Econ 133 – Global Inequality and Growth

The interplay between inequality and growth

Gabriel Zucman
zucman@berkeley.edu
Roadmap

1. Is there an association between inequality and growth in the data?

2. Is there a causal relationship between inequality and growth?
   - Growth → inequality?
   - Inequality → growth?
1 Correlation between inequality and growth in the data

• Time series evidence: looking at growth and inequality within a country over time

• ≠ cross-country evidence: looking at growth and inequality in a sample of countries at a given period of time (e.g., today)

• In both cases, no simple, unidirectional relationship: complex theoretical interplay + diversity of national histories
1.1 Time series evidence

In the very long-run: negative relationship between inequality and growth from 1700 to today in Old World

- Aristocratic, pre-industrial societies of 18th century = high inequality, very low growth

- Democratic, industrial and post-industrial societies of second half of 20th century = relatively low inequality, high growth
In the short / medium-run: no systematic relationship between inequality and growth


- 20th century US: dramatic changes in inequality of pre-tax income, but relatively little changes in macro growth rates
Table 2: The Growth of National Income in the United States since World War II

<table>
<thead>
<tr>
<th>Income group</th>
<th>Pre-tax income growth</th>
<th>Post-tax income growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Population</td>
<td>61%</td>
<td>95%</td>
</tr>
<tr>
<td>Bottom 50%</td>
<td>1%</td>
<td>102%</td>
</tr>
<tr>
<td>Middle 40%</td>
<td>42%</td>
<td>105%</td>
</tr>
<tr>
<td>Top 10%</td>
<td>121%</td>
<td>79%</td>
</tr>
<tr>
<td>Top 1%</td>
<td>205%</td>
<td>47%</td>
</tr>
<tr>
<td>Top 0.1%</td>
<td>321%</td>
<td>54%</td>
</tr>
<tr>
<td>Top 0.01%</td>
<td>454%</td>
<td>75%</td>
</tr>
<tr>
<td>Top 0.001%</td>
<td>636%</td>
<td>57%</td>
</tr>
</tbody>
</table>
1.2 Cross-country evidence

- In the cross-section of developing countries today, more equal countries tend to grow more: Berg and Ostry (2011)

- However big limits:
  - Severe measurement problems
  - Says nothing about direction of causality (if any)
  - No such correlation for rich countries
Note: growth is real GDP growth per worker.
2 Theories of the interplay between inequality and growth

2.1 Growth $\rightarrow$ inequality: the Kuznets curve

A bell-shaped relationship btw inequality and growth: Kuznets (1955)

- Start from economy with 2 sectors: agriculture (low productivity, low inequality) & nonagric. (high productivity, high inequality)

- Phase 1: Shift from agriculture to nonagricultural sectors increases both inequality & growth
• Phase 2: further growth within nonagricultural sector generates mobility → less wealth and permanent income inequality

  – Population growth → old families have a smaller and smaller share of income

  – Productivity growth → new industries displace old wealth

Limit of Kuznets’ theory: not consistent with the data since 1980s
2.2 Inequality $\rightarrow$ growth

A bell-shaped relationship between growth and inequality

- A moderate level of inequality is good for growth: incentive effect

- But excessive inequality is bad for growth:
  - Political economy reasons: inequality $\rightarrow$ political instability
  - Resource constraints: inequality makes it hard for poor people to stay healthy, acquire skills, look after or educate their children
– Credit constraints: inequality makes it harder for poor people to innovate

– Keeping up with the Joneses’: over-borrowing, financial distress

– Effect on institutions: political capture by the wealthy

• There is some suggestive evidence for these various channels (see following graphs)

• Limit: hard to establish rigorous causal link empirically (lack of natural experiment)
Intergenerational economic mobility is measured as the elasticity between paternal earnings and son's adult earnings.

Figure 5
Concentration of Income and Campaign Contributions in the Top 0.01 Percent of Households and Voting Age Population

Source: Bonica et al. (2013)
References


Berg, Andrew G. and Jonathan D. Ostry, “Inequality and Unsustainable Growth: Two Sides of the Same Coin?”, IMF Staff Discussion Note, 2011, [web]


Corak, Miles, “Income Inequality, Equality of Opportunity, and Intergenerational Mobility”, *Journal of Economic Perspectives*, 2013 [web]

Kuznets, Simon *Economic Growth and Income Inequality, American Economic Review* 1955 [web]