Income and Wealth Inequality

Prof. Lutz Hendricks

Econ890, Spring 2021

January 19, 2021
Introduction

We set the stage by examining trends in raw data:

- Income and wealth distribution over time
- and across countries
Basic Statistics

Table 2

Concentration and Skewness of the Distributions

<table>
<thead>
<tr>
<th></th>
<th>Earnings</th>
<th>Income</th>
<th>Wealth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient of variation</td>
<td>3.60</td>
<td>4.32</td>
<td>6.02</td>
</tr>
<tr>
<td>Variance of the logs</td>
<td>1.29</td>
<td>0.99</td>
<td>4.53</td>
</tr>
<tr>
<td>Gini index</td>
<td>0.64</td>
<td>0.58</td>
<td>0.82</td>
</tr>
<tr>
<td>Top 1% / lowest 40%</td>
<td>183</td>
<td>88</td>
<td>1,526</td>
</tr>
</tbody>
</table>

Location of mean (%)  

Mean / median

Diaz-Gimenez et al. (2011)
Income Levels

Figure 3. Average Market Income, by Market Income Group, 2013

Source: Congressional Budget Office (2016)
Figure 9. Components of Inflation-Adjusted Market Income for the Top 1 Percent of Households, 1979 to 2013

Thousands of 2013 Dollars

Source: Congressional Budget Office (2016)
Rising Dispersion

Figure 8. Cumulative Growth in Average Inflation-Adjusted Market Income, by Market Income Group, 1979 to 2013

Percent

Source: Congressional Budget Office.

Source: Congressional Budget Office (2016)
Rising Incomes at the Top

**Figure 1**
Top 1 Percent Income Share in the United States

*Source:* Source is Piketty and Saez (2003) and the World Top Incomes Database.  
*Notes:* The figure reports the share of total income earned by top 1 percent families in the United States from 1913 to 2011. Income is defined as pre-tax market income; it excludes government transfers and nontaxable fringe benefits. The figure reports series including realized capital gains (solid squares) and series excluding realized capital gains (hollow squares).

Alvaredo et al. (2013)
Two key results stand out. First, until recently, there is remarkably little growth in the average GDP per person at the top: the value in 1913 is actually higher than the value in 1977. Instead, all the growth until around 1960 occurs in the bottom 99.9 percent. Second, this pattern changed in recent decades. For example, average growth in GDP per person for the bottom 99.9 percent declined by around half a percentage point, from 2.3 percent between 1950 and 1980 to only 1.8 percent between 1980 and 2007. In contrast, after being virtually absent for 50 years, growth at the top accelerated sharply: GDP per person for the top 0.1 percent exhibited growth more akin to China’s economy, averaging 6.86 percent since 1980. Changes like this clearly have the potential to matter for economic welfare and merit the attention they’ve received.

Source: Jones (2015)
Toy Tax Rates

Panel A. Top 1 percent income shares and Top MTR

Panel B. Top 1 percent and bottom 99 percent income growth

Notes: Panel A depicts the top 1 percent income shares including realized capital gains in full diamonds and excluding realized capital gains in empty diamonds. Computations are based on family market cash income. Income excludes government transfers and is before individual taxes (source is Piketty and Saez 2003, series updated to 2008). Panel A also depicts the top marginal tax rate on ordinary income and on realized long-term capital gains (source is Tax Policy Center). Panel B depicts real cash market income growth per adult of top 1 percent incomes and bottom 99 percent incomes (base 100 in 1913), assuming that individual adult top 1 percent and bottom 99 percent shares are the same as top 1 percent and bottom 99 percent family based shares.

Piketty et al. (2014)
Gini Indexes Based on Market, Before-Tax, and After-Tax Income, 1979 to 2013

Gini Index

Source: Congressional Budget Office.

Source: Congressional Budget Office (2016)

Before tax income = market income + transfers.
Reduction in Income Inequality From Government Transfers and Federal Taxes, 1979 to 2013

Percentage Change in Gini Index

Source: Congressional Budget Office.

Source: Congressional Budget Office (2016)
Returns to Skill

Real weekly earnings relative to 1963 (men)

Source: Autor (2014)

Remarkable: No wage gains for high school grads since 1970
Long-run Perspective

Share of top income decile in total pretax income

Top 10% income share: **Europe**

Top 10% income share: **U.S.**

Source: Piketty and Saez (2014)
Figure 1: Top wealth share measurements over time.

Hubmer et al. (2020)
Cross-country comparison

Figure 3

Wealth Shares of the Top 1% in Three Countries, 1800 to 2010

Source: Jones (2015)
Data Sources

Panel data:

- PSID, NLSY, SIPP, ...
- possible to see how wealth is accumulated
- possible to construct lifetime incomes and sources
- fail to sample the top 1%
Survey of Consumer Finances
Detailed income and wealth information
Oversamples the rich
Cross section data - cannot follow individuals over time
Small samples
Administrative data

Social security earnings histories

Benefits:

▶ no measurement error
▶ huge samples

Drawbacks:

▶ almost impossible to access
▶ limited background info

Guvenen et al. (2014), Guvenen et al. (2017)
World Top Incomes Database

- Based on tax returns (mostly).
- Multiple countries.
- Some imputations for wealth.
- Piketty and Saez (2003), Alvaredo et al. (2013)
- Fagereng et al. (2016):
  - question the accuracy of the Piketty and Saez (2014) inference from tax returns for top wealth holdings.
  - uses administrative data from Norway.


