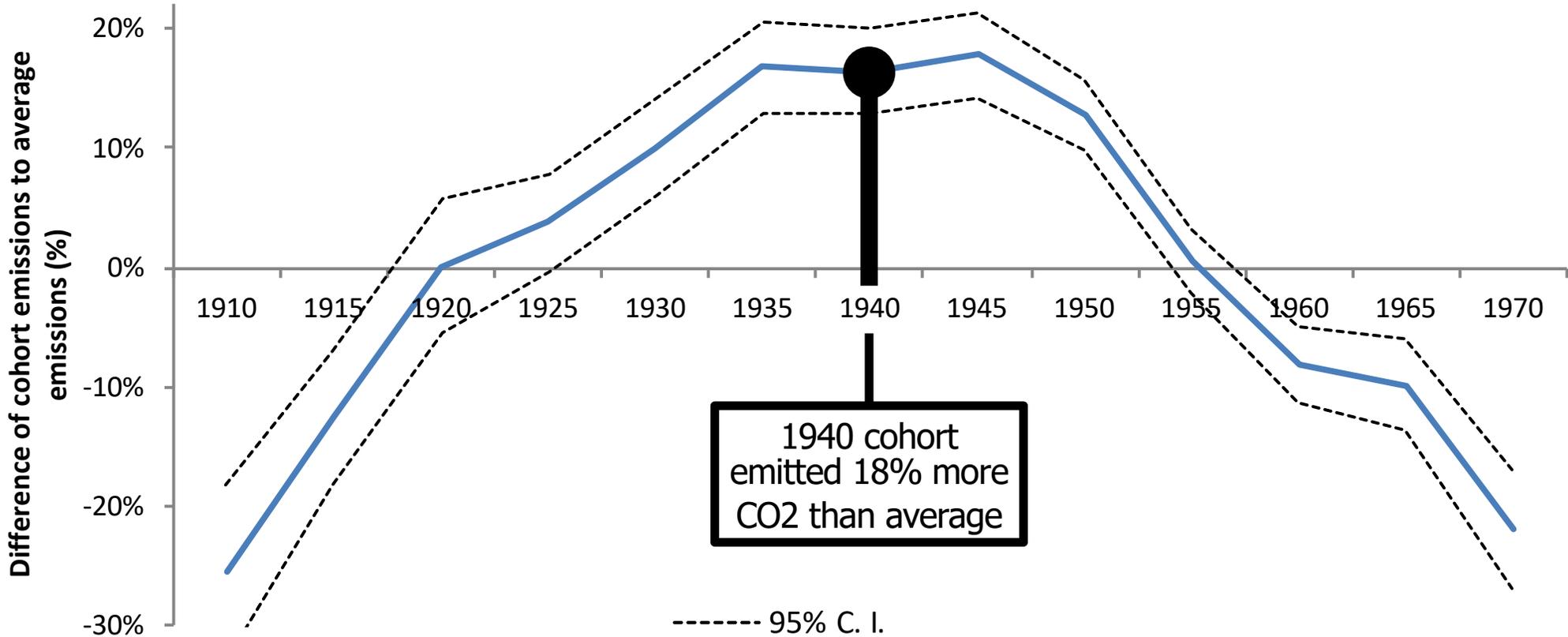
Bottom 50% emitters:
13% of world emissions



Chancel & Piketty, 2015

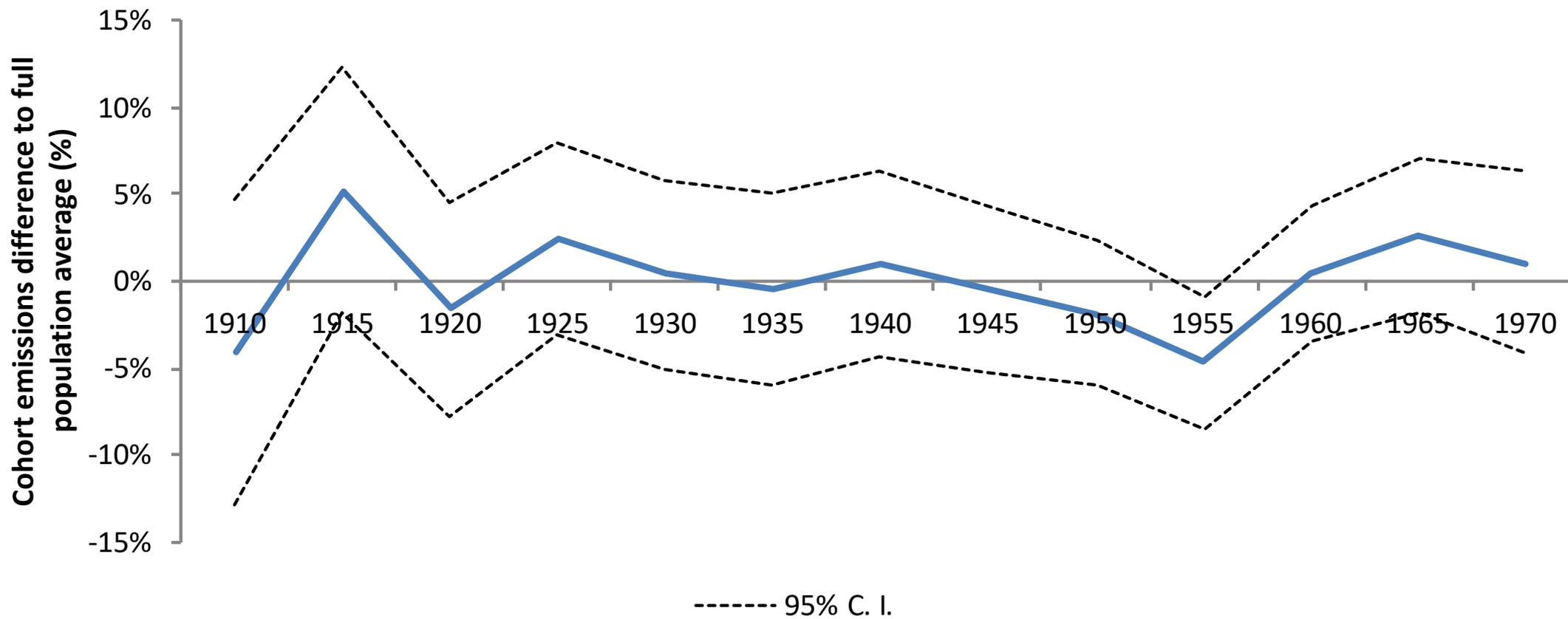
Source: authors. Key: Among the top 10% global emitters, 40% of CO₂e emissions are due to US citizens, 20% to the EU and 10% from China.

**CO2 emissions gap between cohorts in France
(Individuals born from 1910 to 1970)**



Chancel, 2014

CO2 emissions gap between cohorts in the USA
(Individuals born from 1910 to 1970)



Chancel, 2014

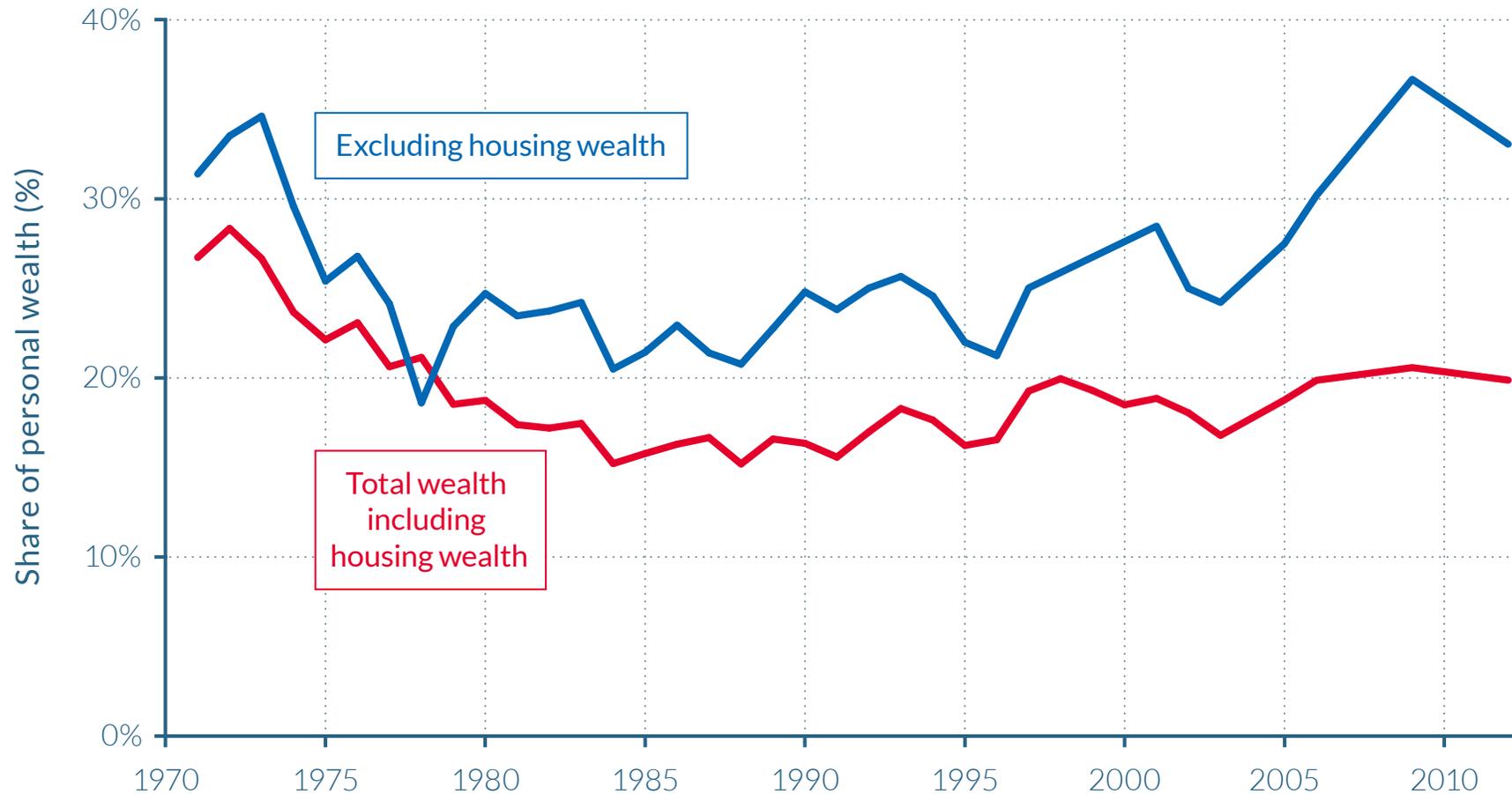
VISIT **WIR2018.WID.WORLD**
FOR THE ONLINE VERSION OF THE REPORT.



Concentration of non-housing wealth (financial and business assets) increased substantially since 1995. Role of housing as moderator.

Figure 4.6.4

Top 1% wealth share in the UK, 1971-2012



Source: Alvaredo, Atkinson and Morelli (2017). See [wir2018.wid.world](#) for data series and notes.

In 2013, the wealth share of the Top 1% was 20% of total wealth. However, when excluding housing wealth, the Top 1% share was 33%.

1. Introduction: the WID.world project

WID.world combines inequality data sources in a consistent way to fill a democratic gap.

2. Global income inequality dynamics

Global top 1% captured twice as much growth as bottom 50% since 1980. Different national trajectories suggest that the trend was not inevitable.

3. Public vs. private capital dynamics

Gradual rise in wealth income ratios since 1980s in the context of large transfers of public to private wealth in emerging and rich countries.

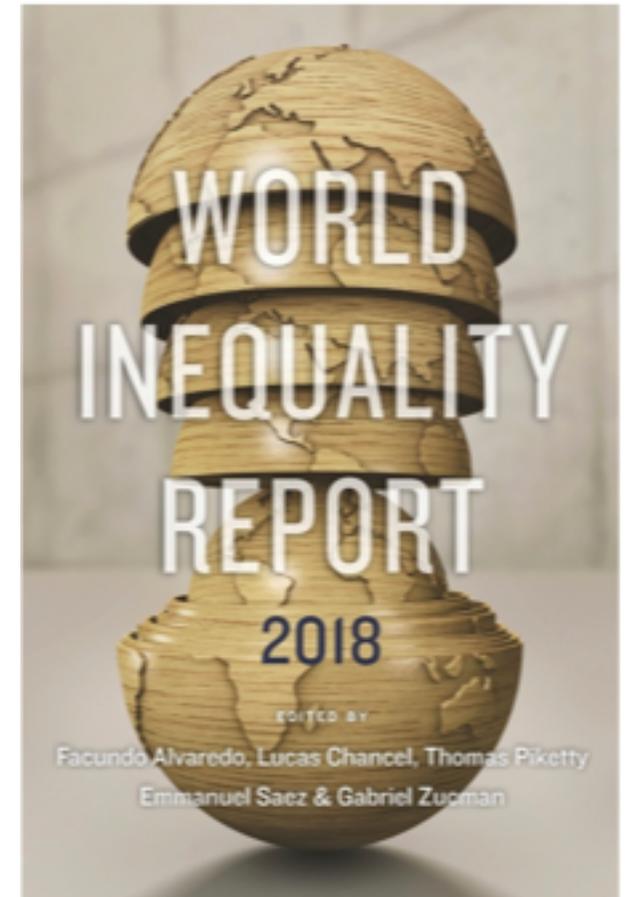
4. Global wealth inequality dynamics

Combination of rising income inequality and fall of public wealth contributed to sharp rise in wealth inequality among individuals.

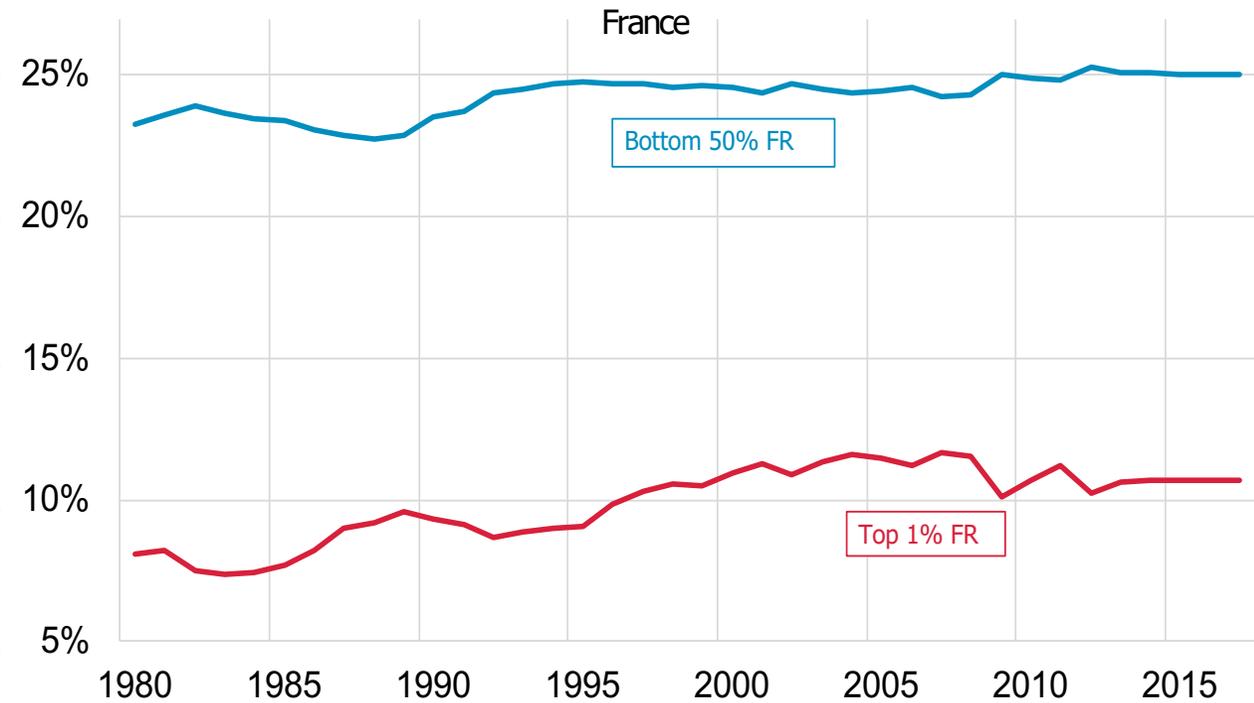
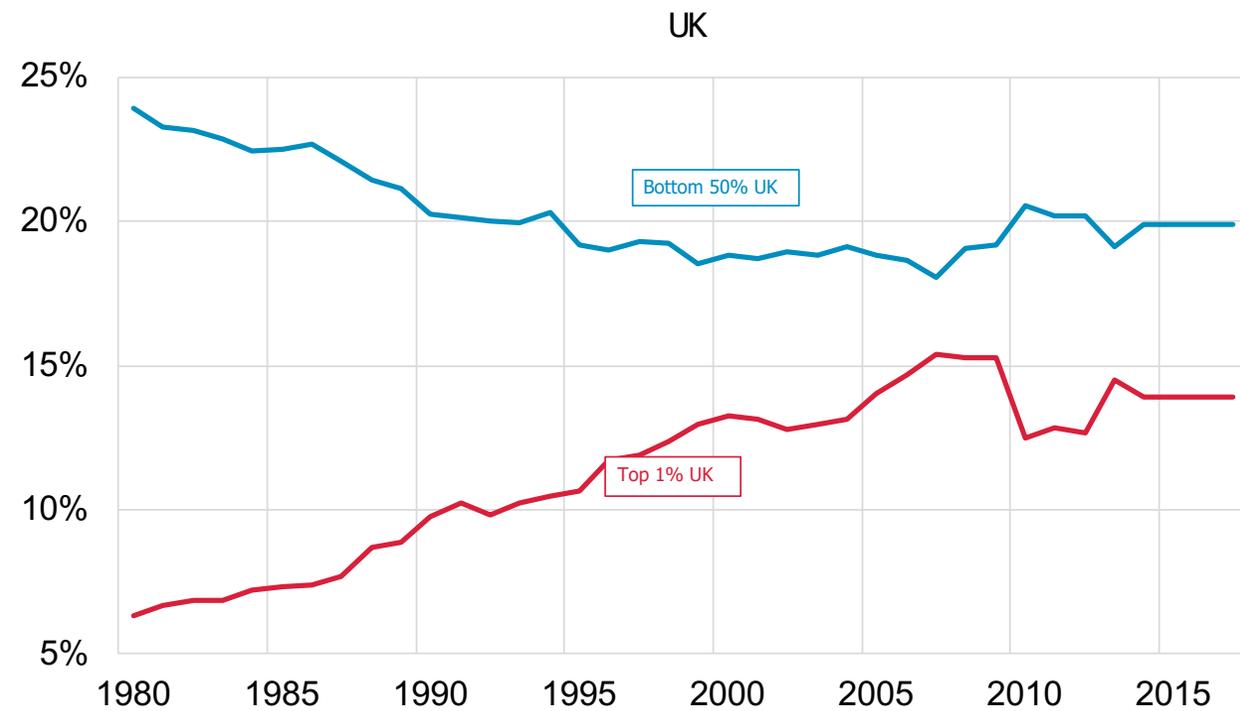
- Focus: [wealth inequality in the UK](#)

5. Conclusion: tackling inequality

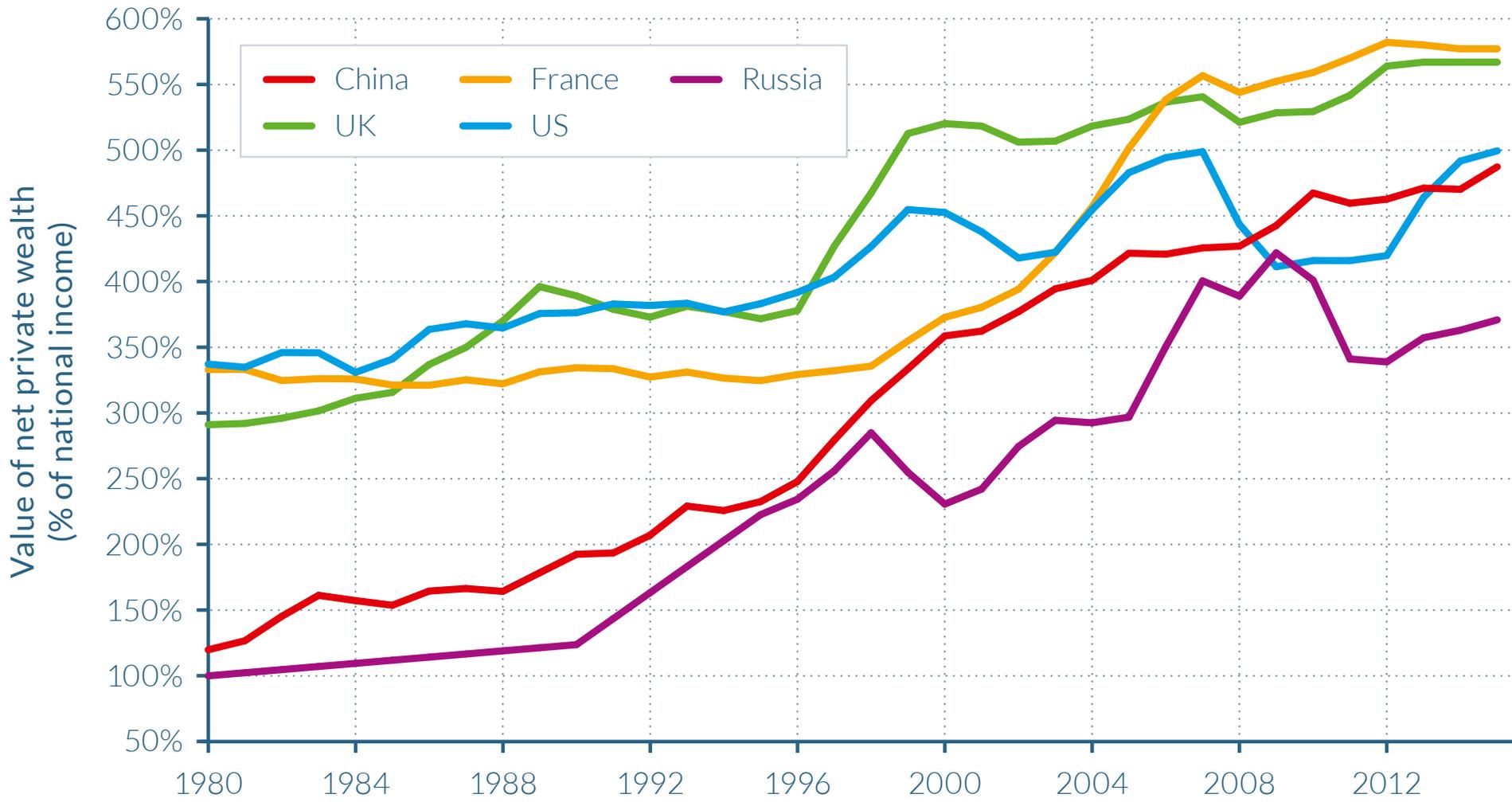
Rethinking the policy cocktail of globalization



Top 1% vs. bottom 50% in France and in the UK, 1980-2016



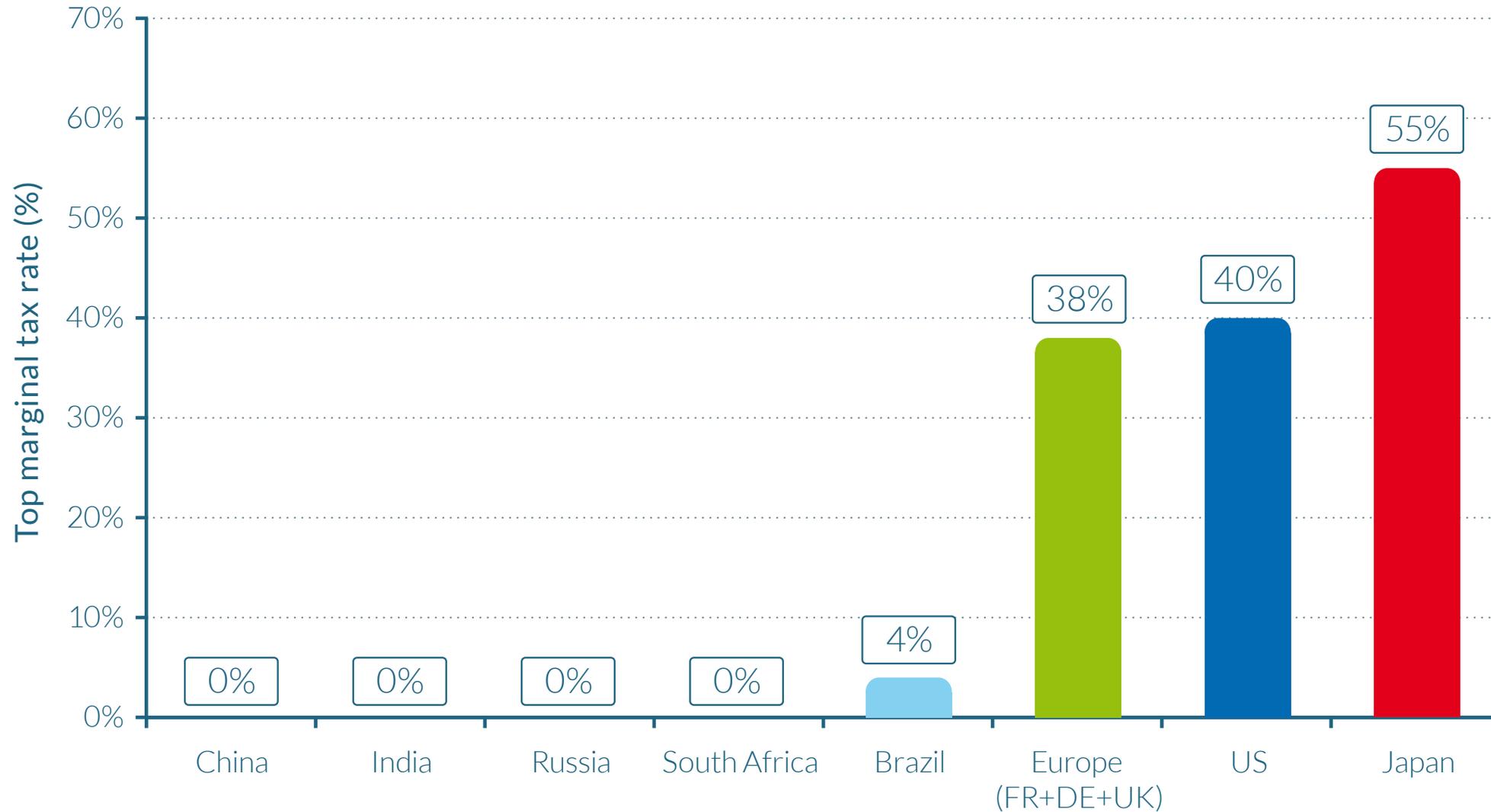
Net private wealth to net national income ratios in China, Russia and rich countries, 1980-2015: The rise of private wealth



Source: World Inequality Report 2018, Figure 3.1.1. See wir2018.wid.world for data sources and notes.

Figure 5.2.4

Top inheritance tax rates in emerging and rich countries, 2017



Source: WID.world (2017). See wir2018.wid.world for data series and notes.

In 2017, the top marginal tax rate of inheritance tax (applying to the highest inheritances) was 55% in Japan, compared to 4% in Brazil. Europe is represented by France, Germany and the UK.