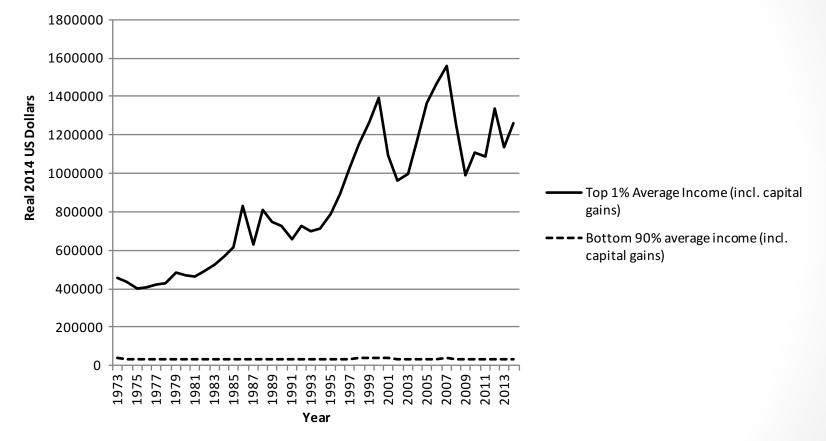
Rewriting the Rules of the Market Economy to Achieve Shared Prosperity

Joseph E. Stiglitz New York June 2016

Enormous growth in inequality

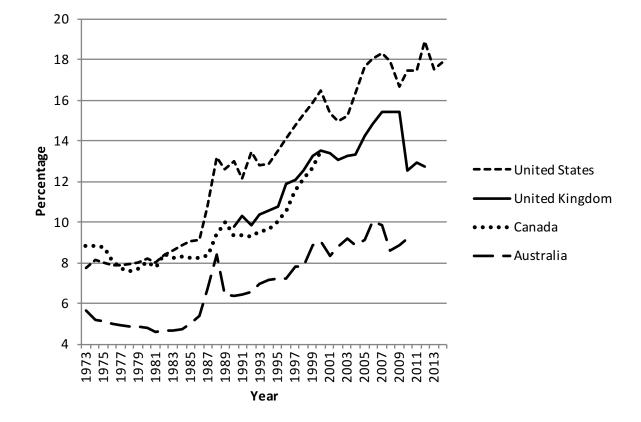
- Especially in US, and countries that have followed US model
- Multiple dimensions of inequality
 - More money at the top
 - More people in poverty
 - Evisceration of the middle
 - Inequalities in wealth exceed those in income
 - Inequality in health—especially large in US
 - Inequality in access to justice

Top 1% vs Bottom 90% Average Income



Source: The World Wealth and Income Database (latest data available at http://www.wid. world/).

Income share of the richest 1%



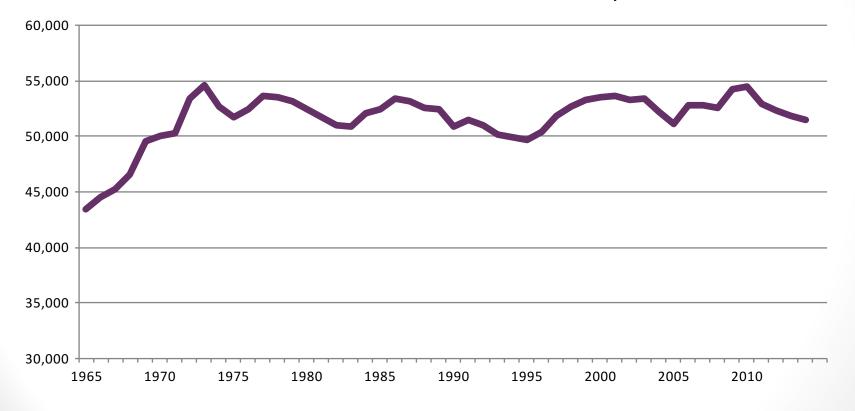
Source: The World Wealth and Income Database (latest data available at http://www.wid. world/).

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

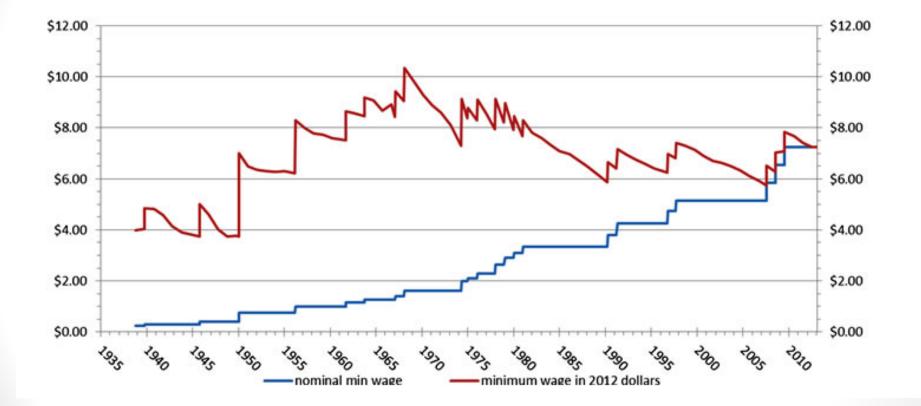


Decline in median income of full-time male worker

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

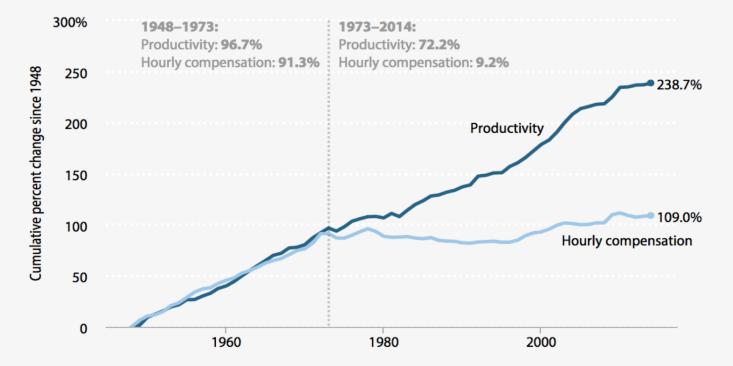


U.S. minimum wage, 1938-2012



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)

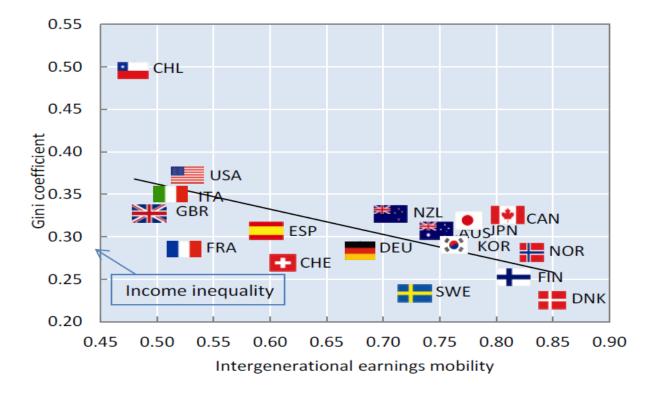
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Most invidious aspect: inequality in opportunity

 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

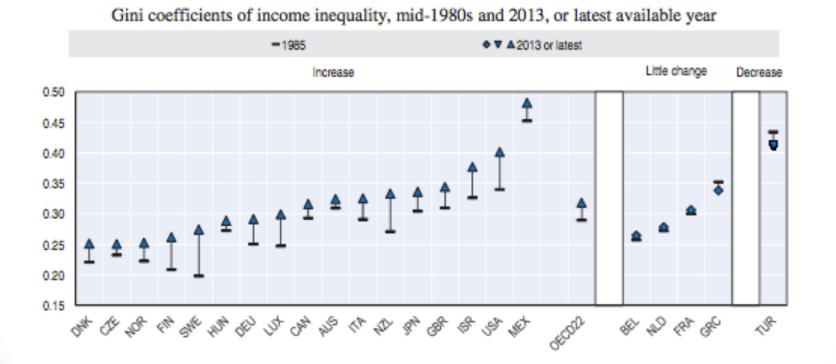


Source: "United States, Tackling High Inequalities Creating Opportunities for All", June 2014, OECD.

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



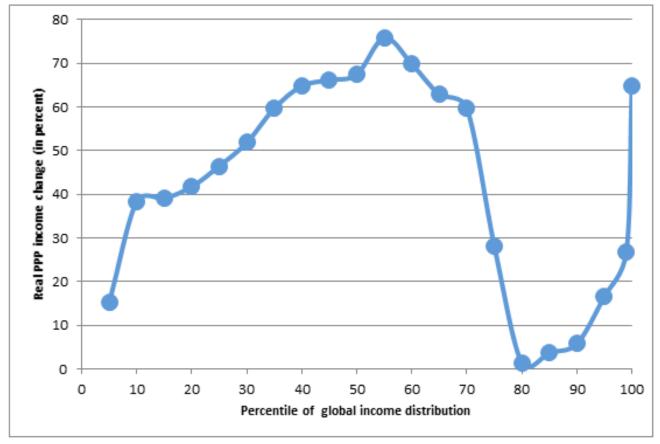
Source: OECD 2015, In It Together: Why Less Inequality Benefits All, http://www.oecd.org/els/soc/OECD2015-In-It-Together-Chapter1-Overview-Inequality.pdf

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.

Cont'd

• 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
- 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

Market forces—based on competitive markets

- (a) Changes in supply and demand for different factors just turned out badly for poor—decreasing wages of unskilled workers and increasing returns to capital and skilled workers
- (b) Increased inequality in the intergenerational transmission of advantages leading to increased inequality in ownership of productive assets (human and financial capital)

Changes in factor returns

(a) Skill biased technological change Unpersuasive

- Skilled workers' wages going down
- Doesn't explain gap between average productivity and average wages

(b) Globalization

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

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 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
 - Localized services
- Some a result of changes in economy
 - 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

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
- The assumption that r > g is not consistent with long run equilibrium: 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

- Ignores growth in life-cycle wealth
- Cannot explain gap between average wages and productivity
 - Even if technical change is skill-biased
- Cannot explain growth in overall wealth/income ratio
 - 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

What Piketty's model cannot explain

- Distributive effects of QE
 - 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

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 the reasons: high level of inequality
- Inequality also affects aggregate demand indirectly
 - Increases instability
 - Realization of this creates uncertainty
 - Uncertainty leads to lower investment

Concluding comments

- Inequality is not just a moral issue; it has economic and political consequences, especially when it reaches the level that it has in the US and especially when it arises in the way that it does in the US
- Incremental changes will not suffice
 - There is a comprehensive agenda which will significantly reduce inequality and increase equality of opportunity entailing "rewriting the rules"
- Urgency—decisions today will affect inequality decades later
 - Key is rewriting the rules once again
- Real question is not economics: it is politics