Global wealth, gender and carbon inequality
New findings from the World Inequality Report

Berkeley Stone Center on Income and Wealth Inequality

18 March 2022

Lucas Chancel

Co-Director, World Inequality Lab, Paris School of Economics
Affiliate Professor, Sciences Paris
Visiting Scholar, Harvard Kennedy School

This presentation

Inequality data as a public good: the World Inequality Database project

What have we learned from recent research on global income & wealth dynamics?

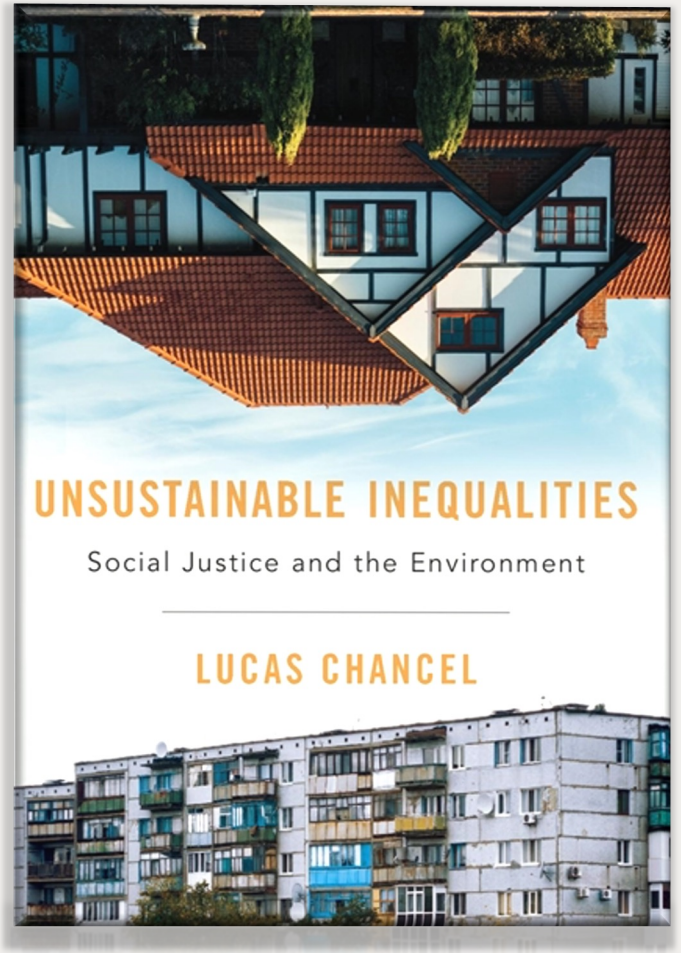
Exploring the new frontiers of global inequality research : gender & carbon injustices

World Inequality Report 2022, Chancel, Piketty, Saez, Zucman et al., Harvard University Press: Belknap, 2022

- Report based on the work of 100+ researchers on all continents affiliated to the World Inequality Database.
- First systematic assessement of global **income**, **wealth**, **gender** and **carbon** inequalities over 30 years
- Diverging inequality levels & trajectories across countries reveal the importance of social policies rather than deterministic forces driving inequality
- All our data is accessible online along with codes & methodologies: visit wir2022.wid.world

Unsustainable inequalities, Harvard University Press: Belknap, 2020

- Inequality and political polarization make it more difficult to protect the environment
- Environmental policies can exacerbate inequalities, leading to a vicious circle of high inequality and low environment protection
- Several options to break it, but this requires a significant shift in how we design social-environmental policies



This presentation

Inequality data as a public good: the World Inequality Database project

What have we learned from recent research on global income & wealth dynamics?

Exploring the new frontiers of global inequality research : gender & carbon injustices

Inequality is everywhere but still missing from public statistics

- Leaks, rich lists, social movements suggest large inequalities (in particular wealth inequalities)
- Public statistics in most countries still struggle to publish basic information about the distribution of income and wealth growth
- Issue of accountability in democracy

The objective of the Distributional National Accounts Project (DINA) is to fill this data gap

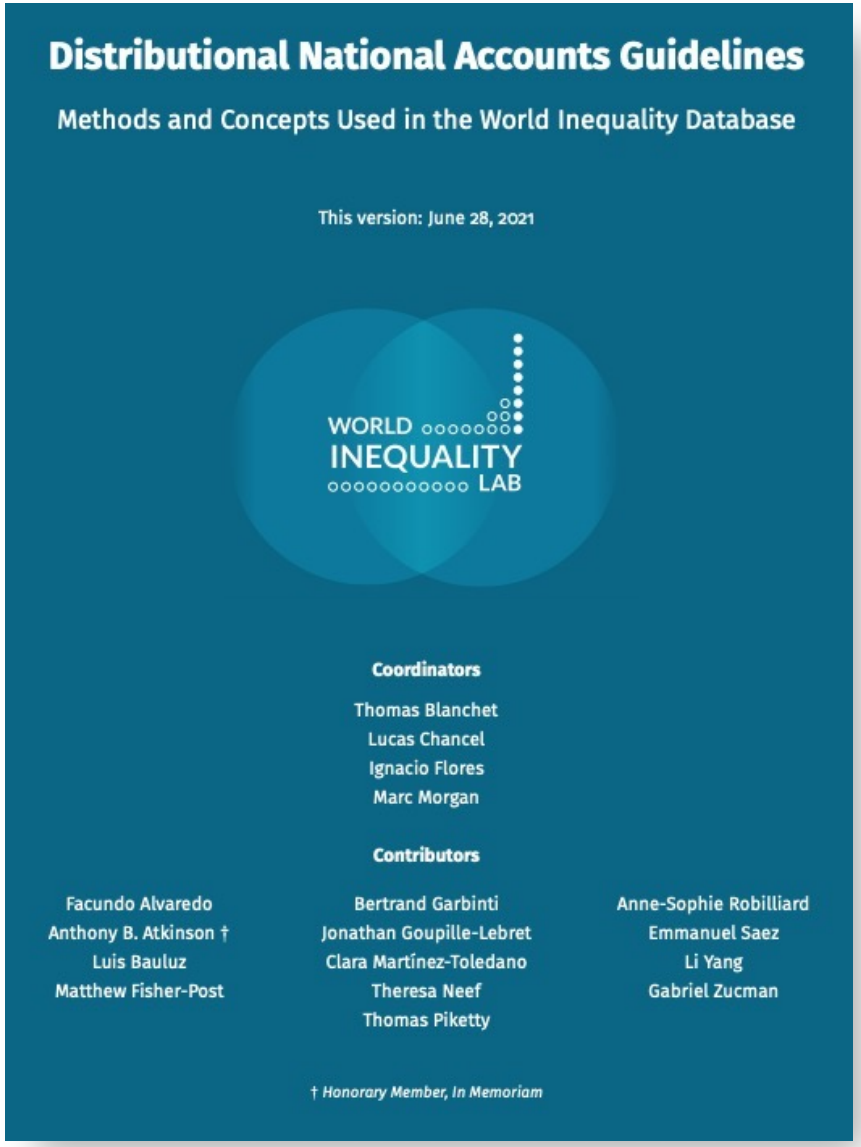
- **1950s-1970s**: Pioneering work of Kuznets (1953) and Atkinson (1978) combining tax and national accounts data

- **2000-2010s**: Project started with the publication of long run top income shares (Piketty, 2001, 2003; Piketty and Saez, 2003; Alvaredo et al. 2013)
  → World Top Income Database

- **Since the mid-2010s**: focus on top and bottom groups, income and wealth thanks to systematic combination of household surveys, national accounts, tax data rich lists
  → World Inequality Database

Methodological contribution: Distributional National Accounts guidelines

- **Flexible** approach to the distribution of national income and wealth within countries
- DINA use the strength of **all data sources** (tax, survey, nat. accounts, lists…) and combine them systematically and in a transparent manner
- A **cumulative** process: series are constantly improved thanks to better data access or methodological improvements
- **Collaborative** enterprise: computer codes, raw sources available online (WID.world, github) for anybody to contribute to the project



An international team of researchers contributing to the World Inequality Database over the years

Rolf Aaberge
STATISTICS NORWAY

Paolo Acciari
MINISTRY OF ECONOMY AND FINANCE (ITALY)

Arun Advani
UNIVERSITY OF WARWICK

Facundo Alvaredo
PARIS SCHOOL OF ECONOMICS, OXFORD UNIVERSITY AND CONICET

Pierre Brassac
BONN UNIVERSITY

Marius Brülhart
UNIVERSITY OF LAUSANNE

Pawel Bukowski
LONDON SCHOOL OF ECONOMICS

Gabriel Burdín
UNIVERSIDAD DE LA REPÚBLICA

Fabien Dell
EUROPEAN COMMISSION

François Delorme
UNIVERSITÉ DE SHERBROOKE

Carmen Durrer de la Sota

Fernando Esponda

Verónica Amarante
ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN

Miguel Artola
UNIVERSIDAD CARLOS III DE MADRID

Lydia Assouad
PARIS SCHOOL OF ECONOMICS

Jorge Atria
PONTIFÍCIA UNIVERSIDAD CATÓLICA DE CHILE

Richard Burkhauser

François Burq

Raymundo Campos
EL COLEGIO DE MÉXICO

Guilhem Cassan
UNIVERSITY OF NAMUR

Matthew Fisher-Post

Ignacio Flores
PARIS SCHOOL OF ECONOMICS

Reto Foellmi
UNIVERSITÄT ST. GALLEN

Michael Förster
ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pierre Bachas
WORLD BANK RESEARCH GROUP

Abhijit Banerjee
MIT

Charlotte Bartels
GERMAN INSTITUTE FOR ECONOMIC RESEARCH (DIW)

Luis Bauluz
PARIS SCHOOL OF ECONOMICS

Lucas Chancel
PARIS SCHOOL OF ECONOMICS AND IDDRI SCIENCES PO

Nikolaos Charalampidis

Aroop Chatterjee
SOUTHERN CENTRE FOR INEQUALITY STUDIES - UNIVERSITY OF THE WITWATERSRAND

Teyu Chou

Juliette Fournier
MIT

Mark Frank
SAM HOUSTON STATE UNIVERSITY

Bertrand Garbinti
CENTRE DE RECHERCHE EN ECONOMIE ET STATISTIQUE (CREST) - ENSAE - INSTITUT POLYTECHNIQUE PARIS

Santiago Garriga
PARIS SCHOOL OF ECONOMICS

Augustin Bergeron
HARVARD UNIVERSITY

Yonatan Berman
LONDON MATHEMATICAL LABORATORY

Nitin Bharti

Thomas Blanchet
PARIS SCHOOL OF ECONOMICS

Cyrus Chu
ACADEMIA SINICA

Denis Cogneau
PARIS SCHOOL OF ECONOMICS

Frank Cowell
LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Guillermo Cruces
CEDLAS

Leonardo Gasparini
UNIVERSIDAD NACIONAL DE LA PLATA

Amory Gethin
PARIS SCHOOL OF ECONOMICS

Janet Gornick
CITY UNIVERSITY OF NEW YORK

Jonathan Goupille-Lebret
PARIS SCHOOL OF ECONOMICS

Florian Bonnet
PARIS SCHOOL OF ECONOMICS

François Bourguignon
PARIS SCHOOL OF ECONOMICS

Antoine Bozio
INSTITUT DES POLITIQUES PUBLIQUES (IPP) AND PARIS SCHOOL OF ECONOMICS

Andrea Brandolini
STATISTICS AND RESEARCH BANCA D'ITALIA

Léo Czajka
PARIS SCHOOL OF ECONOMICS

Conchita D'Ambrosio
UNIVERSITY OF LUXEMBOURG

Mauricio De Rosa
UNIVERSIDAD DE LA REPÚBLICA

Andre Decoster
UNIVERSITY OF LEUVEN

Yajna Govind
PARIS SCHOOL OF ECONOMICS

Malka Guillot
PARIS SCHOOL OF ECONOMICS

Roberto Iacono
NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

Markus Jäntti
STOCKHOLMS UNIVERSITET

An international team of researchers contributing to the World Inequality Database over the years

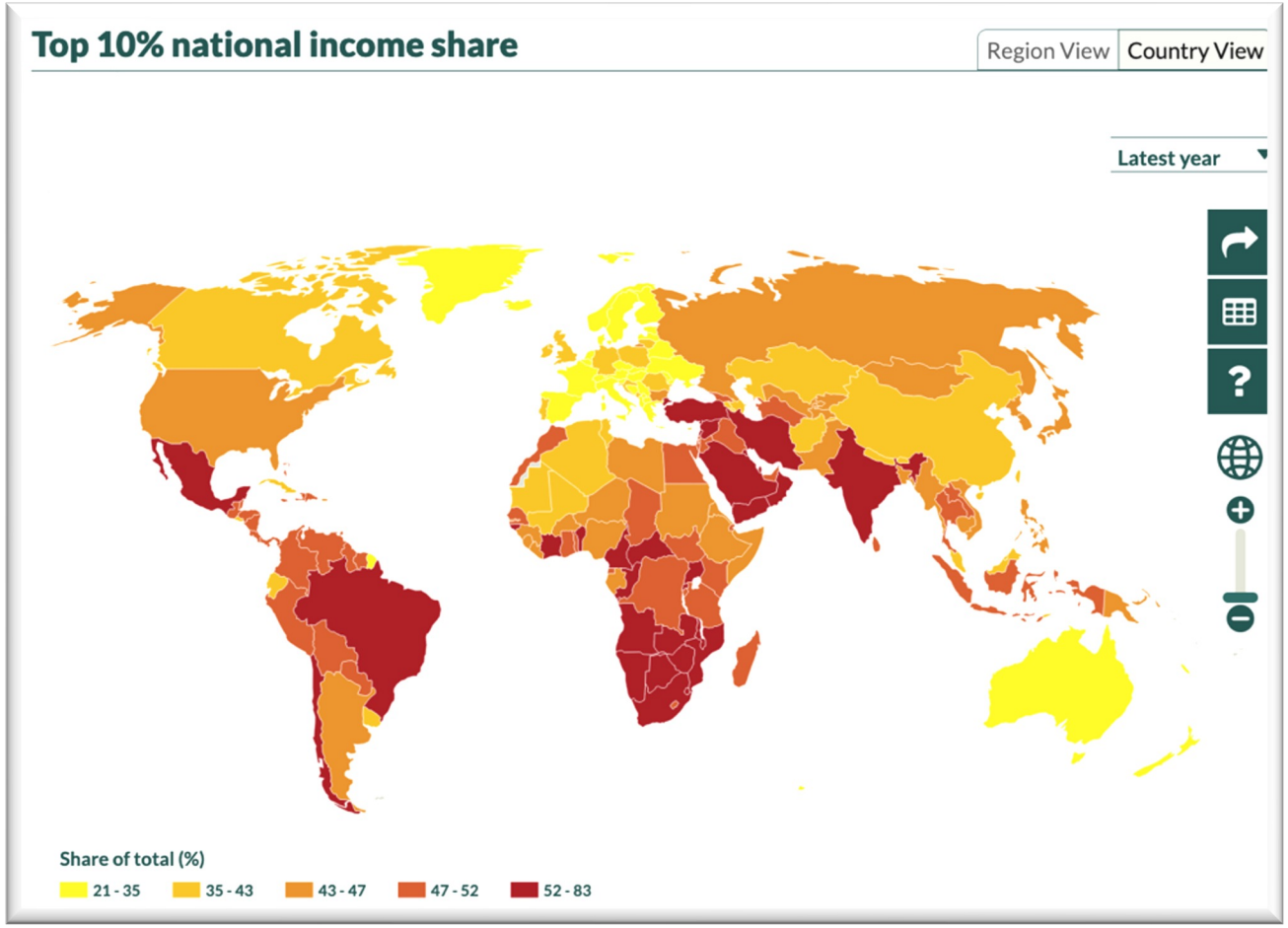
Institutional partnerships with the vast ecosystem of inequality data actors

- **International organizations :** United Nations, World Bank, OECD
- **National statistical offices**: in Europe, Latin America, Africa…
- **Partner institutions:** Luxembourg Income Study (LIS), Commitment for Equity Institute (CEQ), Southern Center for Inequality Studies, Stone Center Harvard Kennedy School…

→ **Common challenges:** heterogeneity of data, lack of common standards
→ **Common goals:** develop public data systems fit for 21st century challenges

The World Inequality Database today

- **Aggregate** income and wealth series for 140+ countries
- **Distributional** income and wealth series for 140+ countries since 1980s-1990s
- **Long-run** income inequality series for large countries & world regions since 1820
- **New developments**: global carbon inequality, global gender inequality, political cleavages & social inequalities (see wpid.world)



www.wid.world

This presentation

Inequality data as a public good: the World Inequality Database project

What have we learned from recent research on global income & wealth dynamics?

Exploring the new frontiers of global inequality research : gender & carbon injustices

Global income and wealth inequality today

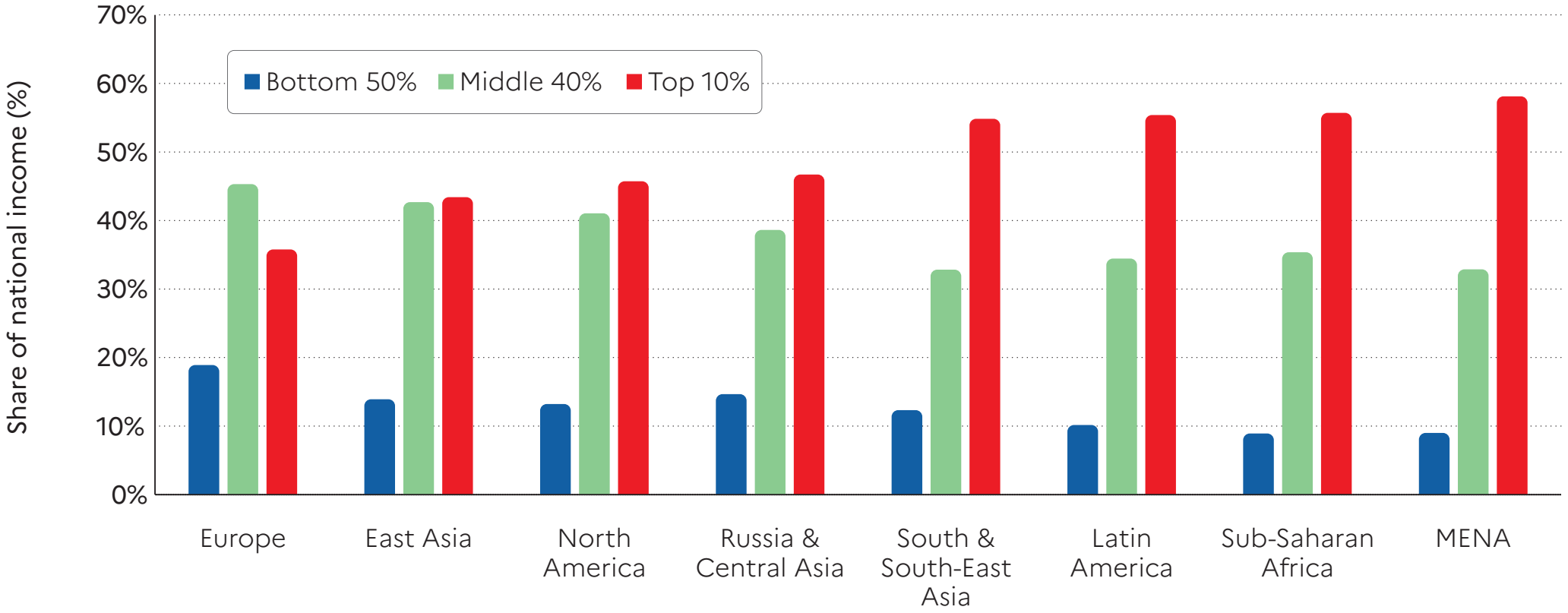
Figure 1 *Global income and wealth inequality, 2021*

Interpretation: *The global 50% captures 8% of total income measured at Purchasing Power Parity (PPP). The global bottom 50% owns 2% of wealth (at Purchasing Power Parity). The global top 10% owns 76% of total Household wealth and captures 52% of total income in 2021. Note that top wealth holders are not necessarily top income holders. Incomes are measured after the operation of pension and unemployment systems and before taxes and transfers.* ***Sources and series:*** *wir2022.wid.world/methodology.*

A diversity of income inequality regimes

Top 10% captures 35%-60% of national income, bottom 50% = 10-20%

Figure 2 *The poorest half lags behind: Bottom 50%, middle 40% and top 10% income shares across the world in 2021*



Interpretation: *In Latin America, the top 10% captures 55% of national income, compared to 36% in Europe. Income is measured after pension and unemployment contributions and benefits paid and received by individuals but before income taxes and other transfers.* ***Sources and series:*** *www.wir2022.wid.world/methodology.*

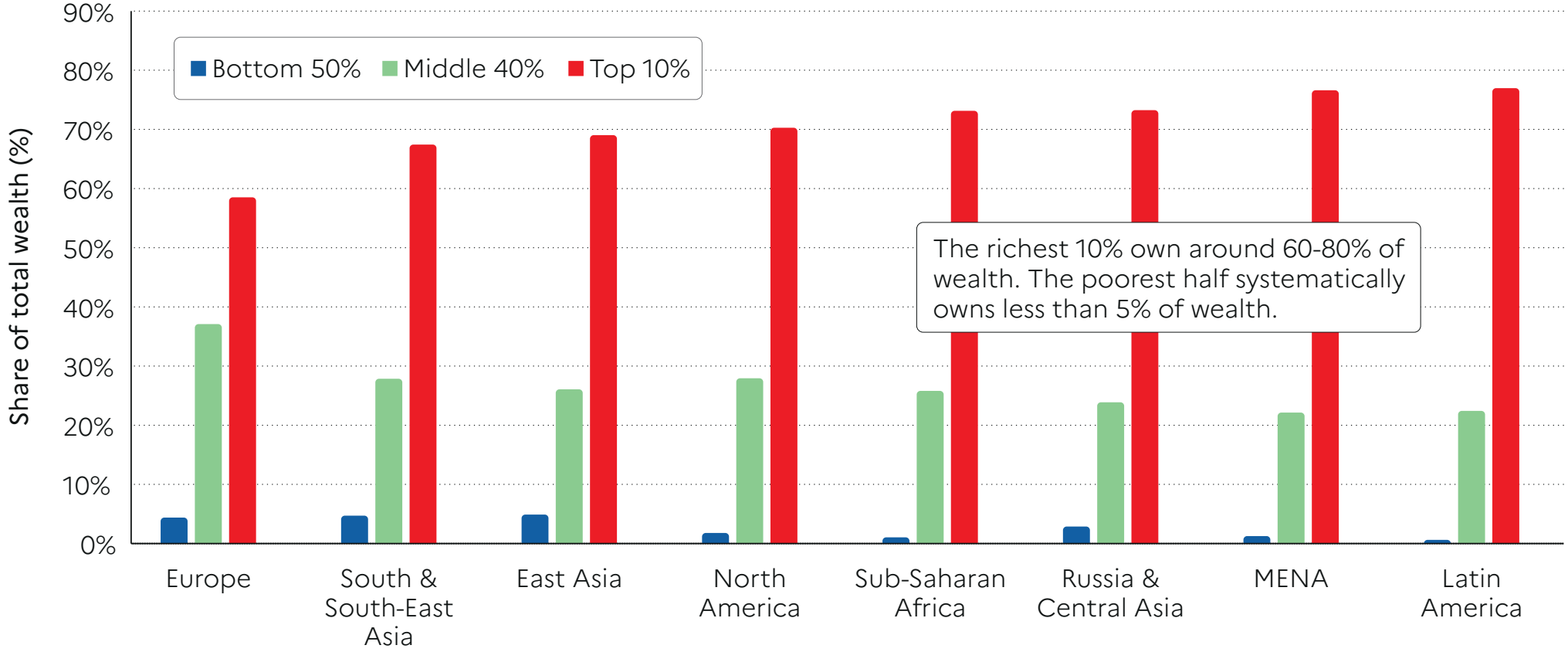
Inequality differences after taxes are mainly due to inequality gaps before taxes: role of predistribution (min. wage, regulations, public services)

Figure 1.10 *Inequality before and after taxes 2018-2021: Top 10/Bottom 50 income gap*

Interpretation: *Before taxes, the bottom 50% in South Africa earns 63 times less than the top 10%, whereas after taxes, the bottom 50% earns 24 times less than the top 10%. Income is measured after pension and unemployment payments and benefits received by individuals but before other taxes they pay and transfers they receive. Data for 2018-2021.* ***Sources and series:*** *wir2022.wid.world/methodology*

Wealth inequality is extreme everywhere: no region with a bottom 50% owning more than 5% of wealth. Top 10% = 60-80%.

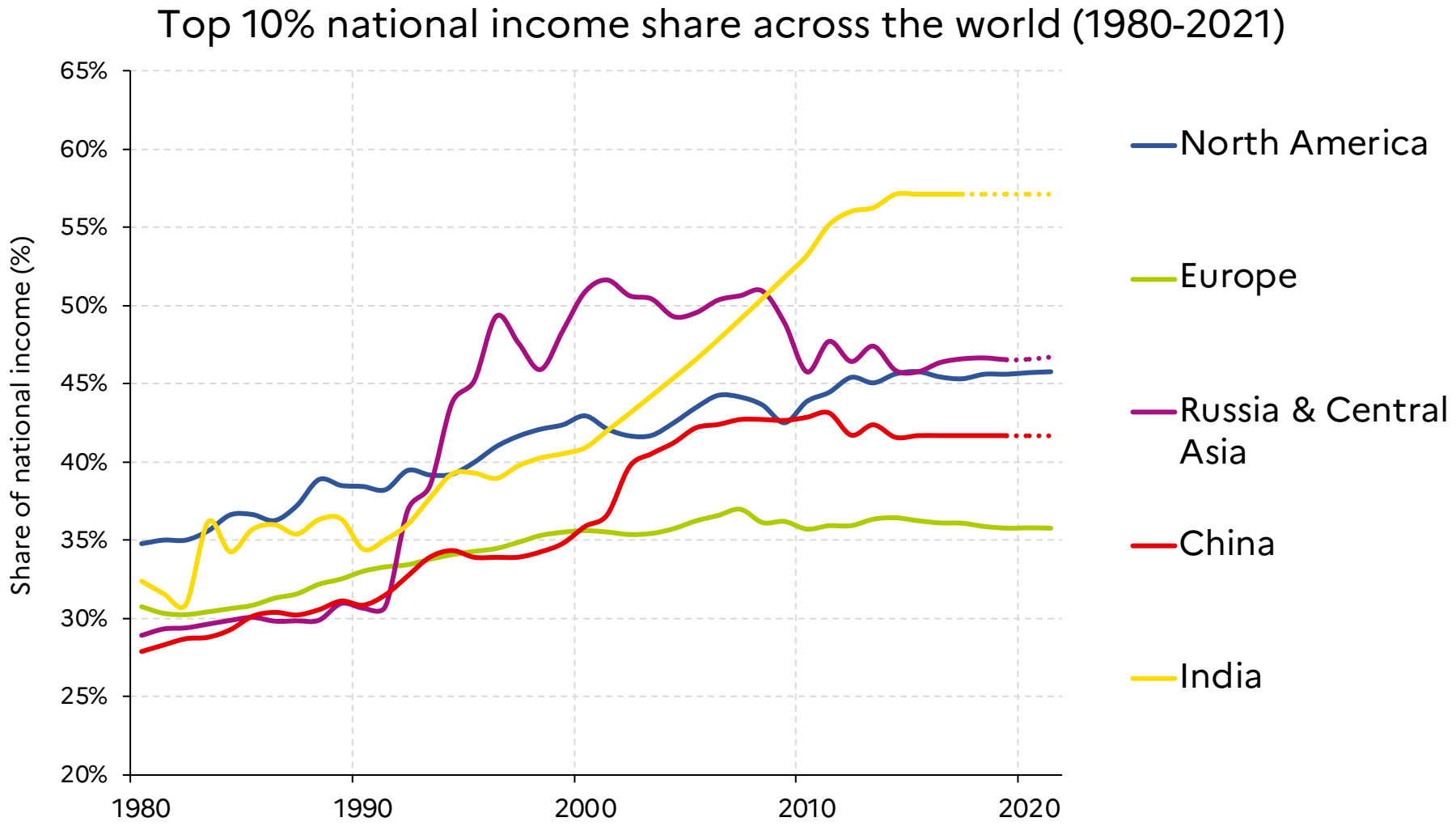
Figure 4 *The extreme concentration of capital: wealth inequality across the world, 2021*



Interpretation: *The Top 10% in Latin America captures 77% of total household wealth, versus 22% for the Middle 40% and 1% for the Bottom 50%. In Europe, the Top 10% owns 58% of total wealth, versus 38% for the Middle 40% and 4% for the Bottom 50%.* ***Sources and series:*** *wir2022.wid.world/methodology.*

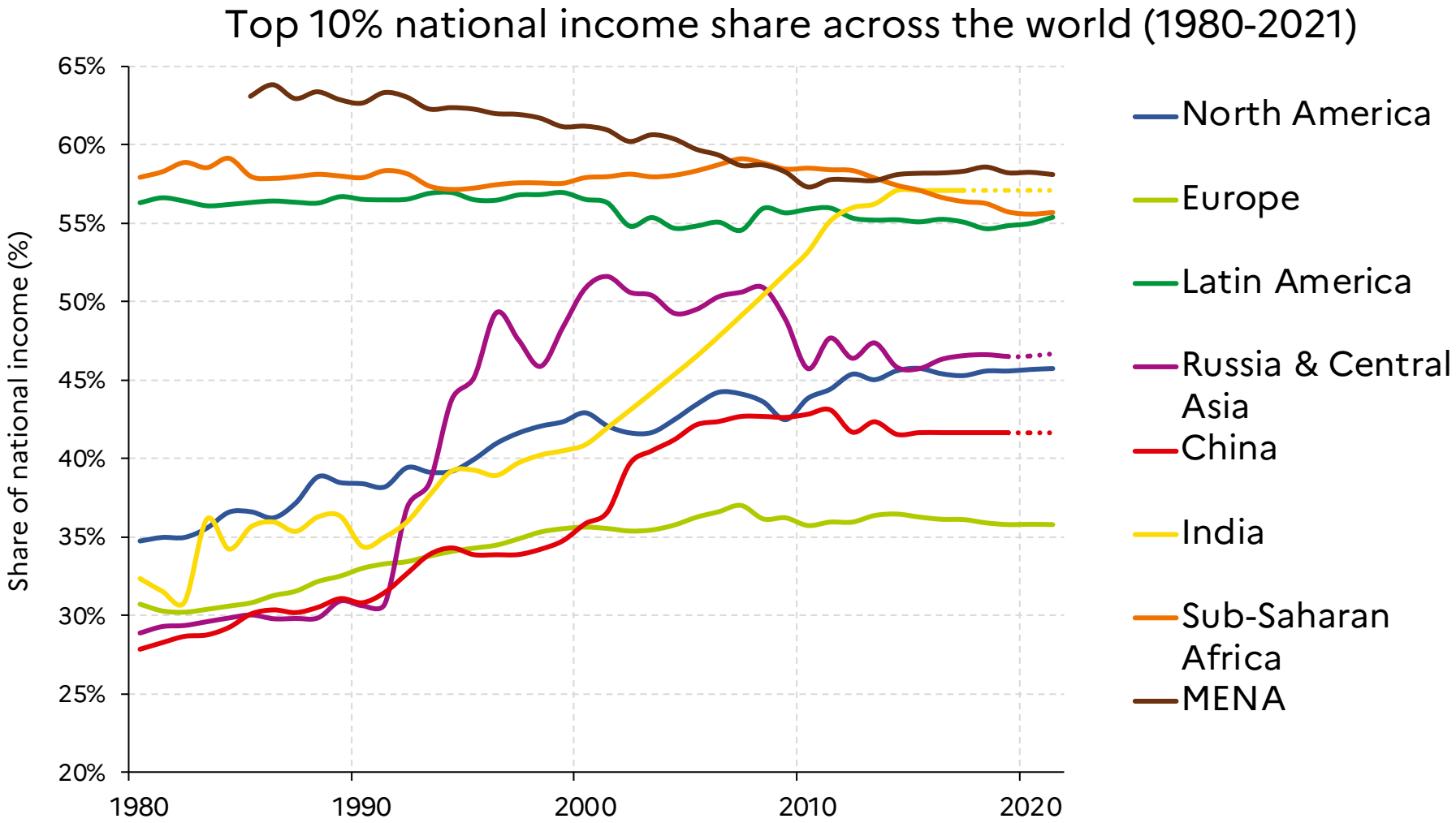
Global inequality since the 1980s

Income inequality rose at different speeds: policy matters



Interpretation: The top 10% share rose from around 28% in China in 1980 to 42% in 2021. **Sources and series:** wid.world/wir2022

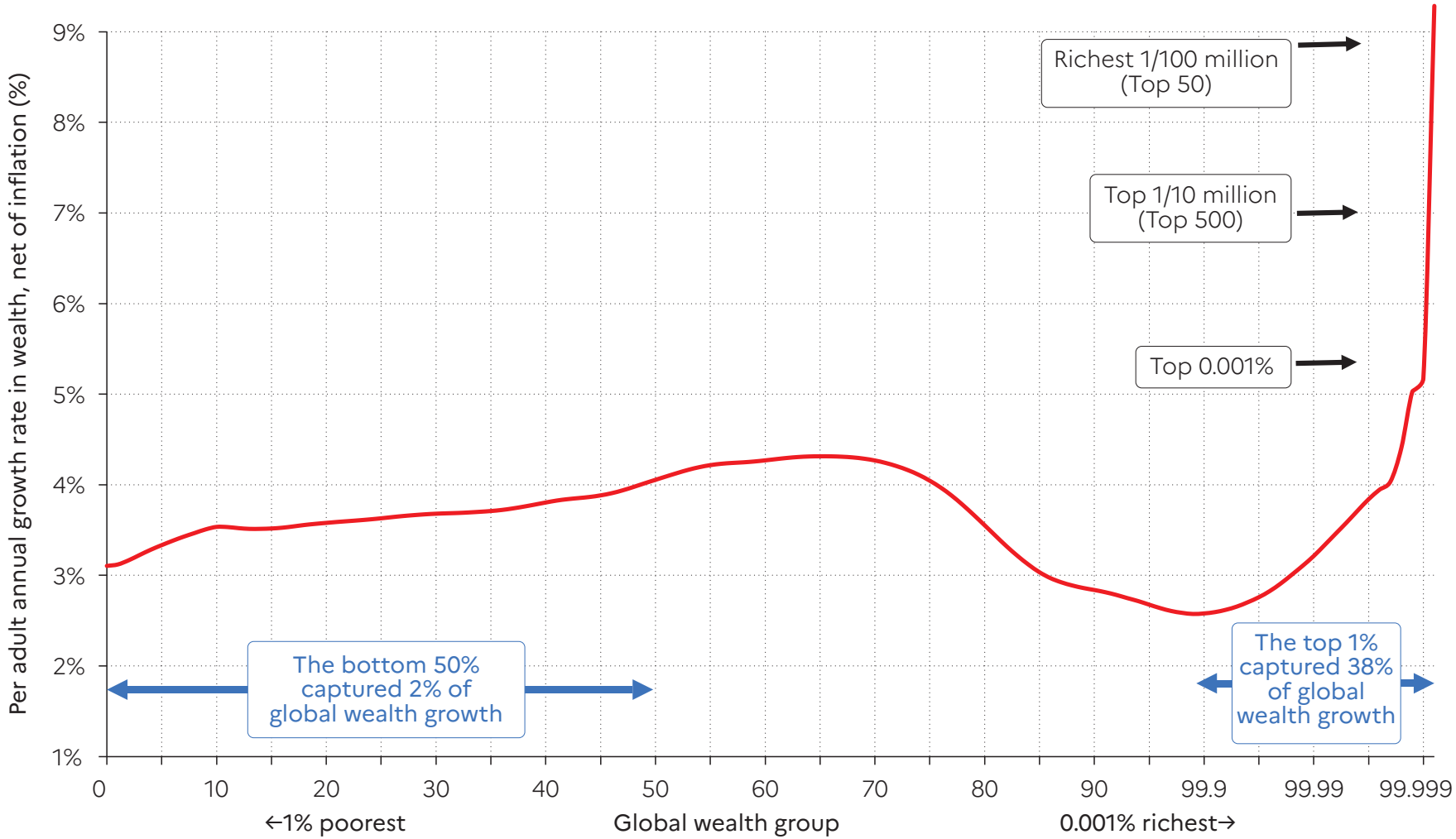
Income inequality rose at different speeds: policy matters



Interpretation: The top 10% share rose from around 28% in China in 1980 to 42% in 2021. **Sources and series:** wid.world/wir2022

Global wealth inequality since 1995: the top 1% captured 38% of total wealth growth, the bottom 50% got 2%.

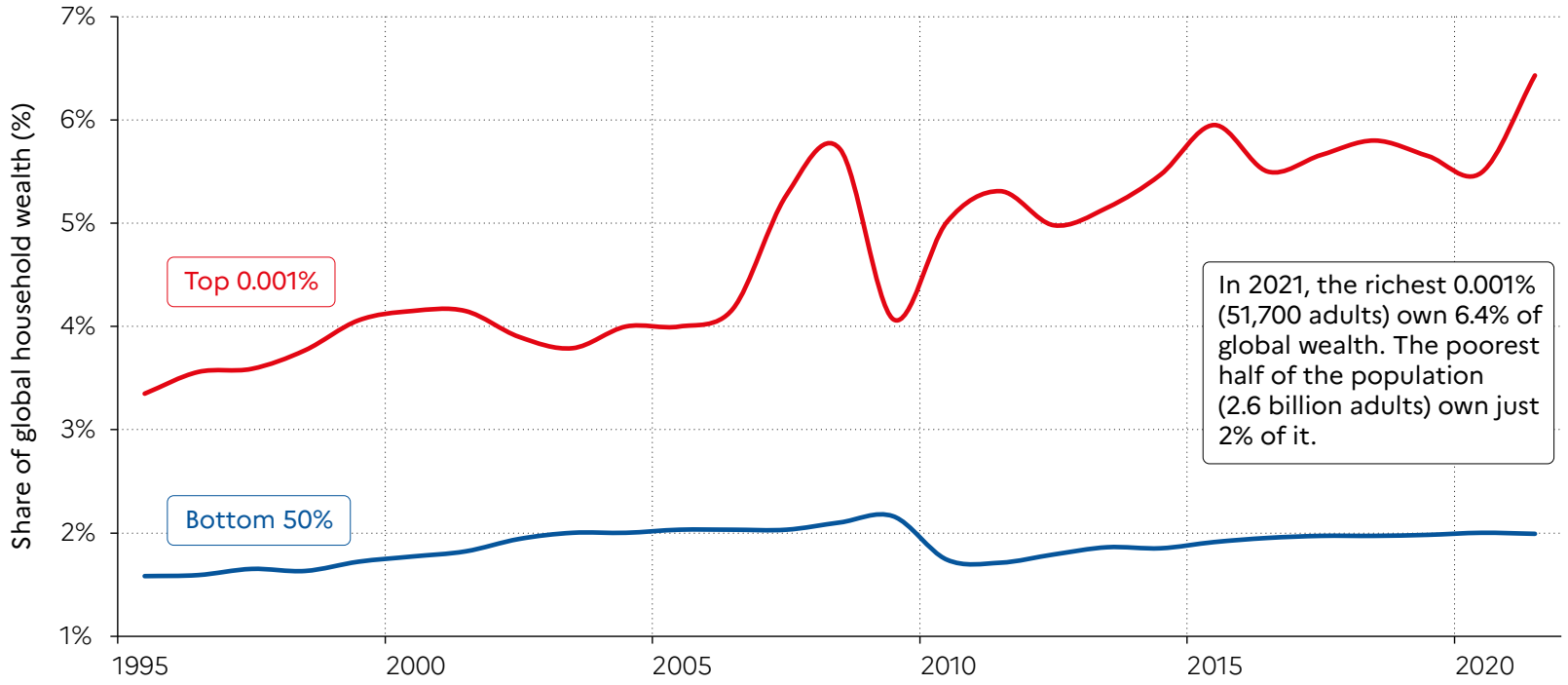
Figure 9 *Average annual wealth growth rate, 1995-2021*



Interpretation: *Growth rates among the poorest half of the population were between 3% and 4% per year, between 1995 and 2021. Since this group started from very low wealth levels, its absolute levels of growth remained very low. The poorest half of the world population only captured 2.3% of overall wealth growth since 1995. The top 1% benefited from high growth rates (3% to 9% per year). This group captured 38% of total wealth growth between 1995 and 2021. Net household 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:*** *wir2022.wid.world/methodology.*

The wealth of multimillionaires skyrocketed: global top 0.001% wealth share rose from 3.5% in 1995 to 6.5% today

Figure 4.3a ***Extreme wealth inequality: top 0.001% vs. bottom 50% wealth share, 1995-2021***

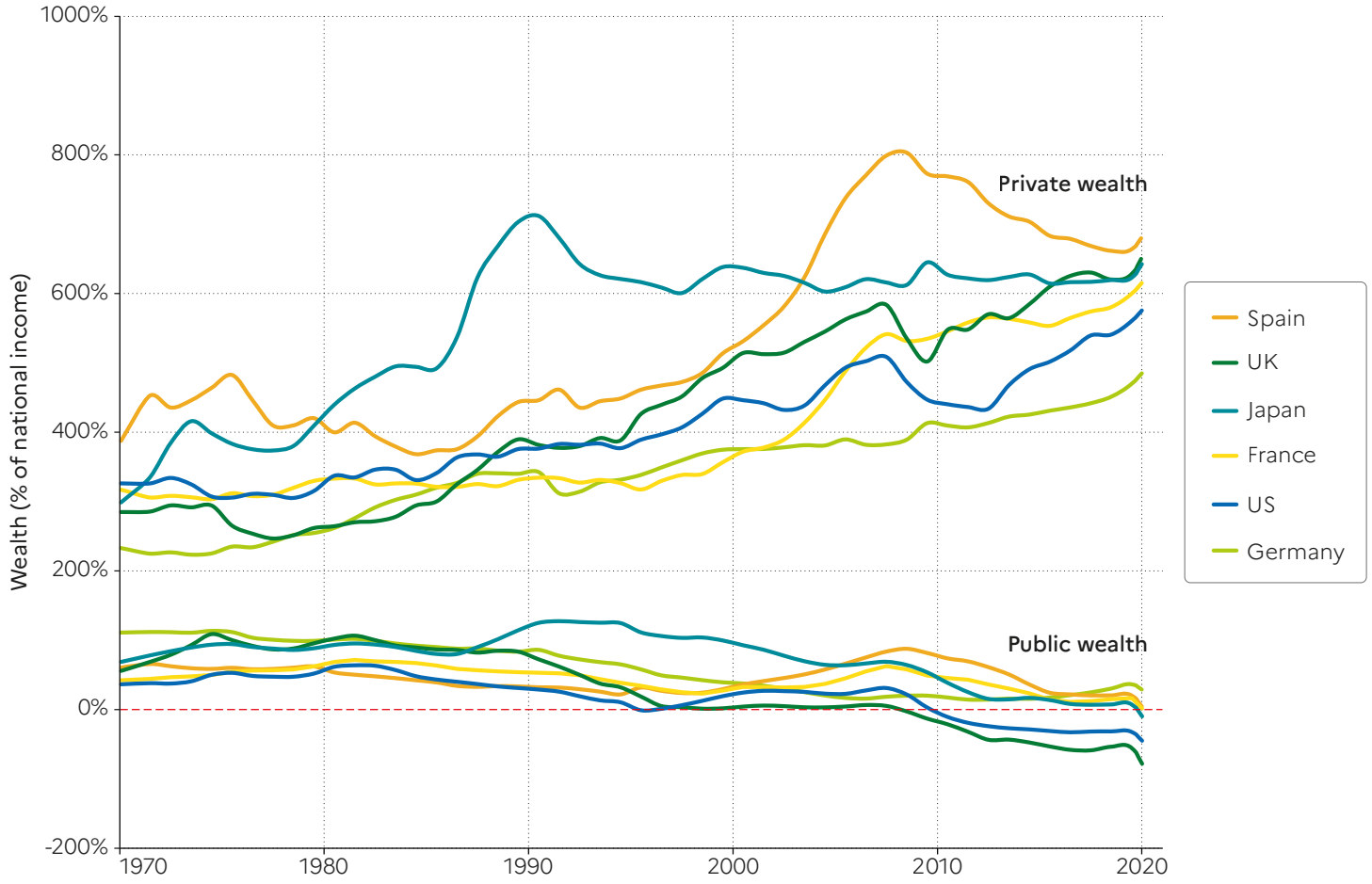


Interpretation: *The share of household wealth detained by the richest 0.001% of adults rose from less than 3.5% of total wealth in 1995 to nearly 6.5% today. After a very slight increase, the share of wealth owned by the poorest half of the population has stagnated since the early 2000s at around 2%. Net household 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:*** *wir2022.wid.world/methodology, Bauluz et al. (2021) and updates.*

Interpretation: the share of the global top 0.01% in total household wealth rose from 7.5% in 1995 to 11% in 2021. **Sources and series**: wir2022.wid.world/methodology

Nations have become richer, governments have become poor

Figure 3.2 *The rise of private wealth and the decline of public wealth in rich countries, 1970-2020*

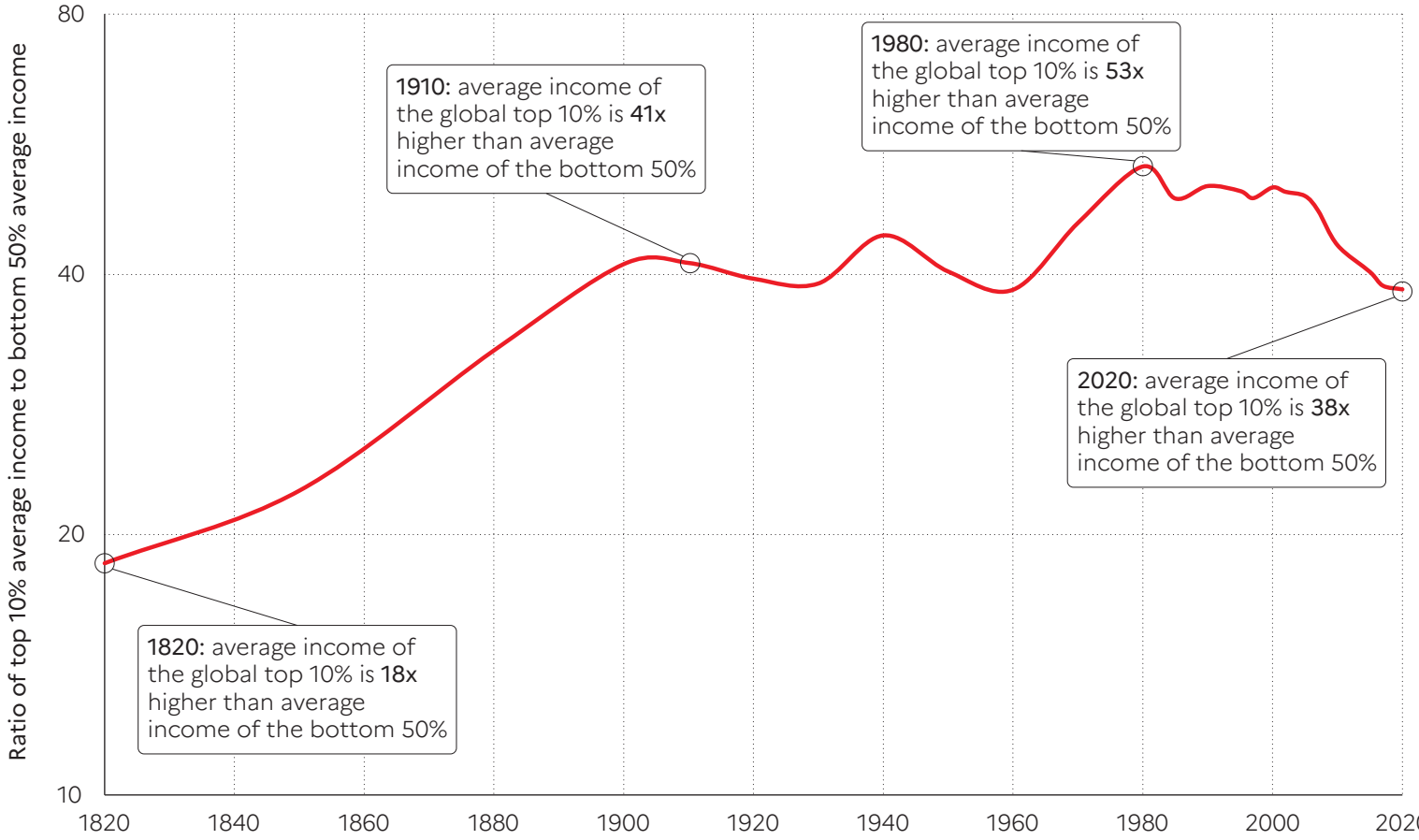


Interpretation: *In UK, public wealth dropped from 60% of national income in 1970 to -106% in 2020. Public wealth is the sum of all financial and non-financial assets, net of debts, held by governments.* ***Sources and series:*** *wir2022.wid.world/methodology, Bauluz et al. (2021) and updates.*

Global inequality in the long run

Global income inequality is about as high today as at the peak of Western imperialism

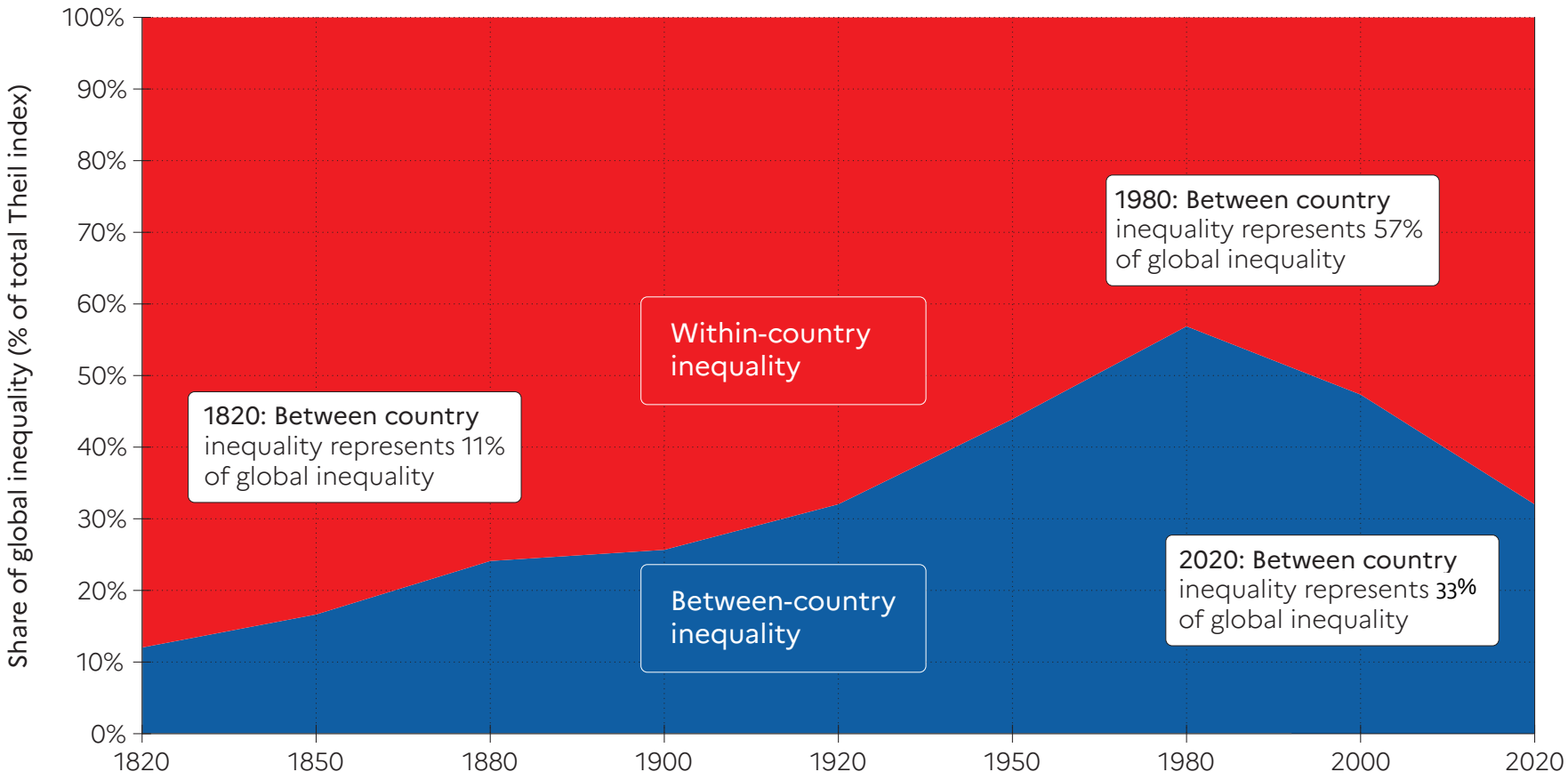
Figure 5 *Global income inequality: T10/B50 ratio, 1820-2020*



Interpretation: *Global inequality, as measured by the ratio T10/B50 between the average income of the top 10% and the average income of the bottom 50%, more than doubled between 1820 and 1910, from less than 20 to about 40, and stabilized around 40 between 1910 and 2020. It is too early to say whether the decline in global inequality observed since 2008 will continue. Income is measured per capita after pension and unemployement insurance transfers and before income and wealth taxes.* ***Sources and series:*** *wir2022.wid.world/lmethodology and Chancel and Piketty (2021)..*

Inequality within countries is even larger than inequality between countries

Figure 6 ***Global income inequality: Between vs. within country inequality (Theil index), 1820-2020***



Interpretation: *The importance of between-country inequality in overall global inequality, as measured by the Theil index, rose between 1820 and 1980 and strongly declined since then. In 2020, between-country inequality makes-up about a third of global inequality between individuals. The rest is due to inequality within countries. Income is measured per capita after pension and unemployement insurance transfers and before income and wealth taxes.* ***Sources and series:*** *wir2022.wid.world/methodology and Chancel and Piketty (2021).*

This presentation

Inequality data as a public good: the World Inequality Database project

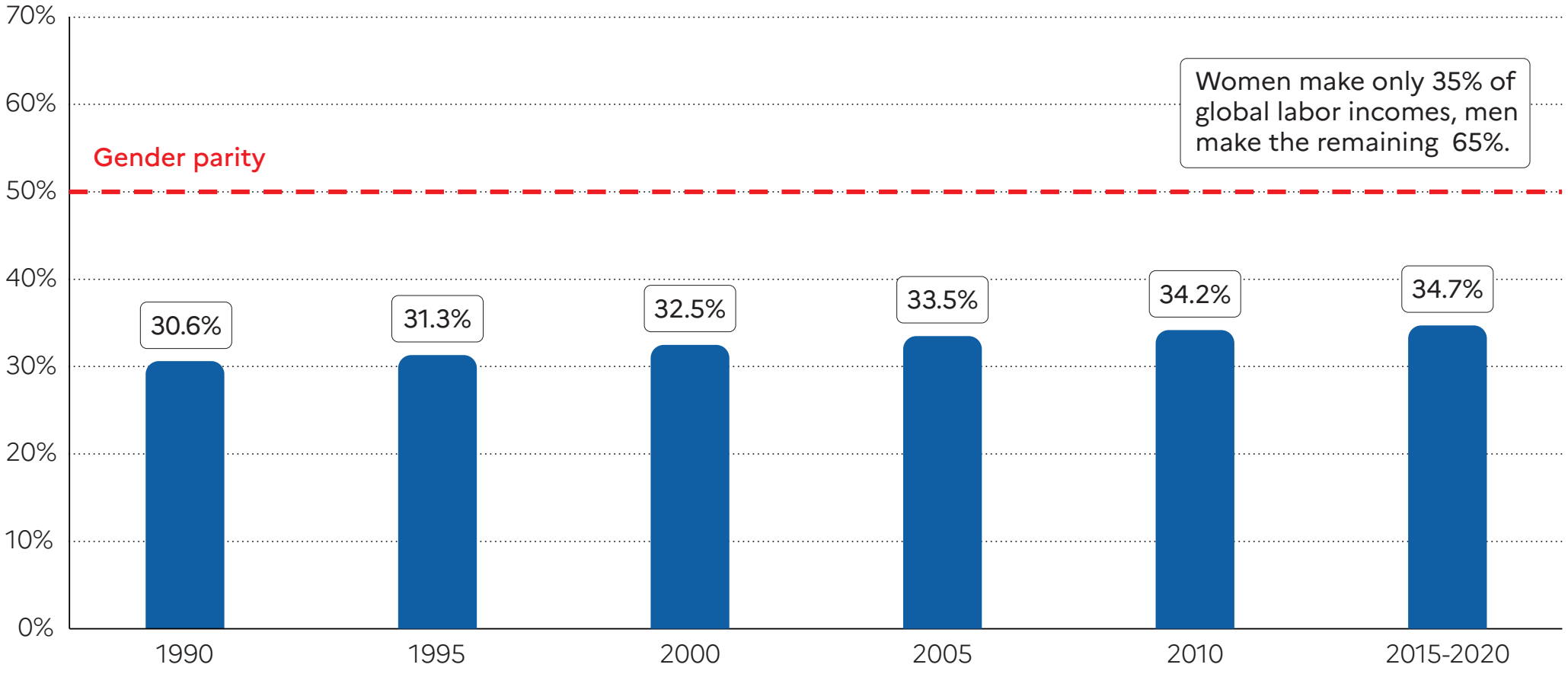
What have we learned from recent research on global income & wealth dynamics?

Exploring the new frontiers of global inequality research : gender & carbon injustices

Global gender inequality

Women earn just a third of all incomes worldwide. 100+ years to reach global parity at current rate

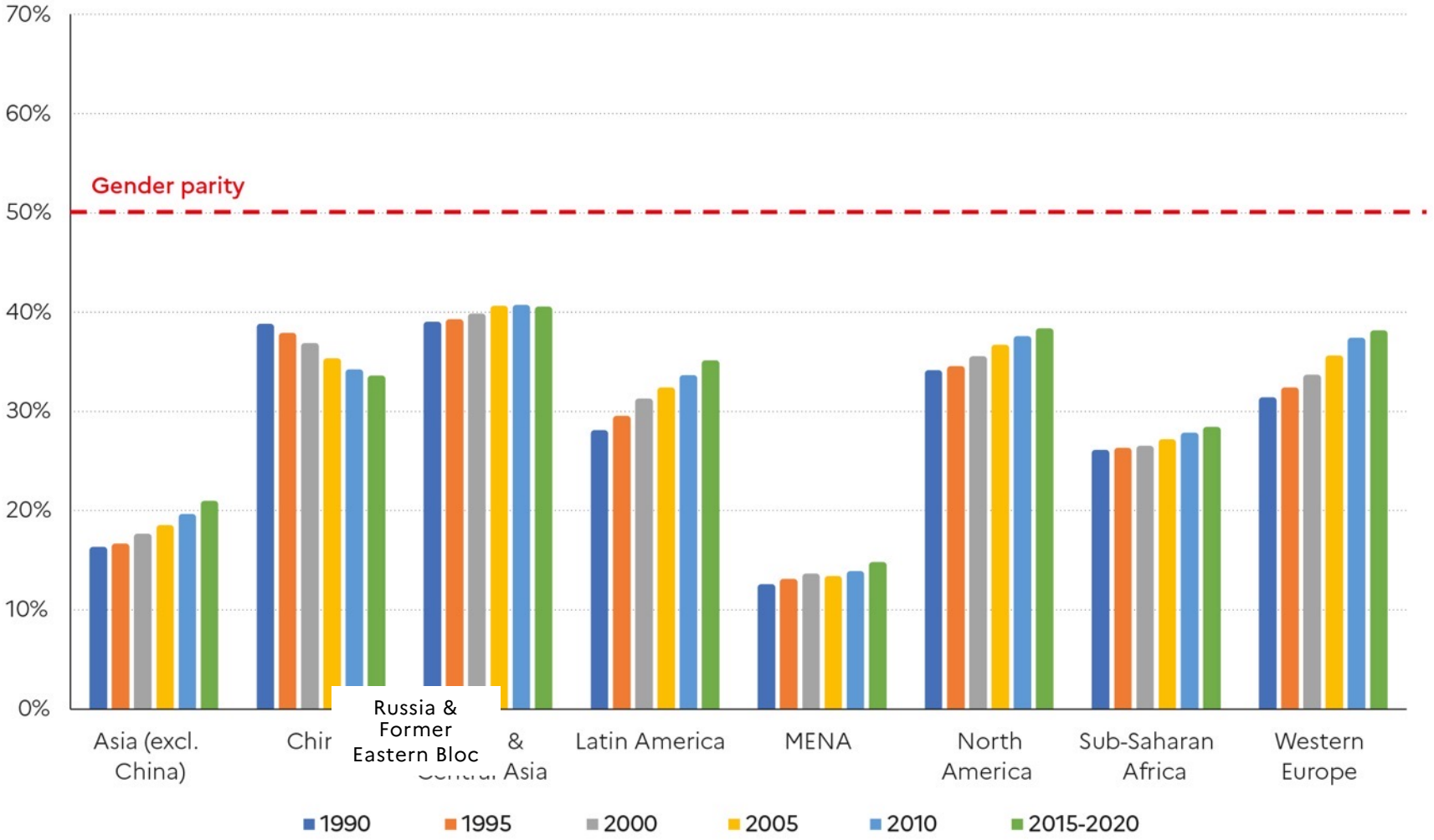
Figure 12 *Female share in global labor incomes, 1990-2020*



Interpretation: *The share of female incomes in global labour incomes was 31% in 1990 and nears 35% in 2015-2020. Today, males make up 64% of total labor incomes.* ***Sources and series:*** *wir2022.wid.world/methodology and Neef and Robilliard (2021).*

Gender inequality across world regions: diverse trajectories highlighting role of institutions /

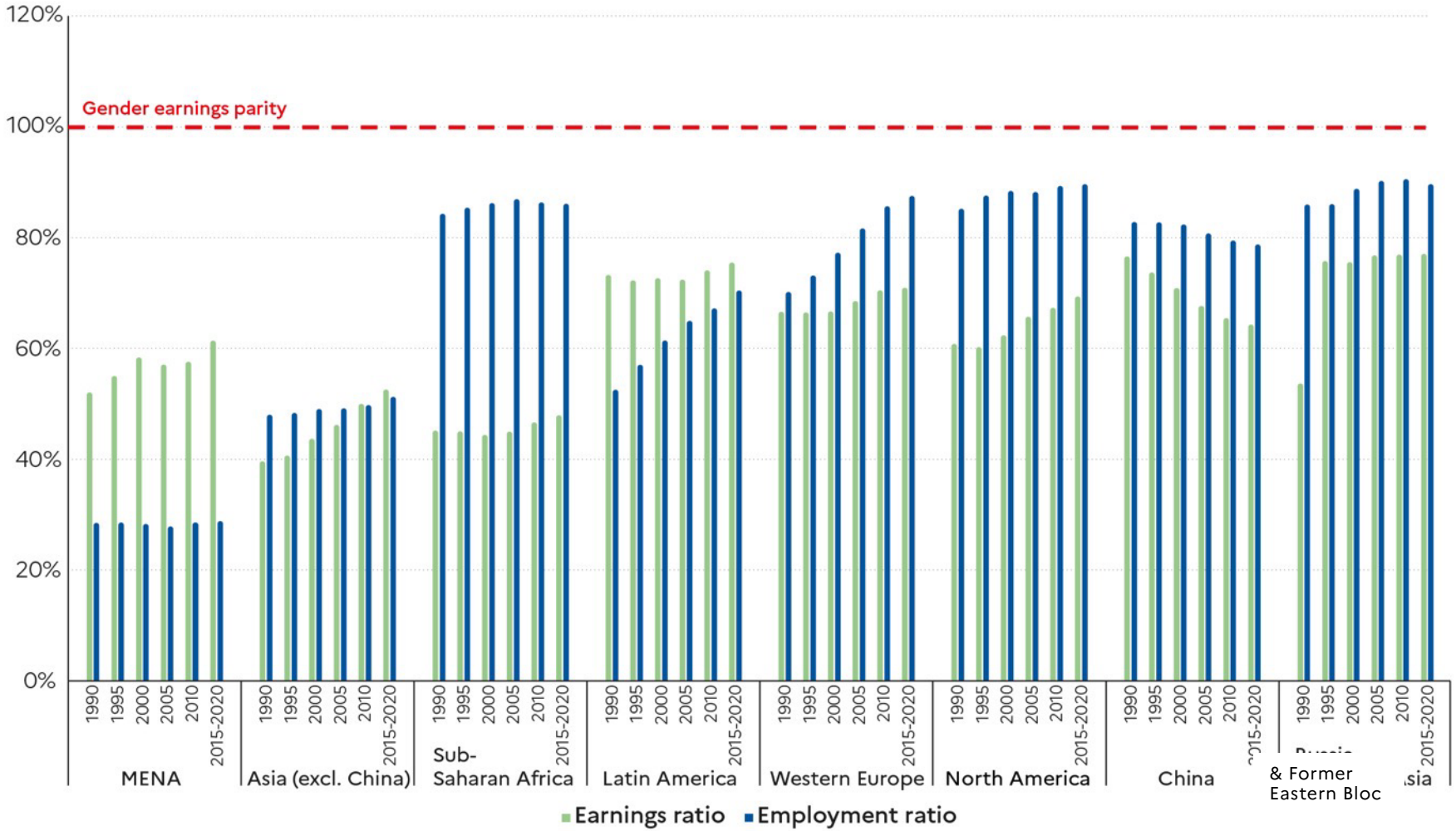
Figure 5.2 *Female labor income share across the world, 1990-2020*



Interpretation: *The female labour income share rose from 34% to 38% in North America between 1990 and 2020.* ***Sources and series:*** *wir2022.wid.world/methodology and Neef and Robilliard (2021).*

Diverse trajectories due to gaps in gender earnings (green bars) and employment (blue bars)

Figure 5.4 *Regional trends in earnings and employment ratios, 1990-2020*



Interpretation: *In the MENA region, a woman earns 61% of what a man earns in 2020, whereas the ratio of employed women to employed men is only 29%.* ***Sources and series:*** *wir2022.wid.world/methodology and Neef and Robilliard (2021)*

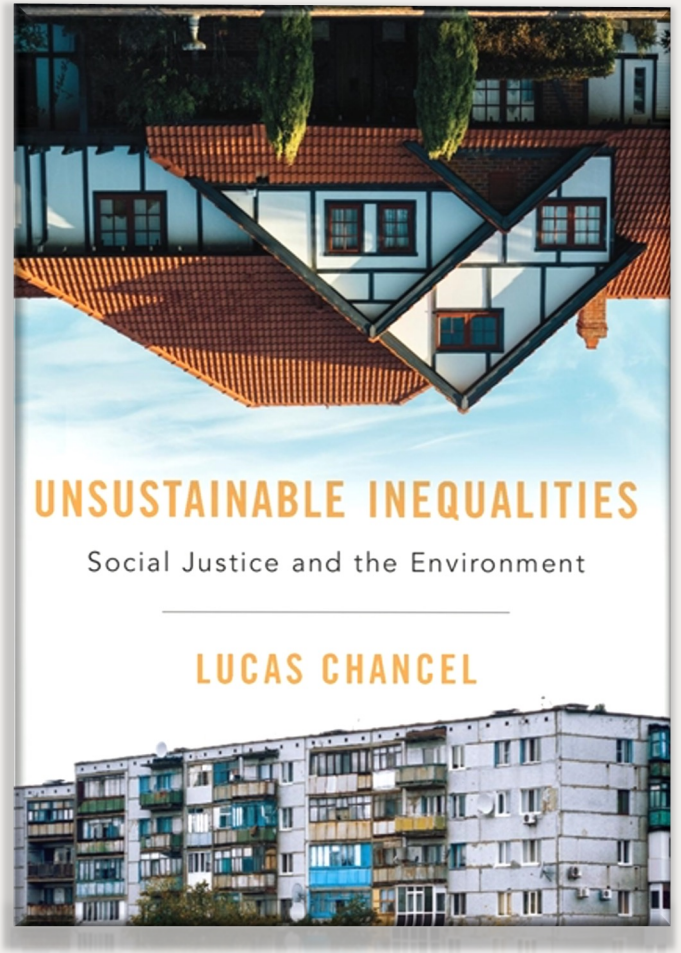
Protecting the environment in a unequal world: Global carbon inequality

Unsustainable inequalities, Harvard University Press: Belknap, 2020

Inequality and political polarization make it more difficult to protect the environment

Environmental policies can exacerbate inequalities, leading to a vicious circle of high inequality and low environment protection

Several options to break it, but this requires a major shift in how we design social-environmental policies



Climate policies blind to equity concerns are likely to fail: « yellow vests »

Yellow vests, 2018. Credit: lepharedunkerquois

Climate policies blind to equity concerns are likely to fail: Indonesia

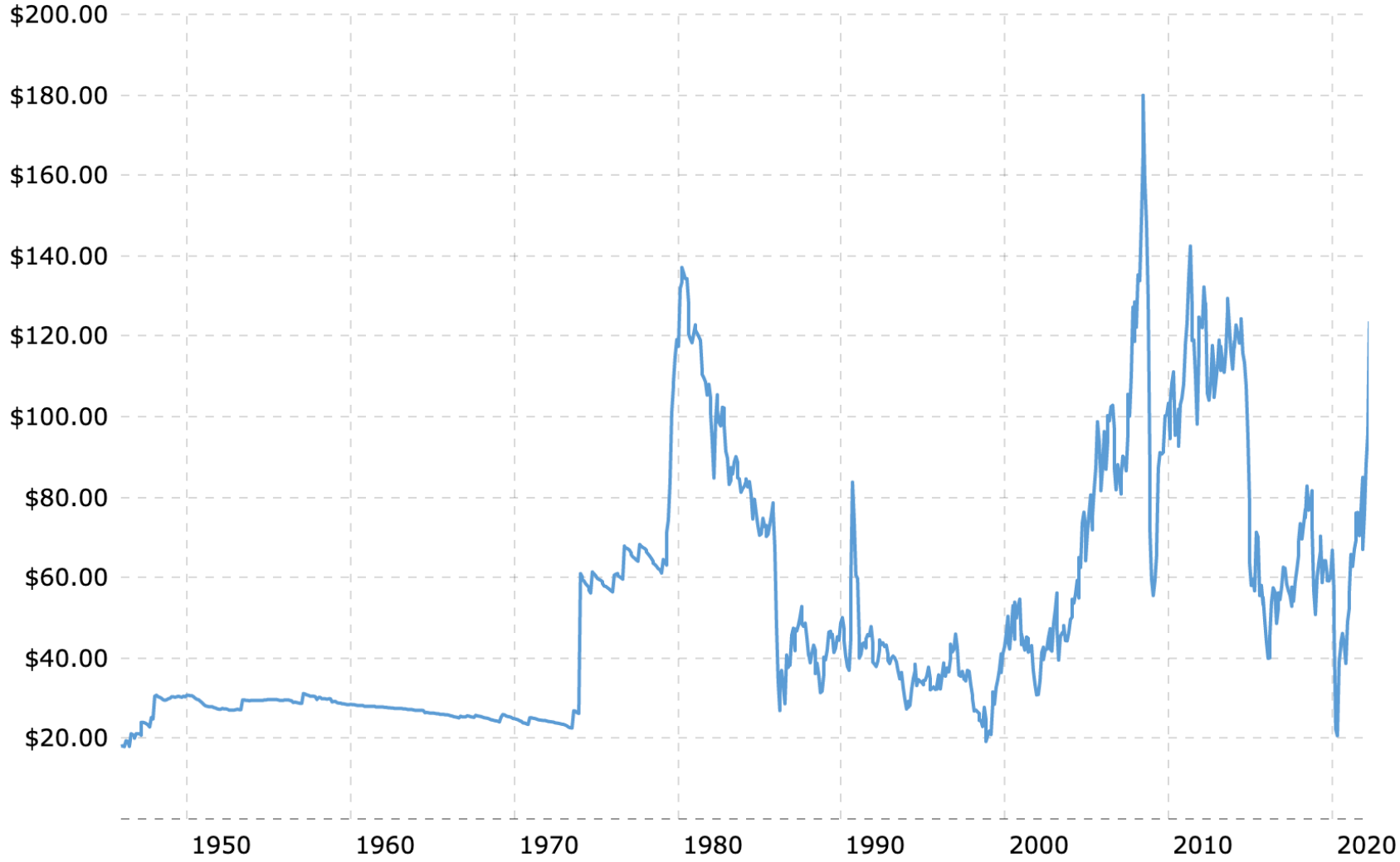
Indonesian fossil fuel subsidy reform, 2012

Climate policies blind to equity concerns are likely to fail: US

US coal miners, credit: wnycstudios.com

War in Ukraine and incoming energy crisis likely to exacerbate tensions between social and environmental dimensions

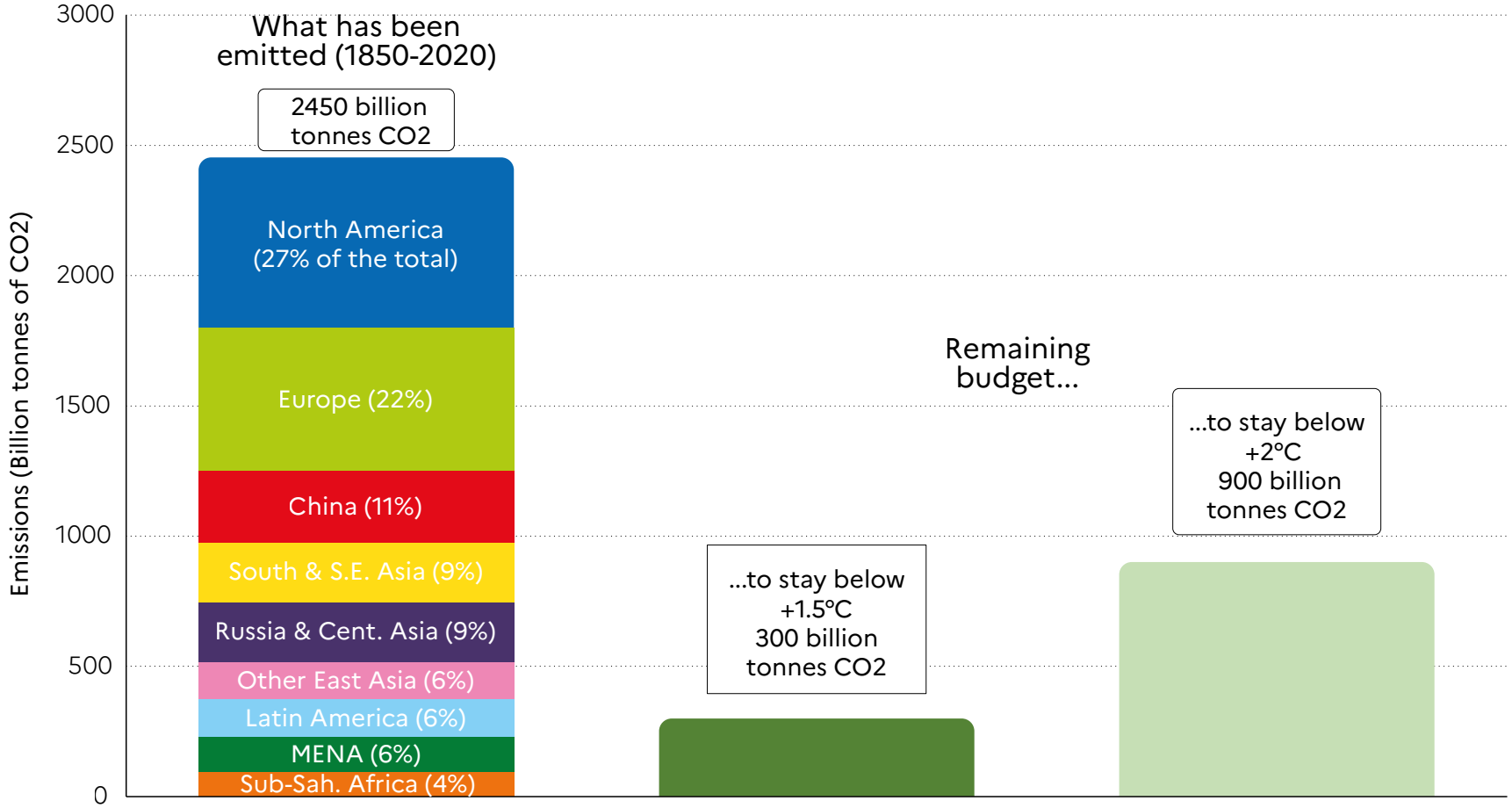
Crude oil price 1945-2022 ($ per barrel, inflation adjusted)



How do we ensure that energy transition between now and 2050 is socially sustainable?

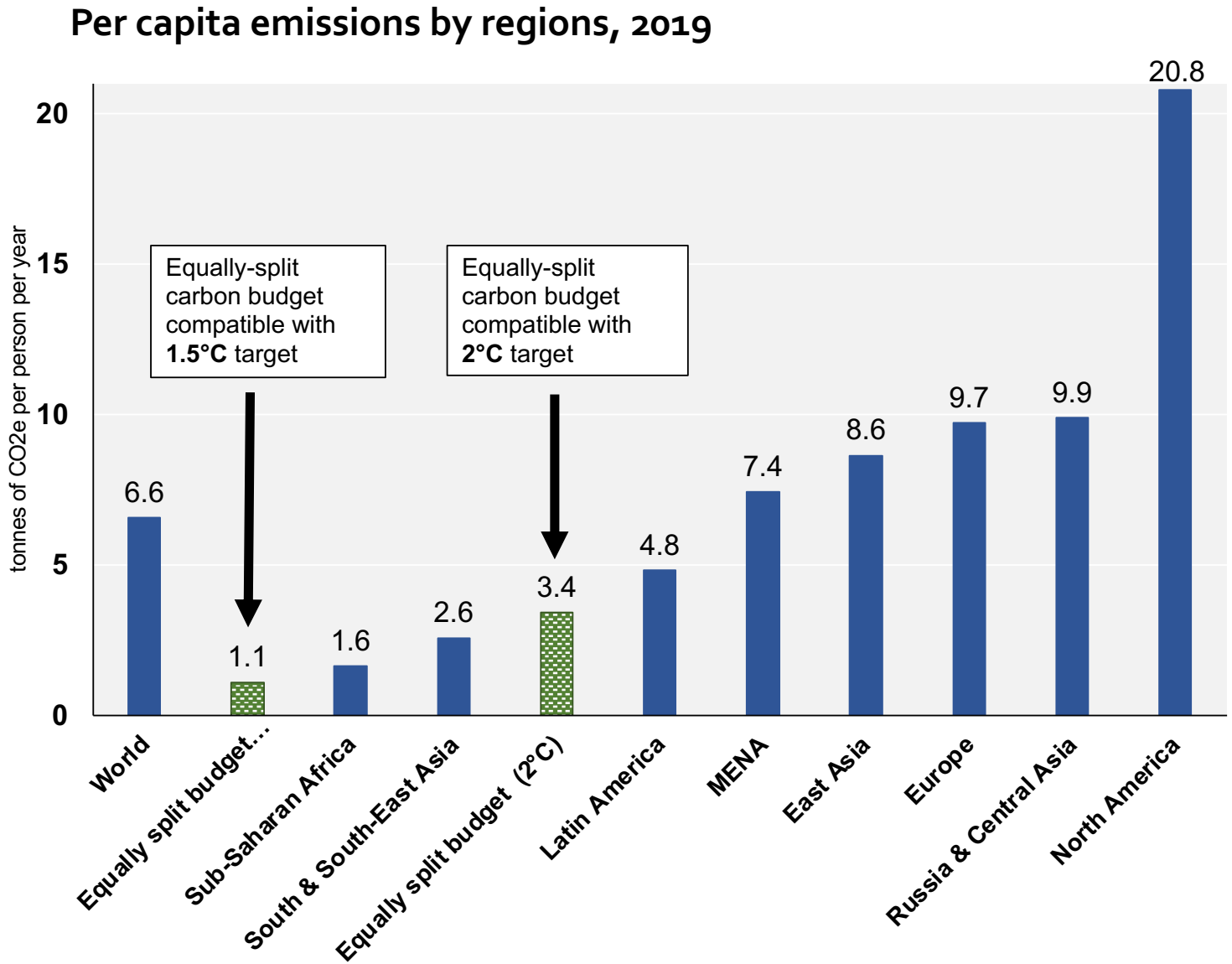
Current global emissions: around 50 billion tonnes. 900 billion tonnes left to stay under 2°C, 300bn tonnes to stay under 1.5°C

Figure 6.2 ***Historical emissions vs. remaining carbon budget***



Interpretation: *The graph shows historical emissions by region (left bar) and the remaining global carbon budget (center and right bars) to have 83% chances to stay under 1.5°C and 2°C, according to IPCC AR6 (2021). Regional emissions are net of carbon embedded in imports of goods and services from other regions.* ***Sources and series:*** *wir2022.wid.world/methodology and Chancel (2021). Historical data from the PRIMAP-hist dataset.*

Substantial inequalities in per capita emissions between regions: <2t/cap (Sub Sah. Africa) vs. 21t/cap (North America)



Interpretation: Sharing the remaining carbon budget to have 83% chances to stay below 1.5°C global temperature increase implies an annual per capita emissions level of 1.1 tonnes per person per year between 2021 and 2050 (and zero afterwards). Emission levels present regional per capita emissions and include all emissions from domestic consumption, public and private investments as well as imports and exports of carbon embedded in goods and services traded with the rest of the world (LULUCF emissions are excluded). *Source and series*: Chancel 2022, see Methods and Supplementary Information.

What is the per capita carbon footprint of a SFX-Paris flight (one way)?

Cntraveler.com

What is the per capita carbon footprint of a SFX-Paris flight (one way)? 1.6 tonnes CO2 in economy class

Cntraveler.com

The per capita carbon footprint of a leisure trip to space?

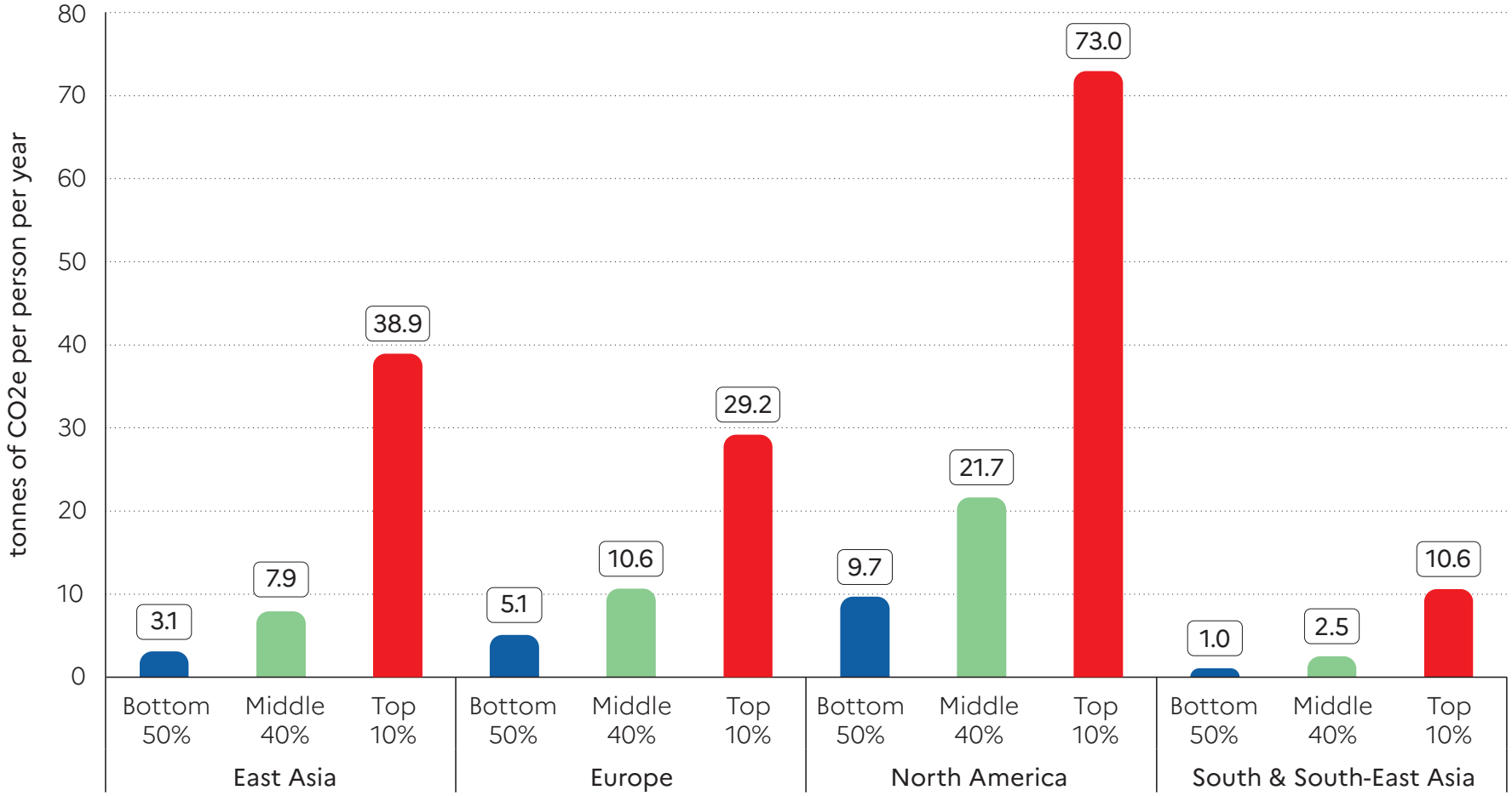
Nbcnews.com

The per capita carbon footprint of a leisure trip to space? Probably 100-200 tonnes CO2

Nbcnews.com

Carbon inequality is not just a rich vs. poor country issue

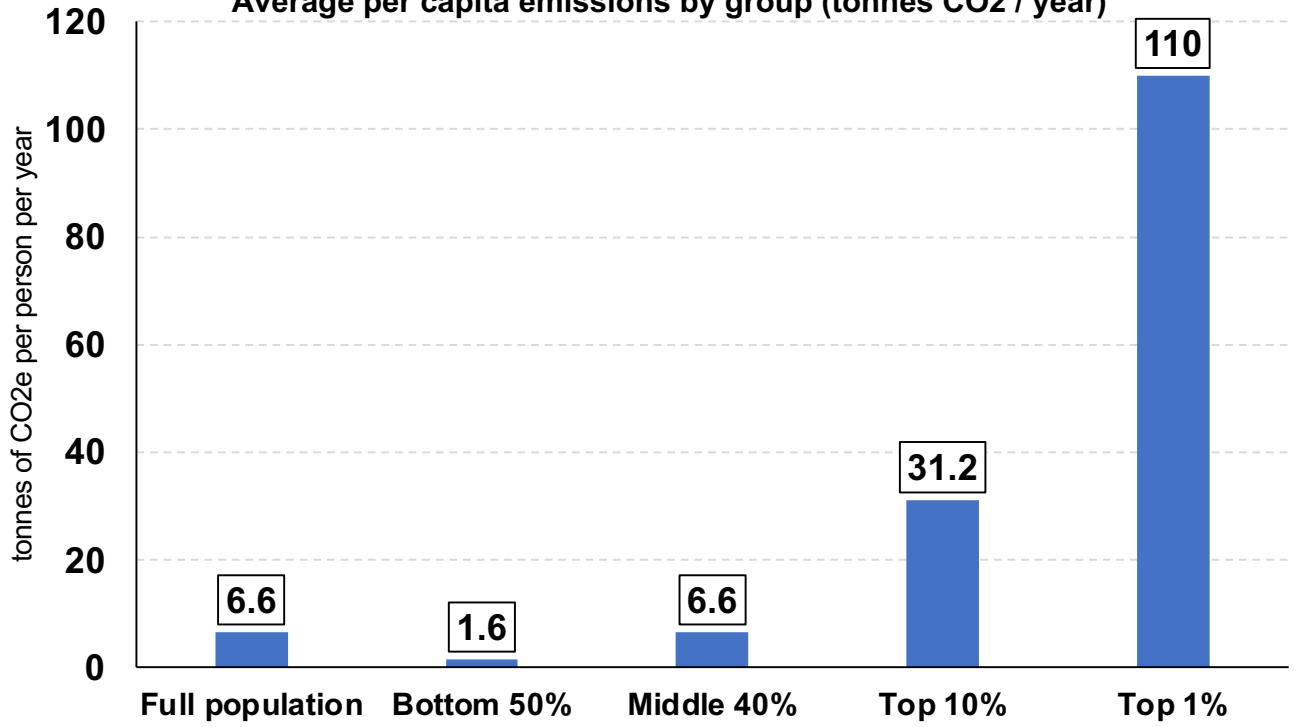
Figure 15 *Per capita emissions across the world, 2019*



Interpretation: *Personal carbon footprints include emissions from domestic consumption, public and private investments as well as imports and exports of carbon embedded in goods and services traded with the rest of the world. Modeled estimates based on the systematic combination of tax data, household surveys and input-output tables. Emissions split equally within households.* ***Sources and series:*** *wir2022.wid.world/methodology and Chancel (2021).*

Poorest half of the world population emits 1.6t/cap vs. 110t/cap for the top 1%

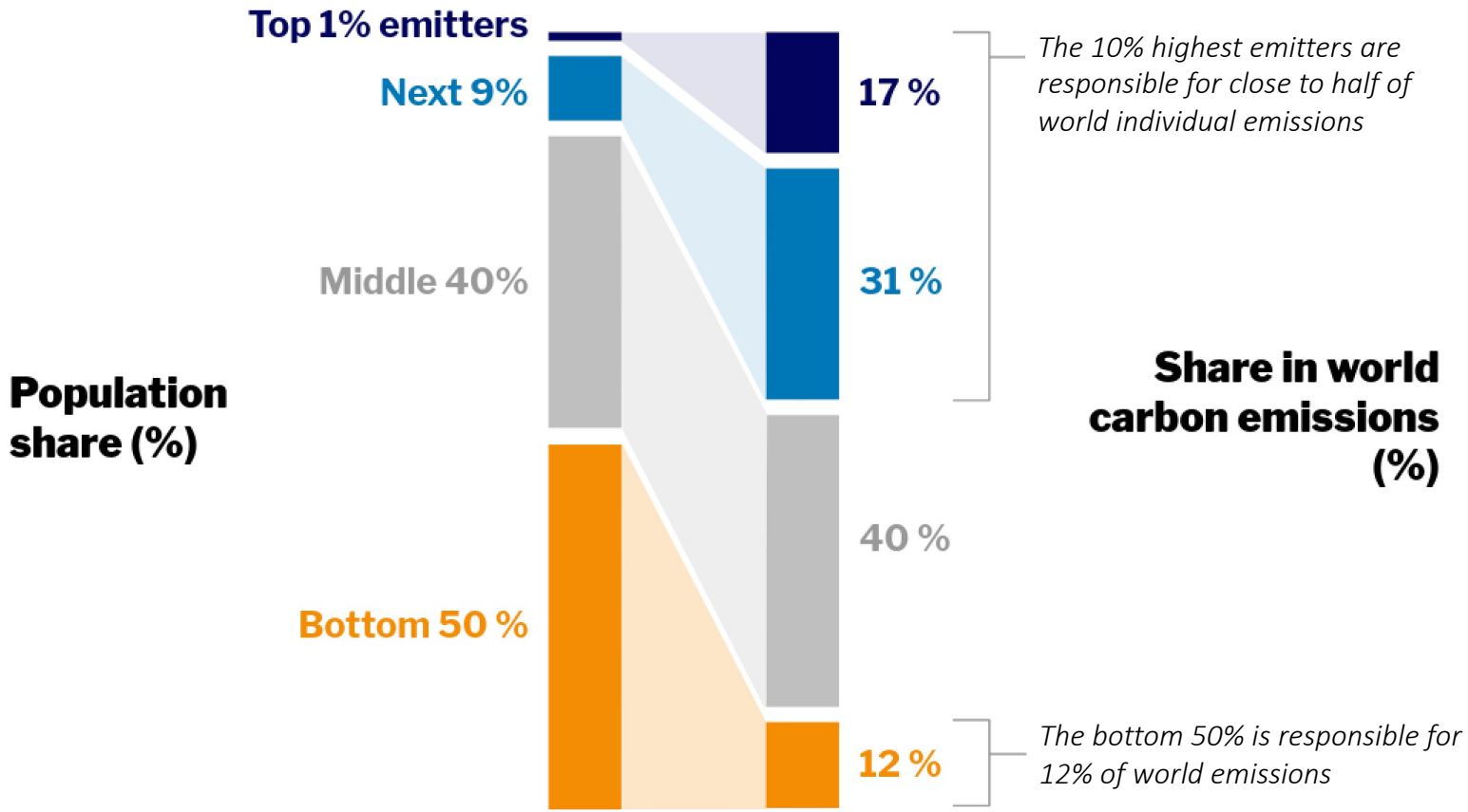
Figure 5A. Global carbon inequality 2019
Average per capita emissions by group (tonnes CO2 / year)



Interpretation: Personal carbon footprints include emissions from domestic consumption, public and private investments as well as imports and exports of carbon embedded in goods and services traded with the rest of the world. Modeled estimates based on the systematic combination of tax data, household surveys and input-output tables. Emissions split equally within households. **Source and series:** Chancel (2021)

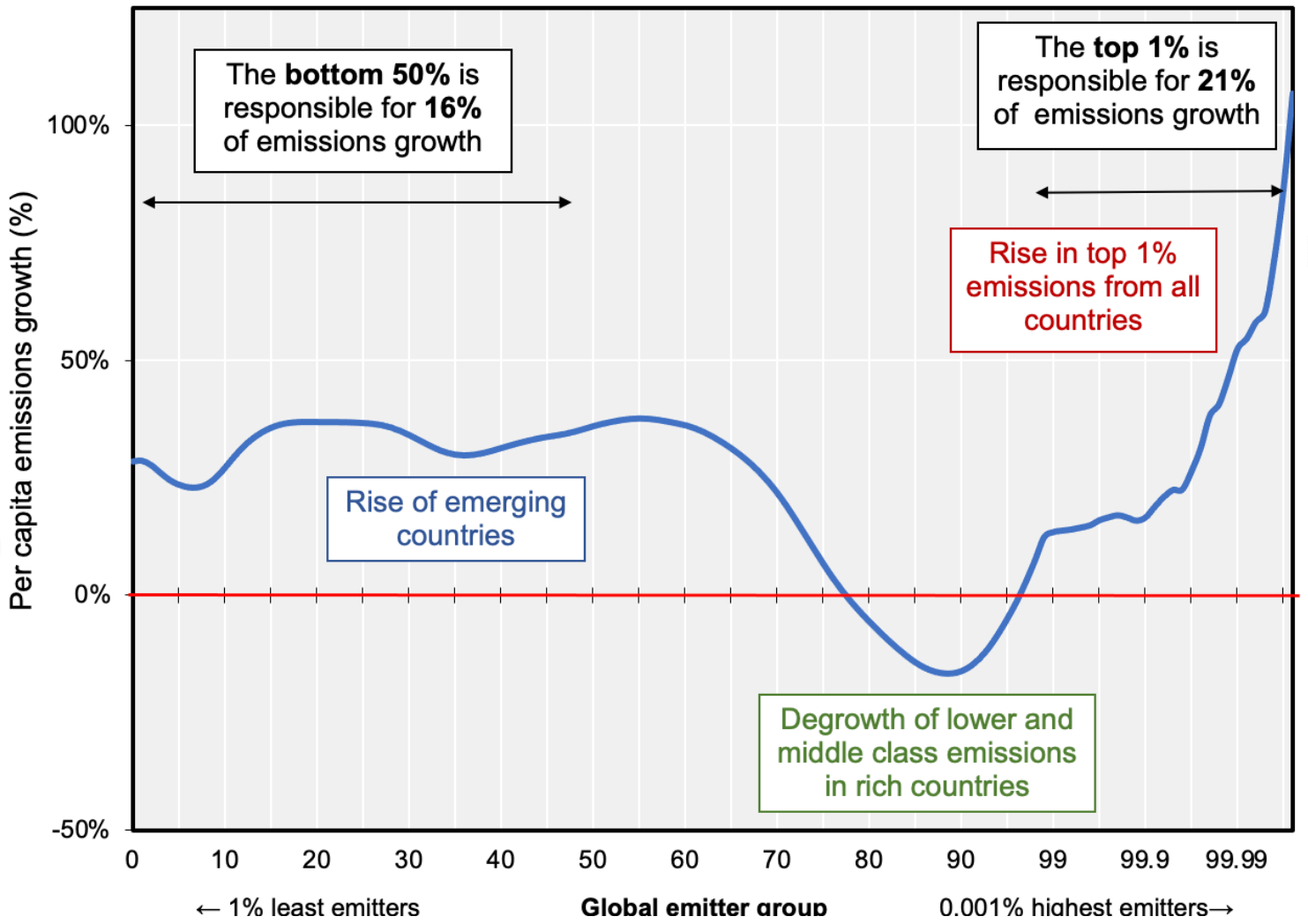
Global top 10% emits close to half of all emissions

Figure A. Global carbon inequality in 2019



Sources and series: Chancel (2021)

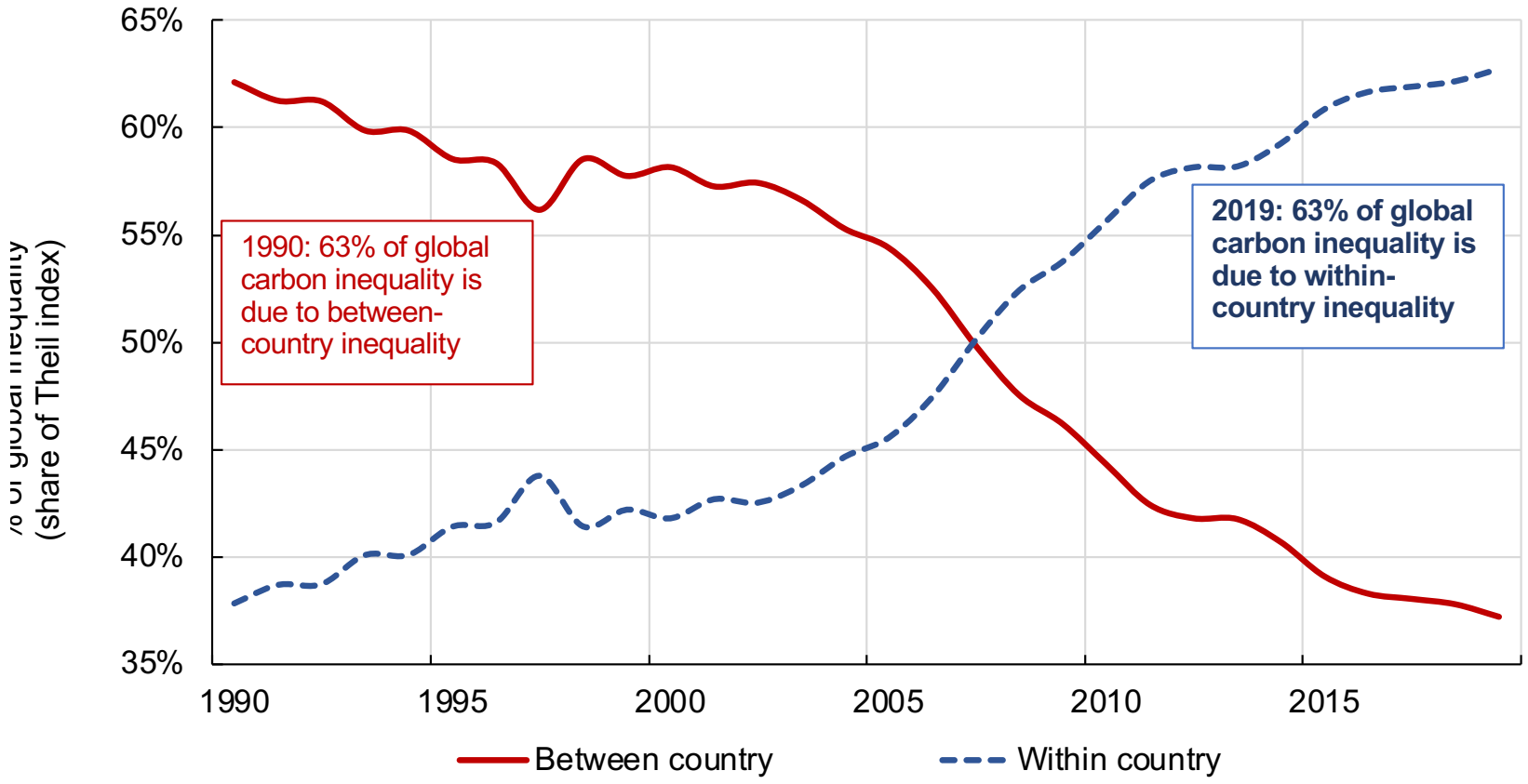
Some groups have reduced their per capita footprints since 1990 – not all



Interpretation. Emissions of the global bottom 50% rose by around 20-40% between 1990 and 2019. Emissions notably declined among groups above the bottom 80% and below the top 5% of the global distribution, these groups mainly correspond to lower and middle income groups in rich countries. Emissions of the global top 1% and richer groups rose substantially. Personal carbon footprints include emissions from domestic consumption, public and private investments as well as imports and exports of carbon embedded in goods and services traded with the rest of the world. Modeled estimates based on the systematic combination of tax data, household surveys and input-output tables. Emissions split equally within households. **Source and series:** Chancel (2021)

Bring climate negociations home: there's now more emissions inequality within countries than between countries.

Figure 8. Global carbon inequalities are mainly due to inequality within countries, 1990-2019
(Theil index decomposition of global carbon inequality)



Interpretation: 37% of global carbon inequality between individuals is due to differences in emissions levels between countries while 63% is explained by inequality within countries in 2019.
Sources and series: Chancel (2021)

Climate change has already exacerbated inequalities between and within countries and will continue to do so in the future

Previous results show large inequality in contributions to climate change between and even more so within countries.

Latest IPPC report & recent research also show that poorest countries and poorest income groups are also hit hardest by climate change:

- Burke et al. 2015: observed temperature increases have reduced GDP of poor countries more than that of rich nations since 1960, mainly via agricultural productivity losses

- Hallegate et al. 2016: low-income groups are more exposed to increased climate risks (floods, heatwaves) and more vulnerable to them.

Differences in exposure to climate change can be extreme. Caricatural but real: the Survival Condo project, Kansas desert

Protecting the environment in an unequal world

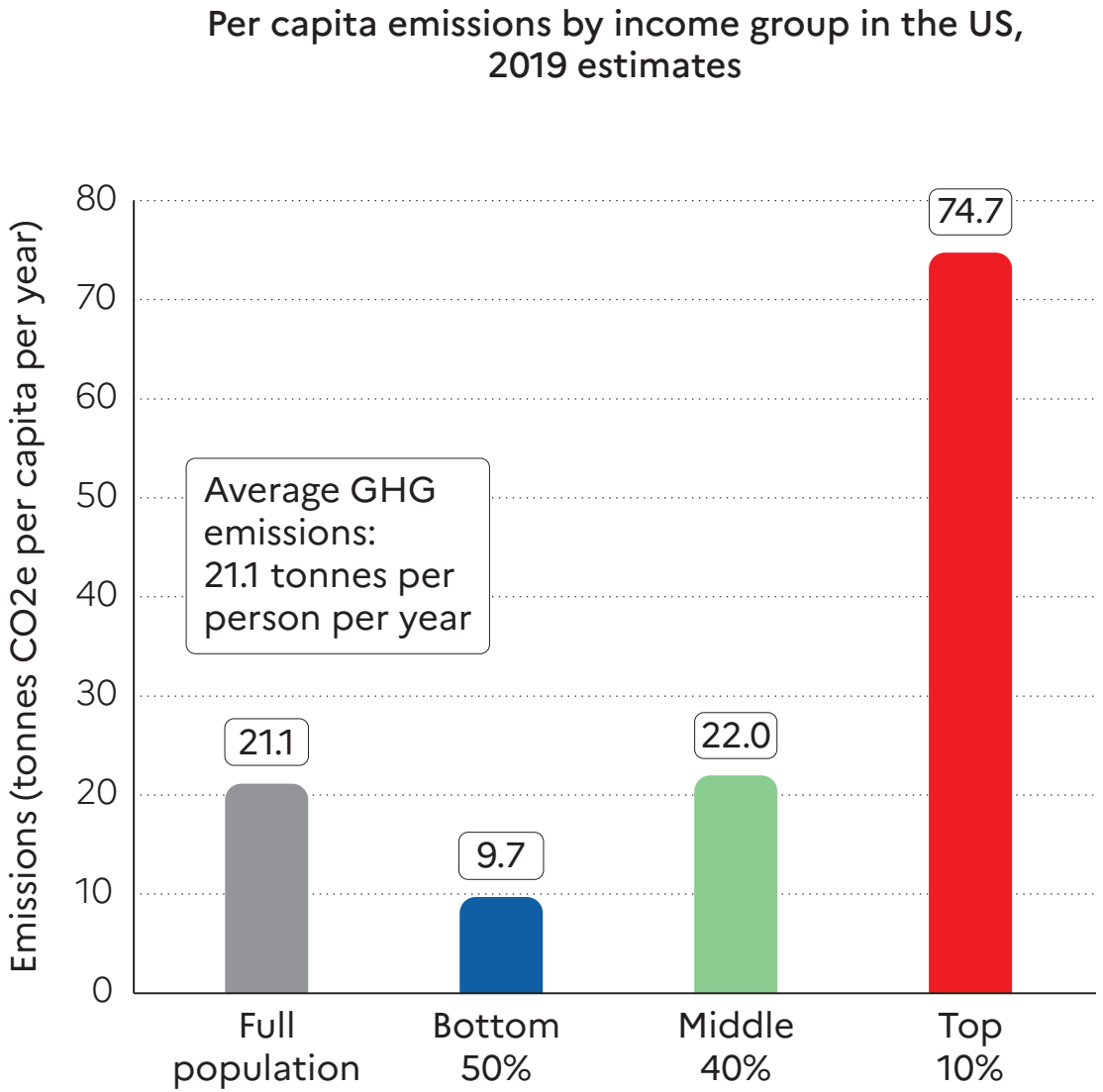
A flat tax on carbon?

A flat tax on carbon?

Carbon taxation is often regressive and targetted at consumers w/o alternatives

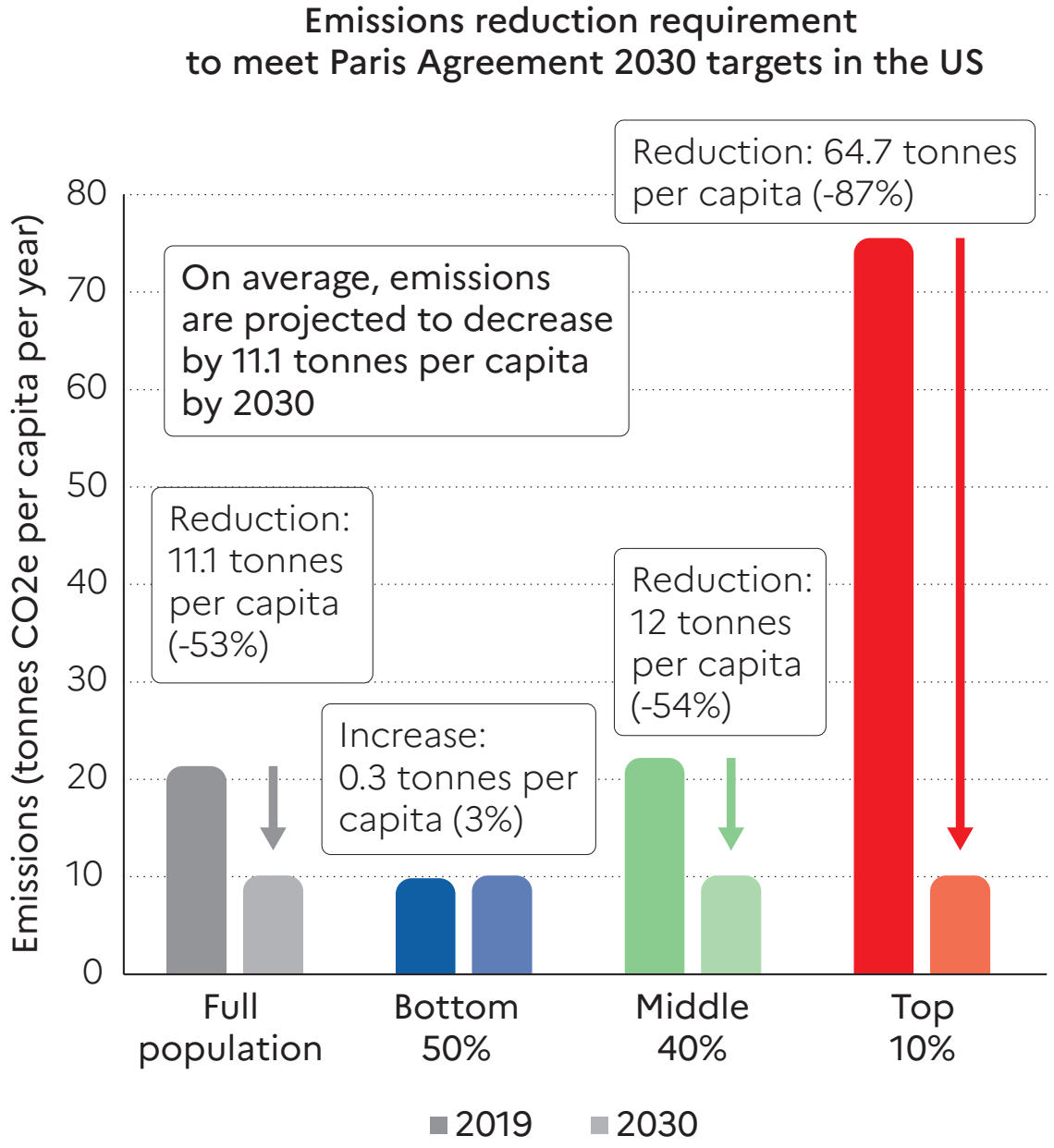
Yellow vests, 2018. Credit: lepharedunkerquois

Bottom groups in rich countries already near 2030 climate targets: US



Interpretation: *Individual carbon footprints include emissions from all greenhouse gases stemming from domestic consumption, public and private investments as well as imports and exports of carbon embedded in goods and services traded with the rest of the world. Modeled estimates based on the systematic combination of national accounts, tax and survey data, input-output models and energy datasets. Emissions are split equally within households. The 2030 target corresponds to the overal emissions budget annouced by governments for 2030, divided by the total population of the country in 2030.* ***Sources and series:*** *wir2022.wid.world/methodology and Chancel (2021).*

Bottom groups in rich countries already near 2030 climate targets: US



Factoring-in inequality at the heart of climate policy design

Table 7. An inequality-check for climate policies

Which social group is targetted?	What kind of climate policy?		
	Decarbonize green energy supply	Decarbonize green energy access	Switch in energy end-uses (building, transport, industry)
Bottom 50%			
Middle 40%			
Top 10 % & Top 1%			

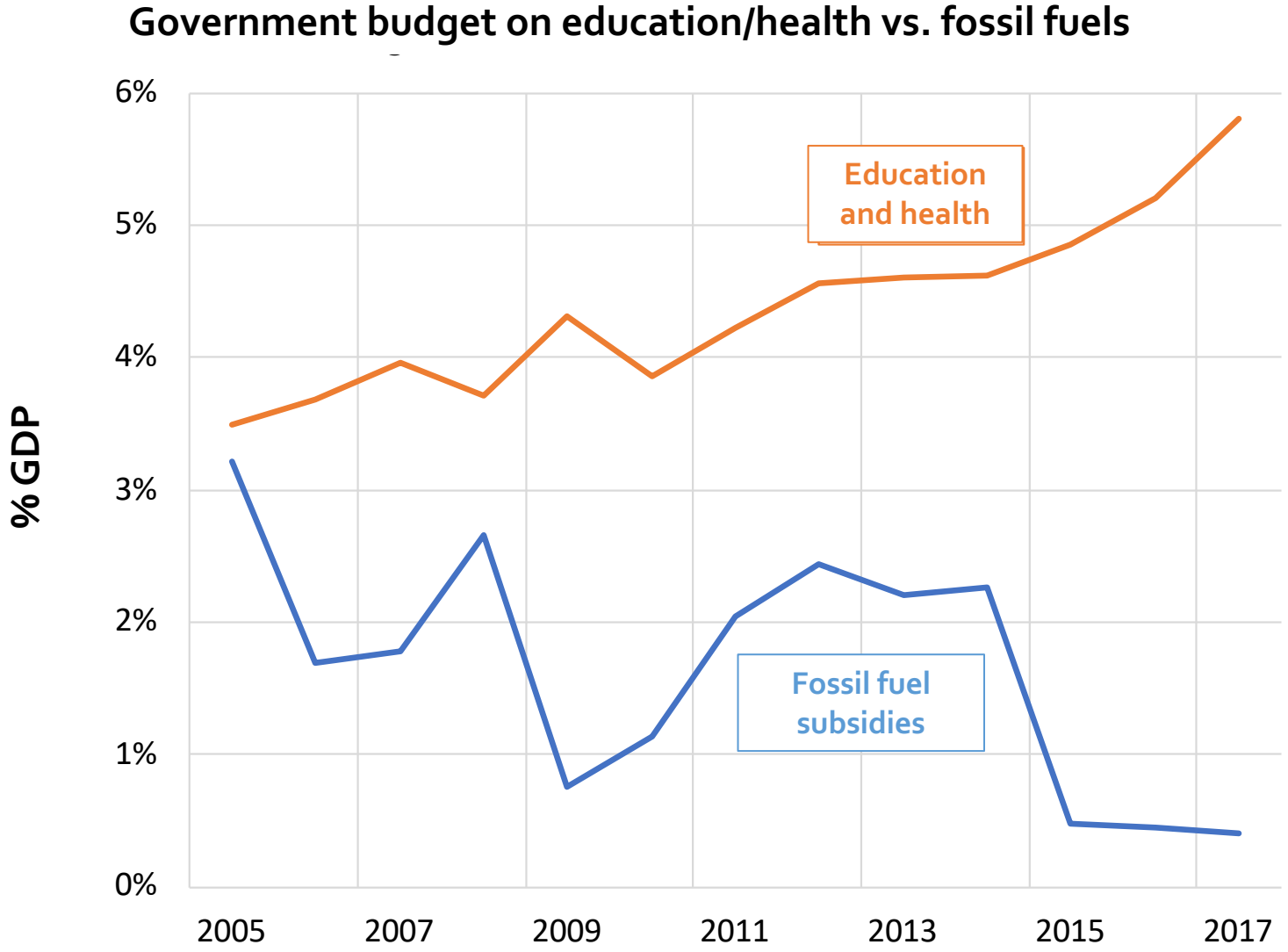
Factoring-in inequality at the heart of climate policy design

Table 7. An inequality-check for climate policies

Which social group is targetted?	What kind of climate policy?		
	Decarbonize green energy supply	**Decarbonize green energy access**	**Switch in energy end-uses (building, transport, industry)**
Bottom 50%	Industrial policy: public investments in renewables (off or on-gridd); Social protection: increase transfers to workers in industries affected by the transition	Public investments in green energy access (e.g. clean cookstoves; construction of new zero carbon social housing)	Develop public transport systems: low-carbon bus, rail, car-sharing strategies; energy retrofitting in social housing; cash-transfers to compensate increase in fossil energy prices
Middle 40%	Same as above + Financial incentives to encourage middle-class investments in green energy. Bans on new fossil investments	Subsidies for green housing construction; Buildings regulations; penalty and bans on sales of inefficient housing	Same as above; Stricter regulations & taxes on polluting purchases (SUVs, air tickets); Subsidies on green alternatives (elec. vehicles)
Top 10 % & Top 1%	Wealth or corporate taxes with pollution top-up to finance the above & accelerate divestment from fossils; Bans on new fossil investments	Wealth or corporate taxes with pollution top-up (see left); Fossil fuel subsidy removal*	Strict regulations on polluting purchases (SUVs, air tickets); Wealth or corporate taxes with pollution top-up (see left); Carbon cards to track high personal carbon footprints & cap them

Key dimension: time. In some countries, window of opportunity to tax pollution before poorest groups adopt polluting lifestyles

Indonesian social-ecological reform: remove fossil fuel subsidies, invest in public services



Source: Author based on Indonesian government budget

Indonesian social-ecological reform: remove fossil fuel subsidies, invest in public services

Credits: nyt.com

A wealth tax on multimillionaires with a pollution top-up

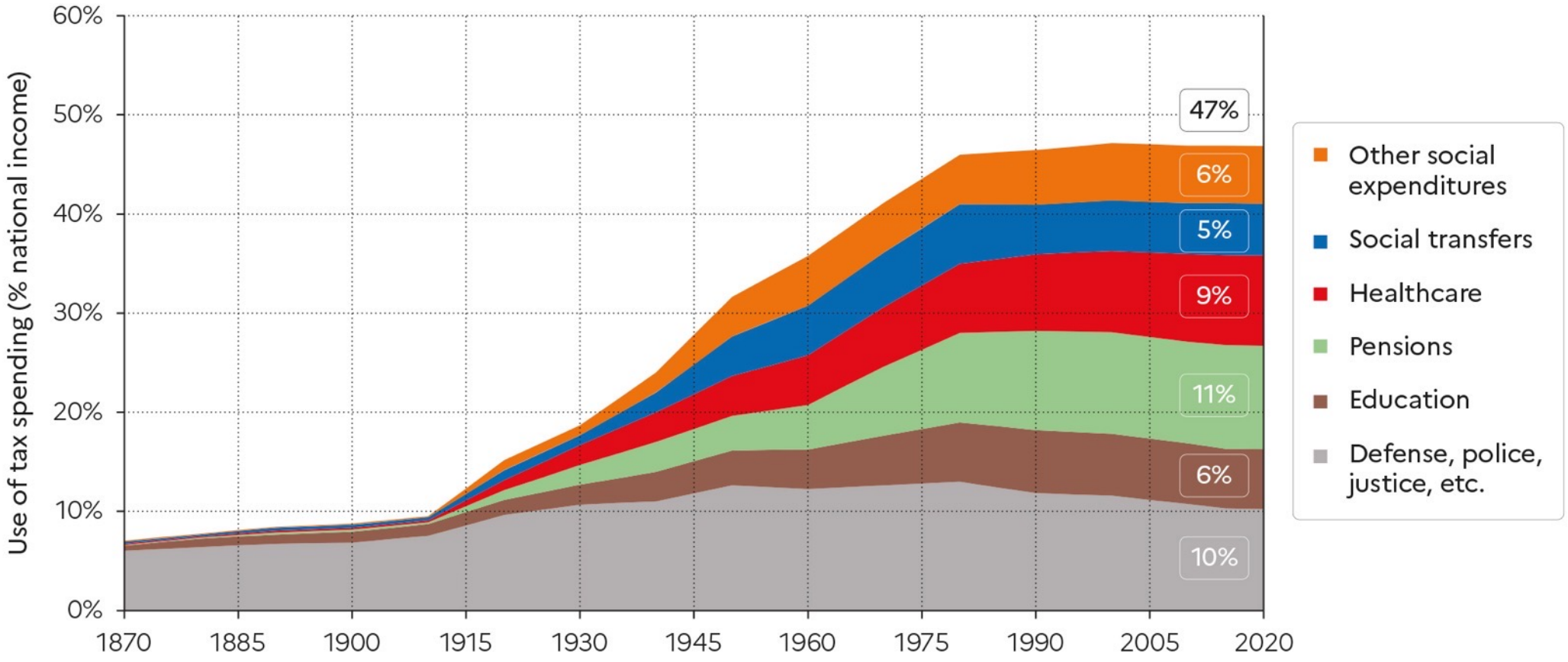
Table 6.8. Revenues from a progressive wealth tax with a pollution top-up

Wealth group ($)	Number of adults (million)	Total group wealth ($ bn)	Avg. group wealth ($ m)	Wealth tax revenues from group ($bn)	Revenues from fossil assets top-up ($bn)	Total tax revenues (% global income)
All above 1m	62.2	174 200	2.8	1695	100	1.7%
1m - 10m	60.3	111 100	1.8	684	64	0.7%
10m - 100m	1.8	33 600	19	432	19	0.5%
+100m	0.1	29 570	387	579	17	0.6%

Interpretation: The table presents revenues from a global progressive wealth tax with a pollution top-up. The wealth tax rates range from 1% for individuals with net wealth between $1m-$10m, 1.5% between $10m-$100m, 2% between $100m-$1bn, 2.5% between $1bn-$10bn, 3% between $10bn-$100bn, 3.5% above $100bn. On top of this wealth tax, we apply a tax on the ownership of assets in oil, gas and coal majors. The rate ranges from 10% to 15%, with a discount proportional to these firms' green energy production (which is currently extremely low for oil majors, around 2% only of capital investments in renewables). **Sources**: Chancel (2021)

Social states haved played a key role to reduce inequality in 20c. 21c challenge: develop social-ecological welfare states

Figure 10.1 *The rise of the Welfare State in European countries, 1870-2020*



Interpretation: *In 2020, tax revenue represented 47% of national income in Western Europe, on average. 10% of resources were spent on defense, police & justice, 6% on education, 11% on pensions, 9% on healthcare, 5% on social transfers and 6% on other social spending (housing, etc.). Before 1914, defense, police and justice represented the vast majority of government spending.* ***Sources and series:*** *wir2022.wid.world/methodology and Piketty (2021).*

Policy responses to Covid crisis and Ukraine war show much can be done to « re-embed » the economy

Covid: strategic planning of key sectors of the economy, large scale support schemes for households and firms impacted

Ukraine: shut country/companies' access to international financial and trade system; divest from key assets and companies; track and seize assets of individuals.

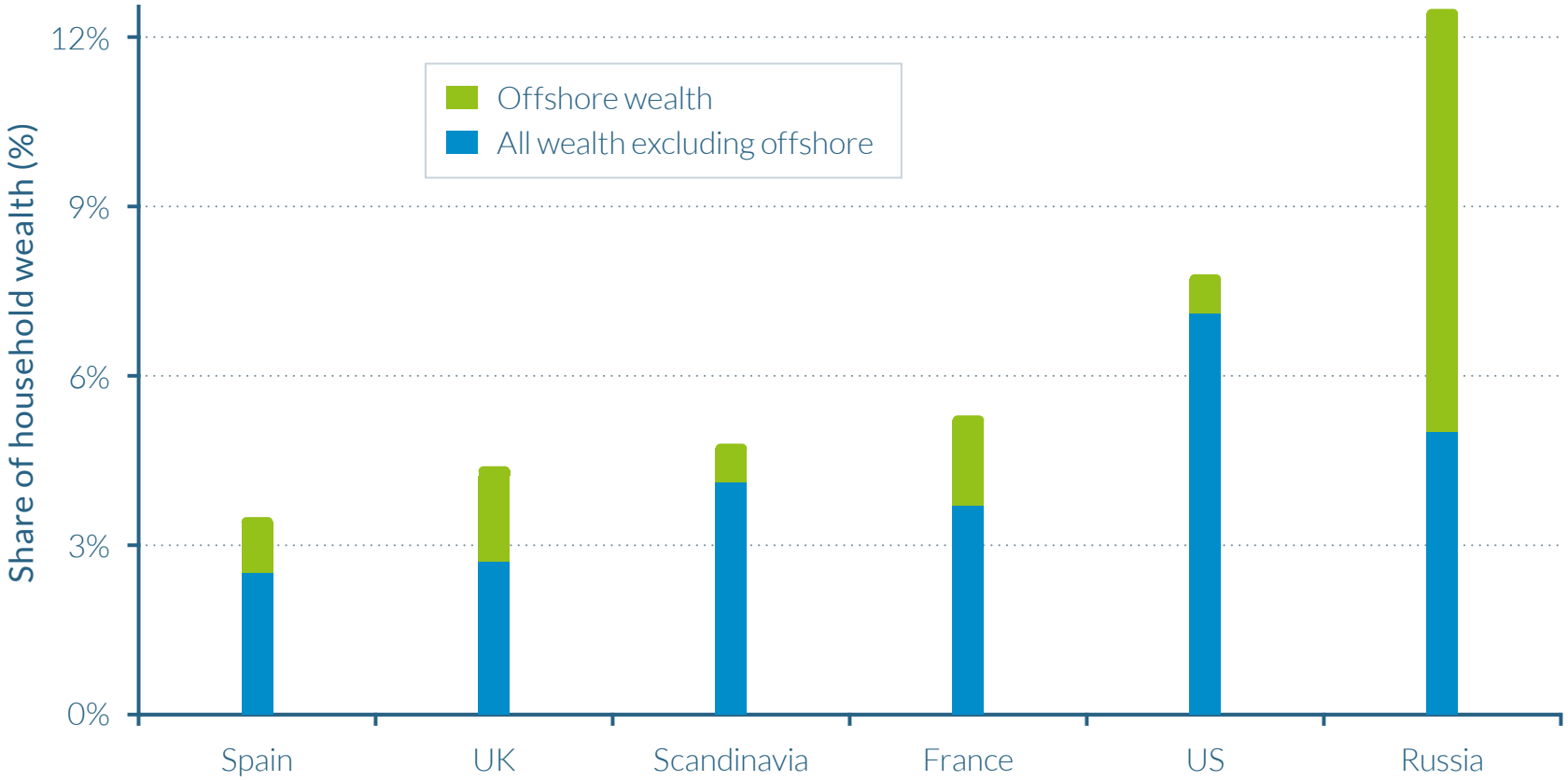
→ 2020-2022 changed the policy playbook. Question: for how long and what policy spill overs beyond Covid/Ukraine crises?

If we acknowledge climate change as vital threat to global security, then it becomes possible to envisage similar options to combat it

Effectively tracking Russian oligarchs' assets means properly tracking all forms of assets: potential revolution in financial transparency

Figure 1.2

Top 0.01% wealth share and its composition in emerging and rich countries, 2000–2009



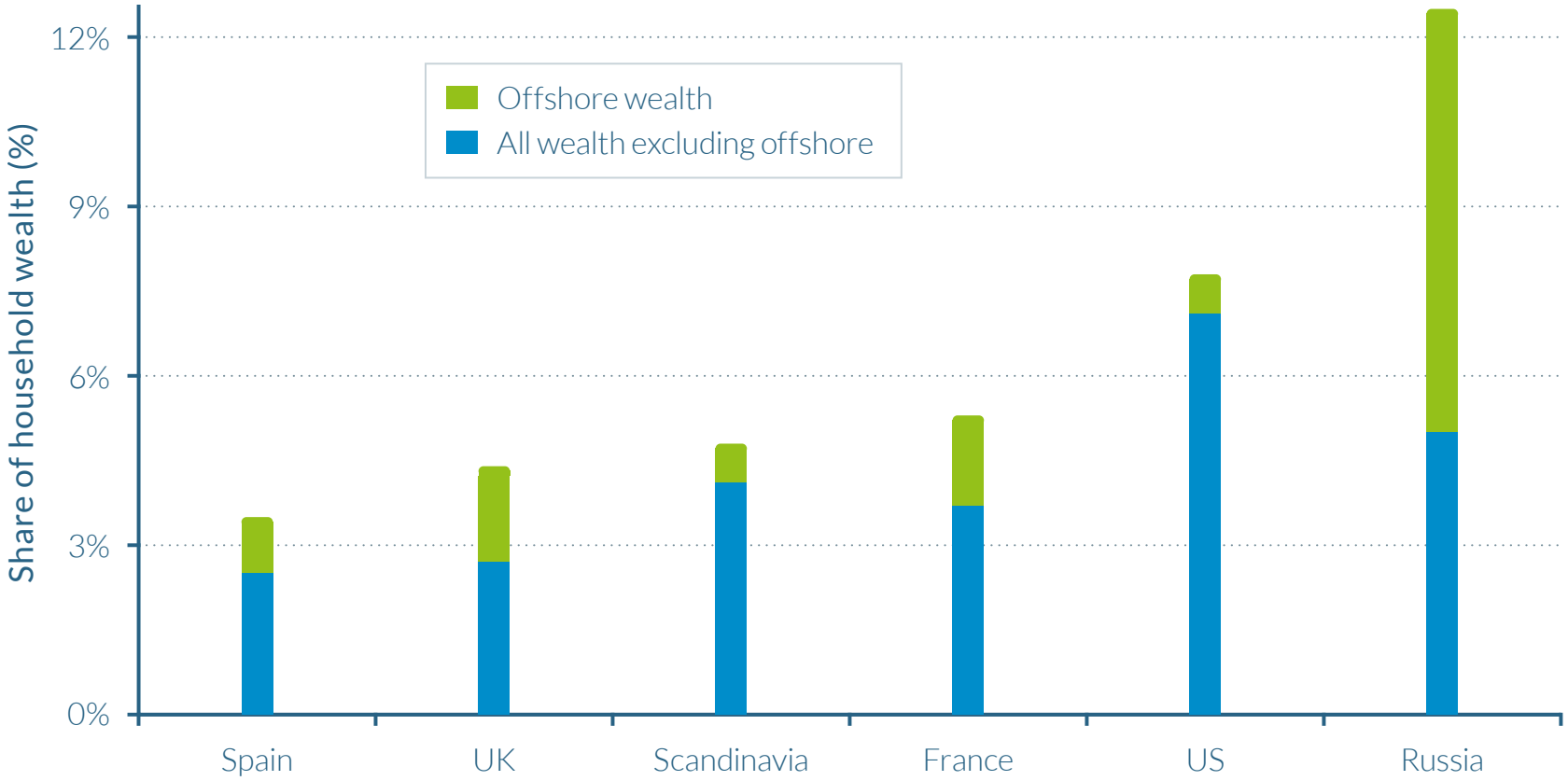
Source: Alstadsæter, Johannesen and Zucman (2017). See wir2018.wid.world for data series and notes.

Between 2000-2009, the average wealth share of the Top 0.01% in Scandinavia was 4.8%. 0.7 percentage points of this wealth was held offshore.

Global assets registry will be key to combat inequality, money laundering and polluting investments

Figure 1.2

Top 0.01% wealth share and its composition in emerging and rich countries, 2000–2009



Source: Alstadsæter, Johannesen and Zucman (2017). See wir2018.wid.world for data series and notes.

Between 2000-2009, the average wealth share of the Top 0.01% in Scandinavia was 4.8%. 0.7 percentage points of this wealth was held offshore.

Some concrete proposals towards more transparency in WIR22

Properly assessing the road towards tax transparency: publishing basic information

Table 9.1A *Number of individuals, Wealth and Taxes paid by wealth bracket*

							Wealth taxes				Income taxes		
Net wealth bracket (€)	Number of individuals	incl. number of residents	incl. number of non-residents	Total net wealth	incl. residents	incl. non-residents	Total wealth taxes	incl. wealth and property tax	incl. capital gains tax	incl. inheritance & estate tax	Total income taxes	incl. personal income tax	incl. corp. income taxes
0-10k													
10k-100k													
100k-1m													
1m-10m													
10m-100m													
100m-1bn													
1bn-5bn													
5bn-10bn													
10bn+													

Data to be systematically published by governments

Wrapping up: inequality as a political choice

- **Inequality varies a lot across countries and over time**
  Tied to social organization rather than "natural" economic laws.

- **Low inequality is possible with high economic prosperity**
  Rich countries post-WW2: low pretax and post-tax inequality and social state growth thanks to highly progressive taxes *and* strong predistribution

- **High wealth inequality closely tied to other forms of social injustices:** gender, race, carbon

→ Importance of transparent information to enable sound democratic debates

Wrapping up: no deep decarbonization without redistribution

- **High inequality makes climate protection more difficult**
  Need to cushion the worse-off, not ex-post, but in the very design of social and climate policies

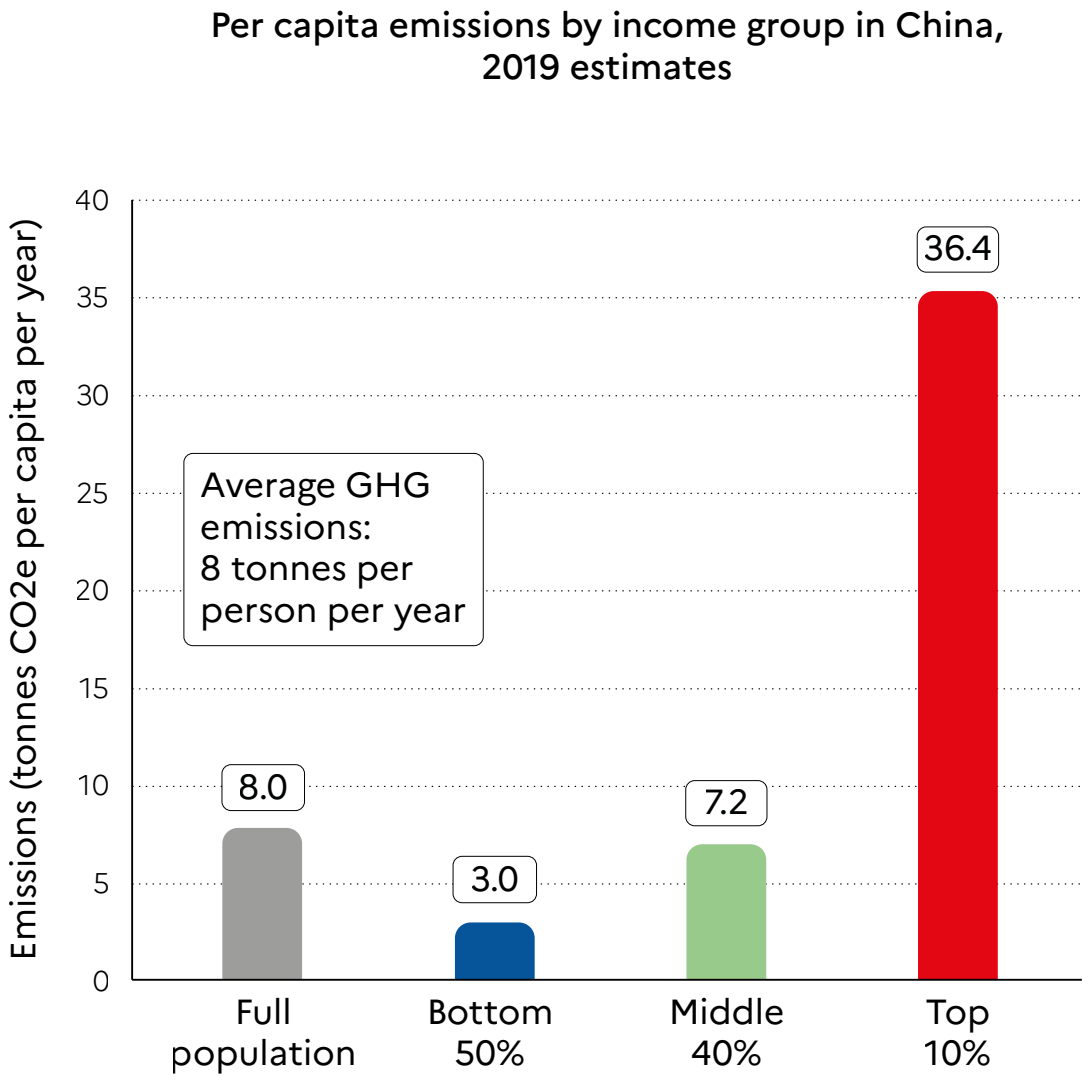
- **Risk is repeating mistakes with trade policies of the 1990-2000s** : too little, too late realization of the need to acknowledge losers and truly accompany them

- **Redistribution of income and wealth from large and wealthy polluters** to finance green investments for all will be critical

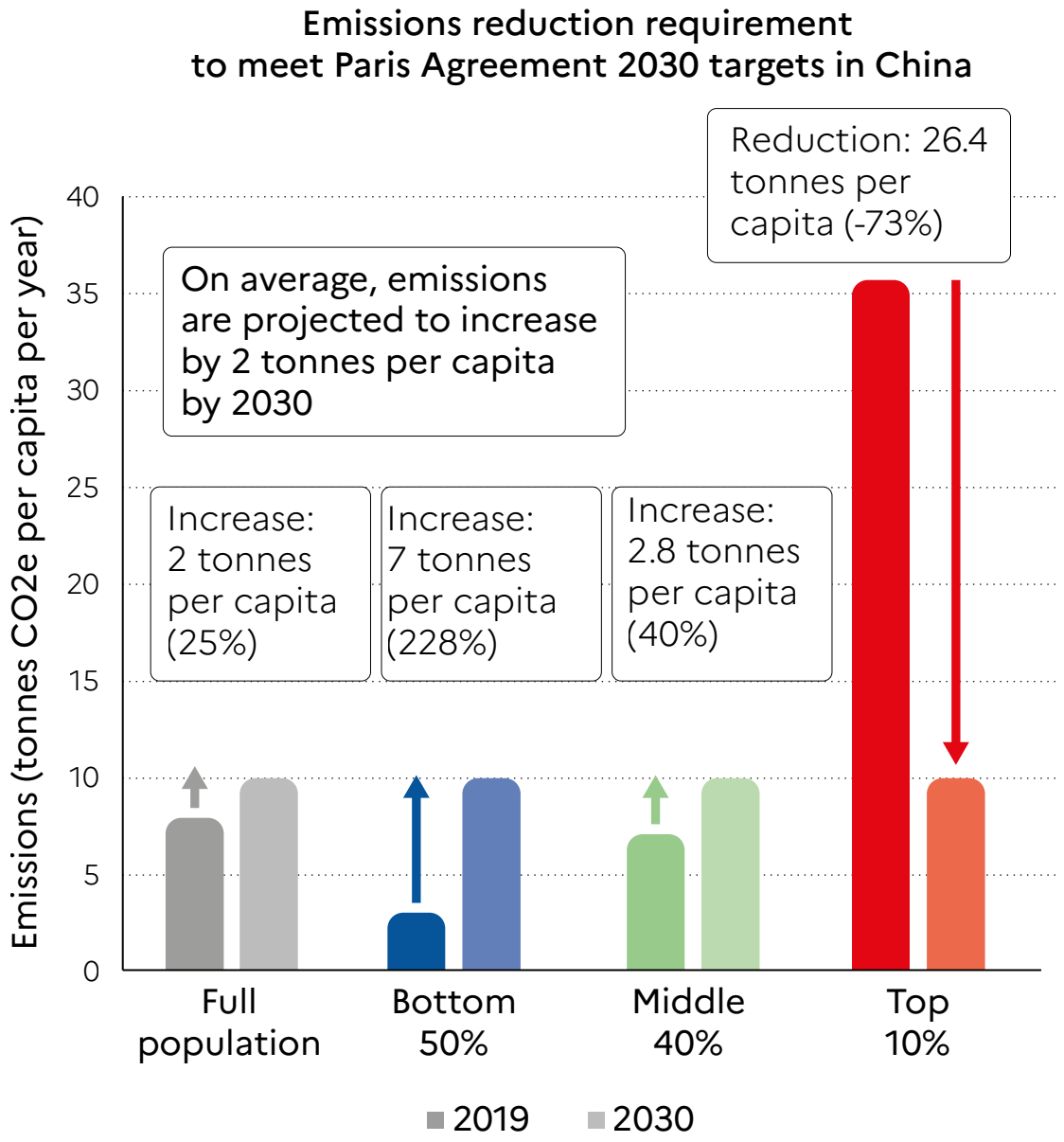
More resources online!

- All our data is accessible online along with codes & methodologies: visit wir2022.wid.world
- Report based on the work of 100+ researchers on all continents affiliated to the World Inequality Database.
- First systematic assessement of global **income**, **wealth**, **gender** and **carbon** inequalities over 30 years
- Diverging inequality levels & trajectories across countries reveal the importance of social policies rather than deterministic forces driving inequality

In emerging countries, the top also needs to decarbonize massively: China



In emerging countries, the top also needs to decarbonize massively: China



Energy and carbon consumption inequalities: who consumes what?

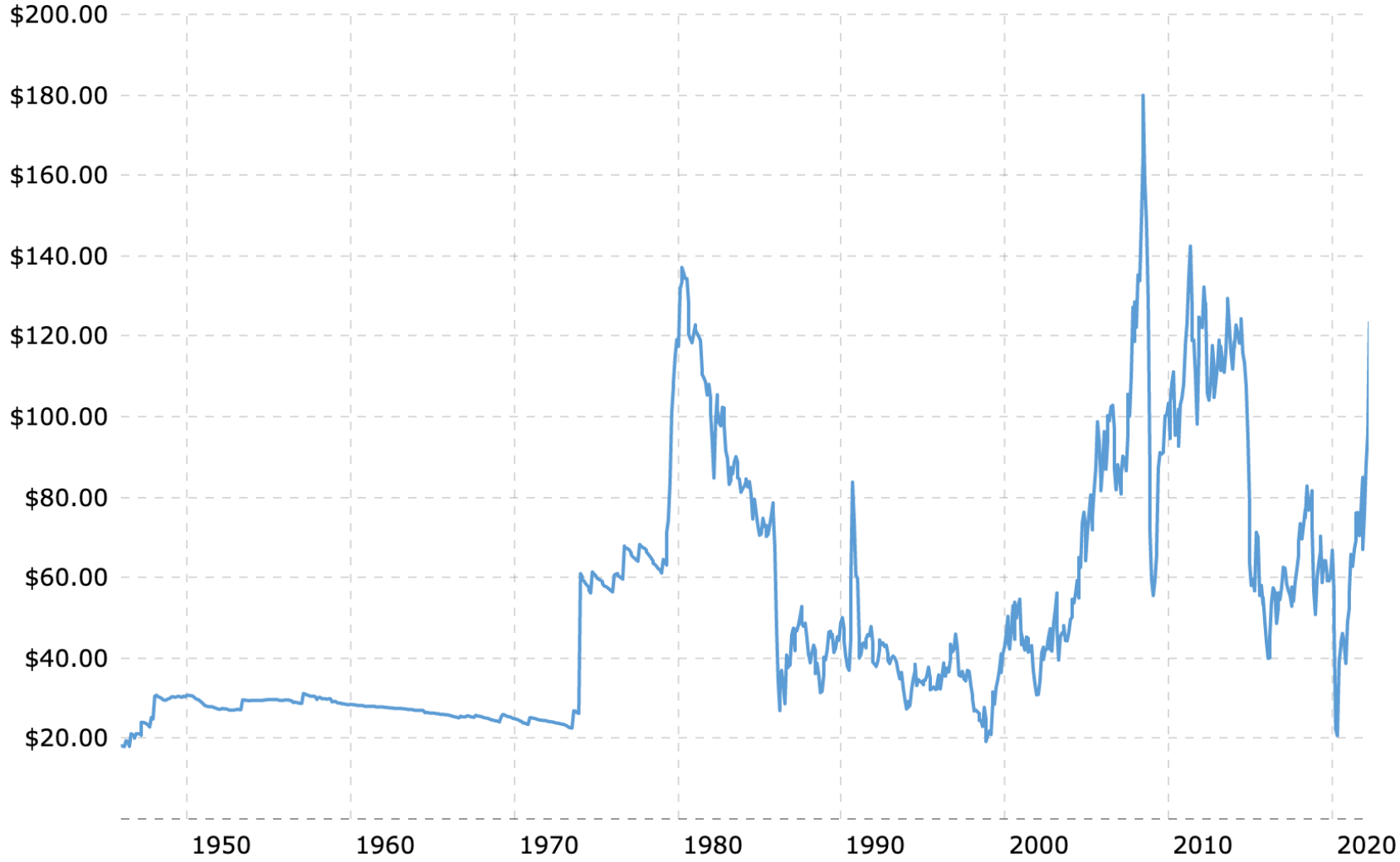
- Strong connection between individuals' income and energy consumption / CO_2 emissions

- CO_2 emissions vary within income groups: same income and different commuting requirements, home efficiency levels, habits.

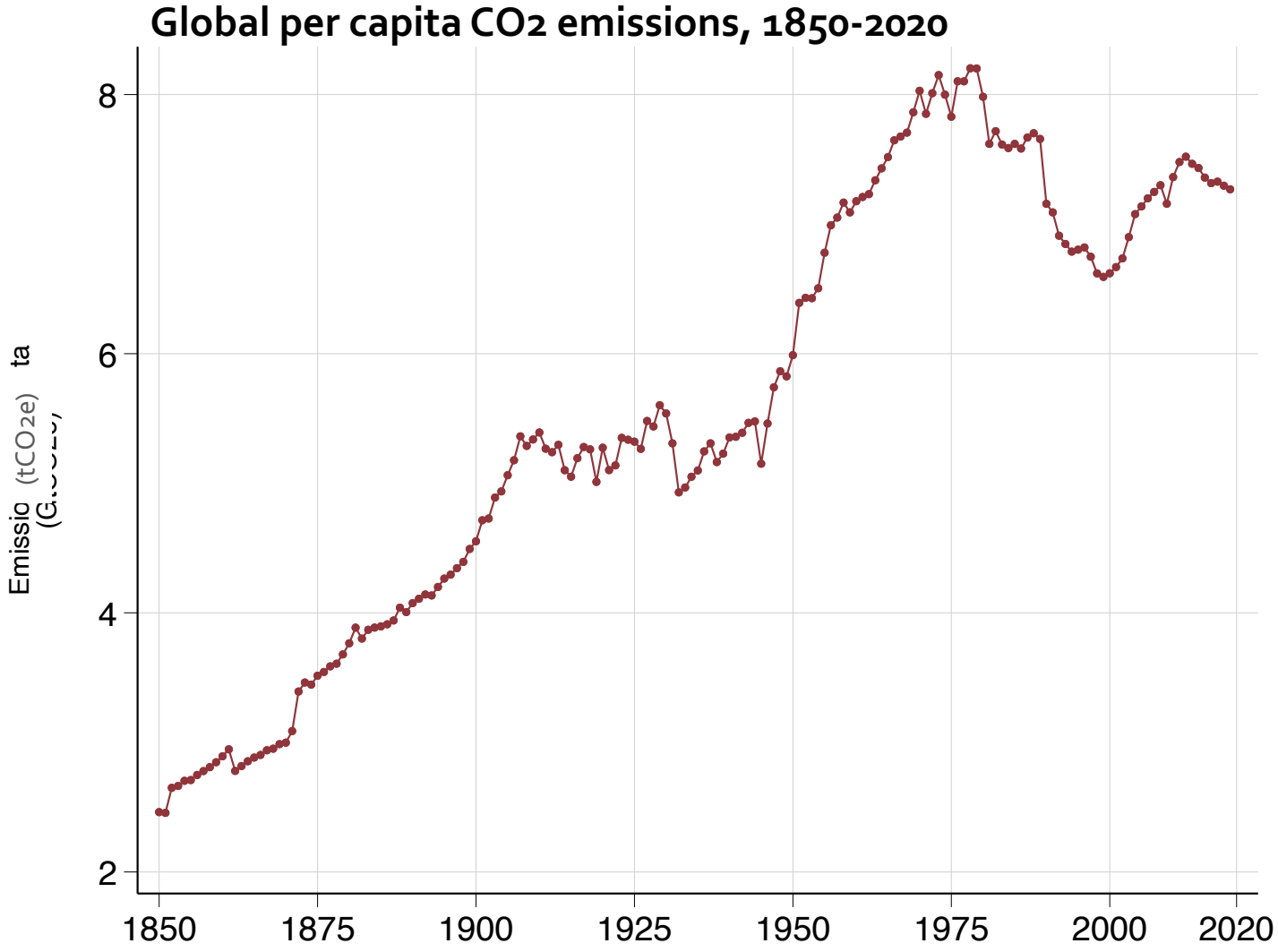
- However micro level data is clear: despite such differences, income drives carbon footprints inequality from direct and indirect energy consumption

War in Ukraine and incoming energy crisis likely to exacerbate tensions between social/env. protection… as well as widen the policy toolkit

Crude oil price 1945-2022 ($ per barrel, inflation adjusted)



1973-1978 oil crises contributed to a significant reduction in global average per capita emissions from 8tCO2 to 6-7 tCO2



Annual global per capita GHG emissions, 1850-2020

Source: Author based on PRIMAP(2016), PRIMAP (2019) and WID.world(2020).

What to do

- Windfall « profit » taxes:
  - Tax fossil fuel companies' selling price: tax price difference between selling price and a base price: US (1980-1988, which as effectively an excise tax)
  - Corporate income surtax on upstream oil majors operations

- Price controls:
  - Set sale price and socialize loss for distributors via taxation

- Temporary energy tax removals:
  - Excise taxes on energy are numerous, can be used as a buffer.