

Osher Lifelong Learning Institute, Fall 2025

Inequality and Economics

Northwestern University

Host: Geoffrey Woglom, Director
National Economic Education Delegation

Course Schedule

Inequality and Public Policy

- **Week 1 (10/14): The New Inequality, Geoffrey Woglom, Amherst College**
- Week 2 (10/21): Economics of Immigration, Robert Gitter, Ohio Wesleyan University
- Week 3 (10/28): Trade and Inequality Geoffrey Woglom, Amherst College
- Week 4 (11/04): The Black-White Wealth Gap, Jon Haveman, Exec. Director, NEED
- Week 5 (11/11): Climate Change Economics Sarah Jacobson, Williams College
- Week 6 (11/18): AI and Inequality Geoffrey Woglom, Amherst College

Characteristics of Native and Latin Amer. Born Population (Age 16 & up)

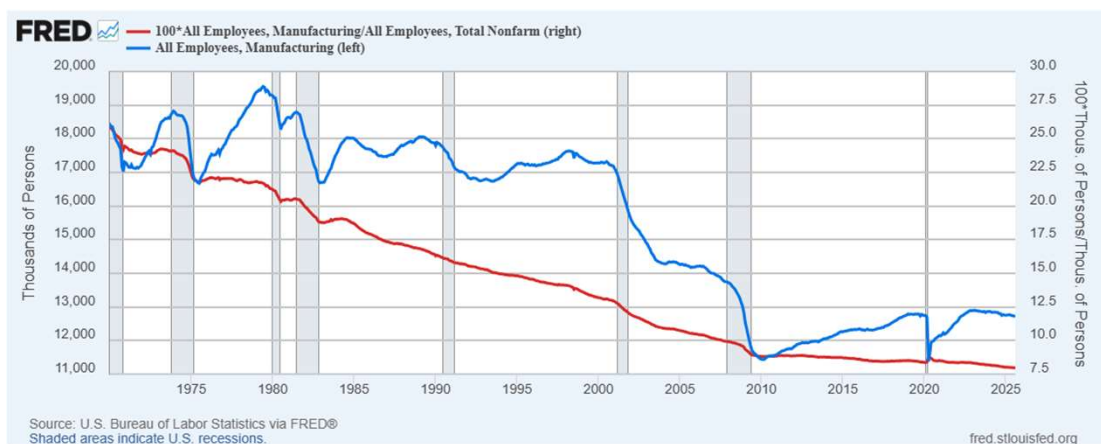
	<u>Native Born</u>	<u>Lat. Amer. Born</u>
Labor Force	130 Mil.	13 Mil
< H.S. Educ	5.8%	37.1.%
Poor English	1.9%	77%
Employed	59.2%	64.9%
Unemployed	3.0%	3.5%
Med. Wk. Earn	\$1,087	\$758
Poverty Rate	13%	17%



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Employment in Manufacturing



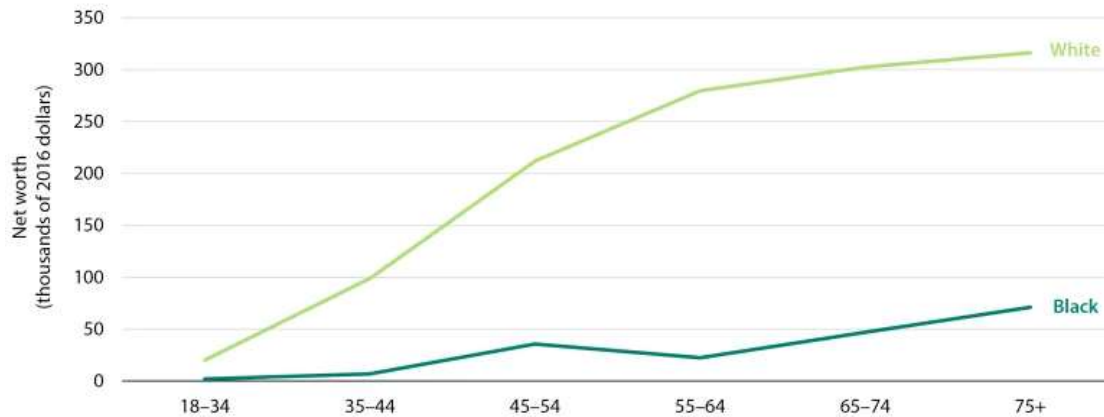
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Net Worth by Age and Race

FIGURE 2.

Median Net Worth, by age of Household Head



Source: Survey of Consumer Finances 2016; authors' calculations.

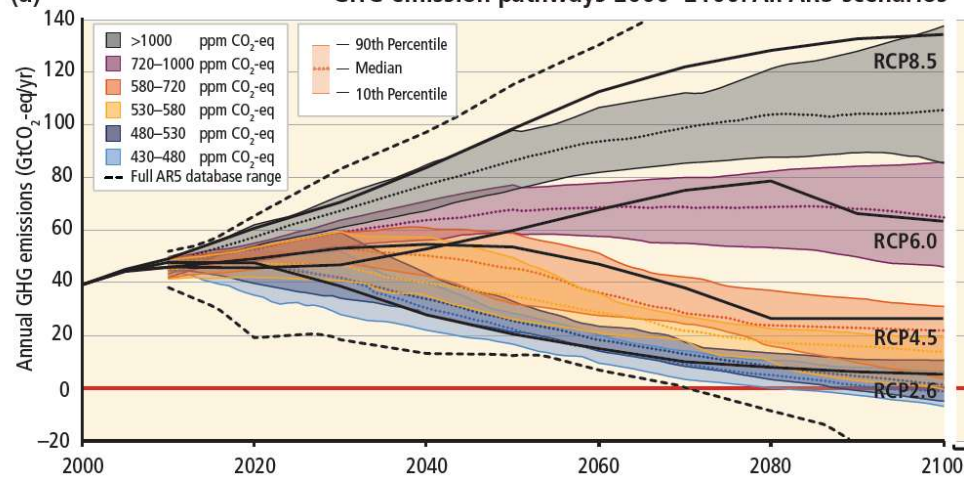
Note: Data are from 2016. Net worth refers to the difference between assets and debt for a household head. Race and ethnicity are those of the survey respondent.

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BROOKINGSSource: <https://www.brookings.edu/blog/up-front/2020/02/27/examining-the-black-white-wealth-gap/>

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Emissions Trajectories into the Future

(a) GHG emission pathways 2000–2100: All AR5 scenarios

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Source: IPCC Assessment Report 5

Outline

- Definitions.
- Snapshots of US Inequality.
- Inequality over time.
- Does inequality matter?
- The New Inequality?
- What to do about it.

Economic Inequality: Material Inequality

• Definition:

- The extent to which the distribution of goods and services deviates from complete equality.
- Material inequality is highly correlated with other kinds of inequality. E.g., life satisfaction, life expectancy.



Different Ways of Thinking About Material Inequality

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

How does wealth differ from income?

Income is measured over a period of time, say one year and measures ability to consume today.

Wealth is one's accumulated savings, including physical and financial assets (net worth), and measures the ability to consume now and in the future.

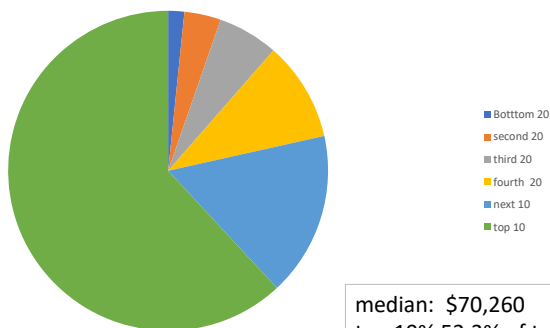


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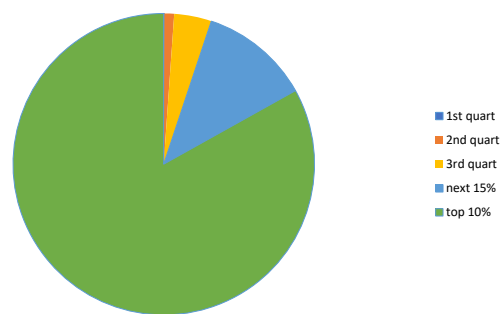
Measuring Material Inequality

Before-Tax Household Income 2022



median: \$70,260
top 10% 52.3% of total

Household Net Worth 2022



Top 10% comprise 73% of total



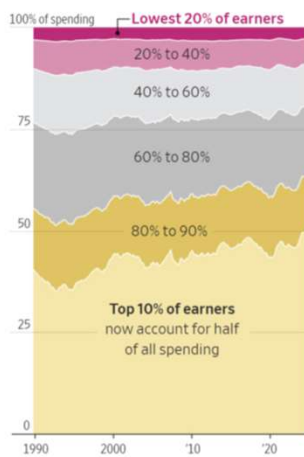
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Federal Reserve Board "Survey of Consumer Finances"

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Shares of Consumption Are Similarly Unequal

Share of spending, by income group



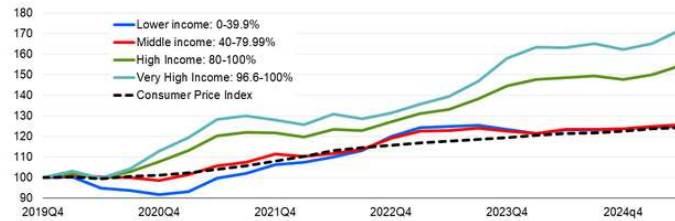
Source: Moody's Analytics



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The Well-To-Do Power Consumer Spending

Personal outlays by income group, 1999q4 = 100

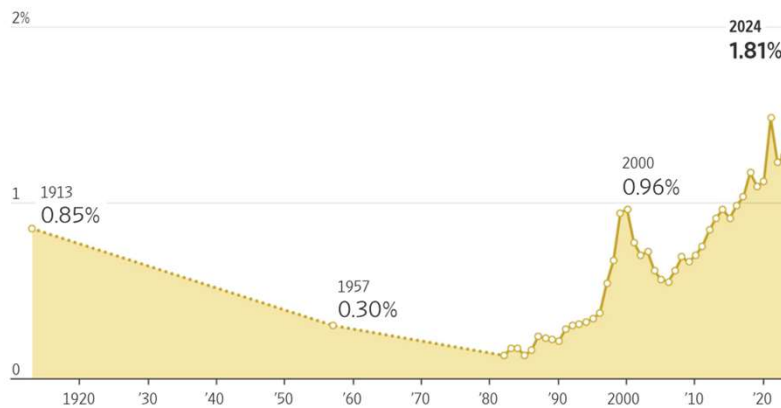


Sources: BLS, Moody's Analytics

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The WSJ April 24th

Wealth of the top 0.00001% in the U.S. as a share of total U.S. household wealth



Source: Gabriel Zucman, analysis of Forbes, Fortune and Federal Reserve data

19 Households
\$2.6 trillion



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Wealth inequality in America

IF U.S. LAND WERE DIVIDED
LIKE U.S. WEALTH



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How We Compare to the Rest of the World

Figure 2
Gini Index by Nation

FRED 2018 GINI Index by Nation (Index)



SOURCE: World Bank via FRED®, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/graph/?m=ORFh>, accessed April 6, 2021.



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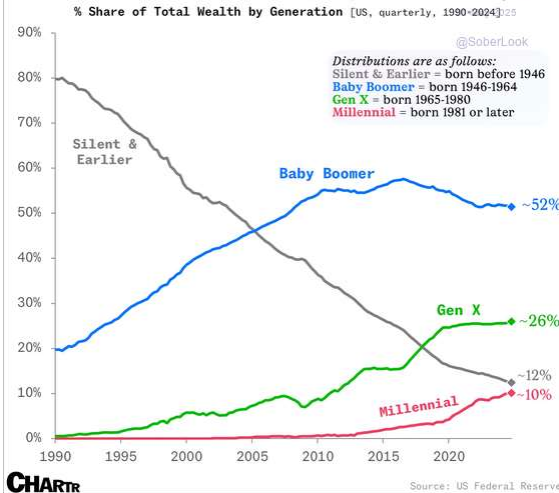
https://files.stlouisfed.org/files/htdocs/publications/page1-econ/2022/09/01/income-and-wealth-inequality_SE.pdf

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Living Standards Across the Globe



America's Wealth, By Generation



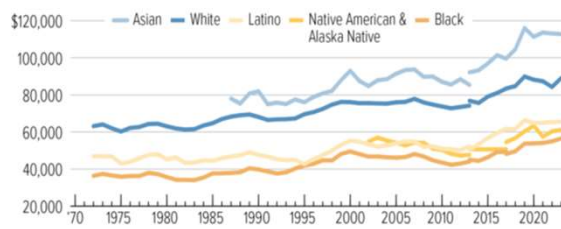
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Racial Wage and Wealth Gaps

FIGURE 2

Incomes Have Grown But Racial Gaps Persist

Median household total money income by race

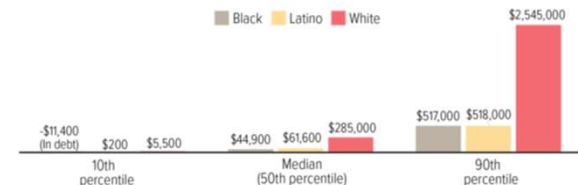


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FIGURE 6

Wealth Highly Concentrated By Race

Household net worth by race and ethnicity, 2022



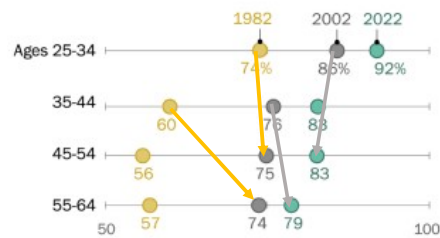
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Gender Pay Gaps

Women's pay relative to men's drops most sharply around ages 35 to 44

Median hourly earnings of women in the U.S. as a % of the median hourly earnings of men, by age



Note: Samples include employed workers ages 25 to 64 with positive earnings, working full time or part time, excluding the self-employed.

Source: Pew Research Center analysis of the Current Population Survey outgoing rotation group files (IPUMS).

PEW RESEARCH CENTER

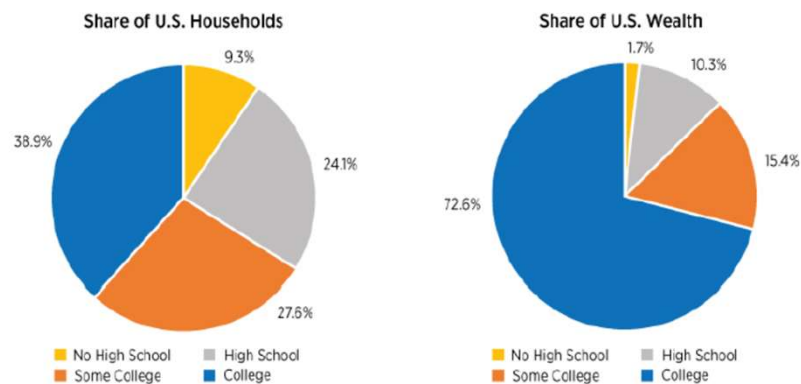


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<https://www.pewresearch.org/social-trends/2023/03/01/the-enduring-grip-of-the-gender-pay-gap/>

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Household Wealth by Education, 2023, Q2



■ FEDERAL RESERVE BANK OF ST. LOUIS

SOURCES: Distributional Financial Accounts and Institute for Economic Equity calculations.

NOTE: College represents families with at least a bachelor's degree; other education levels represent the families' highest completed education.



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Case and Deaton's Astounding Findings

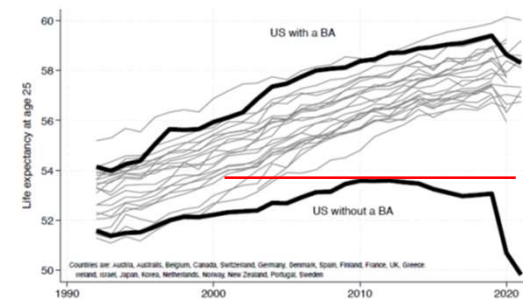
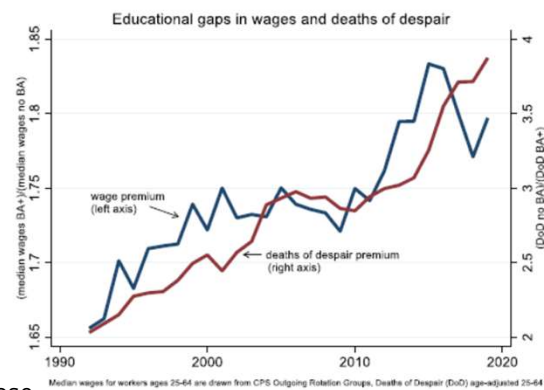


Figure 3: Adult life expectancy for Americans by college degree and for 22 rich countries



Opioids were involved in more than 80,000 overdose deaths in 2021, which was 10 times the number of opioid overdose deaths in 1999. <http://wonder.cdc.gov/>

Health Care Access And Income

Lack of Access to Quality, Affordable Care Reaches New Recorded High of 35%

If you needed access to quality healthcare today, would you be able to afford it?

% No

	2021	2022	2023	2024	Change Since 2021 (pct. pts.)
U.S. total	29	27	31	35	6
Annual household income:					
Less than \$24,000	53	50	53	64	11
\$24,000-\$48,000	46	46	45	57	11
\$48,000-\$90,000	33	30	35	37	4
\$90,000-\$120,000	23	17	19	22	1
\$120,000-\$180,000	13	14	17	16	3
\$180,000+	8	7	7	8	0

West Health-Gallup Healthcare Indices Study, Nov. 18-Dec. 27, 2024 (n=6,296)

GALLUP

Percentage of U.S. Adults Categorized as Cost Desperate Reaches a New High of 11%

The percentage of Americans who lack access to quality, affordable care and have recently been unable to pay for needed care and medicine is rising much faster among Black and Hispanic adults and those from lower-income households, creating wider gaps in access to care.

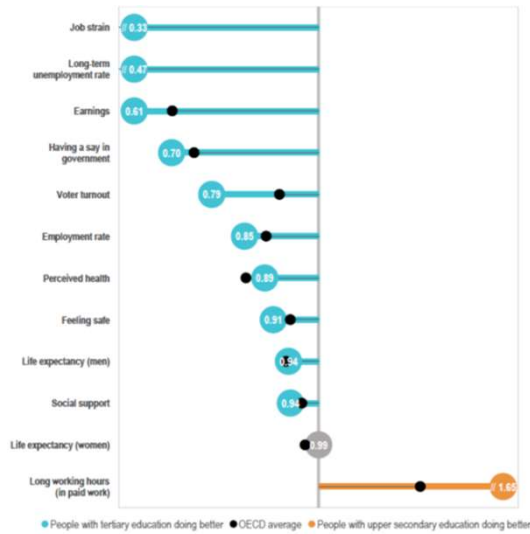
	2021	2022	2023	2024	Change Since 2021 (pct. pts.)
All adults	8	7	8	11	3
Race/Ethnicity:					
White adults	8	6	7	8	0
Black adults	9	7	11	14	5
Hispanic adults	10	11	14	18	8
Annual household income:					
Less than \$24,000	14	11	15	25	11
\$24,000-\$48,000	13	14	16	19	6
\$48,000-\$90,000	11	9	10	12	1
\$90,000-\$120,000	4	5	2	5	1
\$120,000-\$180,000	3	3	3	3	0
\$180,000 or more	2	2	2	1	-1

West Health-Gallup Healthcare Indices Study, Nov. 18-Dec. 27, 2024 (n=6,296)

GALLUP

Education Matters for Broader Measures of Inequality

Ratio of indicators of well being



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OECD, "How's Life in the United States?" <https://www.oecd.org/wise/Better-Life-Initiative-country-note-United-States.pdf>

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Summary of Snapshot

- Top 10% earns over 50% of total income and 70% of total wealth
- US is one of the more unequal countries in the industrialized world.
- Earning a BA is important for
 - Earnings.
 - Life Satisfaction.
 - Life Expectancy.
- Trends appear to be getting worse.



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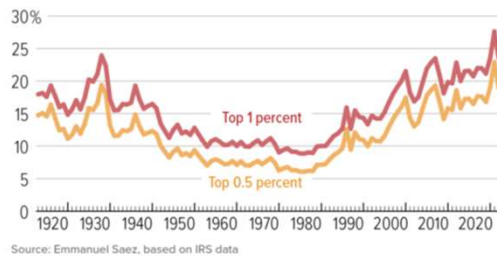
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How Did We Get Here: The Long View

FIGURE 4

Income Concentration at the Top Has Risen Sharply Since the 1970s

Share of total before-tax income flowing to the highest income households (including capital gains), 1913-2022

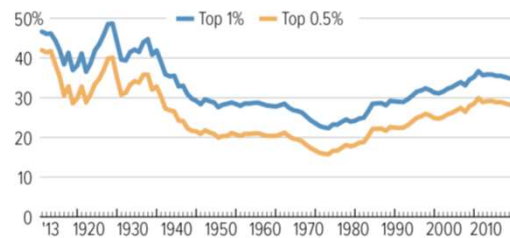


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FIGURE 8

Wealth Concentration Has Risen Since 1970s

Share of total wealth held by the wealthiest households, 1913-2019



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Source: Arloc Sherman, Danilo Trisi, and Joseph Cureton, "A Guide to Statistics on Historical Trends in Income Inequality," Center on Budget and Policy Priorities, Policy Futures, Dec. 11, 2024.

Historical Trends in Material Inequality

• The "Great Convergence": 1935-1978

• The "Great Divergence:" 1979-?

- Income growth in the middle and lower parts of the distribution slowed.
- Incomes at the top continued to grow strongly.



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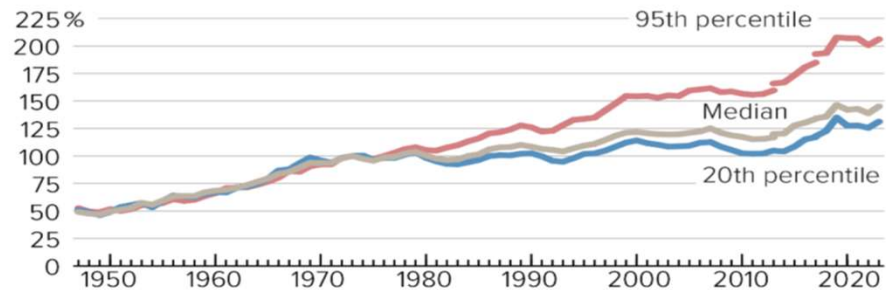
Source: Chad Stone, Danilo Trisi, Arloc Sherman, and Roderick Taylor, "A Guide to Statistics on Historical Trends in Income Inequality," Center on Budget and Policy Priorities, Policy Futures, May 15, 2018.

The Abrupt Increase in Inequality

FIGURE 1

Income Gains Widely Shared in Early Postwar Decades — But Not Since Then

Real family income between 1947 and 2023, as a percentage of 1973 level



Note: Breaks indicate implementation of a redesigned questionnaire (2013) and an updated data processing system (2017).

Source: CBPP calculations based on U.S. Census Bureau Data



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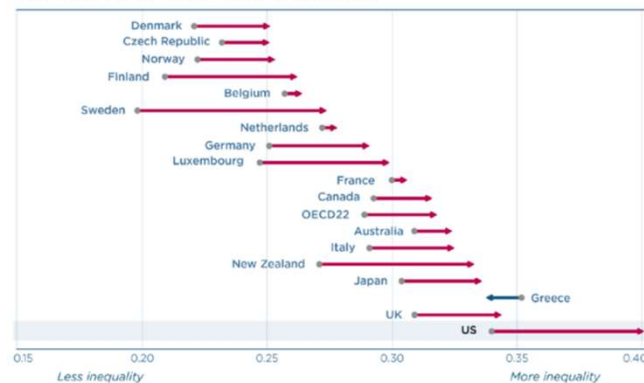
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Source: Arloc Sherman, Danilo Trisi, and Joseph Cureton, "A Guide to Statistics on Historical Trends in Income Inequality," Center on Budget and Policy Priorities, Policy Futures, Dec. 11, 2024.

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Increasing Inequality is Not Just US Phenomenon

Figure 1: Change in Gini coefficient, 1985 to 2013



Note: 1985 data refer to 1985 or closest available year. 2013 data refer to 2013 or nearest available year. The Gini coefficient measures how equally income is distributed across a population, from 0 (perfectly equal) to 1 (all income to one person).

Source: Organization for Economic Cooperation and Development (OECD), "In It Together: Why Less Inequality Benefits All."



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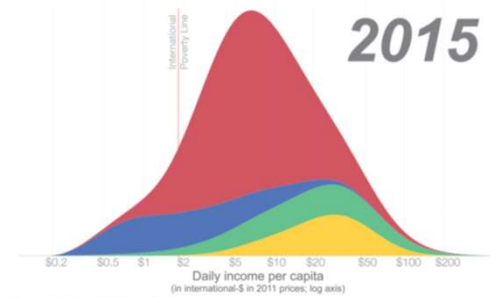
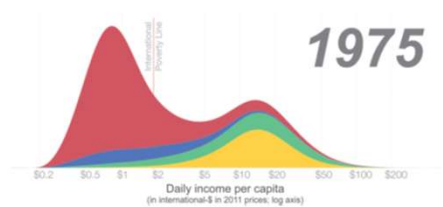
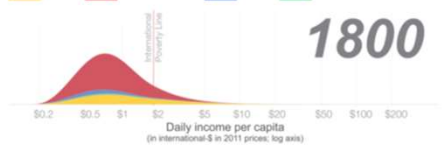
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But Global Inequality is Falling!

Global income distribution in 1800, 1975, and 2015 Our World in Data

Income is measured by adjusting for price changes over time (inflation) and for price differences between countries (purchasing power parity (PPP) adjustment). These estimates are based on reconstructed National Accounts and within-country inequality measures. Non-market income (e.g. through home production such as subsistence farming) is taken into account. The International Poverty Line is set by the United Nations and is the poverty line that defines extreme poverty.

Europe Asia and Pacific Africa North- and South America



Data source: Calculations by Our World in Data from Cambridge University. Research and data to make progress against the world's largest problems. Licensed under CC-BY by the author Max Roser.

Global inequality in 1800, 1975, and 2015²



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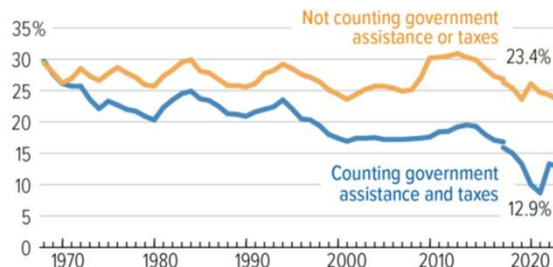
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"Inequality Doesn't Matter; Poverty Does" (?)

FIGURE 10

Economic Security Programs Largely Responsible for Decline in Poverty Since 1960s

Poverty rate



Note: Break in 2017 reflects the implementation of an updated processing system by the Census Bureau. Figures use Supplemental Poverty Measure (SPM) and 2023 poverty line adjusted for inflation.

Source: CBPP analysis of SPM data from Columbia Center on Poverty and Social Policy (before 2009) and U.S. Census Bureau (2009 and later)

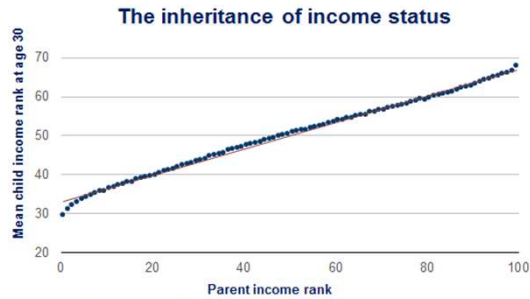


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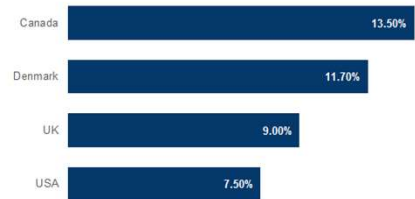
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“Inequality Doesn’t Matter with Intergenerational Mobility (Horatio Alger)” (?)



BROOKINGS

Relative mobility is almost twice as high in Canada



■ Probability that a child born to parents in the bottom fifth of the income distribution reaches the top fifth

Sources: Chetty et al., "Where is the land of opportunity? The geography of intergenerational mobility in the United States" (USA); Blanden and Machin, "Up and down the generational income ladder in Britain: Past changes and future prospects" (UK); Boserup, Kopczuk, and Kremer, "Intergenerational Wealth Mobility: Evidence from Danish Wealth Records of Three Generations" (Denmark); Corak and Heisz, "The intergenerational earnings and income mobility of Canadian men: Evidence from longitudinal tax data" (Canada)

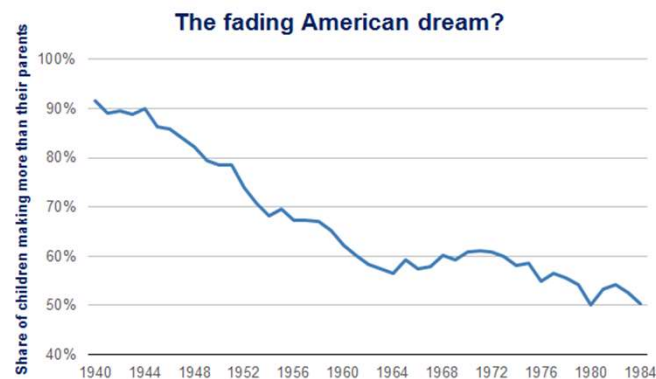
BROOKINGS



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Inequality Doesn't Matter because Children Are Better Off Than Their Parents (?)



Source: Chetty et al., "The fading American dream: Trends in absolute income mobility since 1940"

BROOKINGS



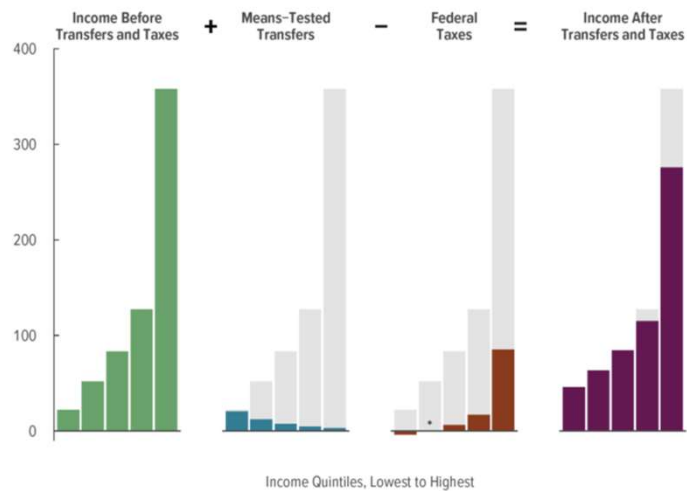
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Tax and Transfer Programs and Inequality

Average Real Income, Means-Tested Transfers, and Federal Taxes in 2020

Thousands of 2020 Dollars



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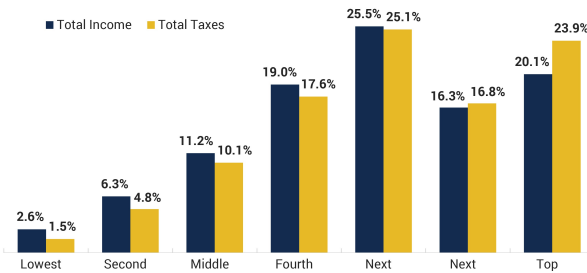
https://www.cbo.gov/system/files/2023-11/59509-household-income_2019-2020.pdf

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What about State Taxes?

FIGURE 1

Shares of Total Taxes Paid by Each Income Group
Compared to Shares of Total Income in 2024



Source: Institute on Taxation and Economic Policy (ITEP) Tax Model, April 2024

Institute on Taxation and Economic Policy | ITEP.org



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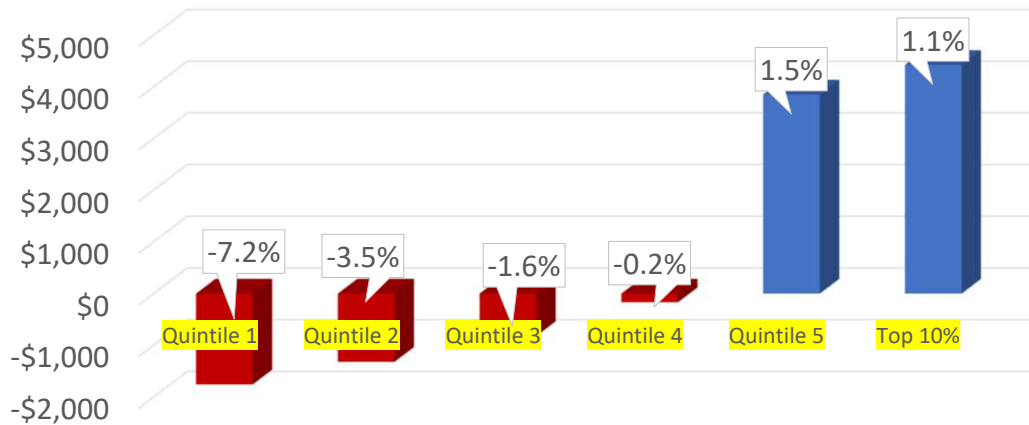
But, this analysis ignores transfers like Food stamp and Medicaid. Most recently, a more comprehensive analysis was done. No pretty pictures, but here is the conclusion:

“We...found that the federal tax and transfer system is progressive, while state systems are close to proportional, on average.”

<https://www.minneapolisfed.org/research/staff-reports/fiscal-progressivity-of-the-us-federal-and-state-governments>

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Big Beautiful Bill & Tariffs



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Source: <https://budgetlab.yale.edu/>

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Market Forces and Inequality

• Changing demand patterns

- Technology and “skill-biased technological change”
- Increased Trade and Globalization
- Industry composition
 - PCs instead of typewriters
 - Services instead of goods
 - Professional services instead of personal services

• Competition in labor markets

- Unionization
- Market concentration
- Immigration (?)



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Technological Change and Inequality

- **Much of the technology adopted in the last 30 years has eliminated low-skill or low-wage jobs.**
 - Computers, advanced manufacturing equipment, steel mini-mills, automation
- **Technological change may result in “winner take all” outcomes.**
 - This likely favors a small group of individuals.
 - But of course the relative winners can change rapidly.
- **Both aspects increase inequality by increasing the rewards to:**
 - Those with significant labor market skills and college degrees.
 - Owners over workers.
- **What will AI do to this story?**



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Globalization

- **What is globalization?**
 - Flow of goods, services, capital, and labor across international borders.
- **How does it affect inequality?**
 - Through a differential impact on low-skilled workers and hence their wages.
 - For the United States, globalization is thought to lower the wages of low skilled and hence low-wage workers relative to those of high-skilled workers.
 - But Globalization lifted 300 million Chinese out of poverty.



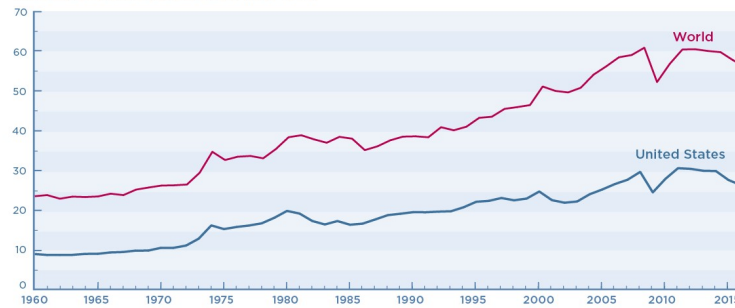
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History of Globalization

US trade grew to levels exceeding a third of its GDP. World trade volume now surpasses half of world GDP.

World and US trade as percent of GDP (1960–2016)



Sources: World Bank: World Bank DataBank and International Debt Statistics; International Monetary Fund: International Financial Statistics and Balance of Payments databases; GDP estimates from World Bank and Organization for Economic Cooperation and Development.

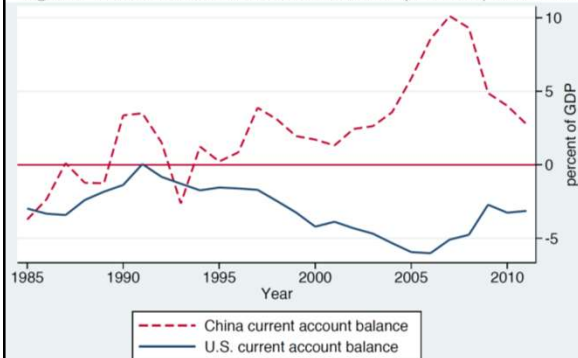


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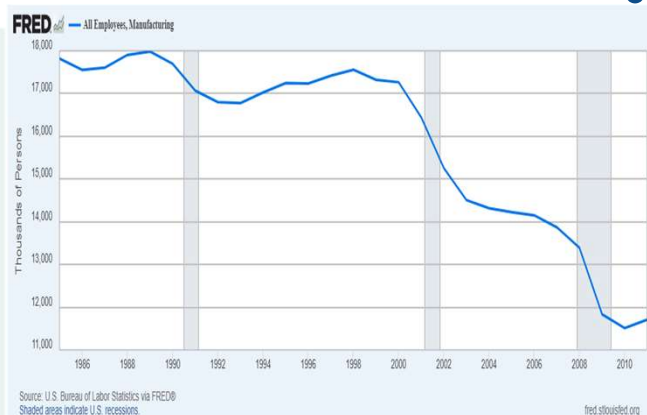
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The China Shock

Figure 5: U.S. and China Current Account Balances (% of GDP) 1985 - 2012



Source: World Development Indicators.



Source: U.S. Bureau of Labor Statistics via FRED®
Shaded areas indicate U.S. recessions.

fred.stlouisfed.org

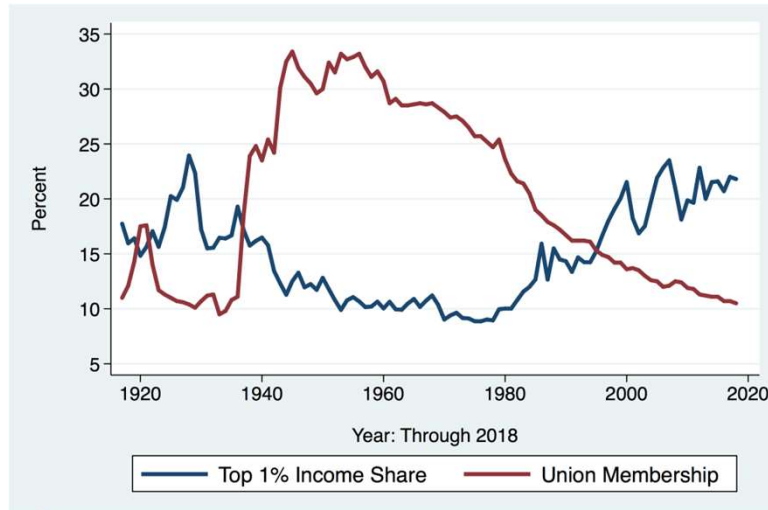
Reminder: China Joins WTO in December of 2001



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Declining Unionization



Unionization Rates

- **1983:** 20.1%
- **2022:** 10.1%

Unionization Rates

- **Public:** 33.1%
- **Private:** 6.0%



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Source: <https://inequality.org/facts/income-inequality/>, Bureau of Labor Statistics and Emmanuel Saez, University of California, Berkeley

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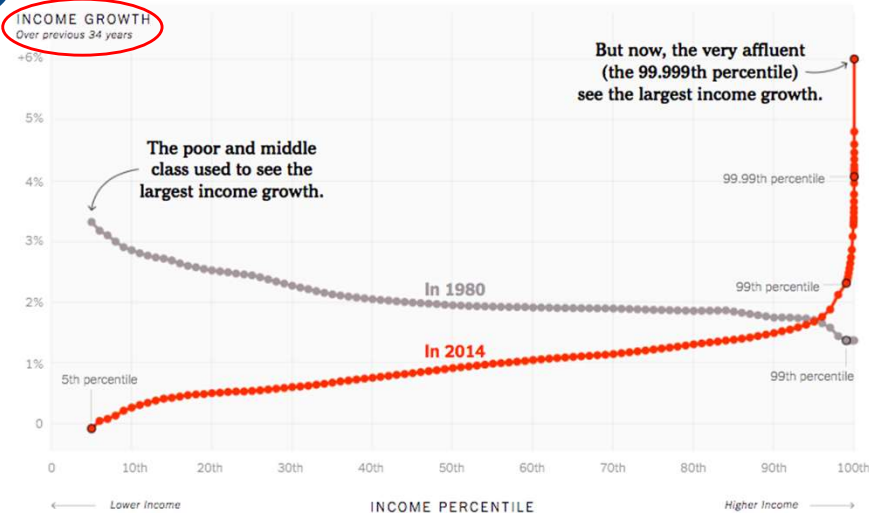
Why Does Inequality Matter?

- **Economic Reason:** too much inequality slows economic growth.
- **Ethical Reasons:** concern for our neighbors. (What makes a Good Society?)
- **Political Reasons:** political polarization leads to government paralysis and an inability to take needed action.



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How Has Income Inequality Changed?



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Source: <https://www.nytimes.com/interactive/2017/08/07/opinion/leonhardt-income-inequality.html>

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Average Income Growth by Generation

Generation	Bottom 50%	Middle 40%	Top 10%	Top 1%
Greatest (46-70)	2.85	2.57	2.03	1.27
Boomer (70-94)	0.15	1.20	1.86	2.28
Gen X (94-15)	0.61	0.93	1.94	2.56

Distributional National Accounts: Methods and Estimates for the United States (with T. Piketty and E. Saez, Accessed from: <https://gabriel-zucman.eu/usdina/> and my calculations.

Something changed in the nature of our economy and society somewhere at about the same time as the rise in inequality.



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New Inequality due to Meritocracy

• Greatest Generation and Meritocracy

1. GI Bill.
2. High-paying, unionized manufacturing jobs.

• Boomers

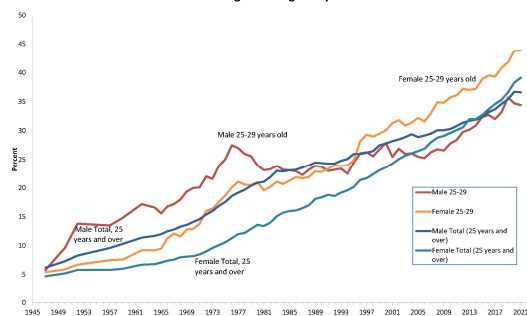
1. 1960s: SATs become more important and legacy status less for college.
2. Economy is more competitive which tended to lessen prejudices against Catholics and Jews.
3. Society is more “meritocratic?”
4. The rise of suburbs
 - a. Less socioeconomic and racial diversity.
 - b. Investments in high quality public schools.

• Gen X

1. Affluent, college educated boomers invest heavily in children’s education.
2. Globalization, automation and the related decline in unionization eliminates high-paying blue collar jobs.

The Continuing Importance of Education

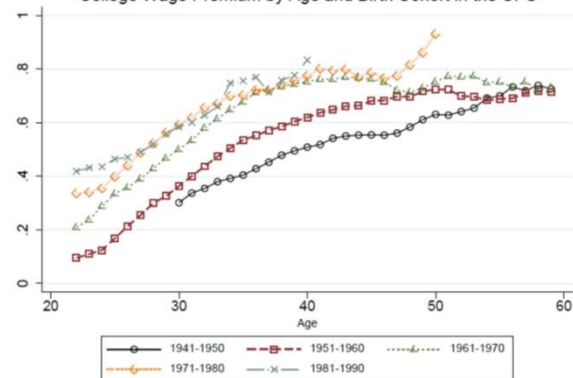
Figure 6: Percent of Population 25 Years and Over, and 25 to 29 Years Old, with Bachelor's Degree or Higher by Sex: 1947-2021



Sources: U.S. Census Bureau, 1947-1952 March Current Population Survey, 2003-2021 Annual Social and Economic Supplement to the Current Population Survey, 1980-2002 Census of Population. For more information on confidentiality protection, sampling error, nonsampling error, and definitions, see <https://www2.census.gov/programs-surveys/cps/cpsr/cpsr2012.pdf>.

United States
Census
Bureau

College Wage Premium by Age and Birth Cohort in the CPS



David Deming, “Why Do Wages Grow Faster for Educated Workers,” NBER Working Paper 31373, 6/23

Is it Still a “Meritocracy?”

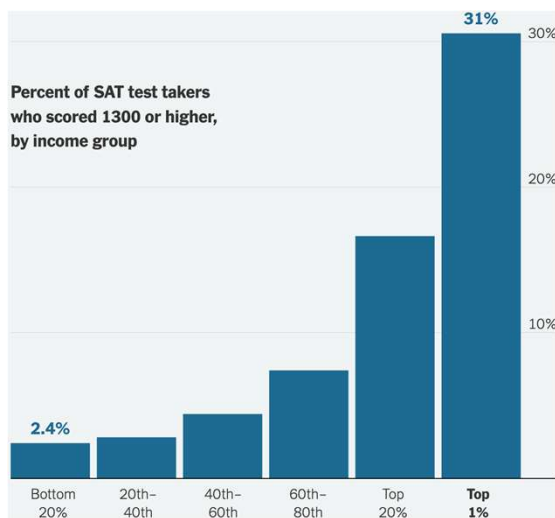
- The key question is whether there is equal opportunity for a college education.
- Without equal access, the meritocracy based on educational attainment becomes an aristocracy.



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To Emphasize Educational Access Issue



What do these numbers reflect?

It gets worse. With “All Students” instead of “test takers,” the bottom 20% scoring above 1300 falls to 0.6%

And worse(er?)...

Elite schools twice as likely to admit student from a high income family as a low to middle income family with the same test scores.

Higher admission rates for the high income is due to: 1) “Legacies; 2) higher “non-academic” rankings; 3) Athletic recruitment



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<https://www.nytimes.com/interactive/2023/10/23/upshot/sat-inequality.html>

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Reinstate the SAT!

• Don't Let the Bad be the Enemy of the Better!

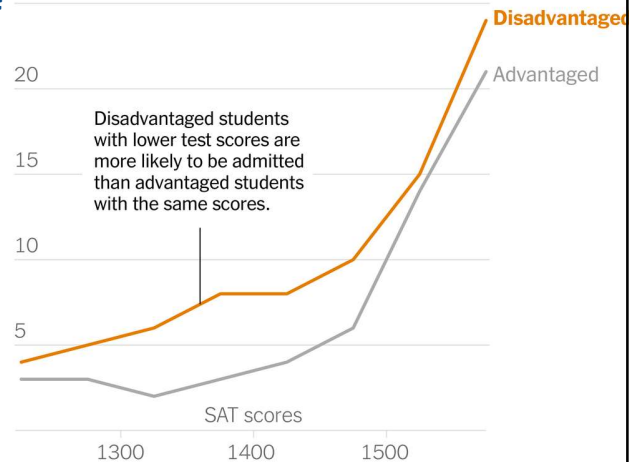
- Harvard
- Yale
- Dartmouth
- Brown
- Cornell
- Caltech
- Georgetown
- MIT
- Vanderbilt



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Share of students admitted to Dartmouth,
by test scores and student advantage

25% of students admitted



Our Imperfect Meritocracy Hurts Rich and Poor

- Poor are hurt because there is less equality of opportunity
- Poor are hurt because in a “meritocracy” your lack of success is due to your failings.
- Rich are hurt because they have to work harder to confirm their status.
- Rich are hurt because they make their children compete at an earlier age (Tiger Moms, SAT prep courses).
- We are all hurt because of the growing segregation between the rich and poor and increasing polarization



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What to do About Inequality?

- **Government policies to reduce material inequality:**

1. Greater Progressivity of Tax/Transfer System.
2. Fix Social Security and Medicare Funding, but **NOT** by raising age of eligibility. (<https://www.brookings.edu/articles/fixing-social-security-blueprint-for-a-bipartisan-solution/>)
3. Tax capital gains at death.
4. Encourage re-unionization of industry. (?)
5. Put limits on low-skilled immigration. (?)
6. Raise Minimum Wage (?)
7. Industrial policies to provide meaningful work for non-BAs. (?)



What To Do about the “New Inequality”

1. Research shows that high-quality birth-to-five programs for disadvantaged children can deliver a 13% return on the investment. (James Heckman)
2. Somehow improve public schools.
3. Encourage students from low-income families to apply to quality colleges (Carolyn Hoxby)
4. Encourage colleges to practice affirmative action based on socioeconomic status (William Bowen).
5. Invest in community colleges.
6. Reinstitute National Service to lessen socioeconomic and racial segregation. (?)



A Bigger Thinker: Michael Sandel

1. Reducing material inequality is insufficient; we need to raise social recognition and esteem for all people.
2. “Broad democratic equality of condition,” that goes beyond equal opportunity.
3. Renewing the dignity of work.
4. Rethinking merit: educating the elite about the role of luck and family background.
5. Ongoing public discussion about moral questions.
6. Promote solidarity and a shared vision; e.g., how should we regulate AI?



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Readings on the New Inequality

<https://sites.google.com/view/macro-current-issues/new-inequality>



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Next Week: Immigration

	<u>Native Born</u>	<u>Lat. Amer. Born</u>
Labor Force	130 Mil.	13 Mil
< H.S. Educ	5.8%	37.1.%
Poor English	1.9%	77%
Employed	59.2%	64.9%
Unemployed	3.0%	3.5%
Med. Wk. Earn	\$1,087	\$758
Poverty Rate	13%	17%

Let's Hear from You!

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My Google site:

<https://sites.google.com/view/macro-current-issues/new-inequality>

Contact NEED: Info@NEEDEcon.org