Enormous growth in inequality

- Especially in US, and countries that have followed US model
- Multiple dimensions of inequality
  - More money at the top—especially the very top
  - More people in poverty
  - Evisceration of the middle
  - Inequalities in wealth exceed those in income
  - Inequality in health—especially large in US
  - Inequality in access to justice
Stagnation: U.S. median household income (constant 2014 US$)

Source: U.S. Census Bureau
Decline in median income of full-time male worker

Real Median Income of Full-Time Male Worker, 1965-2014
U.S. minimum wage, 1938-2012

Disconnect between productivity and a typical worker’s compensation, 1948–2014

1948–1973:
Productivity: 96.7%
Hourly compensation: 91.3%

1973–2014:
Productivity: 72.2%
Hourly compensation: 9.2%

Note: Data are for average hourly compensation of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services minus depreciation per hour worked.

Source: EPI analysis of data from the BEA and BLS (see technical appendix for more detailed information)
Inequality in Asia: on the rise since early 1990s

**Figure 1: Selected Asia: Income Inequality, Pre-1990**
(Net Gini Index; in Gini points; change during the period indicated in parenthesis)

- Hong Kong SAR (1971-86)
- India (1960-90)
- Japan (1962-85)
- Philippines (1971-88)
- Indonesia (1964-87)
- Taiwan Province of China (1964-85)
- Singapore (1966-89)
- Australia (1960-78)
- Malaysia (1970-89)
- China (1964-85)
- Korea (1972-88)
- New Zealand (1960-75)

**Figure 2: Selected Asia: Income Inequality, 1990-Latest**
(Net Gini Index; in Gini points; change during the period indicated in parenthesis)

- Thailand (1990-11)
- Malaysia (1990-12)
- Korea (1990-13)
- Philippines (1990-12)
- Singapore (1990-13)
- Australia (1990-12)
- New Zealand (1990-13)
- Japan (1990-10)
- Taiwan Province of China (1990-12)
- India (1990-10)
- Hong Kong SAR (1990-11)
- Indonesia (1990-13)
- China (1990-13)

Sources: SWIID Version 5.0; and IMF staff calculations.
Regional comparison: Income Inequality

Sources: SWIID Version 5.0; IMF, WEO database; and IMF staff calculations.
Most invidious aspect: inequality in opportunity

- Not a surprise: systematic relationship between inequality in incomes (outcomes) and inequality of opportunity
Income inequality and earnings mobility

Source: “United States, Tackling High Inequalities Creating Opportunities for All”, June 2014, OECD.
Global inequality

• Almost all OECD countries have seen increased inequality in last 30 years

• The trend around the world is somewhat mixed, but remains a concern almost everywhere
Gini changes in OECD

Global inequality: Ginis worse in many countries, late 2000s vs. 1980s

<table>
<thead>
<tr>
<th></th>
<th>1985-90</th>
<th>After 2008</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Gini</td>
<td>36.3</td>
<td>38.8</td>
<td>+2.5</td>
</tr>
<tr>
<td>Pop-weighted Gini</td>
<td>33.9</td>
<td>37.3</td>
<td>+3.4</td>
</tr>
<tr>
<td>GDP-weighted Gini</td>
<td>32.2</td>
<td>36.4</td>
<td>+4.2</td>
</tr>
<tr>
<td>Countries with higher Ginis</td>
<td>32.0</td>
<td>36.2</td>
<td>+4.5</td>
</tr>
<tr>
<td>Countries with lower Ginis</td>
<td>42.8</td>
<td>39.5</td>
<td>-3.3</td>
</tr>
</tbody>
</table>

Global inequality: income growth by percentile, 1988-2008

Global inequality: income growth by percentile

• What previous chart means is that, globally:
  • Very rich—those at far right of graph—have seen their incomes grow at a high rate
  
  • Developing Asian middle class (especially China) has also grown at a fast rate. This is represented by those in middle-left of the graph.
  
  • The incomes of the world’s very poor—those on the far left of the chart—have not kept pace.
  
  • Advanced country middle class incomes—those around the 80th percentile—have stagnated completely
  
  • (This is the analysis that Branko Milanovic has put forward)
Major changes in understandings of inequality

- Trickle down economics doesn’t work
  - There never was good theory or empirical evidence in support
  - In a way, Obama administration and Fed tried it again: bail-out to banks was supposed to benefit all; QE would work by increasing stock market prices, benefitting mostly those at top

- “Repeal” of Kuznets law
  - Was period after WWII, the “golden age of capitalism,” an aberration, the result of the social cohesion brought on by the war?
    - With the economy now returning to the natural state of capitalism?
  - Or is the increase in inequality after 1980 a result of a change in policies?
Major changes in understandings of inequality

• Large differences in outcomes/opportunities among advanced countries
  • Suggesting that it is policies, not inexorable economic forces that are at play
  • Inequality is a choice
• A result of how we structure the economy through tax and expenditure policies, through our legal framework, our institutions, even the conduct of monetary policy
  • All of these affect market power, bargaining power of different groups
  • Even access to jobs and able to participate in labor market
  • Resulting in different distributions of income and wealth before taxes and transfers
• Beginning about a third of a century ago, we began a process of rewriting the rules
  • Lowering taxes and deregulation was supposed to increase growth and make everyone better off
  • In fact, only the very top was better off—incomes of the rest stagnated, performance of the economy as a whole slowed
• Resulting in basic necessities of a middle class society being increasingly out of reach of large proportion of population
  • Retirement security, education of one’s children, ability to own a home
Major changes in understandings of inequality

• “Repeal” of Okun’s Law
  • Economies with less inequality and less inequality of opportunity perform better
  • Equality and economic performance are complements
  • Many reasons for this
    • Lack of opportunity means that we are wasting most valuable resource
    • Macro-economic
      • Instability: Link between inequality and frequency of crises has been shown by IMF as well as others.
      • Weaker growth
        • Richest consume a smaller proportion of their incomes than the poor or middle
        • Greater equality would strengthen aggregate demand
        • Small and medium-sized businesses, buoyed by strong middle class, are drivers of economic growth
• Weaker growth (cont’d)
  • Political economy
    • Harder for divided society to make needed public investments in infrastructure, technology, education, etc.
    • As democratic processes are skewed (e.g. in U.S.), policies that protect interests and rents of wealthiest replace those that support broad-based growth
  
• Erosion of trust
Major changes in understandings of inequality

- We can afford to have more equality
  - In fact, it would help our economy
  - Some much poorer economies have chosen more equalitarian policies

- Because inequality is the result of policies, it is shaped by politics
  - Economic inequality gets translated into political inequality
  - Political inequality leads to economic inequality
  - Vicious circle
Broader consequences

• Undermining democracy

• Dividing society
  • Especially when inequalities are on racial and ethnic lines
Alternative interpretations of growth in inequality

1. Market forces--Based on competitive markets--Changes in supply and demand for different factors just turned out badly for poor:

(a) skill biased technological change
- Overwhelming impact of increased number of educated individuals

Unpersuasive
- Skilled workers’ wages going down
- Doesn’t explain gap between average productivity and average wages
- Doesn’t explain wealth inequality
Competitive market explanations

(b) Globalization
- Predicted by standard theory
- Evidence that it has played an especially important role since 2000

(c) Intergenerational transmission of advantage
- Rich leave their children with more human and financial capital
- Equilibrium wealth distribution reflects balance between centrifugal and centripetal forces
- Increased inequality reflects *increased* intergenerational transmission—an upsetting of previous balance
- Contrary to principle of *equal opportunity*
All of these are affected by policy, by rules of game

- Incentives for skilled biased technological change vs. resource saving technological change
  - Fed policy—low interest rates—encourage capital intensive technologies
  - Absence of climate change undermines incentives for resource saving technological change
- The way we structured globalization encouraged outsourcing of jobs
  - Especially in absence of industrial policies
  - And weakened bargaining power of workers
    - Just as we were weakening unions
- Regressive taxation and weakening public schools leads to increased intergenerational transmission of advantage
Alternative explanation: increase in rents

• Increased monopoly, monopsony power shifts distribution of income and wealth to those with these powers
• But also other reasons for an increase of rent—with increased income and wealth to those who control assets generating rents
  • Land rents
  • Intellectual property rents
  • Rent extraction from government
  • Rent extraction from consumers
Our economy is marked by increasing rents

- Some a result of technology
  - Network effects
- Some a result of changes in economy
  - Increased role of services, much of which is localized, with limited competition
  - Increased urban land rents
- Some a result of policies
  - Change in IPR laws
  - Deregulation—allowing extraction of more rents from government and consumers
- Some a result of market “innovation”
  - Better ways of exploiting consumers
Piketty’s explanation is a variant of intergenerational transmission hypothesis

- Two classes, capitalists save everything, wealth grows at $r$, return on capital
  - Workers save little
- With $r > g$, growth of economy, if $r$ does not fall, share of income of capitalists grows
Technical critique of Piketty

• Savings rate of capitalists far less than 1
• Return on capital endogenous, and should be declining as capitalists accumulate
  • Models need to have macro-/micro- consistency
  • If $W$ were $K$ (wealth and $K$ were same), then law of diminishing returns would imply $r$ would fall
  • And wages would rise
• In fact, virtually all models show that in long run $sr < g$: Piketty’s result cannot hold
  • In fact, Piketty’s model had been well-studied in older growth literature
What Piketty’s model cannot explain

- Growth in life-cycle wealth
- Gap between average wages and productivity
  - Even if technical change is skill-biased
Failure to explain stylized facts

- Can only explain \( \frac{1}{2} \) to \( \frac{3}{4} \) of growth in wealth income ratio by national savings
  - Wealth “residual” explained best by growth of rents
    - Land rents
    - Exploitation rents (monopoly power, political power)
    - Intellectual property rents
- Wealth can go up even if “K” is going down
  - And many increases in wealth associated with rents lead to decreased productivity
Consequences of inequality for the global economy

- Growth in 2015 weakest since Global Financial Crisis and one of poorest performances in recent decades; 2016 on track for being equally weak

- Underlying problem: lack of global aggregate demand
  - One of reasons: high level of inequality
  - Inequality also affects aggregate demand indirectly
    - Increases instability
    - Realization of this creates uncertainty
    - Uncertainty leads to lower investment
New dimensions of inequality

• In modern economy, key distinction is not so much between debtors and creditors, but between life cycle savers and inherited wealth
  • Differences in portfolio composition
  • QE has benefits inherited wealth at expense of life cycle savers, contributing to inequality
  • At same time, implying QE may have little effect on aggregate demand—or adverse effect
    • Adverse effect on consumption of elderly
    • Adverse effect on consumption of those saving for retirement (other target savers)
    • May outweigh slight positive effect on investment
Concluding comments

• Addressing inequality is a vital step in bringing global economy back to health

• Incremental changes will not suffice
  • There is a comprehensive agenda which will significantly reduce inequality and increase equality of opportunity

• Urgency—decisions today will affect inequality decades later
  • Key is rewriting the rules once again

• Real question is not economics: it is politics