

Global Inequality

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Main messages

- Capitalism has not been working well for large parts of the population
 - There has been an enormous growth in inequality
 - Especially in US
 - Virtual stagnation for majority of citizens
 - Multiple dimensions of inequality—health, wealth, opportunity

Explaining growth of inequality and understanding consequences

- Cannot reconcile increase in inequality and other puzzles of modern economy through lens of competitive market
 - What is crucial is growth of rents
 - Key in understanding growth of rents is how the rules of the market economy have been rewritten in last third of a century
 - Though changes in technology and market structure have played a role

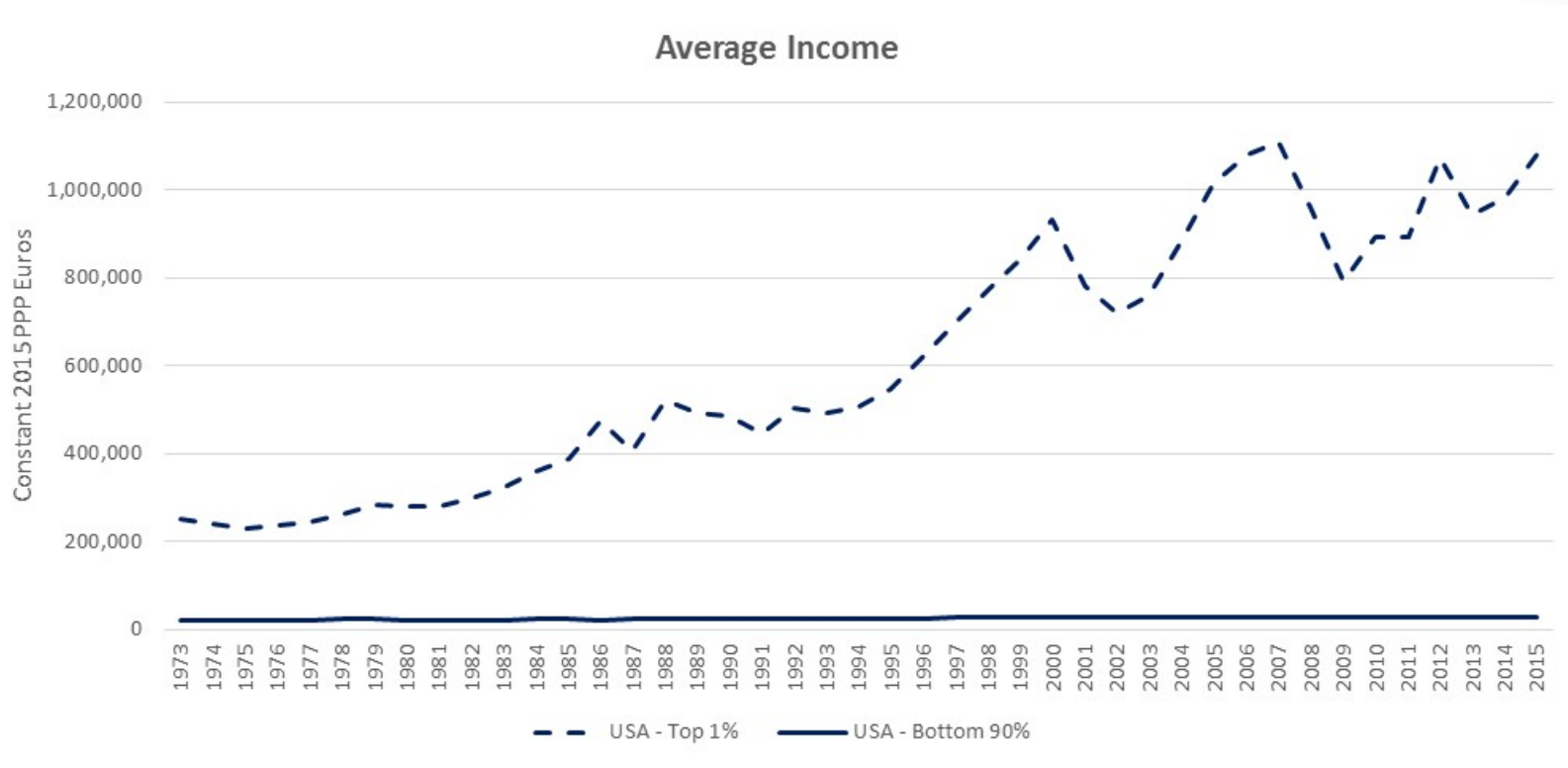
Severe Adverse Consequences of inequality

- Worsening economic performance
- Undermining democracy
- Changing the nature of individuals and society

A rethinking of standard economic theory

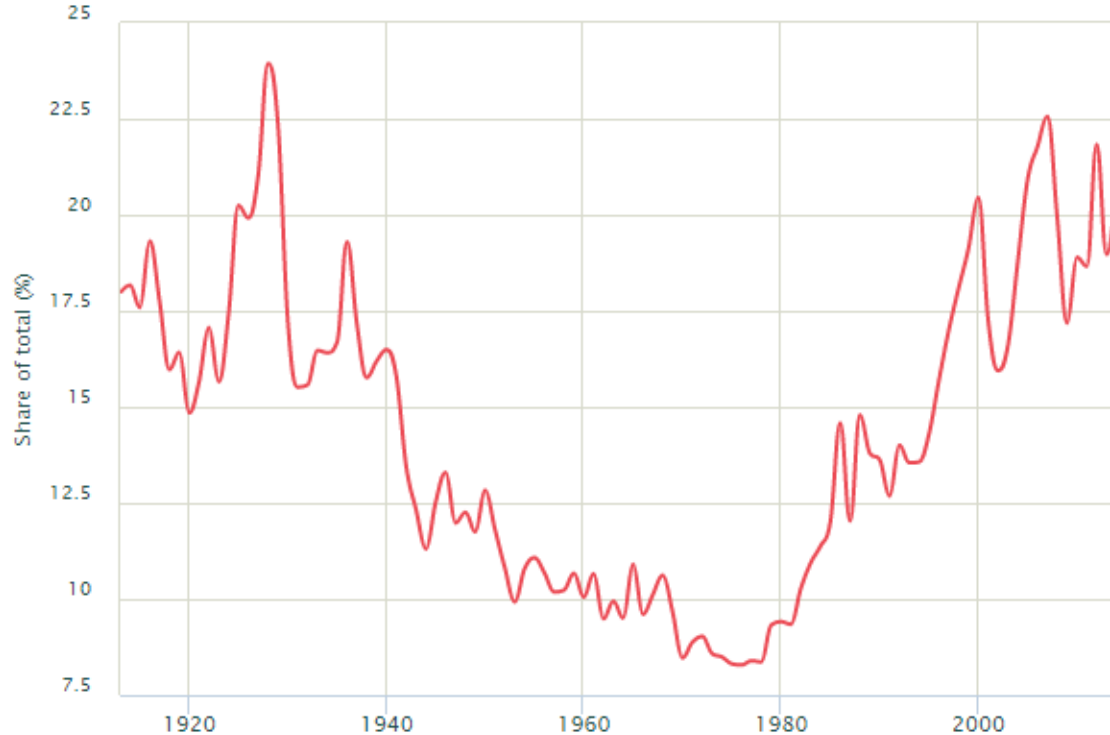
- Advanced countries (including the US) have not been performing well
 - Growth has been anemic
 - The benefits of what growth occurs goes to the top
 - Trickle down economics hasn't worked
- In the US, there has been near stagnation of the bottom 90% for a third of a century
 - With the median income of a full time male worker lower than four decades ago
 - With real wages at the bottom at the same level that they were sixty years ago
 - Life expectancies are in decline, deaths of despair on the increase
 - American style capitalism has not been working for large fractions of the American people
 - An economic model that does not deliver for the majority of the citizens is a failed economic model

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



Source: World Wealth and Income Database

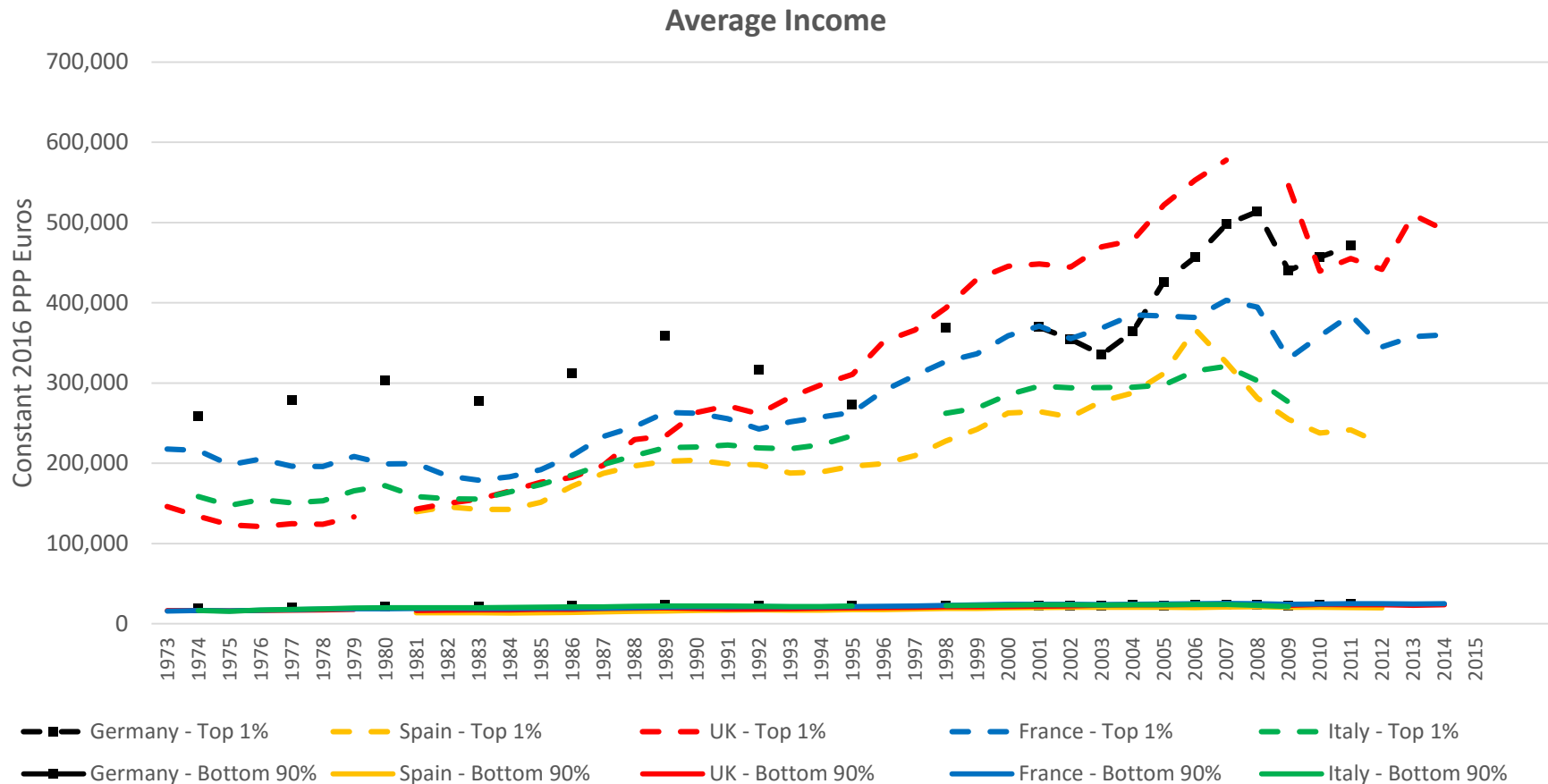
Top 1% fiscal income share in the United States 1913-2015



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.

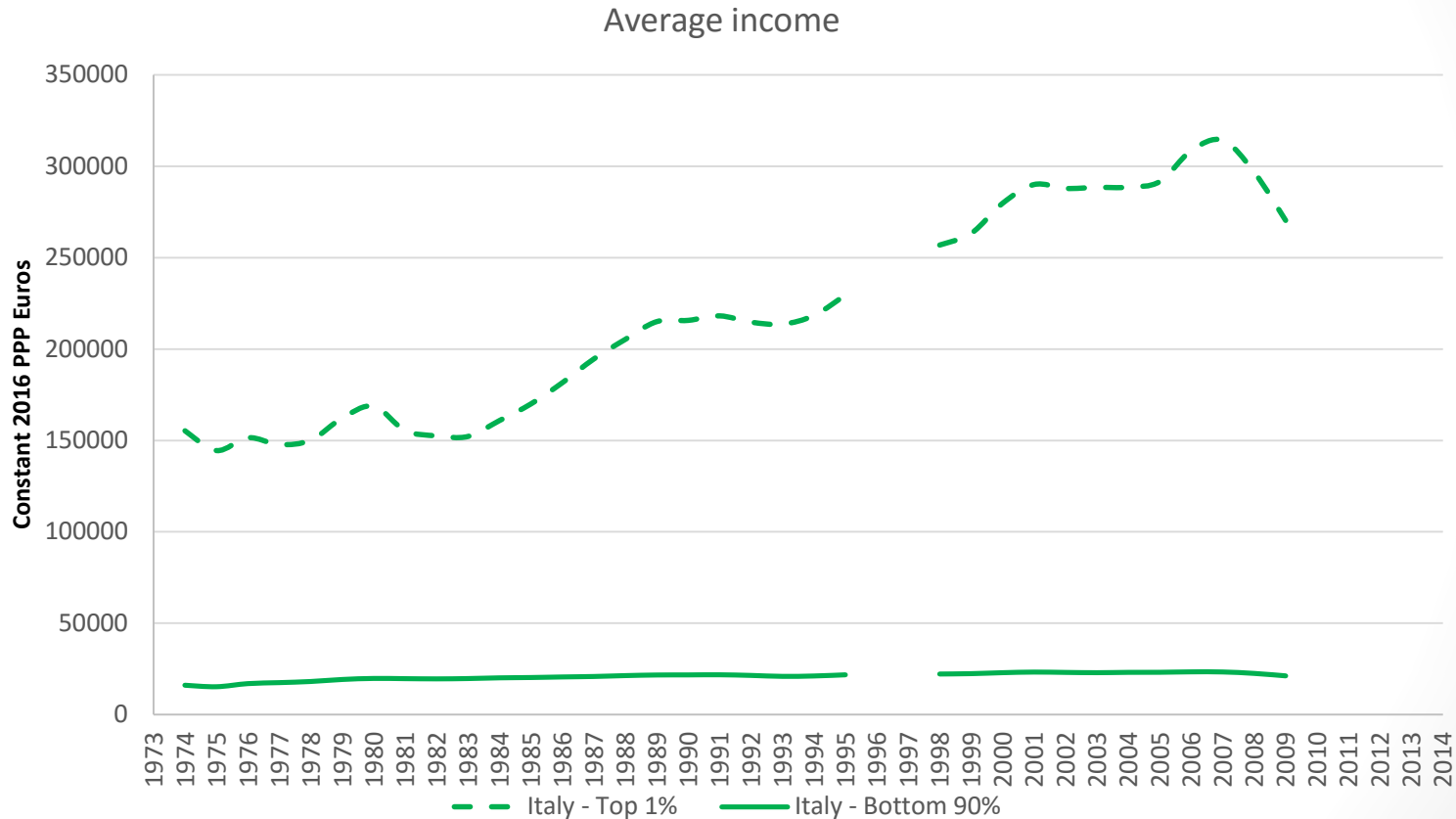
Source: World Wealth and Income Database.

Europe: less increase in inequality in some countries than in others—but also growing inequality



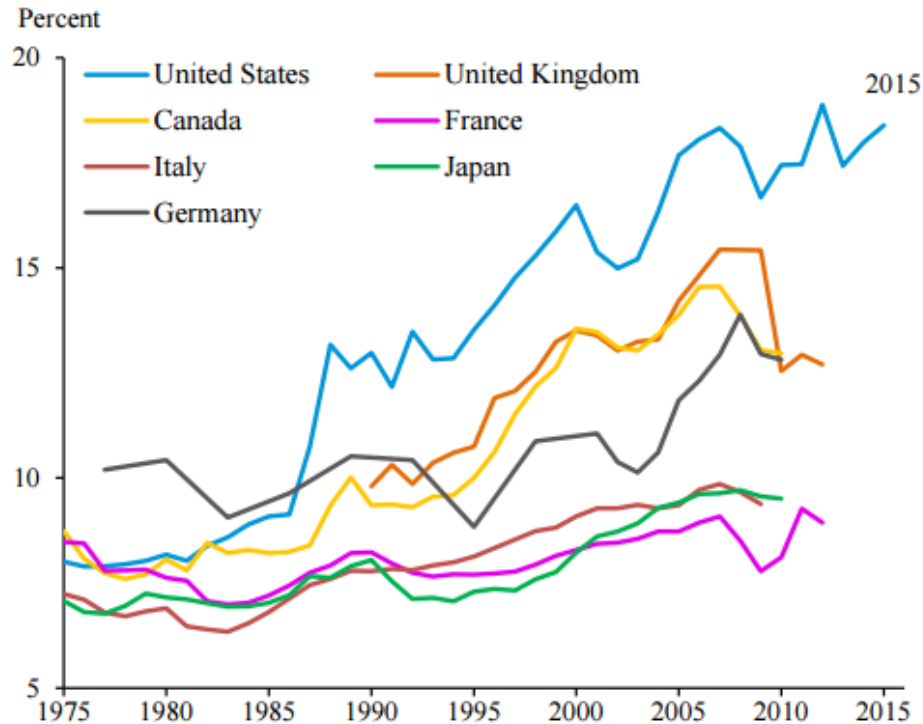
Source: World Wealth and Income Database

Italy: increase in inequality has been less extreme, but near stagnation for bottom 90%



Source: World Wealth and Income Database

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



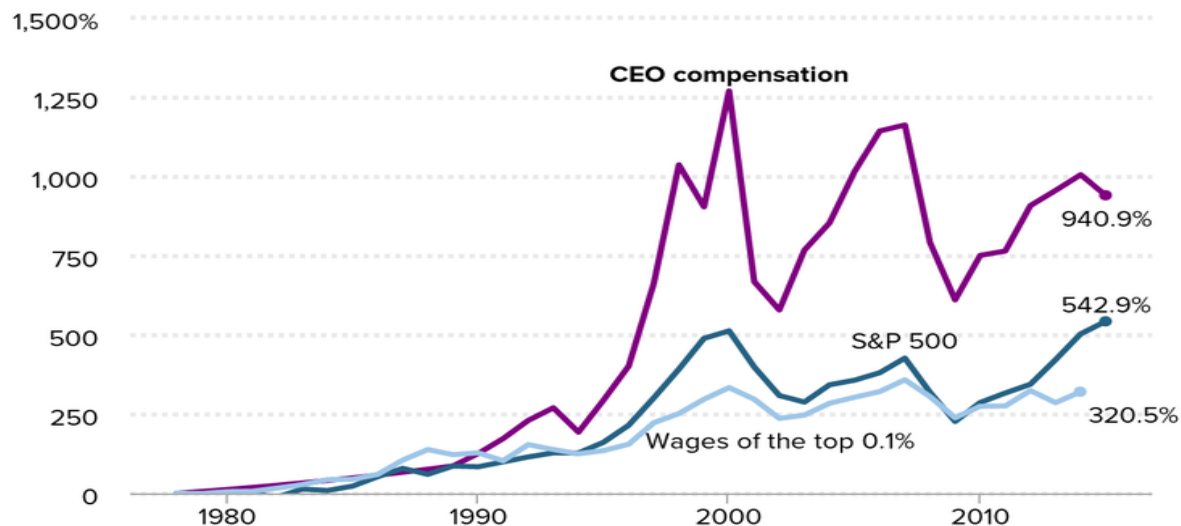
Source: World Wealth and Income Database.

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

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.

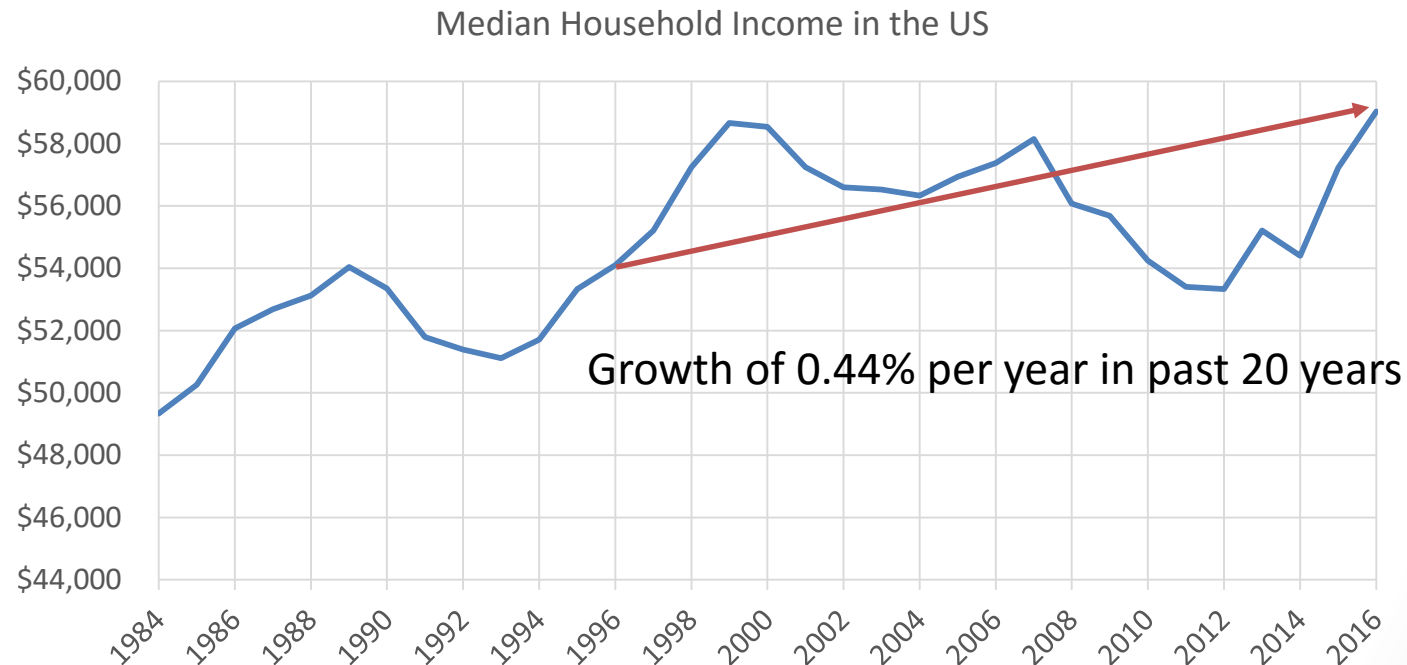
Source: EPI analysis of Compustat Execucomp, Social Security Administration, and Federal Reserve Bank of St. Louis databases.

Stagnation: U.S. median household income

(constant 2016 US\$)

1996:
\$54,105

2016:
\$59,039

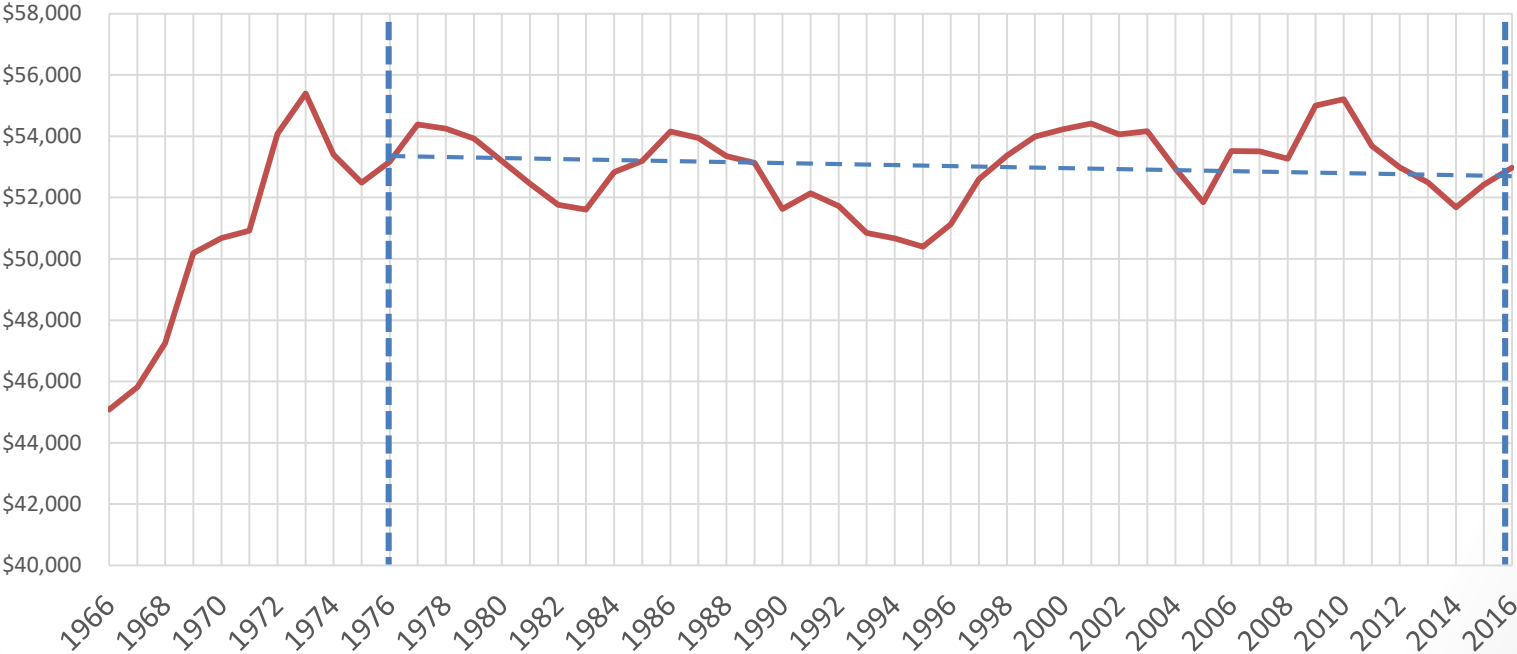


Source: U.S. Census Bureau

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

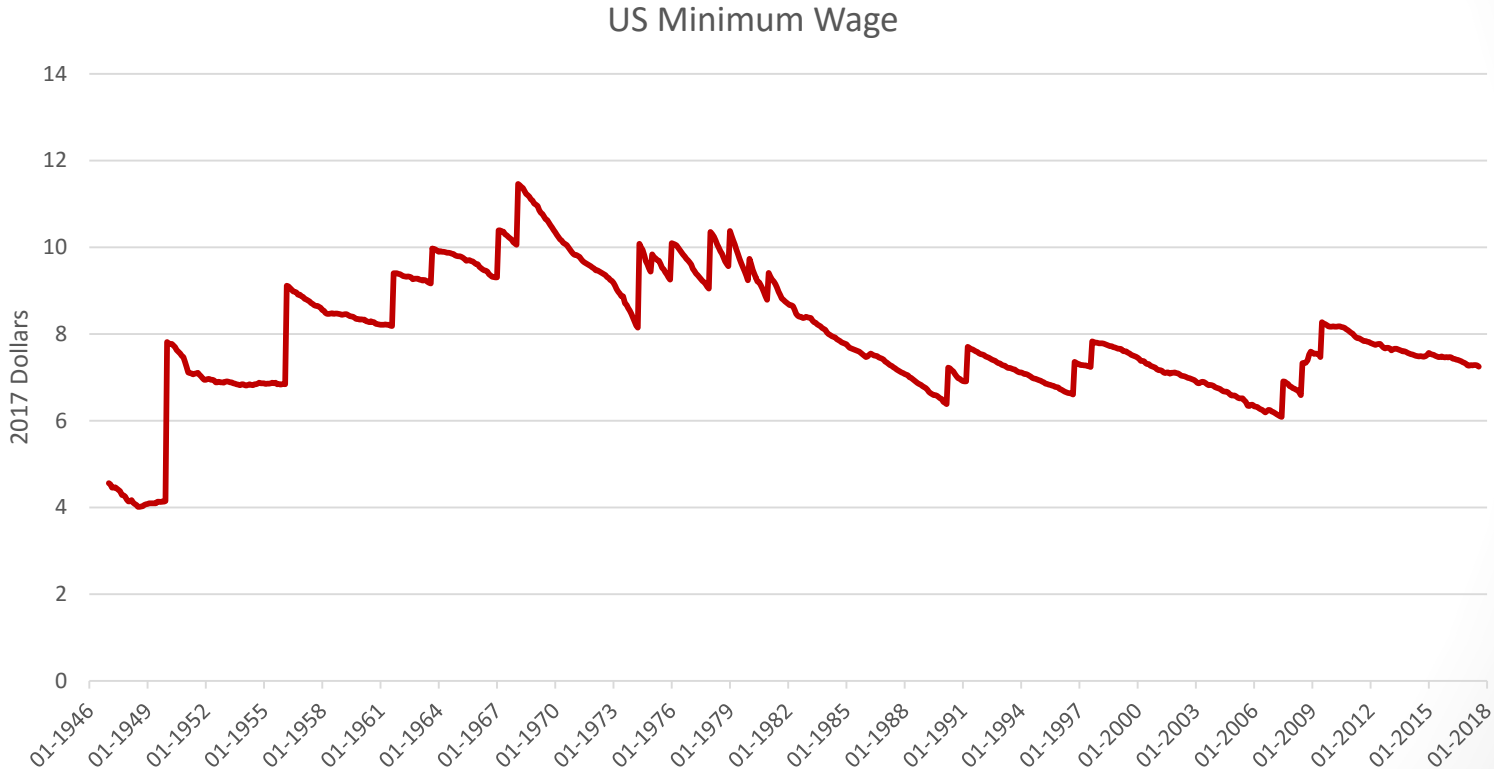
US: Median income of a full time male worker is at the level that it was more than 4 decades ago

(constant 2016 \$)



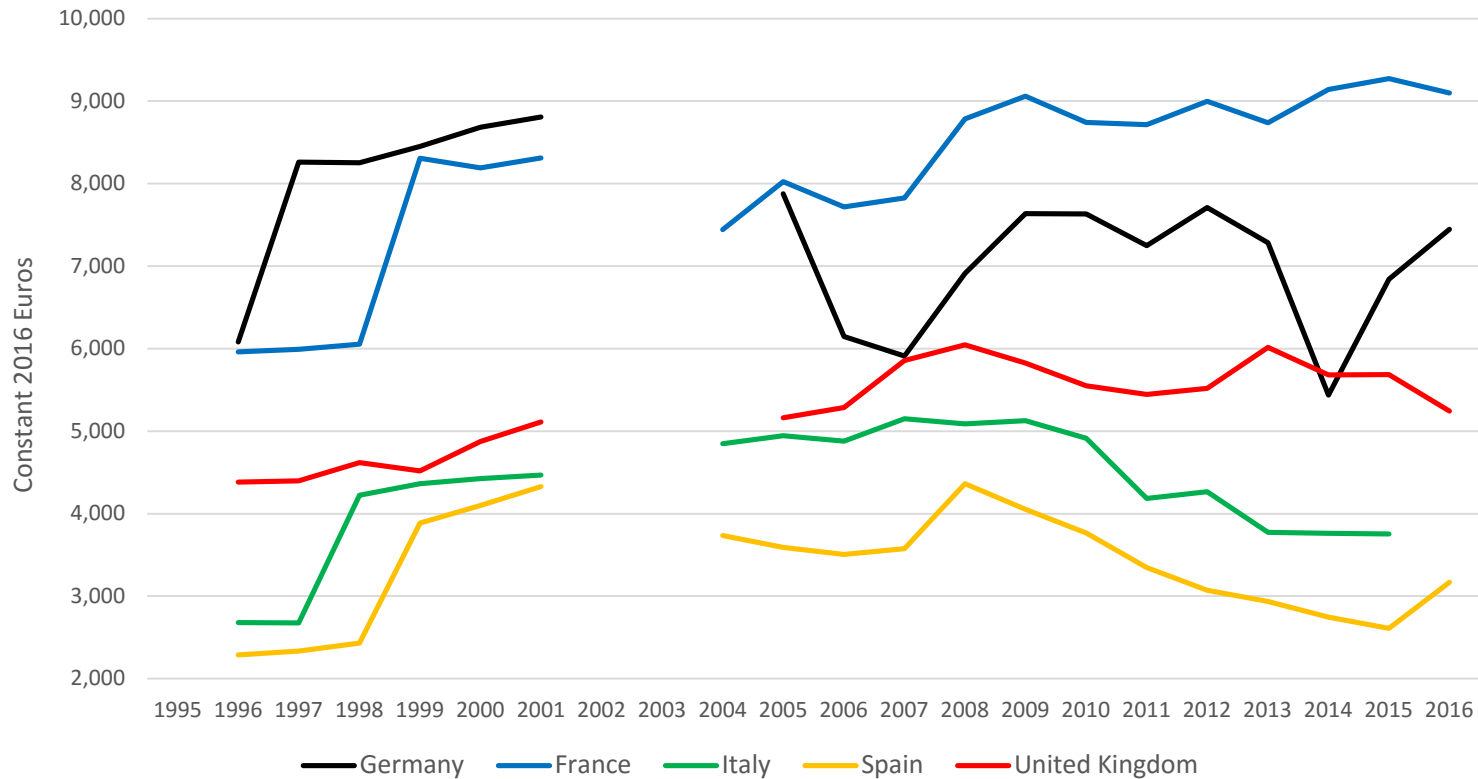
Note: Data is adjusted for the methodological change of 2013.
Source: U.S. Census Bureau.

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



Source: Federal Reserve

Average income of bottom decile fallen by 20% in Italy



Source: Eurostat and author's calculation

Global Inequality

Oxfam reports on wealth concentration at the top: how many of the richest people have as much wealth as bottom 50% (bottom 3.6 billion!)

- In 2014: 85
- In 2017: just 8 *men*

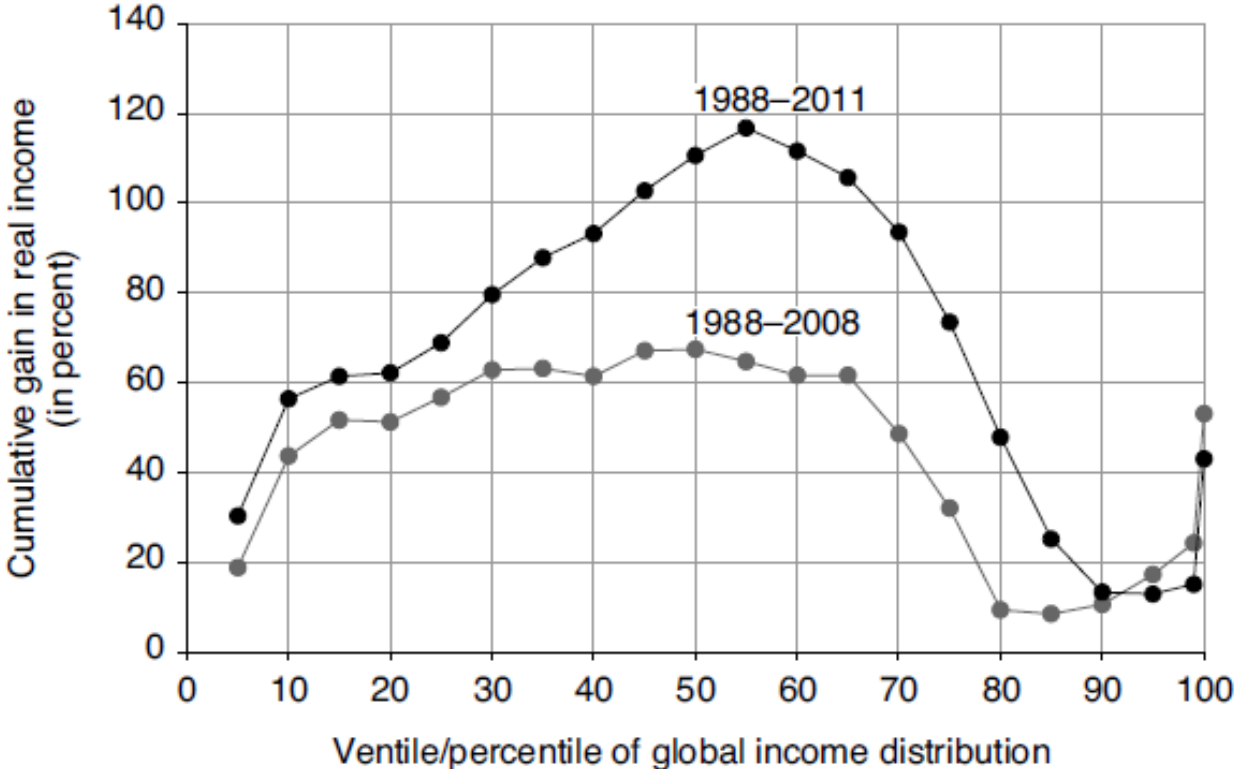
Big winners during last quarter century

- 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

Global Income Growth by Percentile



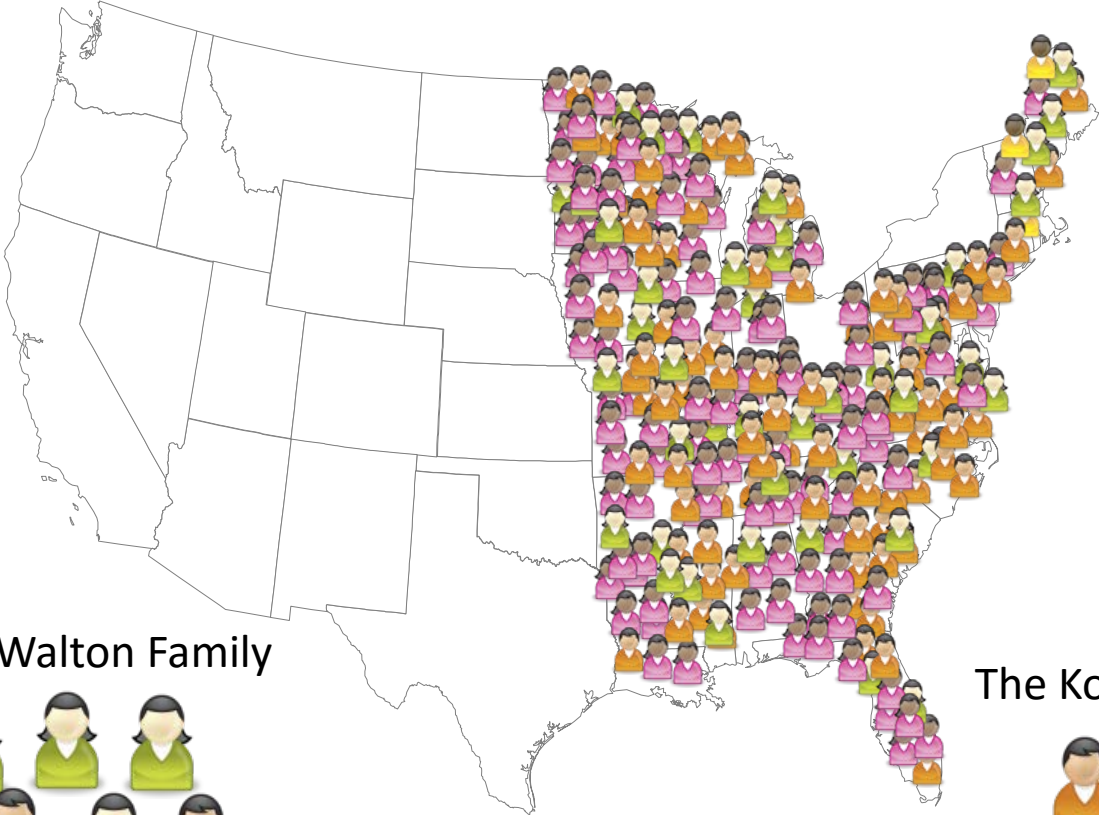
Source: Branko Milanovic.

Many other aspects of inequality

- Wealth
- Health
- opportunity

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

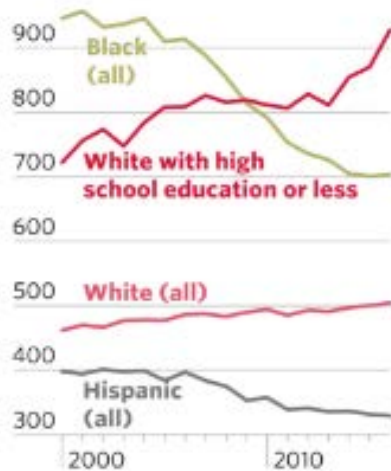


Decline in life expectancies and an increase in deaths of despair

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

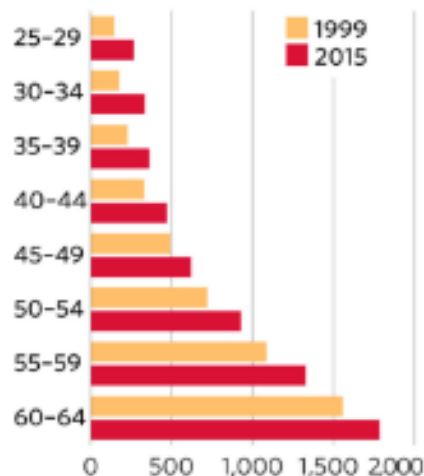
White deaths are rising...

Mortality rate by race, ages 50-54



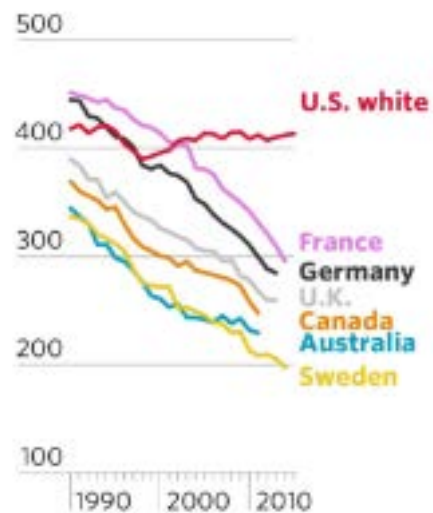
...among all age groups of less-educated whites...

Mortality rate for whites with high school education or less, by age



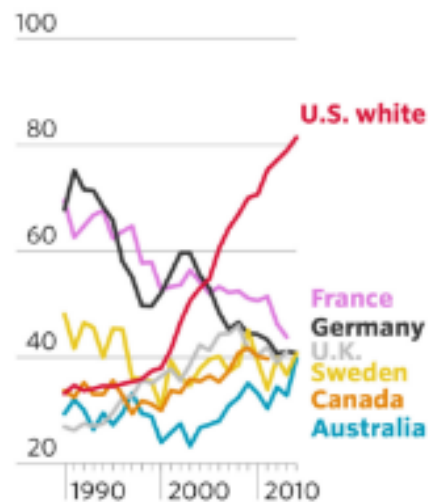
...in contrast to elsewhere...

Mortality rate for all causes, ages 45-54

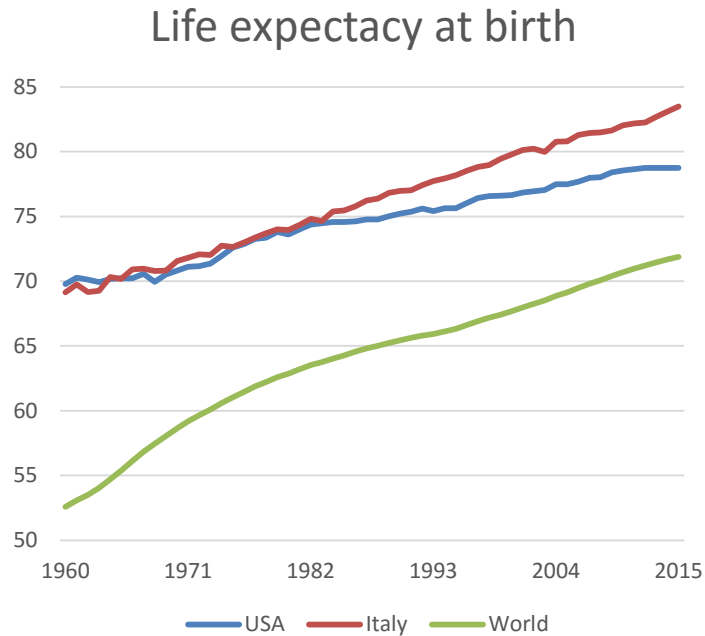


...due in part to increases in 'deaths of despair'.

Mortality rate due to alcohol, drugs and suicide, ages 50-54



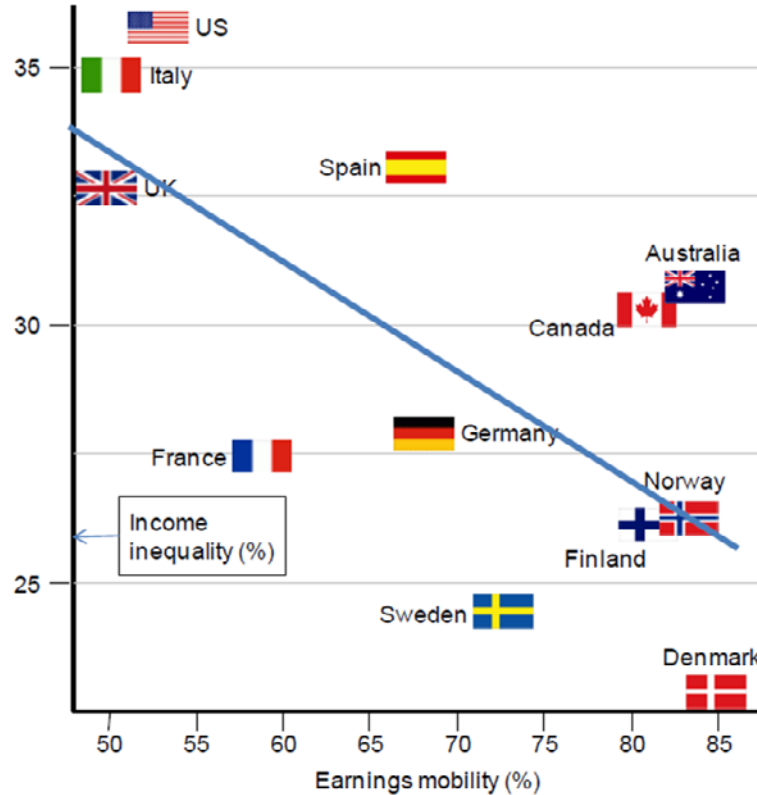
Life expectancies in Italy up and much better than the US



- Suicide rates in Italy have increased in the past few years, but are only about half of the suicide rates in the US.
- Italy is 7.9 per 100,000 vs. US 14.3 per 100,000 people as of 2015.

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.

Many mysteries

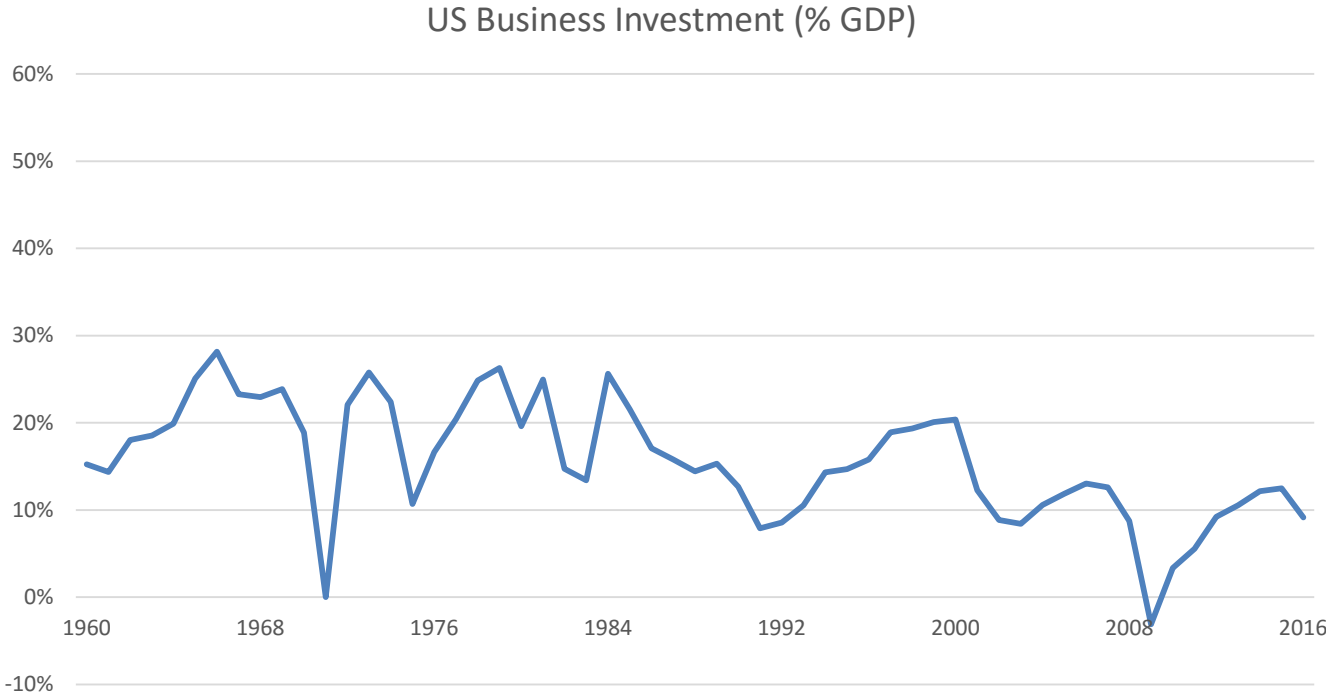
- High profits and low investment
- Wealth income ratio is up but capital income ratio is down in US
 - Insufficient savings to sustain the capital output ratio
 - Result: declining share of capital income as well as labor income
 - But even in countries with higher savings (like France) huge gap between wealth and capital
 - Gap is rents
 - Causal link: savings goes into increases into “capitalized value of rents,” for instance, land and increased value of equity of rent-exploitation firms

Growing profits and low business investment



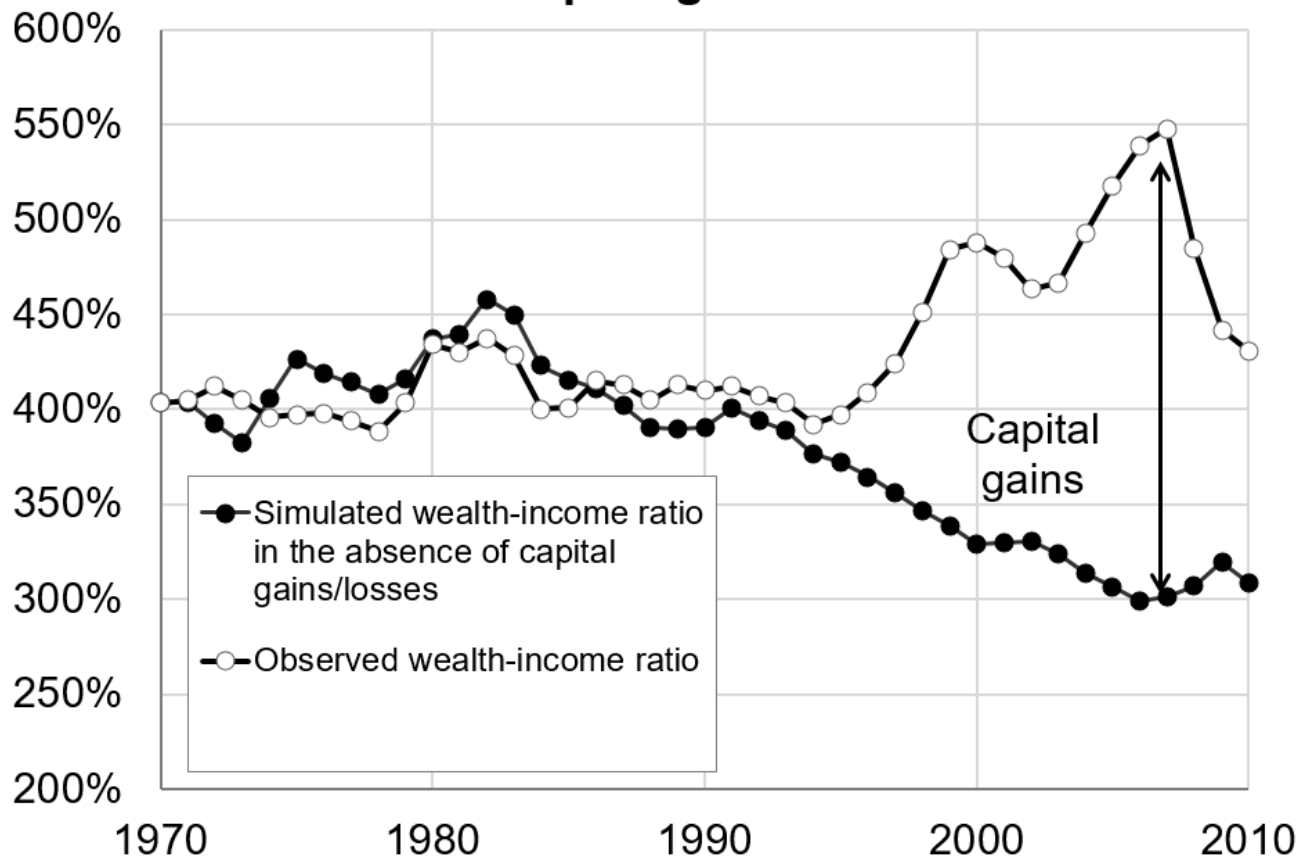
Source: Federal Reserve Bank of St. Louis

Growing profits and low business investment



Source: Federal Reserve Bank of St. Louis

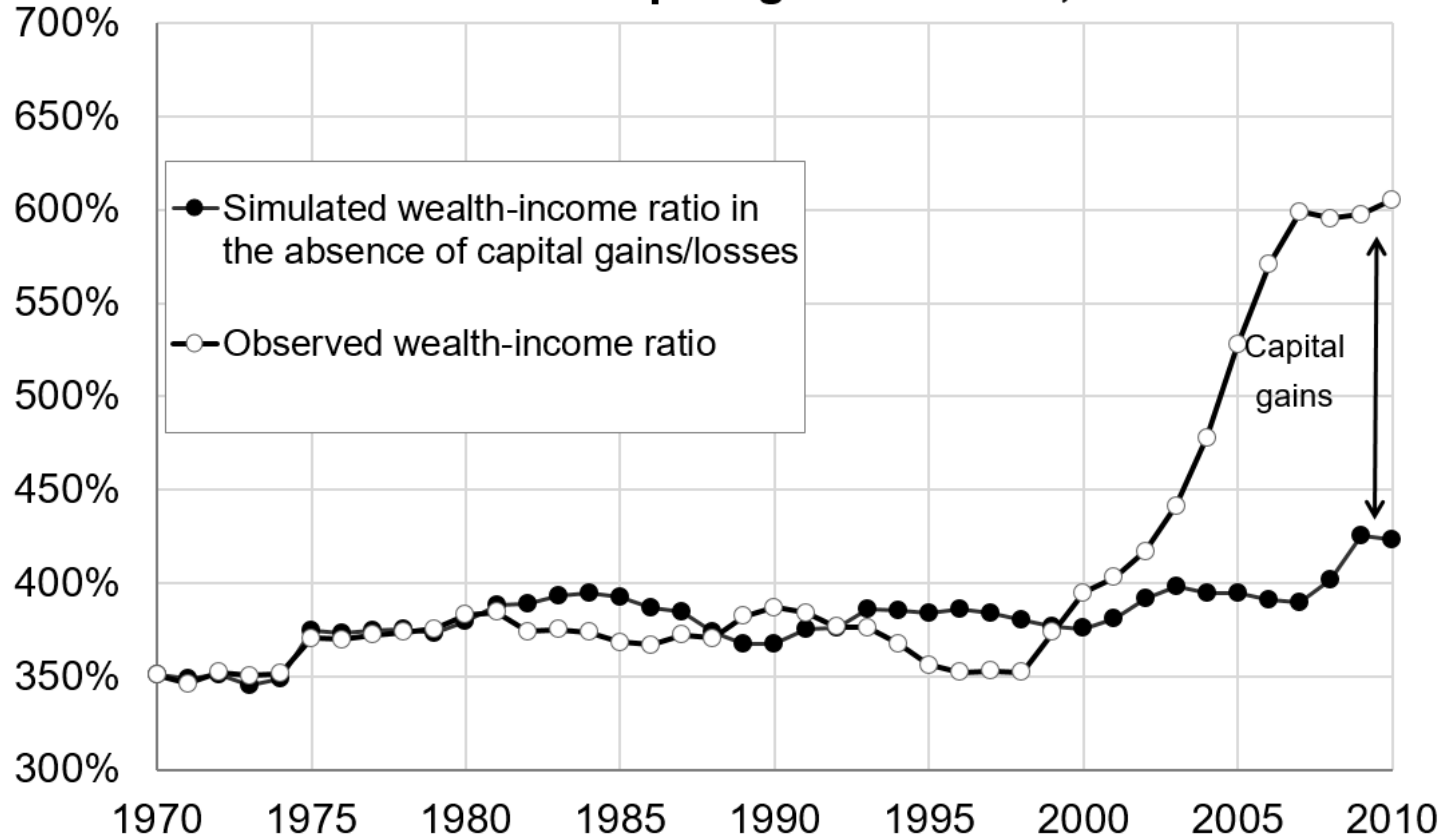
Simulated national wealth-income ratios in the absence of capital gains: U.S. 1970-2010



Authors' computations based on 1970 wealth-income ratios, 1970-2010 national saving flows (including other volume changes) and real income growth rates.

Source: *Capital in the Twenty-First Century*, Thomas Piketty.

Simulated national wealth / national income ratios in the absence of capital gains: France, 1970-2010



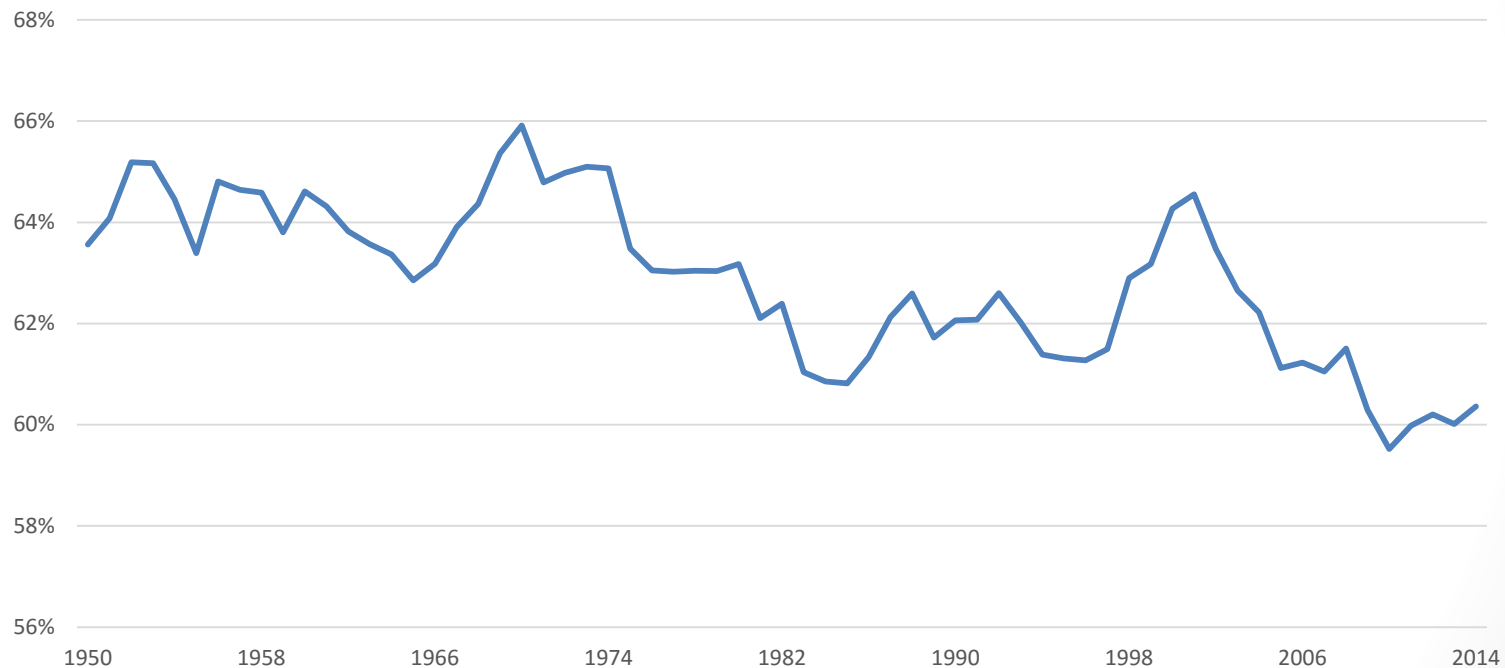
Authors' computations based on 1970 wealth-income ratios, 1970-2010 private saving flows (including other volume changes) and real income growth rates. Source: *Capital in the Twenty-First Century*, Thomas Piketty.

More mysteries

- Share of labor in decline—especially if one excludes top 1% of earners (bankers, CEO's, etc.)
- Yawning gap between productivity and compensation

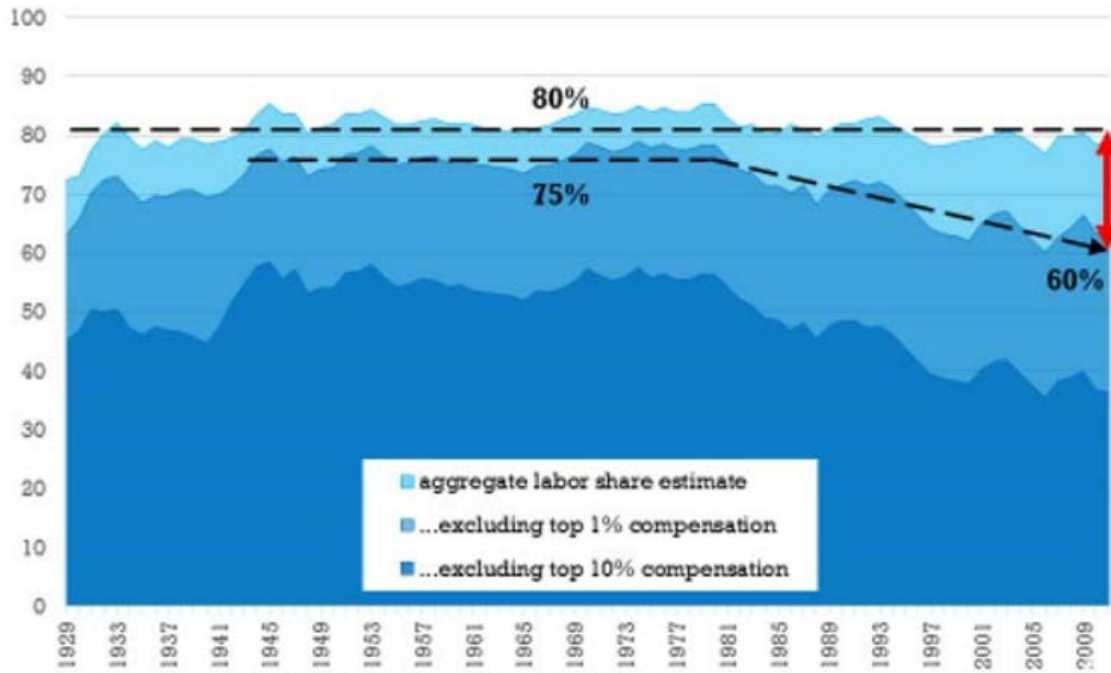
Share of income to labor has been declining

US Labor compensation as share of GDP



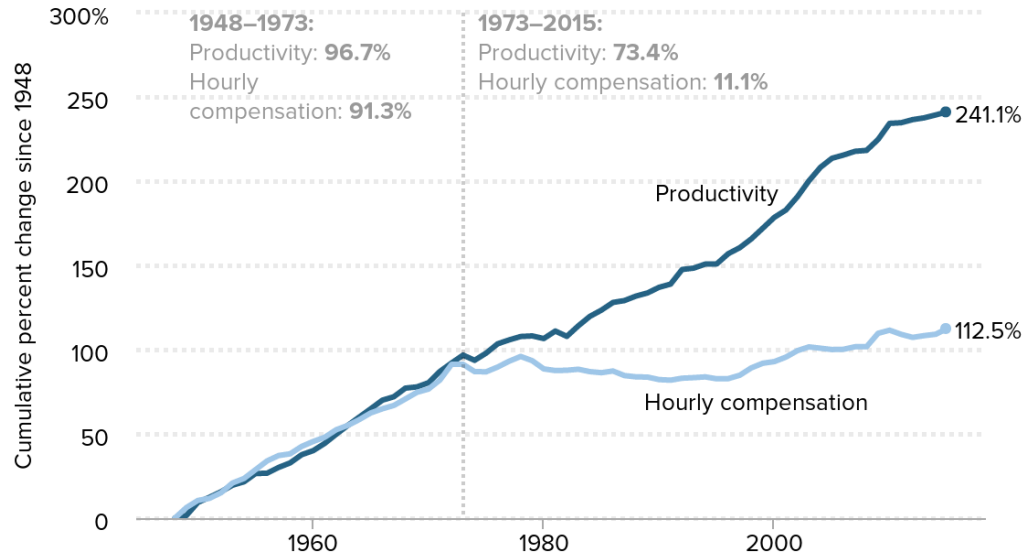
Source: US Bureau of Economic Analysis

Decreased share of labor—especially if one focuses on bottom 99% of labor



Source: Giovannoni (2014) based on NIPA and WTID data

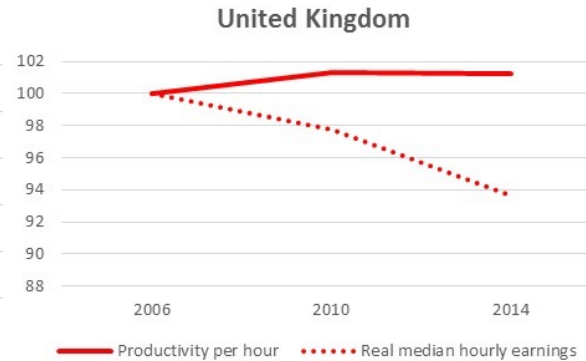
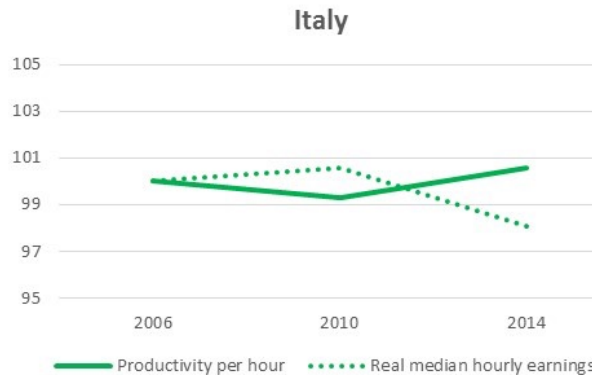
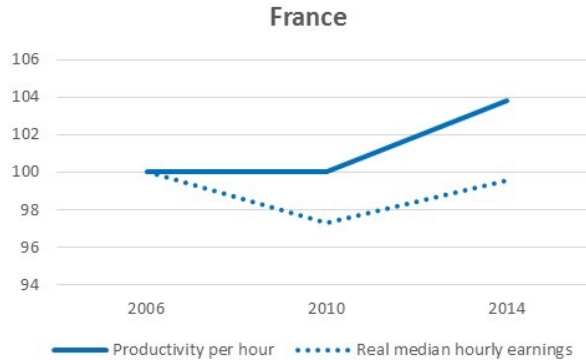
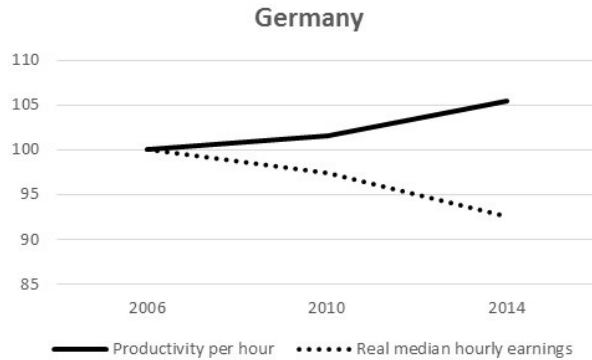
US: Disconnect Between Productivity and a Typical Worker's Compensation, 1948-2015



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)

Europe: Disconnect in Productivity and Compensation

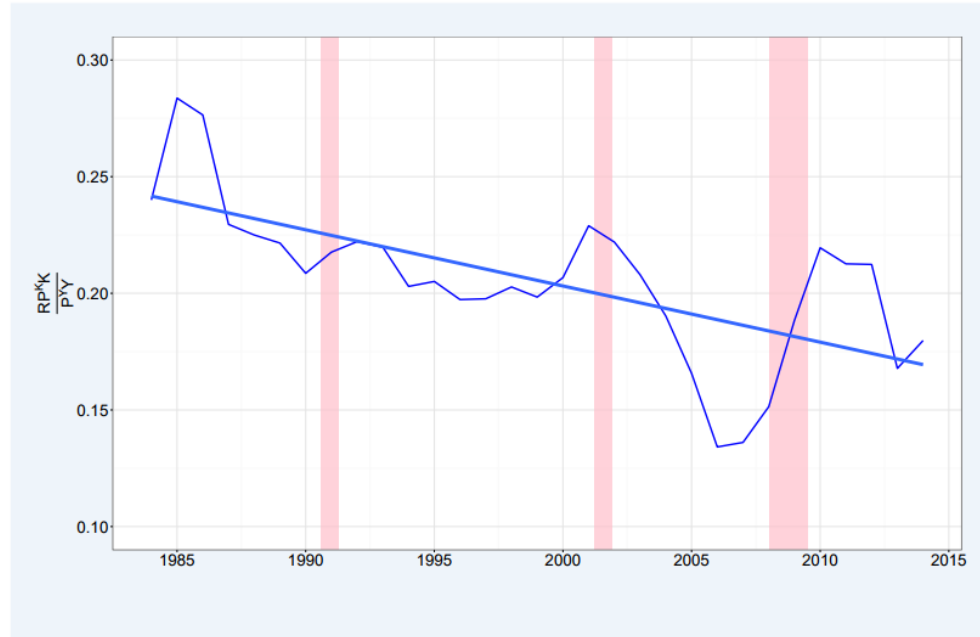


Source: Eurostat.

Not just the share of labor that is down

- Also the share of capital
 - What is up is the share of rents
- The gap between wealth and capital is the “capitalized value of rents”
 - Value of land
 - Value of intellectual property
 - Value of rents seized from the public (selling goods to government at above competitive price—like drugs—and getting assets from government at below market prices—like oil and mineral resources)
 - Most importantly: value of monopoly rents
- All of these have increased—but especially monopoly rents

The capital share of gross value added is declining



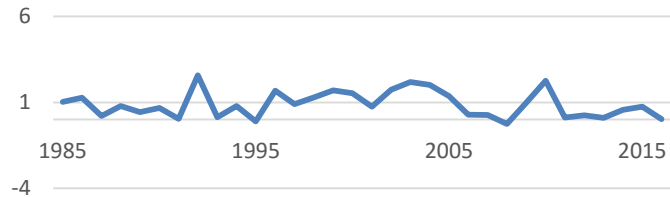
The figure shows the capital share of gross value added for the U.S. non-financial corporate sector over the period 1984–2014. Capital payments are the product of the required rate of return on capital and the value of the capital stock. The capital share is the ratio of capital payments to gross value added. The required rate of return on capital is calculated as $R = (i - \mathbb{E}[\pi] + \delta)$. Capital includes both physical capital and intangible capital. The cost of borrowing is set to Moody's Aaa and expected inflation is calculated as a three-year moving average.

Source: Simcha Barkai, University of Chicago

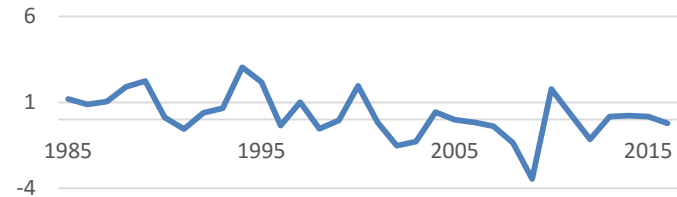
In a supposedly innovation era, productivity growth is low

Growth in GDP per capita

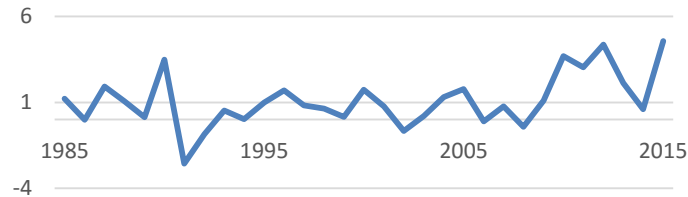
US



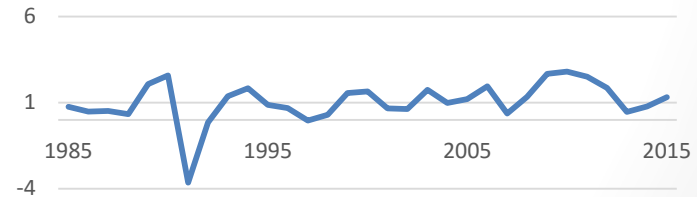
Italy



Japan



Germany



Source: OECD

Multiple explanations of anomalies

- But among key explanation is **an increase in market power of corporations and a decrease of market power of workers, with market power being used to enrich the top—but not invest in the future**
Evidenced by increased market concentrations
 - Consistent with high profit rates
 - Consistent with evidence on high mark-ups (price much greater than cost)
 - Estimates that almost 80% of equity value of publicly listed companies associated with rents, almost a quarter of value added
 - Much linked to the IT sector
- The standard competitive model—the benchmark model of economics since Adam Smith—is now being questioned
 - We live in a world of rent-seeking and exploitation

Explaining the increase in monopoly rents: Technology

- Network externalities have created new “natural monopolies”
 - But these twenty-first century natural monopolies are not regulated
- Hi-tech has learned how to exploit (and hoard) data
 - Engaging in discriminatory pricing
 - Transferring wealth from consumers to producers
 - Discriminatory pricing is inconsistent with the standard competitive model

Explaining the increase in monopoly rents: Rules

- Changes in the rules of the game
- Failing to adapt the rules of the game to a changing world
- New interpretations of old rules
- Law enforcement
- All of these have resulted in greater ability of corporations to exploit workers and consumers, enhancing their market power at the expense of others
 - Resulting in a less efficient and dynamic economy
 - With firms focused more on increasing rents than on increasing societal well being
 - And using their “cleverness” to avoid paying taxes
 - Apple, the world’s largest corporation by capitalization paying less than 1% of its profits in taxes
 - Giving it an unfair advantage over small and medium sized firms that do pay taxes
 - Ironic: all the while it takes a posture of corporate responsibility
 - The first responsibility of a corporation is to pay its fair share of taxes

Not just anti-trust rules

- Though that is important
- But a host of regulations, including those related to corporate governance and labor

Emerging US response: A new post-Trump agenda

- At the center of the new agenda to revive the American economy and create shared prosperity is *rewriting the rules of the American economy*
 - Including new rules curbing corporate, CEO, and market power
- They were rewritten once before, under Reagan
 - Liberalization and low tax rates were supposed to unleash the power of the market
 - Everyone would benefit through trickle down economics
 - What happened was that growth slowed and inequality grew—the only winners were the wealthy

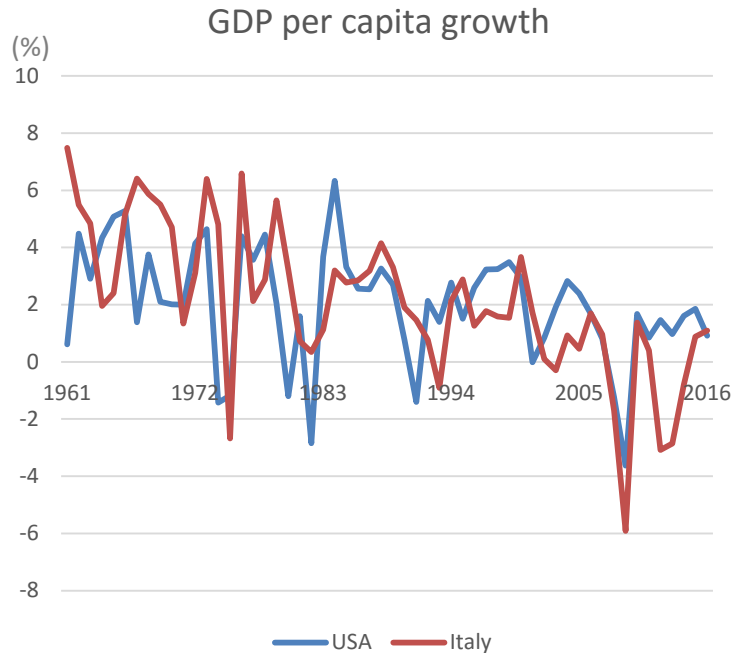
This is more than an economic agenda

- 125 years ago, the US faced a similar situation, with inequality sky-rocketing
- The country responded with the progressive era, including anti-trust law
- The concern then as today is that economic inequality leads to political inequality
 - Undermining democracy and the very nature of our society

II. Italy today

- Italy's economic growth has stagnated
 - Growth in GDP per capita has experienced a secular decline over the past half century—but not much different from US
 - But large gap with US remains
 - Unemployment remains high since the crisis, particularly among youth—larger than other countries
 - Inequality is a slightly better story than the US, but inequality of opportunity (mobility) is strikingly low, according to OECD
- Small firm growth could be promising
 - Growth in share of new firms outpaces the US

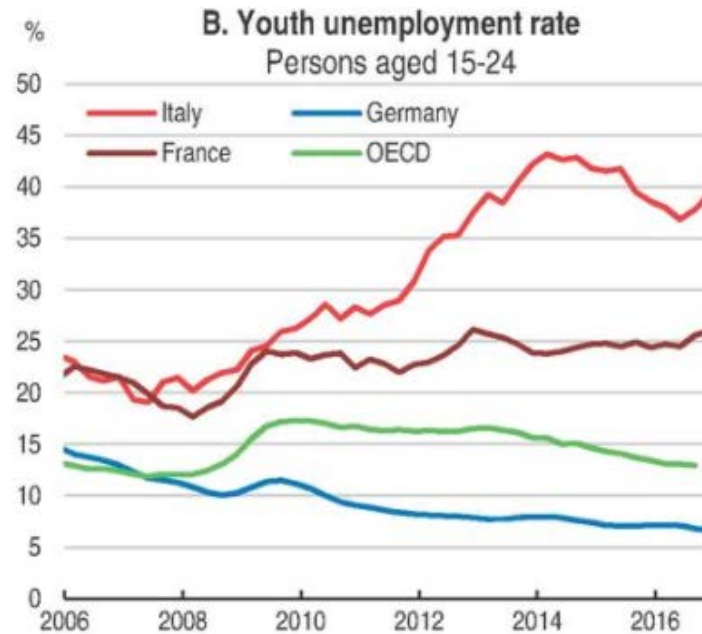
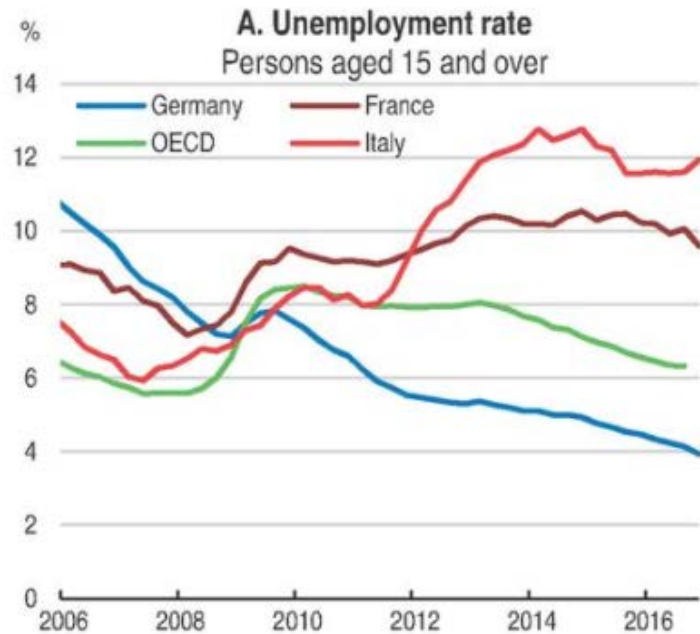
Italy's growth story



Source: World Bank

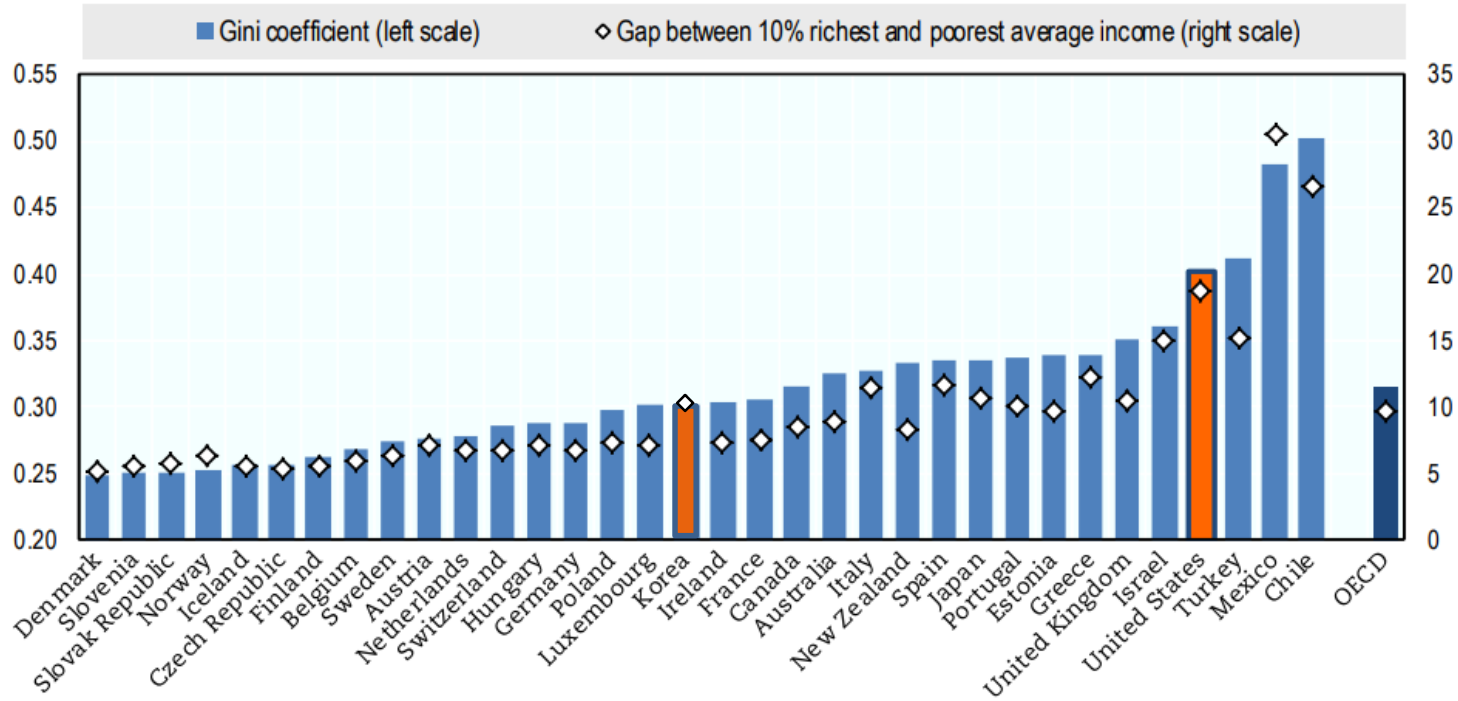
- Italy's growth has closely tracked US growth since the 1960s
- However, growth in per-capita GDP in Italy has mostly lagged behind the US's since the 2008 financial crisis
- Median income in Italy is US\$ 21,430 vs. 30,960 in the US (OECD 2014)

Italy has higher unemployment than its neighbors



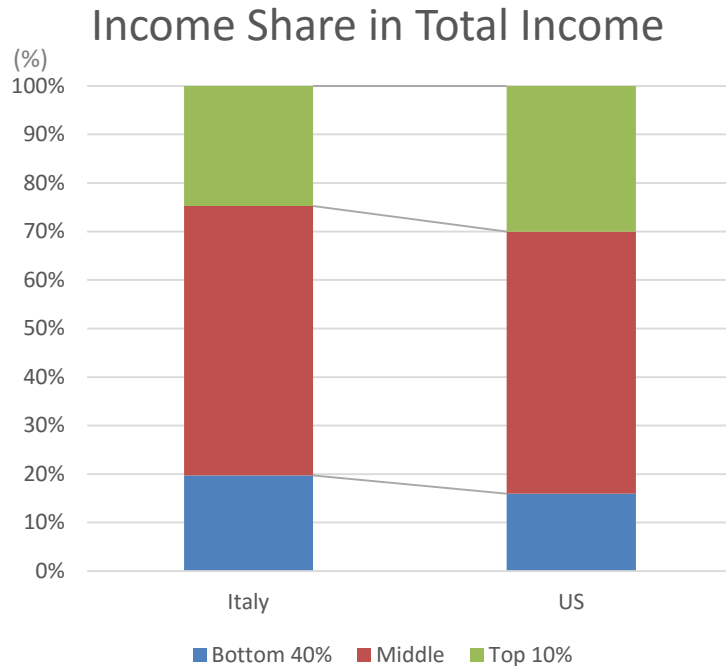
Source: OECD Labour Force Statistics.

Inequality comparison to the OECD



Source: OECD

Inequality comparison to the US



- Italy has a Gini coefficient of 0.33, compared to the US' Gini coefficient of 0.39
- In Italy, a smaller proportion of total income goes to the top 10% than in the USA
- The labor income as a share of GDP in Italy is 43%, compared to 58% in the US

Growth in share of new firms in Italy outpaces the US



Source: OECD

A new policy agenda

- For more than sixty years, conventional wisdom has been that the government should approach problems of unemployment, inequality, and low wages only indirectly, with mild instruments
 - Stimulate aggregate demand through fiscal and monetary measures
 - Improve skills
 - Grow the economy and everyone will benefit: trickle down economics
 - Small tweaks in the economy will achieve desired results
- Overwhelming evidence that this recipe has not worked and will not work
 - Weak job creation
 - Much of the job creation are temporary jobs, without economic security and paying low wages
- And voters have increasingly turned away the centrist parties that pretend that this is so

Approach based on ideology

- On a blind belief that governments are inefficient and markets are efficient
 - No government ever wasted money on the scale of America's financial sector
 - Pervasive inefficiencies and corruption in many parts of the private sector
 - America's private health care system spends 10% more per capita as France's largely public system—with worse results
- Alternative view: we need to strive to increase efficiency of both the private and the public sector, to curb corruption in both, and to limit exploitation

A more direct attack on the problem

- All advanced economies are transitioning from manufacturing to service sector/knowledge economies
 - This is a major transition
- One of several transitions going on simultaneously
 - Demographic transition to an aging economy
 - Knowledge economy different from traditional economy
 - “Creating a Learning Society”
 - Increase in knowledge basis of enormous increase in standards of living over past two centuries
- Markets don't make such transitions on their own well
 - Great Depression can be viewed as part of the failure of the transition from agriculture to manufacturing
- The newly expanding sectors—including health and education and caring for the aged—are sectors in which government naturally plays an important role
 - Wages in those sectors not really market determined
 - They reflect societal values: how much we value the education of our children, the care of our elderly

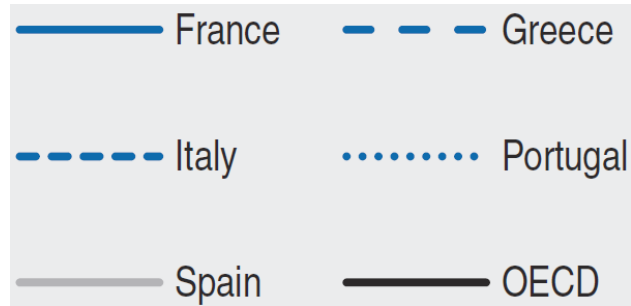
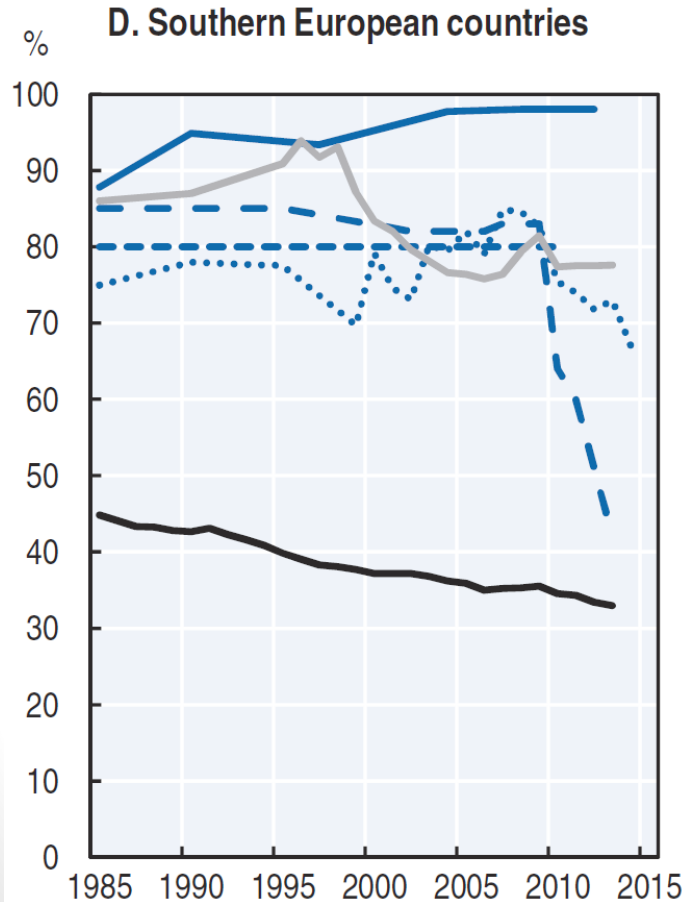
This, for instance, is the approach being taken by new South Korean government

- In some cases it makes sense for government to be more actively engaged in both hiring and wage setting
- Key part of new strategy in Korea
 - Higher employment and increased wages in public sector will help drive up wages in the private sector, reducing inequality
 - Rather than trickle down economics, trickle up
 - And building the economy up from the middle
 - The middle class is the basis of the success of every society, economy, and democracy
 - America's failures today can be traced to the evisceration of the middle class

Multi-prong approach to facilitating transition—ensuring inclusive growth

- Active labor market policies
- Social protection
- Strengthening institutions that strengthen societal balance—unions
 - And labor laws that balance appropriately social protection and flexibility
- Industrial policies
 - Including credit, research, innovation, education, and public investment
 - Place-based policies

Trends in collective bargaining coverage rate: percent of employees with the right to bargain



Note: Collective bargaining coverage is usually computed as the number of employees covered by the collective agreement, divided by the total number of wage and salary-earners.

Source: OECD Employment Outlook 2017

Creating a new middle class society

- These policies offer the hope of an alternative to the current American model which has failed so miserably
 - Success is not automatic
 - Will require careful oversight—to make sure that money is spent well
 - A strengthened civil society can play an important role

Another prong of policy reform: curbing market power

- Not just a matter of economics, but also politics
 - Preservation of meaningful democracy
 - Imbalances of “power” contributions to a loss of trust in societal institutions over the past few years
 - Trust important for functioning of economy and society
- SMEs are almost always at a disadvantage
 - A result in part of imperfections in capital and knowledge markets
 - Good economic policy entails giving these firms some assistance.

Creating an innovation economy

- Need both large and small firms for an innovation economy
 - With an important role for government support for research
- Large firms can undertake research projects that are beyond the scope of small
 - But a large fraction of new ideas originate from new and small firms
- An unlevel playing field stifles these firms
 - And this is especially so when large firms take actions to protect and extend their market power
- Evident in the US, e.g. with Microsoft
 - Widespread concern that big firms today are again stifling innovation
 - Pace of creation of new firms down in US
 - Banks and investors won't extend credit to new enterprises when they know that big-tech can crowd them out

The role of government

- A modern successful economy requires an important role for government
 - For instance, investment in technology, education, and infrastructure
 - Particularly important in transition—in structural transformation
 - Particularly important in ensuring a middle class society
 - Providing access to a middle class life for most citizens
- Part of the explanation of the weak performance of the US economy is insufficient public investment
 - Partly as a result of corporations not paying their taxes and lobbying to have their taxes reduced further

National innovation systems

Successful national innovation systems require a range of institutions

- Public investments in technology and basic research and education is crucial
- Intellectual property is important, but its importance has been exaggerated
 - When US Supreme Court curbed patents on genes, innovation increased, leading to lower prices of tests, higher quality—lives saved
 - Often large disparity between private and social returns to innovation
 - Creating world's most efficient advertising engine was not the world's most important task
 - Saving the planet (climate change) and saving lives were more important
 - Much research is directed at enhancing market power and rent extraction, not maximizing societal welfare
- Small firms can play an important part in a dynamic innovative economy
 - Especially with appropriate support from government for capital
 - Provided in a variety of forms

New models of capitalism and the market economy

- Sad reality is that the American model has failed
 - Though it has some areas of impressive strength (e.g. higher education—where the private for-profit sector plays no important role: all of the major universities are either state or not-for-profit)
 - Evidence of a third of a century
 - Political consequences now evident
 - Should be an important warning for others
- There is a need for a new social contract and changes in our economic and social system
 - There can be both more growth and greater equality