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WHY AMERICA'S WORKERS NEED FASTER WAGE GROWTH—AND WHAT WE CAN DO ABOUT IT

BY ELISE GOULD

This report is part of **Raising America's Pay**, a multiyear research and public education initiative of the Economic Policy Institute to make wage growth an urgent national policy priority. Raising America's Pay identifies broad-based wage growth as the central economic challenge of our time—essential to alleviating inequality, expanding the middle class, reducing poverty, generating shared prosperity, and sustaining economic growth. epi.org/pay

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The last year has been a poor one for American workers' wages. Comparing the first half of 2014 with the first half of 2013, real (inflation-adjusted) hourly wages fell for workers in nearly every decile—even for those with a bachelor's or advanced degree.

Of course, this is not a new story. Comparing the first half of 2014 with the first half of 2007 (the last period of reasonable labor market health before the Great Recession), hourly wages for the vast majority of American workers have been flat or falling. And even since 1979, the vast majority of American workers have seen their hourly wages stagnate or decline—even though decades of consistent gains in economy-wide productivity have provided ample room for wage growth.

The poor performance of American workers' wages in recent decades—particularly their failure to grow at anywhere near the pace of overall productivity—is the country's central economic challenge. Indeed, it's hard to think of a more important economic development in recent decades. It is at the root of the large rise in overall income inequality that has attracted so much attention in recent years. A range of other economic challenges—reducing poverty, increasing mobility, and spurring a more complete recovery from the Great Recession—also rely largely on boosting hourly wage growth for the vast majority.

This paper, hand-in-hand with the [overview paper](#) (Bivens et al. 2014) for EPI's [Raising America's Pay initiative](#), explains in detail why we need to raise wages in order to achieve real gains in the living standards of the vast majority of Americans. This paper begins by documenting the pronounced rise in income inequality in recent decades and then examines the implications of this rise in inequality for living standards growth for the vast majority. It then examines the link between wage growth and these wider income trends before undertaking a thorough analysis of wage trends since 1979. It concludes with an examination of the policy changes that have helped spur these wage trends by shifting bargaining power from the vast majority of workers to corporations and CEOs. The paper highlights an underappreciated subset of these policies: changes in labor market policies and business practices.

Key findings include:

- The vast majority of Americans have experienced disappointing living standards growth in the last generation—largely due to rising inequality.
 - Between 1979 and 2007, more than 90 percent of American households saw their incomes grow more slowly than average income growth (which was pulled up by extraordinarily fast growth at the top).
 - By 2007, the growing wedge between economy-wide average income growth and income growth of the broad middle class (households between the 20th and 80th percentiles) reduced middle-class incomes by nearly \$18,000 annually. In other words, if inequality had not risen between 1979 and 2007, middle-class incomes would have been nearly \$18,000 higher in 2007.
- The large increase in income inequality that has blocked living standards growth for the vast majority has been driven by the failure of hourly wages for the vast majority to rise in line with overall productivity after 1979.

- Between 1979 and 2013, productivity grew 64.9 percent, while hourly compensation of production and nonsupervisory workers, who comprise over 80 percent of the private-sector workforce, grew just 8.0 percent. Productivity thus grew eight times faster than typical worker compensation.
 - Between 1979 and 2013, median real hourly wages rose just 6.1 percent (or 0.2 percent annually), compared with a decline of 5.3 percent (or -0.2 percent annually) for the 10th percentile worker (i.e., the worker who earns more than only 10 percent of workers). Over the same period, the 95th percentile worker saw growth of 40.6 percent, for an annual gain of 1.0 percent. The tight labor market of the late 1990s was the only period when hourly wages increased across the wage distribution, with the strongest growth occurring at the bottom.
 - From the first half of 2013 to the first half of 2014, real hourly wages fell for all deciles, except for a miniscule two-cent increase at the 10th percentile. Underlying this exception to the general trend at the 10th percentile is a set of state-level minimum-wage increases in the first half of 2014 in states where 40 percent of U.S. workers reside.
 - There is no evidence of upward pressure on wages—let alone acceleration of wages—that would signal that the Federal Reserve Board should worry about incipient inflation and raise interest rates in an effort to slow down the economy.
- Various wage gaps (particularly the wage gap between the middle and bottom of the wage distribution, between the top and the middle, and between the very top and everyone else) reflect the relative strength of policy changes in affecting Americans' wages, as compared with other influences (such as the interaction of technology and education).
- The timing of changes in the gap between wages at the middle and bottom suggests that changes in the minimum wage and the unemployment rate explain most of its evolution. Increased trade, declining unionization, and excessive unemployment are at the root of the growing gap between the top and the middle. The growth of the gap between the very top and everyone else is driven in large part by developments in corporate governance and financial regulation that have given those at the very top the bargaining power to claim economic rents.
 - Labor market policies and business practices have large, though often underappreciated, potential impacts on wages. While this set of policies and practices includes many discrete parts, the common thread of the past generation is that practices, institutions, and standards that have boosted bargaining power for low- and moderate-wage workers have been targeted for weakening—and have been replaced by policies that put more power in the hands of corporations and their CEOs.
 - Policies that rebuild institutions to provide bargaining power to these workers should hence be a top priority for those looking for better wage outcomes. These policies include raising the minimum wage, strengthening unions, reducing wage theft, updating overtime protections, and correcting worker misclassification.

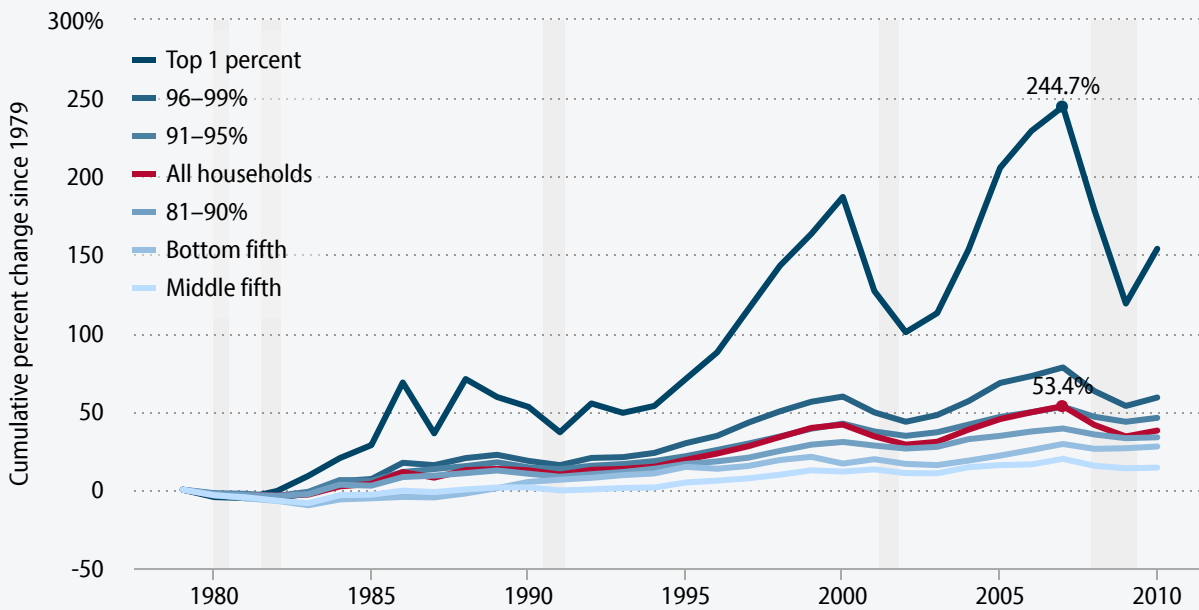
How rising inequality helps explain the disappointing living standards growth for the vast majority

In recent decades, the vast majority of Americans have experienced disappointing growth in their living standards—despite economic growth that could have easily generated faster gains in their living standards had it been broadly shared.

As with most economic analysis, assessing the growth of living standards for the vast majority requires specifying benchmarks against which to measure actual performance. We define two reasonable benchmarks. The first is income growth for the broad middle class relative to overall average growth—or the growth that the economy could have delivered to all households had they all shared proportionately in these gains. The second benchmark is income growth relative to that of earlier historical epochs. What this benchmark shows is that the rise of inequality explains the vast majority of the deceleration in middle-class income growth relative to earlier periods, particularly the first three-plus decades following World War II, when prosperity was broadly shared.

Figure A helps us assess performance relative to the first benchmark by charting the cumulative percentage increase in average incomes for all households (i.e., the overall average); the bottom and middle income fifths; households between the 81st and 90th percentiles, 91st and 95th percentiles, and 96th and 99th percentiles; and the top 1 percent. Breaking the top 1 percent down even further would show nearly as dramatic an increase in inequality just within this top group, but it would also stretch the vertical axis so much as to make it nearly unreadable, so for now we will just examine the top 1 percent.

Change in average real annual household income, by income group, 1979–2010



Note: Data are for comprehensive income. Shaded areas denote recessions. To be consistent with other income and earnings measures in this paper, we use the CPI-U-RS to deflate this series, instead of the personal consumption expenditures deflator used by CBO.

Source: EPI analysis of Congressional Budget Office (2013)

Reproduced from: Figure G in Bivens et al. (2014)

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One striking aspect of the figure is the large decline in top 1 percent incomes following the onset of the Great Recession after 2007. However, a similarly large fall in top 1 percent incomes resulted from stock market declines following the 2001 recession as well, and as the figure shows, these incomes recovered quite quickly. For a clearer look at the trend growth in incomes at various percentiles, we will hence follow the best practice of focusing on business cycle peaks.

Between the business cycle peaks of 1979 and 2007, the results are striking. Overall, real average annual household incomes grew by 53.4 percent. Incomes of the bottom fifth of households grew by 29.2 percent, and incomes of the middle fifth grew just 19.7 percent. Even more strikingly, income growth of households between the 81st and 90th percentiles (39.1 percent) did not come particularly close to matching overall average income growth rates, and even average income growth of households between the 91st and 95th percentiles (53.0 percent) fell short of average growth. In short, between 1979 and 2007, more than 90 percent of American households saw their incomes grow more slowly than average income growth (which was pulled up by extraordinarily fast growth at the top).

In contrast, income growth of households between the 96th and 99th percentiles (78.1 percent) significantly exceeded average growth. And income growth of the top 1 percent (244.7 percent) was nearly five times as rapid as overall average growth.

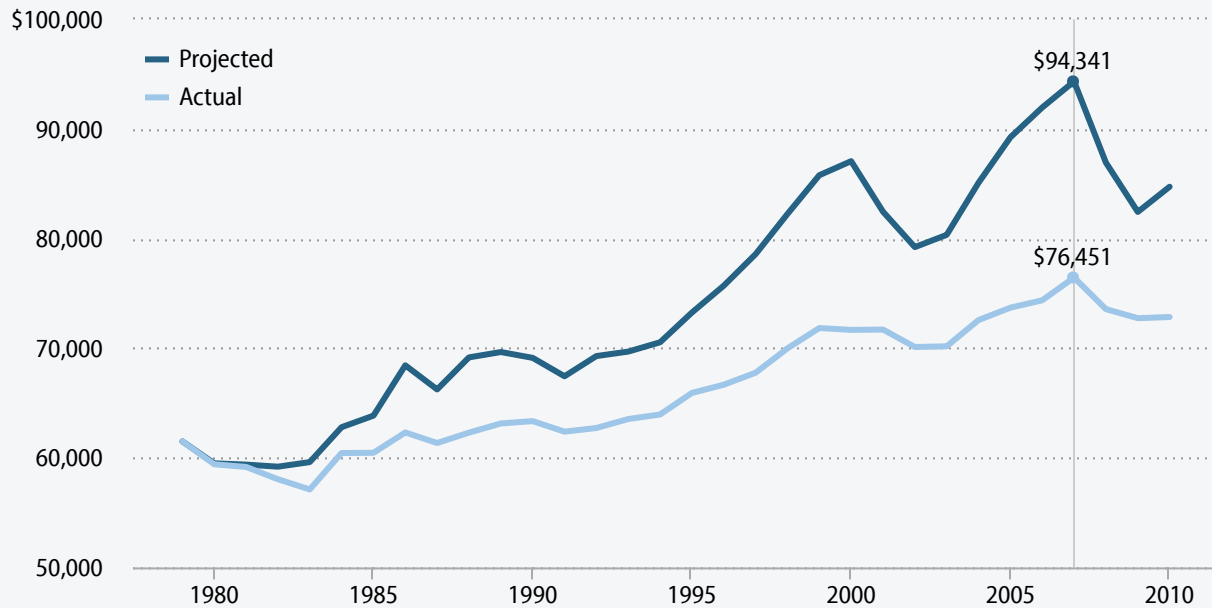
The data in Figure A measure comprehensive income—including cash, market-based incomes (wages and salaries, dividends, rent, capital gains, and business income); non-cash income, such as employer contributions to health insurance premiums; and cash and non-cash government transfers like Social Security, food stamps, Medicare, and Medicaid. A substantial revisionist literature in recent years has tried to make the case that these comprehensive income measures rebut the notion that the U.S. economy is performing poorly for the vast majority of American households. However, it is easy to see that the rise in American inequality is extreme even when using these comprehensive income measures. For example, the top 1 percent of households accounts for a higher share (34.6 percent) of the \$38,178 increase in average comprehensive income that occurred between 1979 and 2007 than the bottom 80 percent of households (32.3 percent).

It is clear that most of the overall income gains from 1979 to 2007 bypassed the vast majority of American households. As such, their living standards are lower than they would be had these gains been shared more broadly. In other words, there is a growing wedge between economy-wide average income growth and income growth of the broad middle class—a wedge we sometimes refer to as the “inequality tax”—that has effectively reduced middle-class incomes.

Figure B displays this inequality tax by showing the actual income growth of the broad middle class (defined as households between the 20th and 80th percentiles of the income distribution) between 1979 and 2007, and growth they could have had if their incomes had simply kept pace with overall average growth (i.e., had inequality not widened over this time). The wedge between these incomes is essentially a tax on middle-class incomes imposed by rising inequality. By 2007, this implicit tax was enormous; middle-class incomes would have been roughly 23.4 percent (\$17,890) higher in that year had inequality not widened. This comparison makes clear why it is important to benchmark even non-zero changes in incomes against reasonable counterfactuals (in this case, the growth of the average), as opposed to simply comparing them to an alternative scenario of zero growth. The U.S. economy has generated enormous amounts of income in recent decades, even in the post-1979 period when overall growth slowed. It can certainly provide far faster growth for the broad middle class than it has over the past generation, and its failure to do so is an economic catastrophe.

FIGURE B [VIEW INTERACTIVE on epi.org](#)

Household income of the broad middle class, actual and projected assuming it grew at overall average rate, 1979–2010



Note: Data show average income of 20th–80th percentile.

Source: EPI analysis of Congressional Budget Office (2013)

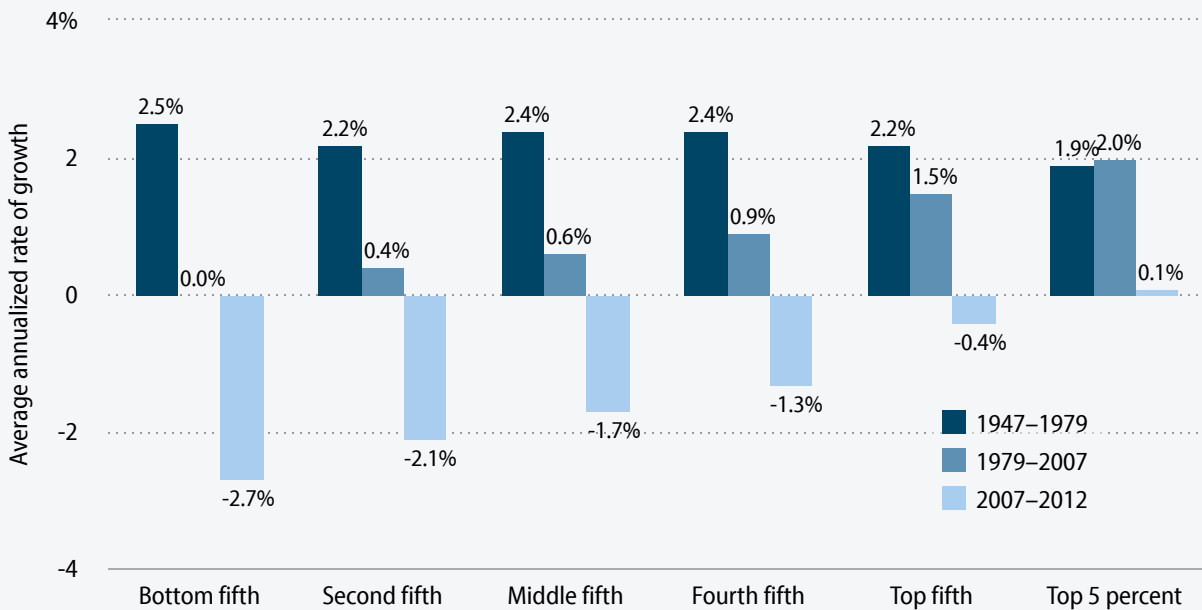
Reproduced from: Figure I in Bivens et al. (2014)

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Next, we turn to the second benchmark against which we assess living standards growth: income growth in previous periods. Incomes have not always grown so unequally as to create a wedge between the typical (i.e., median) and the average household. As shown in **Figure C**, there was an earlier period of far more equal growth. In the three decades following World War II, income growth was relatively strong and uniform across the income distribution. From 1979 to 2007, however, the slower income growth that prevailed was concentrated in the top 20 percent of the income distribution, with most of it going to the top 5 percent. The stair-step pattern shows that each consecutive income group saw an increasing amount of growth. Since the last business cycle peak in 2007, the Great Recession has devastated incomes for the vast majority. Again, here we see a stair-step pattern—this time nearly all below zero. The largest income losses occurred at the bottom, with only the very top of the income distribution experiencing any gains between 2007 and 2012.

FIGURE C [VIEW INTERACTIVE on epi.org](#)

Average annual family income growth, by income group, 1947–2012



Note: Data are for money income.

Source: EPI analysis of Current Population Survey Annual Social and Economic Supplement *Historical Income Tables* (Table F-3)

Updated from: Figure 2C in *The State of Working America, 12th Edition* (Mishel et al. 2012), an Economic Policy Institute book published by Cornell University Press in 2012

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In short, the rise in inequality is by far the most important determinant of the slowdown in living standards growth over the past generation, and it has been enormously costly for the broad middle class. The rapid increase in inequality that began (roughly) in 1979 has not just kept incomes for the vast majority from growing as fast as the overall average, it also is the dominant explanation for why income growth for the vast majority since 1979 lags so far behind income growth in the preceding generation.

Broad wage stagnation underlies sluggish living standards growth for the vast majority

The rise in income inequality that has blocked living standards growth for the vast majority since 1979 has been driven by a pronounced reduction in the collective and individual bargaining power of ordinary American workers, for whom wages are the primary source of income. As a result of their eroded bargaining power, their wages have stagnated over the past generation. If wages of the bottom 99 percent had kept pace with productivity growth over the past generation, as was the case in the preceding generation, then most of the increase in income inequality would not have been possible. This is the direct effect of the fact that rising wage inequality—stagnant wages for the vast majority, combined with substantial wage gains for those at the very top—has left most Americans with an ever-shrinking portion of the

overall wage bill. It is also the case that if labor incomes—i.e., wages—had not grown so unequally, then the share of total output available to be claimed by capital owners, again concentrated at the top of the income distribution, would have been significantly smaller. It is the combination of these two factors—driven by wages for the vast majority lagging productivity—that has led to the erosion of most Americans' living standards.

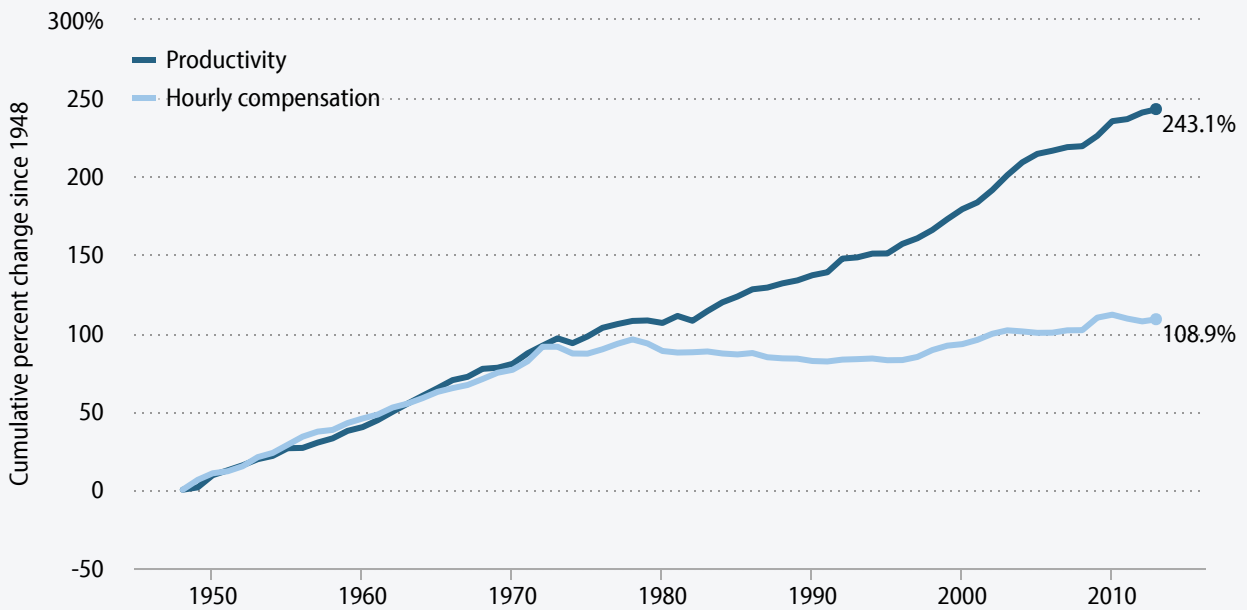
The [Raising America's Pay overview paper](#) (Bivens et al. 2014) provides further evidence that slowly growing cash, market-based income—in essence, stagnant wages—for the bottom 90 percent is at the root of rising income inequality (see, in particular, Figure J of that report). The upshot is clear: The broad wage stagnation described in this section is the single most important reason why living standards growth for the vast majority has decelerated so markedly over the last generation.¹

Core wage trends

The large increase in income inequality that has blocked living standards growth for the vast majority has been driven by the failure of hourly wages for the vast majority to rise in line with overall productivity after 1979. The resulting wage stagnation and inequality have afflicted men and women, and people at all levels of education; even the college educated are just treading water. The latest data from 2014 further confirm these findings. It is also clear from the evidence that broad-based wage growth is the key to reversing the trends in incomes and returning to a time when all can enjoy stable economic growth.

Since 1979, hourly pay for the vast majority of American workers has diverged from economy-wide productivity, as shown in **Figure D**, and this divergence is at the root of numerous American economic challenges. Between 1979 and 2013, productivity grew 64.9 percent, while hourly compensation of production and nonsupervisory workers, who comprise over 80 percent of the private-sector workforce, grew just 8.0 percent. Productivity thus grew eight times faster than typical worker compensation.

Disconnect between productivity and typical worker's compensation,* 1948–2013



Note: From 1948 to 1979, productivity rose 108.1 percent, and hourly compensation increased 93.4 percent. From 1979 to 2013, productivity rose 64.9 percent, and hourly compensation rose 8.0 percent.

* Data are for compensation of production/nonsupervisory workers in the private sector (who comprise over 80 percent of the private-sector workforce) and net productivity (growth of output of goods and services less depreciation per hour worked) of the total economy. Hourly compensation is derived from inflating the average wages of production/nonsupervisory workers from the BLS Current Employment Statistics (CES) by a compensation-to-wage ratio. The compensation-to-wage ratio is calculated by dividing the average total compensation (wages and salaries plus benefits) by the average wage and salary accruals of all full- and part-time employees from the Bureau of Economic Analysis (BEA) National Income and Product Accounts (NIPA) interactive tables. The 2013 compensation-to-wage ratio used in the calculation of hourly compensation was estimated using the growth rate of the compensation-to-wage ratio from 2012 to 2013 from the Bureau of Labor Statistics (BLS) Employer Costs for Employee Compensation (ECEC).

Source: EPI analysis of data from Bureau of Labor Statistics (BLS) Labor Productivity and Costs program, BLS Current Employment Statistics public data series, BLS Employer Costs for Employee Compensation, and Bureau of Economic Analysis National Income and Product Accounts (Tables 2.3.4, 6.2, 6.3, 6.9, 6.10, and 6.11)

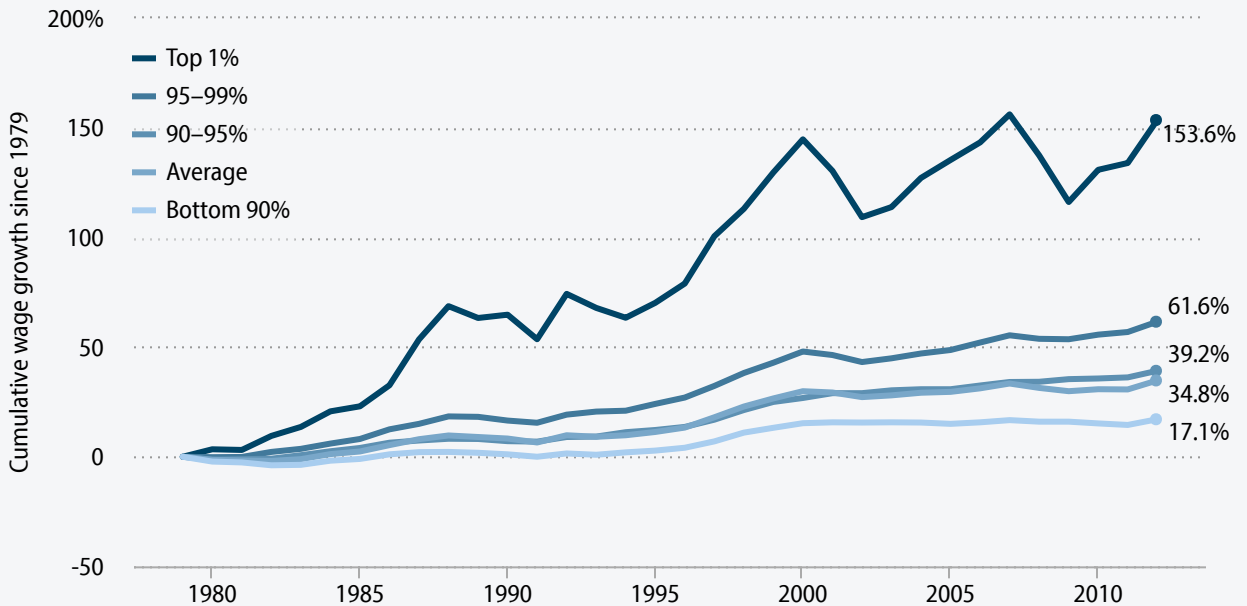
Updated from: Figure A in Bivens et al. (2014)

A natural question that arises from this figure is just where did the “excess” productivity go? A significant portion of it went to higher corporate profits and increased income accruing to capital and business owners (see Table 3 in the [Raising America’s Pay overview paper](#)). But much of it went to those at the very top of the wage distribution, as shown in [Figure E](#). The top 1 percent of earners saw cumulative gains in annual wages of 153.6 percent between 1979 and 2012—far in excess of economy-wide productivity growth and over four times faster than average wage growth. Comparing the growth of the top 1 percent to other privileged workers (those between the 90th and 99th percentiles) is also instructive. For example, wage earners in the 90th through 95th percentiles (earning more than 90 percent of other

wage earners but less than the highest 5 percent of earners) saw wage growth of 39.2 percent—more than double that of the bottom 90 percent of earners, but only one-fourth as much as the wage gains of the top 1 percent.

FIGURE E [VIEW INTERACTIVE on epi.org](#)

Cumulative change in real annual wages, by wage group, 1979–2012



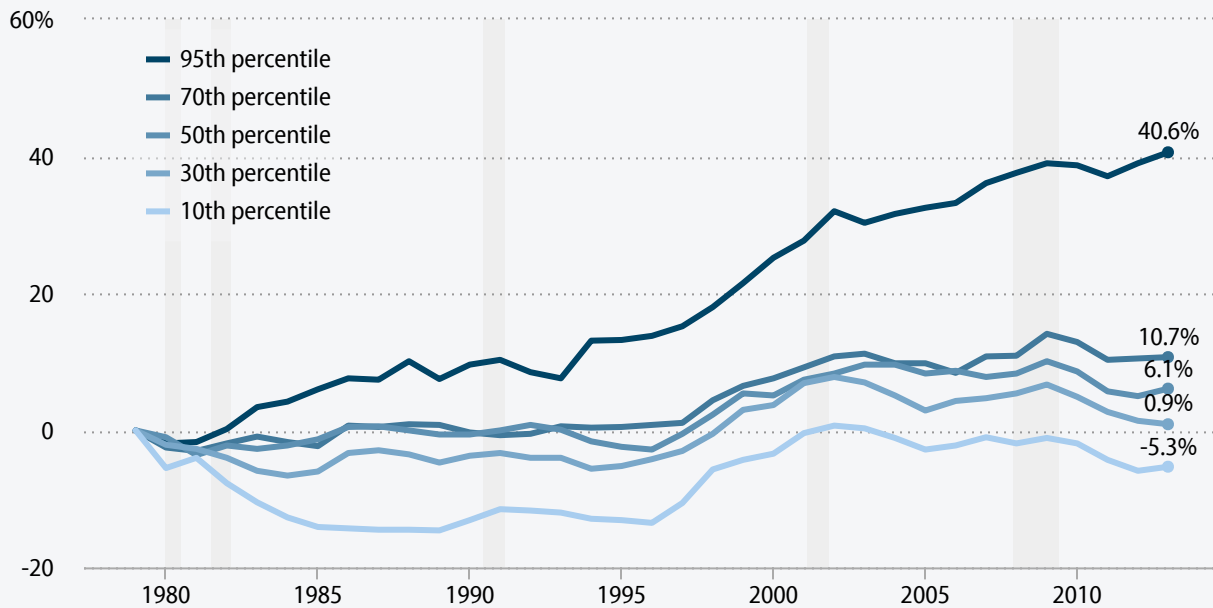
Source: EPI analysis of Kopczuk, Saez, and Song (2010) and Social Security Administration wage statistics

Reproduced from: Figure F in Bivens et al. (2014)

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While Figure E uses data on *annual* earnings, **Figure F** displays the cumulative change in real *hourly* wages at particular points in the wage distribution.² It is important to examine hourly wages because one way workers can increase their annual wages is simply by working more hours. As such, it is valuable to know whether any annual wage gains stem from rising hours or from rising pay per hour worked.

Cumulative change in real hourly wages of all workers, by wage percentile,* 1979–2013



* The xth-percentile wage is the wage at which x% of wage earners earn less and (100-x)% earn more.

Note: Shaded areas denote recessions.

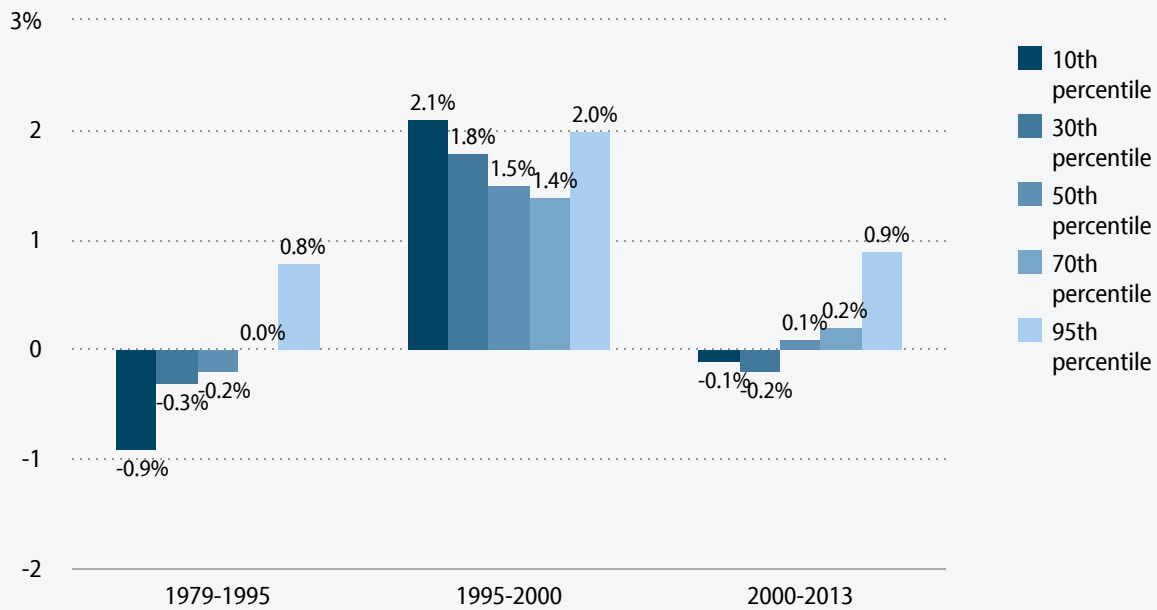
Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

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What this figure shows is that hourly wages of the vast majority of American workers have performed even worse than suggested by Figure E. For all but the highest earners, hourly wages have either stagnated or declined since 1979 (with the exception of a period of strong across-the-board wage growth in the late 1990s). Median hourly wages rose just 6.1 percent (or 0.2 percent annually) between 1979 and 2013, compared with a decline of 5.3 percent (or -0.2 percent annually) for the 10th percentile worker (i.e., the worker who earns more than only 10 percent of workers). Over the same period, the 95th percentile worker saw growth of 40.6 percent, for an annual gain of 1.0 percent.

Figure G decomposes the annualized growth rates of real hourly wages over particular periods of interest for select wage percentiles. The 1979–1995 period has the familiar stair-step pattern found in the income data; at each successive wage percentile shown, growth rates increase. Between 2000 and 2013, hourly wages of the vast majority of workers either fell (bottom 30 percent) or were essentially flat (next 40 percent), and only the 95th percentile saw wage growth closely approaching 1 percent annually. The late 1990s was the only period between 1979 and 2013 when wage growth was robust and broadly shared; in fact, wage growth was actually strongest for those at the bottom.

Annualized growth rates of real hourly wages, by wage percentile, 1979–2013



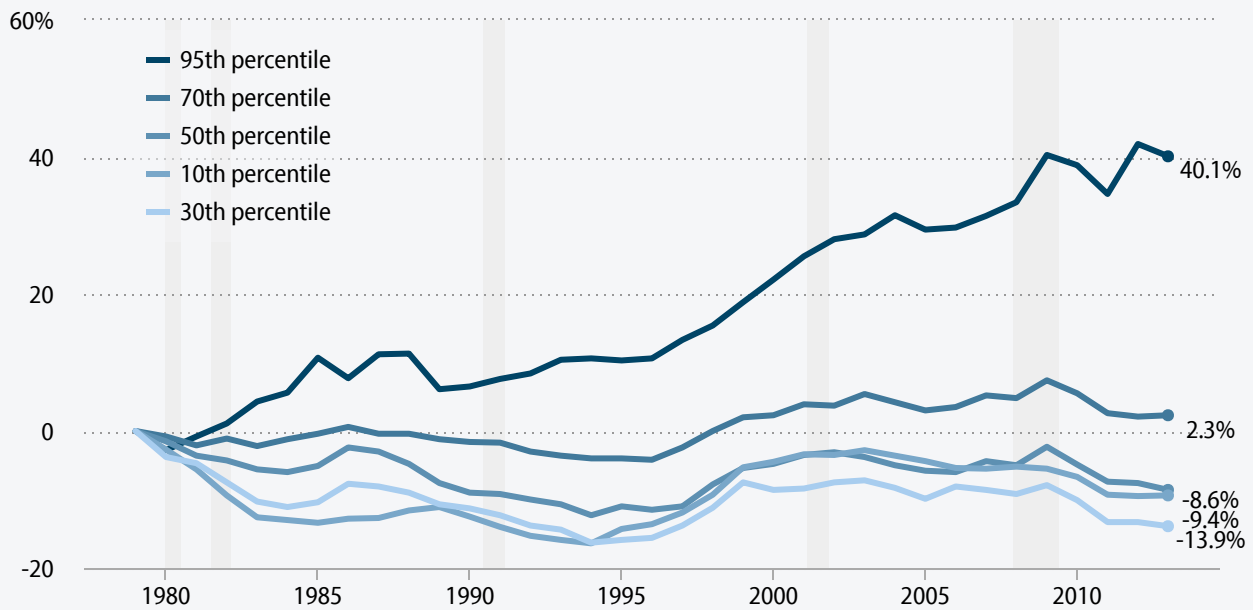
* The xth-percentile wage is the wage at which x% of wage earners earn less and (100-x)% earn more.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Wage trends by gender

This overall picture, however, masks different outcomes for men and women. **Figure H** shows the cumulative percent change over 1979–2013 in real hourly wages of men at key wage levels. The long-term pattern is that wages of median male workers and of low-wage men have been and remain below their 1979 levels, despite strong wage growth in the late 1990s. Even men at the 70th percentile experienced slow growth of only 2.3 percent *cumulatively* over nearly three-and-a-half decades. In contrast, high-wage men at the 95th percentile did substantially better, with their wages growing 40.1 percent. Figure H thus shows that low- and middle-wage men have fared comparably poorly, and that the wage gap between those at the top and those in the middle and bottom has expanded continuously over the last three-and-a-half decades.

Cumulative change in real hourly wages of men, by wage percentile,* 1979–2013



* The xth-percentile wage is the wage at which x% of wage earners earn less and (100-x)% earn more.

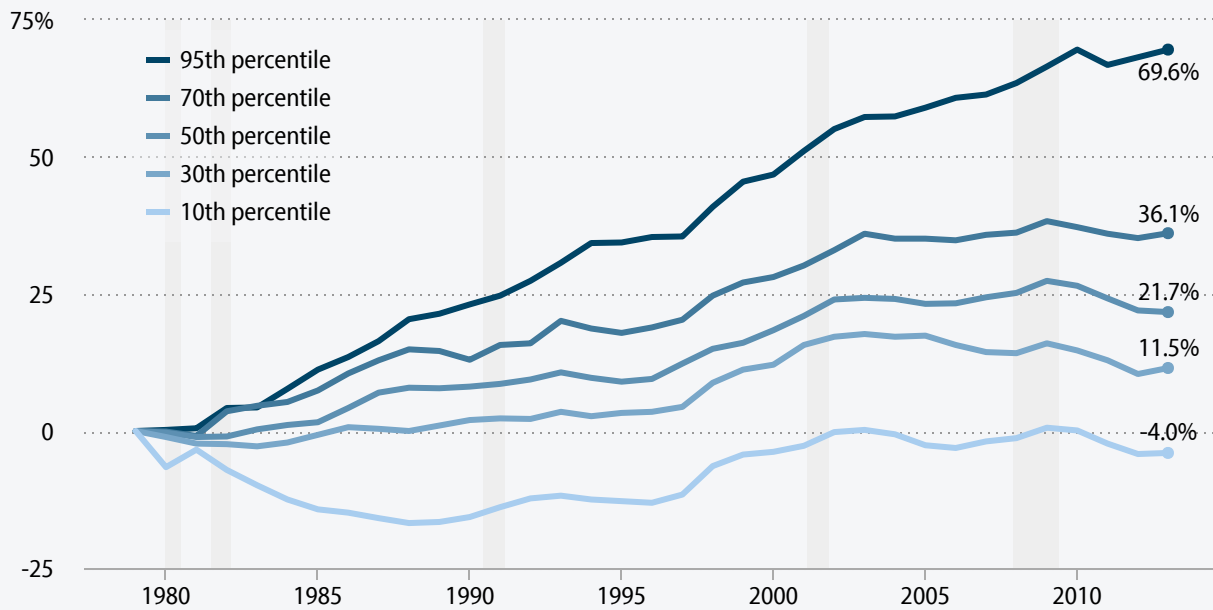
Note: Shaded areas denote recessions.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Updated from: Figure 4C in *The State of Working America, 12th Edition* (Mishel et al. 2012), an Economic Policy Institute book published by Cornell University Press in 2012

Figure I shows the cumulative percent change over 1979–2013 in real hourly wages of women at key wage levels. Wage growth for women has been stronger than for men at every wage level. Low-wage women at the 10th percentile were the only group to not experience any wage growth between 1979 and 2013, whereas more than half of men saw wage declines. Wages of the median woman grew by 21.7 percent from 1979 to 2013, with the gap between low- and middle-wage women’s wages growing mostly over 1979–1995. Once the acceleration of the late 1990s ended, women from the 70th percentile on down experienced stagnant or falling wages. Higher-wage women fared far better than middle-wage and lower-wage women for the entire period and had considerable improvement—69.6 percent—at the 95th percentile.

Cumulative change in real hourly wages of women, by wage percentile,* 1979–2013



* The xth-percentile wage is the wage at which x% of wage earners earn less and (100-x)% earn more.

Note: Shaded areas denote recessions.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Updated from: Figure 4D in *The State of Working America, 12th Edition* (Mishel et al. 2012), an Economic Policy Institute book published by Cornell University Press in 2012

The most recent wage trends

The latest data from the first half of 2014 reveal evidence of the same abysmal trends experienced through the Great Recession and much of the last three decades. **Table 1** provides data from the first half of the last several years, since the last business cycle peak in 2007. This table includes the 2007 peak, the official end of the recession in 2009, and the two most recent years of data for comparison. Wages for the bottom 70 percent are still lower than in 2007, and wages for all groups are lower than they were at the end of the recession in 2009. Furthermore, over the last year, wages fell for all groups, except for a miniscule two-cent increase at the 10th percentile.

TABLE 1

Real hourly wages in first half (FH) of year, by wage percentile,* 2007–2014 (annual 2013 dollars)

	10th	20th	30th	40th	50th	60th	70th	80th	90th	95th
<i>FH2007</i>	\$8.75	\$10.60	\$12.40	\$14.57	\$17.05	\$20.16	\$23.85	\$29.38	\$39.42	\$51.41
<i>FH2009</i>	8.80	10.76	12.71	14.92	17.40	20.59	24.72	30.57	41.10	52.56
<i>FH2013</i>	8.36	10.01	11.97	14.23	16.75	19.81	23.97	29.88	40.84	52.63
<i>FH2014</i>	8.38	9.91	11.86	14.15	16.59	19.63	23.72	29.54	40.00	52.23
Annualized percent changes										
<i>2007–2009</i>	0.3%	0.8%	1.2%	1.2%	1.0%	1.1%	1.8%	2.0%	2.1%	1.1%
<i>2009–2014</i>	-1.0	-1.6	-1.4	-1.0	-0.9	-1.0	-0.8	-0.7	-0.5	-0.1
<i>2007–2014</i>	-0.6	-0.9	-0.6	-0.4	-0.4	-0.4	-0.1	0.1	0.2	0.2
<i>2013–2014</i>	0.3	-1.0	-0.9	-0.5	-0.9	-0.9	-1.1	-1.1	-2.0	-0.7

* The xth-percentile wage is the wage at which x% of wage earners earn less and (100-x)% earn more.

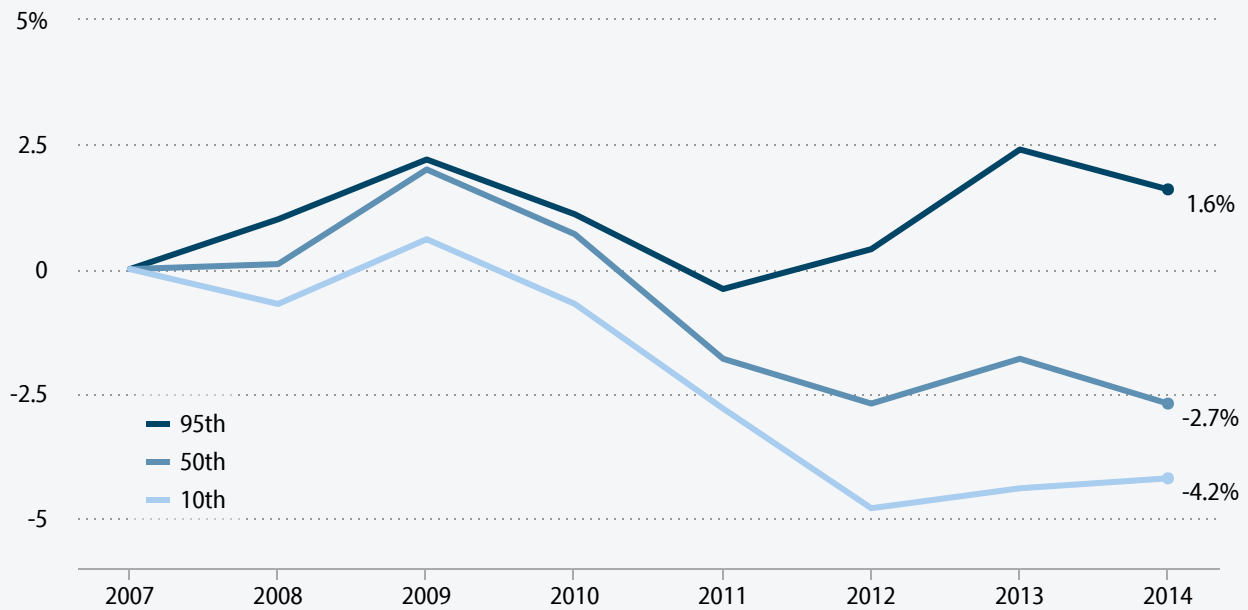
Source: EPI analysis of Current Population Survey Outgoing Rotation Group (ORG) microdata

It is significant to note that this fall in real wages over the last year was not accompanied by (or associated with) a spectacular increase in inflation. At 1.6 percent, inflation over the last year has been modest, similar to the previous year's 1.7 percent increase. Both were lower than the 2.8 percent average that prevailed from the first half of 2007 to the first half of 2014, which means that the fall in real wages over the last year is not driven by high inflation.

Figure J depicts some of the data presented in Table 1 by showing the cumulative growth in real hourly wages for the 10th, 50th, and 95th percentiles between the first half of 2007 and the first half of 2014. After a sharp increase in real wages between 2008 and 2009, due primarily to negative inflation, wages for most groups fell through 2012. While there was an increase between 2012 and 2013, the increase was short-lived, and wages for all but the 10th percentile have fallen again over the last year.

FIGURE J [VIEW INTERACTIVE on epi.org](#)

Cumulative growth in real hourly wages, by wage percentile,* 2007–2014**



* The xth-percentile wage is the wage at which x% of wage earners earn less and (100-x)% earn more.

** Data reflect first half values for each year.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

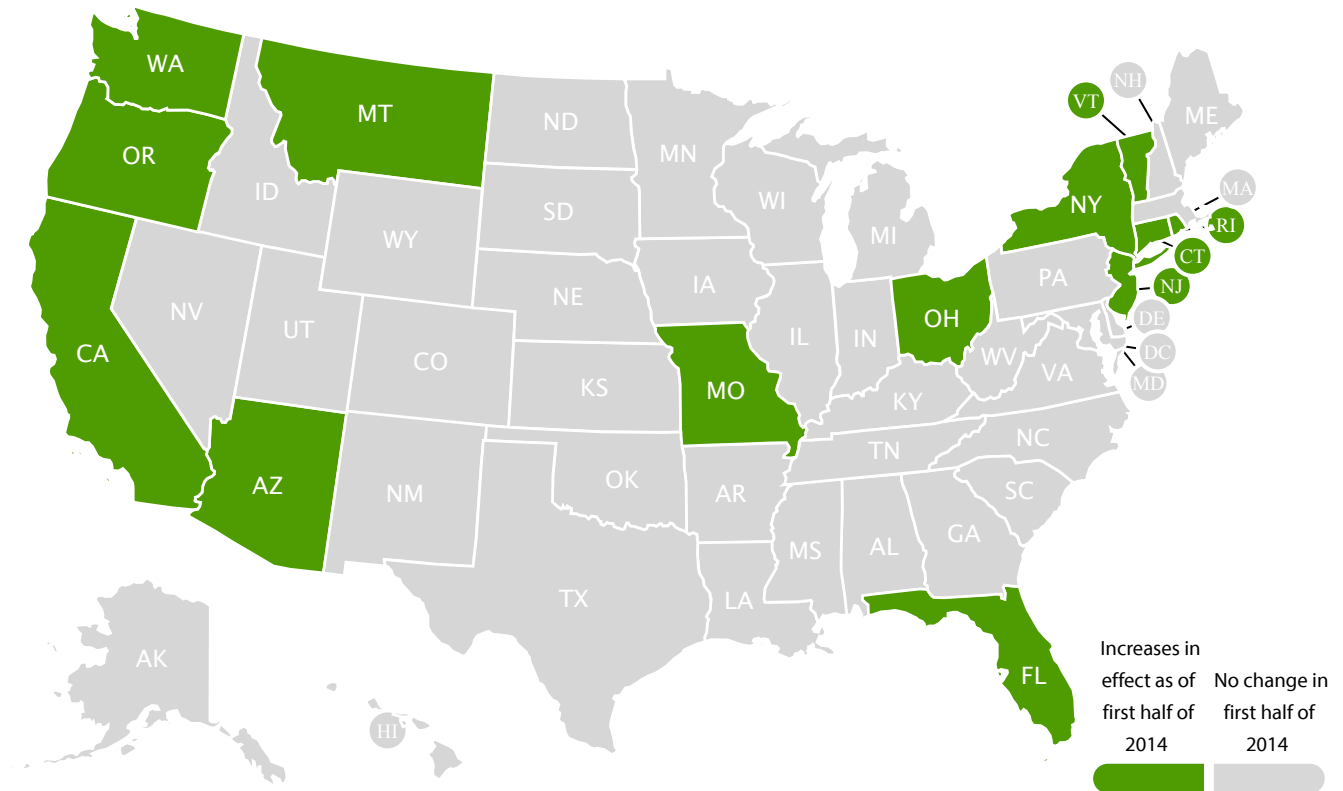
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It is clear that wages have continued to stagnate if not fall in 2014. Therefore, there is no evidence of upward pressure on wages—let alone acceleration of wages—that would signal that the Federal Reserve Board should worry about incipient inflation and raise interest rates in an effort to slow the economy.

What is particularly striking about both Figure J and Table 1 is that every decile and the 95th percentile experienced real wage declines from the first half of 2013 to the first half of 2014, except for the 10th percentile. Granted, the 10th percentile wage only increased by two cents, or 0.3 percent; however, the fact that it did not decline along with the wages of all the other groups is worth noting. One policy that has been proven to lift wages, particularly at the bottom of the wage distribution, is the minimum wage. **Figure K** displays in green the states with minimum-wage increases in the first half of 2014. Of these states, the largest increases were in those with legislated increases (California, Connecticut, New Jersey, New York, and Rhode Island). The remaining states in green had smaller increases resulting from indexing the minimum wage to inflation.

FIGURE K

States with minimum-wage increases in the first half of 2014



Note: California, Connecticut, New Jersey, New York, and Rhode Island legislated minimum-wage increases. In the remaining states in green, the minimum wage increased due to indexing to inflation.

Source: EPI analysis of Cooper (2014)

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Workers in these states with increases in their minimum wage in the first half of this year account for about 40 percent of the overall U.S. workforce. In addition, these minimum-wage increases are expected to raise wages for an estimated 4.5 million workers (Cooper 2014). Furthermore, a closer look at the changes in the 10th percentile wage in these states versus the states without any minimum-wage increase in the first half of 2014 reveals divergent trends. Between the first half of 2013 and the first half of 2014, the 10th percentile wage in states with minimum-wage increases grew by 0.9 percent, while it fell 0.1 percent in states without a minimum-wage increase. While wages for all other deciles fell across both sets of states, the 10th percentile in states with minimum-wage increases was the only group where real wages actually increased. This indicates that strong labor standards can improve outcomes even when the unemployment rate remains high and workers have severely reduced bargaining power.

Wage gaps indicate that policies affect wage trends

The broad story told by these wage trends is crystal clear: The last 35 years have been mostly (excepting the late 1990s) a period when hourly wages of the vast majority lagged far behind economy-wide productivity. However, it is not the

case that each point in the wage distribution has retreated from its neighbors at a common pace. As explained in greater detail in the [Raising America's Pay overview paper](#) (Bivens et al. 2014), the evolution of key wage gaps demonstrates that policy changes play far bigger roles in wage trends than is commonly granted.

Wage inequality across the board has increased dramatically over the last 35 years. For most of the 1980s, inequality increased across the entire wage distribution. This means middle-wage earners (those at the 50th percentile) pulled away from low-wage earners (those at the 10th percentile); in other words, the 50/10 wage ratio increased. At the same time, top wage earners pulled away from the middle (i.e., the 95/50 wage ratio increased). In terms of policy, the timing of changes in the gap between wages at the middle and bottom of the wage distribution suggests that changes in the minimum wage and the unemployment rate explain most of its evolution. Indeed, between the 1970s and the late 2000s, the eroded minimum wage alone explains roughly two-thirds of the growing wage gap between low- and middle-wage workers (Mishel et al. 2012). As for the 95/50 ratio, increased trade, declining unionization, and excessive unemployment are at the root of the growth of the gap, as discussed in the [Raising America's Pay overview paper](#) (Bivens et al. 2014).

Since the late 1980s, the increase in inequality has been almost entirely in the “upper tail” of the distribution; put simply, the top has pulled away from everyone else. In fact, the wage gap between those in the top 1 percent and other very high-wage workers (those between the 90th and 95th percentiles) rose faster and more consistently than any of the other wage gaps. As the top 1 percent is dominated by corporate managers and finance-sector professionals, this suggests these wage trends are driven in large part by developments in corporate governance and financial regulation that have given those at the very top the bargaining power that allows them to claim economic rents (for more on this, see Bivens and Mishel 2013). Additionally, as detailed in the [Raising America's Pay overview paper](#) (Bivens et al. 2014), the growth of the wage gap at the very top corresponds closely to the growth of the stock market (reflecting the stock options realized by executives that are included in their wages). This suggests that explanations that account for corporate governance, tax policy toward executive performance pay and upper-end marginal rates, and financial sector regulation should be front and center.

Wage inequality is not fueled by a growing demand for skills and education

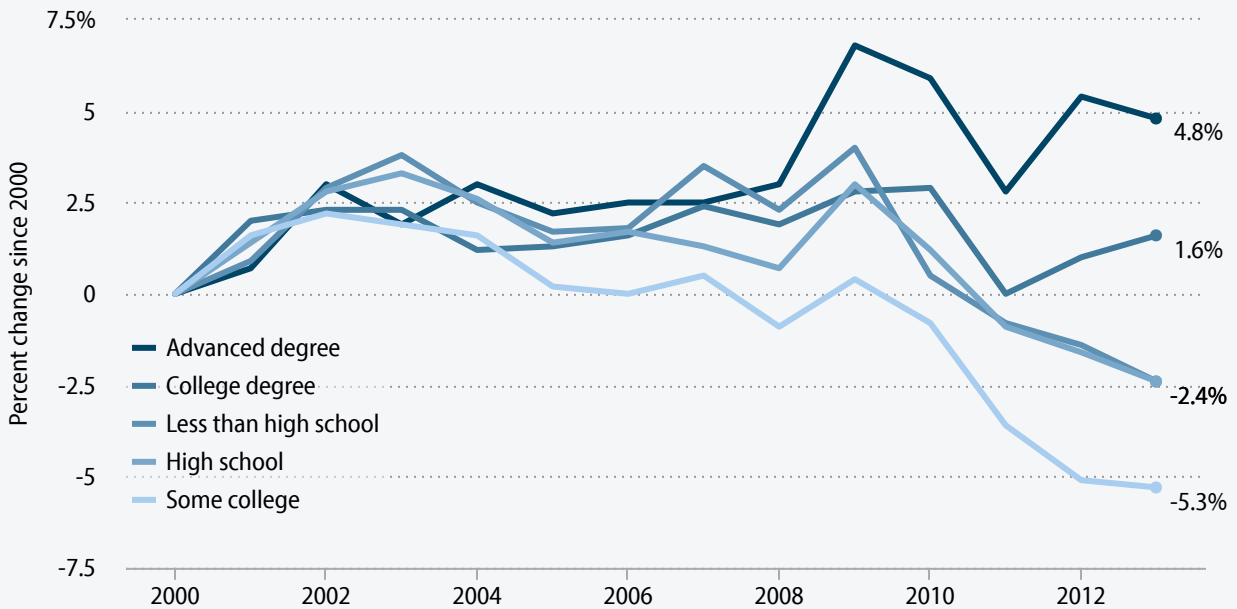
A particularly prevalent and convenient story explains wage inequality as a simple consequence of growing employer demand for skills and education—often thought to be driven by advances in technology. According to this explanation, because there is a shortage of skilled or college-educated workers, the wage gap between workers with and without a college degree is widening. This is sometimes referred to as a “skill-biased technological change” explanation of wage inequality (since it is based on technology leading to the need for more skills). However, despite its great popularity and intuitive appeal, this story about recent wage trends being driven more and more by a race between education and technology does not fit the facts well, especially since the mid-1990s.

First of all, the gap between wages near the top of the wage distribution and the middle (and, for that matter, between the very top and the top) has grown much faster since 1995 than has the wage gap between those with a four-year college degree and those with a high school degree. This suggests that rising demands for this credential cannot fully explain the growth in inequality.

Another reason to be skeptical that a technologically related demand for more-credentialed workers has driven wage inequality is the fact that the workers with the key credential—four-year college graduates—have not done that well, especially in the last 10 years. **Figure L** displays the percent change in real hourly wages from 2000 to 2013 by education level. As with the percentile figures, once the acceleration of the late 1990s ended around 2002, it is clear that those in nearly every education category experienced falling or stagnant wages.

FIGURE L [VIEW INTERACTIVE on epi.org](#)

Percent change in real hourly wages of all workers, by education, 2000–2013



Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

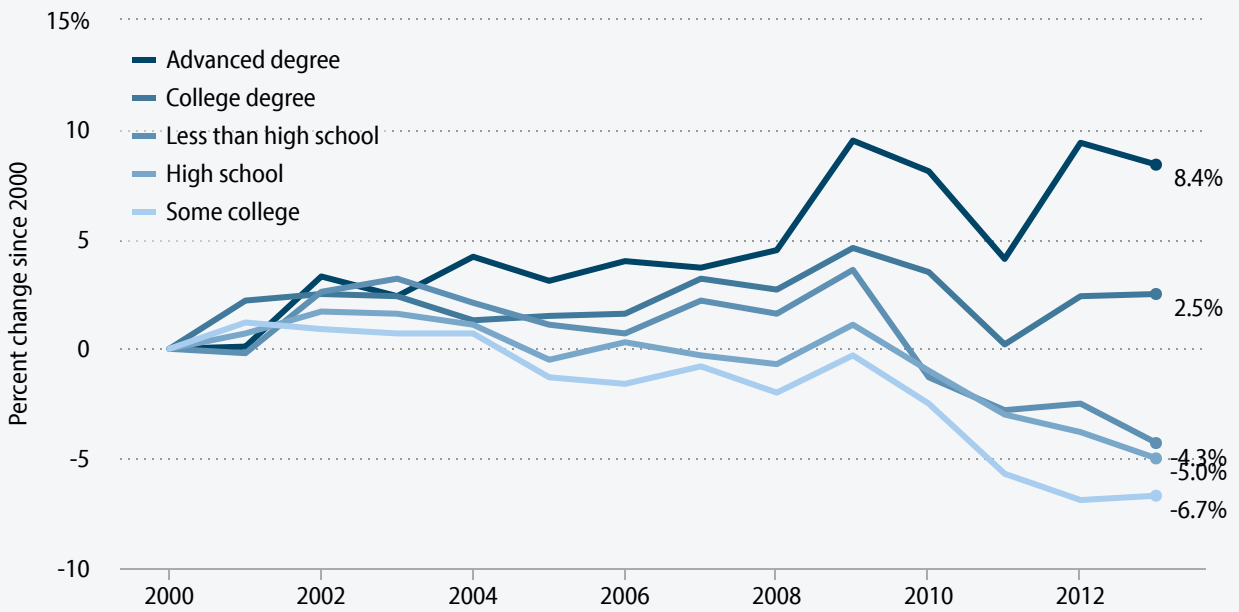
Adapted from: Table 4.14 in *The State of Working America, 12th Edition* (Mishel et al. 2012), an Economic Policy Institute book published by Cornell University Press in 2012

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In fact, additional evidence in the [Raising America's Pay overview paper](#) shows that real hourly wages have declined for nearly 70 percent of the workforce with four-year college degrees since 2000 (see Figure X in Bivens et al. 2014). And the 90th percentile college graduate's wages only increased 4.4 percent *cumulatively* from 2000 to 2013.

As with wage deciles, a closer examination of how trends in wages by education differ for men and women is also illuminating. **Figure M** provides wage trends for men, while **Figure N** provides wage trends for women. For both men and women, those with some college experienced the largest losses between 2000 and 2013, while those with a college or advanced degree experienced modest gains.

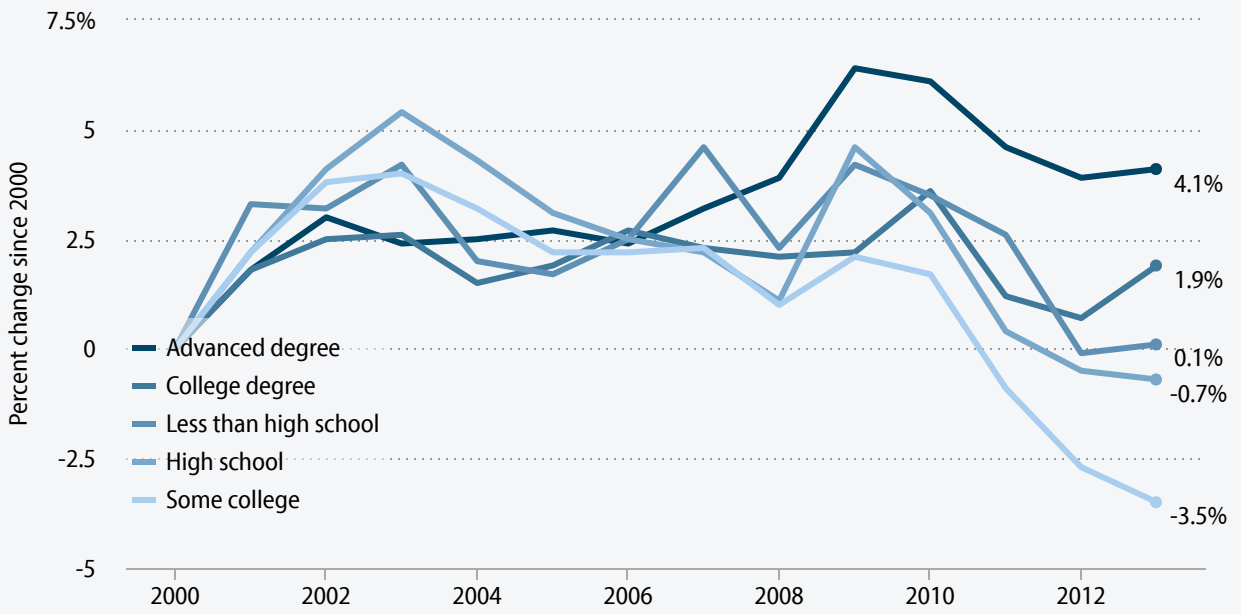
Percent change in real hourly wages of men, by education, 2000–2013



Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Adapted from: Table 4.15 in *The State of Working America, 12th Edition* (Mishel et al. 2012), an Economic Policy Institute book published by Cornell University Press in 2012

Percent change in real hourly wages of women, by education, 2000–2013



Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Adapted from: Table 4.16 in *The State of Working America, 12th Edition* (Mishel et al. 2012), an Economic Policy Institute book published by Cornell University Press in 2012

On average, men with some college or less fared worse than similarly educated women, while men with a college or advanced degree fared better than similarly educated women. For men and women with only a college degree, their wages in 2013 were no higher than they were in 2002.

Table 2 presents the most up-to-date data on wages by education up through the first half of 2014. As with the aforementioned data on wage deciles, American workers fared poorly between the first half of 2013 and the first half of 2014. Through the recession itself—from the business cycle peak in 2007 to the official end of the recession in 2009—wages rose for all groups except those with some college. Between 2009 and 2014, wages fell for all groups. On net, from the first half of 2007 to the first half of 2014, wages stagnated or fell for all groups. It is clear that the persistent slack in the labor market is leaving workers with little to no ability to bargain for better wages.

TABLE 2

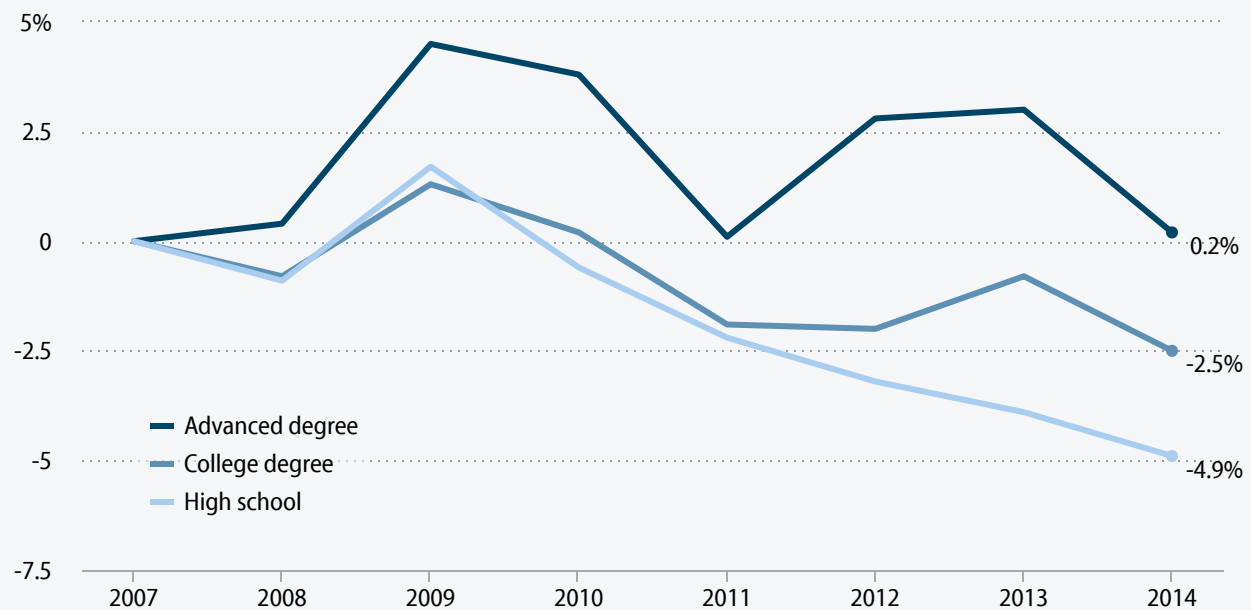
Real hourly wages in first half (FH) of year, by education, 2007–2014 (annual 2013 dollars)

	Less than high school	High school	Some college	College	Advanced degree
<i>FH2007</i>	\$12.92	\$16.97	\$19.20	\$29.72	\$37.63
<i>FH2009</i>	12.95	17.26	19.10	30.12	39.32
<i>FH2013</i>	12.01	16.32	17.97	29.48	38.75
<i>FH2014</i>	11.94	16.14	17.80	28.99	37.72
Annualized percent changes					
<i>2007–2009</i>	0.1%	0.8%	-0.3%	0.7%	2.2%
<i>2009–2014</i>	-1.6	-1.3	-1.4	-0.8	-0.8
<i>2007–2014</i>	-1.1	-0.7	-1.1	-0.4	0.0
<i>2013–2014</i>	-0.6	-1.1	-1.0	-1.6	-2.7

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

Figure O shows the cumulative growth in real hourly wages for those with an advanced degree, college degree, and high school degree between the first half of 2007 and the first half of 2014. It is important to note that, as also shown in Table 2, wages have fallen across all education groups in the last year—a trend the Federal Reserve Board should note when it considers whether or not to slow down the economy by increasing interest rates. This also provides further evidence that poor wage performance does not stem from workers lacking skills or education, as wages fell for even the most educated over the last year.

Cumulative growth in real hourly wages, by education, 2007–2014*



* Data reflect first half values for each year.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata

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For those with a high school or college degree, the trend over the last year is a continuation of the trend that has prevailed over the last several years; the wages of those with a high school degree fell 4.9 percent between the first half of 2007 and the first half of 2014, while those with a college degree registered a 2.5 percent decrease. Even those with an advanced degree saw stagnant wages, with a cumulative increase of just 0.2 percent over this period.

On the whole, the broad wage trends by education level over the last decade-and-a-half make clear that wage inequality cannot be readily explained by stories about educational credentials and technology; wage inequality has increased steadily, yet even those with a college diploma or advanced degree have experienced lackluster wage growth. This lends further credence to the argument that policy changes have had much larger impacts on wage trends than is commonly acknowledged. The following section explores this theme in more detail.

The policy roots of wage stagnation

Rising inequality and marked deceleration in living standards growth for the vast majority is simply the flip side of nearly stagnant hourly wage growth for the vast majority of the American workforce in the last three-and-a-half decades. Importantly, this wage slowdown is not simply the sad outcome of inevitable and irreversible changes in the economy (e.g., technological change or the “flattening” of the global economy). Instead, policy changes that have shifted bargaining power from workers to corporations and CEOs have played a large role.

The list of policies that impact wages is long—much longer than generally realized. For example, macroeconomic stabilization policy (fiscal and monetary and exchange rate policies), regulatory policy (especially financial regulation), policies concerning corporate governance, and tax policy all have significant impacts on wages.

However, labor market policies and business practices have also had large, though often underappreciated, potential impacts on wages. While this set of policies and practices includes many discrete parts, the common thread of the past generation is that practices, institutions, and standards that have boosted bargaining power for low- and moderate-wage workers have been targeted for weakening—and have been replaced by policies that put more leverage in the hands of those with the most economic power.

Policies that rebuild institutions to provide bargaining power to these workers should hence be a top priority for those looking for better wage outcomes. These policies include raising the minimum wage, strengthening unions, reducing wage theft, updating overtime protections, correcting worker misclassification, and much more. What follows is a brief explanation of these policies and how reversing recent trends can improve the living standards of the vast majority of American workers and their families.

The **minimum wage** is currently more than 25 percent below its real value in the late 1960s. An increase in the minimum wage to \$10.10, as proposed by Sen. Tom Harkin (D-Iowa) and Rep. George Miller (D-Calif.) in their Fair Minimum Wage Act, would provide an **additional \$35 billion in wage income** to affected workers, most of whom are concentrated in low-income households (Cooper 2013a). Other academic research finds that the same bill would lift about 2.4 million people out of poverty (Dube forthcoming). Among those who would see a raise from the Harkin–Miller bill, 55 percent are women and 25 percent are women of color, and nearly one-in-five children would see at least one parent receive a **raise** (Cooper 2013).

Another key policy priority should be efforts to level the playing field for workers to organize and form **unions**. The decline in unionization over the last several decades has led to increases in wage inequality and a loss of bargaining power for workers (Mishel et al. 2012). And this loss in bargaining power is not confined to union members themselves—unions often set wage standards for entire sectors. Importantly, the decline in unionization is not a natural, inevitable phenomenon or a result of workers no longer wanting unions. It is the result of a policy decision **to allow growing employer aggressiveness** to tilt the playing field against organizing drives (Bronfenbrenner 2009).

This policy choice is clear when one looks at the evidence. First, unionization has held up much better in the public sector, where employers have less ability to fight organizing drives. Second, in 2007, the share of non-union workers who said they wanted to be represented by a union or similar organization reached an all-time high of **over 50 percent** (Freeman 2007). There is a growing wedge between the desire to organize and bargain collectively, and workers' ability to do so. And, third, even the most obvious form of employer aggressiveness—the firing of workers who are trying to organize—has **risen sharply** in recent decades, according to the National Labor Relations Board (Schmitt and Zipperer 2007).

The fact is that the decline of unions can explain approximately **one-third of the growth of wage inequality among men and approximately one-fifth among women since the 1970s** (Western and Rosenfeld 2011). This rising wage inequality is the key driver behind stagnant wages for workers at the bottom. When low-wage workers have been able to organize,

unionization is **associated with higher wages and benefits** for many, including food preparation workers, cashiers, cafeteria workers, childcare workers, cooks, housekeepers, and home-care aides (Schmitt et al. 2007).

Reducing wage theft is also particularly important to low-wage workers. Wage theft occurs when employers withhold wages that are owed to a worker, for example by requiring workers to work off the clock, or refusing to pay overtime. In nearly 9,000 investigations of the restaurant industry, the Wage and Hour Division of the Department of Labor **found that 83.8 percent of the establishments investigated** had wage and hour violations—underscoring the enforcement problems (Cooper 2013b).

Millions of low- and moderate-wage workers have also seen slow wage growth because policymakers have chosen to allow them to become ineligible for overtime pay under antiquated provisions. This is because the real value of the salary threshold under which all salaried workers, regardless of their work duties, are covered by overtime provisions has been allowed to erode dramatically. Simply **adjusting the threshold for inflation** since 1975 would raise it to \$984 per week (or \$51,000 on an annual basis), from its current level of \$455 (\$24,000 annually) (Eisenbrey 2014). This simple adjustment would guarantee millions of additional workers time-and-a-half pay when they work more than 40 hours in a week.

Changing other labor market policies and business practices would increase the wages of low- and moderate-wage workers. Such misguided policies and practices include the **misclassification of employees**, which occurs when workers are improperly deemed independent contractors so their employer doesn't have to pay payroll taxes, unemployment insurance, and workers' compensation. **Just-in-time scheduling**, which occurs when employers schedule workers erratically and sporadically, denies workers any regularity in their schedule or pay. This makes it difficult for working parents to find child care, or for workers to find a second job to help them make ends meet. Finally, legislation that provides **paid sick time, paid family medical leave, and flexible work hours** would all support workers and their families.

Conclusion

The stagnation of hourly wages is the most important economic issue facing most American families, and most of our key economic challenges hinge on whether or not hourly wages for the vast majority will grow. Further, the policy roots of hourly wage trends are deep, but too often downplayed or even ignored. This is particularly true when it comes to labor market policies and business practices; reversing the deteriorating state of labor market standards and protections for low- and moderate-wage workers would be an ideal place to start rebuilding their ability to share in overall economic gains. Recent momentum to raise the federal minimum wage and restore some of the overtime protections lost in recent decades is a very encouraging beginning.

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About the author

Elise Gould joined EPI as an economist in 2003 and is the institute's director of health policy research. Her research areas include employer-sponsored health insurance, inequality and health, poverty, economic mobility, and the employer tax exclusion. She is a coauthor of *The State of Working America, 12th Edition*. In the past, she has authored a chapter on health in *The State of Working America 2008/09*; coauthored a book on health insurance coverage in retirement; published in venues such as *The Chronicle of Higher Education*, *Challenge Magazine*, and *Tax Notes*; and written for academic journals including *Health Economics*, *Health Affairs*, *Journal of Aging and Social Policy*, *Risk Management & Insurance Review*, *Environmental Health Perspectives*, and *International Journal of Health Services*. She holds a master's in public affairs from the University of Texas at Austin and a Ph.D. in economics from the University of Wisconsin at Madison.

Endnotes

1. Further, because government transfers actually grew more rapidly in the pre-1979 period, it is implausible that transfer growth could have overcome the slowdown in cash, market-based income growth for the vast majority since 1979 to forestall a slowdown in overall growth.
2. These data are “top coded” for purposes of privacy, meaning that wage values above a certain threshold are not reported at the actual value provided to the Census Bureau, but at a specified top wage (roughly 3 percent of workers in the Current Population Survey are assigned a top-coded wage). As such, we do sacrifice a bit of detail on the highest earners.

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