Figure 1: Gini coefficient


Top 10\% Pre-tax Income Share in the US, 1917-2014


Source: Piketty and Saez, 2003 updated to 2014. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.

Decomposing Top 10\% into 3 Groups, 1913-2014


Source: Piketty and Saez, 2003 updated to 2014. Series based on pre-tax cash market income including realized capital gains and excluding government transfers.

Top 0.1\% US Pre-Tax Income Share, 1913-2014


Source: Piketty and Saez, 2003 updated to 2014. Series based on pre-tax cash market income including or excluding realized capital gains, and always excluding government transfers.

Real average national income:
Full adult population vs. bottom $\mathbf{9 0 \%}$


Real values are obtained by using the national income deflator and expressed in 2012 dollars. Source: Appendix Tables XX.
2. Federal Average Tax Rates by Income Groups (individual+corporate+payroll+estate taxes)


2A. Tax revenue/GDP in the US, UK, and Sweden


Figure 13.1. Tax revenues in rich countries, 1870-2010


Figure 12: Capital shares in factor-price national income 1975-2010


$$
10 \%
$$

| 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Source: Piketty and Zucman (2014)

Figure 5.1. Private and public capital: Europe and America, 1870-2010

A. Mean Child Income Rank vs. Parent Income Rank in the U.S.


Source: Chetty, Hendren, Kline, Saez (2014)
B. United States vs. Denmark


Source: Chetty, Hendren, Kline, Saez (2014)

## The American Dream?

- Probability that a child born to parents in the bottom fifth of the income distribution reaches the top fifth:

$\rightarrow$ Chances of achieving the "American Dream" are almost two times higher in Canada than in the U.S.

The Geography of Upward Mobility in the United States
Probability of Reaching the Top Fifth Starting from the Bottom Fifth
US average 7.5\% [kids born 1980-2]


| $\square>16.8 \%$ |
| :--- |
| $\square 12.9 \%-16.8 \%$ |
| $\square 11.3 \%-12.9 \%$ |
| $9.9 \%-11.3 \%$ |
| $9.0 \%-9.9 \%$ |
| $8.1 \%-9.0 \%$ |
| $7.1 \%-8.1 \%$ |
| $6.1 \%-7.1 \%$ |
| $4.8 \%-6.1 \%$ |
| $\square$ |
| $<4.8 \%$ |
| 8 |

The Geography of Upward Mobility in the United States Odds of Reaching the Top Fifth Starting from the Bottom Fifth US average 7.5\% [kids born 1980-2]


Note: Lighter Color = More Upward Mobility
Download Statistics for Your Area at www.equality-of-opportunity.org

TABLE 1. Upward Mobility in the 50 Largest Metro Areas: The Top 10 and Bottom 10

| Rank | Commuting Zone | Odds of Reaching <br> Top Fifth from <br> Bottom Fifth | Rank | Commuting Zone | Odds of Reaching <br> Top Fifth from <br> Bottom Fifth |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | San Jose, CA | $12.9 \%$ | 41 | Cleveland, OH | $5.1 \%$ |
| 2 | San Francisco, CA | $12.2 \%$ | 42 | St. Louis, MO | $5.1 \%$ |
| 3 | Washington, D.C. | $11.0 \%$ | 43 | Raleigh, NC | $5.0 \%$ |
| 4 | Seattle, WA | $10.9 \%$ | 44 | Jacksonville, FL | $4.9 \%$ |
| 5 | Salt Lake City, UT | $10.8 \%$ | 45 | Columbus, OH | $4.9 \%$ |
| 6 | New York, NY | $10.5 \%$ | 46 | Indianapolis, IN | $4.9 \%$ |
| 7 | Boston, MA | $10.5 \%$ | 47 | Dayton, OH | $4.9 \%$ |
| 8 | San Diego, CA | $10.4 \%$ | 48 | Atlanta, GA | $4.5 \%$ |
| 9 | Newark, NJ | $10.2 \%$ | 49 | Milwaukee, WI | $4.5 \%$ |
| 10 | Manchester, NH | $10.0 \%$ | 50 | Charlotte, NC | $4.4 \%$ |

Note: This table reports selected statistics from a sample of the 50 largest commuting zones (CZs) according to their populations in the 2000 Census. The columns report the percentage of children whose family income is in the top quintile of the national distribution of child family income conditional on having parent family income in the bottom quintile of the parental national income distribution-these probabilities are taken from Online Data Table VI of Chetty et al., 2014a.

Top 10\% wealth share in the United States, 1917-2012


The figure depicts the share of total household wealth owned by the top $10 \%$, obained by capitalizing income tax returns versus in the Survey of Consumer Finances. The unit of analysis is the familly. Source: Appendix Tables B1 and C4.

Top 0.1\% wealth share in the United States, 1913-2012


This figure depicts the share of total household wealth held by the $0.1 \%$ richest families, as estimated by capitalizing income tax returns. In 2012, the top $0.1 \%$ includes about 160,000 families with net wealth above $\$ 20.6$ million. Source: Appendix Table B1.

Figure A6: The composition of capital income in the U.S.,


## DINA confirm the rise of income inequality, but post-tax inequality $\nearrow$ less

Top 10\% national income share: pre-tax vs. post-tax


[^0]
## The macro rate of tax rose until the 1960s and has been constant since then



Source: Appendix Table II-G1.
Source: Piketty, Saez, Zucman (2016)

## Tax progressivity has declined since the 1960s

Average tax rates by pre-tax income group


Source: Appendix Table II-G1.
Source: Piketty, Saez, Zucman (2016)

## Top 10\% Income Shares Across Countries

Pre-tax National Income, equal-split adults


## Top 10\% Income Shares Across Countries

Pre-tax National Income, equal-split adults


Share of pre-tax national income


Source: Saez and Zucman (2019), Figure 1.1

US Top 10\% Income Shares pre-tax vs. post-tax, 1913-2018


Average vs. bottom 50\% income growth per adult


Top 1\% income share in the United States, 1913-2021


US pre-tax income in 2021, Gini=62.8\%


Source: IRS Individual income tax statistics for 2021

# Men still make $85 \%$ of the top $1 \%$ of the labor income distribution 

Share of women in the employed population, by fractile of labor income


[^1]

Piketty-Saez (reported income with capital gains)

0\%



Average tax rates by income group in 2018



Average tax rates by income group (\% of pre-tax income)


Figure 10.15. The rise of the social State in Europe, 1870-2015


Interpretation. In 2015, fiscal revenues represented 47\% of national income on average in Western Europe et were used as follows: 10\% of national income for regalian expenditure (army, police, justice, general administration, basic infrastructure: roads, etc.); 6\% for education; $11 \%$ for pensions; $9 \%$ for health; $5 \%$ for social transfers (other than pensions); $6 \%$ for other social spending (housing, etc.). Before 1914, regalian expenditure absorbed almost all fiscal revenues. Note. The evolution depicted here is the average of Germany, France, Britain and Sweden (see figure 10.14). Sources and séries: see piketty.pse.ens.fr/ideology.

Figure 10.14. The rise of the fiscal State in rich countries 1870-2015


Interpretation. Total fiscal revenues (all taxes and social contributions included) made less than $10 \%$ of national income in rich countries during the 19th century and until World War 1, before rising strongly from the 1910s-1920s until the 1970s-1980s and then stabilizing at different levels across countries: around $30 \%$ in the U.S., $40 \%$ in Britain and $45 \%-55 \%$ in Germany, France and Sweden.
Sources and series: see piketty.pse.ens.frideology.

## Figure 6

## The Evolution of Bottom 50 Percent Incomes

Source: Saez and Zucman JEP2020


Source: Piketty, Saez, and Zucman (2018), updated September 2020.
Note: The figure depicts the evolution of the real incomes per adult (in 2018 dollars) for the bottom half of the income distribution for three income concepts: (1) pre-tax income before deducting taxes or adding government transfers (concept sums up to national income), (2) post-tax income that deducts all taxes and adds all transfers (cash and in-kind) and collective public expenditures minus the government deficit (also sums up to national income), (3) disposable cash income which is pre-tax income minus all taxes plus cash (or quasi-cash) transfers, i.e., (3) does not include in-kind transfers (primarily Medicaid and Medicare) and collective public expenditures that are included in (2).

## Figure 5

## Average Tax Rates By Income Groups

(percent of pre-tax income)
Source: Saez and Zucman JEP2020


Source: Saez and Zucman (2019b).
Note: The figure depicts the US average tax rate by income groups from 1950 to 2018. All federal, state, and local taxes are included. Taxes are expressed as a fraction of pre-tax income. P0-10 denotes the bottom 10 percent of the income distribution, P10-20 the next 10 percent, etc.

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.

Total household wealth (to national income)


This figure depicts the share of total household wealth relative to national income Source: Piketty, Saez, and Zucman (2018).

Figure 8 The rise of private versus the decline of public wealth in rich countries, 1970-2020


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.

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 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/Imethodology and Chancel and Piketty (2021).

Figure 1.1 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. Income is measured after the operation of pension and unemployment systems and before taxes and transfers. Sources and series: wir2022.wid.world/methodology


## Disposable Income During the Pandemic

Thanks to government transfers to help with covid losses (such as checks to families, extra unemployment benefits, the paycheck protection program, etc.), disposable income (defined as income after taxes and cash transfers) increased a lot, especially so for the Bottom $50 \%$.

```
- Top 10% - Middle 40% - Bottom 50% \bullet Total
```


$\underline{\sim}$ Disposable income growth per unit From 01/2019 to 12/2021

| Group | Growth (\%) | Gain (\$) |
| :--- | ---: | ---: |
| $\square$ Top 0.01\% | $4.6 \%$ | $\$ 910 \mathrm{k}$ |
| $\square$ Top 0.1\% | $5.8 \%$ | $\$ 260 \mathrm{k}$ |
| $\square$ Top 1\% | $6.4 \%$ | $\$ 67 \mathrm{k}$ |
| $\square$ - Top 10\% | $\mathbf{4 . 2 \%}$ | $\$ 11 \mathrm{k}$ |
| $\square \bullet$ Middle 40\% | $\mathbf{2 . 7 \%}$ | $\$ 1.9 \mathrm{k}$ |
| $\square \bullet$ Bottom 50\% | $\mathbf{1 1 . 1 \%}$ | $\$ 2.6 \mathrm{k}$ |
| $\square \bullet$ Total | $\mathbf{4 . 8 \%}$ | $\$ 3.2 \mathrm{k}$ |

## Factor Income During the Pandemic

Factor income (defined as labor income from work and capital income from ownership) fell a lot during COVID and the fall was much more
dramatic for people in the Bottom 50\%. But factor income recovered fast for all groups. All income figures adjust for price inflation.

- Top 10\% • Middle 40\% • Bottom 50\% • Total


| $\stackrel{\sim}{\sim}$ Factor income growth per unit From 01/2019 to 12/2021 |  |  |
| :---: | :---: | :---: |
| Group | Growth (\%) | Gain (\$) |
| $\square \cdot$ Top 0.01\% | 5.7\% | \$1.8M |
| $\square$ - Top 0.1\% | 6.9\% | \$470k |
| $\square$ - Top 1\% | 8.2\% | \$120k |
| $\checkmark$ - Top 10\% | 6.6\% | \$24k |
| $\square$ - Middle 40\% | 3.4\% | \$2.9k |
| $\square$ - Bottom 50\% | 4.7\% | \$870 |
| $\checkmark$ - Total | 5\% | \$4.0k |

## Figure 13 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).

## Bottom 50\% Incomes (aged 20-64): The Role of Government Transfers



## Bottom 50\% Incomes (aged 20-64): The Role of Government Transfers



## Bottom 50\% Incomes (aged 20-64): The Role of Government Transfers



## Bottom 50\% Incomes (aged 20-64): The Role of Government Transfers



The tax deficit of billionaires


Notes: This figure reports estimates of effective tax rates by pre-tax income groups and for billionaires in France, the Netherlands, and the United States. These estimates include all taxes paid at all levels of government and are expressed as a percent of pre-tax income. P0-10 denotes the 10\% of adults at the bottom of the pre-tax income distribution, P10-20 the next decile, etc. Pre-tax income includes all national income (measured following standard national account definitions) before government taxes and transfers and after the operation of the pension system. National income excludes unrealized capital gains but includes the retained earnings of companies. Sources: see chapter 4.

## $25 \%$ <br> Top 1\% Income Share in the US, 1913-2021 <br> Reported income on individual tax returns <br> 

Top 1\% Income Share in the US, 1913-2021


Average tax rates (\% of pre-tax income): top $1 \%$ vs. all


Average tax rate of the top $0.1 \%$ (\% of pre-tax income)





## Top 10\% Income Shares Across Countries

Pre-tax National Income, equal-split adults


## Inequality differences after taxes are mainly due to inequality gaps before taxes:

 role of pre-distribution

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

## The Distribution of Global Economic Growth, 1980-2019

Total Per Capita Income Growth by Percentile in the World as a Whole, 1980-2019


## The Distribution of Global Economic Growth, 1980-2019

Total Per Capita Income Growth by Percentile in the World as a Whole, 1980-2019


## Top 1\% share of earnings, 1979-2021 Social Security data



1979-2021 increase: +7.3 points (top 1\% share multiplied by factor of $x 2.0$ )

5\%


Source: Social Security wage statistics, see https://www.epi.org/publication/inequality-2021-ssa-data/\#


[^0]:    Source: Appendix Tables II-B1 and II-C1

[^1]:    Source: Appendix Table II-F1.

