Eco L3 - Globalization, Inequality, and Redistribution

Lecture 4: Globalization and the Rise of Extreme Wealth

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Roadmap

1. Measuring wealth inequality

2. The rise of extreme wealth

3. The role of top-end taxes

1 Measuring wealth inequality

Wealth inequality more difficult to measure than income inequality

- Idea data source would be annual wealth tax declarations for the entire population
- But exist in very few countries only (eg, Norway)
- For most countries, need to use indirect methods and combine data sources

1.1 Estate tax multiplier method

- Start with wealth-at-death reported on estate tax returns
- Compute mortality rate by age and gender
- Then weight wealth-at-death by inverse of mortality rate
- Main limitation: differential mortality by wealth conditional on age and gender

1.2 Capitalization of investment income

- Start with capital income reported in personal income tax returns
- Compute rate of return on each asset class
- Multiply capital income by inverse of rate of return
- Main limitation: differential realized rates of return by wealth group within asset class

1.3 Rich lists

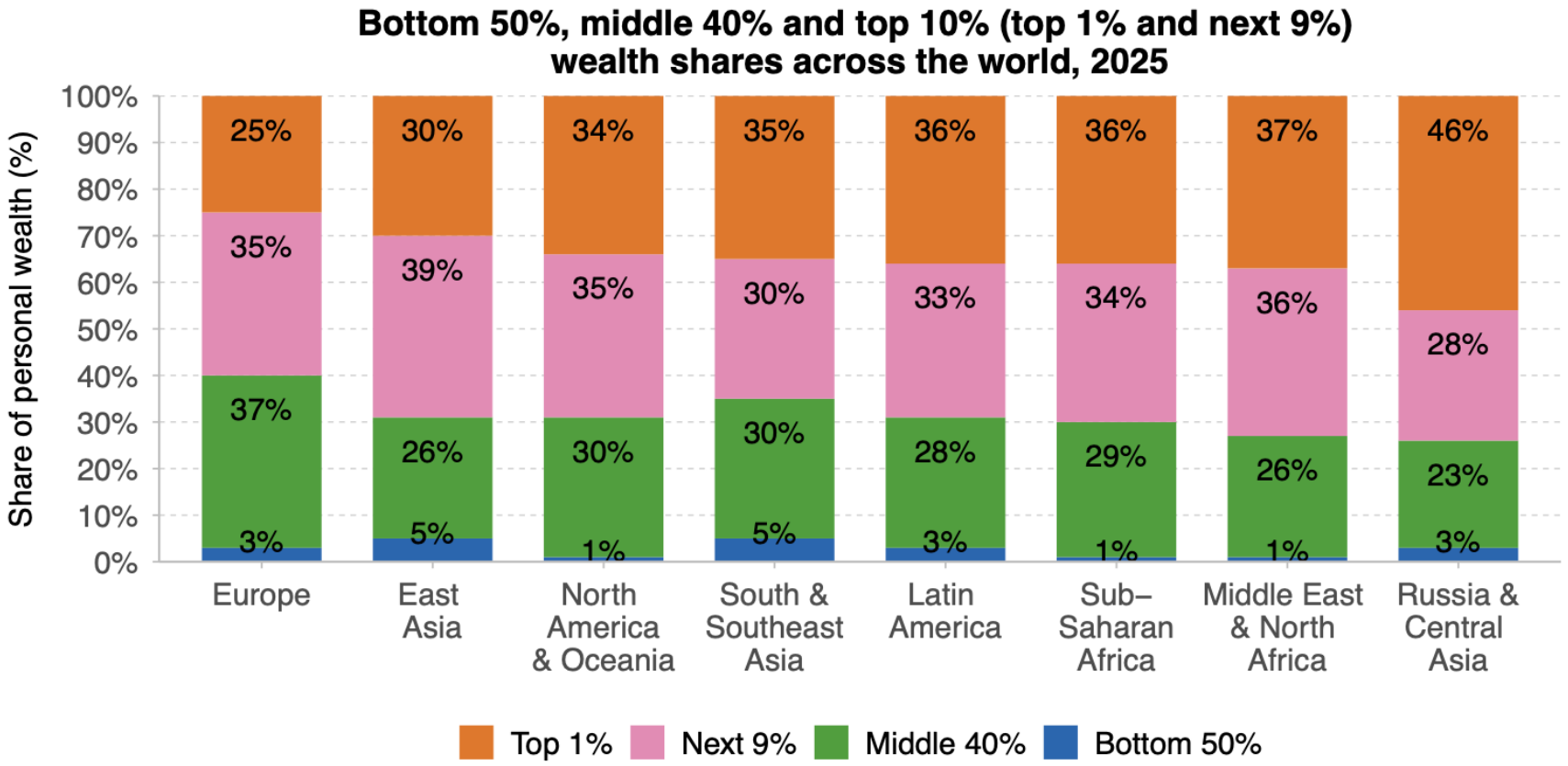
- Rankings by magazines like Forbes (US and global), Bloomberg (global), Challenges (France), Sunday Times (UK,) etc.
- Significant information on shares in listed companies due to reporting requirements to securities and exchange commissions
- Much less information on private businesses, debts

2 The rise of extreme wealth

2.1 Levels of wealth inequality

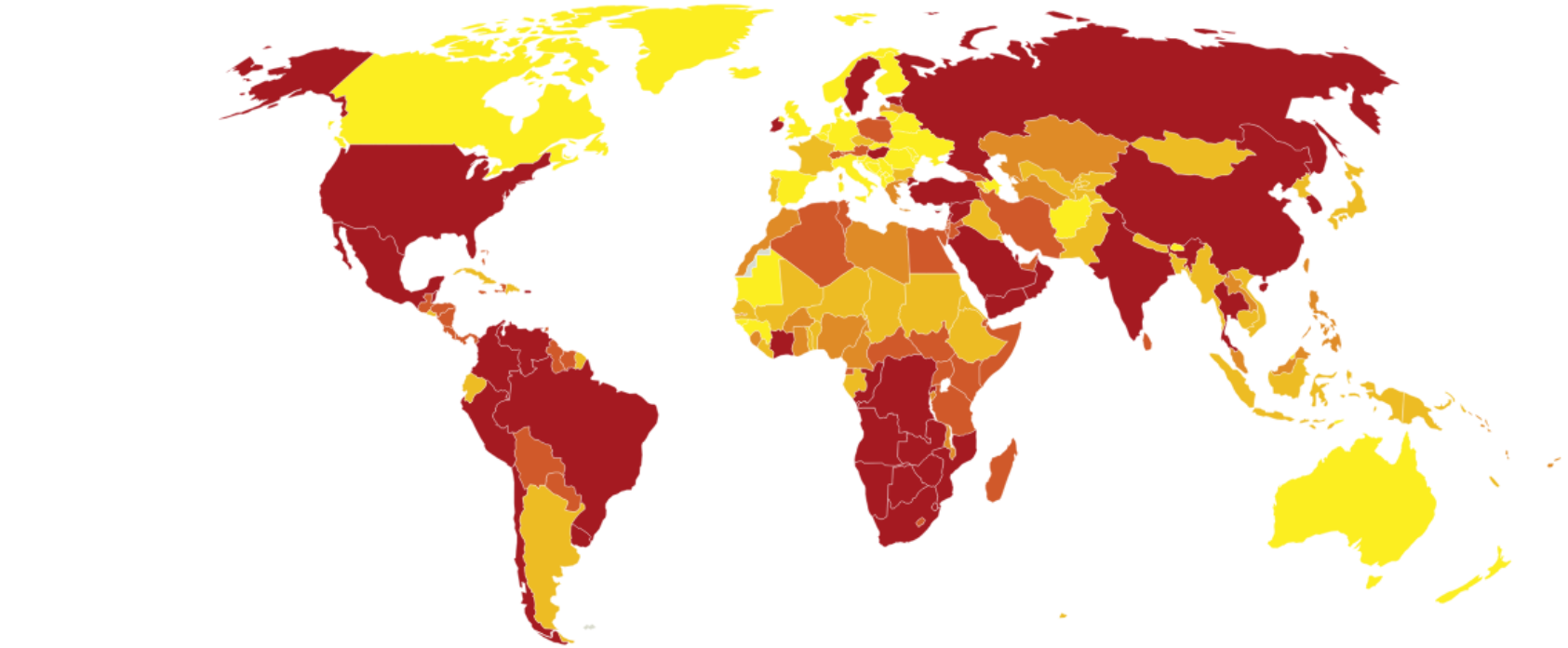
Private wealth always more concentrated than income

- Top 10% owns more than 50% of wealth everywhere
- Bottom 50% owns less than 10%; middle 40% owns 40% or less



Interpretation. In Latin America, the top 1% captures 36% of national wealth, and the next 9% an additional 33%. Together, the top 10% holds 69%, compared to 60% in Europe. Net personal wealth is equal to the sum of financial assets (e.g. equity or bonds) and non–financial assets (e.g., housing or land) owned by individuals, net of their debts. **Sources and series:** Arias–Osorio et al. (2025) and wir2026.wid.world/methodology.

Map 5. Top 10% net personal wealth share (2024)

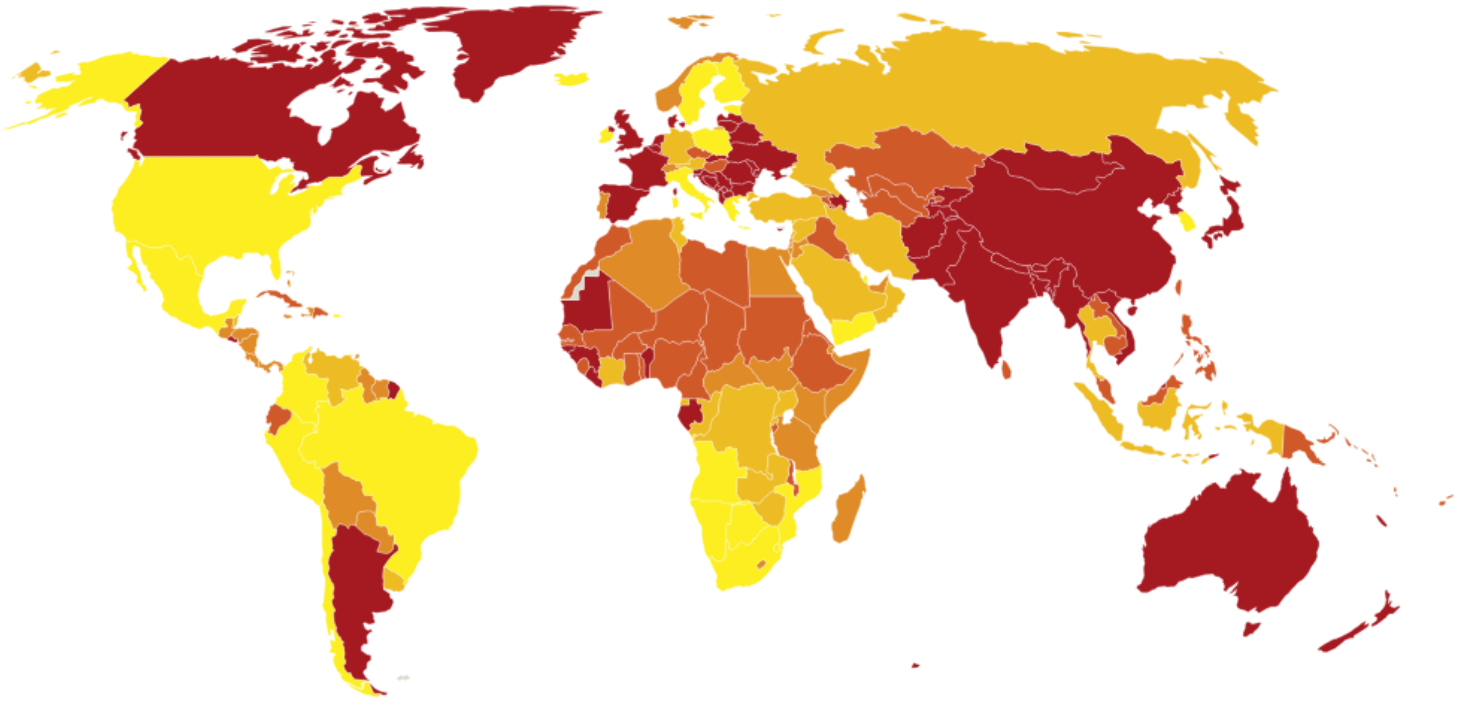


Share of total (%)

45 - 59 59 - 60 60 - 62 62 - 64 64 - 86

Graph provided by www.wid.world

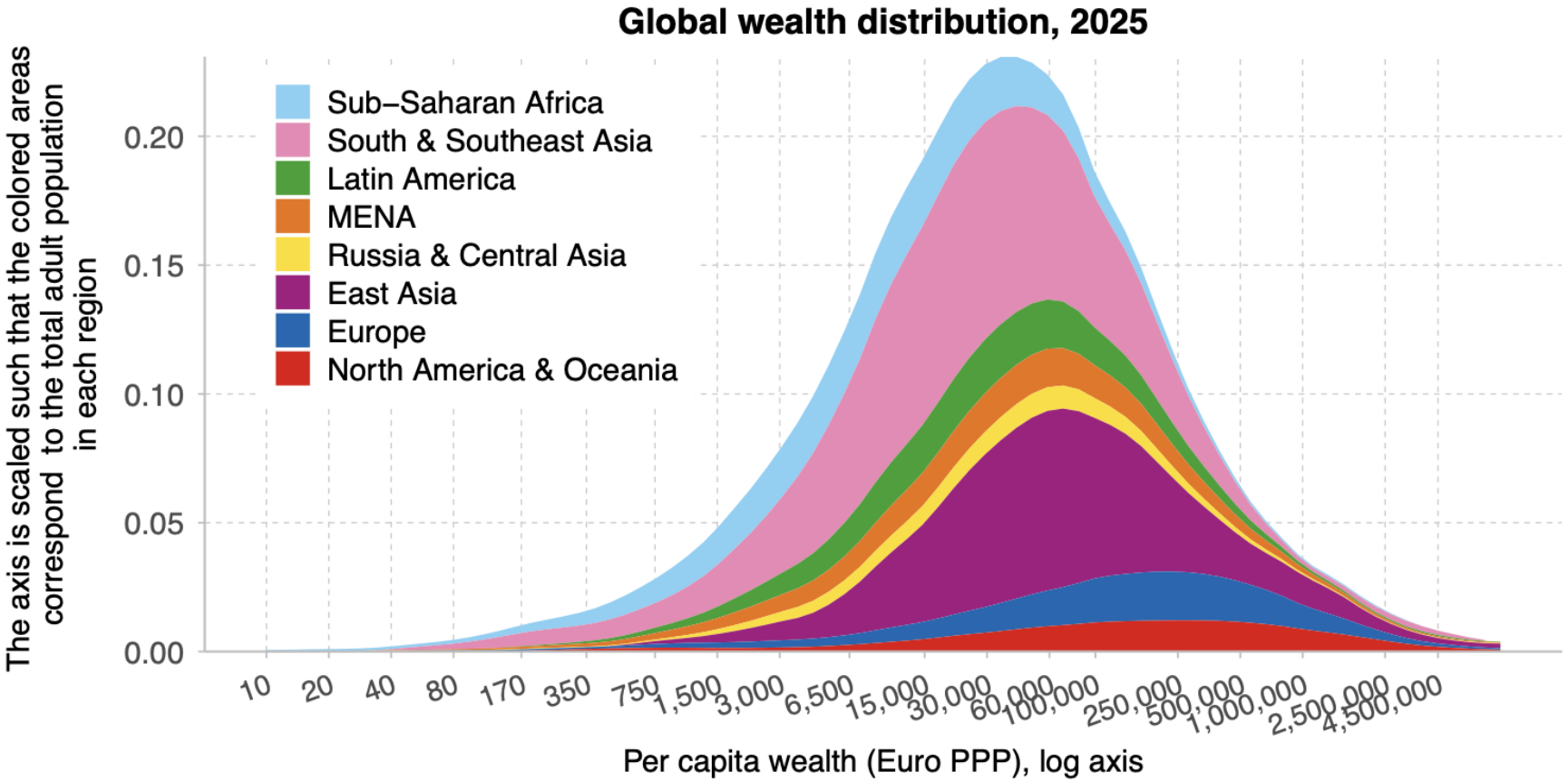
Map 6. Bottom 50% net personal wealth share (2024)



Share of total (%)

-10.9 - 2.6 | 2.6 - 3.5 | 3.5 - 3.8 | 3.8 - 4 | 4 - 10.4

Graph provided by www.wid.world

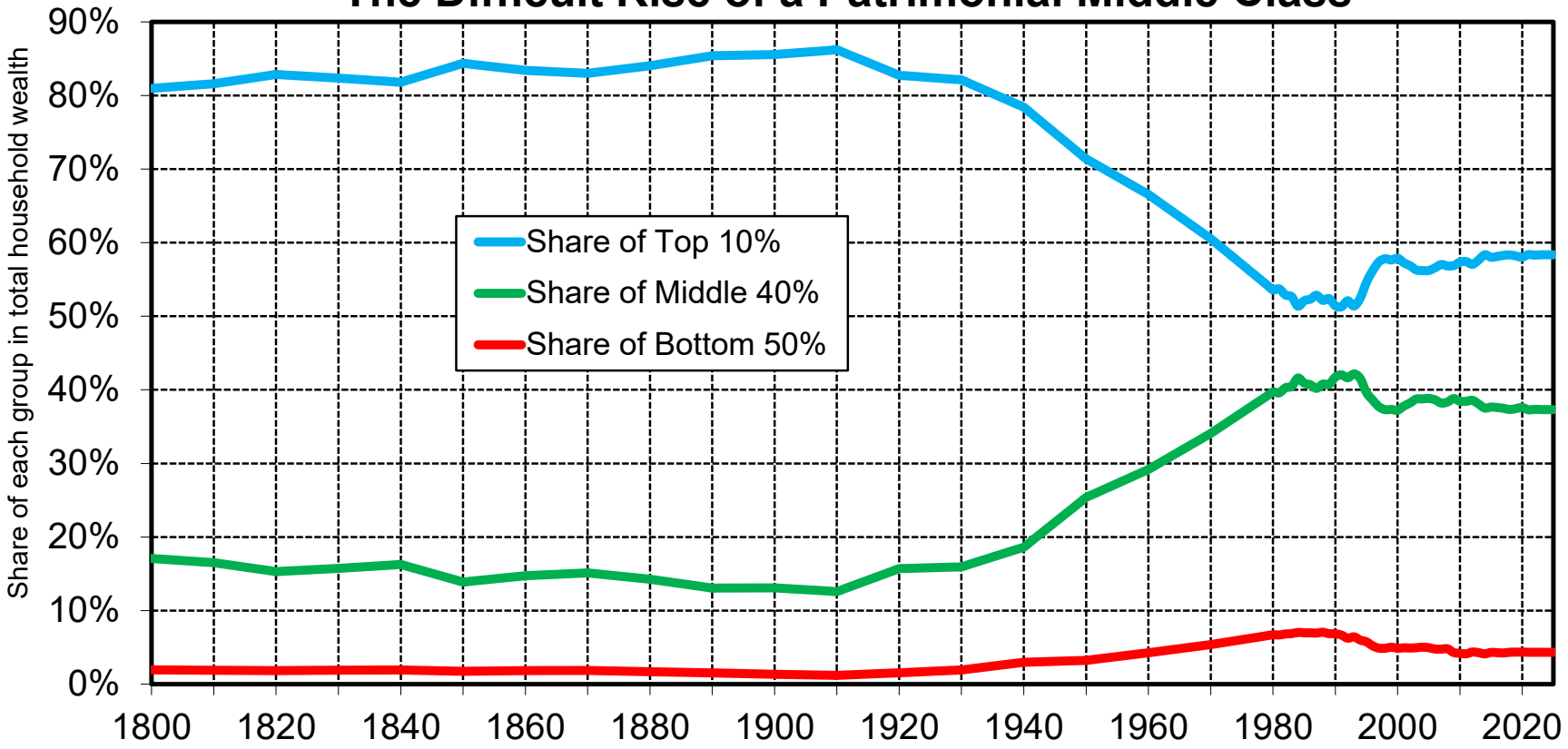


Interpretation. The graph shows the size and geographical repartition of the global population at different levels of the wealth distribution.The relative size of each color wedge is proportional to the population in a region. Distribution of personal wealth, net of debts. **Sources and series:** Arias−Osorio et al. (2025) and wir2026.wid.world/methodology.

2.2 Trends in wealth inequality within countries

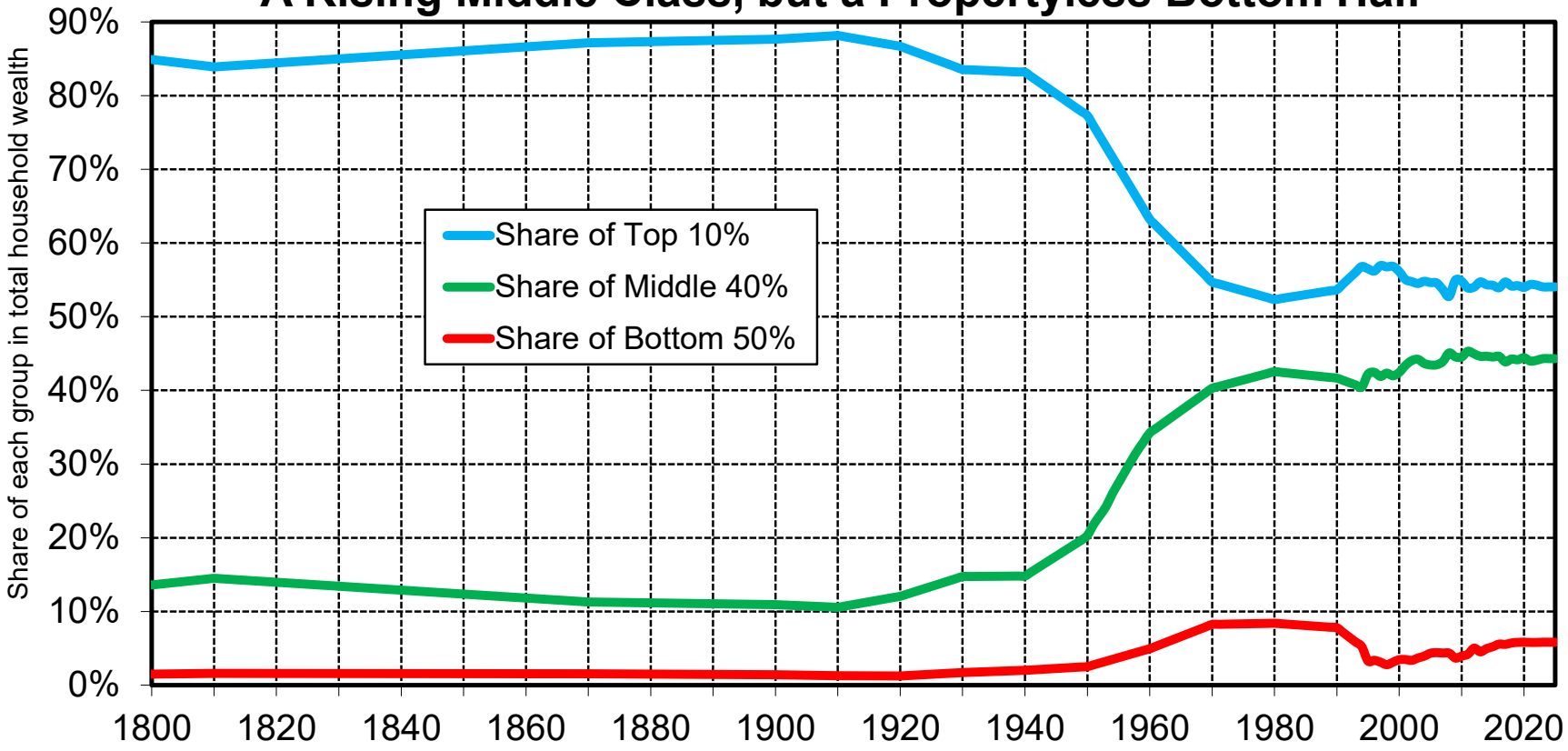
- As for income, general trends towards more inequality, but different magnitude across countries
- Since 1980s: Large rise in US, Russia, China, less so in Europe
- Long-term: great reversal US vs. Europe

Fig. 36. Wealth Shares in Western Europe: The Difficult Rise of a Patrimonial Middle Class



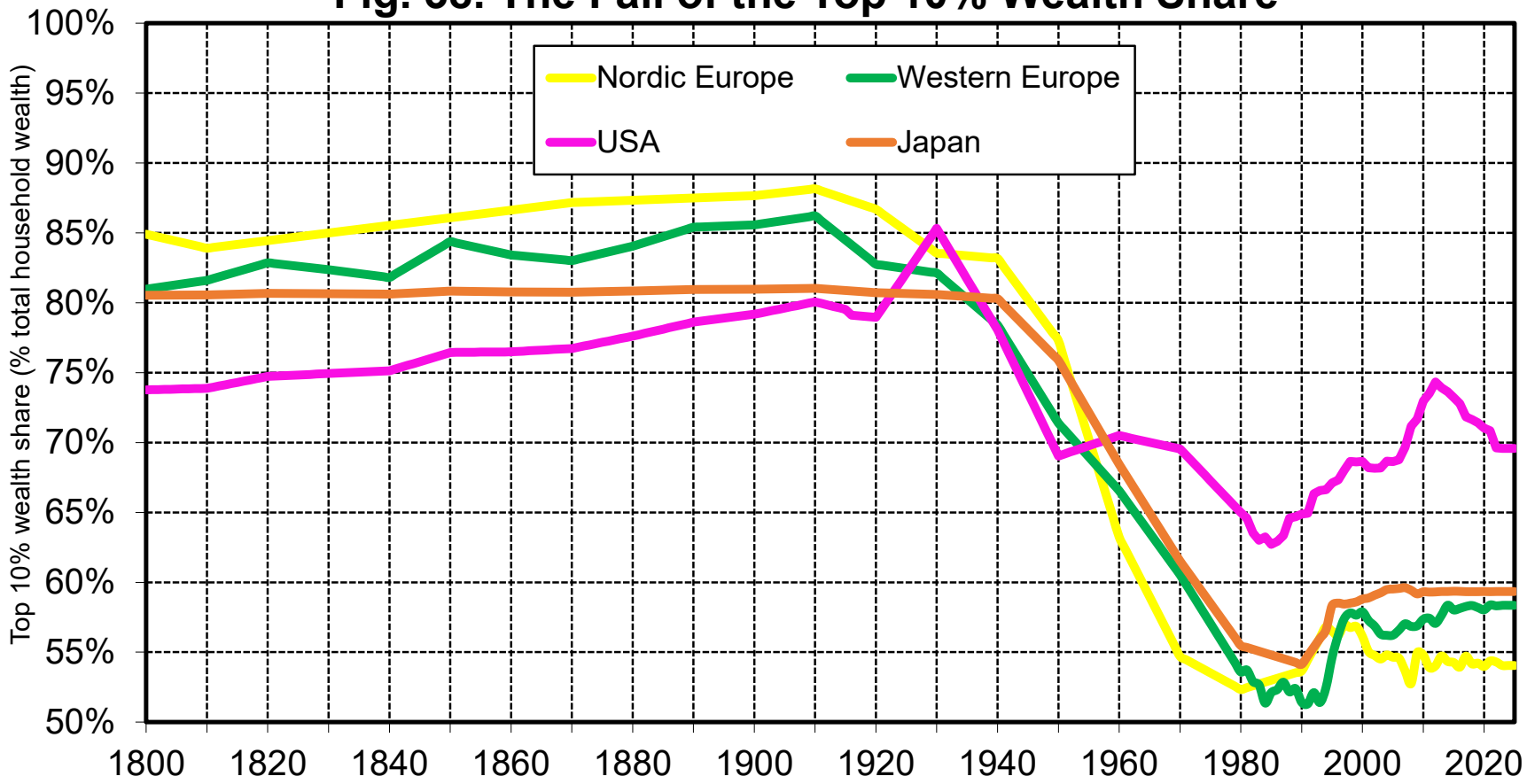
Interpretation. In Western Europe (which we define as the average Germany-France-Britain), the share of the top 10% highest wealth holders in total household wealth (including housing, business and financial asssets, net of debt) fell from over 80% in 1910 to about 50-60% since 1980-1990, with a moderate rise in recent decades. The long-run fall of the top 10% share benefited mostly to the next 40% (the "patrimonial middle class") and very little to the bottom 50%. **Sources and series**: wid.world (E1a)

Fig. 37. Wealth Shares in Nordic Europe: A Rising Middle Class, but a Propertyless Bottom Half



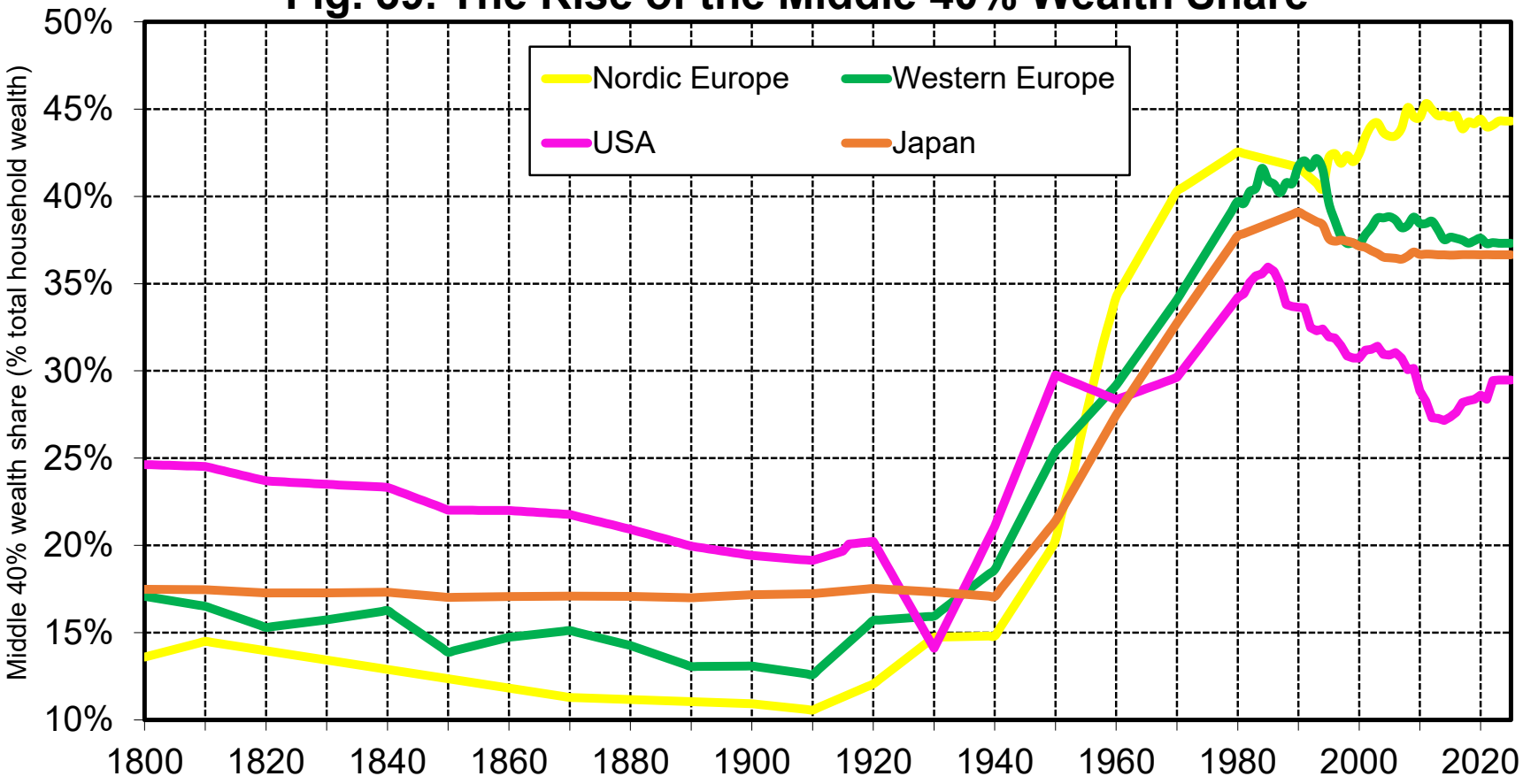
Interpretation. In Nordic Europe (which we define as the average Sweden-Denmark-Norway-Netherlands), the share of the top 10% highest wealth holders in total household wealth (including housing, business and financial asssets, net of debt) fell from over 80% in 1910 to about 50-55% since 1980-1990, with a moderate rise in recent decades. The long-run fall of the top 10% share benefited mostly to the next 40% (the "patrimonial middle class") and very little to the bottom 50%. **Sources and series**: wid.world (E1b)

Fig. 38. The Fall of the Top 10% Wealth Share



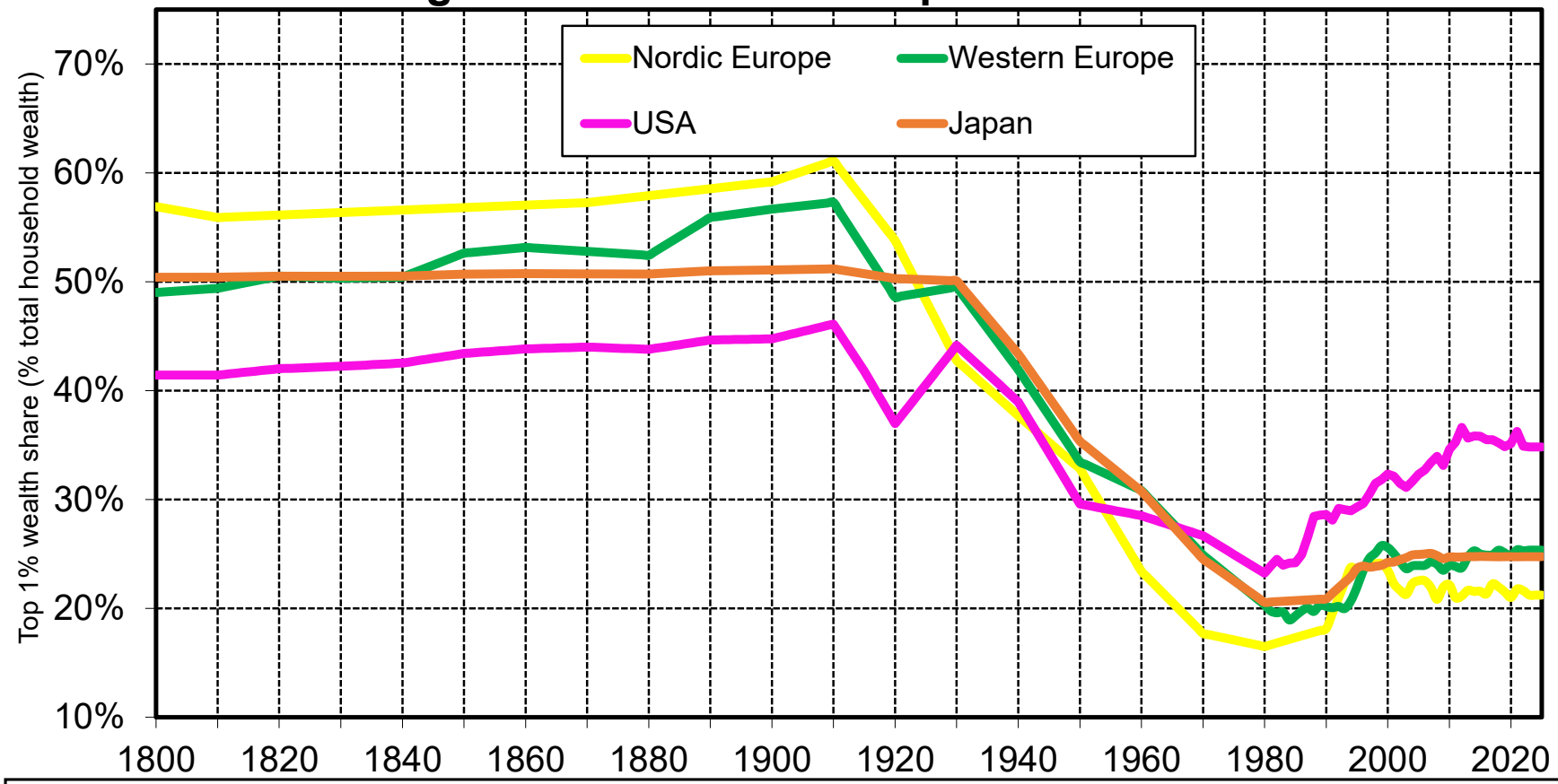
Interpretation. We observe in all rich countries a significant fall of the top 10% wealth share between 1910 and 1980. In the USA, the fall was less massive than in Western Europe or Nordic Europe, and was partly undone by rising wealth concentration since 1980-1990.
Sources and series: wid.world (E1c)

Fig. 39. The Rise of the Middle 40% Wealth Share



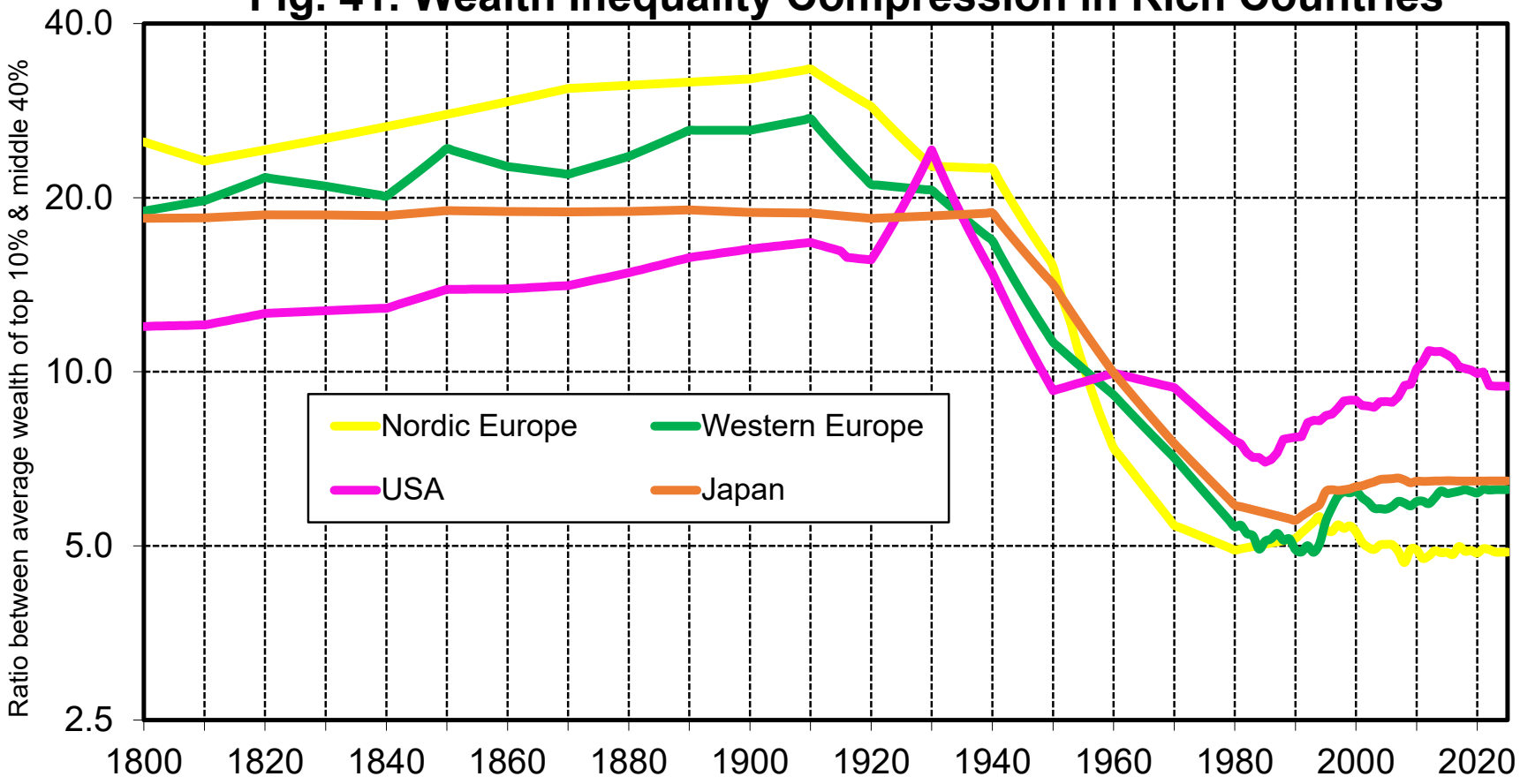
Interpretation. Between 1910 and 1980, we observe in all rich countries a significant rise of the wealth share of the "patrimonial middle class" (the middle 40%, in between the top 10% and the bottom 50%). In the USA, the rise was less massive than in Western Europe or Nordic Europe, and was partly undone by rising wealth concentration since 1980-1990. **Sources and series**: wid.world (E1d)

Fig. 40. The Fall of the Top 1% Wealth Share



Interpretation. We observe in all rich countries a very large fall of the top 1% wealth share between 1910 and 1980. In the USA, the fall was less massive than in Western Europe or Nordic Europe, and was partly undone by rising wealth concentration since 1980-1990.
Sources and series: wid.world (E1e)

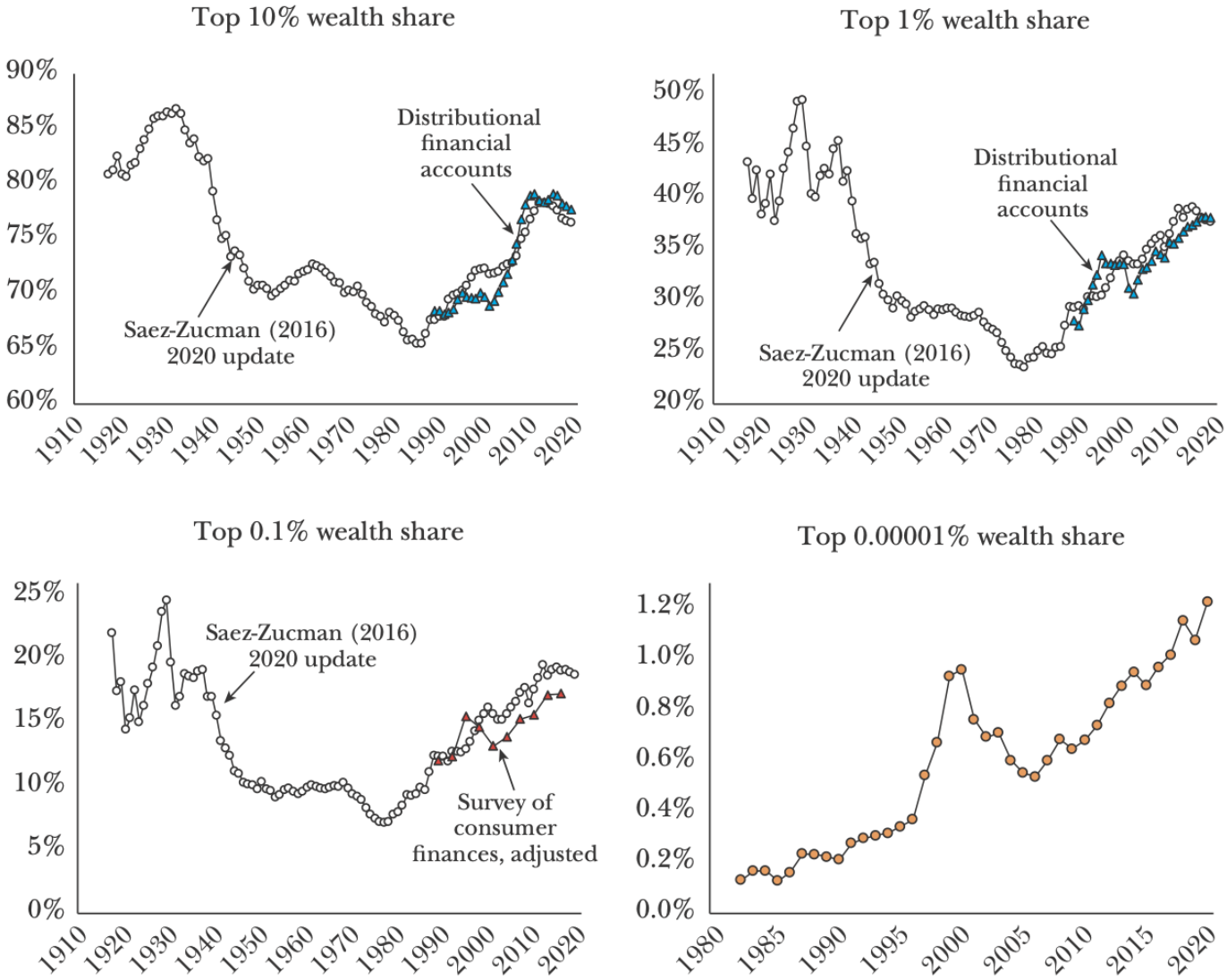
Fig. 41. Wealth Inequality Compression in Rich Countries



Interpretation. The ratio T10/M40 between the average wealth of the top 10% and the middle 40% has declined in all rich countries in the long run, from about 20-30 in 1900-1910 to about 5-7 in Nordic and Western Europe since 1980-1990. In the USA, the compression of the wealth scale was less massive than in Europe, and was partly undone by rising wealth concentration since 1980-1990. **Sources and series**: wid.world (E2a)

Figure 1

Top Wealth Shares in the United States: Comparing Estimates



Source: Saez and Zucman (2020)

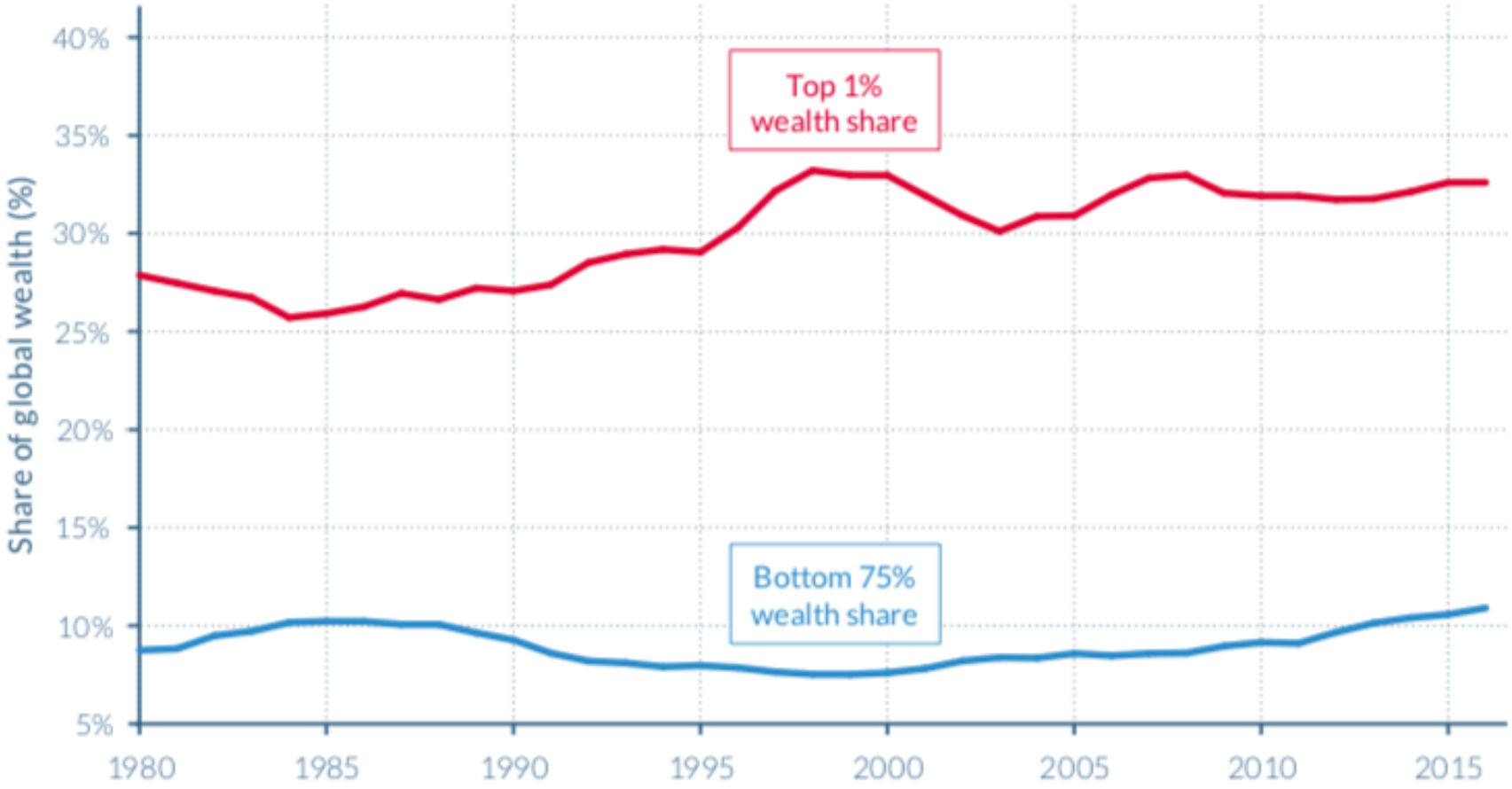
2.3 Trends in world wealth inequality

Evidence points toward rise in global wealth inequality over past decades

- Global top 1% increased from about 28% in 1980 to 33% today, bottom 75% share hovered around 10%
- Changing geography of wealth
- Very fast rise in billionaire wealth

Figure 4.1.1

Top 1% and Bottom 75% shares of global wealth, 1980–2017: China, Europe and the US

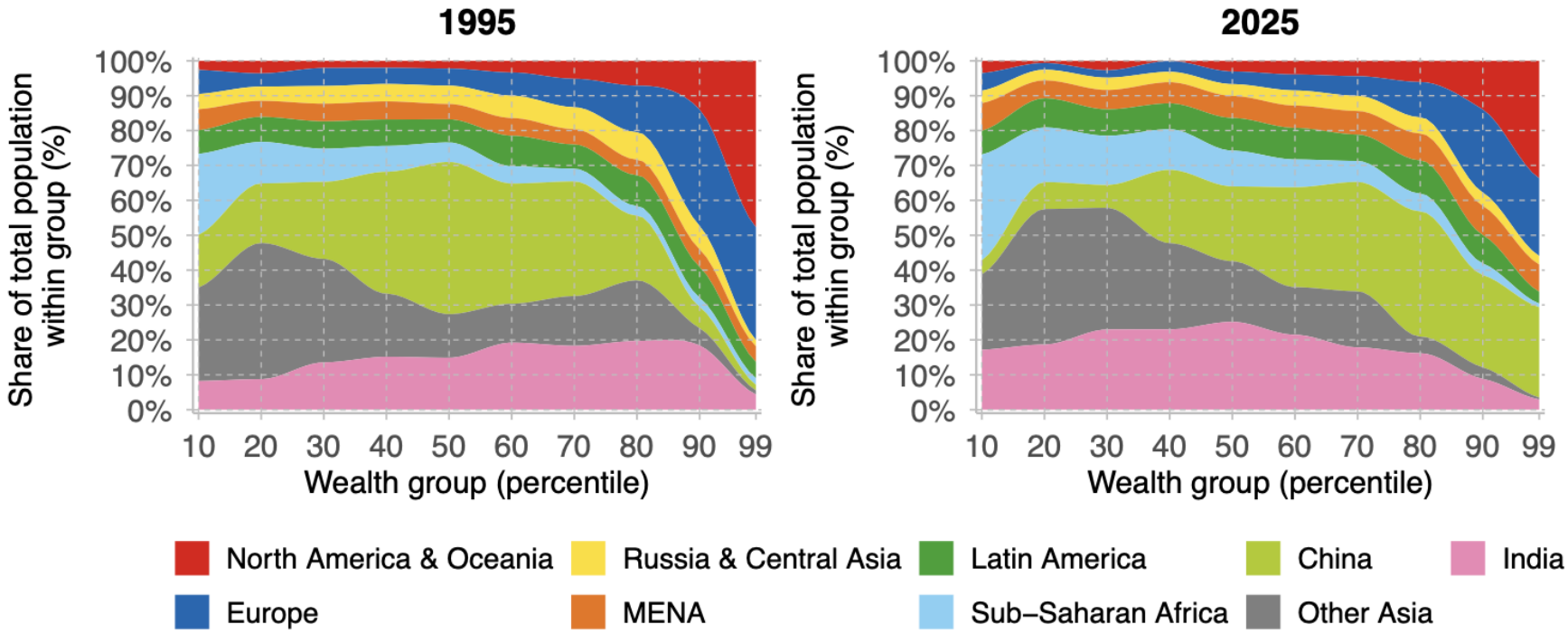


Source: WID.world (2017). See wir2018.wid.world for data series and notes.

In 2016, 33% of global wealth was owned by the Top 1%. The evolution of global wealth groups from 1980 to 2017 is represented by China, Europe and the US.

Source: World Inequality Report 2018

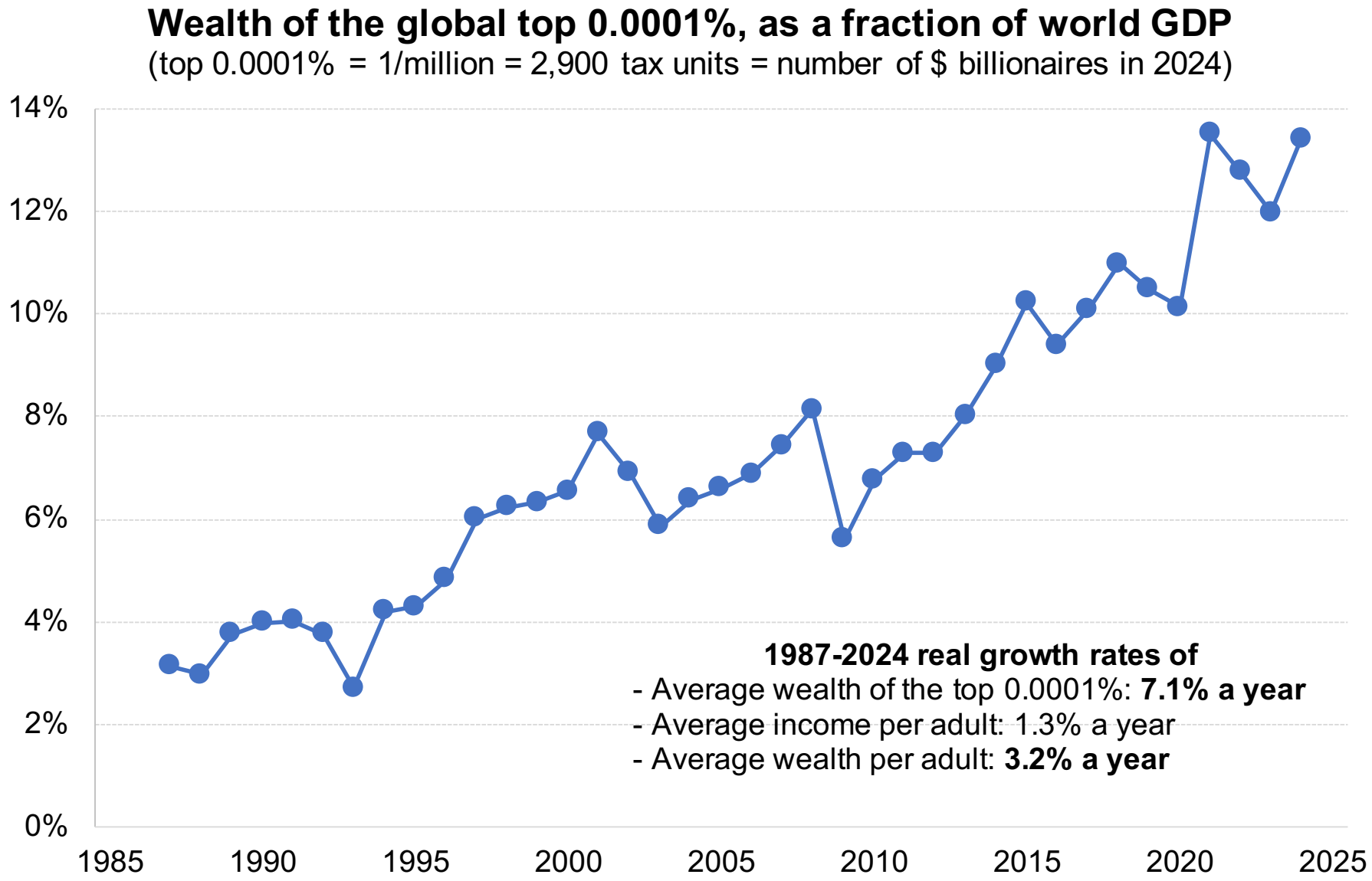
Geographic breakdown of global wealth groups, 1995–2025



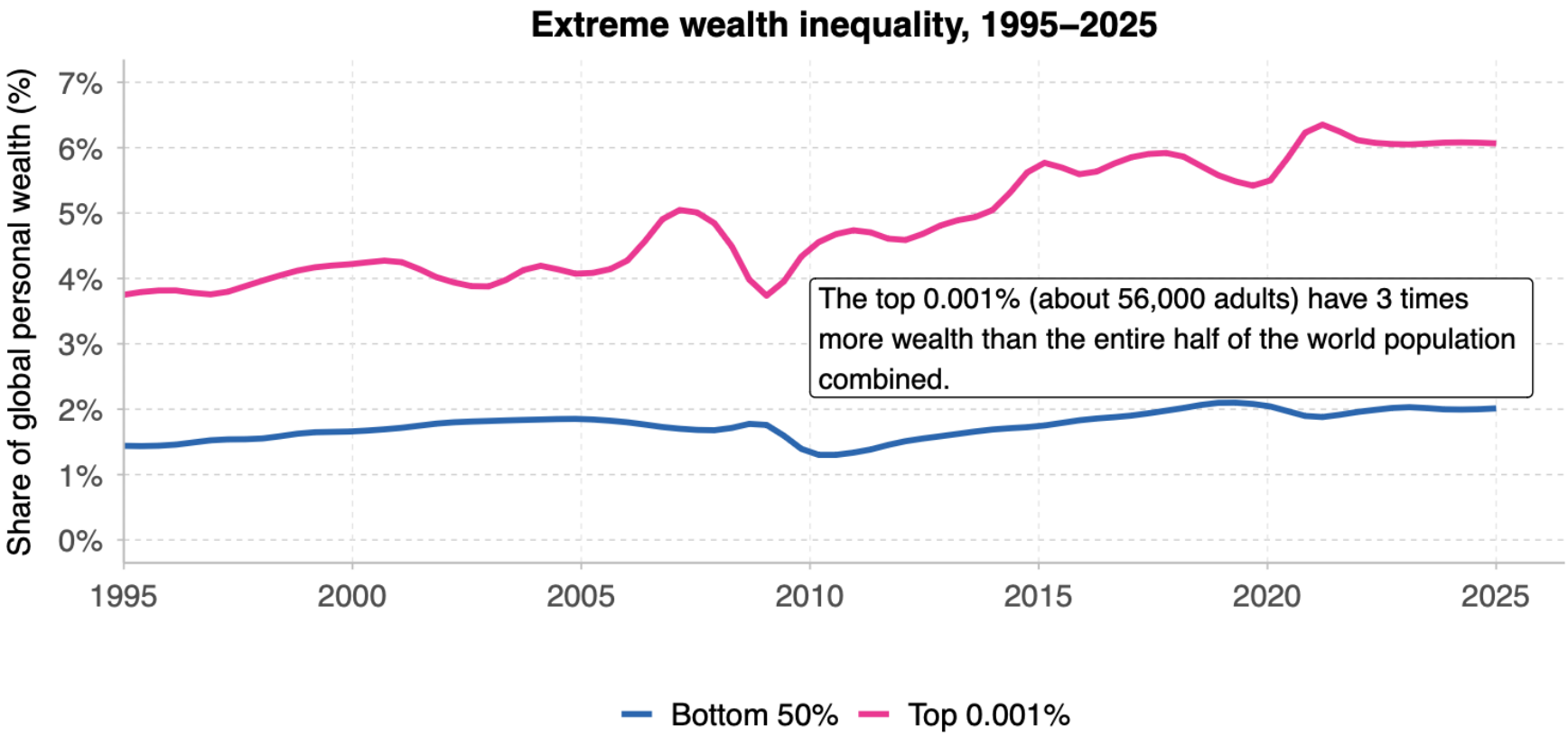
Interpretation. These graphs show the geographical breakdown of global wealth groups. Between 1995 and 2025, the global wealth distribution has shifted, with China gaining presence in the upper percentiles, while Europe and North America & Oceania's dominance in top wealth groups has declined, but it is still large. In 1995, 2% of the world's top 1% wealth group were Chinese residents. By 2025, this figure increased to 26%. This highlights the growing globalshare of China and the diversification of the global elite. **Sources and series:** Arias–Osorio et al. (2025) and wir2026.wid.world/methodology.

2.4 The rise of global billionaires

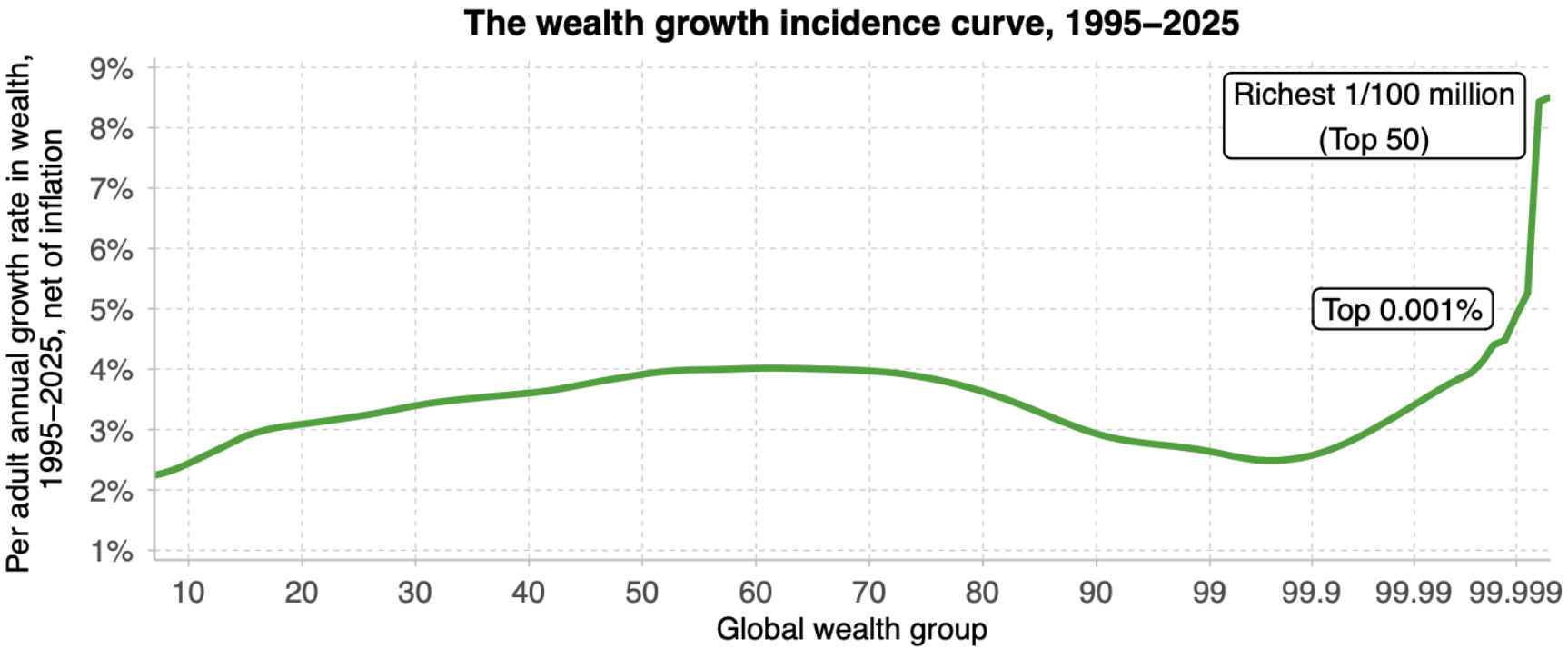
- Rise of extreme wealth: striking dimension of the dynamics of global inequality
- Billionaires still own a relatively small fraction of global wealth (about 2%–3%)
- But significant power due to control over large businesses, influence on policymaking, ownership of media
- Ex: concentration of media ownership in France



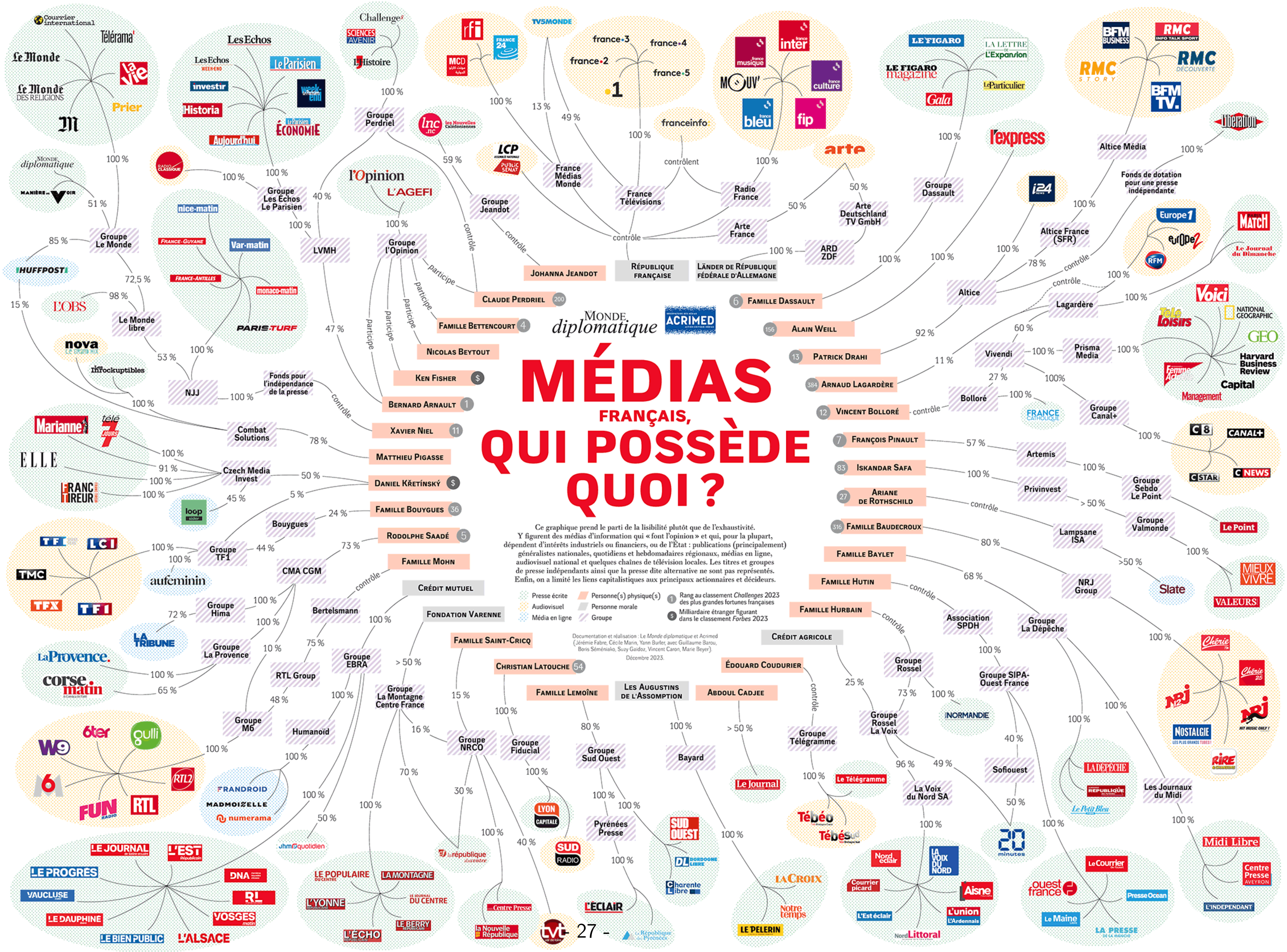
Source: Zucman (2024) "A Blueprint for a Coordinated Minimum Effective Taxation Standard on Ultra-High-Net-Worth Individuals"



Interpretation. The share of personal wealth detained by the richest 0.001% of adults rose from around 3.8% of total wealth in 1995 to nearly 6.1% in 2025. After a very slight increase, the share of wealth owned by the poorest half of the population has stagnated since the early 2000s at around 2%. Net personal wealth is equal to the sum of financial assets (e.g. equity or bonds) and non–financial assets (e.g. housing or land) owned by individuals, net of their debts. **Sources and series:** Arias–Osorio et al. (2025) and wir2026.wid.world/methodology.



Interpretation. Growth rates in net personal wealth varied sharply across the global distribution between 1995 and 2025. While the bottom 50% experienced positive growth of around 2–4% per year, their low initial wealth meant that they captured only 1.1% of total global wealth growth. In contrast, the top 1% experienced significantly higher growth rates, ranging from 2 to 9% annually, and captured 36.7% of global wealth growth during the same period. The very top of the distribution, including the wealthiest 50 individuals, had the steepest increases. Net personal wealth is defined as the sum of financial (e.g. equity, bonds) and non–financial assets (e.g. housing, land) owned by individuals, net of their debts. **Notes.** The curve is smoothed using a centered moving average. **Sources and series:** Arias–Osorio et al. (2025), Chancel et al. (2022), and wir2026.wid.world/methodology.



MÉDIAS FRANÇAIS, QUI POSSÈDE QUOI ?
Le Monde diplomatique
ACRIMED
Ce graphique prend le parti de la lisibilité plutôt que de l'exhaustivité. Y figurent des médias d'information qui « font l'opinion » et qui, pour la plupart, dépendent d'intérêts industriels ou financiers, ou de l'État : publications (principalement) généralistes nationales, quotidiens et hebdomadaires régionaux, médias en ligne, audiovisuel national et quelques chaînes de télévision locales. Les titres et groupes de presse indépendants ainsi que la presse dite alternative ne sont pas représentés. Enfin, on a limité les liens capitalistiques aux principaux actionnaires et décideurs.
Presse écrite
Audiovisuel
Média en ligne
Personne(s) physique(s)
Personne morale
Groupe
Rang au classement Challenges 2023 des plus grandes fortunes françaises
Milliardaire étranger figurant dans le classement Forbes 2023
Documentation et réalisation : Le Monde diplomatique et Acrimed (Jérémie Fabre, Cécile Marin, Yann Burler, avec Guillaume Barou, Boris Séméniako, Suzy Gaidoz, Vincent Caron, Marie Beyer). Décembre 2023.
Claude Perdriel
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Nicolas Beytout
Ken Fisher
Bernard Arnault
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Matthieu Pigasse
Daniel Křetínský
Famille Bouygues
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Arnaud Lagardère
Vincent Bolloré
François Pinault
Iskandar Safa
Ariane de Rothschild
Famille Baudecroux
Famille Baylet
Famille Hutin
Famille Hurbain

3 Theories of the wealth distribution

3.1 The role of saving rate

- Individual i wealth accumulation can always be written:

$$W^i_{t+1} = (1 + q^i_t) \cdot (W^i_t + s^i_t \cdot Y^i_t)$$

- where W^i_t is wealth, Y^i_t is income, s^i_t is net savings rate, $1 + q^i_t$ is rate of capital gains (price effect) in year t

- In a long-run steady-state without price effect, then:

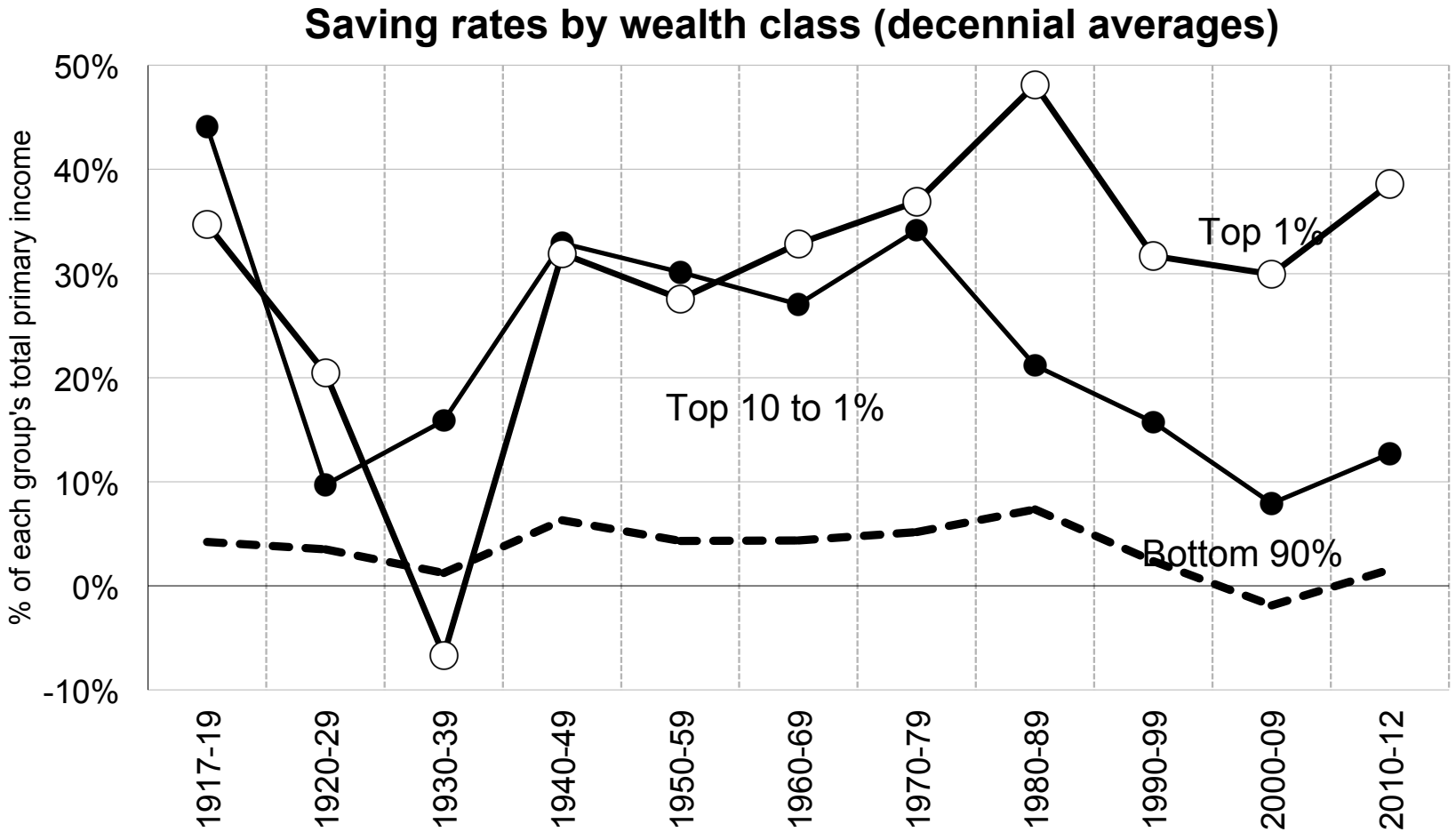
$$sh^p_W = sh^p_Y \cdot \frac{s^p}{s}$$

- where sh_W^p is share of wealth owned by fractile p (e.g., top 1%), sh_Y^p share of income earned by p, and s^p/s is relative savings rate
- This is a generalization of Harrod-Domar-Solow formula $\beta = s/g$
- Shows key role of relative saving rates

3.2 Where does s come from?

3.3 Precautionary saving model

- Income is uncertain $\rightarrow$ hold wealth as precaution for "rainy days" (main uncertainty: job loss)
- As one gets richer, less need to insure against labor income risk $\rightarrow$ model predicts that saving rate falls with income
- Not consistent with the data



The rich save more as a fraction of their income, except in the 1930s when there was large dissaving through corporations. NB: The average private saving rate has been 9.8% over 1913-2013.

Source: Saez and Zucman (2016)

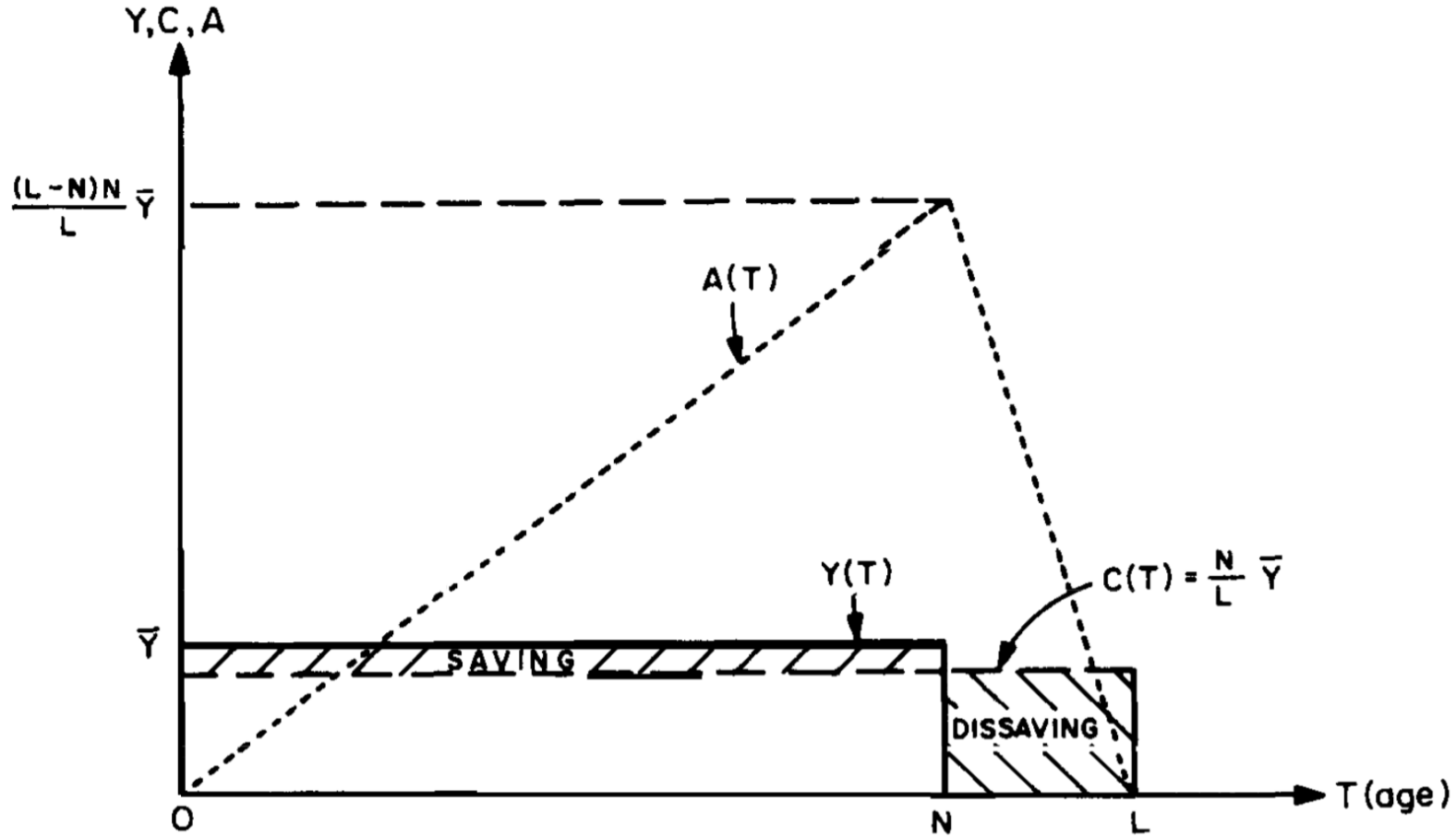
3.4 Life-cycle saving models

Main idea: people save to spread resources over the life-cycle

- Individuals die with 0 wealth, wealth accumulation entirely driven by need to save for retirement
- Assume that everybody starts working at age 0, works for N years, dies at age L, and that there is no growth $(n = g = r = 0)$
- Ex: $N = 60$, $L = 70 \rightarrow$ retirement length $L - N = 10$ years
- Labor income is constant at $\bar{Y}$ during working age period, then 0
- Everybody fully smoothes annual consumption so that C is always

equal to average per capita output: $C = \bar{Y} \cdot N/L$

- While working, people save $S = (1 - N/L) \cdot \bar{Y}$
- Then during retirement people dis-save $S = -N/L \cdot \bar{Y}$



INCOME, CONSUMPTION, SAVING AND WEALTH AS A FUNCTION OF AGE

Source: Modigliani (1985)

Limits of simple life-cycle model

- Social Security $\rightarrow$ reduces need to save for retirement
- What fraction of aggregate wealth comes from life-cycle savers? Modigliani vs. Kotlikoff-Summers controversey
- Main limit: life-cycle model generates too little wealth inequality: wealth inequality simply the mirror image of income inequality

3.5 Dynamic random shock models

Key question for the study of wealth inequality: why is wealth much more concentrated than labor income?

- Precautionary saving models: wealth less unequal than income
- Life-cycle saving models: wealth as unequal as labor income
- To generate a higher concentration of wealth, one needs dynamic models with cumulative shocks

General formulation: $W_{t+1i} = \tilde{a}_{ti} \cdot W_{ti} + \tilde{b}_{ti}$

- $\tilde{a}$: multiplicative stochastic shock to wealth
- $\tilde{b}$: additive component (e.g., labor income)

Different types of shocks

- Shocks to rates of return: $W_{t+1} = (1 + \tilde{R}) \cdot W_t + \tilde{b}$
- Shocks to number of children
- Shocks to saving taste across generations

Theorem: under a certain number of assumptions, wealth converges to a steady-state distribution that has the following properties:

- It follows a Pareto law at the top
- The Pareto exponent a depends on shocks $\tilde{a}_{ti}$
- The higher $E(\tilde{a}_{ti}) < 1$, the lower a (higher steady state inequality)
- The higher the variance of shocks, the lower a
- With globalization, likely higher variance: top businesses reap profits from global markets

4 The role of top-end taxes

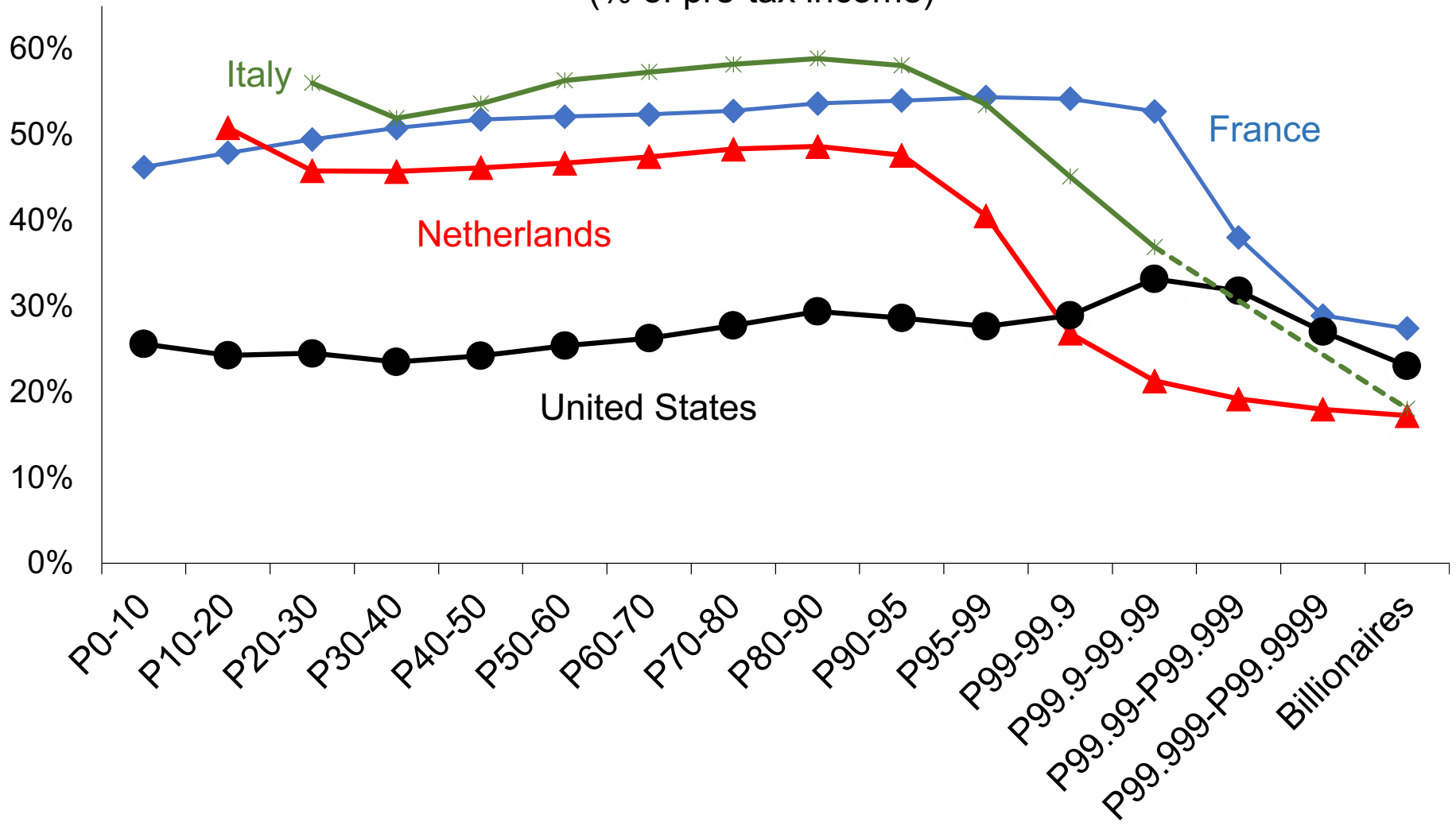
Relevant return for wealth accumulation process is net-of-tax return

$$W_{t+1} = (1 + \tilde{R} - \tau) \cdot W_t + \tilde{b}$$

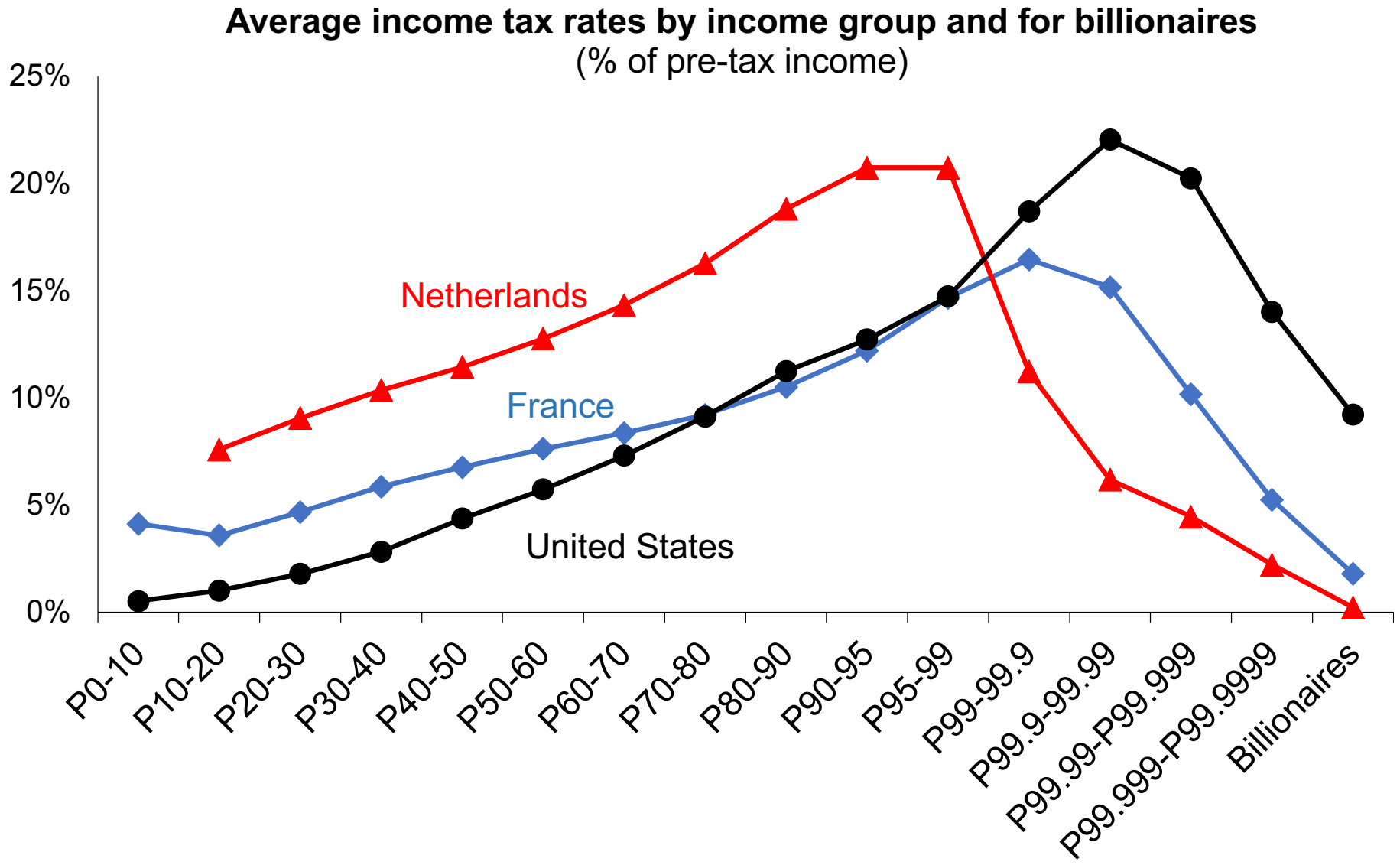
- $\tilde{R}$: stochastic return on wealth (net of corporate tax)
- τ: individual taxes expressed as a fraction of wealth
- $\tilde{b}$: saving out of labor income

If $\tilde{R} = \tilde{R}(W) \nearrow$ with W and $\tau = \tau(W) \searrow$ with W: **explosive path** $\rightarrow$ key role of $\tau(W)$

Average tax rates by income group and for billionaires
(% of pre-tax income)



Source: Zucman (2024) "A Blueprint for a Coordinated Minimum Effective Taxation Standard on Ultra-High-Net-Worth Individuals"



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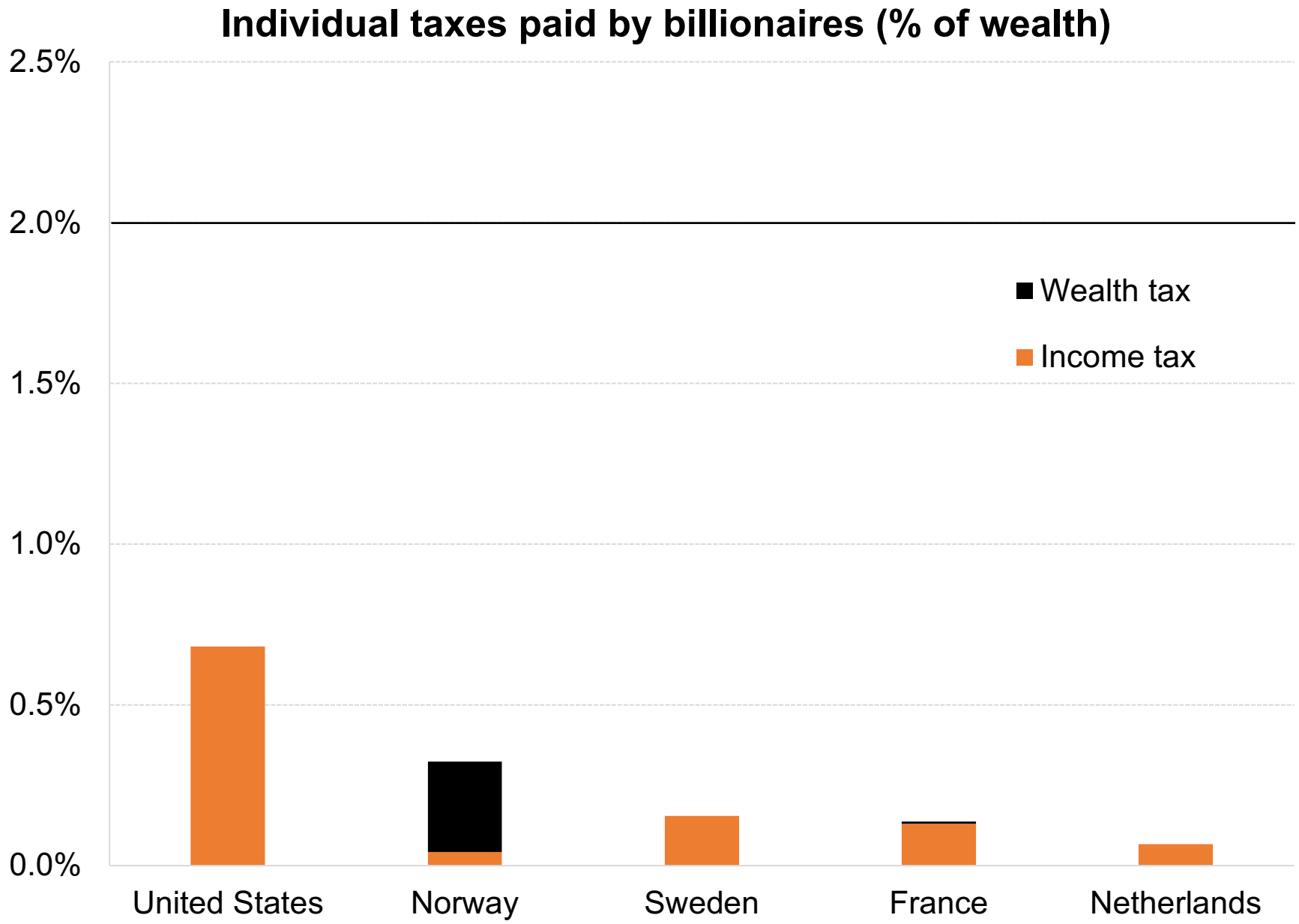
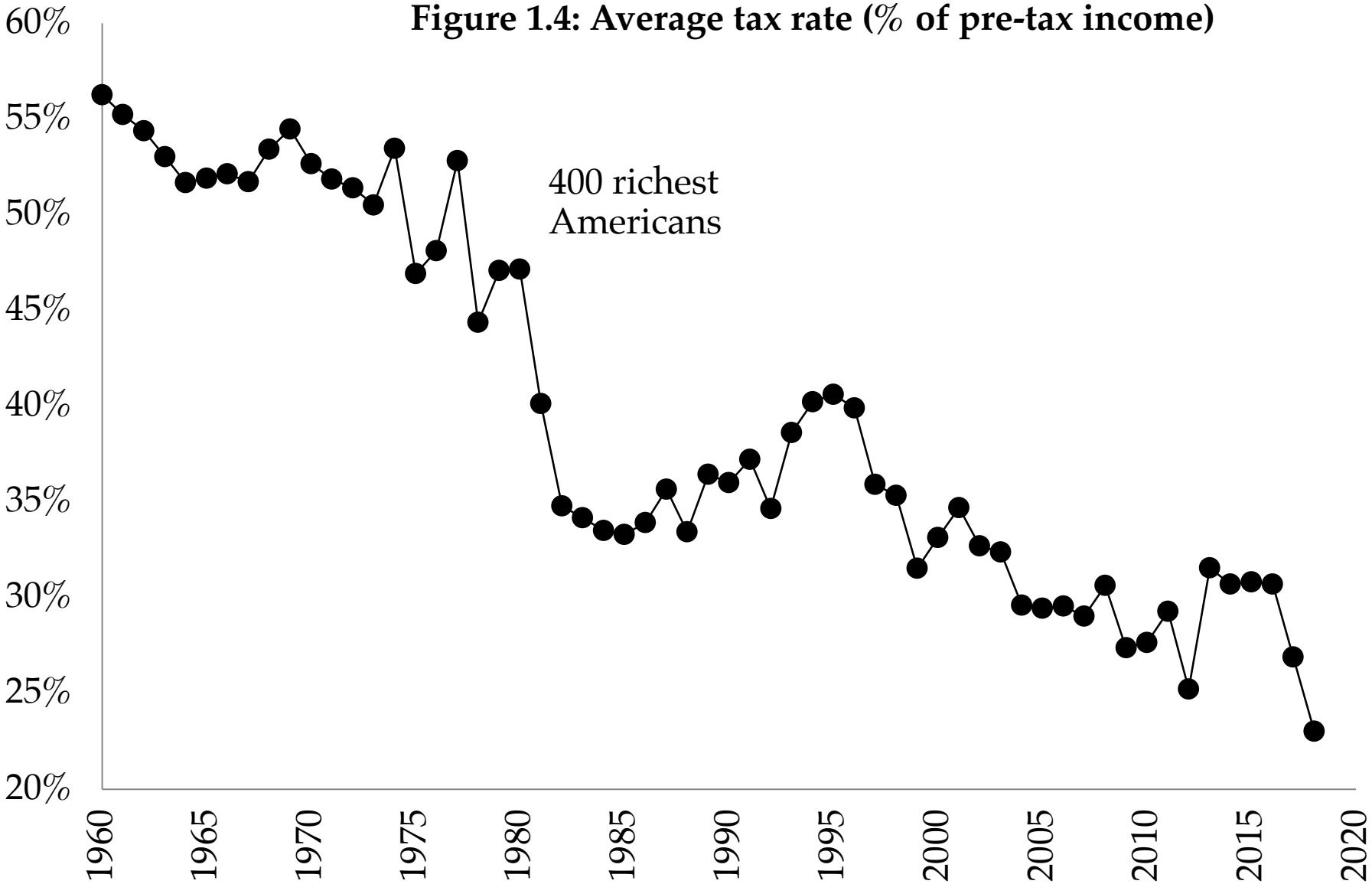


Source: Zucman (2024) "A Blueprint for a Coordinated Minimum Effective Taxation Standard on Ultra-High-Net-Worth Individuals"

Figure 1.4: Average tax rate (% of pre-tax income)



Source: Saez and Zucman (2019), *The Triumph of Injustice*