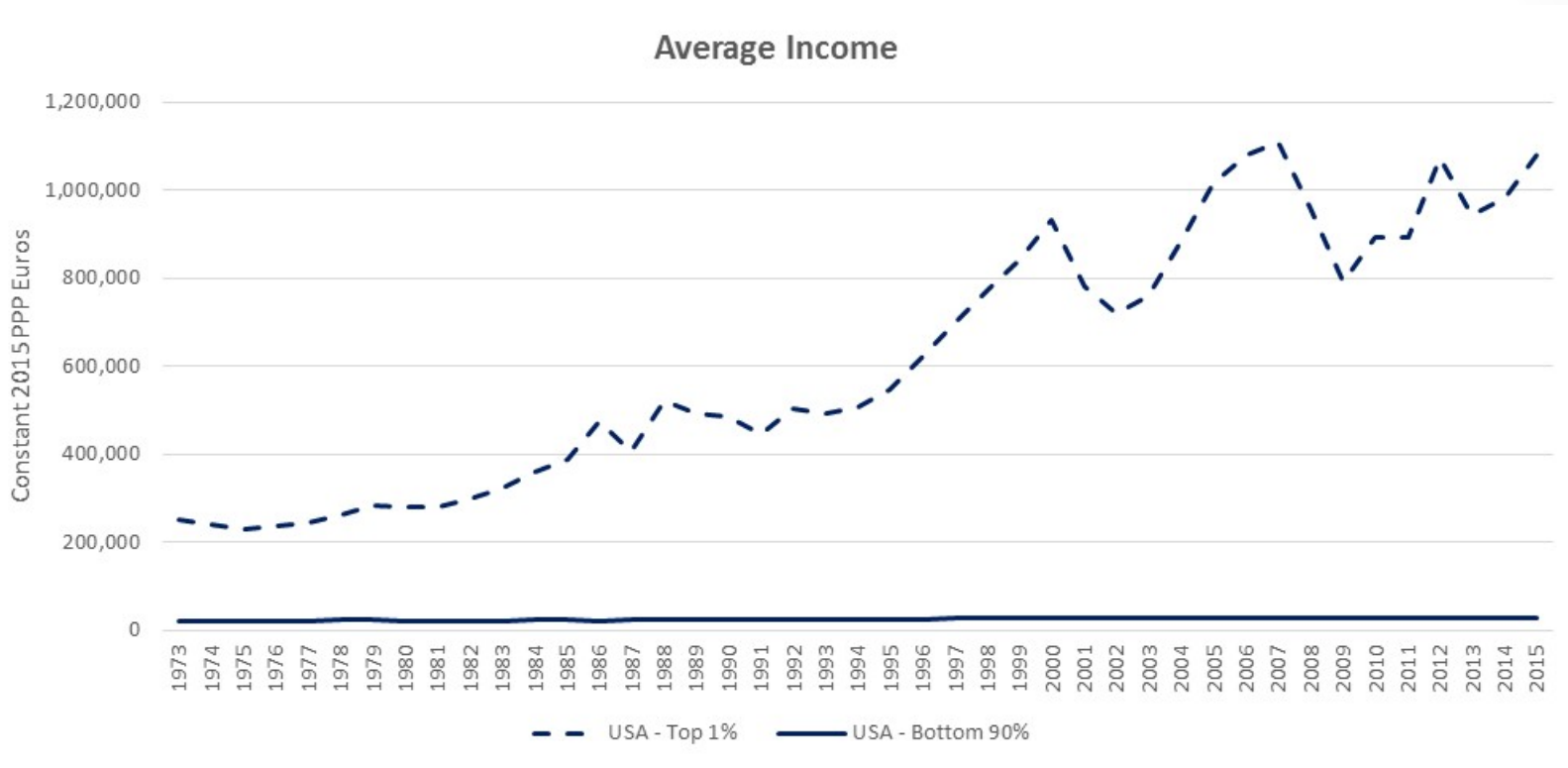


Undermining Our Future: Why Inequality is Rising and How It Threatens Health

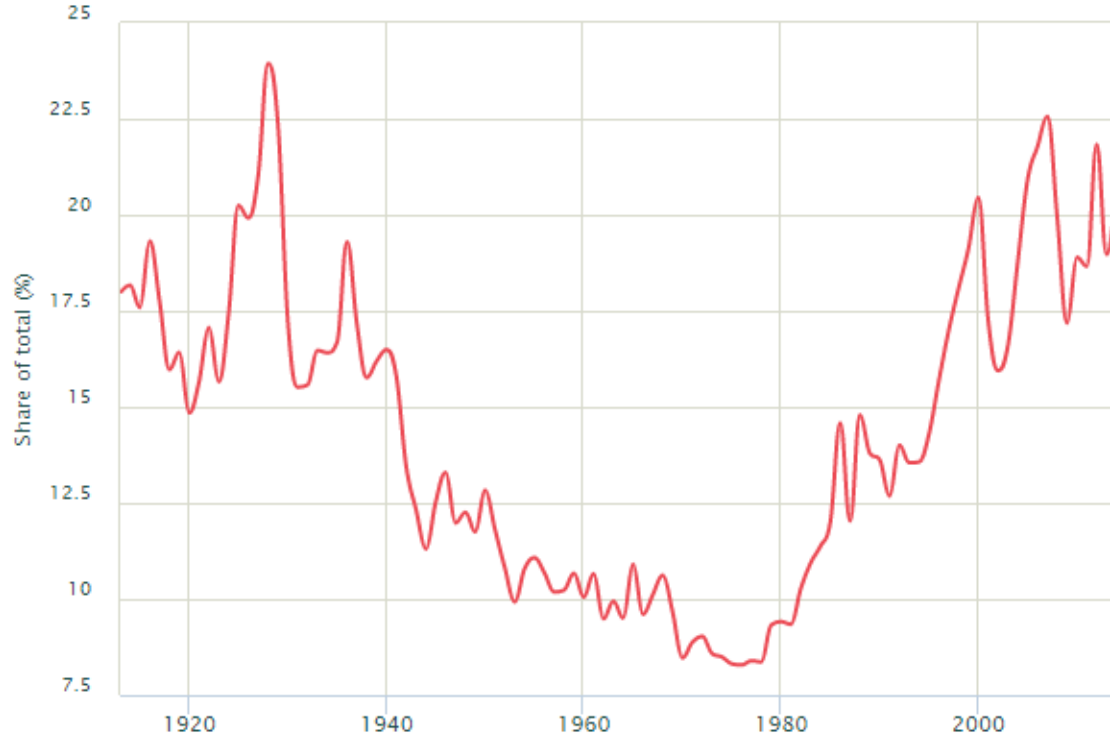
Joseph E. Stiglitz
Mount Sinai
February 2, 2018

US: bottom 90% have seen little increase in income over last third of a century



Source: World Wealth and Income Database

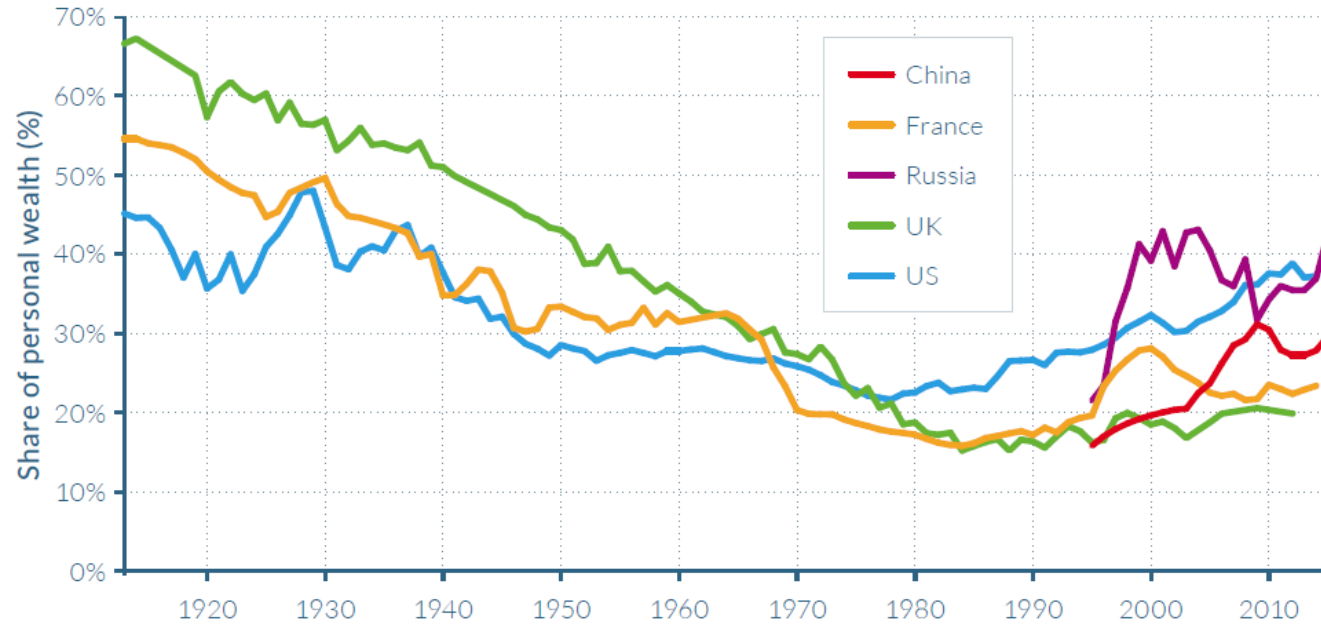
Top 1% income share in the United States 1913-2015



Note: Fiscal income is defined as the sum of all income items reported on income tax returns, before any deduction. It includes labour income, capital income and mixed income. The concept of fiscal income varies with national tax legislations, so in order to make international comparisons it is preferable to use the concept of national income. The population is comprised of individuals over age 20. The base unit is the individual (rather than the household) but resources are split equally within couples.

Source: World Wealth and Income Database.

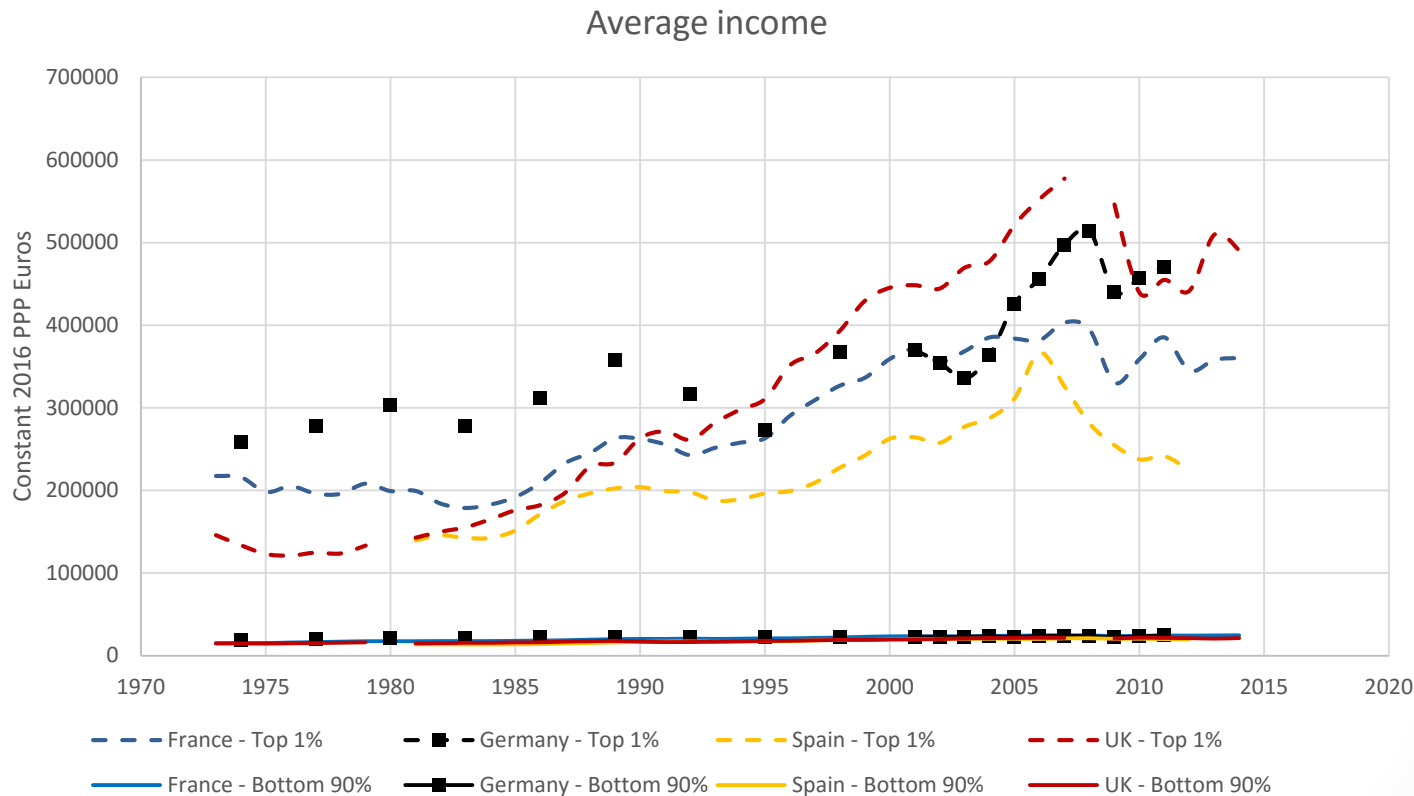
Top 1% wealth shares across the world, 1913–2015: the fall and rise of personal wealth inequality



Source: WID.world (2017). See [wir2018.wid.world](#) for data series and notes.

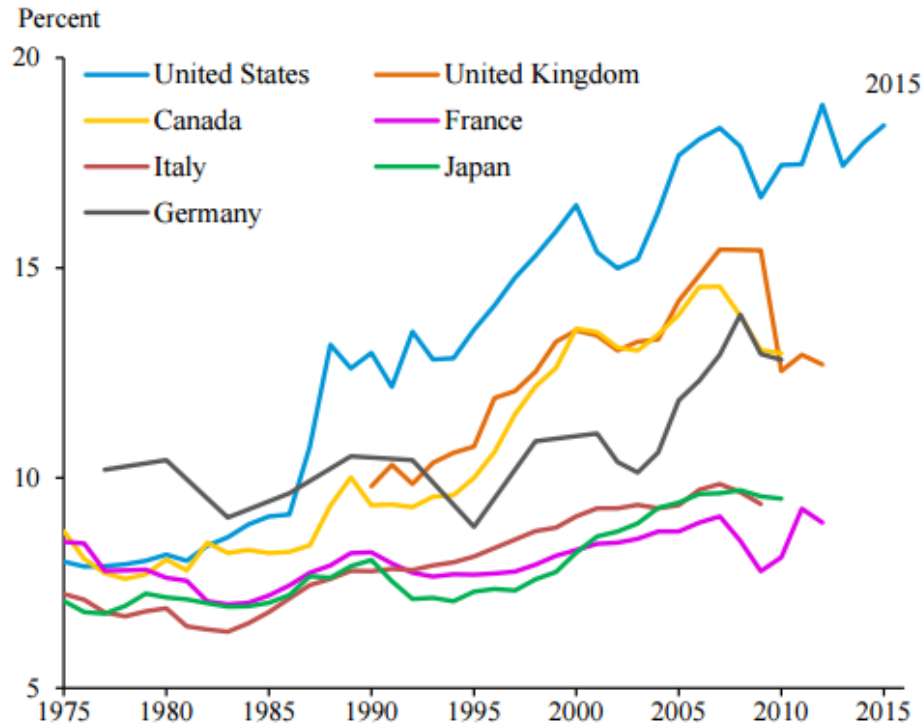
In 2015, the Top 1% wealth share was 43% in Russia against 22% in 1995.

Europe: less increase in inequality in some countries than in others



Source: World Wealth and Income Database.

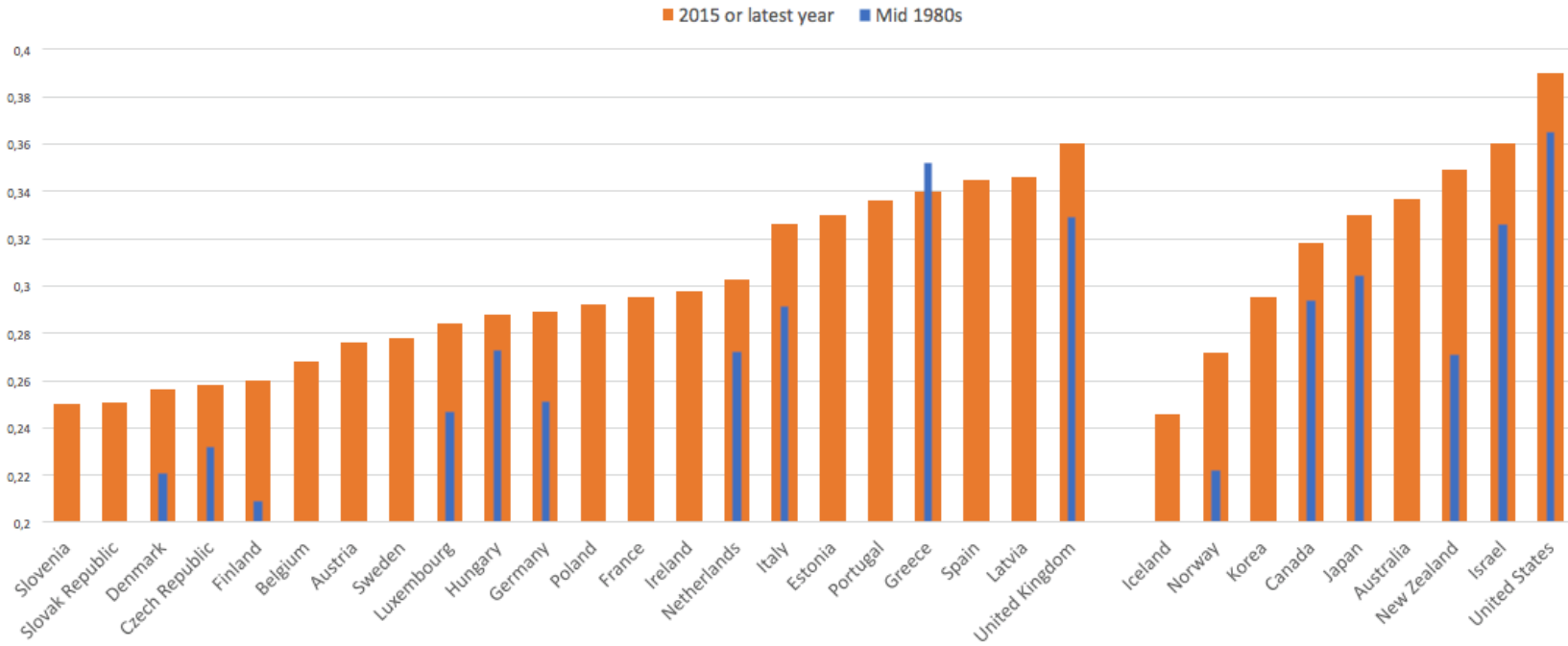
Global Inequality: Share of Income Earned by Top 1%, 1975-2015



Source: World Wealth and Income Database.

Chart from: US Economic Report of the President, January 2017.

Gini Coefficient of disposable income in 2015 (or latest year) and mid-1980s (when available)



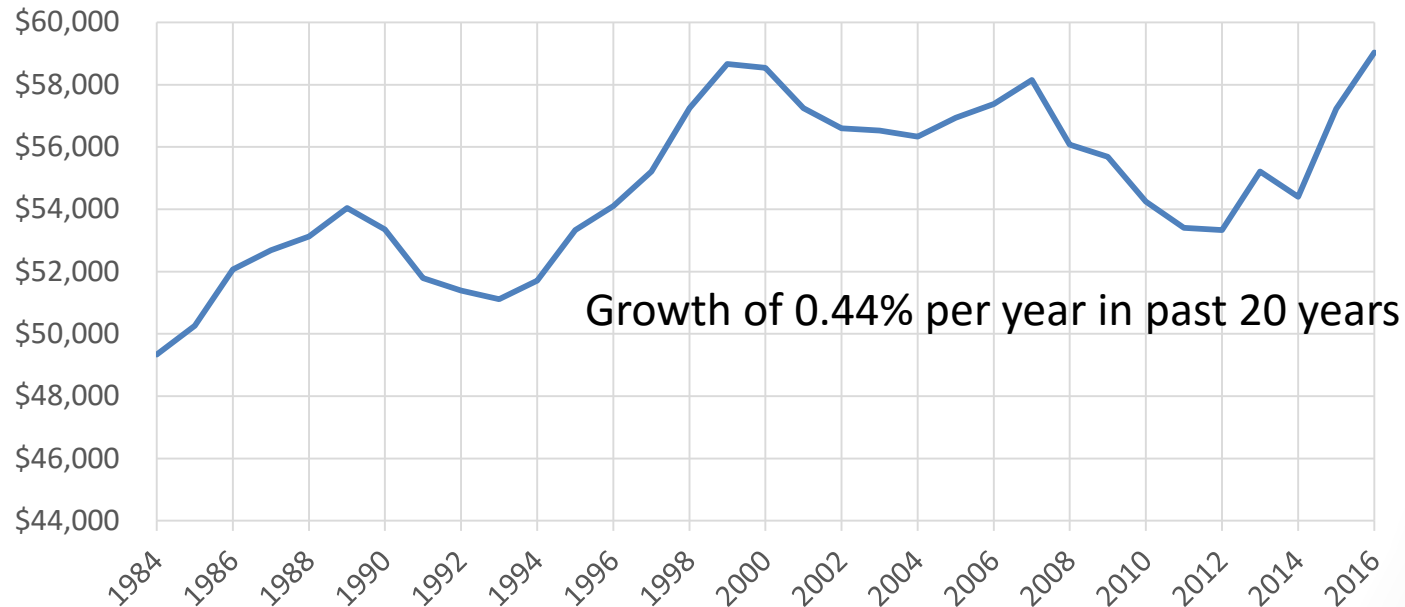
Stagnation: U.S. median household income

(constant 2016 US\$)

1996:
\$54,105

2016:
\$59,039

Median Household Income in the US

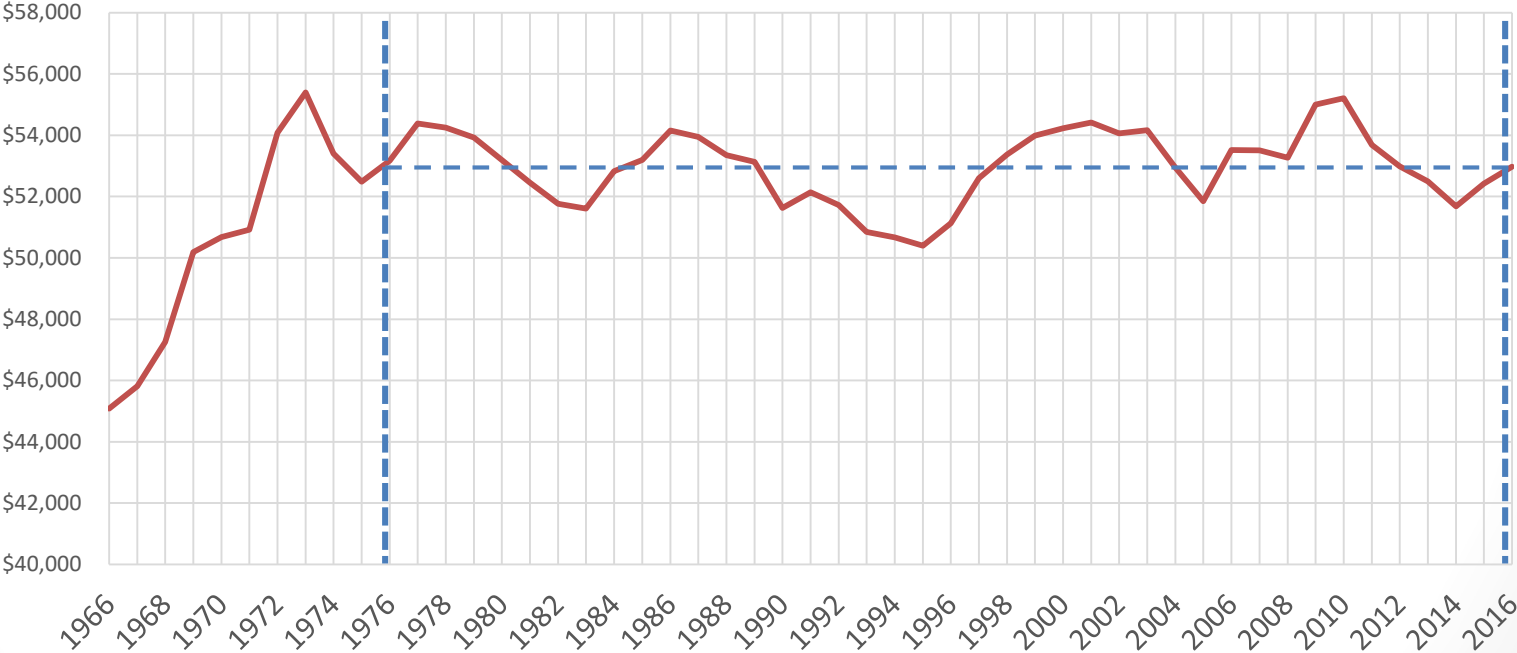


Source: U.S. Census Bureau

Note: Data is adjusted for the methodological change of 2013.

US: Median income of a full time male worker is at the level that it was more than 4 decades ago

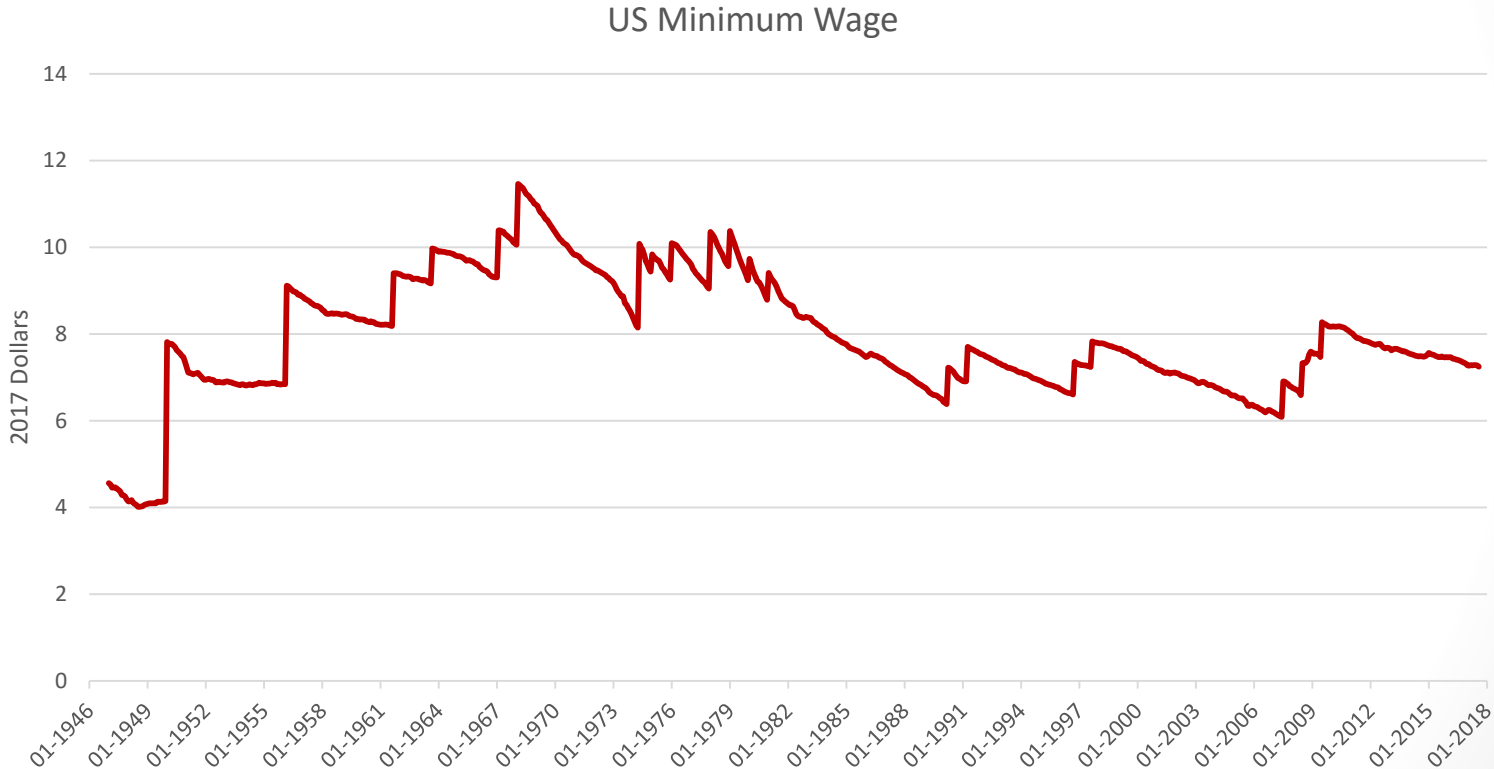
(constant 2016 \$)



Note: Data is adjusted for the methodological change of 2013.

Source: U.S. Census Bureau.

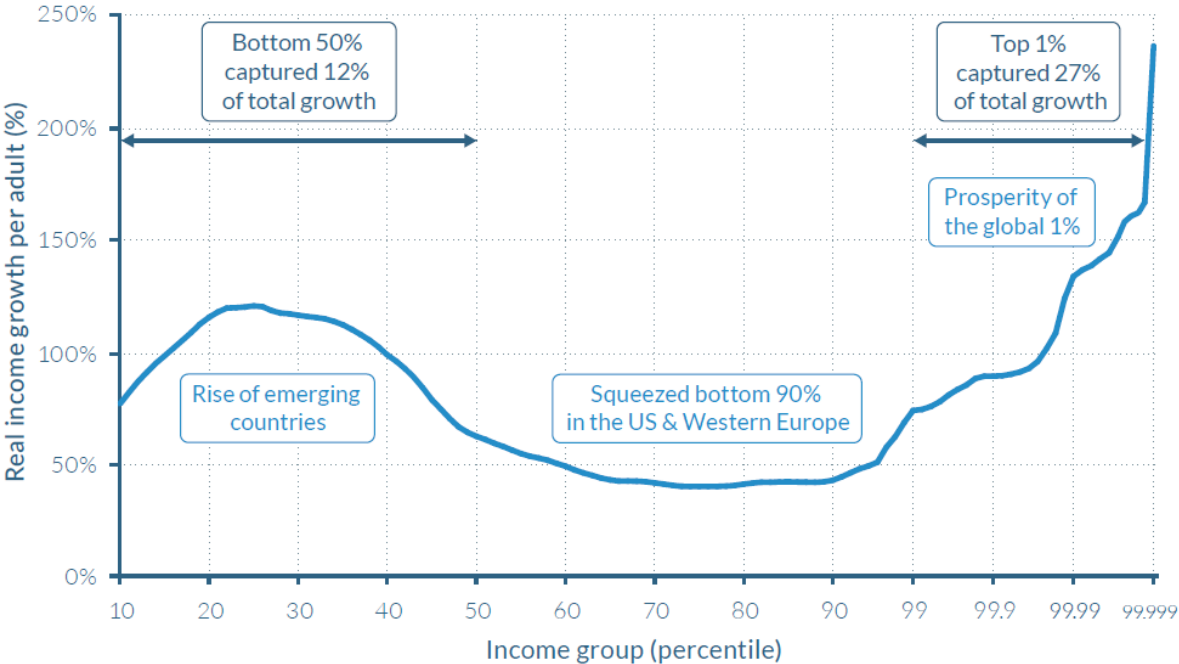
US: Real wages at the bottom are at the level that they were roughly sixty years ago



Source: Federal Reserve

Global Income Growth by Percentile

The elephant curve of global inequality and growth, 1980–2016

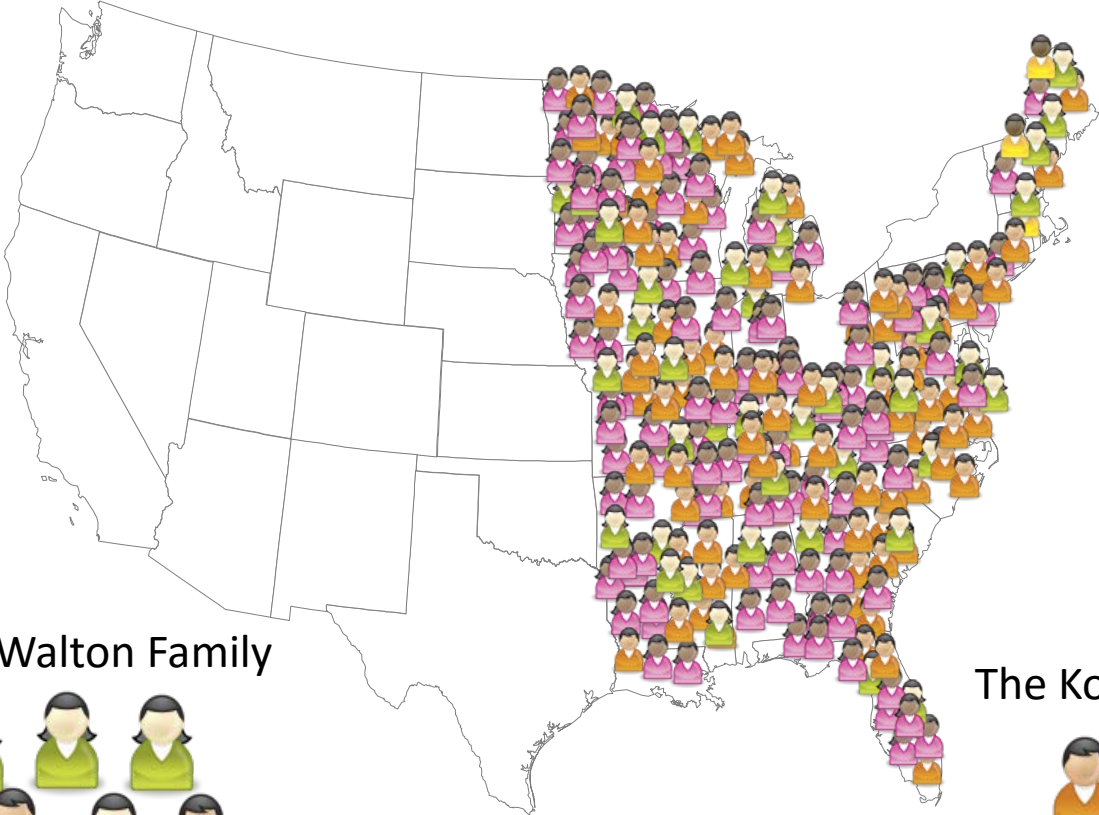


Source: WID.world (2017). See [wir2018.wid.world](#) for more details.

On the horizontal axis, the world population is divided into a hundred groups of equal population size and sorted in ascending order from left to right, according to each group's income level. The Top 1% group is divided into ten groups, the richest of these groups is also divided into ten groups, and the very top group is again divided into ten groups of equal population size. The vertical axis shows the total income growth of an average individual in each group between 1980 and 2016. For percentile group p99p99.1 (the poorest 10% among the world's richest 1%), growth was 74% between 1980 and 2016. The Top 1% captured 27% of total growth over this period. Income estimates account for differences in the cost of living between countries. Values are net of inflation.

The Walton Family and The Koch Brothers have a net worth of \$212 billion in 2016

That's the net worth of 115 million Americans or 35% of the country.



The Walton Family



The Koch Brothers



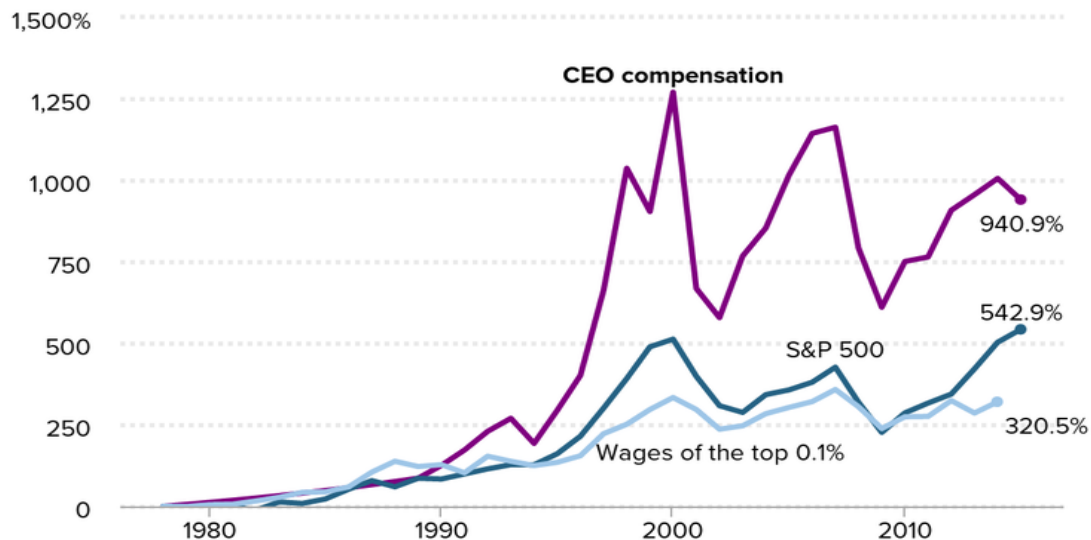
Global Inequality

- Oxfam reports on wealth concentration at the top: how many of the richest people have as much wealth as bottom 50% (3.8 billion people!)
 - In 2010: 388
 - In 2017: just 42
- 82% of all growth in global wealth in 2016 went to the top 1%, while the bottom half saw no increase at all.
- The richest 1% continue to own more wealth than the whole rest of humanity.
- Big winners during last quarter century: global 1% and global middle class (middle class in China and India)
- Big losers during last quarter century (not sharing in gains): those at the bottom and the middle class in advanced countries

Inequality even at the top 0.1%

CEO compensation has grown faster than the wages of the top 0.1 percent and the stock market

Cumulative percentage change in CEO compensation, wages of the top 0.1 percent, and the S&P 500, 1978–2015



Notes: Wage data for the top 0.1 percent is not yet available for 2015.

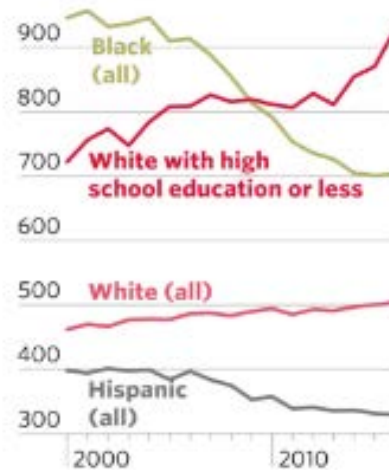
Source: EPI analysis of Compustat Execucomp, Social Security Administration, and Federal Reserve Bank of St. Louis databases.

Decline in life expectancies and an increase in deaths of despair

New research shows the increasing mortality rate among white Americans spans age groups and is most acute among the less-educated.

White deaths are rising...

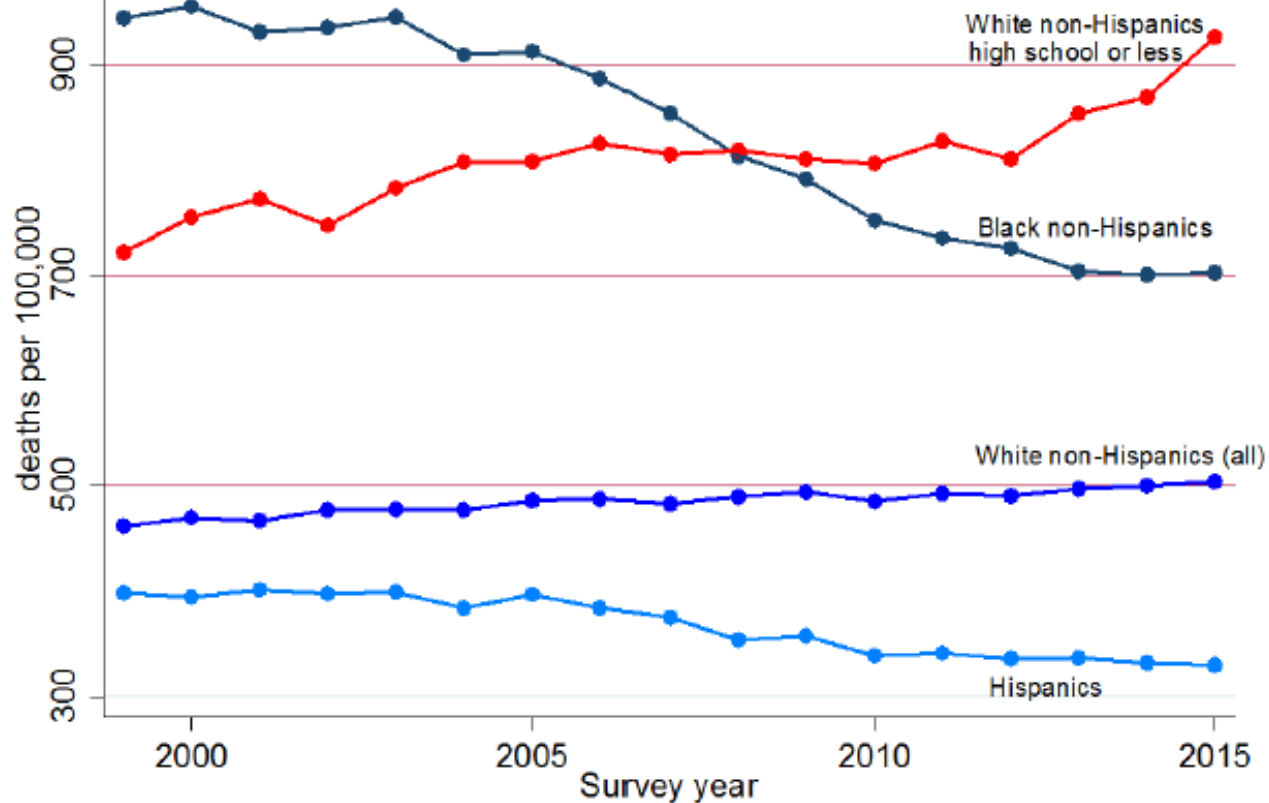
Mortality rate by race, ages 50-54



Mortality rate=deaths per 100,000

Anne Case and Angus Deaton of Princeton University

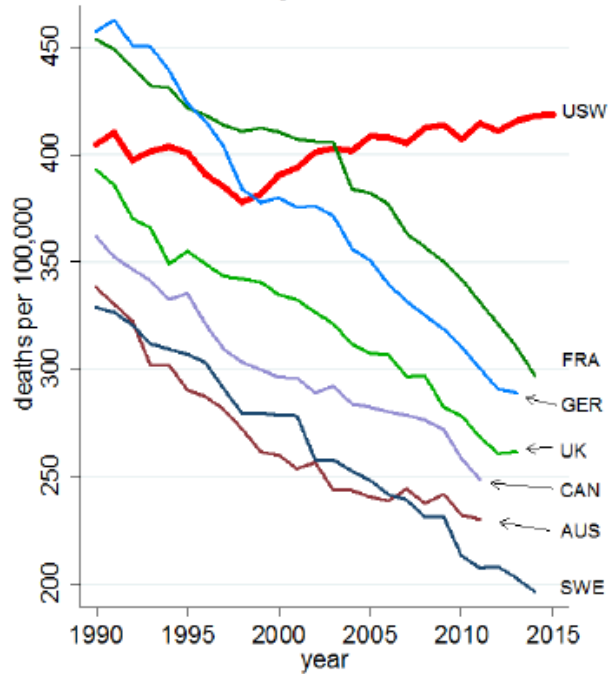
Figure 1.1 All-cause mortality by race and ethnicity, ages 50-54



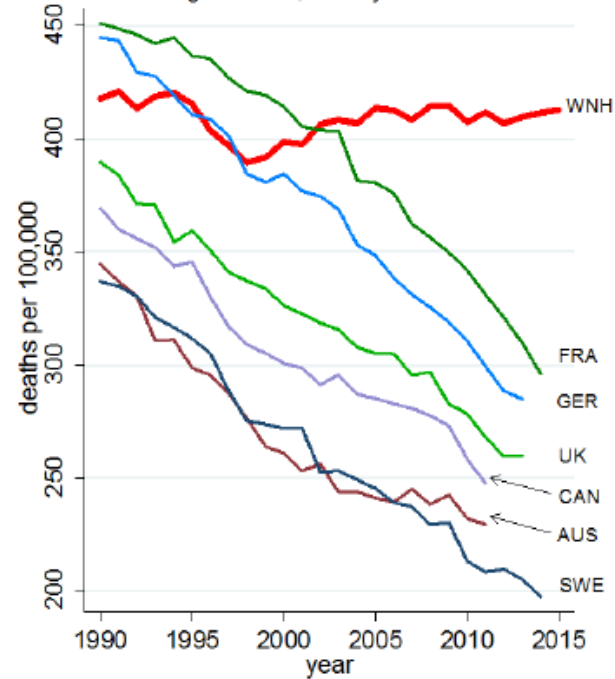
Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

Figure 1.3

All-cause mortality rates
ages 45-54



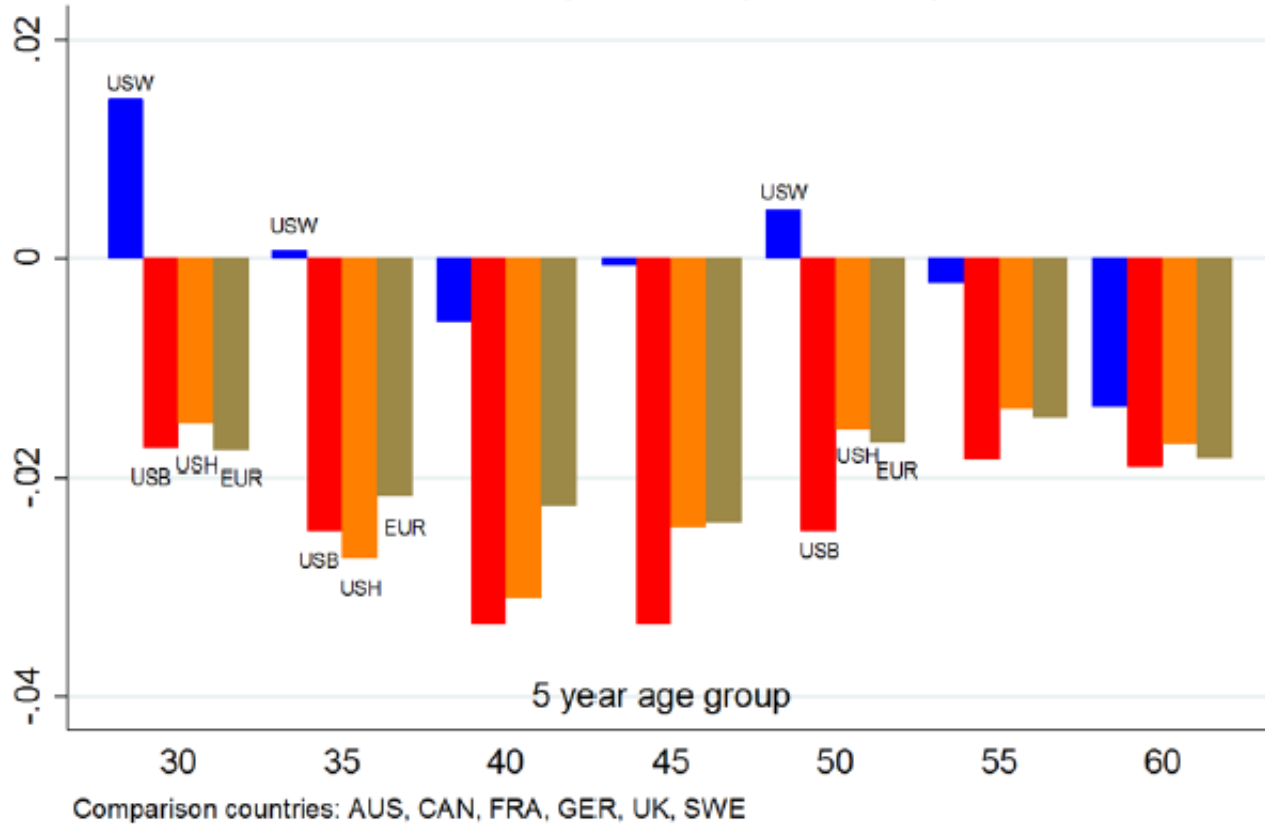
Age-adjusted mortality rates
ages 45-54, base year=2010



Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

Figure 1.4 Mortality trends 2000-2014 by five-year age group

US white- and black-non-Hispanics, US Hispanics and comparison countries



Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

Figure 1.9 All-cause mortality, white non-Hispanics, ages 45-54

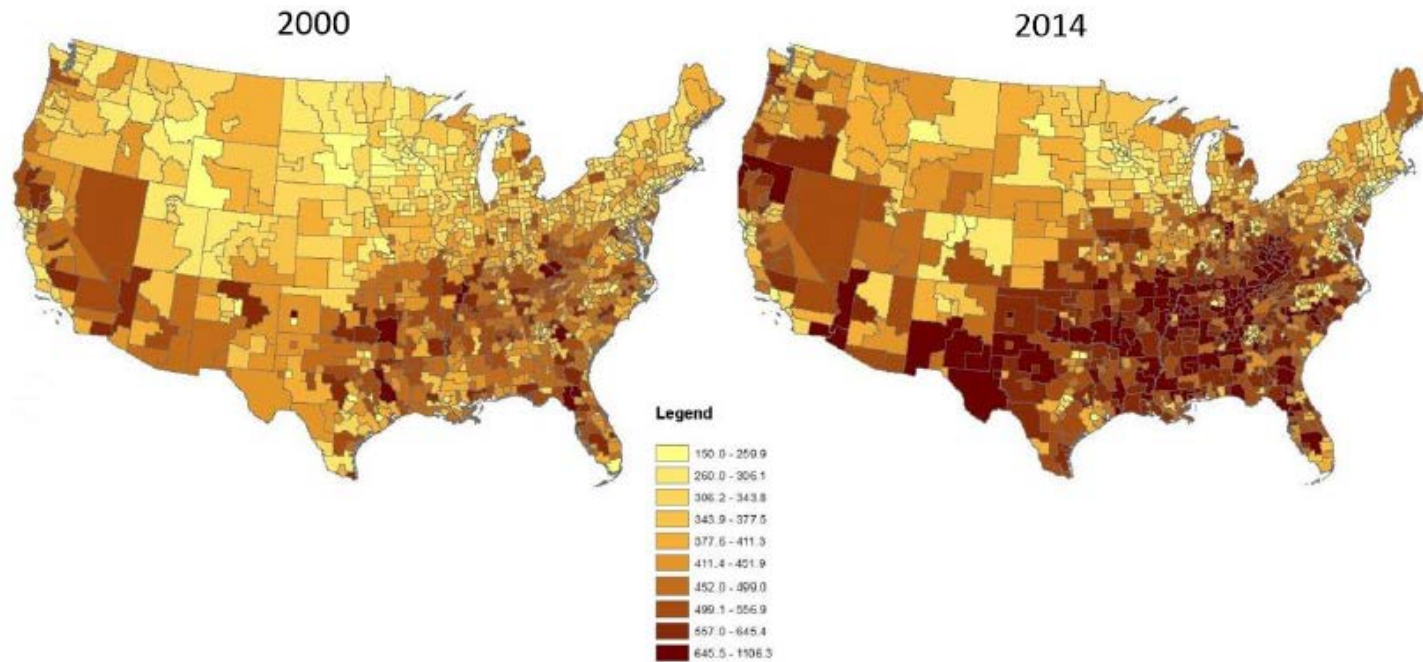
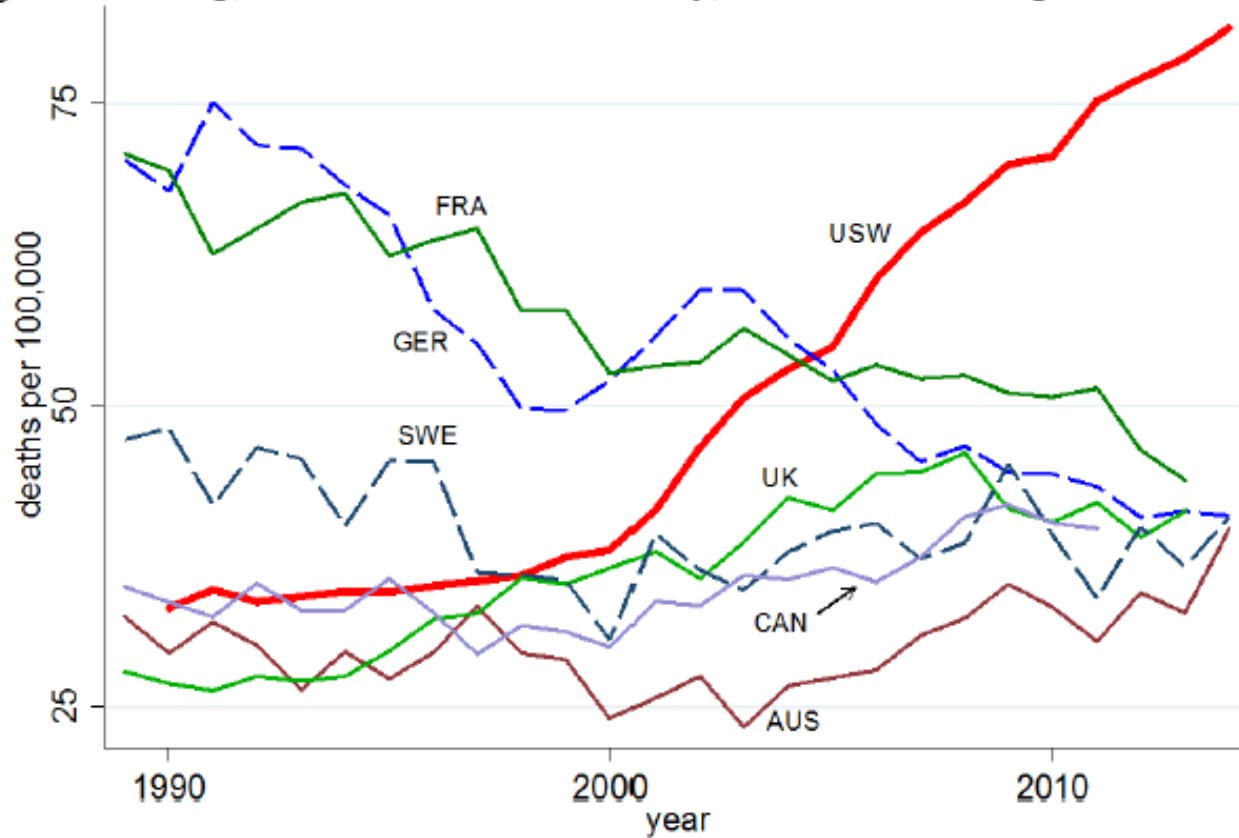
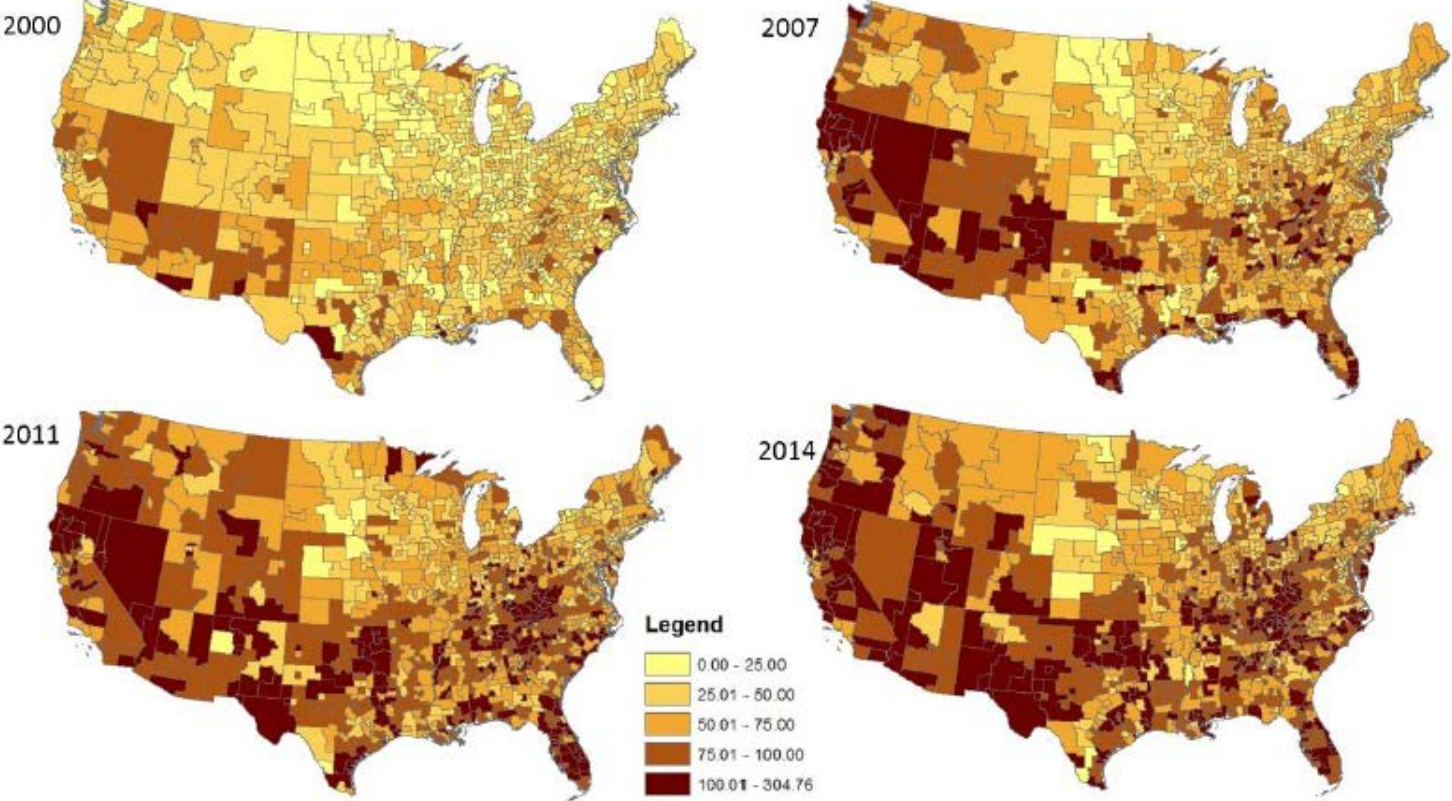


Figure 1.5 Drug, alcohol and suicide mortality, men and women ages 50-54



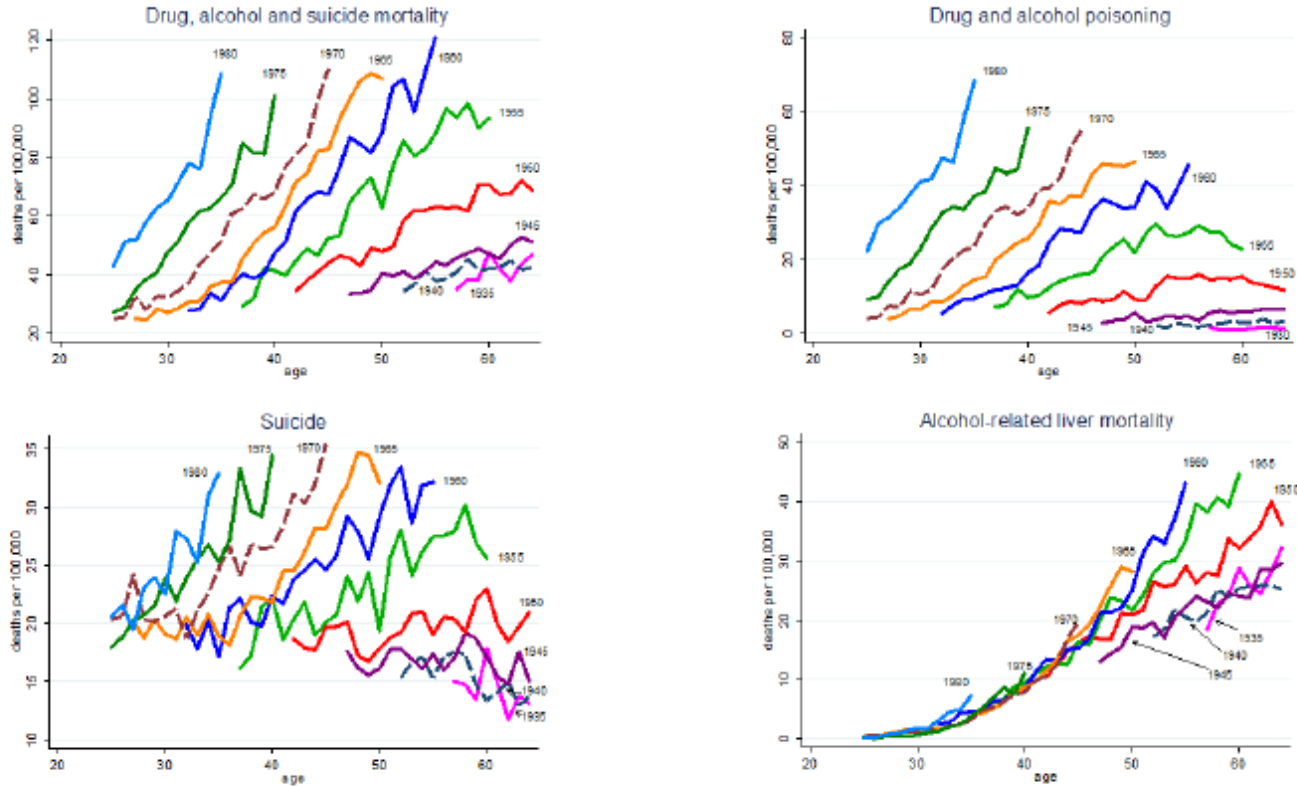
Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

Figure 1.6 Drug, alcohol and suicide mortality, white non-Hispanics ages 45-54



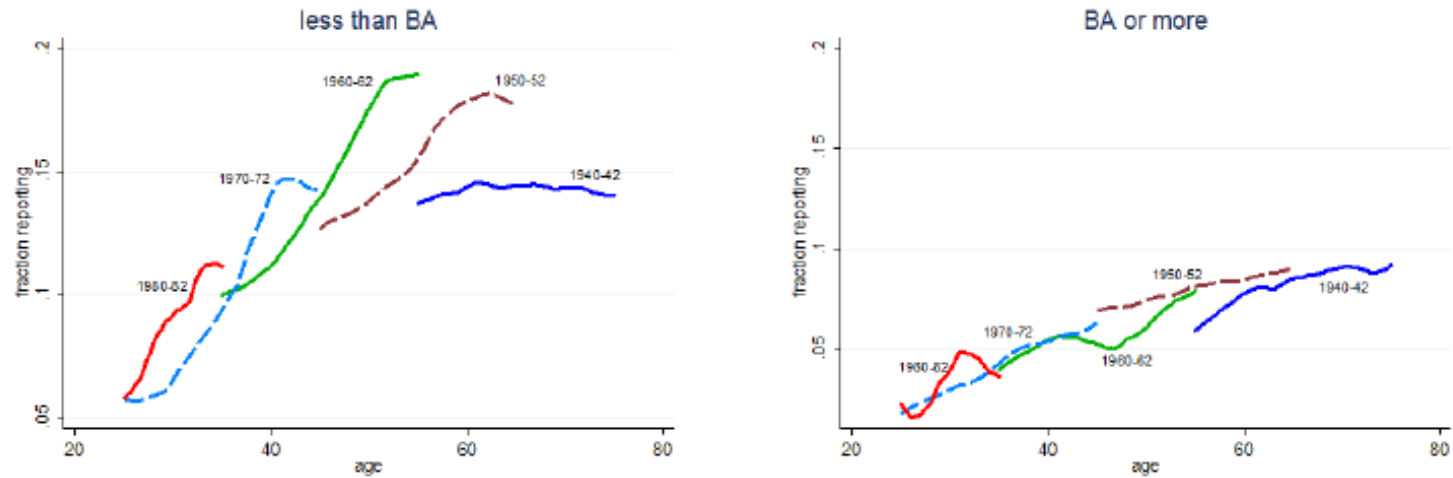
Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

Figure 1.7 Drug, alcohol and suicide mortality by birth cohort, white non-Hispanics, less than BA



Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

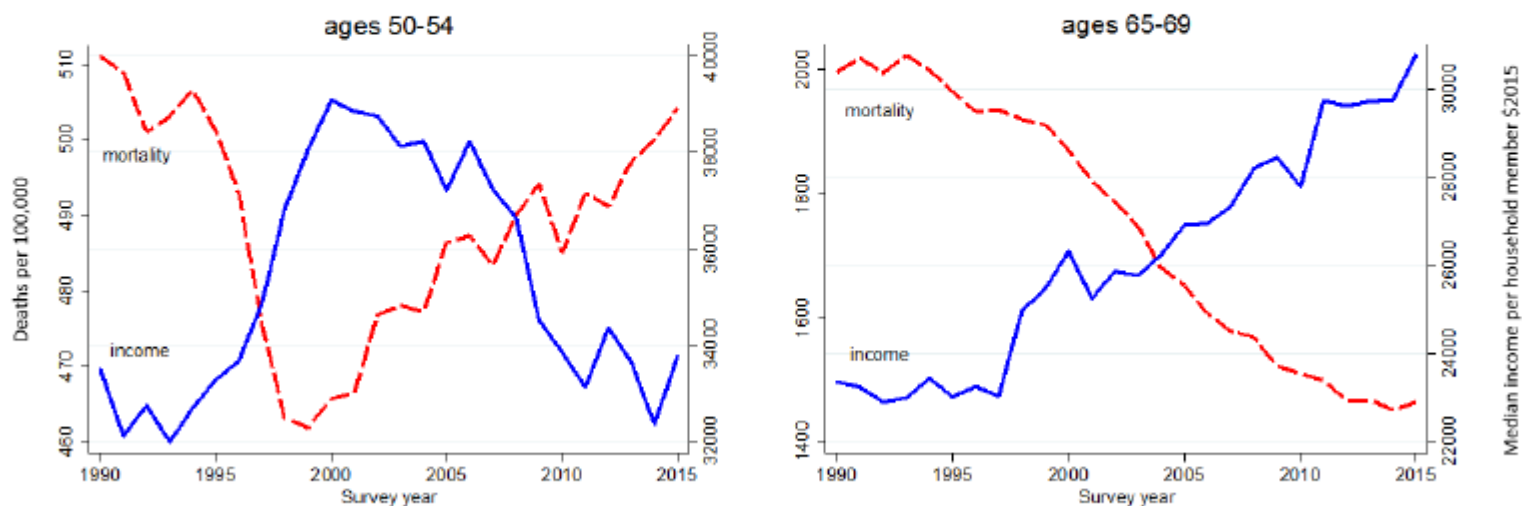
Figure 1.13 Fraction reporting sciatic pain, white non-Hispanics by birth year and education class



Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

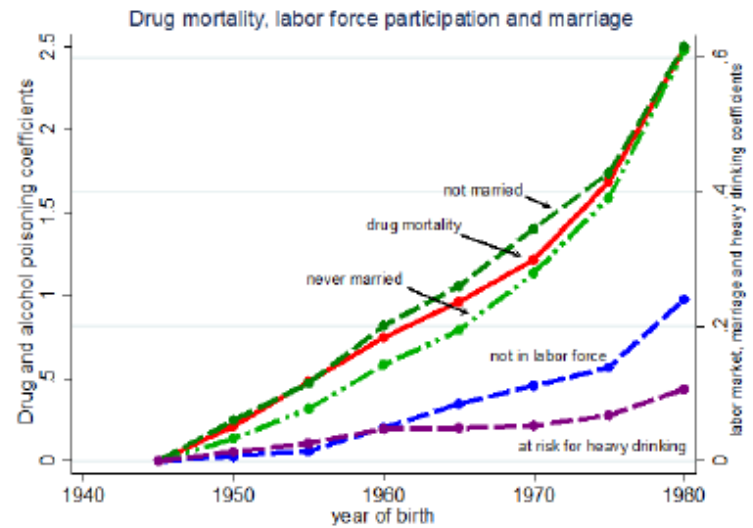
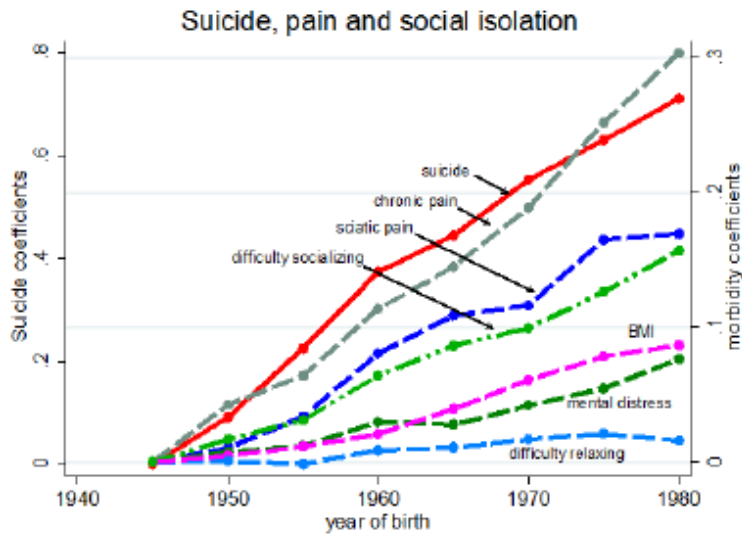
Figure 2.1

Median household income per member and all-cause mortality, white non-Hispanics by age group



Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

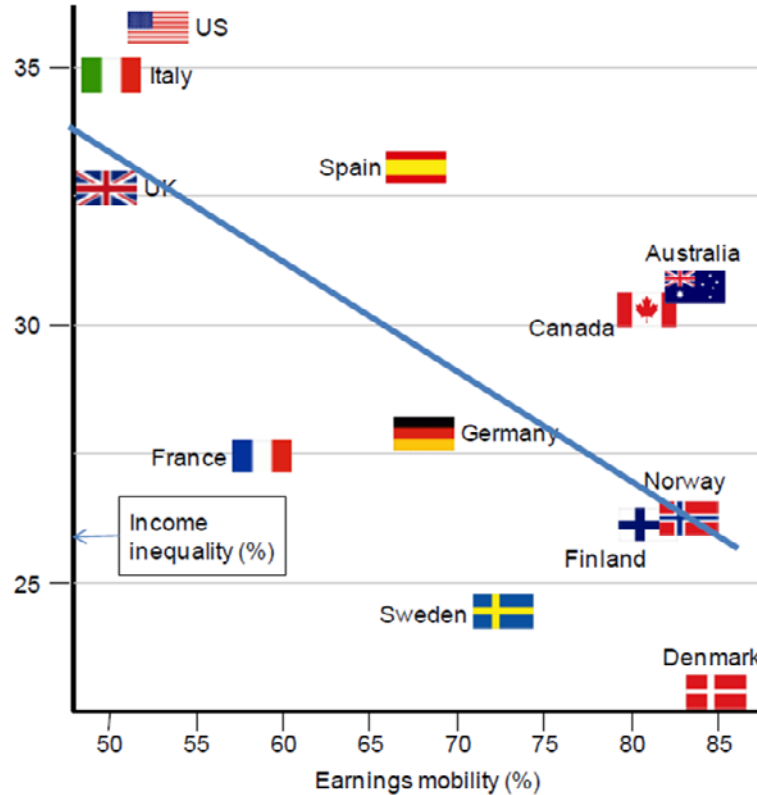
Figure 3.3 Estimates of cumulative deprivation, white non-Hispanics ages 25-64, less than BA



Source: "Mortality and Morbidity in the 21st Century", Anne Case and Angus Deaton, Brookings Papers on Economic Activity, March 17, 2017.

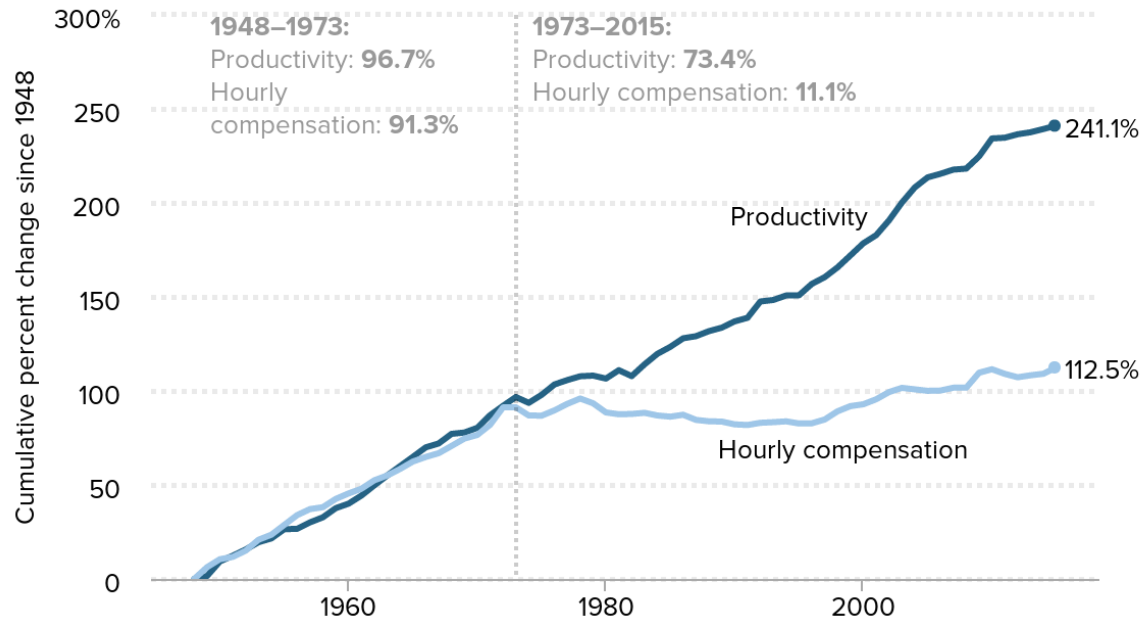
Income inequality and earnings mobility

Income inequality
(from LIS)



Source: Janet Gornick; OECD 2008. *Growing Unequal: Income Distribution and Poverty in OECD Countries*. Paris: OECD.

US: Disconnect Between Productivity and a Typical Worker's Compensation, 1948-2015

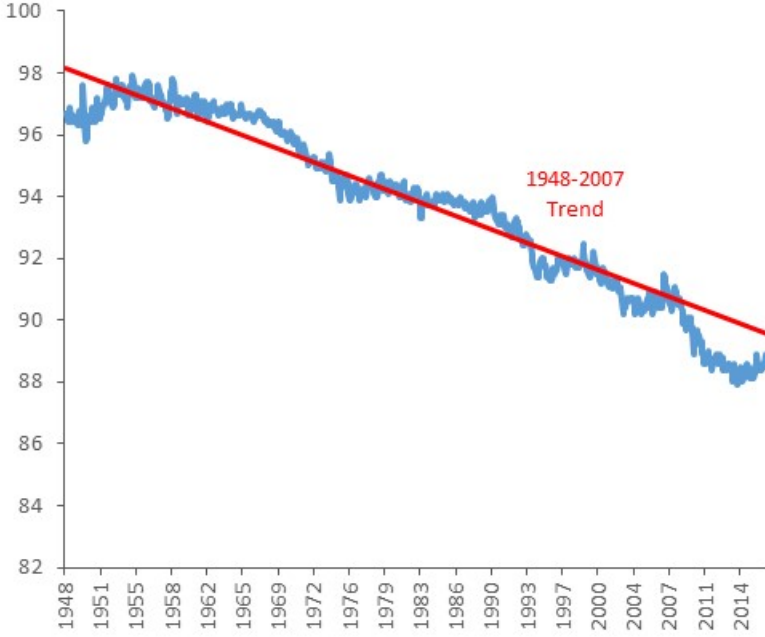


Note: Data are for average hourly compensation of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services minus depreciation per hour worked.

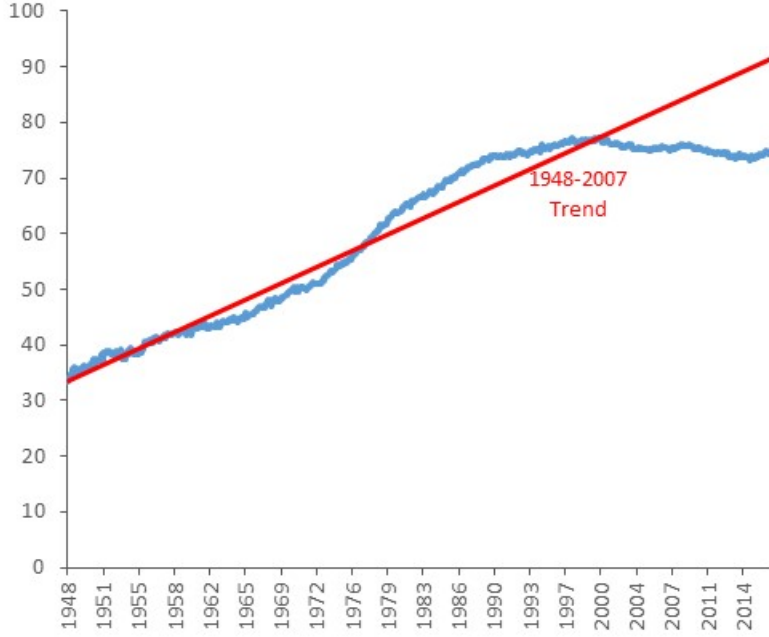
Source: EPI analysis of data from the BEA and BLS (see technical appendix of *Understanding the Historic Divergence Between Productivity and a Typical Worker's Pay* for more detailed information)

US: Labor Force Participation Rates

Prime-Age Male Labor Force Participation Rate, 1948-2017



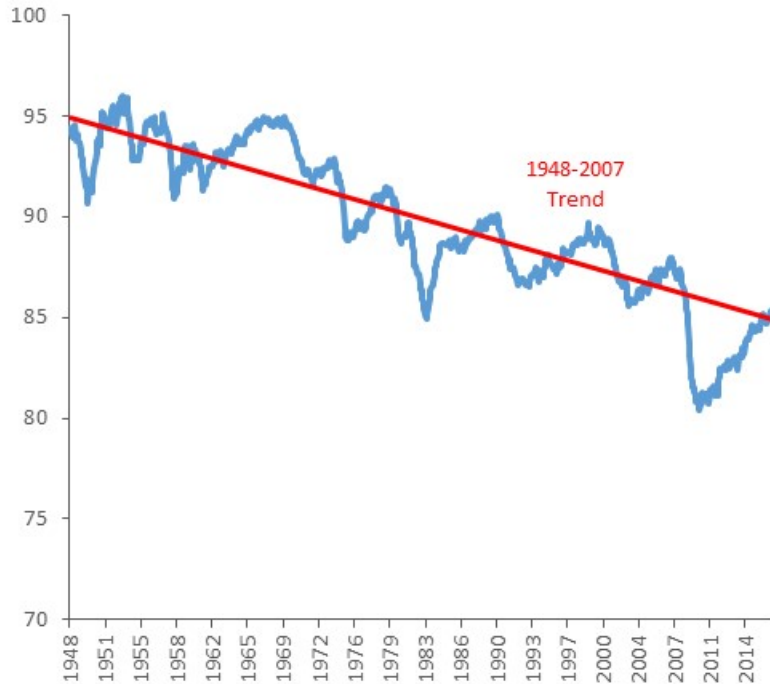
Prime-Age Female Labor Force Participation Rate, 1948-2017



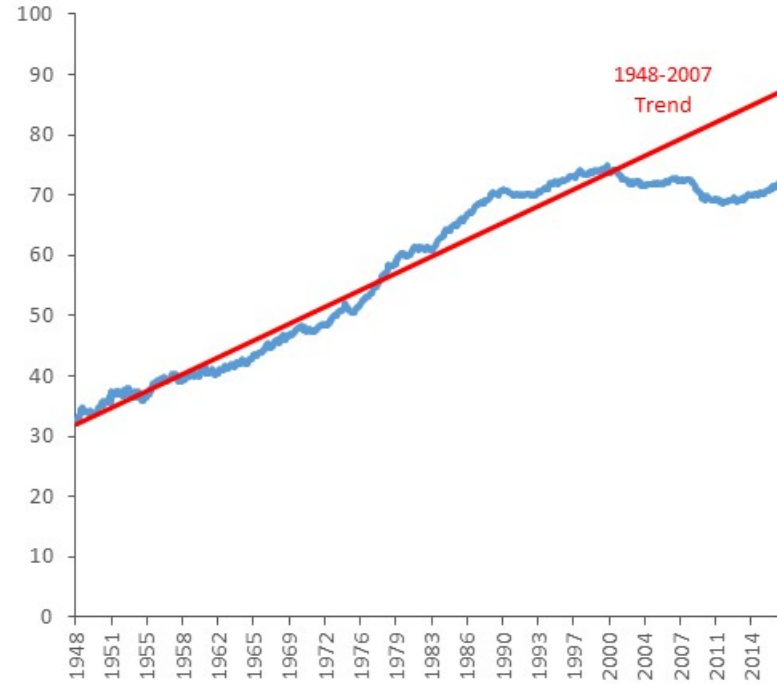
Source: Bureau of Labor Statistics.

US: Employment to Population Ratios

Prime-Age Male Employment to Population Ratio, 1948-2017



Prime-Age Female Employment to Population Ratio, 1948-2017



Causes of inequality and consequences

- Large economic literature attempting to explain causes, persistence, and increases in inequality—especially the enormous increase since 1980
 - High savings rate of rich (Piketty, Kaldor)
 - Unable to explain key aspects of inequality in income and wealth
 - Intergenerational transmission of advantage and disadvantage (Stiglitz, 1969, 2015)
 - Giving rise to inequalities in endowments
 - With stochastic returns, gives rise to equilibrium income and wealth distribution
 - Equilibrium balance between centrifugal and centripetal forces
 - Centrifugal forces have increased, centripetal forces weakened
 - Globalization
 - Skill biased technological change

Rents, market power and Market distortions

- Variety of sources of market power
 - Imperfect information, barriers to entry, network effects
- Market power may be increasing because of changes in technology, markets, or public policy
 - Increasing concern about market power in health care sector (health insurance industry, pharmaceuticals)
- Creates monopoly profits/rents—moves money from bottom of economy to top
 - Only one example of increasing rents—getting a larger share of a given economic pie rather than increasing the size of the economic pie
 - Land rents, intellectual property rents
 - Evidence that an increasing share of national income is appropriated as rents
 - Example of exploitation
 - Other examples of exploitation include pervasive discrimination

Important new perspective of inequality

- **Not inevitable consequence of market forces**—not simply the result of the “laws of nature” or the “laws of economics”
 - Cannot be explained within competitive model
 - Though changes in technology can have impacts
- Largely the result of *policy*, of how we structure markets
 - Markets don't exist in a vacuum
- The rules of the economy were rewritten in the Reagan-Thatcher era and afterwards in ways which led to more inequality and poorer economic performance
 - Significant increases in rents (monopoly rents, land rents, intellectual property rights, rent extraction by corporate executives and financial sector)
 - Weakening of workers' bargaining position
- They now have to be rewritten once again, in ways that can reduce inequality and improve economic performance

Adverse effects of inequality

- Large economics literature now suggesting why, even with standard model, **greater inequality leads to poorer economic performance**—through multiple channels
 - Inequality of outcomes related to inequality of opportunity (rungs of ladder are further apart)
 - Those at the bottom aren't able to fulfill their potential
 - Political economy—more divided societies less willing to make investments in education, infrastructure, technology which advance societal performance
 - Worried that a powerful state might use powers for redistribution

Further adverse effects of inequality

- **Excessive indebtedness of those at the bottom**, giving rise to instability
 - Related to “keeping up with Jones”
- **Adverse effects on morale** of those at the bottom
 - Especially when they feel the system is rigged
 - Less incentive to work hard
 - Example of generalized “efficiency wage” effects

Inequality and Economic performance can be complementary