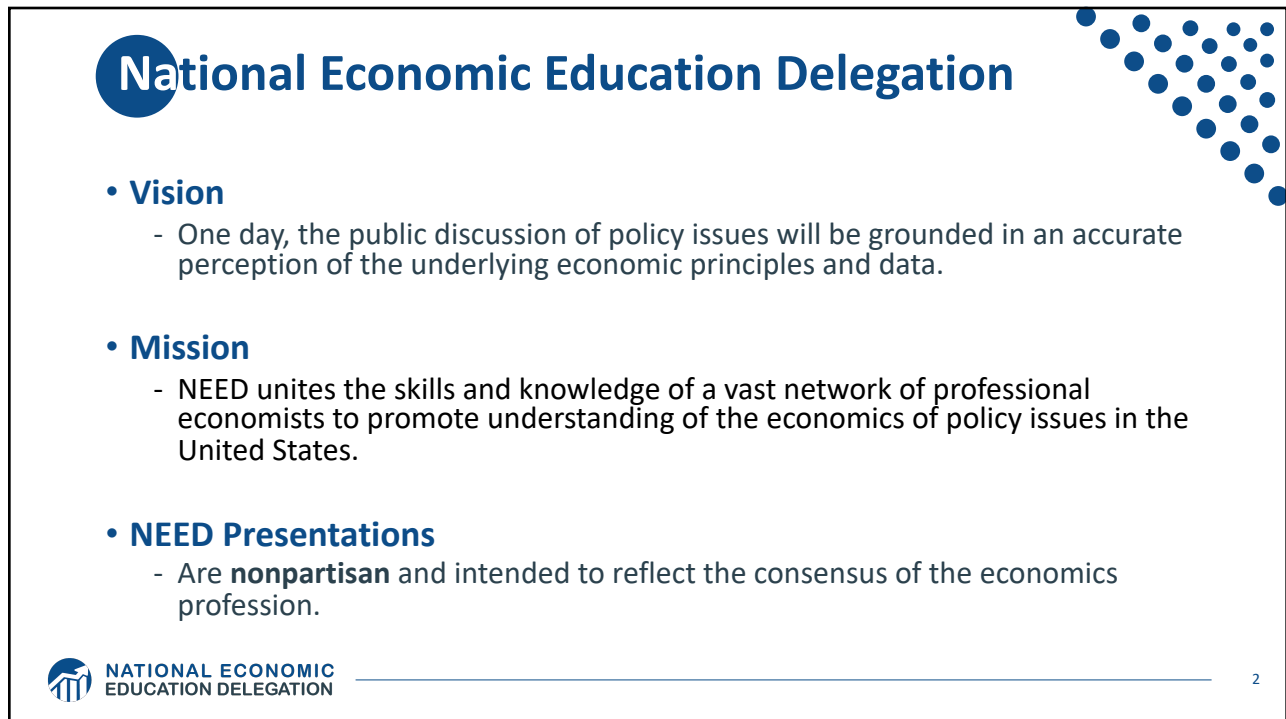


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National Economic Education Delegation

- **Vision**
 - One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.
- **Mission**
 - NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.
- **NEED Presentations**
 - Are **nonpartisan** and intended to reflect the consensus of the economics profession.

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Who Are We?

- **Honorary Board: 52 members**

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 3 Nobel Prize Winners
 - o Akerlof, Smith, Maskin

- **Delegates: 522 members**

- At all levels of academia and some in government service
- All have a Ph.D. in economics
- Crowdsource slide decks
- Give presentations

- **Global Partners: 45 Ph.D. Economists**

- Aid in slide deck development



Credits and Disclaimer

- **This slide deck was authored by:**

- Jon Haveman, Executive Director of NEED
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- **This slide deck was reviewed by:**

- Timothy Smeeding, University of Wisconsin
- Robert Wright, Augustana University

- **Disclaimer**

- NEED presentations are designed to be nonpartisan
- It is, however, inevitable that the presenter will be asked for and will provide their own views
- Such views are those of the presenter and not necessarily those of the National Economic Education Delegation (NEED)

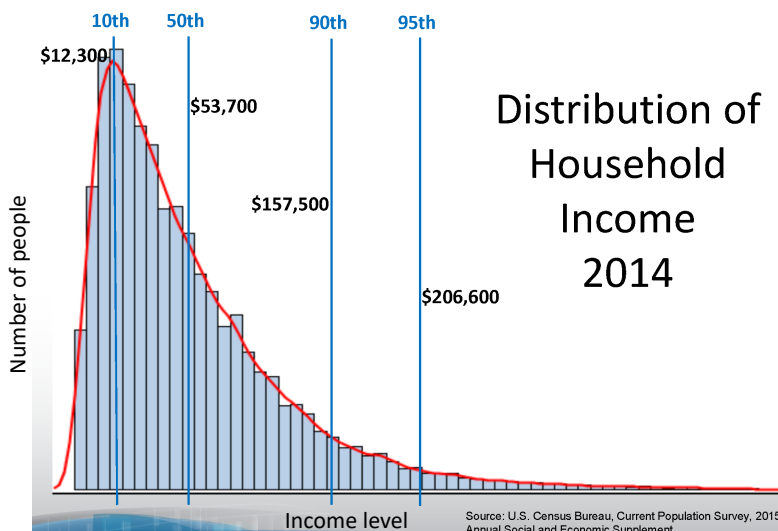


Outline

- Measurement of economic inequality
- Some facts: Inequality measures over time and across countries
- Why does it happen? Some key drivers of economic inequality
- Does it matter and is it a problem?
- What should/can be done about inequality?

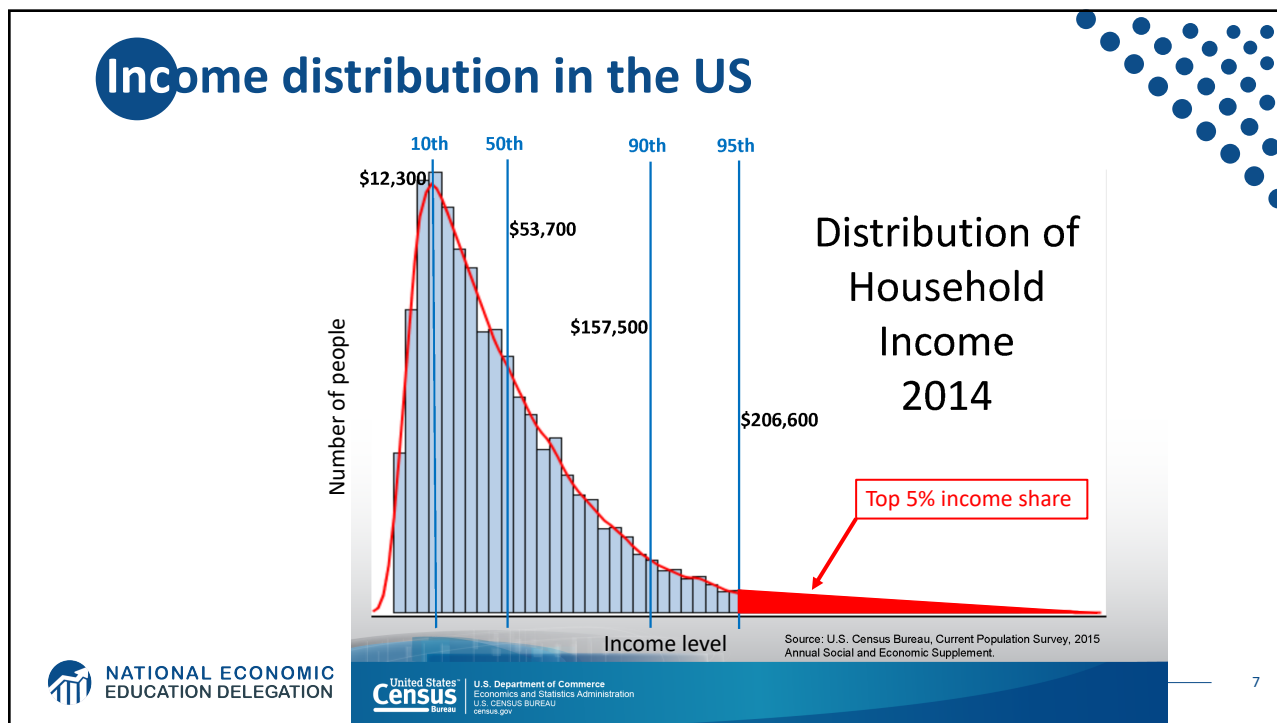
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Income distribution in the US

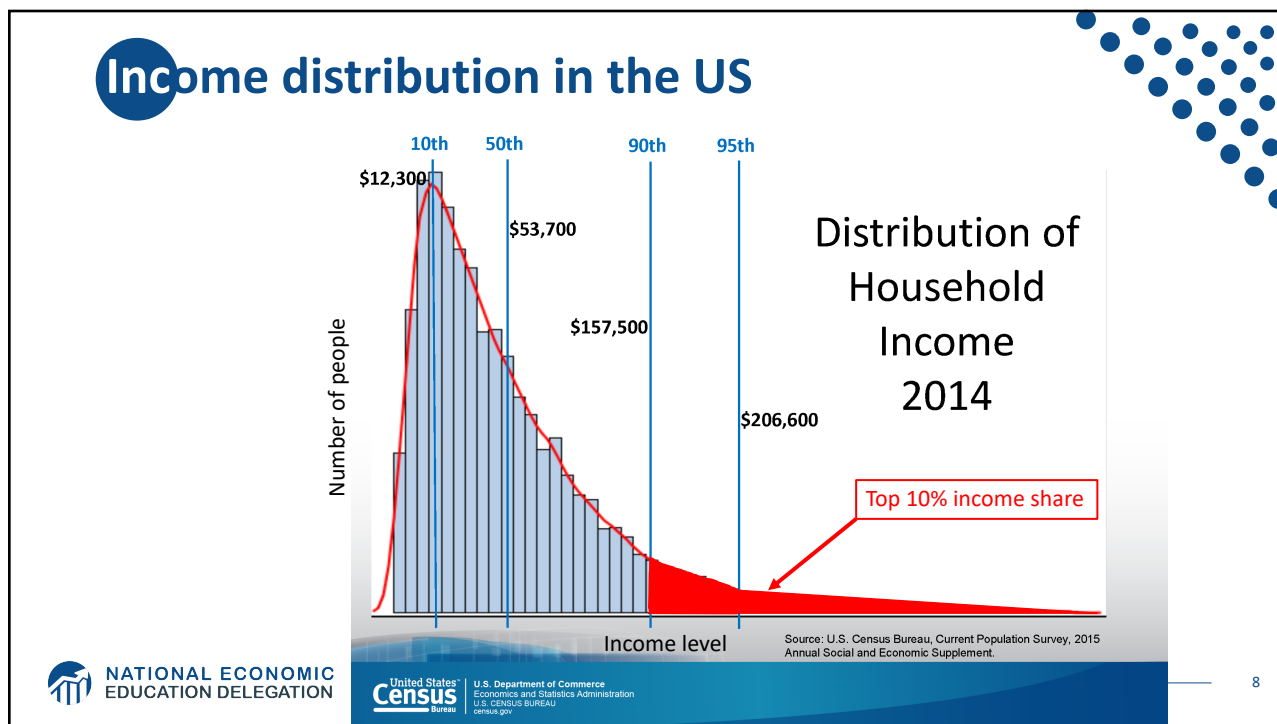


Source: U.S. Census Bureau, Current Population Survey, 2015 Annual Social and Economic Supplement.

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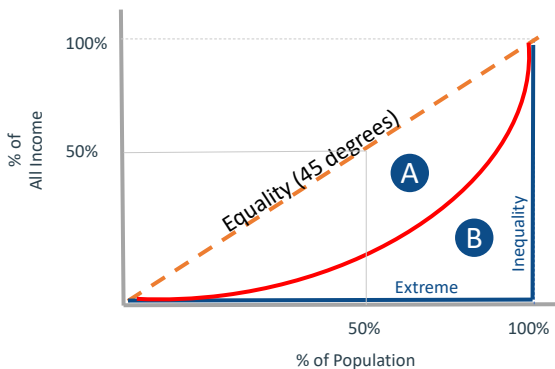
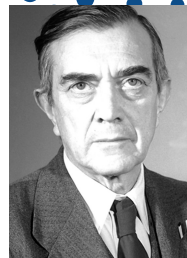


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A convenient summary of inequality: The Gini Coefficient (since 1912)

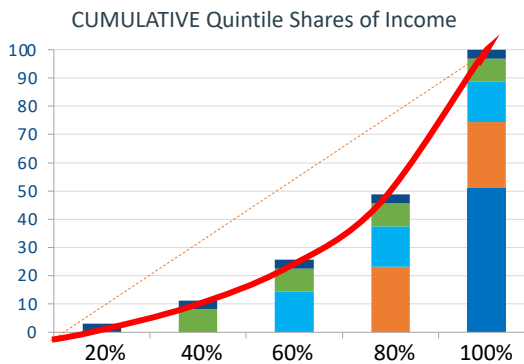
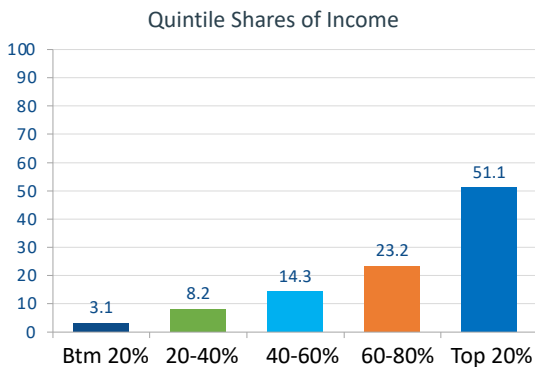


$$\text{Gini} = \frac{A}{A + B} \times 100$$

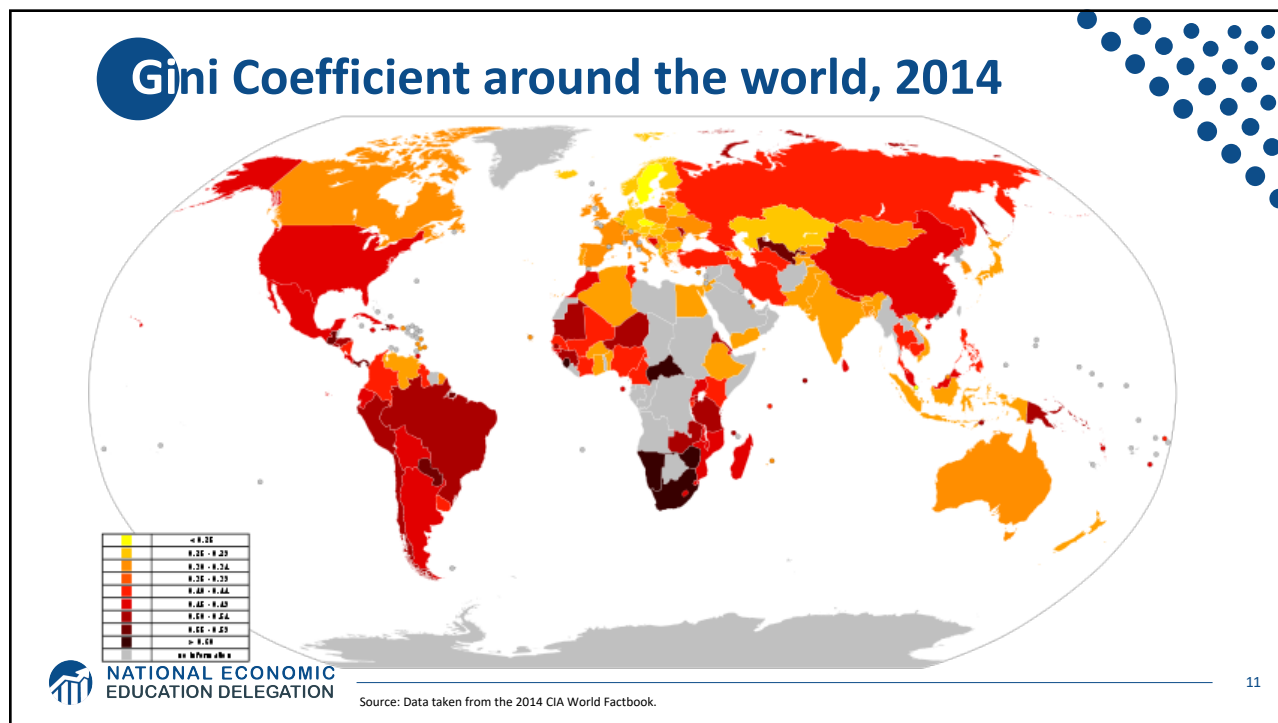
Bigger A: More inequality
Smaller A: Less inequality



Forming the GINI Coefficient: 2015



Source: 2015 1-year American Community Survey, based on pre-tax household income.



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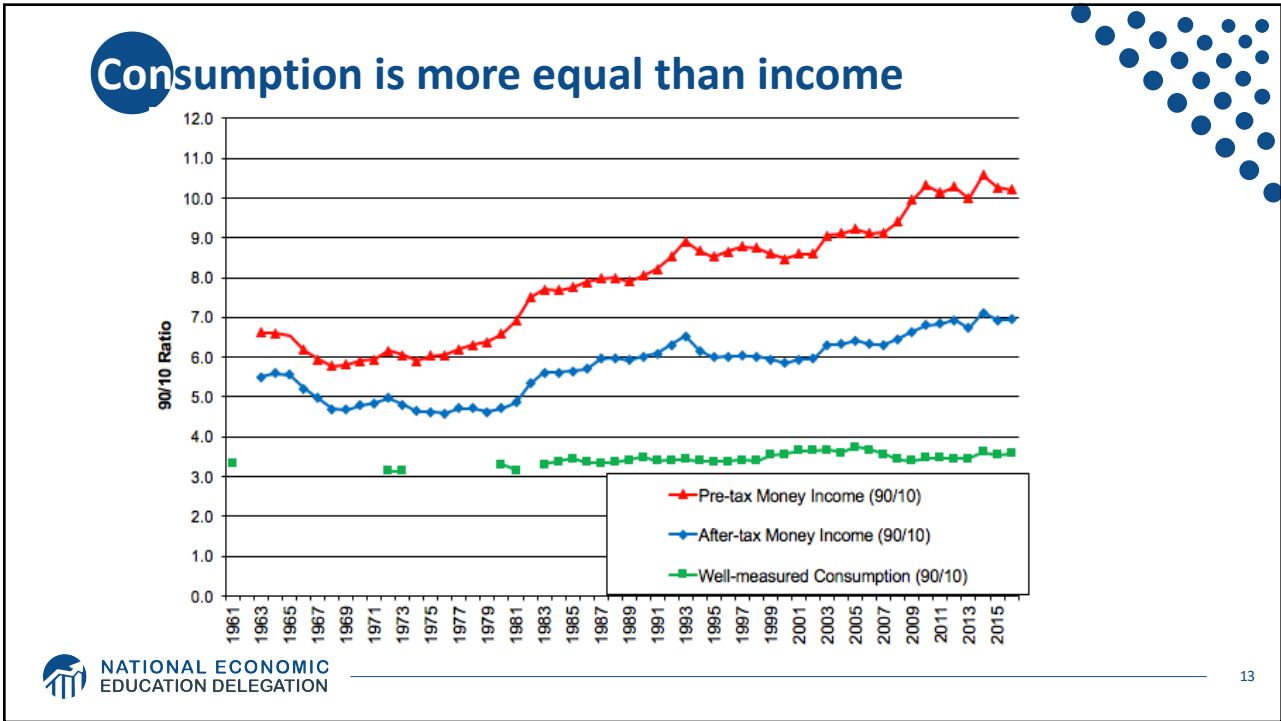
Different Ways of Thinking About Inequality

- **Income Inequality**
 - Before taxes and transfers
 - After taxes and transfers
- **Wealth Inequality**
- **Consumption Inequality**

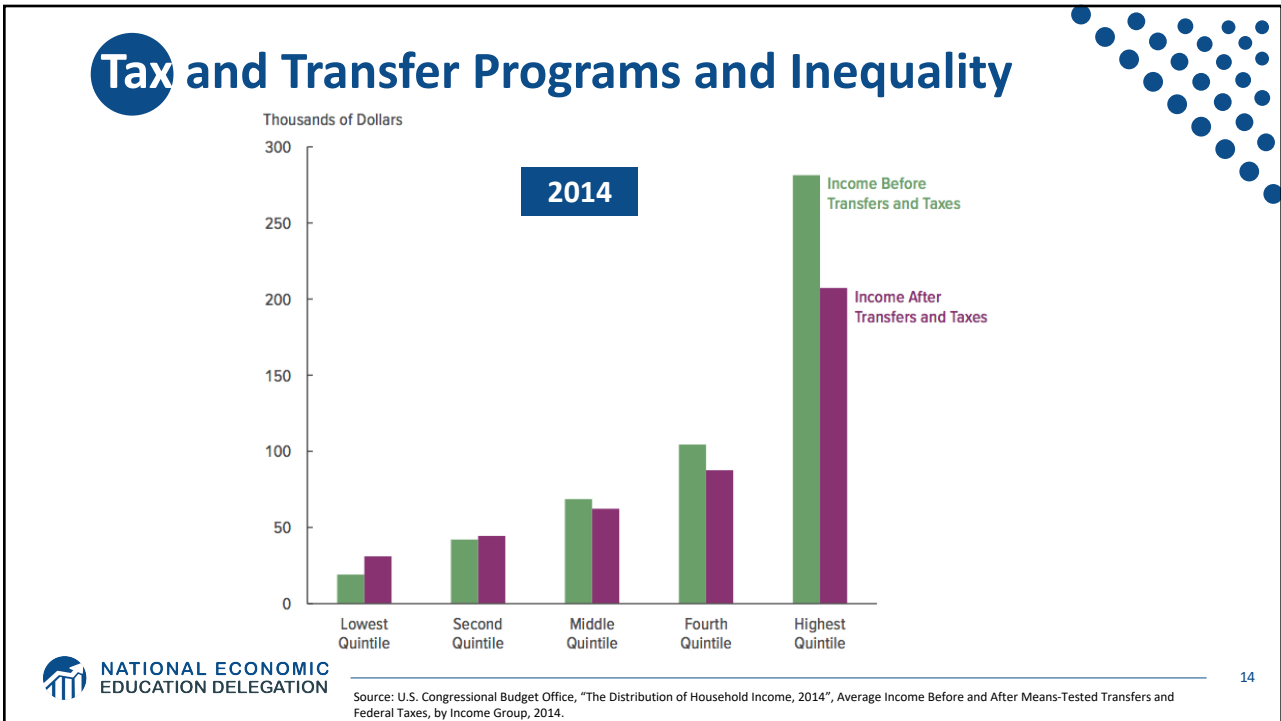
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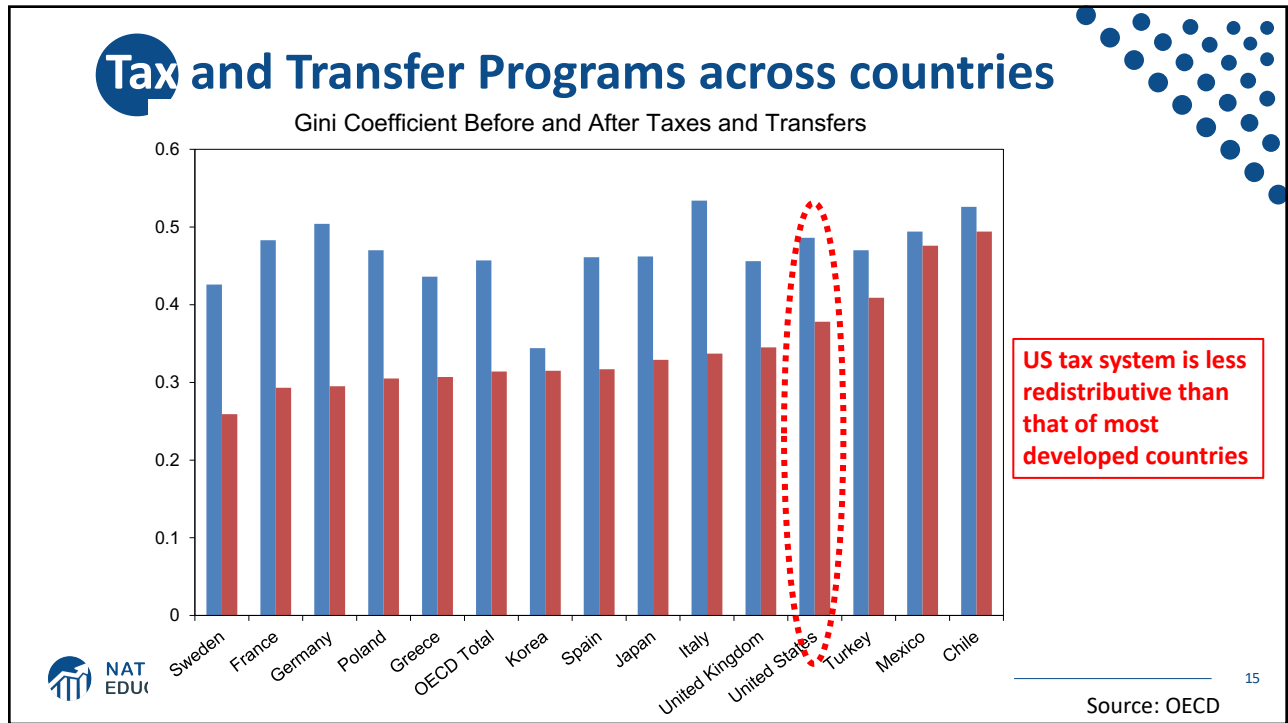
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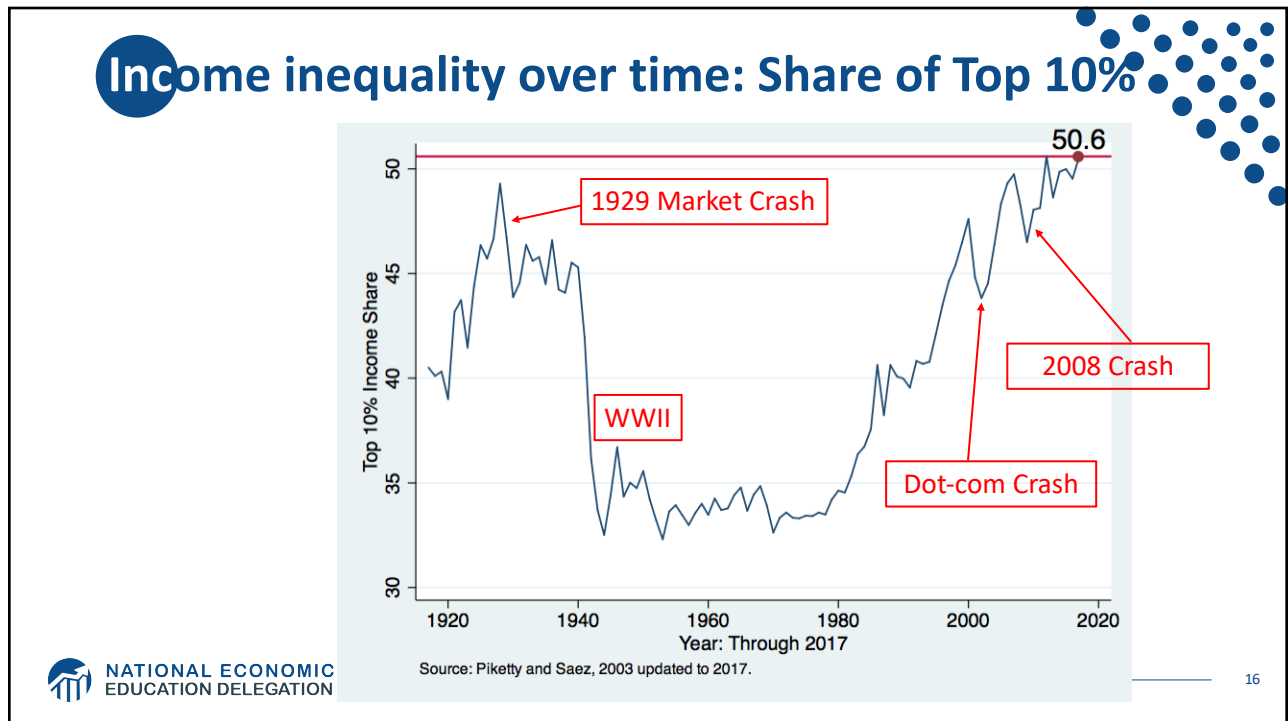
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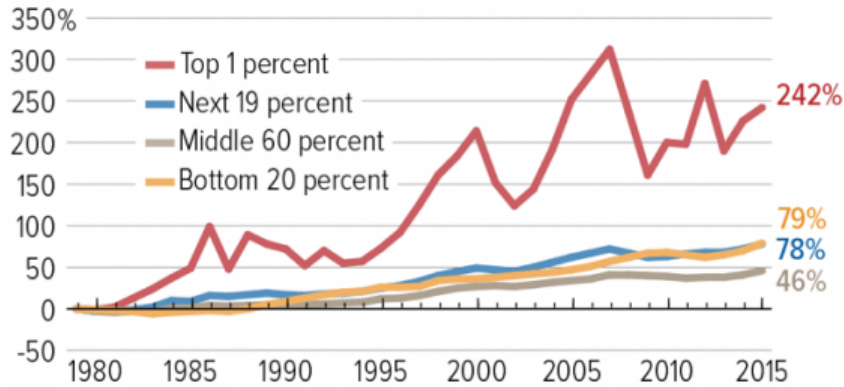
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Income inequality trends: winners and losers

Percent change in income after transfers and taxes since 1979



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Recent Facts on Income Inequality

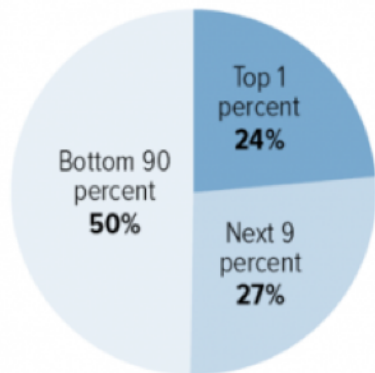
- **Beginning in the 1970s, the income gap widened.**

- Biggest winners: top 5 %
- Biggest losers: middle-income families

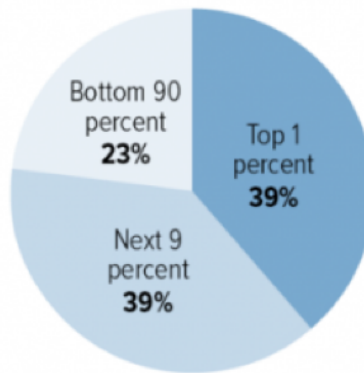
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Wealth is distributed more unequally compared to income

Distribution of before-tax income, 2016



Distribution of wealth, 2016

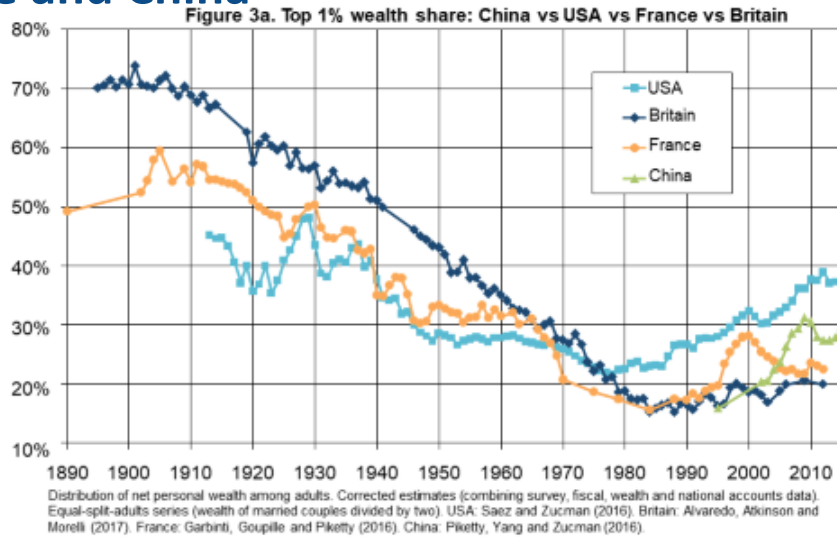


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Wealth group	Number of families	Wealth threshold	Average wealth	Wealth share
Bottom 90%	144,600,000		\$84,000	23%
Top 10-1%	14,463,000	\$660,000	\$1,310,000	35%
Top 1-0.1%	1,446,300	\$3,960,000	\$7,290,000	20%
Top 0.1-0.01%	144,600	\$20,600,000	\$39,700,000	11%
Top .01%	16,070	\$111,000,000	\$371,000,000	11%

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Wealth share of the top 1%: US, UK, France and China



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Why might wealth be distributed more unequally compared to income?

Differences in saving behavior

- Wealthy households save a larger fraction of their income; thus, they accumulate more wealth

Differences in rate of return on saving

- Wealthy households hold riskier assets (e.g. stocks and private businesses) and receive higher average returns

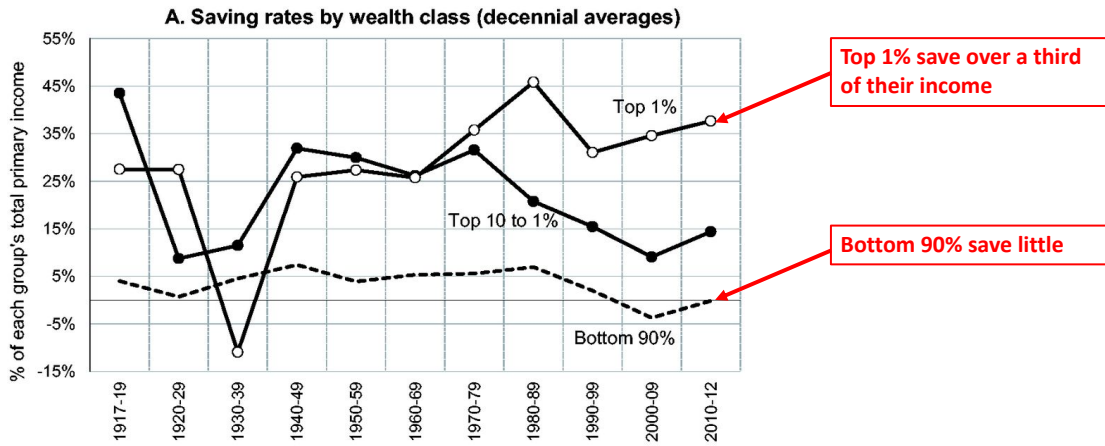


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Saving rates by wealth group



Source: Saez and Zuchman, Quarterly Journal of Economics, 2016

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Where Does Inequality Come From?

- **Labor Characteristics**

- Population composition
 - o Aging
 - o Immigration
- Personal Choices
 - o Educational attainment
 - o Effort
 - o Priorities
 - o Household composition

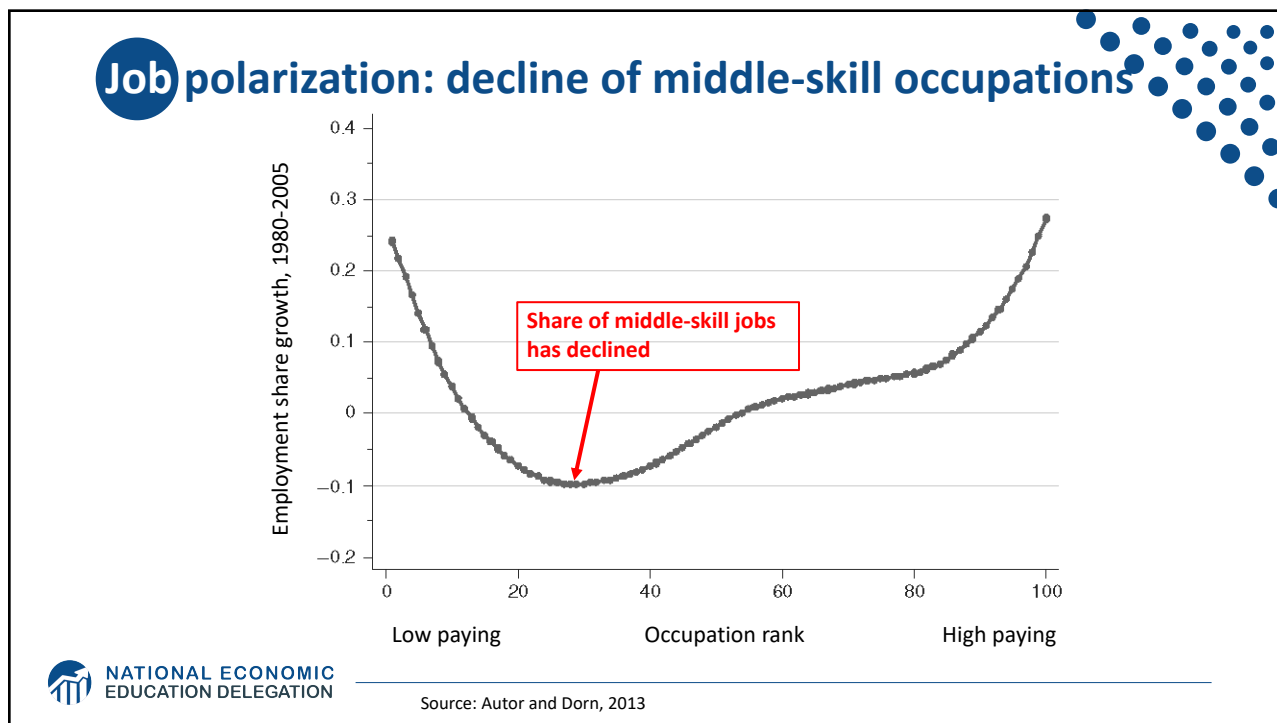
- **Market Forces**

- Technological change
- Job polarization
- Globalization

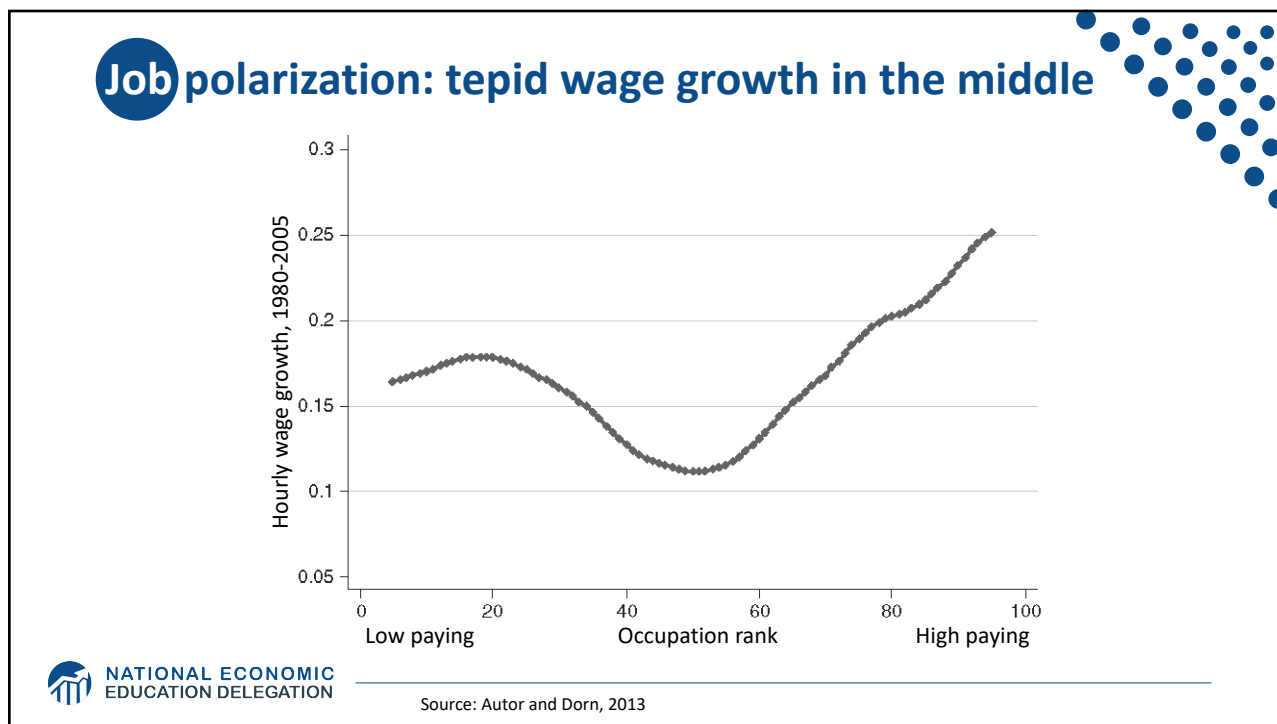
- **Government Policy**

- Regulation
- Taxation and redistribution of income

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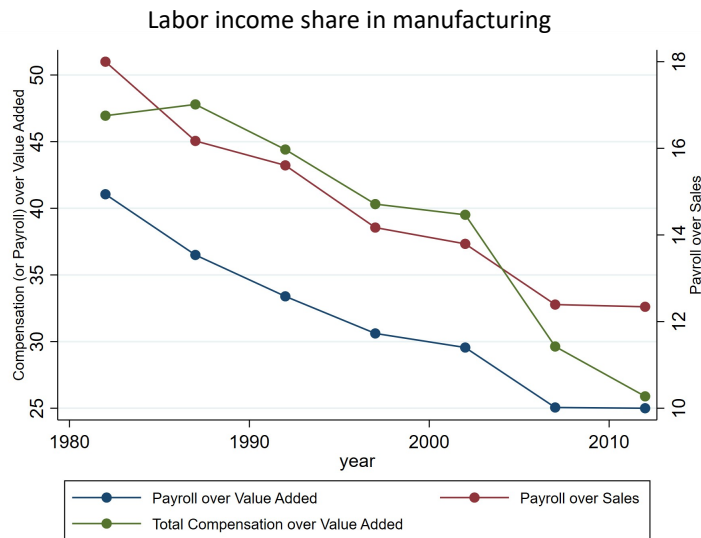


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Share of income paid to labor has been falling



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Technological Change and Inequality

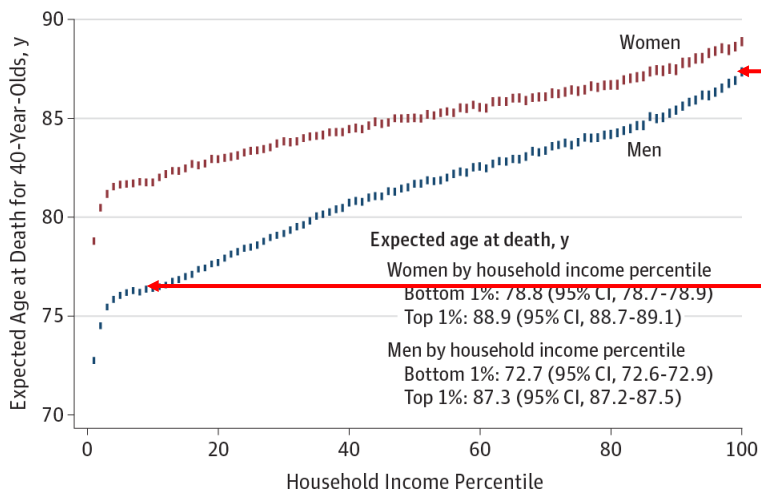
- **Much of the technology adopted in the last 30 years has eliminated middle-skill jobs.**
 - Computers, advanced manufacturing equipment, automation
- **There is a “winner take all” aspect of the technology-driven economy.**
 - This likely favors a small group of individuals.
- **Both aspects increase inequality by increasing the rewards to:**
 - Those with significant labor market skills
 - Owners of assets and intellectual property over workers

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Why does economic inequality matter?

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Life expectancy by income group



Top 1% can expect to live about 10 years longer than bottom 10%

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Pay grade and health: the Whitehall Study

- More than 6000 British civil servants were followed for over a decade
- All have identical access to health care
- No differences in “long-standing illness” prevalence by pay grade

Compared to the highest pay grade, the lowest pay grade executives are:

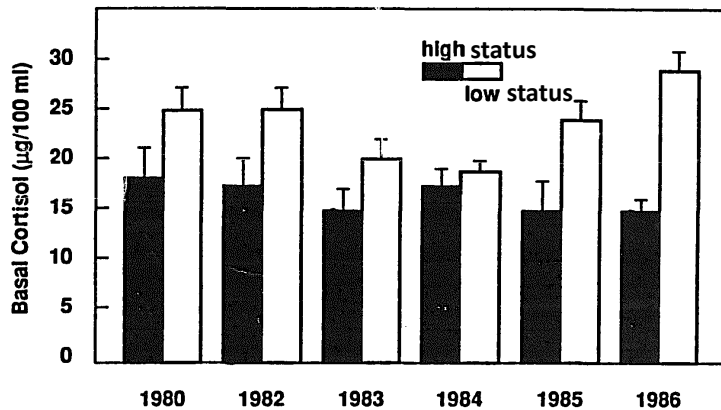
- About 2X as likely to have symptoms of depression
 - 3X as likely to be smokers
 - Have significantly higher BMI and blood pressure
- Problematic alcohol consumption is associated with *higher* pay grade



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Inequality and toxic stress

Differences in stress hormone levels between high-status and low-status baboons



Source: Sapolsky (*Biol. Psychiatry*, 1990)



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Inequality and lack of social cohesion

“For the poor, *more inequality means more anger* at what they don’t have and more cognitive load from the worry about how to keep up. For the wealthy, it’s *more fear* about the menace of the have-nots and more effort put into walling themselves off from them. *For everyone, there’s less social support* - by definition, the more widely-spread and unequal a hierarchy, the fewer peers one has, and true social support requires the symmetry of peers.”

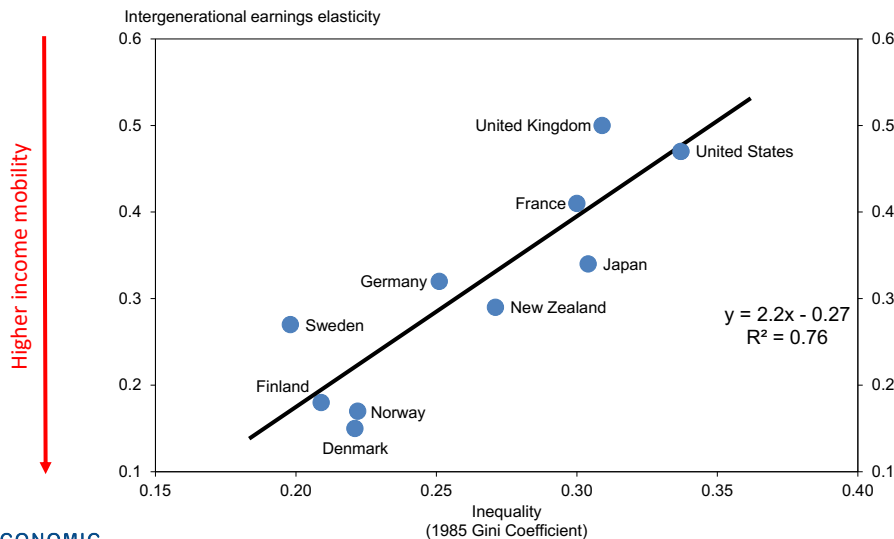


Robert Sapolsky, Professor of Biology and Neurology, Stanford University

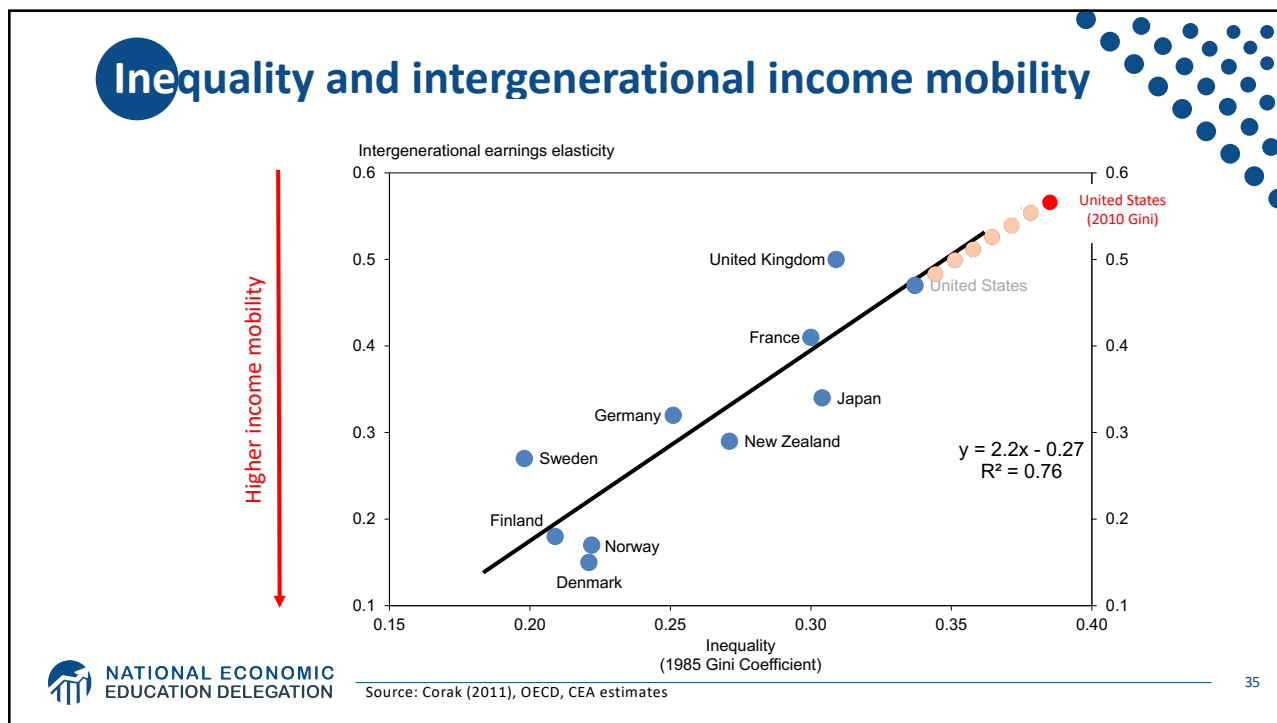
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Inequality and intergenerational income mobility

The Great Gatsby Curve



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What can/should be done about inequality?

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Government policy tools

- **Market Influence: PRE-distribution**
 - Characteristics of labor
 - Access to education
 - Effects on labor demand
 - Market regulation
 - Antitrust policy
 - Intellectual property policy
 - Labor regulations
 - Minimum wage, overtime, health insurance, etc.
 - Occupational licensing
- **RE-distribution**
 - Tax system
 - Transfers
 - Direct aid
 - Food stamps
 - Medicaid



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Addressing Inequality: Long Term

- **Focus on education**
 - Public education, in particular
 - Reduce disparities in quality of public education
 - Improve counseling in low-income schools
 - With respect to college – paths to success and funding
 - Investments are needed in early education, not later
 - Universal pre-K
 - Upgrade quality of elementary schools in low-income areas
- **Focus on childhood poverty**
 - Childhood poverty was shown to have long-lasting adverse effects



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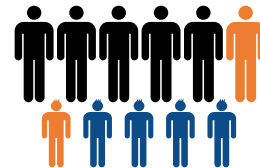
What to do About Inequality?

- **Nothing?**
- **Redistribution?**
- **PRE-distribution?**
- **Early access to resources?**



Summary

- **Income inequality is clearly increasing.**
 - The economy is favoring owners of assets and intellectual property over labor.
- **The causes appear to be largely driven by:**
 - The market – technology, competition, and trade
 - Changing institutions/regulation.
- **Open questions are:**
 - To act or not to act?
 - If so, how?
- **The level of inequality is a policy choice.**



Thank you!

Any Questions?

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