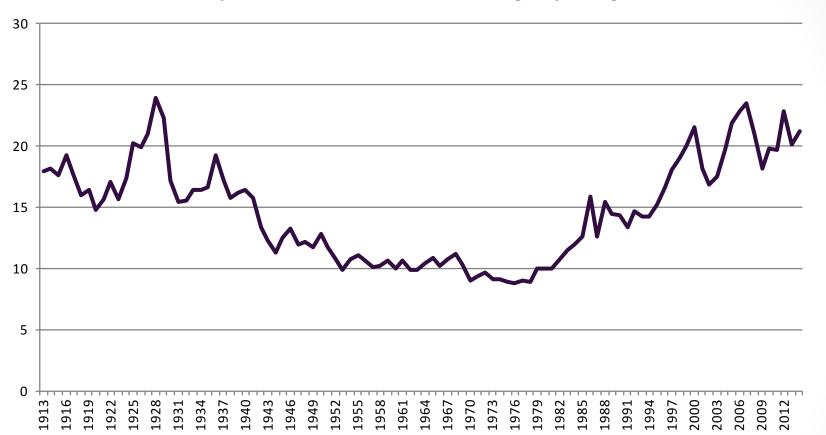
The Global Economy and Inequality

Joseph E. Stiglitz Hong Kong, The Chinese University of Hong Kong May 2016

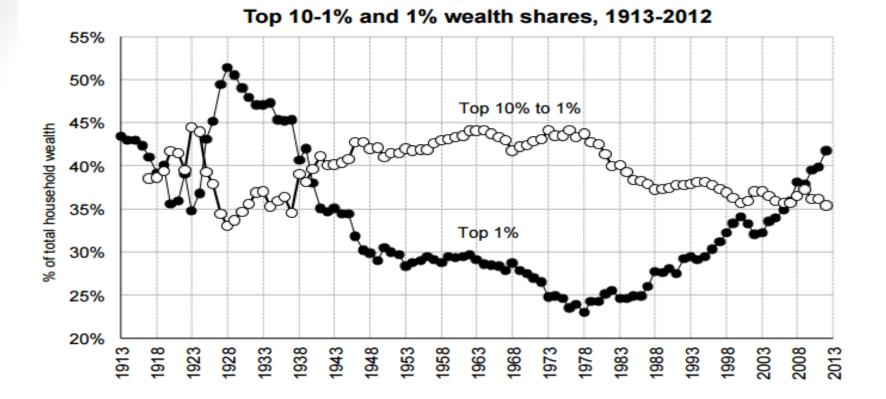
Enormous growth in inequality

- 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



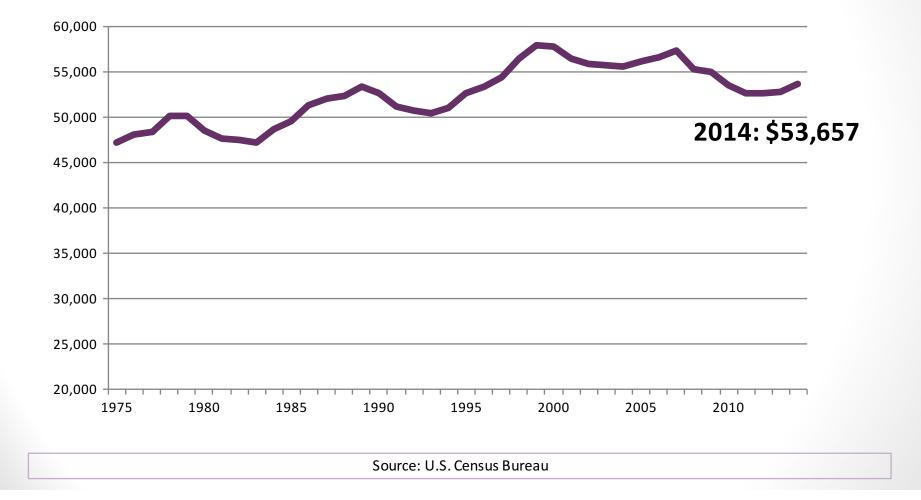
US Top 1% income share-including capital gains

Source: Thomas Piketty and Emmanuel Saez, "Income Inequality in the United States, 1913-1998" *Quarterly Journal of Economics*, 118(1), 2003, 1-39 (Longer updated version published in A.B. Atkinson and T. Piketty eds., Oxford University Press, 2007) (Tables and Figures Updated to 2013 in Excel format, January 2015). Series based on pre-tax cash market income including realized capital gains and excluding government transfers.



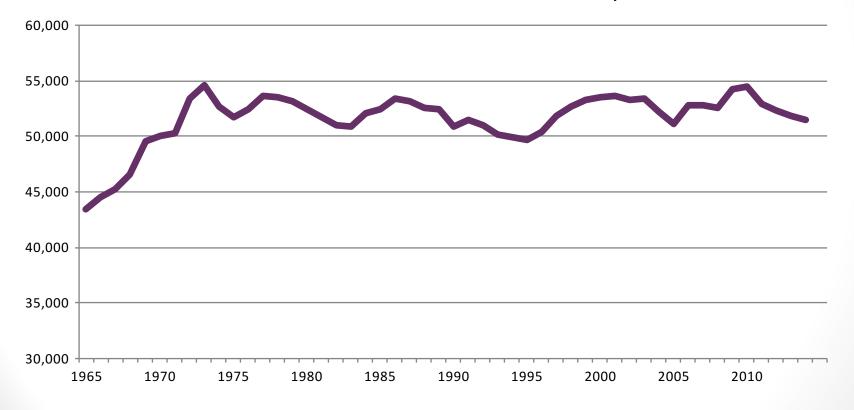
Source: Emmanuel Saez and Gabriel Zucman, 2014, "Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data" NBER Working Paper, October, revise and resubmit *Quarterly Journal of Economics*.

Stagnation: U.S. median household income (constant 2014 US\$)

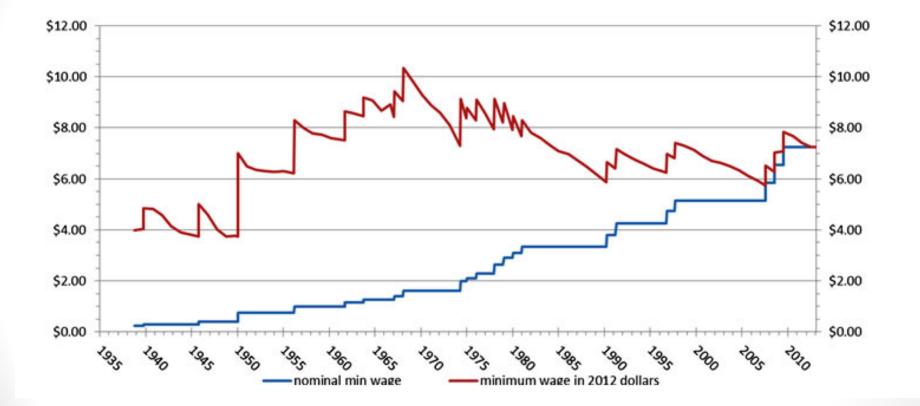


Decline in median income of full-time male worker

Real Median Income of Full-Time Male Worker, 1965-2014

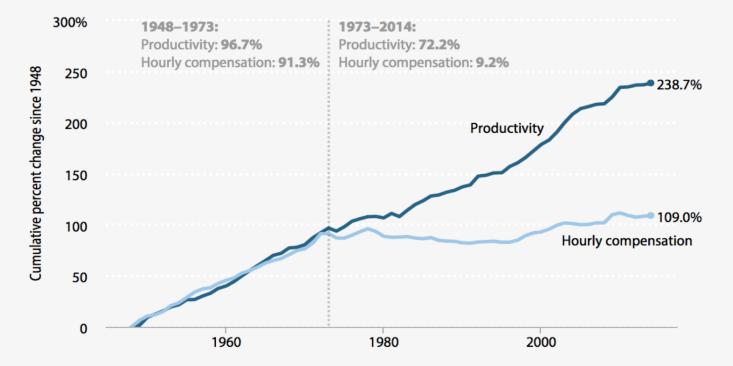


U.S. minimum wage, 1938-2012



Source: U.S. Department of Labor. http://www.dol.gov/minwage/minwage-gdp-history.htm

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



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.

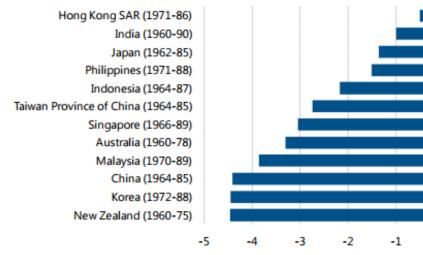
Source: EPI analysis of data from the BEA and BLS (see technical appendix for more detailed information)

ECONOMIC POLICY INSTITUTE

Inequality in Asia: on the rise since early 1990s

Figure 1: Selected Asia: Income Inequality, Pre-1990

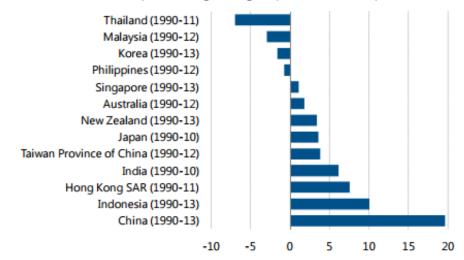
(Net Gini Index; in Gini points; change during the period indicated in parenthese)



Sources: SWIID Version 5.0; and IMF staff calculations.

Figure 2: Selected Asia: Income Inequality, 1990-Latest

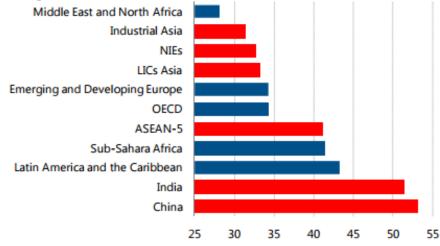
(Net Gini Index; in Gini points; change during the period indicated in parenthese)



Sources: SWIID Version 5.0; and IMF staff calculations.

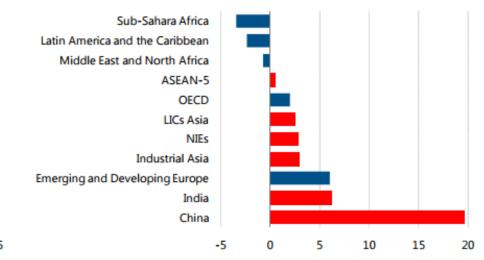
Regional comparison: Income Inequality

(Net Gini Index; in Gini points; year of 2013; population-weighted average across the region)



Sources: SWIID Version 5.0; IMF, WEO database; and IMF staff calculations.

(Net Gini Index; in Gini points; change since 1990; average across the region)



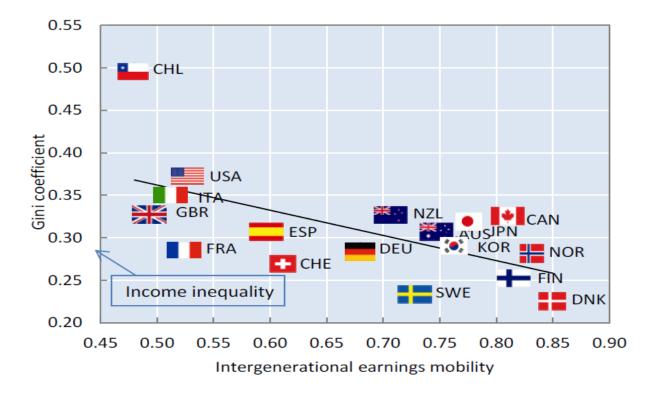
Sources: SWIID Version 5.0; IMF, WEO database; and IMF staff calculations.

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

Income inequality and intergenerational earnings mobility, mid-2000s

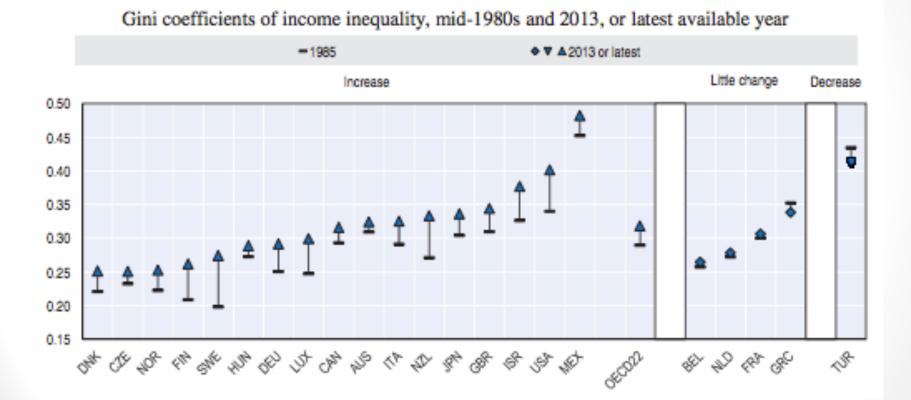


Source: "United States, Tackling High Inequalities Creating Opportunities for All", June 2014, OECD.

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



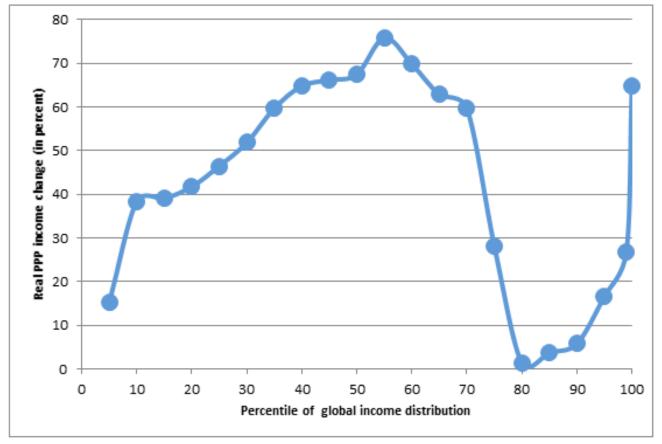
Source: OECD 2015, In It Together: Why Less Inequality Benefits All, http://www.oecd.org/els/soc/OECD2015-In-It-Together-Chapter1-Overview-Inequality.pdf

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

	1985-90	After 2008	Change
Average Gini	36.3	38.8	ular Snip
Pop-weighted Gini	33.9	37.3	+3.4
GDP-weighted Gini	32.2	36.4	+4.2
Countries with higher Ginis	32.0	36.2	+4.5
Countries with lower Ginis	42.8	39.5 Branko	-3.3

Source: Branko Milanovic, http://glineq.blogspot.co.ke/2015/02/trends-in-global-income-inequality-and.html

Global inequality: income growth by percentile, 1988-2008



Source: Branko Milanovic, http://glineq.blogspot.co.ke/2015/02/trends-in-global-income-inequality-and.html

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)

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?

- 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

- "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

- 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 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 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 ½ to ¾ 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