# WORLD INEQUALITY REPORT 2022

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Foreword by Esther Duflo and Abhijit Banerjee



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# The report also draws on the extensive work of researchers associated to the World Inequality Database available at www.wid.world/team

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World Inequality Lab, 2021

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# FOREWORD

### By Abhijit Banerjee and Esther Duflo

The job of holding up a mirror to the world can be a frustrating one. When the news is persistently bad, when the mirror highlights more wrinkles than we want to face up to, it is easy enough to find excuses we are about to turn the corner, there is no other way to go, efficiency demands this, think of all the other good things that are happening, and the evergreen favorite, the data is wrong. Chasing down each of these narratives and slaying them takes stubbornness and hard work. Over the last twenty-five years, Thomas Piketty has been leading this fight, first by himself, then with Emmanuel Saez, Facundo Alvaredo, and the late Sir Tony Atkinson and, increasingly, with a growing team of collaborators, culminating in the World Inequality Lab.

This report is the current flagship product of the Lab, prepared under the leadership of Lucas Chancel and also coordinated by Thomas Piketty, Emmanuel Saez and Gabriel Zucman. It is the product of a relentless data amassment which makes it possible to provide better answers to almost every question we want to ask about what is happening to inequality world-wide. The answer is not pretty. In every large region of the world with the exception of Europe, the share of the bottom 50% in total earnings is less than 15% (less than ten in Latin America, Sub-Saharan Africa and the MENAS region) while the share of the richest 10% is over 40% and in many of the regions, closer to 60%. But what is perhaps even more striking is what is happening to wealth. The share of the bottom 50% of the world in total global wealth is 2% by their estimates, while the share of the top 10% is 76%. Since wealth is a major source of future economic gains, and increasingly, of power and influence, this presages further increases in inequality. Indeed, at the heart of this explosion is the extreme concentration of the economic power in the hands of a very small minority of the super-rich. The wealth of the top 10% globally, which constitutes the middle class in rich countries and the merely rich in poor countries is actually growing slower than the world average, but the top 1% is growing much faster: between 1995 and 2021, the top 1% captured 38% of the global increment in wealth, while the bottom 50% captured a frightening 2%. The share of wealth owned by the global top 0.1% rose from 7% to 11% over that period and global billionaire wealth soared. With the boom in the stock market, the picture does not seem to be getting better.

And yet, as the report makes clear, there is no case for giving up or opting to sit it out till the revolution. The period from 1945 or 1950 till 1980, was a period of shrinking inequality in many parts of the world (US, UK, France, but also India and China). For the countries of the West these were also covered the thirty odd years of fast productivity growth and increasing prosperity, never matched since—in other words there is no prima facie evidence for the idea that fast growth demands or necessarily goes hand in hand with growing inequality. The reason why that was possible had a lot to do with policy—tax rates were high, and there was an ideology that inequality needed to kept in check, that was shared between the corporate sector, civil society and the government. The same experience was repeated, if briefly, in the first years of this millennium in Latin America, when growth accelerated, poverty and wage inequality went down, thanks to a strong commitment to redistributive policies.

However, for most of the world, the defining experience turned out to be the panicked reaction to the slowdown of growth in US and UK in the 1970s, that led to the conviction that a big part of the problem was that the institutions that kept inequality low (minimum wage, union, taxes, regulation, etc.) were to blame, and that what we needed was to unleash an entrepreneurial culture that celebrates the unabashed accumulation of private wealth. We now know that as the Reagan-Thatcher revolution and it was the starting point of a dizzying rise in inequality within countries that continues to this day. When state control was (successfully) loosened in countries like China and India to allow private sector-led growth, the same ideology got trotted out to justify not worrying about inequality, with the consequence that India is now among the most unequal countries in the world (based on this report) and China risks getting there soon.

Policy kept inequality in check, and policy changes let it run amok. This report once again makes it clear that profound policy changes are needed for things to fall back in place. The policy solutions often exist, and when they don't, we often know how to find them. Our own research, and that of the researchers in the network we helped create, has focused on how to get the plumbing right, so that policy can do its job. The World Inequality Lab and all those involved in this report are doing the same for how to collect taxes and redistribute better.

As the world comes of the pandemic and there is renewed attention to economic policy, a report like this is extraordinarily timely. It has the potential to light a fire under us to do something now, before the cumulative concentration of economic (and other) power in the hands of a smaller and smaller minority makes it impossible to fight back. Read it, shout out its messages, find ways to act upon it.

# Reliable inequality data as a global public good

We live in a data-abundant world and yet we lack basic information about inequality. Economic growth numbers are published every year by governments across the globe, but they do not tell us about how growth is distributed across the population – about who gains and who loses from economic policies. Accessing such data is critical for democracy. Beyond income and wealth, it is also critical to improve our collective capability to measure and monitor other dimensions of socioeconomic disparities, including gender and environmental inequalities. Open-access, transparent, reliable inequality information is a global public good.

This report presents the most up-to-date synthesis of international research efforts to track global inequalities. The data and analysis presented here are based on the work of more than 100 researchers over four years, located on all continents, contributing to the World Inequality Database (WID.world), maintained by the World Inequality Lab. This vast network collaborates with statistical institutions, tax authorities, universities and international organizations, to harmonize, disseminate analyze and comparable international inequality data.

# Contemporary income and wealth inequalities are very large

An average adult individual earns PPP €16,700 (PPP USD23,380) per year in 2021, and the average adult owns €72,900 (USD102,600).<sup>1</sup> These averages mask wide disparities both between and within countries. The richest 10% of the global population currently takes 52% of global income, whereas the poorest half of the population earns 8.5% of it. On average, an individual from the top 10% of the global income distribution earns €87,200 (USD122,100) per year, whereas an individual from the poorest half of the global income distribution makes €2,800 (USD3,920) per year (Figure 1).

Global wealth inequalities are even more pronounced than income inequalities. The poorest half of the global population barely owns any wealth at all, possessing just 2% of the total. In contrast, the richest 10% of the global population own 76% of all wealth. On average, the poorest half of the population owns PPP €2,900 per adult, i.e. USD4,100 and the top 10% own €550,900 (or USD771,300) on average.



**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.

# Figure 1 Global income and wealth inequality, 2021

# MENA is the most unequal region in the world, Europe has the lowest inequality levels

Figure 2 shows income inequality levels across the regions. Inequality varies significantly between the most equal region (Europe) and the most unequal (Middle East and North Africa i.e. MENA). In Europe, the top 10% income share is around 36%, whereas in MENA it reaches 58%. In between these two levels, we see a diversity of patterns. In East Asia, the top 10% makes 43% of total income and in Latin America, 55%.

# Average national incomes tell us little about inequality

The world map of inequalities (Figure 3) reveals that national average income levels are poor predictors of inequality: among high-income countries, some are very unequal (such as the US), while other are relatively equal (e.g. Sweden). The same is true among low- and middle-income countries, with some exhibiting extreme inequality (e.g. Brazil and India), somewhat high levels (e.g. China) and moderate to relatively low levels (e.g. Malaysia, Uruguay).

# Inequality is a political choice, not an inevitability

Income and wealth inequalities have been on the rise nearly everywhere since the 1980s, following a series of deregulation and liberalization programs which took different forms in different countries. The rise has not been uniform: certain countries have experienced spectacular increases in inequality (including the US, Russia and India) while others (European countries and China) have experienced relatively smaller rises. These differences, which we discussed at length in the previous edition of the World Inequality Report, confirm that inequality is not inevitable, it is a political choice.<sup>2</sup>

# Contemporary global inequalities are close to early 20<sup>th</sup> century levels, at the peak of Western imperialism

While inequality has increased within most countries, over the past two decades, global inequalities between countries have declined. The gap between the average incomes of the richest 10% of countries and the average incomes of the poorest 50% of countries dropped from around 50x to a little less than 40x (Figure 5). At the same time, inequalities increased significantly within countries. The gap between the average incomes of the top 10% and the bottom 50% of individuals within countries has almost doubled, from 8.5x to 15x (see Chapter 2). This sharp rise in within country inequalities has meant that despite economic catch-up and strong growth in the emerging countries, the world remains particularly unequal today. It also means that inequalities within countries are now even greater than the significant inequalities observed between countries (Figure 6).



### 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.

Asia

Global inequalities seem to be about as great today as they were at the peak of Western imperialism in the early 20<sup>th</sup> century. Indeed, the share of income presently captured by the poorest half of the world's people is about half what it was in 1820, before the great divergence between Western countries and their colonies (Figure 7). In other words, there is still a long way to go to undo the global economic inequalities inherited from the very unequal organization of world production between the mid-19<sup>th</sup> and mid-20<sup>th</sup> centuries.



**Interpretation:** In Brazil, the bottom 50% earns 29 times less than the top 10%. The value is 7 in France. Income is measured after pension and unemployment payments and benefits received by individuals but before other taxes they pay and transfers they receive. **Source and series:** wir2022.wid.world/methodology.



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.

### 12



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/Imethodology and Chancel and Piketty (2021).



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).



**Interpretation:** The share of global income going to top 10% highest incomes at the world level has fluctuated around 50-60% between 1820 and 2020 (50% in 1820, 60% in 1910, 56% in 1980, 61% in 2000, 55% in 2020), while the share going to the bottom 50% lowest incomes has generally been around or below 10% (14% in 1820, 7% in 1910, 5% in 1980, 6% in 2000, 7% in 2020). Global inequality has always been very large. It rose between 1820 and 1910 and shows little long-run trend between 1910 and 2020. **Sources and series:** see wir2022.wid.world/methodology and Chancel and Piketty (2021).



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

# Nations have become richer, but governments have become poor

One way to understand these inequalities is to focus on the gap between the net wealth of governments and net wealth of the private sector. Over the past 40 years, countries have become significantly richer, but their governments have become significantly poorer. The share of wealth held by public actors is close to zero or negative in rich countries, meaning that the totality of wealth is in private hands (Figure 8). This trend has been magnified by the Covid crisis, during which governments borrowed the equivalent of 10-20% of GDP, essentially from the private sector. The currently low wealth of governments has important implications for state capacities to tackle inequality in the future, as well as the key challenges of the 21st century such as climate change.

# Wealth inequalities have increased at the very top of the distribution

The rise in private wealth has also been unequal within countries and at the world level. Global multimillionaires have captured a disproportionate share of global wealth growth over the past several decades: the top 1% took 38% of all additional wealth accumulated since the mid-1990s, whereas the bottom 50% captured just 2% of it. This inequality stems from serious inequality in growth rates between the top and the bottom segments of the wealth distribution. The wealth of richest individuals on earth has grown at 6 to 9% per year since 1995, whereas average wealth has grown at 3.2% per year (Figure 9). Since 1995, the share of global wealth possessed by billionaires has risen from 1% to over 3%. This increase was exacerbated during the COVID pandemic. In fact, 2020 marked the steepest increase in global billionaires' share of wealth on record (Figure 10).



**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.

# Wealth inequalities within countries shrank for most of the 20<sup>th</sup> century, but the bottom 50% share has always been very low

Wealth inequality was significantly reduced in Western countries between the early 20<sup>th</sup> century and the 1980s, but the poorest half of the population in these countries has always owned very little, i.e. between 2% and 7% of the total (Figure 11). In other regions, the share of the bottom 50% is even lower. These results show that much remains to be done, in every region of the world, if we are to reduce extreme wealth inequalities.

# Gender inequalities remain considerable at the global level, and progress within countries is too slow

The World Inequality Report 2022 provides the first estimates of the gender inequality in global earnings. Overall, women's share of total incomes from work (labor income) neared 30% in 1990 and stands at less than 35% today (Figure 12). Current gender earnings inequality remains very high: in a gender equal world, women would earn 50% of all labor income. In 30 years, progress has been very slow at the global level, and dynamics have been different across countries, with some recording progress but others seeing reductions in women's share of earnings (Figure 13).

# Addressing large inequalities in carbon emissions is essential for tackling climate change

Global income and wealth inequalities are tightly connected to ecological inequalities and to inequalities in contributions to climate change. On average, humans emit 6.6 tonnes of carbon dioxide equivalent (CO2) per capita, per year. Our novel data set on carbon emissions inequalities reveals important inequalities in CO2 emissions at the world level: the top 10% of emitters are responsible for close to 50% of all emissions, while the bottom 50% produce 12% of the total (Figure 14).



Figure 10 The share of wealth owned by the global top 0.01% and billionaires, 1995-2021

**Interpretation:** The share of wealth detained by the global top 0.01% rose from 7% in 1995 to 11% in 2021. The top 0.01% is composed of 520 000 adults in 2021. The entry threshold of this group rose from  $\in 693,000$  (PPP) in 1995 to  $\in 16,666,000$  today. Billionaires correspond to individuals owning at least \$1b in nominal terms. The 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.

**Figure 15** shows that these inequalities are not just a rich vs. poor country issue. There are high emitters in low- and middle-income countries and low emitters in rich countries. In Europe, the bottom 50% of the population emits around five tonnes per year per person; the bottom 50% in East Asia emits around three tonnes and the bottom 50% in North America around 10 tonnes. This contrasts sharply with the emissions of the top 10% in these regions (29 tonnes in Europe, 39 in East Asia, and 73 in North America). This report also reveals that the poorest half of the population in rich countries is already at (or near) the 2030 climate targets set by rich countries, when these targets are expressed on a per capita basis. This is not the case for the top half of the population. Large inequalities in emissions suggest that climate policies should target wealthy polluters more. So far, climate policies such as carbon taxes have often disproportionately impacted lowand middle-income groups, while leaving the consumption habits of wealthiest groups unchanged.



**Interpretation:** The graph presents decennal averages of top 1% personal wealth shares in Western Europe and the US. Between 1910 and 2020, the top 1% was 55% on average in Europe vs. 43% in the US. A century later, the US is almost back to its early 20th century level. **Sources and series:** wir2022.wid.world/methodology.



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 65% of total labor incomes. **Sources and series:** wir2022.wid.world/methodology and Neef and Robilliard (2021).

Figure 13



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).

Female labor income share across the world, 1990-2020



**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).

# Figure 14 Global carbon inequality, 2019. Group contribution to world emissions (%)



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).



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### Redistributing wealth to invest in the future

The World Inequality Report 2022 reviews several policy options for redistributing wealth and investing in the future in order to meet the challenges of the 21st century. Table 1 presents revenue gains that would come from a modest progressive wealth tax on global multimillionaires. Given the large volume of wealth concentration, modest progressive taxes can generate significant revenues for governments. In our scenario, we find that 1.6% of global incomes could be generated and reinvested in education, health and the ecological transition. The report comes with an online simulator so that everybody can design their preferred wealth tax at the global level, or in their region.

We stress at the outset that addressing the challenges of the 21<sup>st</sup> century is not feasible without significant redistribution of income and wealth inequalities. The rise of modern

welfare states in the 20th century, which was associated with tremendous progress in health, education, and opportunities for all (see Chapter 10), was linked to the rise of steep progressive taxation rates. This played a critical role in order to ensure the social and political acceptability of increased taxation and socialization of wealth. A similar evolution will be necessary in order to address the challenges of the 21st century. Recent developments in international taxation show that progress towards fairer economic policies is indeed possible at the global level as well as within countries. Chapters 8, 9 and 10 of the report discuss various options to tackle inequality, learning from examples all over the world and throughout modern history. Inequality is always political choice and learning from policies implemented in other countries or at other points of time is critical to design fairer development pathways.

Table 1

### Global millionaires and billionaires, 2021

				Global wealth tax	
Wealth group (\$)	Number of adults	Total wealth (\$ bn)	Average wealth (\$ m)	Effective wealth tax rate (%)	Total revenues (% global income)
All above 1m	62,165,160	174,200	2.8	1.0	1.6
1m - 10m	60,319,510	111,100	1.8	0.6	0.6
10m - 100m	1,769,200	33,600	19	1.3	0.4
100m - 1b	73,710	16,500	220	1.5	0.2
1b - 10b	2,582	7,580	2,940	2.3	0.2
10b - 100b	159	4,170	26,210	2.8	0.1
Over 100b	9	1,320	146,780	3.2	0.04

**Interpretation:** In 2021, 62.2 million people in the world owned more than \$1 million (at MER). Their average wealth was \$ 2.8 million, representing a total of \$174 trillion. **Note:** Numbers of millionaires are rounded to the nearest ten. **Sources and series:** wir2022.wid.world/methodology.

### NOTES

- 1 Values expressed at Purchasing Power Parity (PPP)
- 2 World Inequality Report 2018, Harvard University Press, and online at wir2018.wid.world

"Read this report, shout out its messages, find ways to act upon it."

# Abhijit Banerjee and Esther Duflo

"The World Inequality Report gathers the most up-to-date data on global income and wealth inequality and presents new findings on gender and environmental injustices. Our investigation reveals that inequality is not inevitable – it is a political choice." Lucas Chancel

"If one lesson emerges from the richness of the data presented in this report, it is that human societies can choose how much inequality they generate through social and public policy. The report is a world map and a roadmap as to how."

# Emmanuel Saez

"Women hold half the sky but only capture a third of earnings worldwide – as we show in this report. A lot more can and should be done to accelerate progress towards gender parity".

# Theresa Neef and Anne-Sophie Robilliard

"The World Inequality Report addresses a critical democratic need: rigorously documenting what is happening to inequality in all its dimensions. It is an invaluable resource for students, journalists, policymakers, and civil society all over the world."

# Gabriel Zucman

"History teaches us that elites fight to maintain extreme inequality, but in the end, there is a long-run movement toward more equality, at least since the end of the 18<sup>th</sup> century, and it will continue."

# Thomas Piketty

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