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A HOT ECONOMY: SUSTAINABILITY AND TRADE-OFFS

SEPTEMBER 26, 2019

FEDERAL RESERVE BANK OF SAN FRANCISCO

PANEL DISCUSSION: RESEARCH PERSPECTIVES ON THE COSTS AND BENEFITS OF A HOT ECONOMY

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Costs and Benefits of a Hot Economy

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September 26, 2019

Unemployment rates are much lower than they were before the Great Recession

	2007-Q4	2019-Q2	Change
Unemployment Rate	4.8	3.6	-1.2
U6 (broader underutilization)	8.5	7.2	-1.3
Black unemployment	8.7	6.3	-2.4
Hispanic unemployment	6.0	4.2	-1.8
Long-term unemployment	0.9	0.8	-0.1

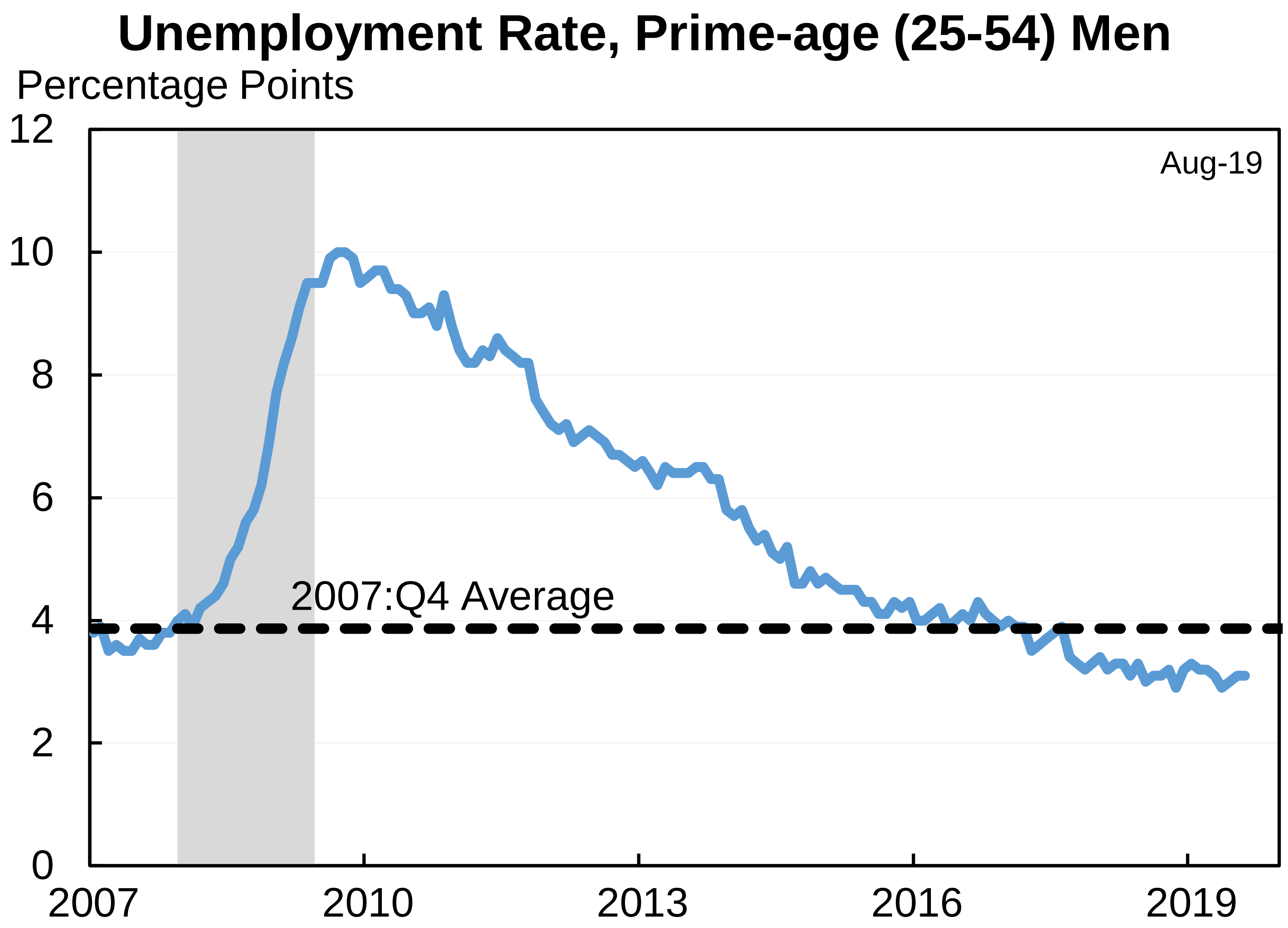
Source: Bureau of Labor Statistics; Haver Analytics; author’s calculations.

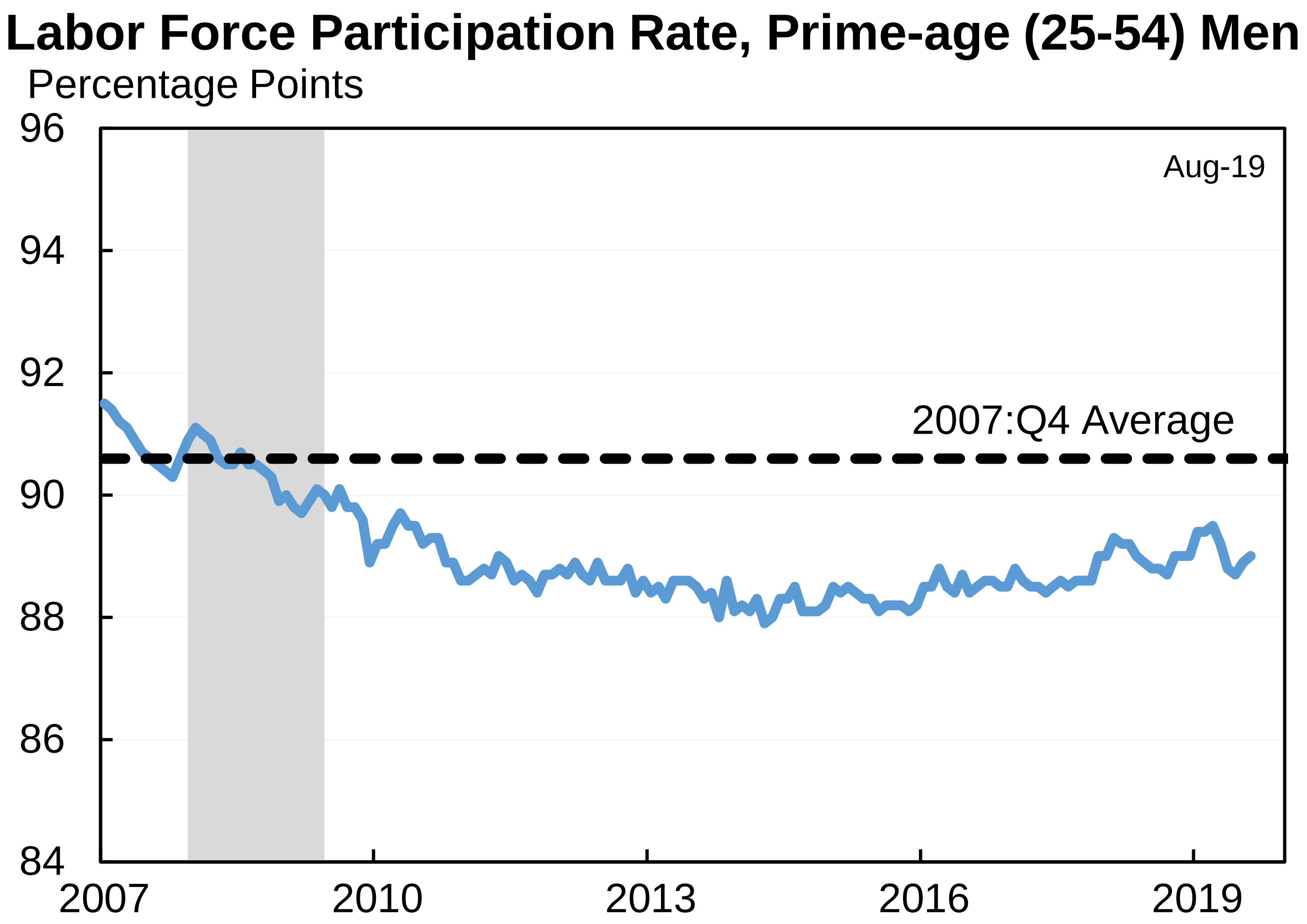
Non-employment rates (including people not looking for jobs) are more mixed

	2007-Q4	2019-Q2	Change
Younger workers (16-24)	47.3	48.9	1.6
Older workers (55+)	62.3	61.2	-1.1
Prime-age (25-54)	20.3	20.3	0.0
Prime-age men	12.9	13.8	0.9
Prime-age women	27.6	26.7	-0.9

Source: Bureau of Labor Statistics; Haver Analytics; author’s calculations.

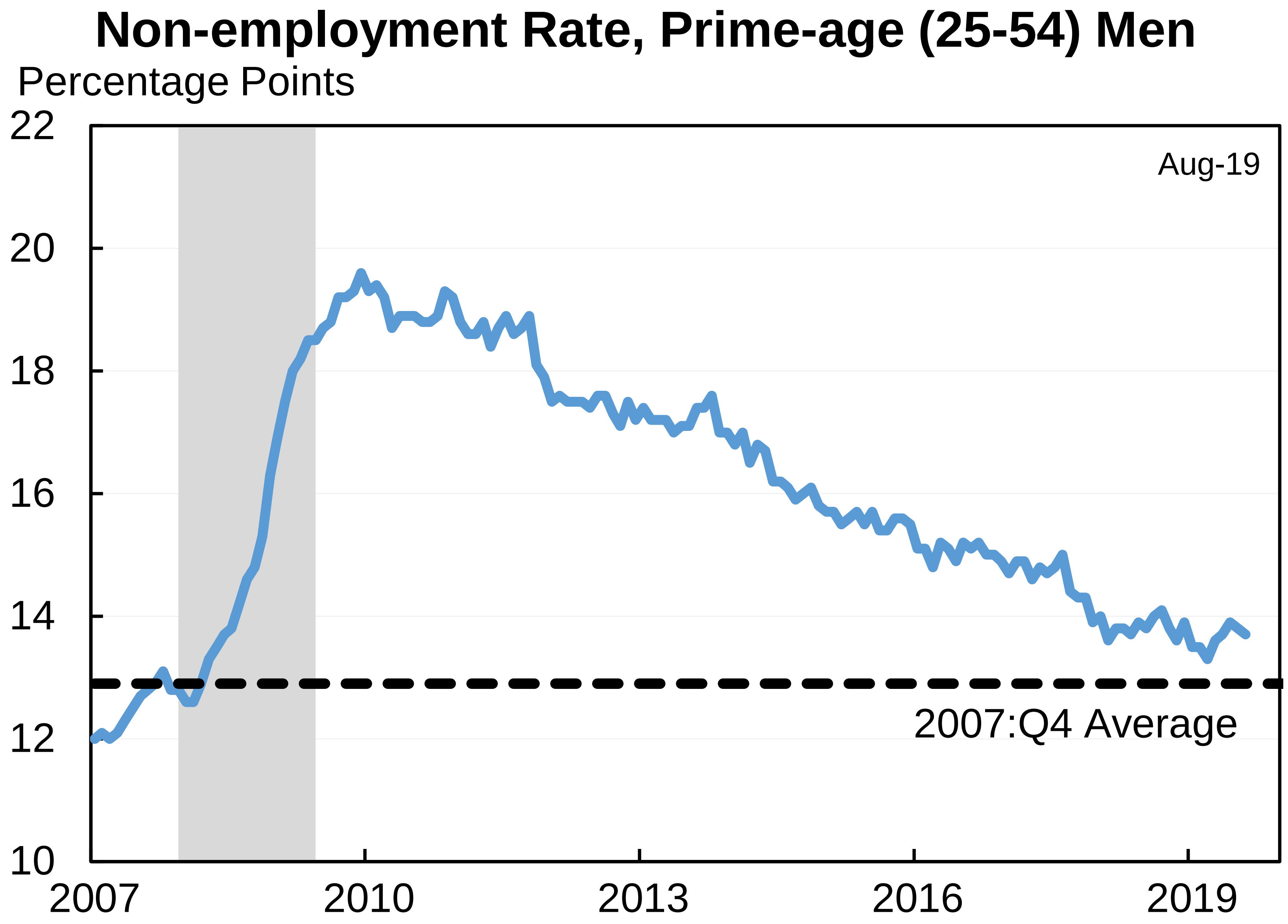
A closer look at prime-age men: unemployment rate down but also labor force participation rate down





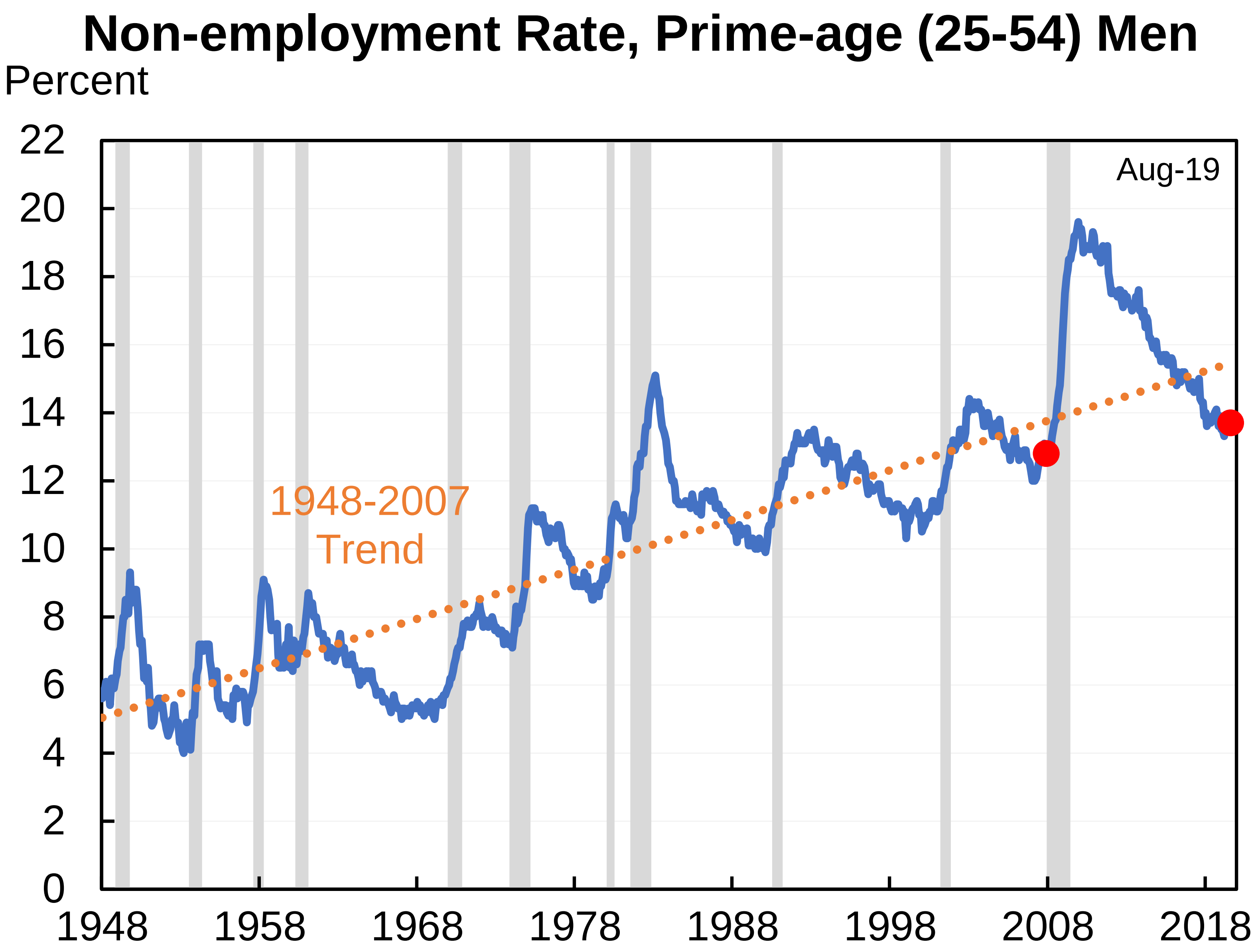
Source: Bureau of Labor Statistics; Haver Analytics.

The net effect: non-employment rates have made steady progress but not enough to make up for recessionary losses



Source: Bureau of Labor Statistics; Haver Analytics; author’s calculations.

This has almost always been the case since the 1960s



Source: Bureau of Labor Statistics; author's calculations.

Two lessons from the employment experience for policy

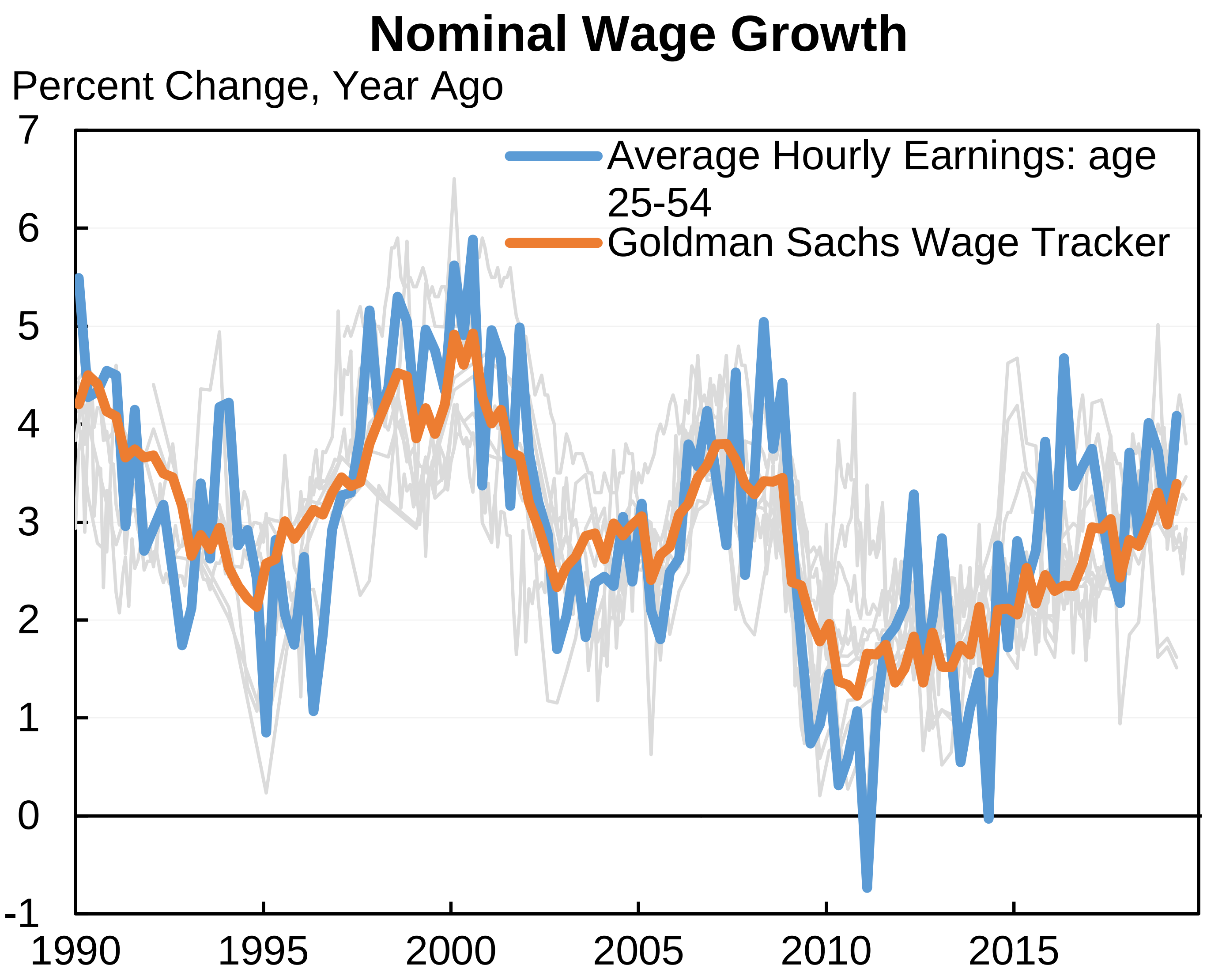
1. Monetary policy may have more scope than many appreciated. A hot economy has helped bring prime-age male employment above its previous trend. And there may still be more room to grow.

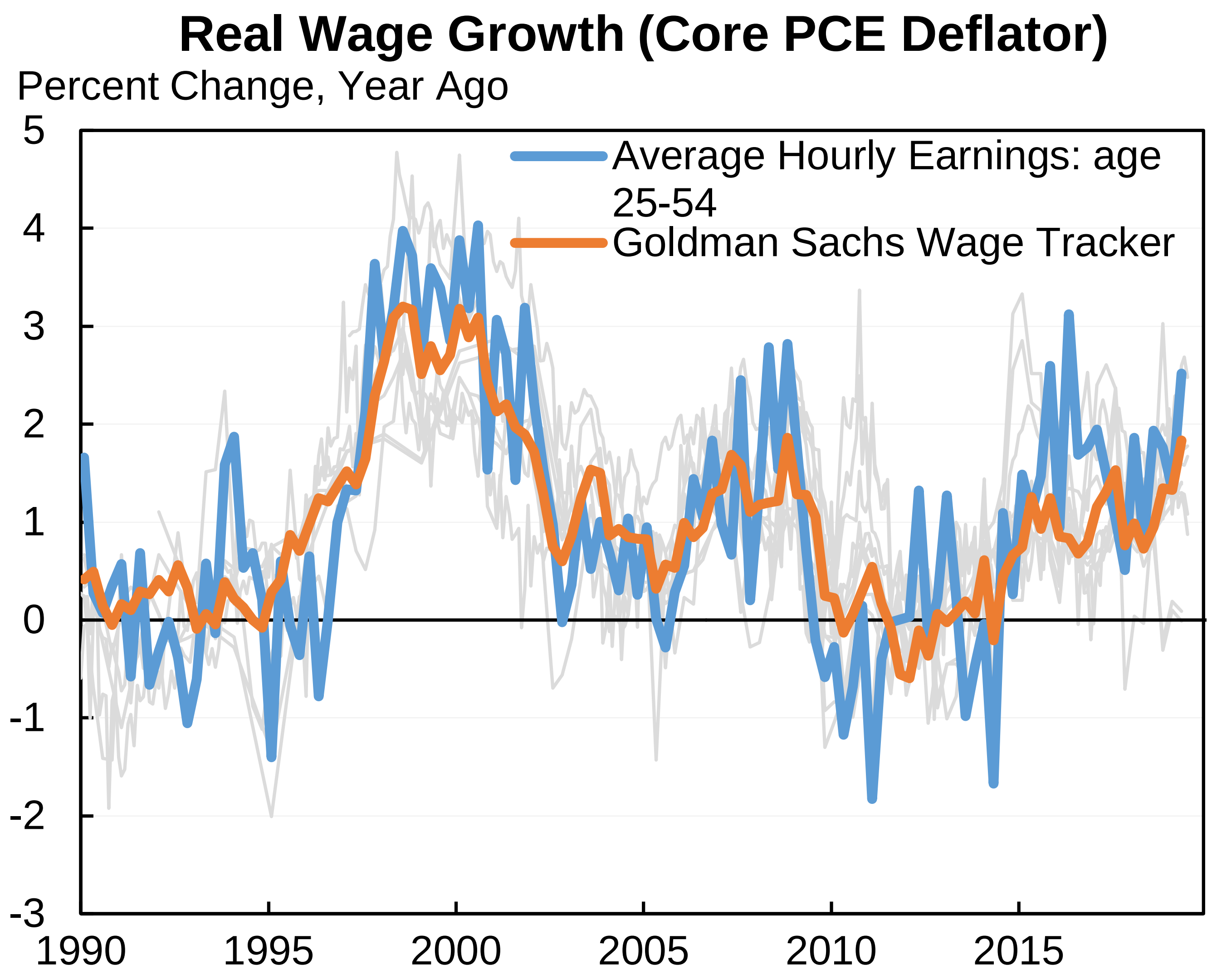
2. Monetary policy, by itself, cannot offset decades of structural problems. No monetary policy can erase the 10 percentage point increase in non-employment since the 1950s. Need to remedy structural issues like insufficient education, unsupportive labor markets, limits on mobility, lack of training programs, mass incarceration, the opioid epidemic, and more.

What does a hot labor market mean for wages?

- Employment increases are a good enough reason for a hot labor market.
- Stronger real wage growth would be a bonus.
- Question: what goes up more, prices or wages?

First a quick review of what has happened to nominal and (trend) real wages

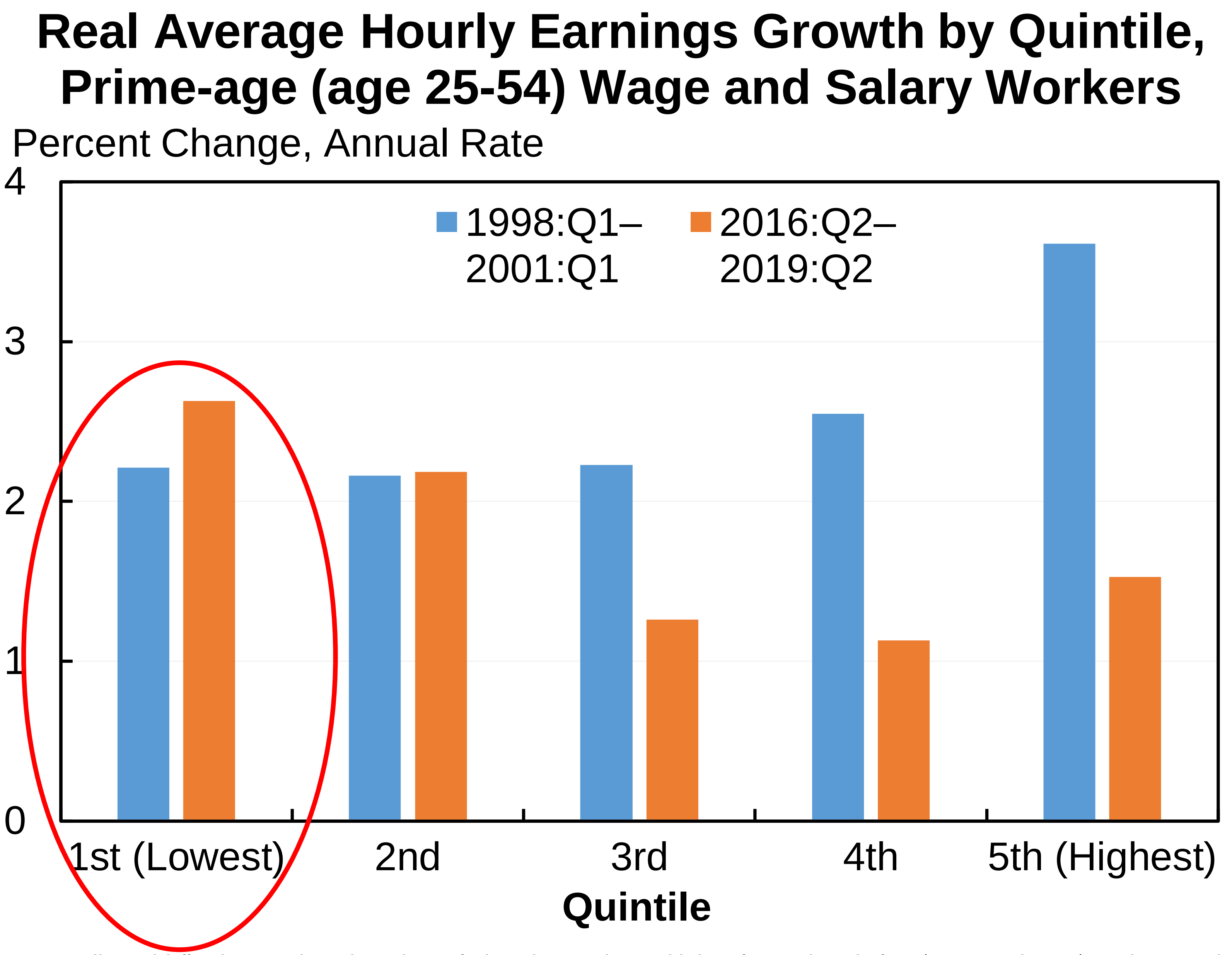




Other wage measures: Atlanta Fed wage growth tracker, ECI: wages and salaries of civilian workers, ECEC: wages and salaries of civilian workers, ECI: wages and salaries of private industry workers, ECEC: wages and salaries of private industry workers, median usual weekly earnings, average hourly earnings: total private, average hourly earnings: production and nonsupervisory workers, average weekly earnings: total private, average weekly earnings: production and nonsupervisory workers.

Source: Bureau of Labor Statistics; Current Population Survey, Merged Outgoing Rotation Groups; IPUMS CPS; Goldman Sachs; Federal Reserve Bank of Atlanta; Bureau of Economic Analysis; Haver Analytics; author’s calculations.

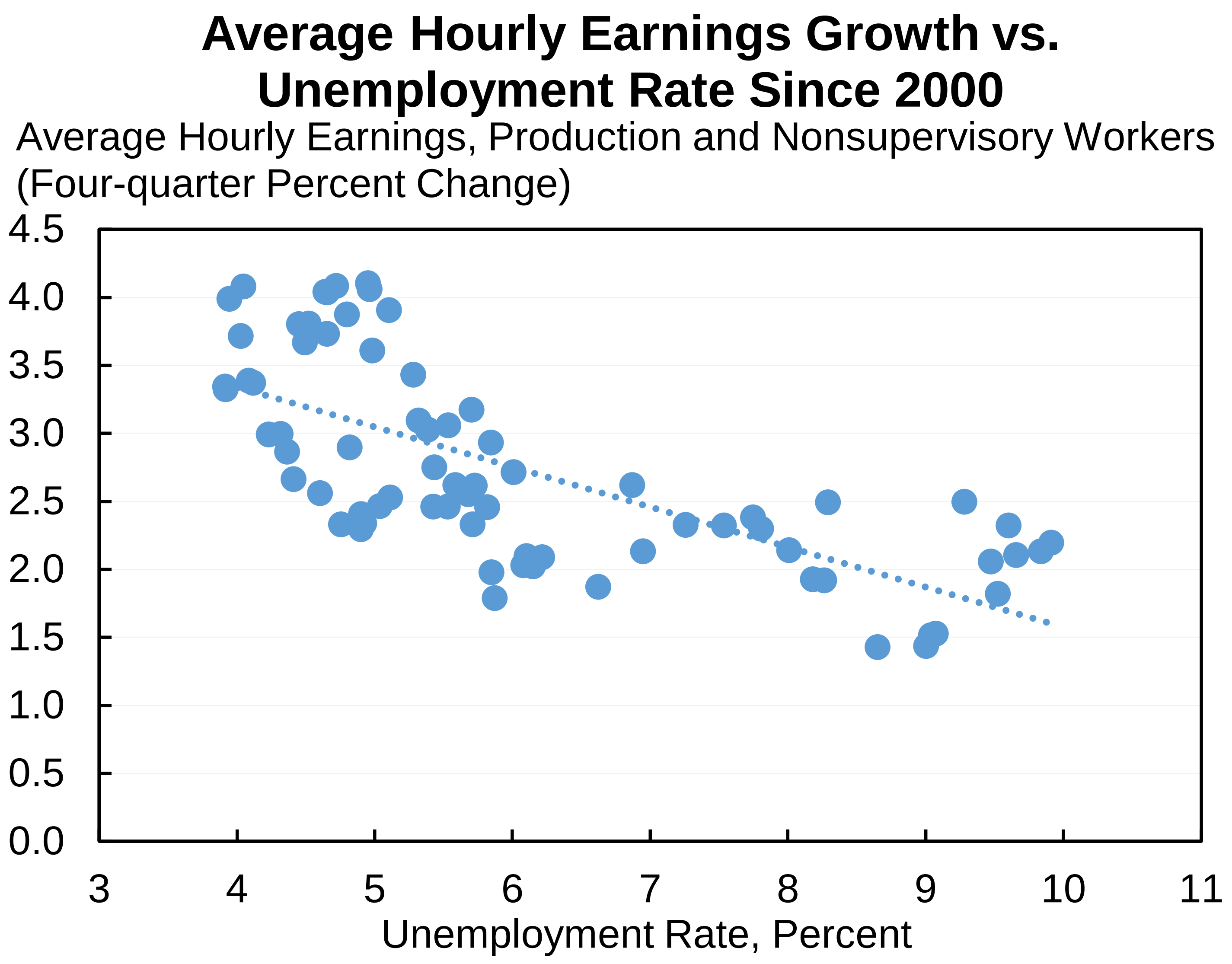
The distribution of wages tells an even more favorable story—in fact more favorable than the last hot economy

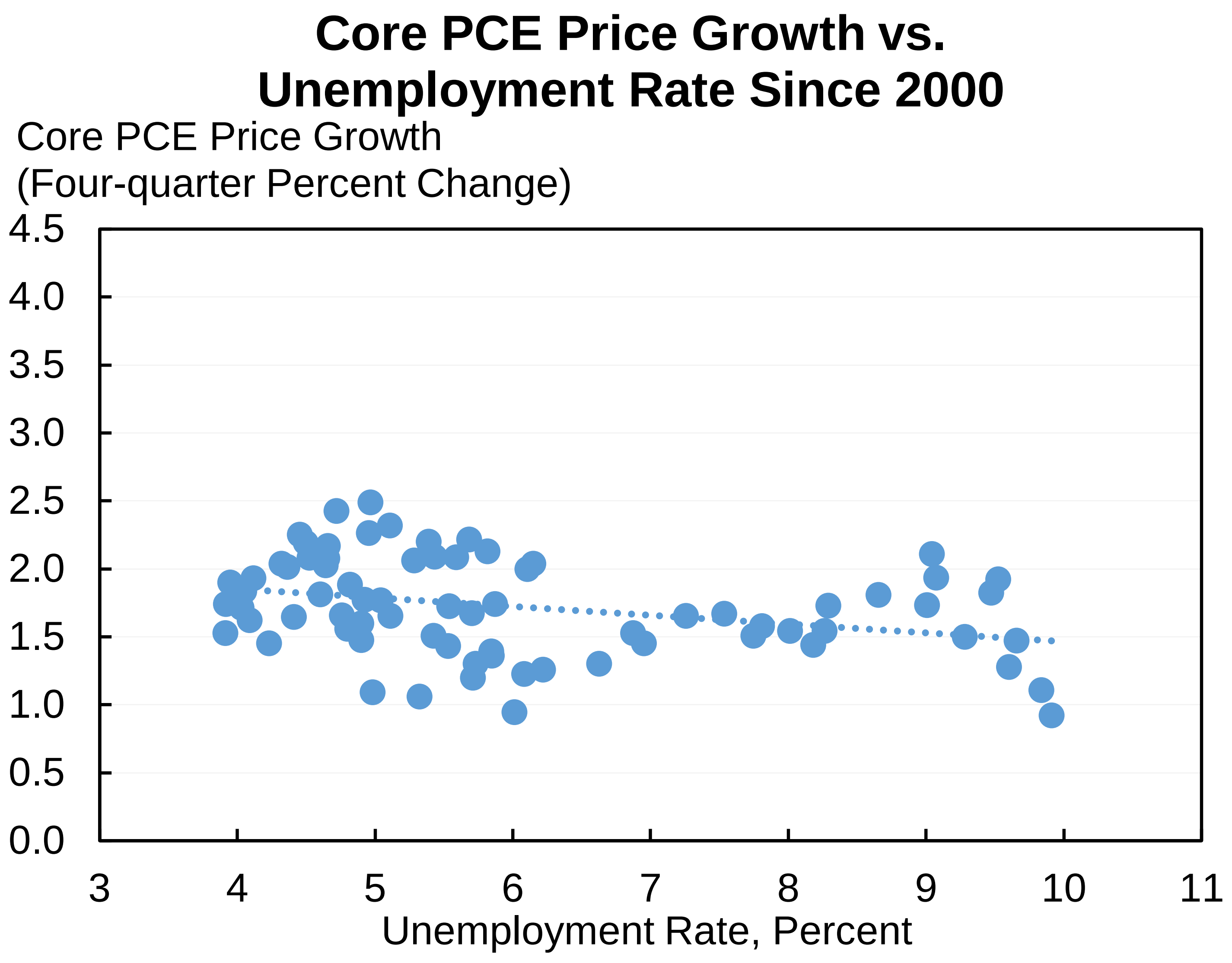


In the latest period wage growth at the bottom is higher than in the late 1990s and is higher than it has been at the top recently.

Note: Top-coded earnings are adjusted following Lemieux (2006). Excludes observations with hourly earnings below $0.50 or above $100 in 1989 dollars as deflated by the CPI-U-RS. Nominal wages are deflated by PCE price inflation.
Source: Bureau of Labor Statistics; Haver Analytics; Current Population Survey, Merged Outgoing Rotation Groups; IPUMS CPS; Bureau of Economic Analysis; author's calculations.

It appears that wage growth has been more responsive to changes in the unemployment rate than has price growth





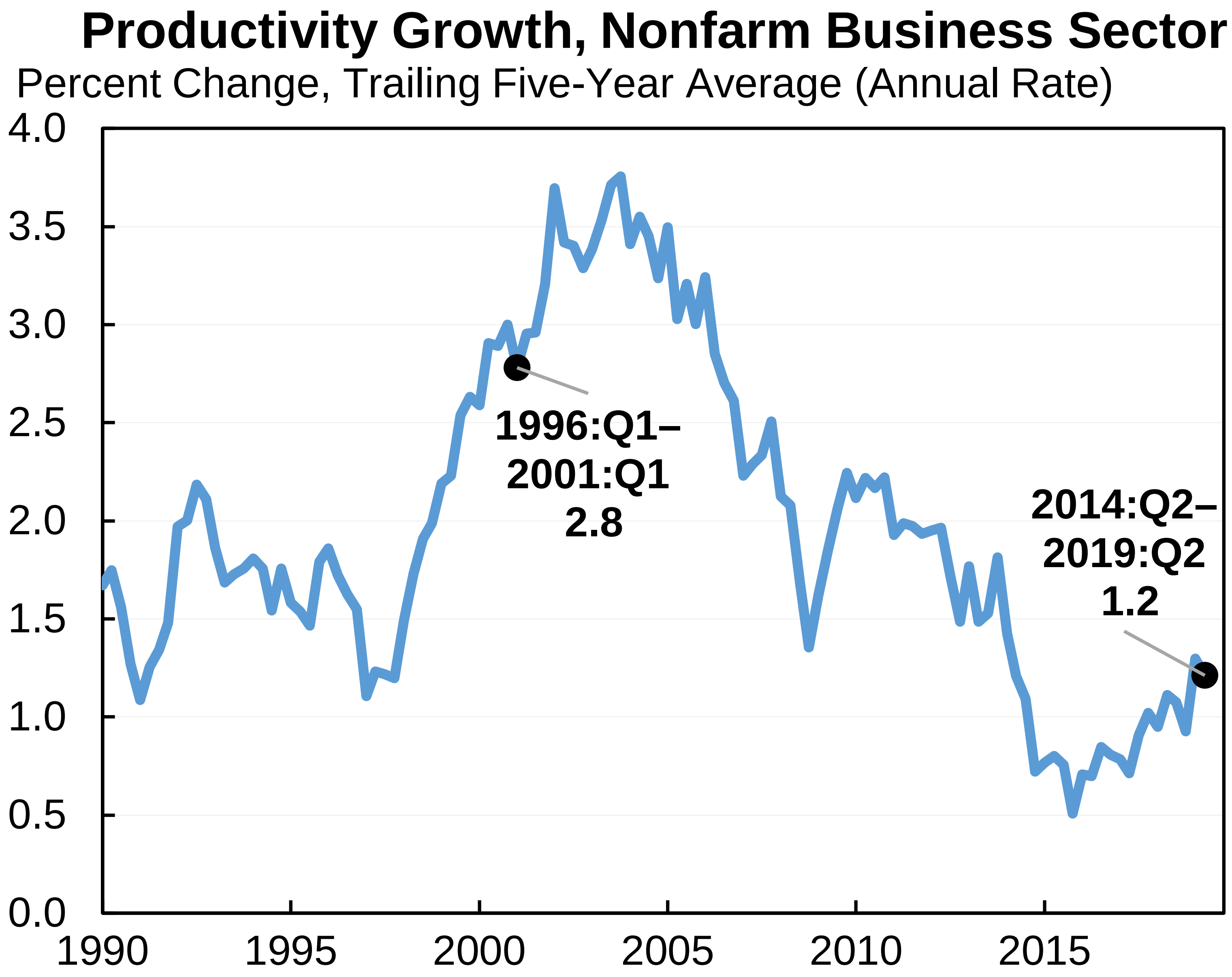
Note: Dotted line is linear trend.
Source: Bureau of Labor Statistics; Bureau of Economic Analysis; Haver Analytics; author’s calculations.

This is generally true for different models of the Phillips curve and measures of slack (plus prices/wages, not shown)

Effect of a 1 percentage point improvement in labor markets (2000 to present)						
Slack Measure	**Traditional Phillips curve**		**Accelerationist Phillips Curve**		**Autoregressive Phillips Curve**	
	Average Hourly Earnings	Core PCE Prices	Average Hourly Earnings	Core PCE Prices	Average Hourly Earnings	Core PCE Prices
UR	0.29**	0.06**	0.09	-0.03	0.21**	0.06**
Short-term UR	0.50**	0.14**	0.32**	-0.06	0.40**	0.12
Prime-age employment	0.30**	0.06	0.01	-0.03	0.25**	0.06**

Note: ** indicates estimate is significant at the 5 percent level. Estimated with Newey-West standard errors using an 8 quarter lag.
Source: Bureau of Labor Statistics; Bureau of Economic Analysis; Haver Analytics; author's calculations.

The hot labor market is helping to make up for the fact that productivity growth is slower than it was in the late 1990s



With lower productivity growth, we would expect wage growth to be lower—by as much as 1.6 percentage points.

Source: Bureau of Labor Statistics; Haver Analytics; author's calculations.

Focusing on wages has an analogous policy lesson as focusing on employment

1. **Monetary policy appears to be able to raise real wage growth.** More research needed—especially on relative effects on wages and prices.

2. **Monetary policy, by itself, cannot offset decades of structural problems.** Slower productivity growth and higher inequality are major impediments to wage growth. Monetary policy can help with these but cannot fully undo the deeper forces like the nature of technological change, slowdown in educational advancement, weaker labor unions, lower minimum wage, and more.

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Research Perspectives on the Costs and Benefits of a Hot Economy

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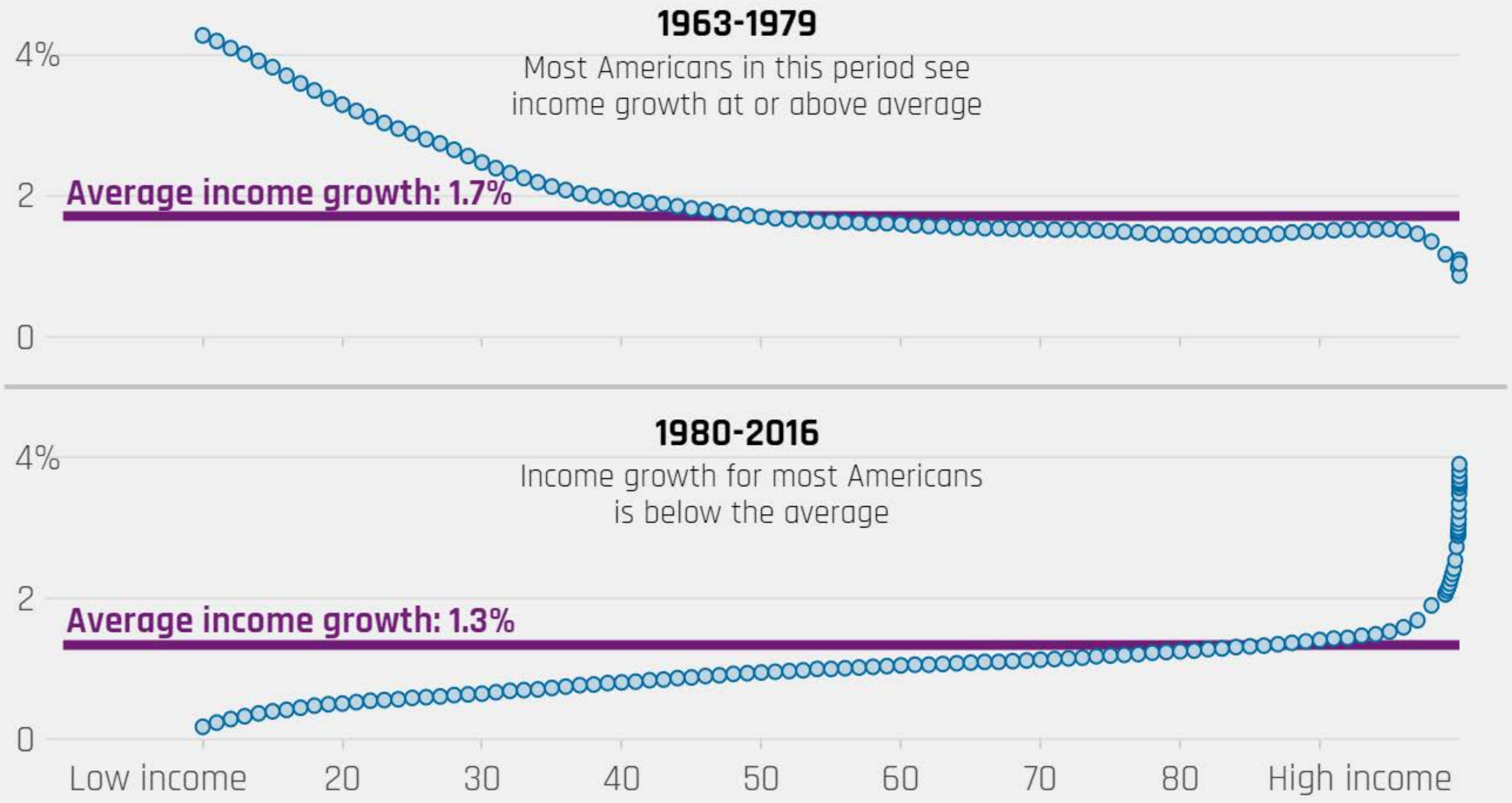
Average income no longer represents the fortunes of most Americans

Annual income growth for earners in each percentile of the U.S. population in two periods



Source: Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," Quarterly Journal of Economics 133, no. 2 (May 1, 2018): Appendix tables II: distributional series, available at http://gabriel-zucman.eu/usdina/.

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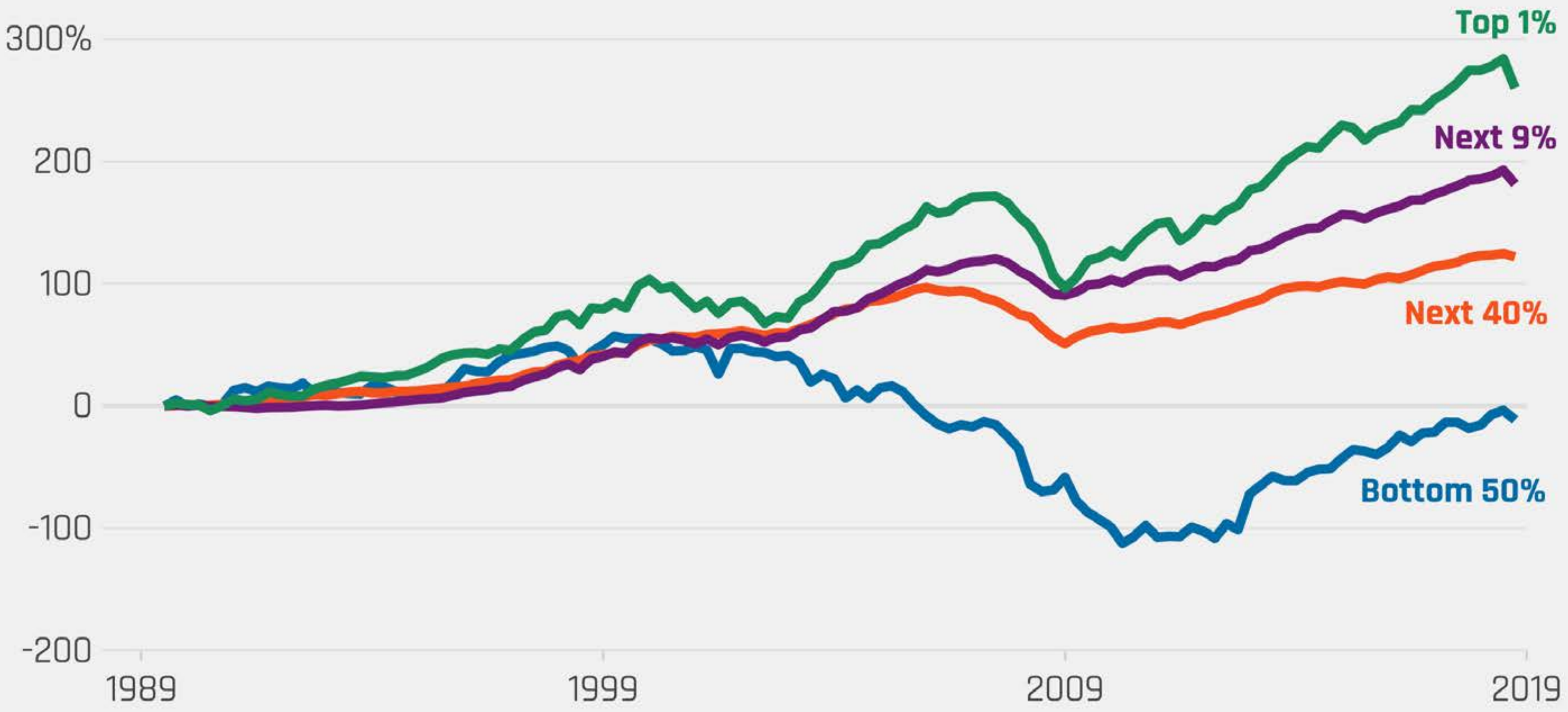
The top 1% have seen a nearly 300% increase in wealth since 1989

Cumulative wealth growth in the United States between 1989-2018, adjusted to 2019 dollars using the GDP Price Index



Source: “Distributional Financial Accounts: Levels of Wealth by Wealth Percentile Groups,” available at https://www.federalreserve.gov/releases/efa/efa-distributional-financial-accounts.htm [last accessed August 8, 2019].

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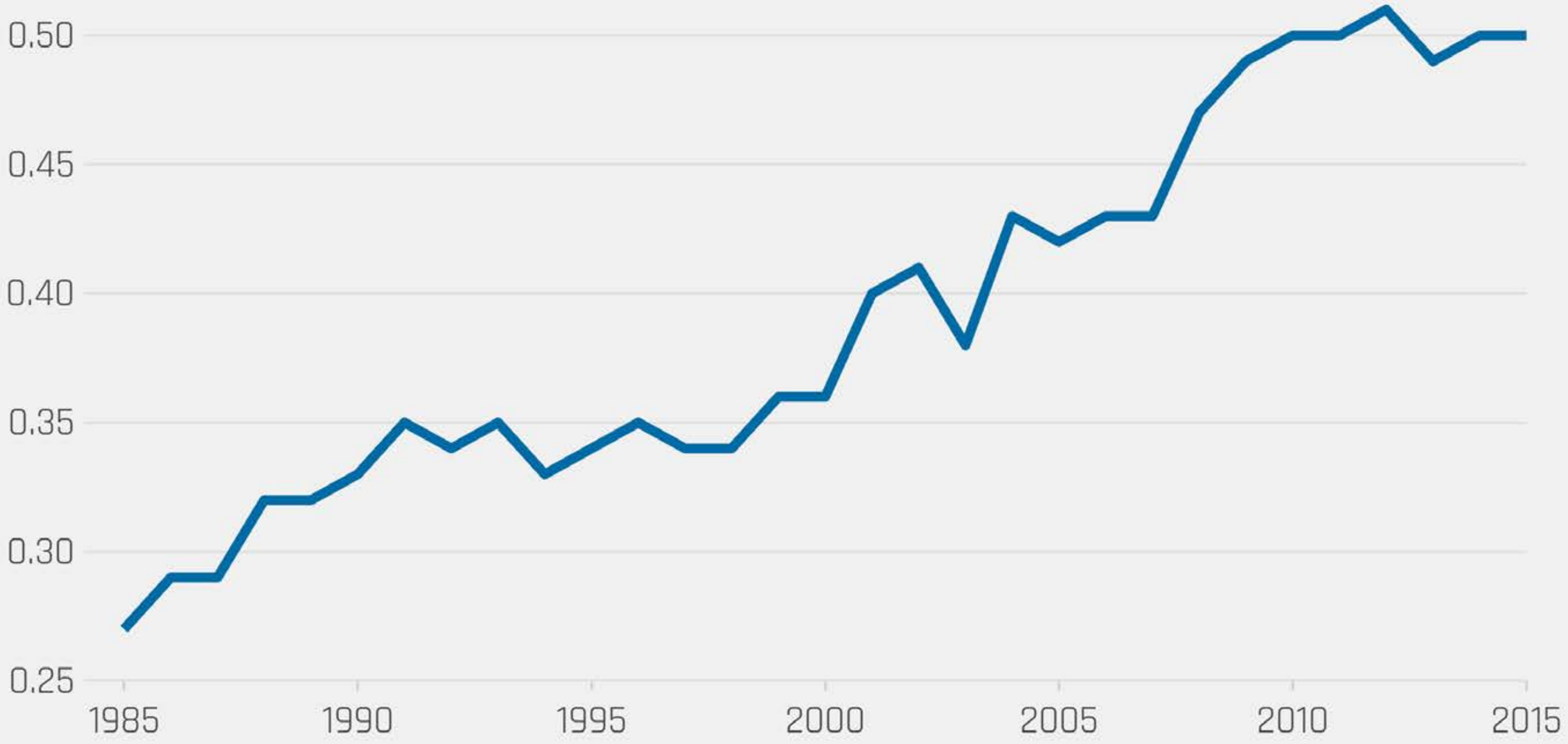
Market concentration has risen in recent decades

Modified Herfindahl Index across industries in the United States, 1985-2015



Source: Germán Gutiérrez and Thomas Philippon, “Declining Competition and Investment in the U.S.”; U.S. Census Bureau; Compustat.

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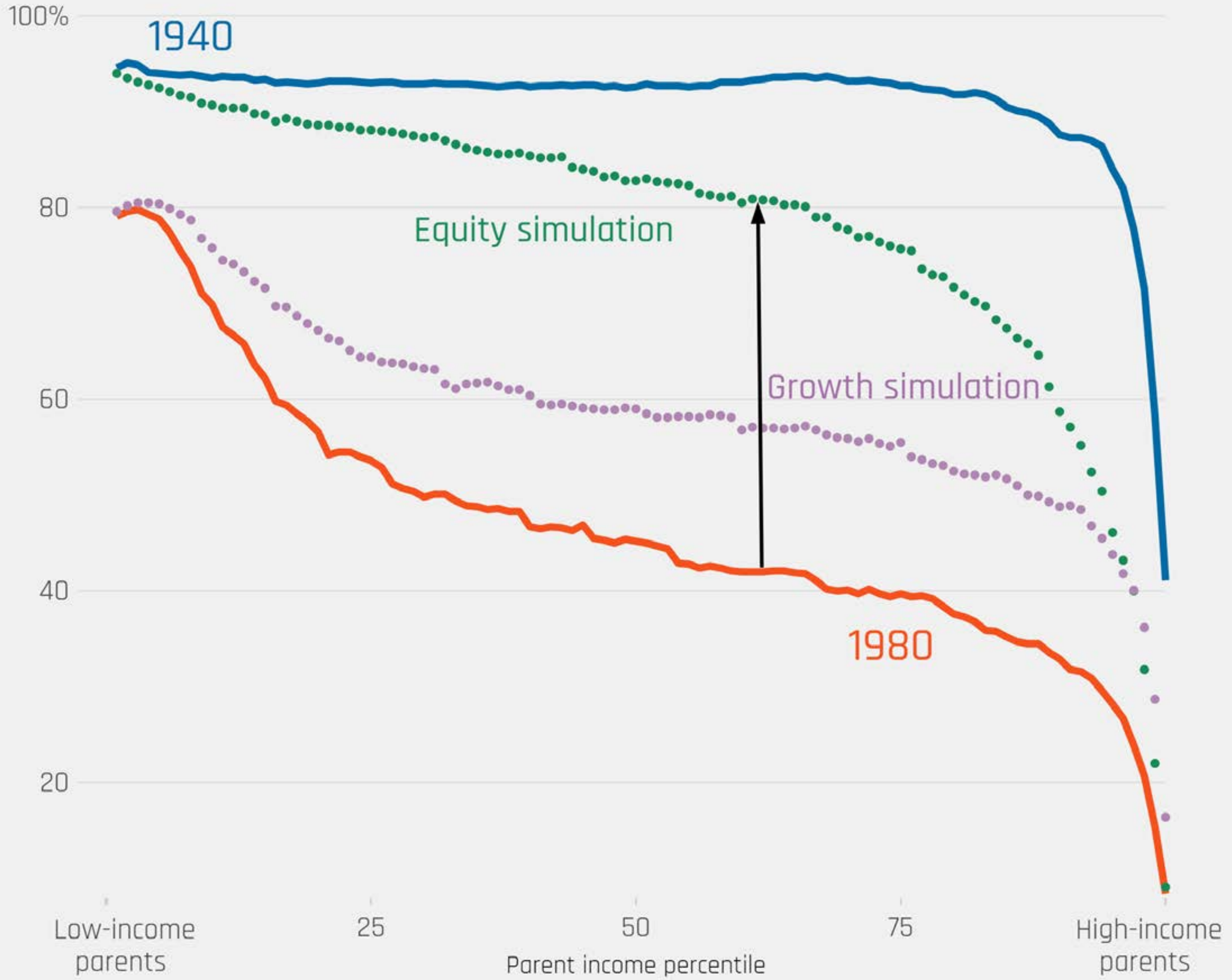
Lower inequality closes 70 percent of the mobility gap

Percent of children in each cohort who earn more than their parents with simulations



Source: Raj Chetty, David Grusky, Maximilian Hell, Nathaniel Hendren, Robert Manduca, Jimmy Narang, "The Fading American Dream: Trends in Absolute Income Mobility Since 1940" Science 356(6336): 398-406, 2017.

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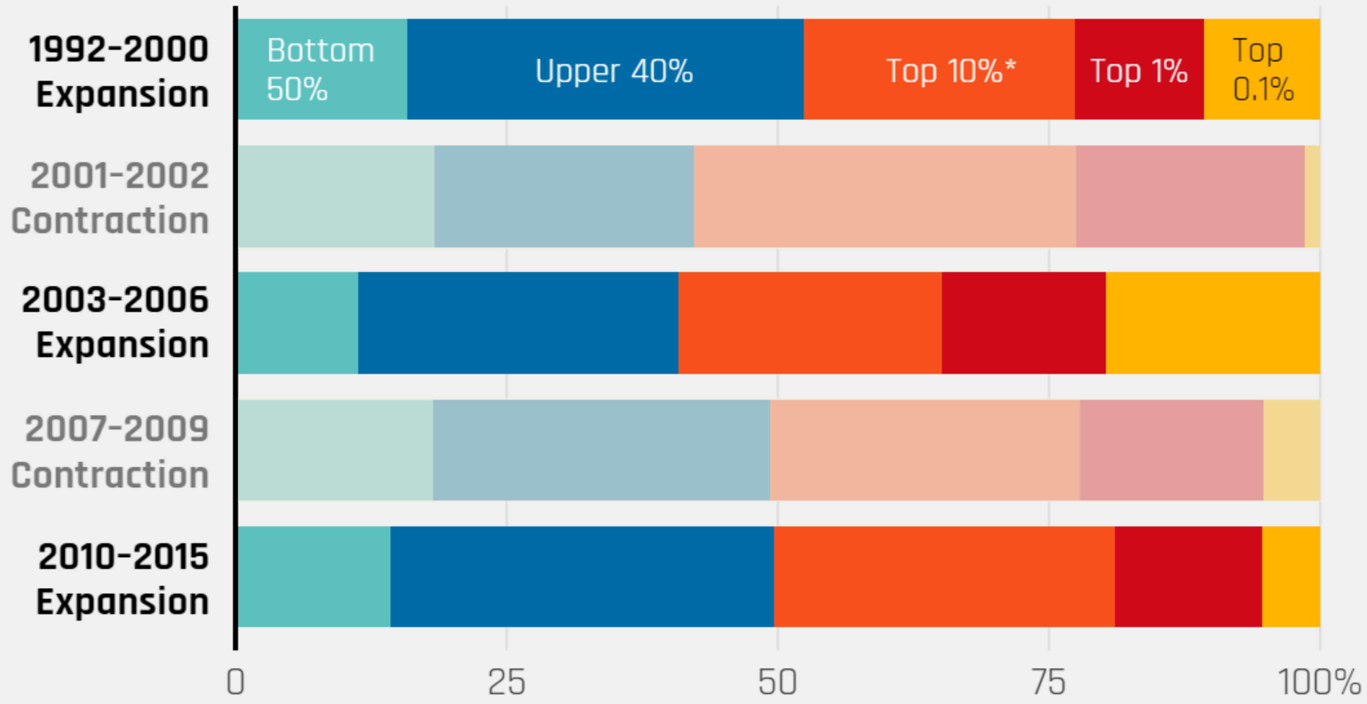
The richest 10% of Americans have received about half of all growth in recent economic expansions

Percent of total change in income in recent expansions and contractions earned or lost by each income group



Source: "Appendix table II: distributional series," available at http://gabriel-zucman.eu/usdina/ (last accessed April 2019).

* Top 10%, 1%, and 0.1% are exclusive of each other. Expansions and contractions as identified by the DINA dataset based on per adult annual National Income

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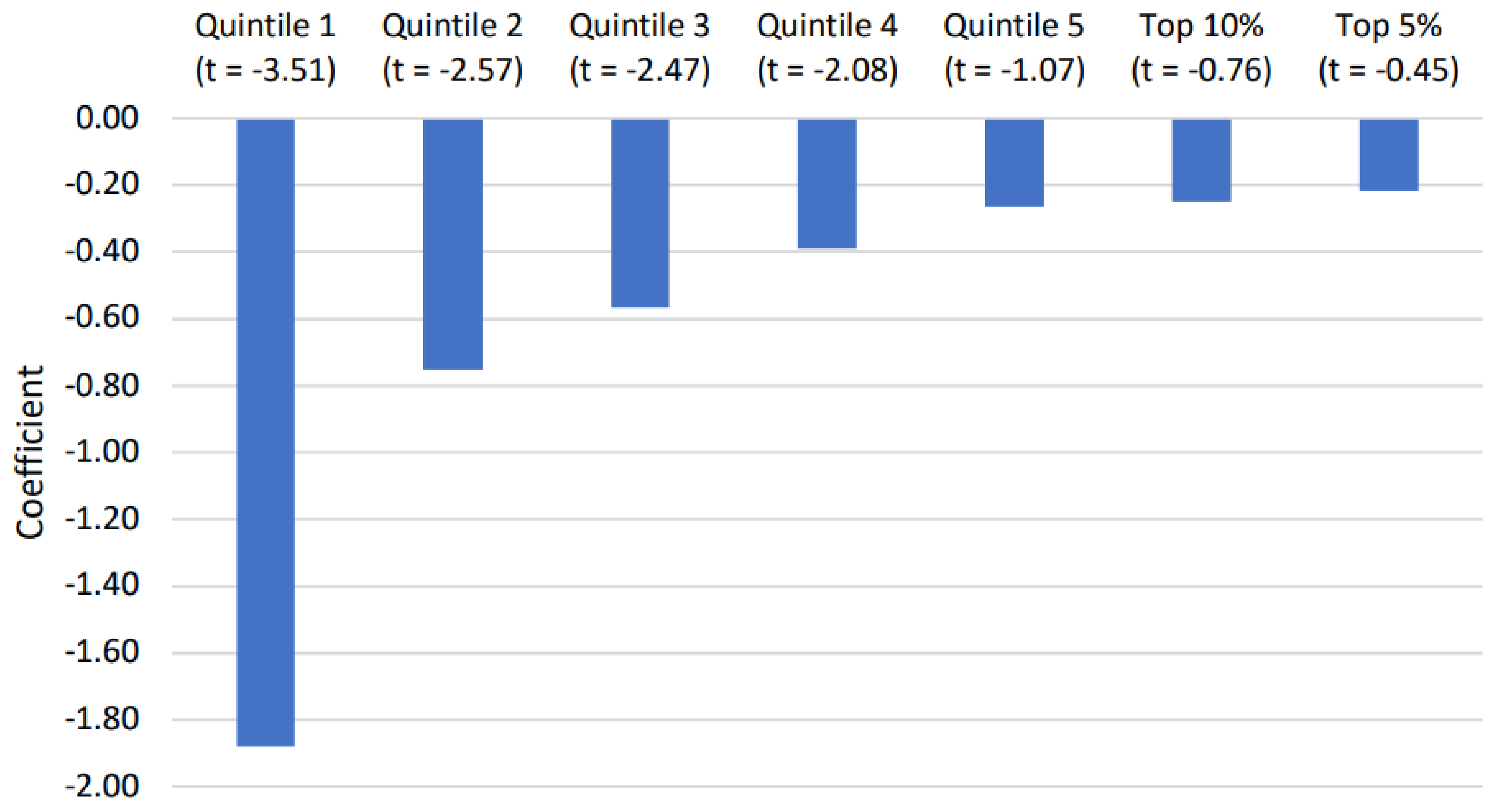
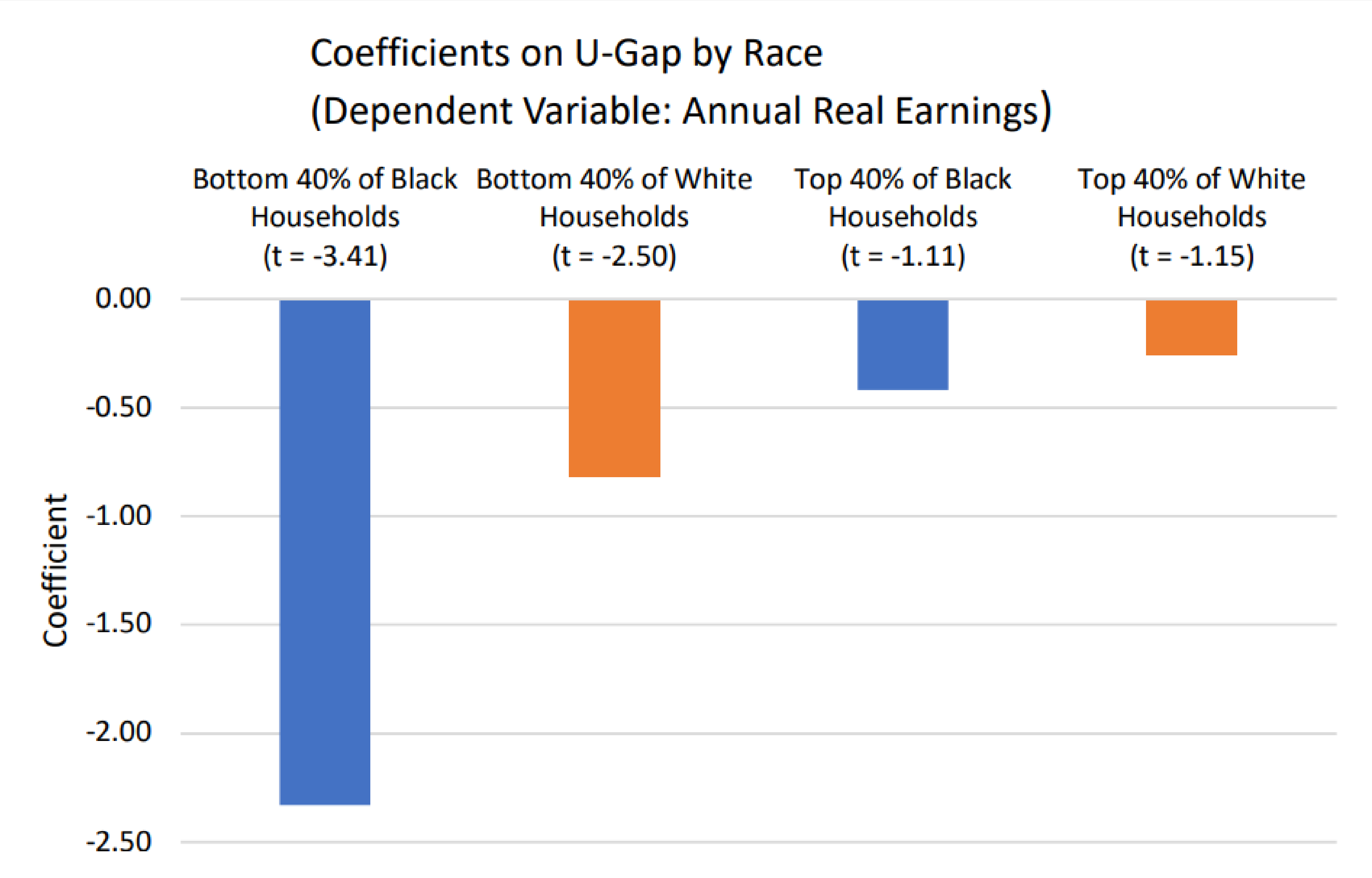
Coefficients and T-Statistics on U-Gap for Different Earnings Groups (Dependent Variable: Annual Real Earnings)



Source: Jared Bernstein and Keith Bentele, "The Increasing Benefits and Diminished Costs of Running a High-Pressure Labor Market," *Center on Budget and Policy Priorities*.



Source: Jared Bernstein and Keith Bentele, “The Increasing Benefits and Diminished Costs of Running a High-Pressure Labor Market,” *Center on Budget and Policy Priorities*.

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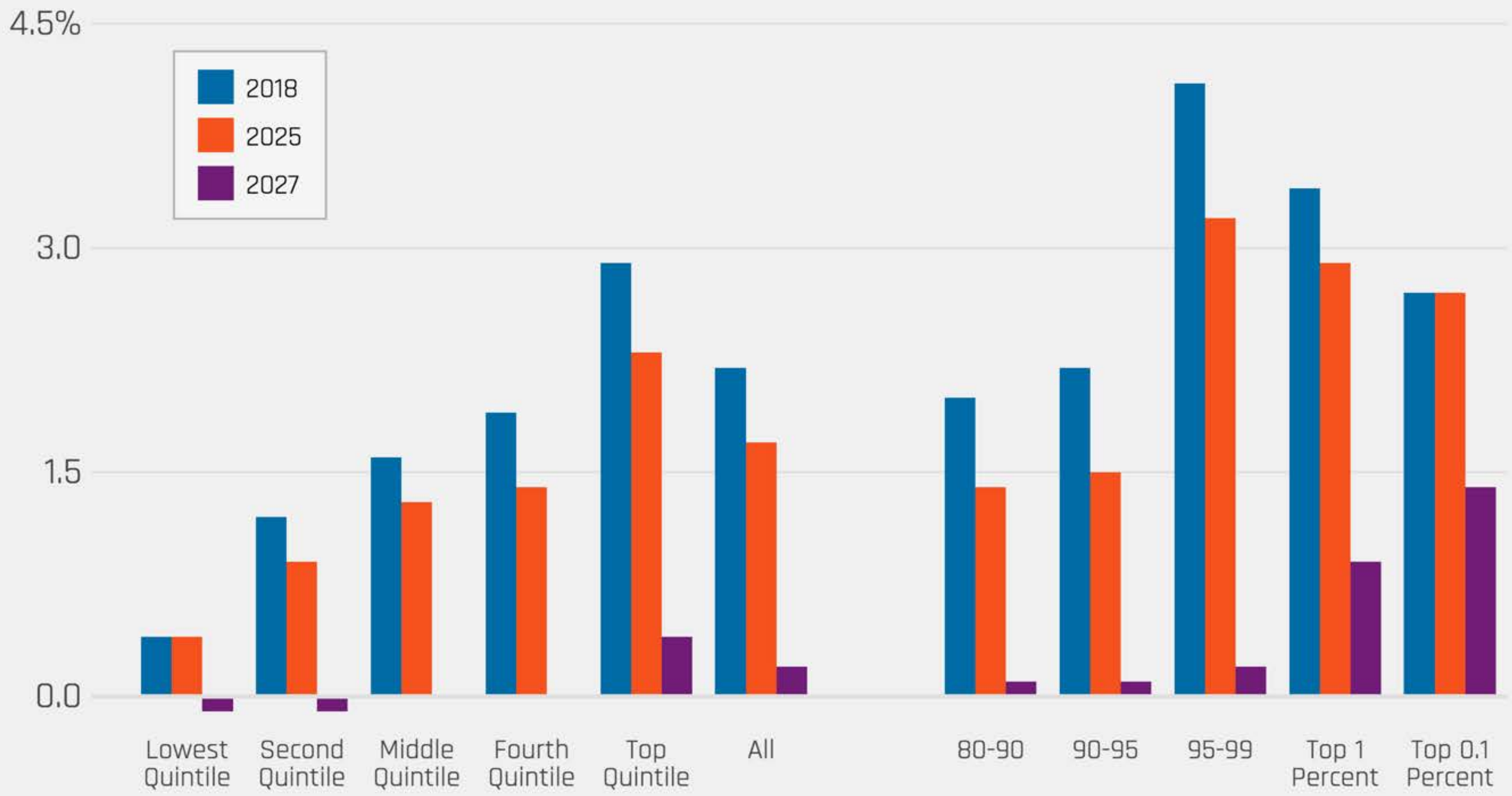
TCJA Increases Welfare the Most for High-Income Families

Percent change in after-tax income (static), 2018, 2025, 2027



Source: Tax Policy Center.
Note: Excludes effects of repealing the individual mandate.

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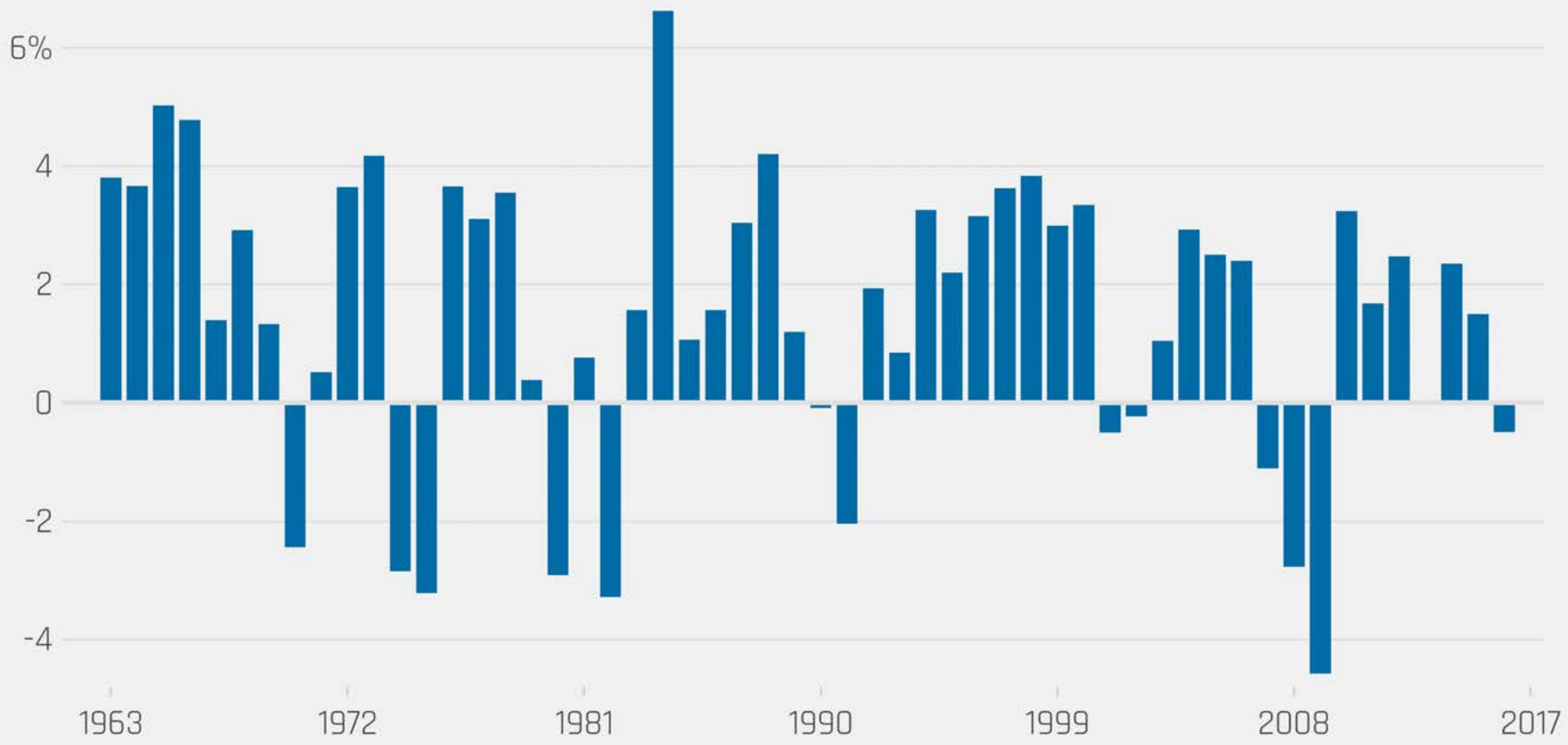
Aggregate numbers mask how growth is distributed

Per capita annual U.S. real National Income growth, 1963-2016



Source: Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," Quarterly Journal of Economics 133, no. 2 (May 1, 2018): Appendix tables II: distributional series, available at http://gabriel-zucman.eu/usdina/.

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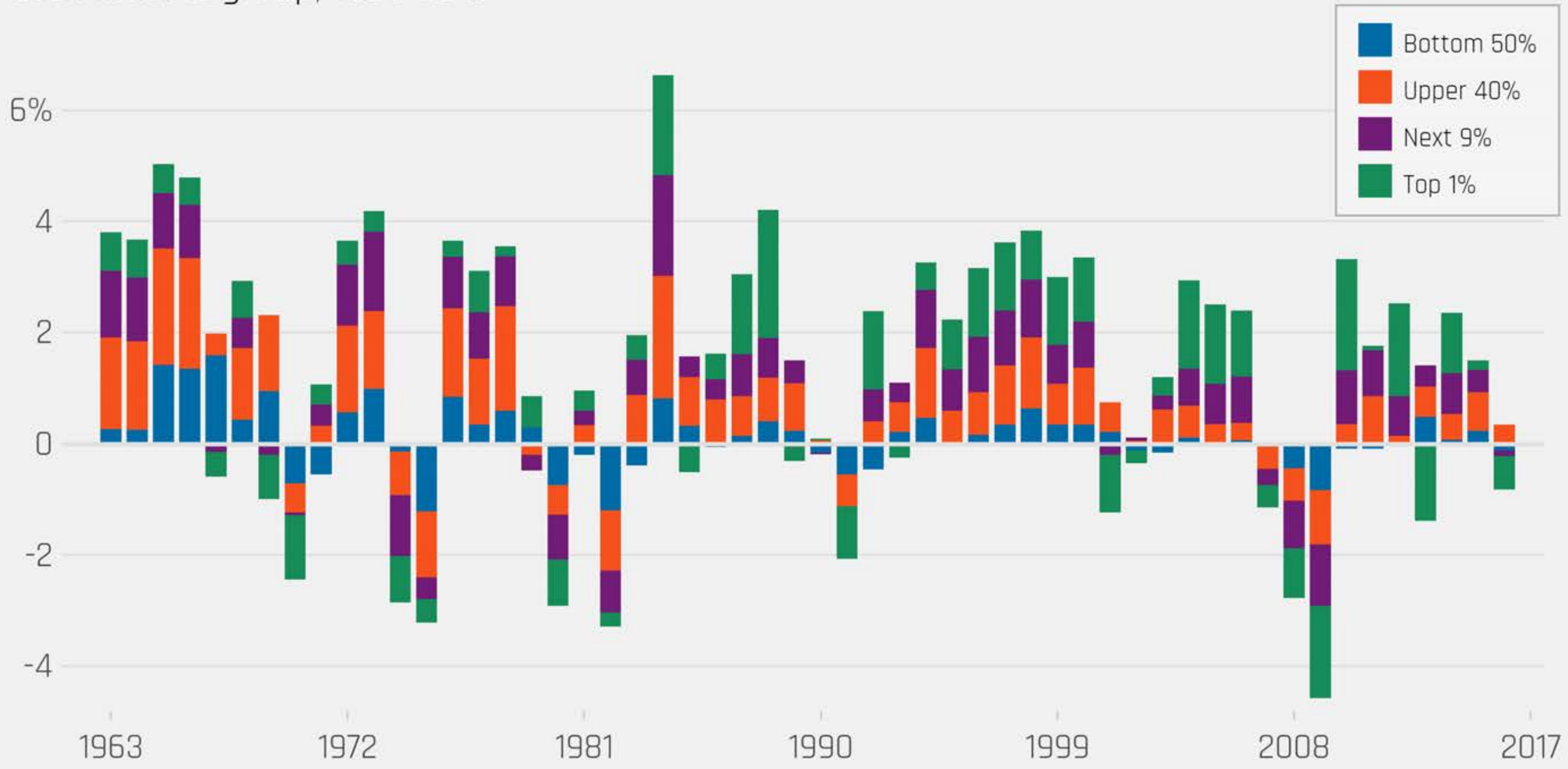
Since the 1980s, more growth has flowed to high income Americans

Per capita annual real U.S. National Income growth subdivided by amount of growth earned by each income group, 1963-2016



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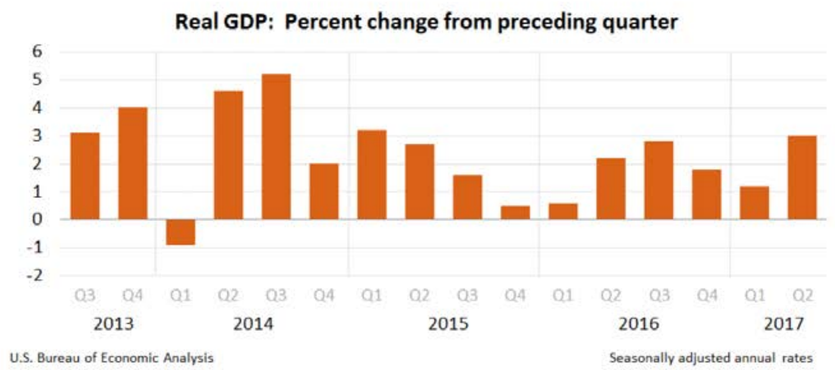
National Income and Product Accounts
Gross Domestic Product: Second Quarter 2017 (Second Estimate)
Corporate Profits: Second Quarter 2017 (Preliminary Estimate)

Real gross domestic product (GDP) increased at an annual rate of 3.0 percent in the second quarter of 2017 (table 1), according to the "second" estimate released by the Bureau of Economic Analysis. In the first quarter, real GDP increased 1.2 percent.

The GDP estimate released today is based on more complete source data than were available for the "advance" estimate issued last month. In the advance estimate, the increase in real GDP was 2.6 percent. With this second estimate for the second quarter, the general picture of economic growth remains the same; increases in personal consumption expenditures (PCE) and in nonresidential fixed investment were larger than previously estimated. These increases were partly offset by a larger decrease in state and local government spending (see "Updates to GDP" below).



Real gross domestic income (GDI) increased 2.9 percent in the second quarter, compared with an increase of 2.7 percent (revised) in the first. The average of real GDP and real GDI, a supplemental measure of U.S. economic activity that equally weights GDP and GDI, increased 3.0 percent in the second quarter, compared with an increase of 2.0 percent in the first quarter (table 1).

The increase in real GDP in the second quarter reflected positive contributions from PCE, nonresidential fixed investment, exports, federal government spending, and private inventory investment that were partly offset by negative contributions from residential fixed investment and state and local government spending. Imports, which are a subtraction in the calculation of GDP, increased (table 2).

The acceleration in real GDP in the second quarter primarily reflected upturns in private inventory investment and federal government spending and an acceleration in PCE that were partly offset by downturns in residential fixed investment and state and local government spending and a deceleration in exports.

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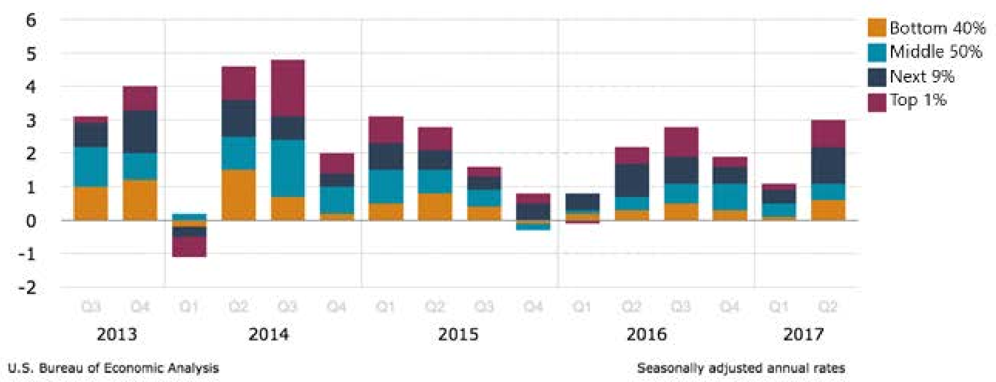
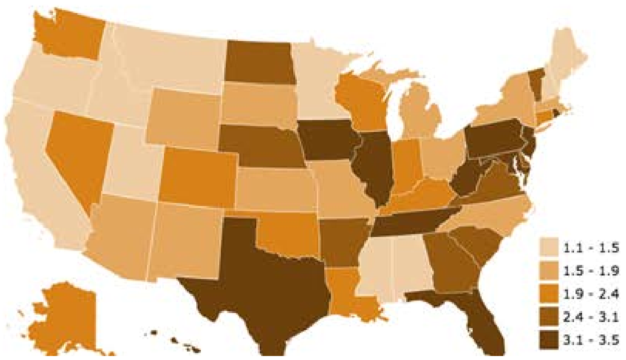
Real GDP: Percent change from preceding quarter by income quantile

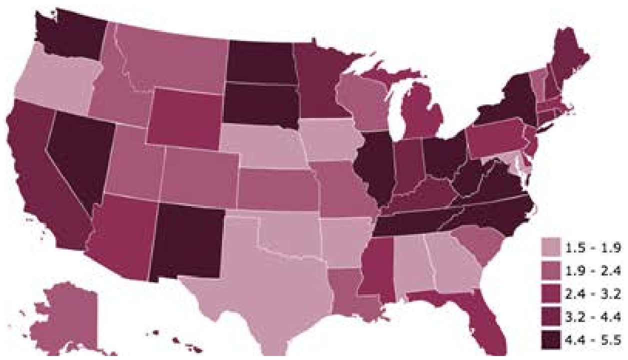


Incomes of the top 1% of earners in the economy grew by 4.0%, representing 26.7% of GDP growth. Gains made by the top 10% of earners made up 36.7% of overall GDP growth while the Middle 40% of earners captured 16.7% of GDP growth and the bottom 50% of earners captured 20% of GDP growth. This growth pattern is less equitable than growth in the first quarter. The 90/10 income ratio rose to 14.63 from 14.50 in the previous quarter.

Percent change in bottom 40% income, by state



Percent change in top 1% income, by state



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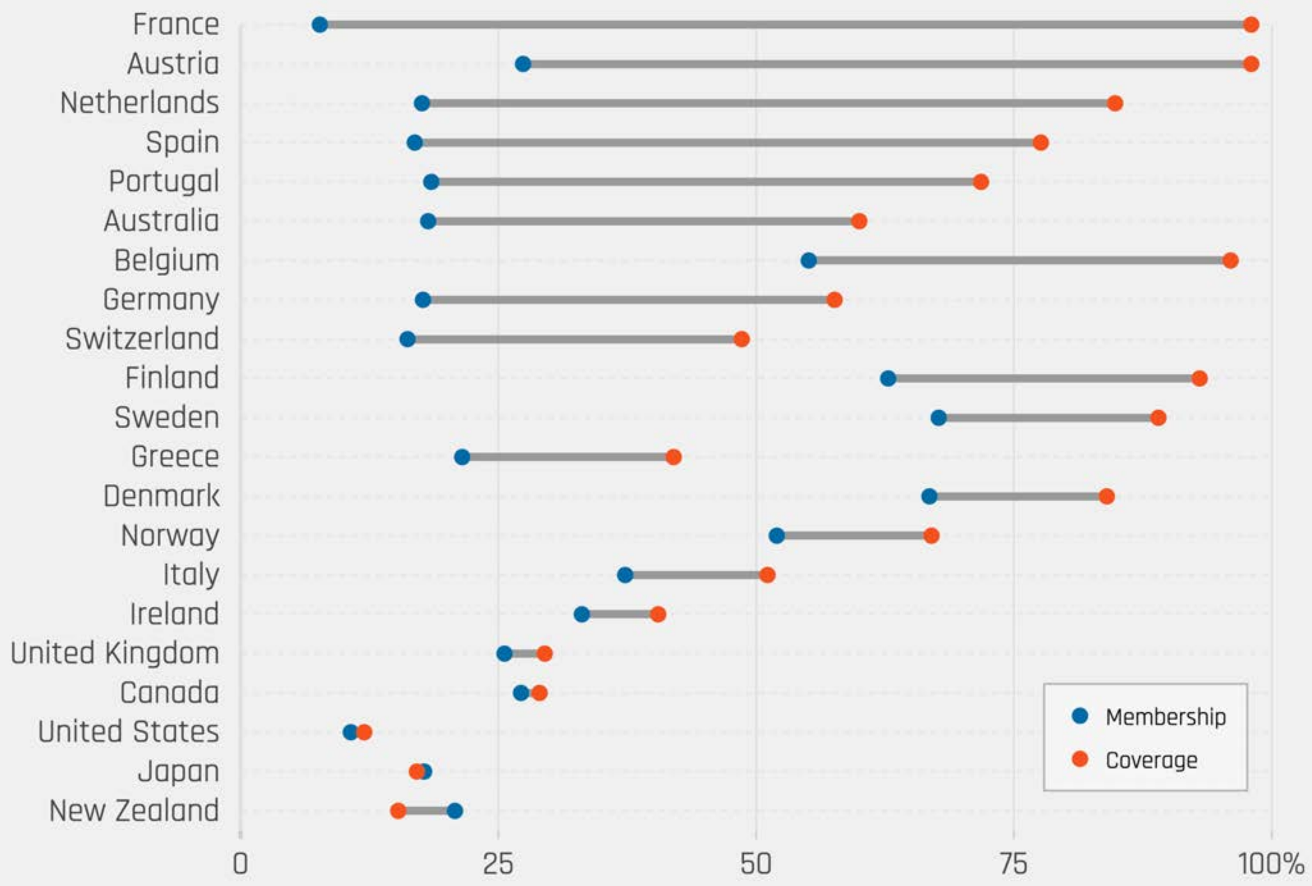
(artist mockup)

Collective bargaining coverage in the U.S. is last among OECD countries

Union density and collective bargaining coverage across 21 OECD countries



Source: J. Visser, ICTWSS Data base. version 5.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. September 2016; Bureau of Labor Statistics, U.S. Department of Labor, Current Population Survey, February 17, 2017, https://www.bls.gov/cps/cpslutabs.htm.

Note: Data is from 2016 or the latest available for each country. Select member countries of the Organisation of Economic Co-operation and Development with roughly similar standards of living as the United States.

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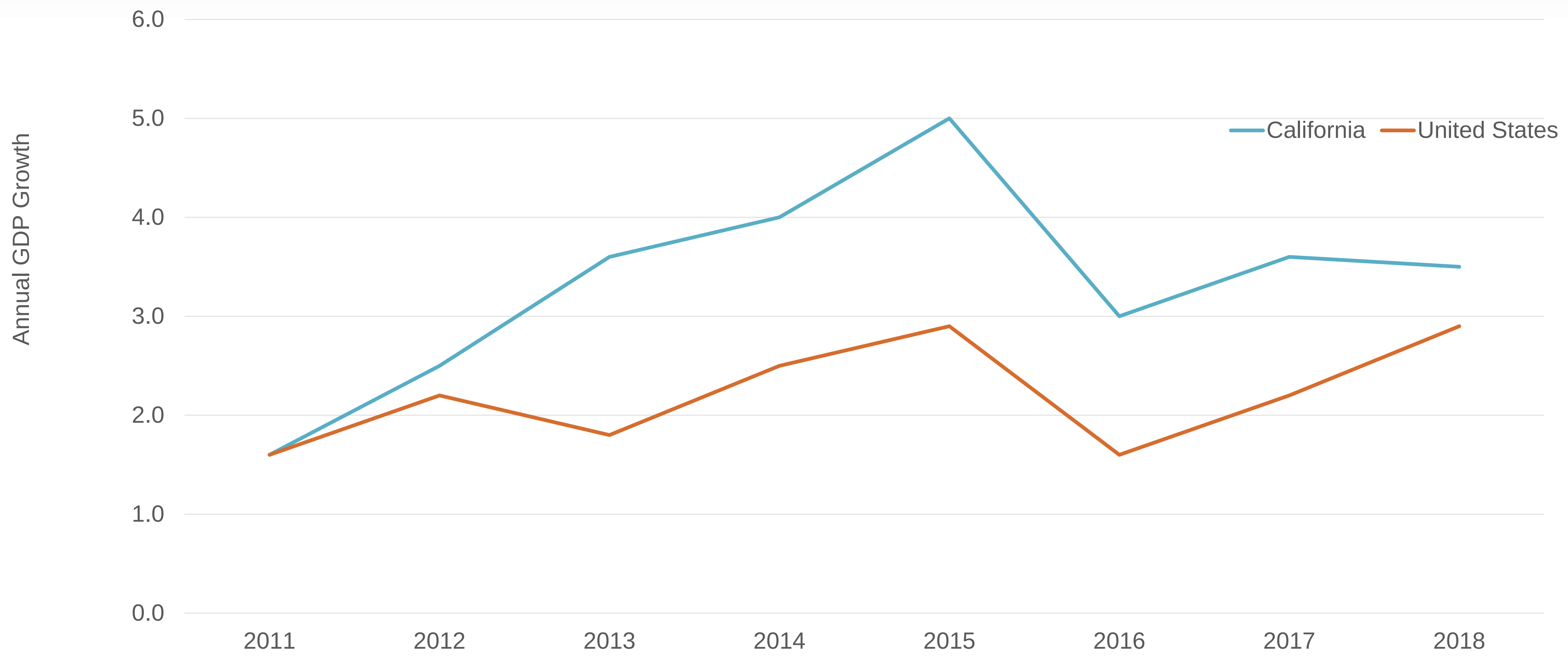
Poverty and California’s Hot Economy

September 26, 2019

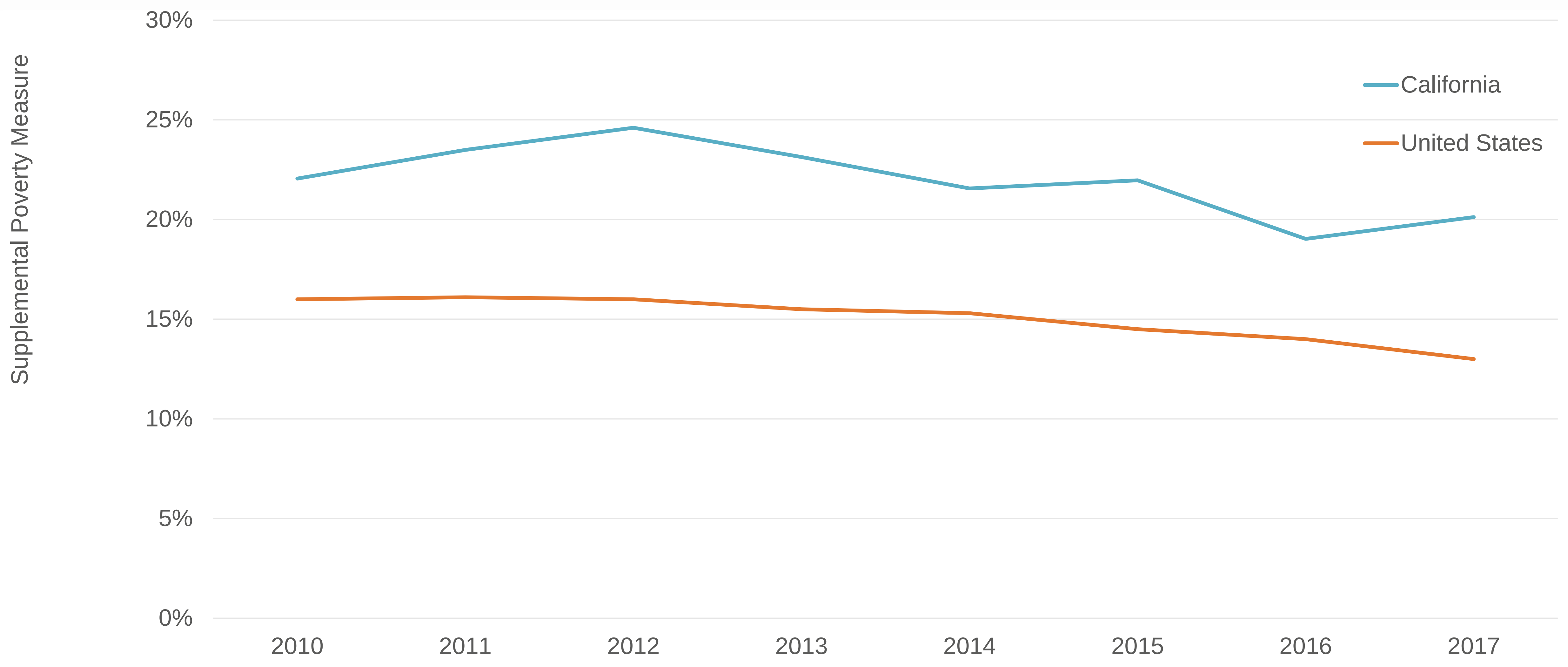
Sarah Bohn

California outpaces the U.S. in economic growth…



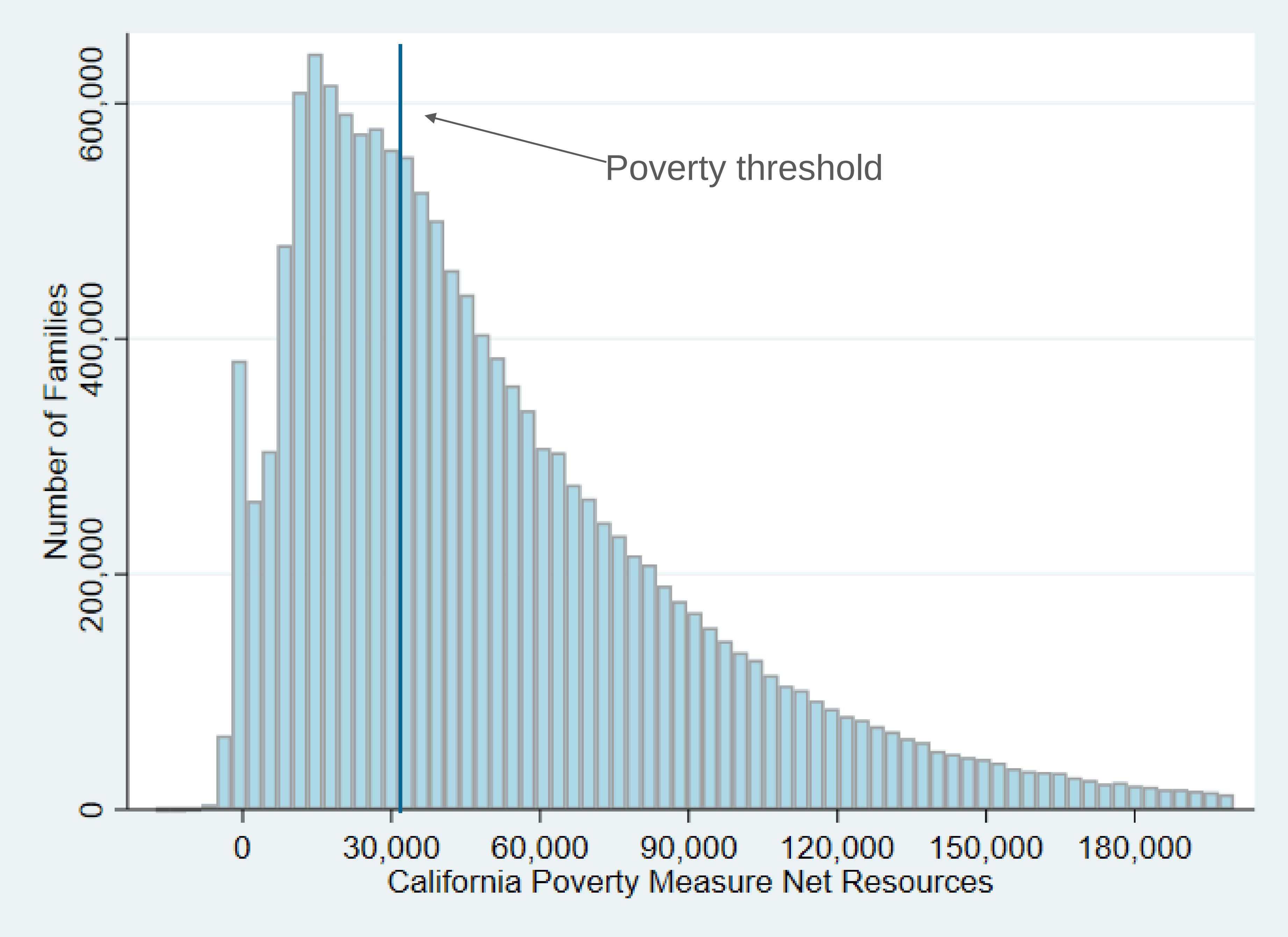
Source: Bureau of Economic Analysis

...but California has persistently higher poverty than the U.S.



Source: Census Bureau

Many of California's families live below, or near, the poverty line



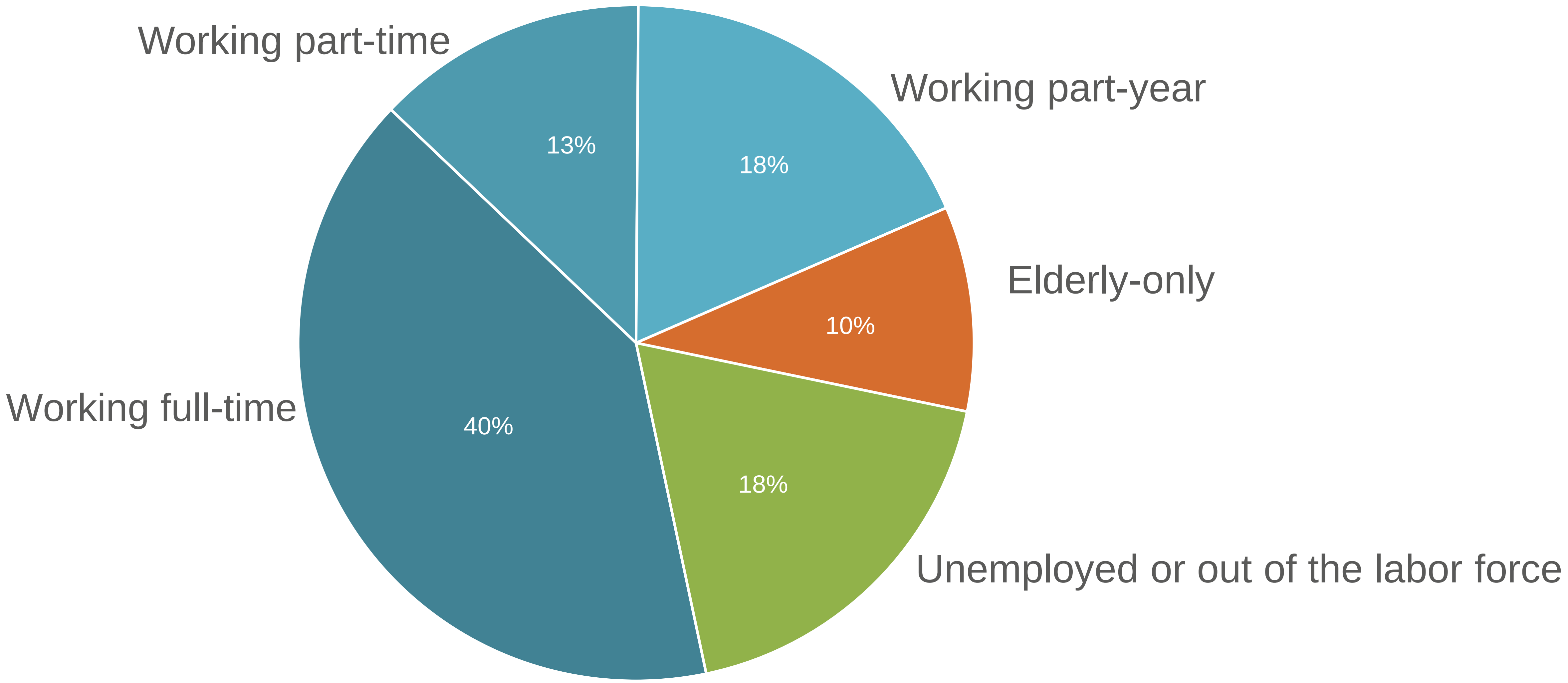
Source:

PPIC-Stanford California Poverty Measure, 2017. Statewide average threshold shown.

PPIC

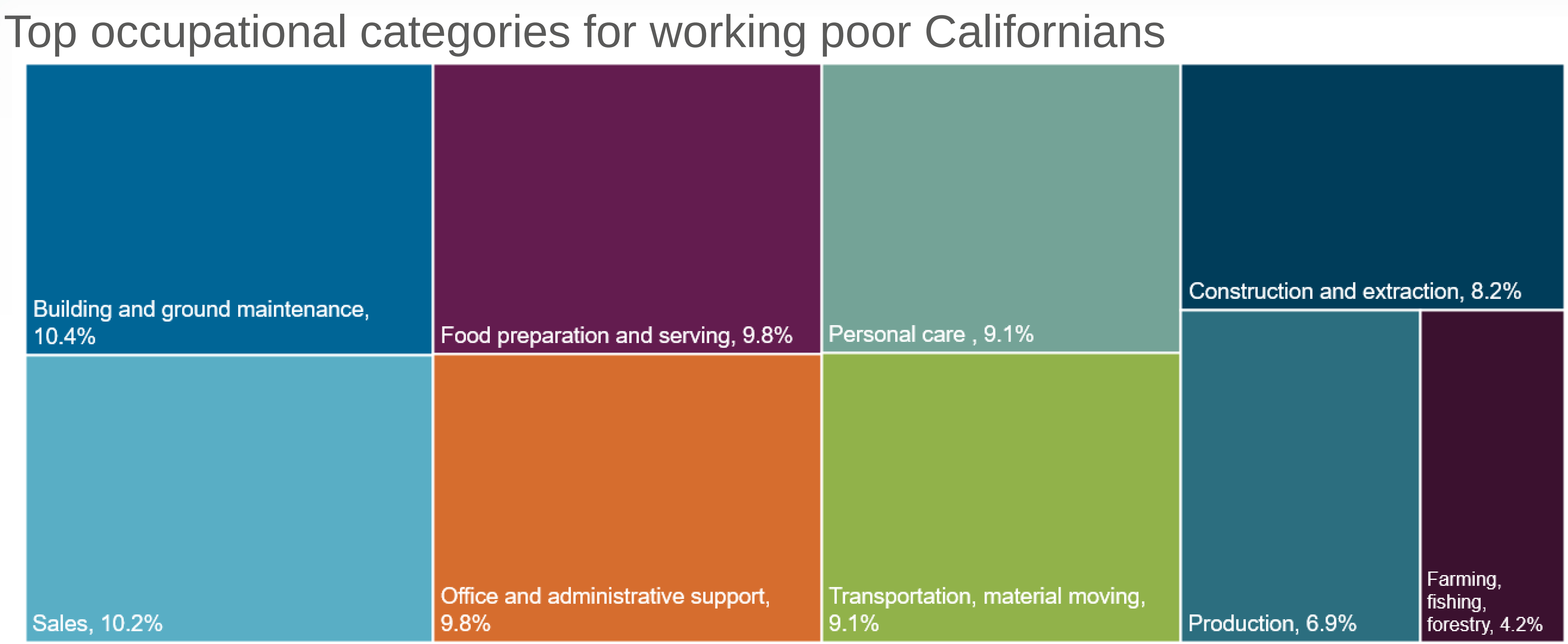
Most poor Californians live in working families

Family-level work status among Californians in poverty



Source: PPIC-Stanford California Poverty Measure, 2017

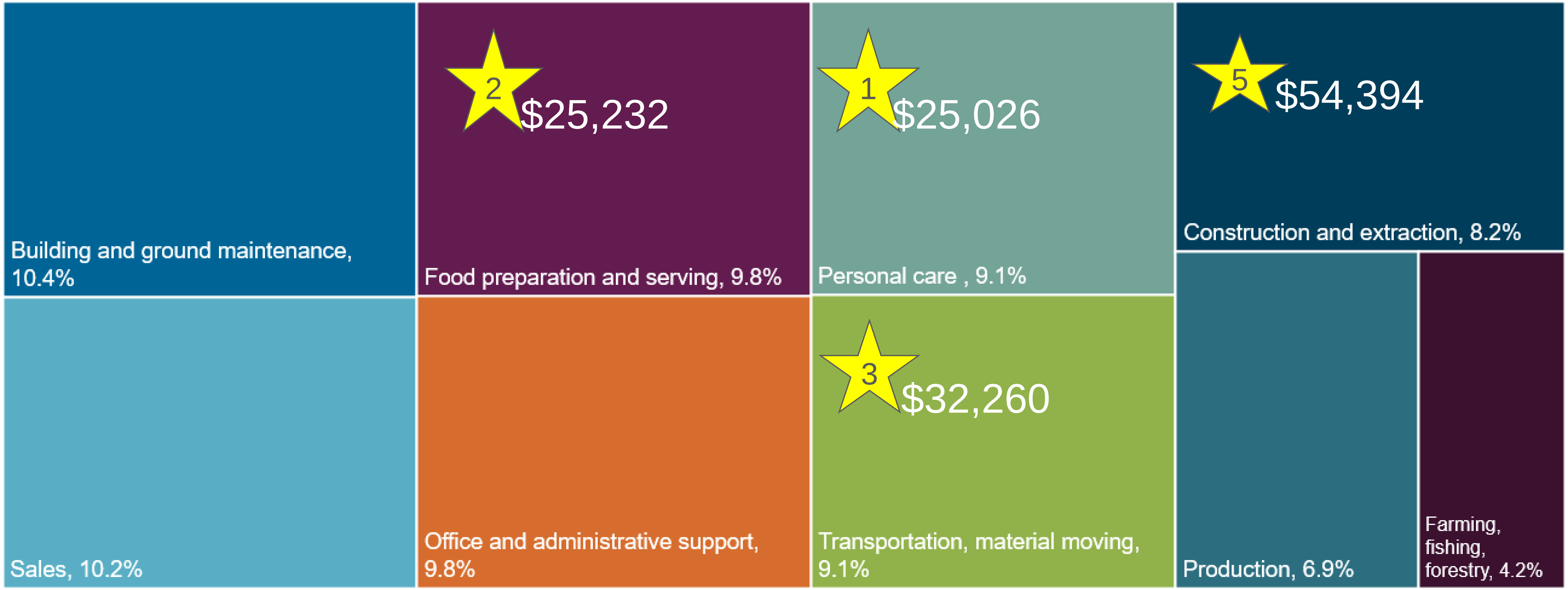
The working poor are overrepresented in a few occupations



Source: PPIC-Stanford California Poverty Measure, 2017. Top 9 categories account for 78% of the working poor.

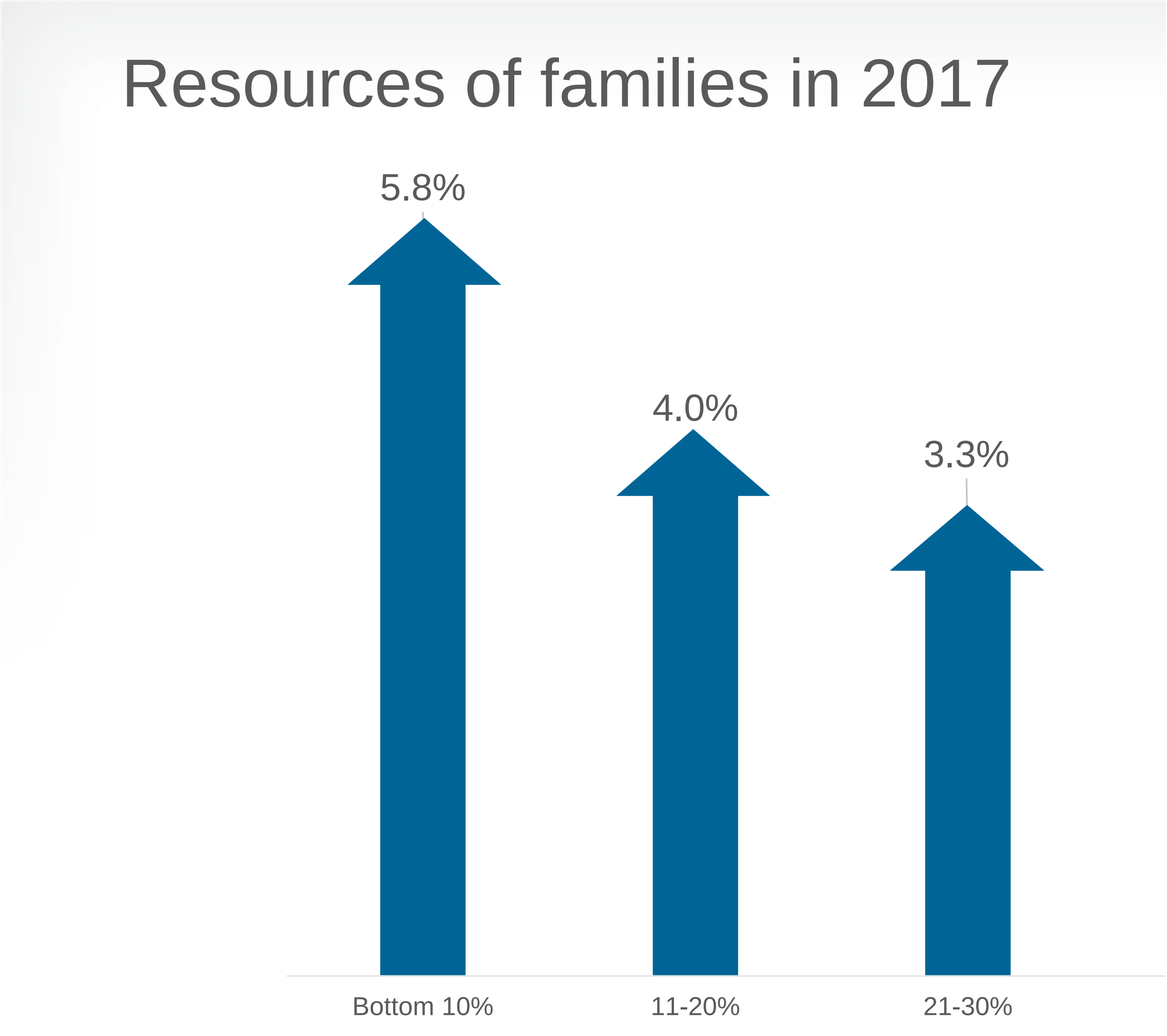
These occupations are among the fastest-growing and lowest-paid in the California economy

Top occupational categories for working poor Californians



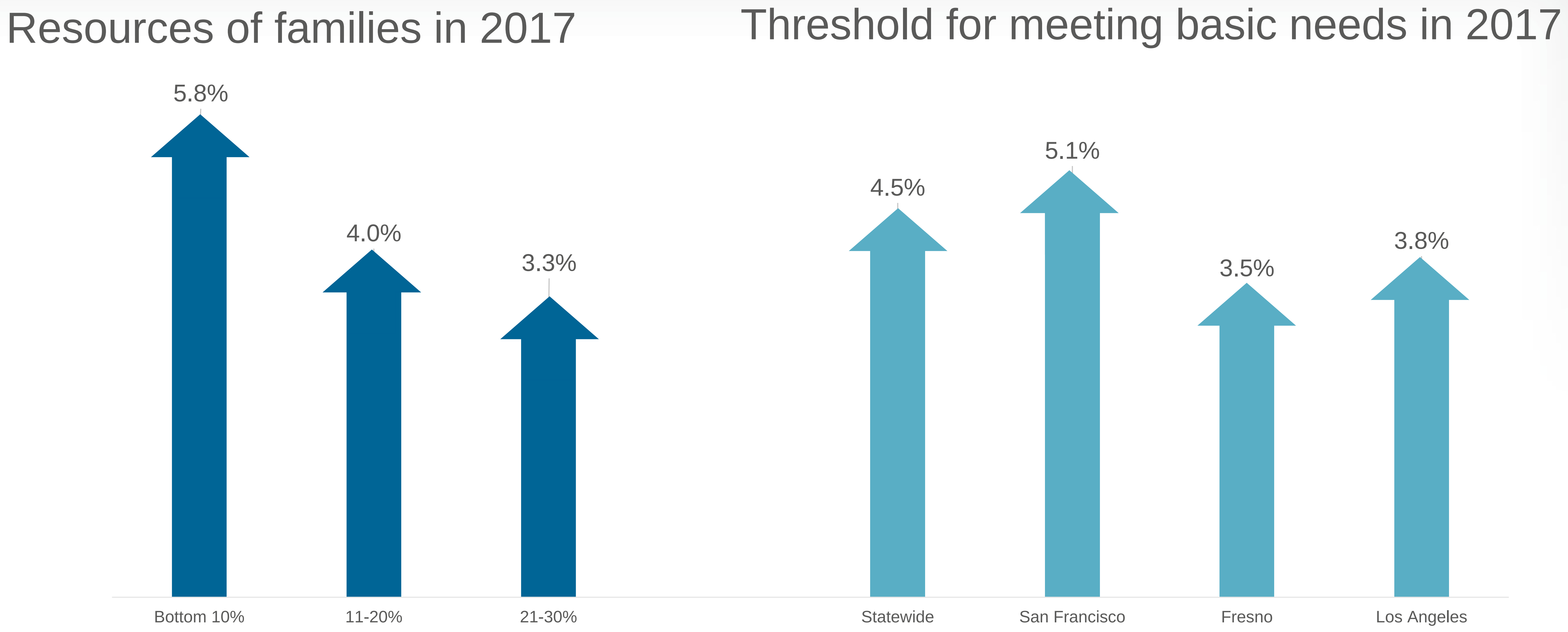
Source: PPIC-Stanford California Poverty Measure, 2017. Employment Development Department 2016-2026 employment projections and 2018 median annual earnings.

While resources are growing, even for the lowest income families in California…



Source: PPIC-Stanford California Poverty Measure, 2016-2017

…the increasing cost of living neutralizes gains



Source: PPIC-Stanford California Poverty Measure, 2016-2017

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