EPI BRIEFING PAPER
ECONOMIC POLICY INSTITUTE • MAY 27, 2015 • BRIEFING PAPER #401

THE CLASS OF 2015

Despite an Improving Economy, Young Grads Still Face an Uphill Climb

BY **ALYSSA DAVIS**, **WILL KIMBALL**, AND **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*

Introduction and key findings

The Great Recession has had lasting effects on employment prospects of young people entering the workforce after graduating from high school or college. Despite officially ending in June 2009, the recession left millions unemployed for prolonged spells, with recent workforce entrants such as young graduates being particularly vulnerable. The slow pace of the recovery means that seven classes of students have graduated into an acutely weak labor market and have had to compete with more-experienced workers for a limited number of job opportunities. This is on top of the fact that graduates since 2000 have confronted suboptimal labor market conditions, resulting in stagnant wages and limited job opportunities. While recent improvements in economic conditions have finally begun to brighten young graduates' job prospects, the labor market is still far from recovered from the Great Recession.

This paper's title, *The Class of 2015,* is admittedly something of a misnomer, as we do not yet know the labor market outcomes of these graduates. However, the outcomes of recent high school and college graduates provide a good sense of the labor market conditions faced by the young men and women who graduate this spring. This paper focuses on recent high school (age 17–20) and college graduates (age 21–24) who are not enrolled in further schooling. We analyze employment, enrollment, and wage trends in order to glean the Class of 2015's economic prospects as they start their careers.

Due to the progression of the economic recovery and a modest improvement in the unemployment rate, members of the Class of 2015 currently have better job prospects than the classes of 2009–2014. However, the Class of 2015 still faces real economic challenges, as evidenced by elevated levels of unemployment and underemployment, and a large share of graduates who still remain "idled" by the economy. In addition, wages of young high school and college graduates have failed to reach their prerecession levels, and have in fact stagnated or declined for almost every group since 2000.

Key findings include:

- Unemployment of young graduates is extremely high today, but not because of something unique about the Great Recession and its aftermath that has affected young people in particular. Rather, it is high because young workers always experience disproportionate increases in unemployment during periods of labor market weakness—and the Great Recession and its aftermath is the longest, most severe period of economic weakness in more than seven decades.
- Unemployment and underemployment rates among young graduates are improving but remain substantially higher than before the recession began.
    - For young college graduates, the unemployment rate is currently 7.2 percent (compared with 5.5 percent in 2007), and the underemployment rate is 14.9 percent (compared with 9.6 percent in 2007).
    - For young high school graduates, the unemployment rate is 19.5 percent (compared with 15.9 percent in 2007), and the underemployment rate is 37.0 percent (compared with 26.8 percent in 2007).
- The high share of unemployed and underemployed young college graduates and the share of employed young college graduates working in jobs that do not require a college degree underscore that the current unemployment crisis

among young workers did *not* arise because today's young adults lack the right education or skills. Rather, it stems from weak demand for goods and services, which makes it *un*necessary for employers to significantly ramp up hiring.

- The share of young graduates who are "idled" by the economy—neither enrolled in further schooling nor employed—remains elevated in the wake of the Great Recession. This indicates that many graduates are unable to take the two main paths—receiving further education or getting more work experience—that enable future career success.
    - Among young college graduates, 10.5 percent are neither enrolled nor employed (compared with 8.4 percent in 2007).
    - Among young high school graduates, 16.3 percent are neither enrolled nor employed (compared with 13.7 percent in 2007).
- Wages of young college and high school graduates are performing poorly—and are substantially lower today than in 2000. The real (inflation-adjusted) wages of young high school graduates are 5.5 percent lower today than in 2000, and the wages of young college graduates are 2.5 percent lower.
    - Women in particular have seen large declines in hourly wages, among both high school and college graduates.
    - Young high school and college graduates' wages follow the same trends as those of older graduates, signaling that the slowdown in young graduates' wages stems from a wider wage growth problem.
- The overall unemployment rates, idling rates, and wages of young graduates mask substantial racial and ethnic disparities in these measures.
    - The unemployment rates of blacks and Hispanics are substantially higher than the unemployment rates of white non-Hispanics, for both young high school graduates and young college graduates.
    - The share of young black and Hispanic graduates who remain unemployed and not enrolled in further schooling is substantially higher than that of white graduates.
- The cost of higher education has grown far more rapidly than median family income, leaving students with little choice but to take out loans which, upon graduating into a labor market with limited job opportunities, they may not have the funds to repay.
    - From the 1983–1984 enrollment year to the 2013–2014 enrollment year, the inflation-adjusted cost of a four-year education, including tuition, fees, and room and board, increased 125.7 percent for private school and 129.0 percent for public school (according to the College Board).
    - Between 2004 and 2014, there was a 92 percent increase in the number of student loan borrowers and a 74 percent increase in average student loan balances (according to the Federal Reserve Bank of New York).
- Due to young college graduates' limited job opportunities, stagnating wages, and the rising cost of higher education, college is becoming an increasingly difficult investment.

- Graduating in a weak economy has long-lasting economic consequences. Economic research suggests that for the next 10 to 15 years, those in the Class of 2015 will likely earn less than if they had graduated when job opportunities were plentiful.
- The policy solutions to improve the job prospects of young high school and college graduates are the same solutions needed to help generate broad-based demand for all workers.
    - We should pursue full employment and boost wages through prioritizing low rates of unemployment when making monetary policy, publicly financing employment programs and investing in infrastructure, strengthening collective bargaining rights, raising the minimum wage, strongly enforcing labor standards, and ending discriminatory practices that contribute to race and gender inequalities.

In good times and bad, unemployment rate twice as high for young workers

In economic recessions as well as expansions, the unemployment rate of young workers (those under age 25) is typically a little more than twice as high as the overall unemployment rate. On average between 1989 and 2007, the unemployment rate of workers under age 25 was 2.2 times as high as the overall unemployment rate (see **Figure A** for national data and **Appendix Table A1** for state-level data). This trend persists over time because young workers are relatively new to the labor market—often looking for their first or second job—and they may be passed over in hiring decisions due to lack of experience. As for young workers who are already employed, their lack of seniority makes them likely candidates for being laid off if their firm falls on hard times or is restructuring. Young workers also tend to be more mobile than older workers, moving between employers, careers, or cities, and thus spend a larger share of their time as job seekers.

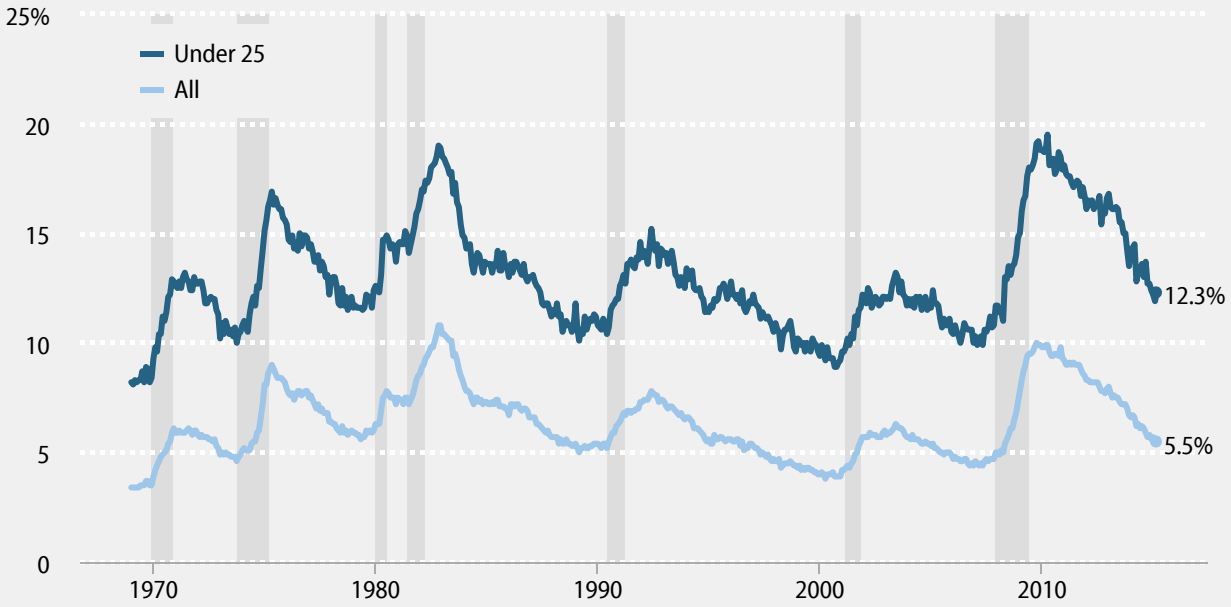
The historical fact that the unemployment rate of young workers tends to be a little more than twice the overall rate continues to be true today. In March 2015, the overall unemployment rate was 5.5 percent, and the unemployment rate of workers under age 25, at 12.3 percent, was 2.2 times as high.

This raises two key points. First, because the unemployment rate of young workers is typically slightly more than twice as high as the overall rate, young workers experience much greater-than-average increases in unemployment during economic downturns. When the overall unemployment rate is elevated by 1 percentage point, the unemployment rate of young workers will likely be elevated by around 2 percentage points.

Second, the dire situation young workers face today is not unexpected given overall labor market weakness. In other words, unemployment of young workers is high today not because of something unique about the Great Recession and its aftermath that has affected young people in particular. Rather, it is high because young workers always experience disproportionate increases in unemployment during downturns—and the Great Recession and its aftermath is the longest, most severe period of economic weakness in more than seven decades.

FIGURE A

Unemployment rate of workers under age 25 and all workers, 1969–2015



Note: Shaded areas denote recessions. Data are seasonally adjusted.

Source: EPI analysis of Bureau of Labor Statistics Current Population Survey public data series

ECONOMIC POLICY INSTITUTE

Educational attainment of young workers

Although this paper focuses on high school and college graduates, it is necessary to note that these populations make up only a portion of young workers. In fact, as seen in **Table 1**, 75.2 percent of young workers (age 17–24) have a high school degree or more, but only 9.7 percent have at least a college degree.

This is an important fact to keep in mind as we consider the role of high school and college graduates in our economy. Although we focus on high school and college graduates, a nontrivial part of the population age 17–24 (24.8 percent) have not graduated from high school or earned an equivalent degree. Of course, as we look at individuals who are slightly older (age 24 to 29), we find that a greater share have finished high school, but college graduates are still a minority. Among this age group, 35.2 percent have a high school degree or less, along with 30.7 percent who have some college experience. Only 34.1 percent have completed college or received an advanced degree. This suggests that more attention should be paid to the job market for those with less than a bachelor's degree, as they comprise the vast majority (nearly two-thirds) of the 24–29 age group. Access to good jobs for these individuals is especially critical, as stable employment allows them to build a career or pay for further schooling.

TABLE 1

Highest degree earned, by age and demographic, 2015*

	Age 17–24						Age 24–29					
	All	Men	Women	White	Black	Hispanic	All	Men	Women	White	Black	Hispanic
Less than high school	24.8%	26.1%	23.5%	22.5%	26.6%	30.9%	8.9%	9.7%	8.0%	4.6%	9.2%	21.6%
High school	27.9%	30.1%	25.7%	26.1%	32.2%	32.1%	26.4%	29.9%	22.9%	23.8%	33.0%	32.5%
Some college	37.6%	35.8%	39.5%	39.2%	35.9%	32.9%	30.7%	29.4%	32.0%	30.4%	36.7%	29.9%
Bachelor's degree	9.0%	7.5%	10.5%	11.5%	4.9%	3.8%	26.6%	24.6%	28.5%	32.5%	17.2%	13.3%
Advanced degree	0.7%	0.6%	0.9%	0.8%	0.5%	0.3%	7.5%	6.4%	8.5%	8.6%	4.0%	2.8%

* Data reflect 12-month moving average as of March 2015.

Note: Race/ethnicity categories are mutually exclusive (i.e., white non-Hispanic, black non-Hispanic, and Hispanic any race).

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

High school graduates are struggling to find work

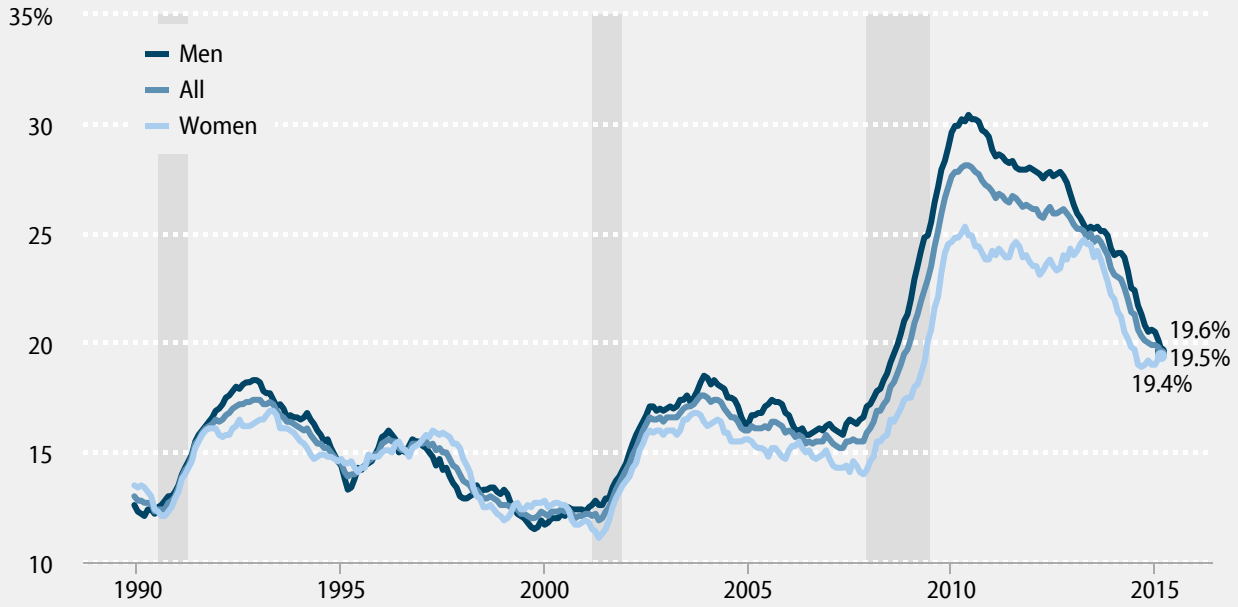
Among young high school graduates, unemployment rates are astonishingly high. **Figure B** shows the unemployment rate of young high school graduates between age 17 and 20 who are not enrolled in additional schooling. (Most data presented in this paper on graduates who are not enrolled, along with data on enrollment itself, begin in 1989, the first business cycle peak for which enrollment data are available from the Bureau of Labor Statistics. Furthermore, from this point forward, the data from the Current Population Survey [CPS] basic monthly and CPS Outgoing Rotation Group are presented in 12-month moving averages, as this removes any need for seasonal adjustment and provides sufficient sample sizes. For example, the most recent data point is a 12-month average from April 2014 to March 2015, and appears in the figures as March 2015. Consequently, references to data points in the text may not represent calendar-year averages.)

As Figure B shows, the unemployment rate of young high school graduates who are not enrolled in additional schooling jumped from 15.9 percent in 2007 to a peak of 28.1 percent in 2010, dwarfing the increases in prior recessions. The rate has since declined to 19.5 percent. The increase between 2007 and 2010 was particularly pronounced for young male high school graduates, from 17.1 percent to 30.4 percent. Men's unemployment rates tend to disproportionately increase during downturns, in large part because men are more concentrated in industries particularly hard-hit by recessions, such as manufacturing, construction, and transportation. Since 2010, unemployment rates by gender for young high school graduates have become more equal; the latest data show that the unemployment rate was 19.6 percent for young male high school graduates and 19.4 percent for young female high school graduates.

Figure C shows that among young high school graduates, the unemployment rate of racial and ethnic minorities—particularly young non-Hispanic black graduates—tends to be higher than that of white non-Hispanic graduates, in good times and bad.[1] In 2007, the unemployment rate of young white high school graduates age 17–20 who are not enrolled in further schooling was 13.1 percent. It rose to a peak of 25.9 percent in 2010 and has since improved to

FIGURE B

Unemployment rate of young high school graduates, by gender, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for high school graduates age 17–20 who are not enrolled in further schooling.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

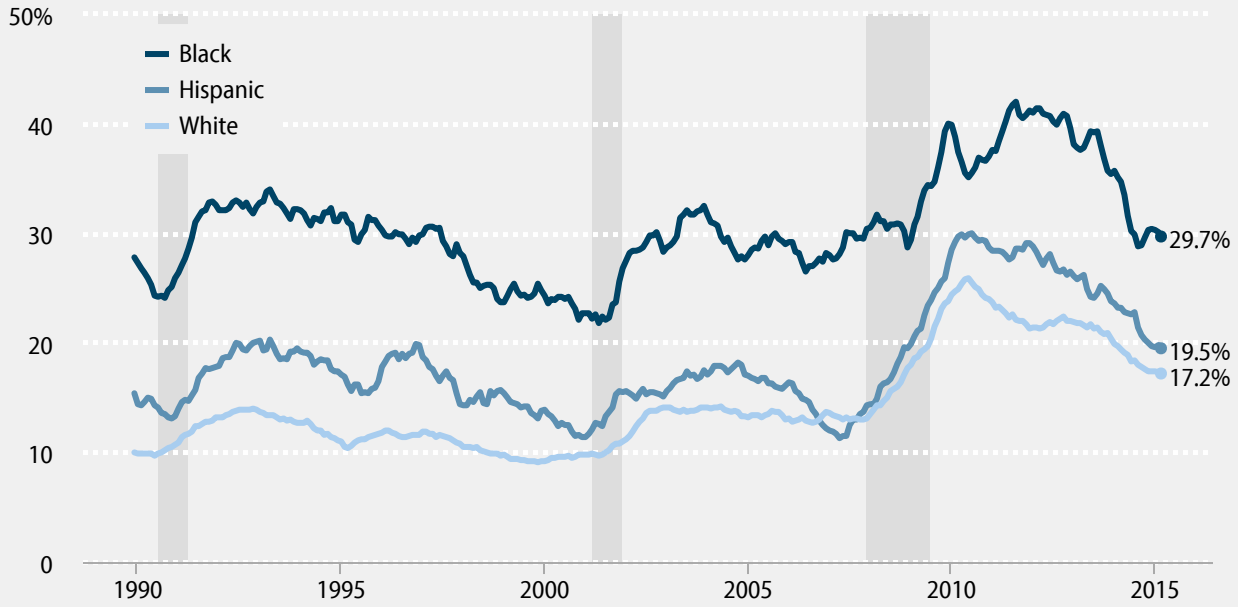
17.2 percent. In 2007, the unemployment rate of young black high school graduates was 30.4 percent. It continued on a general upward trend until 2011, when it reached 42.0 percent, and has since declined to 29.7 percent. In 2007, the unemployment rate of young Hispanic high school graduates was 14.3 percent. That rate also rose until 2010, when it reached a peak of 30.0 percent, and has since improved somewhat to 19.5 percent.

It's interesting to note that black high school graduates are the only group to have dipped below their prerecession unemployment rate. Of course, black graduates had remarkably high unemployment rates before the Great Recession. Following the 2000 recession, their unemployment rate never really improved. Today, they are still much more likely to be unemployed than their Hispanic and white peers, 1.5 and 1.7 times, respectively.

Further, the unemployment rate may understate continued weakness in the labor market. A more comprehensive measure of labor market slack than the unemployment rate is the "underemployment rate" (officially, the U-6 measure of labor underutilization). In addition to the unemployed (jobless workers who report that they are actively seeking work), the underemployment rate also includes those who work part time but want full-time work ("involuntary" part timers), and those who want a job and have looked for work in the last year but have given up actively seeking work in the last four weeks ("marginally attached" workers).

FIGURE C

Unemployment rate of young high school graduates, by race/ethnicity, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for high school graduates age 17–20 who are not enrolled in further schooling. Race/ethnicity categories are mutually exclusive (i.e., white non-Hispanic, black non-Hispanic, and Hispanic any race).

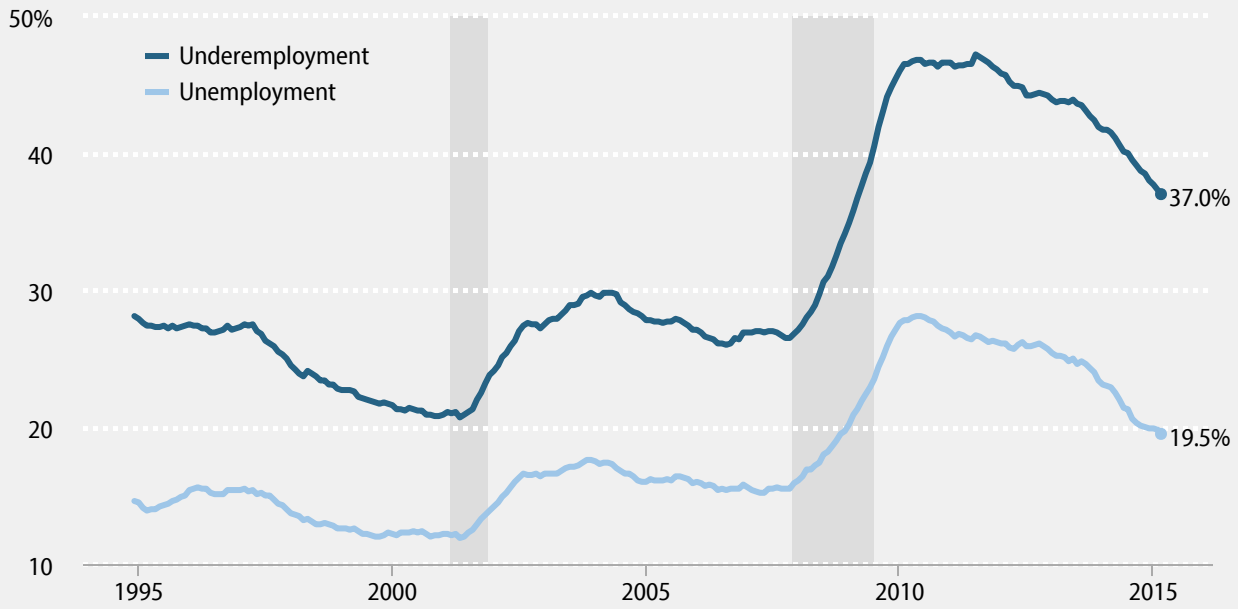
Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

Figure D presents data on both unemployment and underemployment among young high school graduates (those age 17–20 who are not enrolled in further schooling). Currently, while the unemployment rate of young high school graduates is 19.5 percent, their underemployment rate is 37.0 percent. In other words, in addition to the officially unemployed, a significant share of young people either want a job but have simply given up actively looking for work (i.e., they are marginally attached), or have a job that does not provide the hours they need (i.e., they are part time for economic reasons). Underemployment remains particularly elevated compared with its prerecession level, which has caused the ratio of the underemployment to unemployment rate to be near the highest it's ever been for young high school graduates, at 1.9. The wide gap between unemployment and underemployment suggests that a lack of job opportunities is either forcing young people to drop out of the labor force or take part-time jobs when they're looking for full-time jobs. While state breakdowns of underemployment by educational attainment are not available, **Appendix Table A2** shows state-level underemployment rates of all workers by age.

FIGURE D

Unemployment and underemployment rates of young high school graduates, 1994–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Underemployment data are only available beginning in 1994. Data are for high school graduates age 17–20 who are not enrolled in further schooling.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

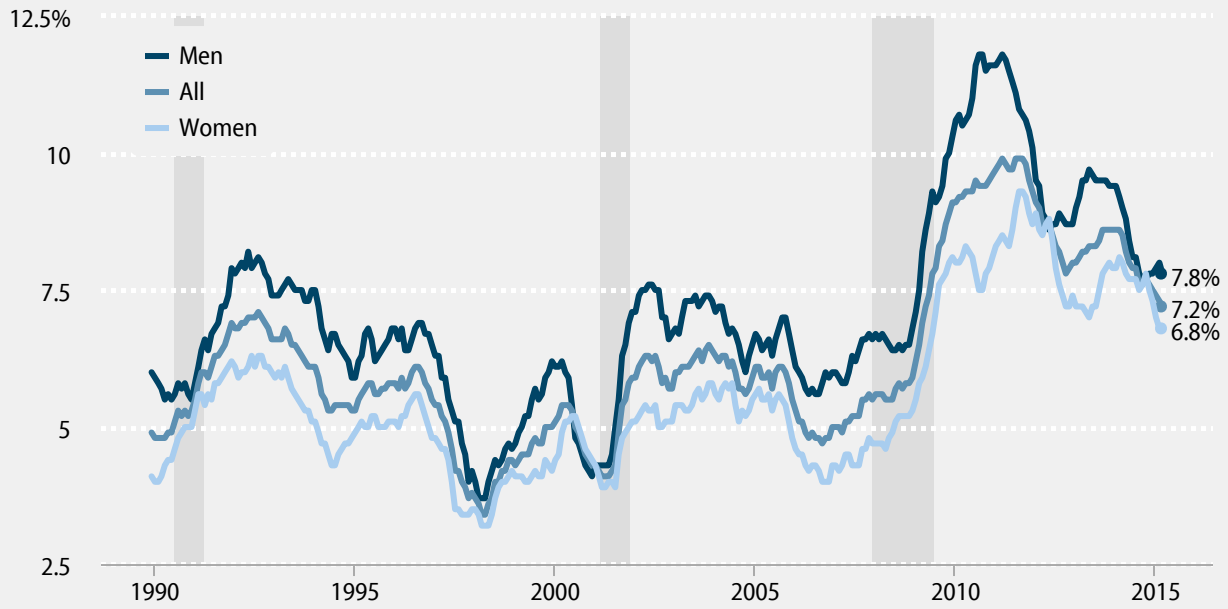
Young college graduates also face a tough labor market

By attending and finishing college, young college graduates have made a significant down payment on their career in terms of both time and money, and they typically have very high labor force participation. And because a college degree affords more opportunities in the labor market—not least of which is the fact that college graduates are often more competitive relative to non–college graduates when it comes to landing jobs not requiring a college degree—unemployment among young workers with a college degree is substantially lower than among other young workers. However, young college graduates' job prospects have deteriorated dramatically since the start of the Great Recession. In this section we examine the labor market outcomes of college graduates between age 21 and 24 who do not have an advanced degree and are not enrolled in additional schooling.

Figure E shows that the unemployment rate of young college graduates jumped between 2007 and 2011 from 5.5 percent to a peak of 9.9 percent, dwarfing the increases in prior recessions. It declined somewhat between 2011 and 2012, primarily due to young college graduates either dropping out of, or never entering, the labor force because job opportunities were so weak. In 2013, some of the 2011–2012 trends reversed: The unemployment rate increased modestly

FIGURE E

Unemployment rate of young college graduates, by gender, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for college graduates age 21–24 who are not enrolled in further schooling.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

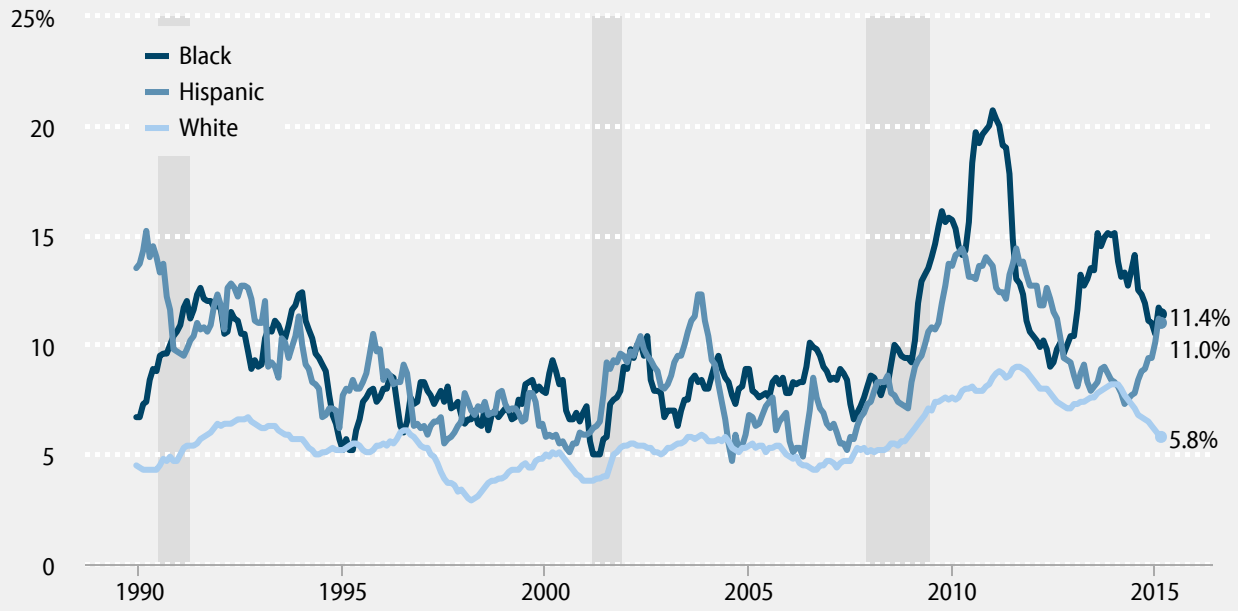
because the share of young college graduates actively looking for a job increased. The unemployment rate of young college graduates has since decreased due to stronger job growth in 2014, and now sits at 7.2 percent. However, it remains significantly elevated, especially in a historical context, and the Class of 2015 will join a sizable backlog of unemployed college graduates from the last six graduating classes (the classes of 2009–2014) in a difficult job market.

Unemployment data by gender, though somewhat volatile due to relatively small sample sizes, show that the increase in unemployment was larger for young male college graduates (from 6.6 percent in 2007 to a peak of 11.8 percent in 2010) than young female college graduates (from 4.7 percent in 2007 to a peak of 9.3 percent in 2011). For young male college graduates the unemployment rate has since improved to 7.8 percent, whereas it stands at 6.8 percent for young female college graduates. This gender gap in unemployment is likely due largely to industry concentration; women are more likely to be employed in industries, such as health and education, that are less sensitive to downturns.

Figure F shows unemployment rates by race and ethnicity of college graduates age 21–24 who are not enrolled in further schooling. The data by race and ethnicity are very volatile year-to-year due to small sample sizes, so it is important not to emphasize year-over-year changes but to instead focus on longer-run trends. What they show is that the unemployment rate of young college graduates who are racial and ethnic minorities tends to be higher than that of young

FIGURE F

Unemployment rate of young college graduates, by race and ethnicity, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling. Shaded areas denote recessions. Race/ethnicity categories are mutually exclusive (i.e., white non-Hispanic, black non-Hispanic, and Hispanic any race).

Source: EPI analysis of basic monthly Current Population Survey microdata

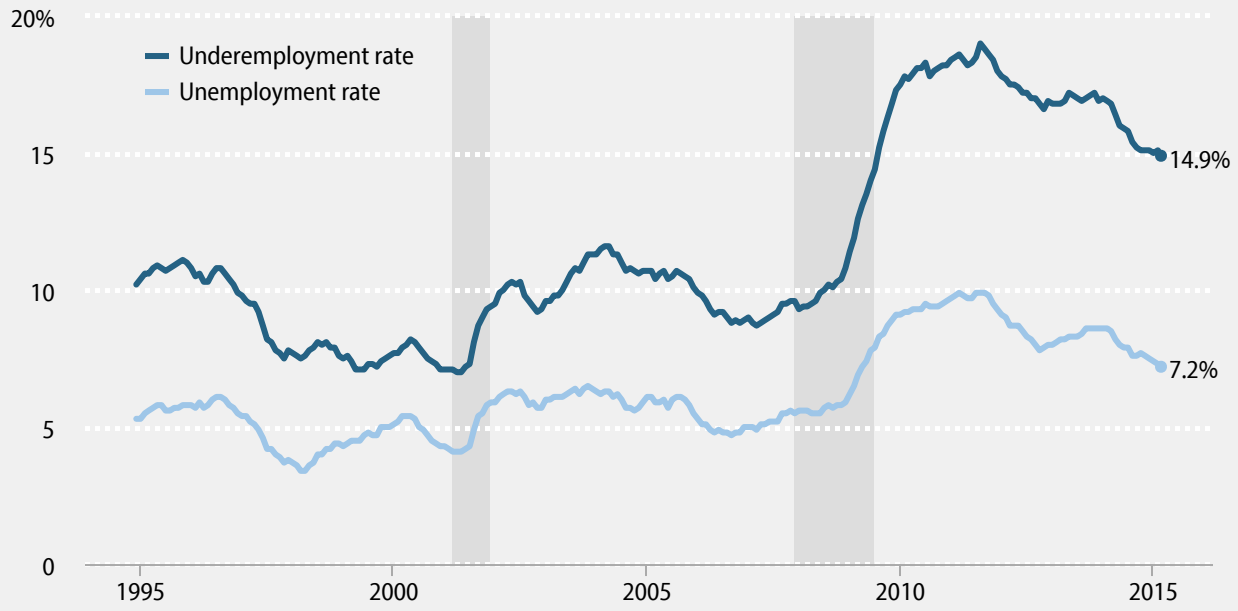
ECONOMIC POLICY INSTITUTE

white non-Hispanic college graduates, in good times and bad. The unemployment rate of young black college graduates was 8.1 percent in 2007, rose to 20.7 percent by 2011, and has since improved to 11.4 percent. The unemployment rate of young Hispanic college graduates was 7.3 percent in 2007, rose to 14.4 percent by 2010, improved to 7.3 percent by 2014, and has ticked back up to 11.0 percent. Among young white non-Hispanic college graduates, the unemployment rate was 5.1 percent in 2007, rose to 9.0 percent in 2011, and has since improved to 5.8 percent.

One would think there would be little disparity in the unemployment rates of young college graduates, who have the same basic degree and are in the same labor market position (i.e., college graduates, age 21–24, not enrolled in school, and either employed or actively seeking work). It is notable that having an equivalent amount of higher education and a virtual blank slate of prior professional work experience still does not generate parity in unemployment across races and ethnicities. The unemployment rates of black and Hispanic college graduates remain much more elevated than those of whites. This suggests other factors may be in play, such as discrimination or unequal access to the informal professional networks that often lead to job opportunities.

FIGURE G

Unemployment and underemployment rates of young college graduates, 1994–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Underemployment data are only available beginning in 1994. Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

Figure G presents unemployment and underemployment data for young college graduates age 21–24 who are not enrolled in further schooling. Currently, while the unemployment rate of this group is 7.2 percent, the underemployment rate is more than twice that, at 14.9 percent. In other words, in addition to the substantial share who are officially unemployed, a large amount of these young, highly educated workers either have a job but cannot attain the hours they need, or want a job but have given up looking for work. Similar to the story for high school graduates, the underemployment-to-unemployment ratio for recent college graduates is the highest it's ever been, at 2.1. This signifies that young college graduates are still experiencing significant labor market slack.

Employed college graduates are ending up in lower-level jobs

Although the measure of underemployment used in Figure G—the U-6 measure of labor underutilization—includes hours-based underemployment (i.e., part-time workers who want full-time work), it does not include "skills/education–based" underemployment (e.g., the young college graduate working as a barista). A recent paper by researchers at the Federal Reserve Bank of New York (Abel and Deitz 2014) offers insight into skills/education–based underemployment of recent college graduates. They categorize occupations according to whether the U.S. Department of Labor's

Occupational Information Network (O*NET) characterizes them as requiring a four-year college degree, and calculate what share of recent college graduates with jobs are working in jobs that actually require a college degree. First, it is important to note that even in good economic times, a surprisingly high share of young college graduates work in jobs that do not require their college degree. For example, in 2000—when jobs were plentiful and the unemployment rate was 4.0 percent—36 percent of employed college graduates age 22–27 worked in jobs that did not require a college degree. No matter how strong the labor market is, recent college graduates often require some time to transition smoothly into their desired career track.

However, the share of young college graduates working in jobs not requiring a college degree increased over the weak 2000–2007 business cycle, increased further in the Great Recession, and has not yet begun to improve. In 2007, 38 percent of employed college graduates under age 27 were working in a job that did not require a college degree, and this share increased to 46 percent by 2014 (Abel and Deitz 2014). Furthermore, the "non-college" jobs that workers with a college degree are ending up in are of lower quality now than they used to be. In 2000, half of recent college graduates who were in a job that did not require a college degree were nevertheless in a "good" job that tended to be career-oriented and fairly well-compensated—such as electrician, dental hygienist, or mechanic. That share has dropped substantially, while at the same time, there has been an increase in the share of recent college grads who are in low-wage jobs, such as bartender, food server, or cashier. The bottom line is that for recent college graduates, finding a good job has become much more difficult. These findings are consistent with other research showing that among the workforce as a whole, there has been a decline in the demand for "cognitive skills" since 2000 (Beaudry, Green, and Sand 2013).

These trends also underscore that the unemployment crisis since 2007 among young workers more broadly did not arise because young people today lack enough education or skills. Rather, it stems from weak demand for goods and services, which makes it unnecessary for employers to significantly ramp up hiring. For more on the fact that today's labor market weakness is due to weak demand and not workers lacking the right skills or education, see Shierholz 2014.

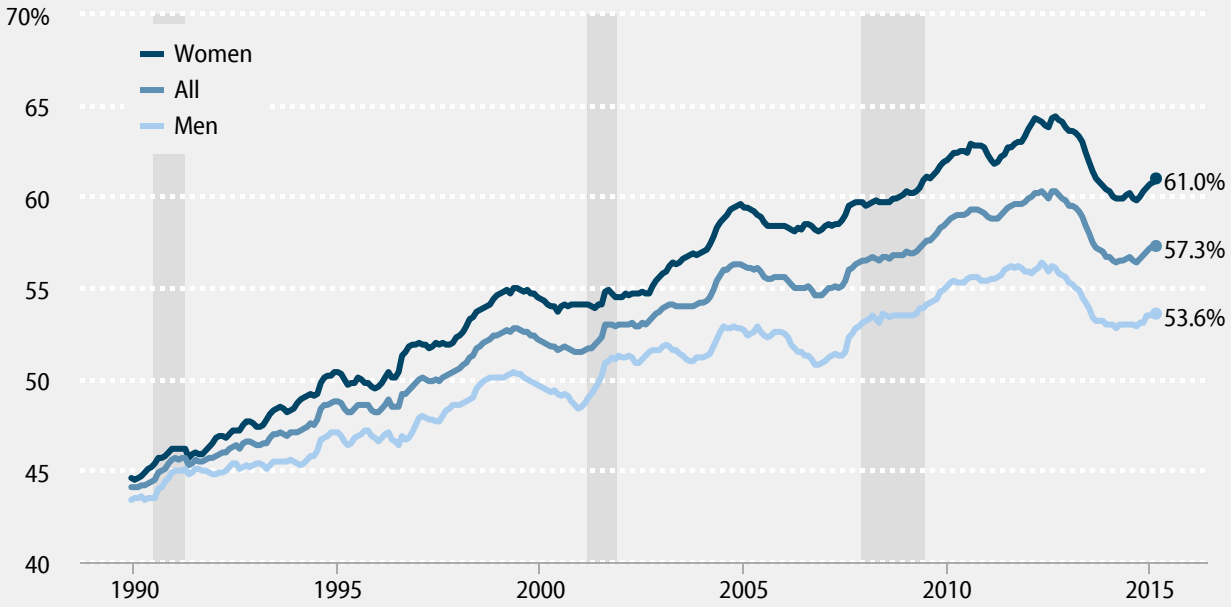
Young workers are not "riding out" the recession by "sheltering in school"

Educational opportunity is often identified as a possible silver lining to the dark cloud of unemployment and underemployment that looms over today's young graduates. The assumption is that a lack of job opportunities propels young workers to "shelter" from the downturn by attaining additional schooling, which may improve their long-run career prospects. However, there is little evidence of an uptick in enrollment due to the Great Recession, and in fact, enrollment plummeted over 2012–2014 and still has not recovered.

Figure H shows the share of young high school graduates (age 17–20) enrolled in college or university. The share of young high school graduates who go on to enroll in college has steadily increased over time, from 44.1 percent in 1989 to 57.3 percent in 2015.[2] Women saw particularly steep increases in enrollment since 1989 (44.6 percent to 61.0 percent) compared with men (43.4 percent to 53.6 percent). Notably, the increases in enrollment between 2007 and 2012 simply followed this historical trend; they were no greater than the structural rise that had been happening before the Great Recession began. The overall enrollment rate increased 0.7 percentage points per year on average between 2000 and 2007, and it also increased 0.7 percentage points per year between 2007 and 2012 (for women, the increase was 0.8 percentage points per year for both periods, while for men, the increase in the two periods was 0.7 percent-

FIGURE H

Share of young high school graduates enrolled in college or a university, by gender, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for high school graduates age 17–20 who may have previous college experience.

Source: EPI analysis of basic monthly Current Population Survey microdata

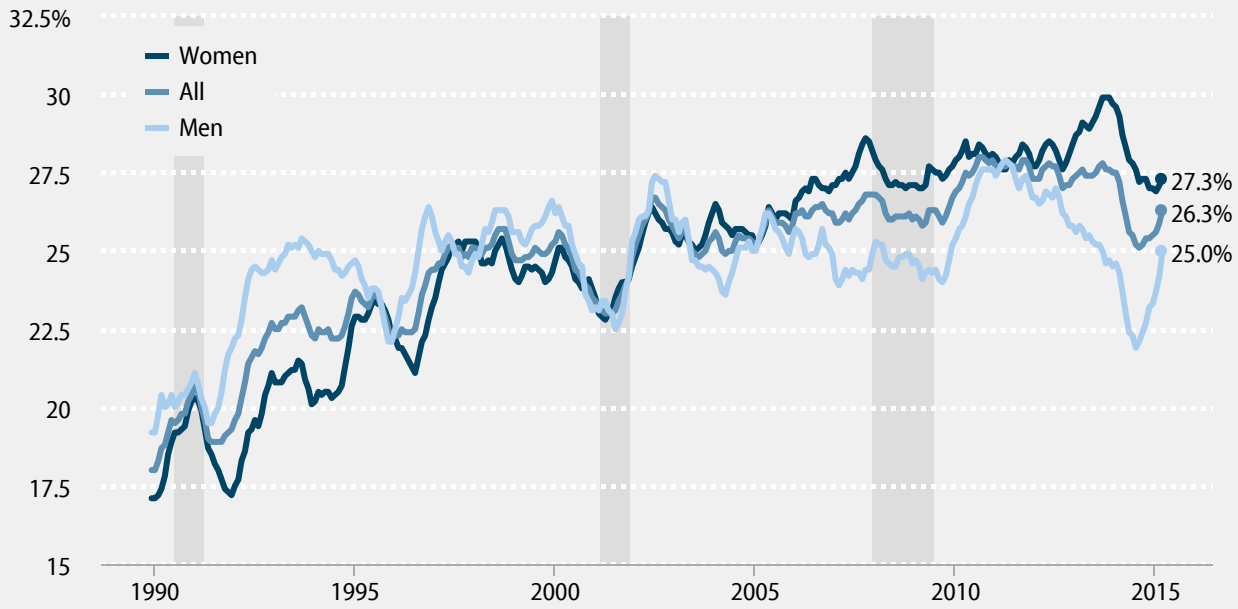
ECONOMIC POLICY INSTITUTE

age points per year and 0.5 percentage points per year, respectively). In other words, there is little evidence of a Great Recession–induced increase in enrollment. And in 2012 and 2013, enrollment rates for both men and women dropped substantially. Enrollment rates have recently been on a slight upswing, in line with the historical trend, but have not fully recovered to the peak levels reached at the beginning of 2012. The share of young high school graduates enrolling in college is now 57.3 percent, in line with the 2009 share. Taken together, all of this suggests that young high school graduates have not been "riding out" the recession-induced lack of job opportunities by "sheltering in school."

The same holds true for young college graduates. **Figure I** shows the share of young college graduates (age 21–24) enrolled in additional schooling (for example, to get a master's degree). This share has also greatly increased over time (from 18.0 percent in 1989 to 26.3 percent in 2015), also with particularly steep increases for women (17.1 percent to 27.3 percent) compared with men (19.2 percent to 25.0 percent). The data in Figure I are quite volatile due to small sample sizes, but they show that college graduates' increases in enrollment since 2007 have been no greater than what had been happening before the Great Recession. The overall enrollment rate increased 0.5 percentage points per year on average between 2000 and 2007, while it did not increase at all on average since 2007. Similar to high school graduates' post-recession dip in college enrollment, college graduates saw a large decrease in their graduate school enrollment rates,

FIGURE I

Share of young college graduates enrolled in further education, by gender, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Data are for college graduates (bachelor's degree only) age 21–24. Shaded areas denote recessions.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

occurring over 2013–2014. Men in particular saw large decreases, with their graduate school enrollment rates declining 6.0 percentage points over 2011–2014. Women's enrollment rates experienced a decrease of 2.9 percentage points over 2013–2014. Since 2014, enrollment rates have been on a slight uptick and are in line with levels seen in 2009. In short, there is little evidence of a Great Recession–induced increase in enrollment. While state breakdowns of enrollment by educational attainment are not available, **Appendix Table A3** shows enrollment rates by state of all high school graduates (including those with college degrees) under age 25.

That enrollment has not meaningfully increased above its long-run trend despite the lack of job opportunities in the Great Recession and its aftermath is likely due largely to an often-overlooked fact: Students and workers are not distinct groups. Many students must work to pay for school or cover living expenses. In 2007, before the recession began, half (50.4 percent) of college students under age 25 were employed. By 2015, the share had dropped to 44.3 percent. For students who must work to afford school, but cannot find work due to the poor labor market, "sheltering in school" is not an option. Furthermore, many students depend on the support of their parents to get through college, and if their parents saw the value of their home drop when the housing bubble burst, or have had bad labor market outcomes in the aftermath of the Great Recession, that avenue to college may also be unavailable (see, for example, Lovenheim and Reynolds 2013). In this downturn, certainly some students have had the financial resources to take shelter in school.

However, the lack of a Great Recession–induced increase in enrollment suggests this group has been more than offset by students who have been forced to drop out of school, or never enter, because the effects of the bursting of the housing bubble and the ensuing Great Recession meant they could not afford to attend. These trends may have exacerbated the already disparate access to college by socio-economic status (Mishel et al. 2012, Figure 3N).

Many young graduates are still left idled after Great Recession

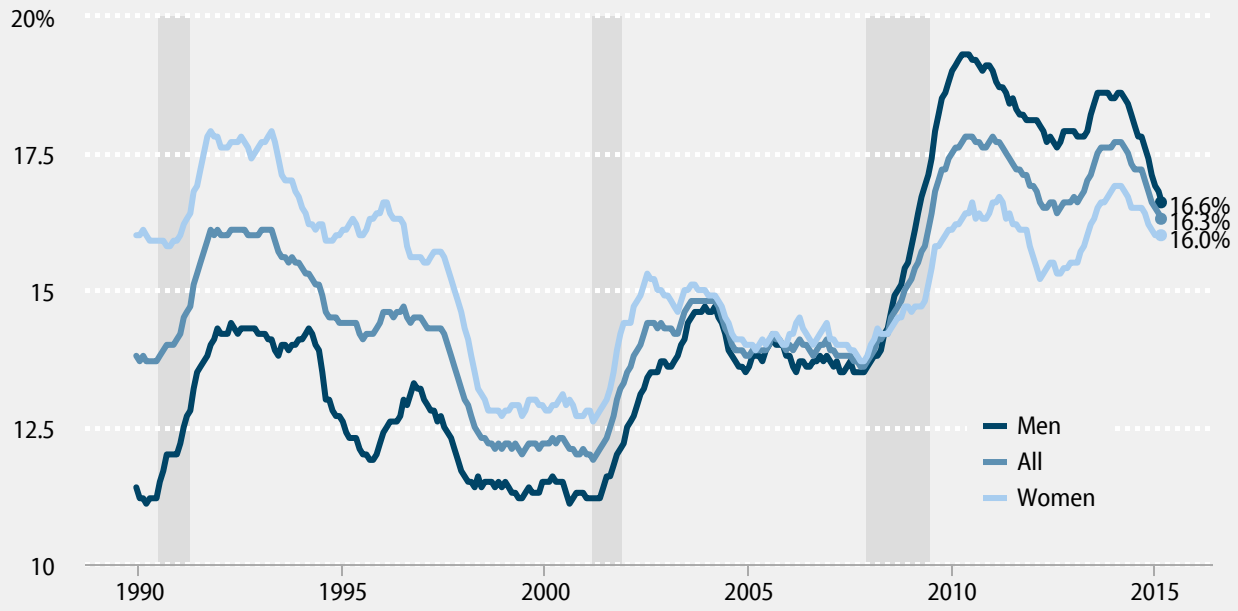
The lack of a Great Recession–fueled increase in college or university enrollment, combined with a lack of job prospects, means a significant share of young graduates are now idled, or "disconnected"—that is, neither enrolled in school nor employed. These young graduates are deviating from the two main paths—getting work experience or receiving further education—that they could follow to begin setting themselves up for their future. **Figure J** shows the share of young high school graduates age 17–20 who are idled, neither enrolled nor employed. In 2007, 13.7 percent of young high school graduates fell into this category, and that share spiked to 17.8 percent in 2010. It declined between 2010 and 2012, but because of the drop in enrollment discussed above, shot back up to 17.7 percent in 2014. Since then, it has declined again to 16.3 percent. Initially, idling rates rose more sharply for men than women (from 13.6 percent to 19.3 percent for men, and from 13.7 percent to 16.7 percent for women). By 2015, their idling rates had somewhat converged again, at 16.6 percent and 16.0 percent, respectively, for men and women.

The problem of young people being left idled disproportionately affects young black and Hispanic high school graduates. As shown in **Figure K**, 23.2 percent of young black high school graduates and 18.1 percent of young Hispanic high school graduates are currently not employed nor enrolled in further schooling, compared with 14.2 percent of whites. That means that nearly a quarter of young black high school graduates and nearly a fifth of young Hispanic high school graduates are not on the two major paths to future career success. All three racial and ethnic categories saw an increase in their idling rates after the Great Recession: Black graduates' share increased from 22.2 percent in 2007 to 24.7 percent in 2010, Hispanic graduates' share increased from 16.5 percent to 22.4 percent, and white graduates' share increased from 11.5 percent to 15.4 percent. (It is worth noting that this share measures only the young high school graduates within the civilian noninstitutionalized population, and does not take into account members of the population who are incarcerated.) All of these rates were much lower in the tight labor market of the late 1990s.

College graduates face a similar predicament, as many of them have been left idled in the wake of the Great Recession. **Figure L** shows the share of young college graduates age 21–24 who are neither enrolled nor employed. In 2007, 8.4 percent of young college graduates fell into this category, and that share spiked to 11.9 percent in 2011. It has since declined to 10.5 percent. The pattern was quite similar for men and women, though the male share peaked in 2010 while the female share peaked in 2011. The "disconnection rates" for both young high school graduates and young college graduates remain 1.2 times as high as they were before the recession began, and 1.4 times as high as they were in the trough prior to the 2001 recession. The increase in the share of disconnected young people represents an enormous loss of opportunities for this cohort, as the loss of work experience or further education will have a lasting negative impact on their lifetime earnings. The long-term scarring effects of the Great Recession and its aftermath on young graduates are discussed in depth later in this paper.

FIGURE J

Share of young high school graduates not enrolled in college or a university and not employed, by gender, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for high school graduates age 17–20 who may have previous college experience. "Not employed" includes those who are unemployed and those who are not in the labor force.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

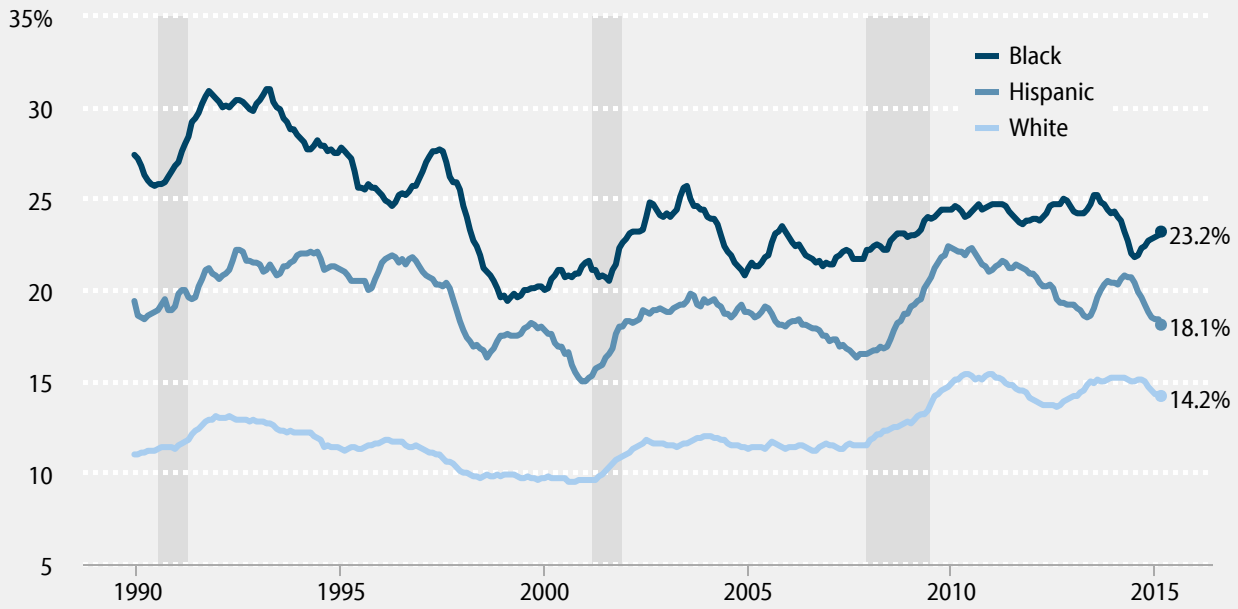
Wages of high school and college graduates performing poorly

The sustained economic weakness in the wake of the Great Recession led to a decline in young high school and college graduates' hourly wages, although these groups have seen stagnant or declining wages since 2000. **Figure M** presents average hourly wages of young high school graduates (age 17–20) and young college graduates (age 21–24); the underlying data for key years are provided in **Table 2**.[3] On average, young high school graduates had an hourly wage of $10.40 in the latest data. This wage rate would yield an annual income of roughly $21,600 for a full-time, full-year worker. Young college graduates had an average hourly wage of $17.94, which would translate into an annual income of roughly $37,300 for a full-time, full-year worker. On average, wages of young female graduates remain far less than those of young male graduates, regardless of educational attainment. Among young high school graduates, women earn 14.9 percent less than men, while among young college graduates, women earn 15.7 percent less than men.

The wages of all groups of young graduates have fared poorly during the Great Recession and its aftermath, as shown in Table 2. Wages of young college and high school graduates fell, on average, from 2010 to 2012, and have made very modest improvements since then. The real (inflation-adjusted) wages of young high school graduates are 4.8 percent

FIGURE K

Share of young high school graduates not enrolled in college or a university and not employed, by race/ethnicity, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for high school graduates age 17–20 who may have previous college experience. "Not employed" includes those who are unemployed and those who are not in the labor force.

Source: EPI analysis of basic monthly Current Population Survey microdata

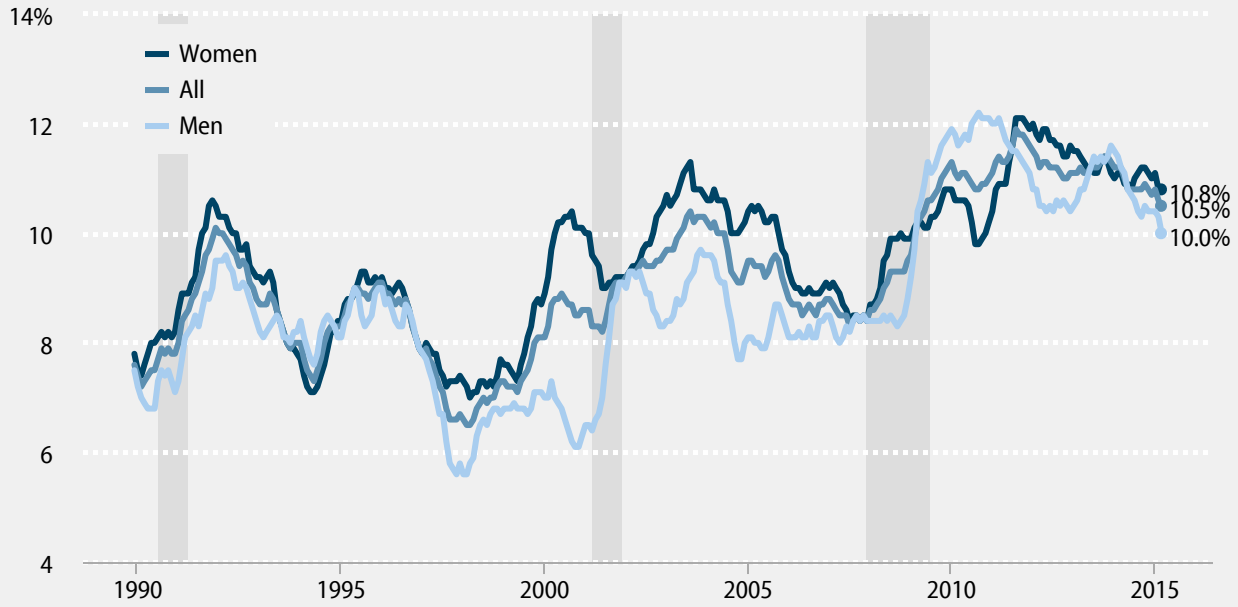
ECONOMIC POLICY INSTITUTE

lower today than they were in 2007 (the declines were the same for men and women, at 5.4 percent each).[4] The wages of young college graduates have also dropped since 2007, by 2.0 percent (for young college graduates, women experienced a decline of 4.4 percent, whereas men remained essentially the same with an increase of 0.2 percent). Over the last year, wages have seen a healthy pickup for both high school and college graduates, but this growth is sorely needed after 15 years of either stagnant or declining wages.

Indeed, as Figure M shows, the wages of young graduates fared poorly even before the Great Recession; they saw virtually no growth over the entire period of broad wage stagnation that began during the business cycle of 2000–2007. Since 2000, the wages of young high school graduates have declined 5.5 percent (6.1 percent for men and 6.3 percent for women),[5] and the wages of young college graduates have decreased 2.5 percent (with all of the loss coming from women's wages, with a drop of 6.7 percent; male college grads have seen a 1.0 percent gain overall since 2000). These drops translate into substantial amounts of money. For full-time, full-year workers, the hourly wage declines since 2000 represent a roughly $1,300 decline in annual earnings for young high school graduates, and a roughly $1,000 decline for young college graduates.

FIGURE L

Share of young college graduates not enrolled in college or a university and not employed, by gender, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Shaded areas denote recessions. Data are for college graduates (bachelor's degree only) age 21–24. "Not employed" includes those who are unemployed and those who are not in the labor force.

Source: EPI analysis of basic monthly Current Population Survey microdata

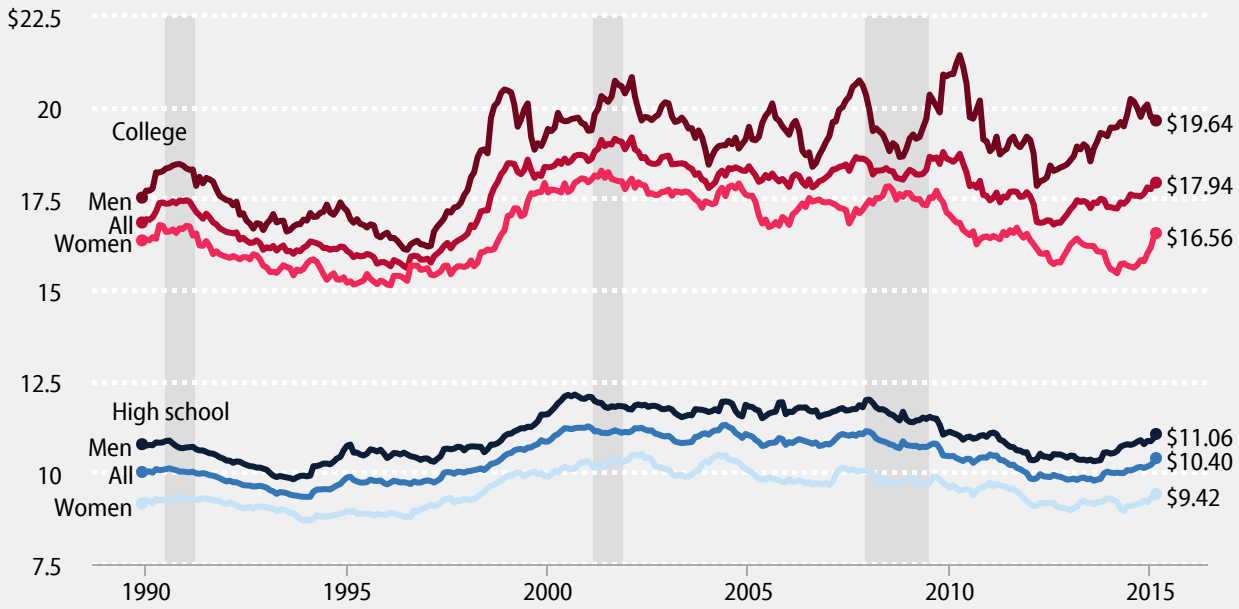
ECONOMIC POLICY INSTITUTE

The wage declines since 2000 stand in sharp contrast to the strong wage growth for these groups from 1995 to 2000. During that period of low unemployment and strong overall wage growth, wages rose 12.3 percent for young high school graduates and 15.8 percent for young college graduates. The stark difference between these two economic periods illustrates how the wages of young graduates vary considerably depending on whether the overall economy is experiencing low unemployment and strong wage growth, or high unemployment and wage stagnation. Young graduates who enter the labor market during periods of strength (e.g., 1995–2000) face much stronger wage prospects than young graduates who enter the labor market during periods of weakness (e.g., 2001 to the present).

Although it may be tempting to point to young graduates' age or lack of previous work experience as the reason their wages have failed to grow since 2000, when we look at the population as a whole, similar wage trends emerge. **Figures N and O** show wages of young high school graduates (age 17–20) and young college graduates (age 21–24) compared with high school and college graduates' wages in the age 16–64 population. While young graduates have lower wages than the wider populations of high school and college graduates (which is expected due to their relative dearth of work experience), their wages display the same trends. Similar to young graduates, high school and college graduates age 16–64 saw a brief period of wage growth in the 1990s, but have had stagnant or declining wages since 2000. This is

FIGURE M

Real average hourly wages of young workers, by education, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling, and high school graduates age 17–20 who are not enrolled in further schooling. Shaded areas denote recessions.

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

ECONOMIC POLICY INSTITUTE

indicative of an economy-wide slowdown in wage growth driven both by a lack of demand for workers and by the erosion of workers' power to bargain with their employer for higher wages (Bivens et al. 2014).

Erosion of job quality for young college graduates

Figure P shows the share of employed young graduates who receive pension coverage from their own employer (either defined-benefit or defined-contribution). In 1989, just 12.3 percent of new high school graduates (age 17–20) with jobs had a pension through their workplace, and that share fell even further to 6.7 percent by 2013. Pension coverage among new college graduates (age 21–24) increased from 30.9 percent to 41.5 percent between 1989 and 2000, presumably because of increased participation in defined-contribution plans. However, this group's pension coverage fell from 41.5 percent in 2000 to 27.0 percent in 2012. This sharp reduction in pension benefits for young college graduates since 2000 is yet another indicator of a substantial job quality problem even for those with high educational attainment. In 2013, however, recent college graduates saw their pension coverage rebound to 35.2 percent (an increase of 8.2 percentage points, or 30.5 percent). This increase could be a sign of improving conditions in at least one form of compensation, or simply a temporary blip in the series.

TABLE 2

Real average hourly wages of young workers, 1989–2015*

	High school graduates			College graduates		
Year*	All	Men	Women	All	Men	Women
1990	$10.00	$10.75	$9.15	$16.99	$17.78	$16.45
1995	9.80	10.55	8.96	15.90	16.84	15.15
2000	11.01	11.78	10.05	18.41	19.44	17.74
2007	10.93	11.69	9.95	18.31	19.61	17.33
2015	10.40	11.06	9.42	17.94	19.64	16.56
Percent change						
1990–2000	10.1%	9.7%	9.8%	8.4%	9.3%	7.9%
1990–1995	-2.0	-1.8	-2.1	-6.4	-5.3	-7.9
1995–2000	12.3	11.7	12.1	15.8	15.4	17.1
2000–2015	-5.5	-6.1	-6.3	-2.5	1.0	-6.7
2000–2007	-0.7	-0.8	-1.0	-0.5	0.9	-2.4
2007–2015	-4.8	-5.4	-5.4	-2.0	0.2	-4.4

* Data represent 12-month averages as of March of the indicated year.

Note: Data are for college graduates age 21–24 and high school graduates age 17–20 who are not enrolled in further schooling. Wages are in 2014 dollars.

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

ECONOMIC POLICY INSTITUTE

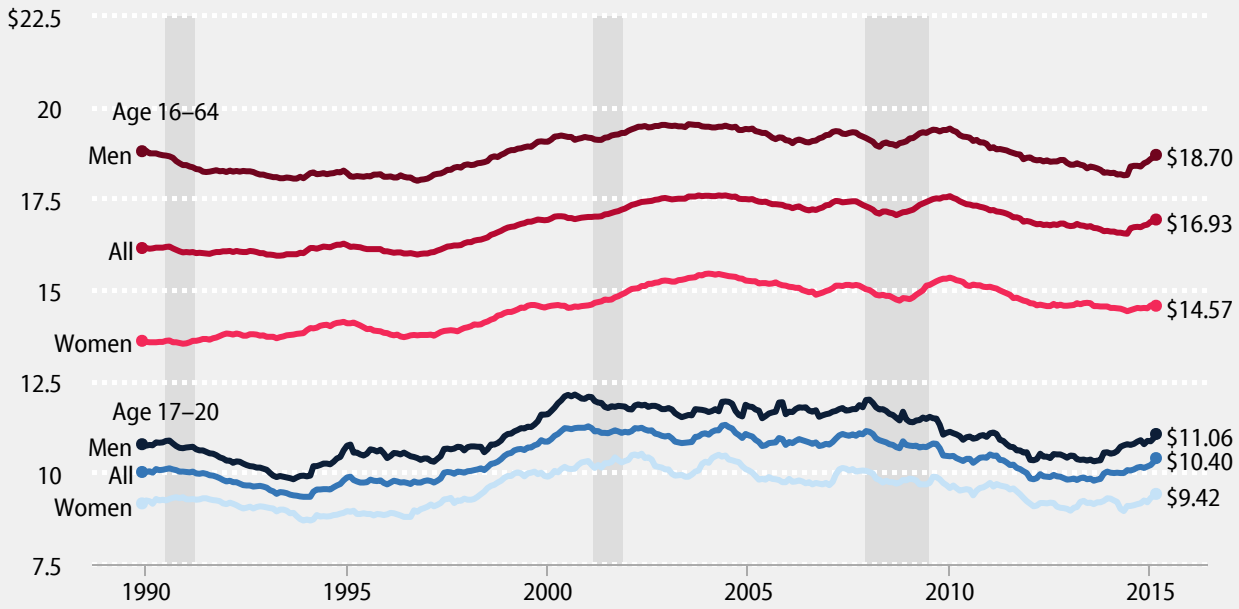
Another measure of job quality, employer-provided health insurance, has displayed long-term losses for both young high school and college graduates (Shierholz, Davis, and Kimball 2014). However, because of the non-group health insurance expansions of the Affordable Care Act, and recent changes to health insurance coverage definitions in the CPS Annual Social and Economic Supplement, which make trend comparisons unreliable, we do not specifically look at those trends through 2013. If wages are any indication, it is likely that health insurance provision through young people's own employers has not grown by a measurable extent. The Affordable Care Act, however, did substantially expand coverage of young people as dependents on their parents' policies (Gould 2013).

The high cost of higher education and the value of college

The high cost of college is one likely reason that college enrollment rates did not increase above their long-run trend in the last several years despite the lack of job opportunities during the Great Recession and its aftermath. In the 2014–2015 school year, the total cost of attendance for an on-campus student—including in-state tuition, books, room and board, and transportation expenses—at a four-year in-state public school averaged $23,410. For a four-year private school, it was $46,272. The cost of higher education has risen faster than typical family incomes, making it harder for families to pay for college. From the 1983–1984 enrollment year to the 2013–2014 enrollment year, the inflation-adjusted cost of a four-year education, including tuition, fees, and room and board, increased 125.7 percent for private school and 129.0 percent for public school. Median family income increased only 16.8 percent over this period, leaving families and students increasingly unable to pay for most colleges and universities in full (College Board 2014; CPS ASEC).

FIGURE N

Real average hourly wages of workers with a high school degree, by age, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: The age 17–20 cohort includes only those workers who are not enrolled in further schooling. Shaded areas denote recessions.

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

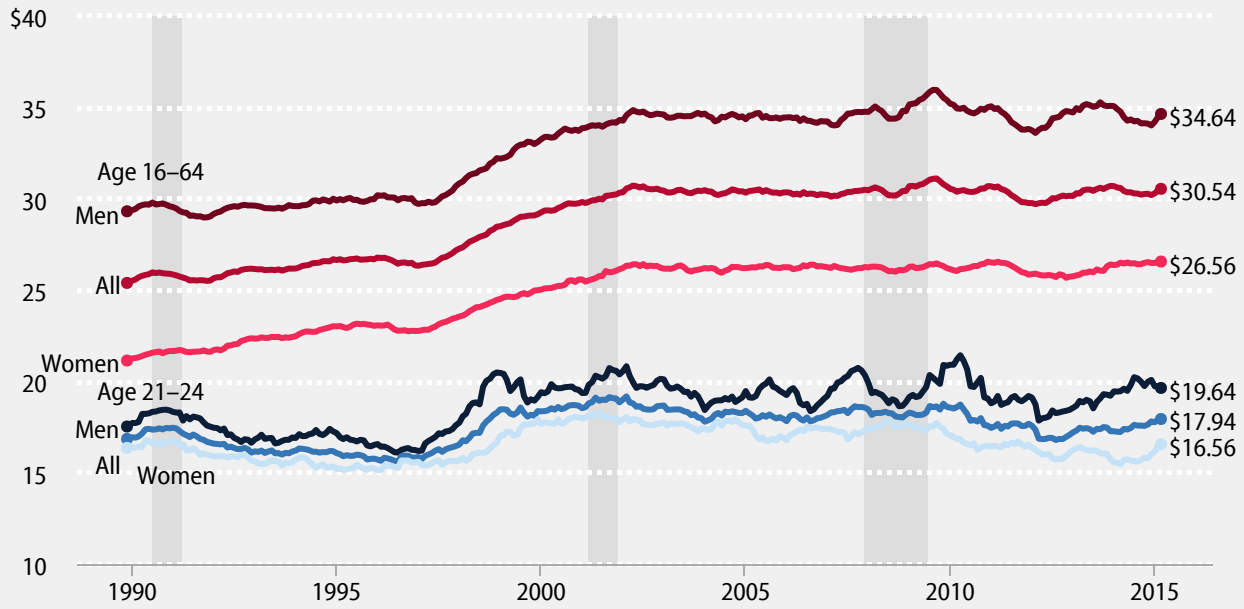
ECONOMIC POLICY INSTITUTE

As tuition costs have risen at rates vastly exceeding income growth, it is not surprising that many students have to take on debt to pay for college. Using the Survey of Consumer Finances, Fry (2014) shows that in 2010, 37 percent of the nation's households headed by an adult younger than age 40 owed money on student debt, a proportion that has more than doubled since 1989. For households with student loan debt, the average amount was $26,682 in 2010, and the median was $13,410. The average amount is higher than the median because of very high amounts of debt owed by some: 10 percent of households owe $61,895 or more (Fry 2012). Furthermore, the average student debt amount has nearly tripled since 1989. Using the Federal Reserve Board of New York's Consumer Credit Panel, Brown et al. (2015a) find that between 2004 and 2014, the number of student loan borrowers increased by 92 percent, and average debt per borrower increased by 74 percent.

Most Class of 2015 college graduates enrolled in college four years ago, in fall 2011. Though the recession officially ended in June 2009, the recovery has been slow, and family incomes continued to deteriorate in the aftermath of the recession. Between 2007—the start of the Great Recession—and 2010, median family income dropped by 6.6 percent, and between 2010 and 2012, it dropped by an additional 1.9 percent (CPS ASEC Table F-5). In other words, during the lead-up to the time they were in college, it is likely that many of the families of the students in the Class of 2015 faced real income declines due to job loss or lack of wage growth.

FIGURE O

Real average hourly wages of workers with a bachelor's degree, by age, 1989–2015*



* Data reflect 12-month moving averages; data for 2015 represent 12-month average from April 2014 to March 2015.

Note: The age 21–24 cohort includes only those who do not have an advanced degree and are not enrolled in further schooling. Shaded areas denote recessions.

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

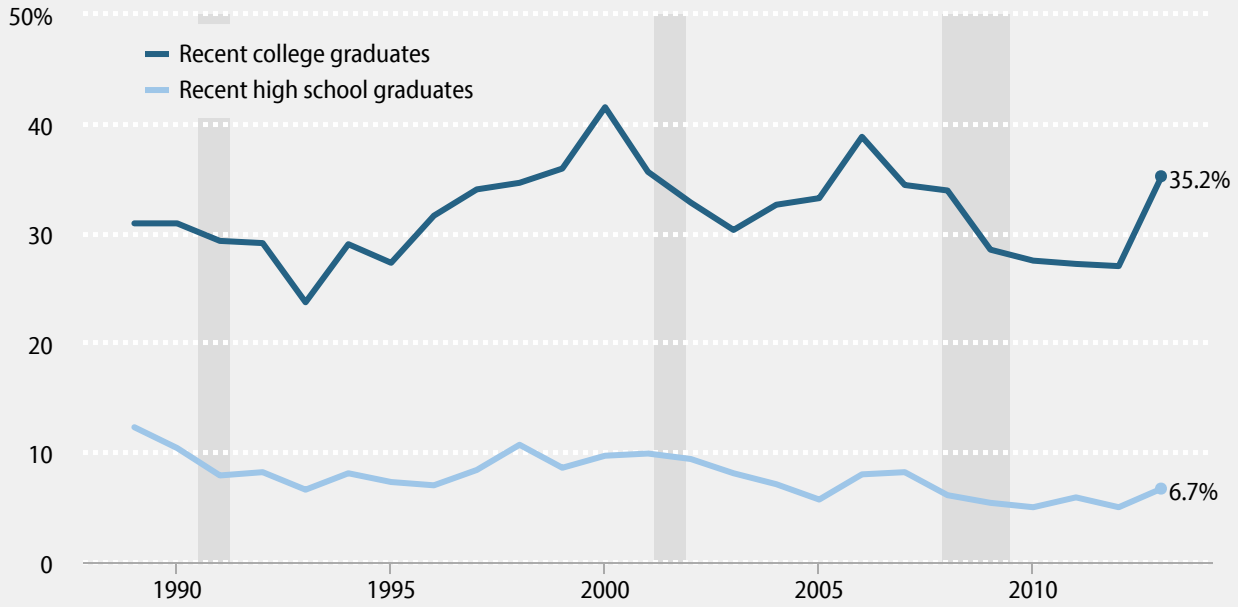
ECONOMIC POLICY INSTITUTE

At the same time, higher education costs increased to make up for asset losses (at private universities) and funding cuts (at public universities) during the downturn. For example, between the 2007–2008 school year and the 2014–2015 school year, state appropriations for higher education per full-time enrolled student fell by 20.3 percent, and in response, public colleges and universities have had to steeply increase tuition (Mitchell and Leachman 2015). The share of Class of 2015 graduates with large student loan amounts has likely risen accordingly.

Students in the Class of 2015, most of whom started college after the Great Recession was officially over, were unlikely, when taking on student loans, to have foreseen how slow the recovery would be. They likely also did not foresee that upon graduation they would enter a still-weak labor market and face the very real possibility of not being able to find a job that would provide the income needed to repay their loans. Although most student loans have a grace period of six months before payments are expected, recent graduates who do not find a stable income source may be forced to miss a payment or default altogether on their loans. Default can ruin young workers' credit scores and set them back years when it comes to saving for a house or a car. Researchers at the Federal Reserve Bank of New York find that while 17 percent of borrowers are delinquent, only 37 percent of all student debt holders are making regular payments on schedule. They also find that the recent growth in student loan balances and delinquencies was accompanied by a

FIGURE P

Share of recent high school graduates and college graduates with employer-provided pension coverage, 1989–2013



Note: Coverage is defined as being included in an employer-provided plan where the employer paid for at least some of the coverage. Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling, and high school graduates age 17–20 who are not enrolled in further schooling. Shaded areas denote recessions.

Source: EPI analysis of Current Population Survey Annual Social and Economic Supplement microdata

ECONOMIC POLICY INSTITUTE

decrease in other types of borrowing for younger age groups, suggesting that student loan debt is indeed crowding out other investments (Brown et al. 2015b). Fry finds that young college-educated adults without student debt obligations have about seven times the typical net worth of households headed by a young, college-educated adult with student debt (Fry et al. 2014).

The rising cost of college combined with the failure of wages to grow for young college graduates signals that a college education is becoming a more uncertain investment. The college premium, or the relative edge young workers receive in earnings from obtaining a college degree, experienced rapid growth in the 1980s and 1990s, but the growth has been relatively slow since 2000 (Mishel et al. 2012, Figure 4N). Any rise in the premium that has occurred in the last 15 years is due to larger wage losses for high school graduates, rather than strong wage growth for college graduates. Recall from Table 2 that on average, young college graduates have an hourly wage of $17.94, which translates to an annual salary of roughly $37,300 for a full-time, full-year worker. This is a decline of 2.5 percent from what a typical college graduate would have made in 2000 ($38,300). In comparison, over 2000–2014 the average cost of college rose between 32.8 percent for a public university and 38.3 percent for private schools, and the average debt burden of student borrowers has risen 92 percent since 2004 (College Board 2014; Brown et al. 2015a). Although wages of new college graduates

are much higher than those of their high school counterparts, their wages are failing to keep up with the rising cost of college and therefore the rising levels of student loans needed to pay for college, signaling that college is becoming an increasingly difficult investment. On top of this, the only way to access this college premium is by completing a college degree. Of the 66 percent of young adults who began college, 37.5 haven't completed their degree by age 27 (BLS 2014), often graduating with debt but without the relative benefits in employment and wages that the college premium offers.

Weak safety net for young workers

As previously demonstrated, the unemployment rates of young workers are significantly higher than before the recession began. Without jobs or the benefits that often accompany employment, what safety net exists for new entrants to the labor market who are unemployed?

Many federal and state assistance programs that comprise the safety net for unemployed and underemployed workers are not available to young people who have little or no work experience. Unemployment insurance (UI), the primary safety net for workers who are laid off through no fault of their own, helps the unemployed make ends meet until they can find another job. Young workers are often ineligible for this program, however, because they must first meet state wage and work minimums during an established reference period. Young workers often fail to meet these eligibility requirements due to their more intermittent attachment to the labor market and the fact that many are entering the labor market for the first time. Our unemployment system is simply not designed to help workers who are looking for their first job at a time when the labor market is weak.

Temporary Assistance for Needy Families (TANF) program benefits have work requirements and are only available to individuals with children, which excludes most young graduates. The Supplemental Nutrition Assistance Program (SNAP), formerly known as the food stamp program, is offered to young adults without work experience or dependents. However, if they are not currently working or participating in a work-training program, benefits are generally only available for three months in a 36-month period. The earned income tax credit (EITC), a refundable federal income tax credit for low- to moderate-income individuals, is only available to those with earned income and is very modest for workers without children.

The Affordable Care Act, enacted in 2010, expanded health insurance options by allowing adults under age 26 to remain on their parents' employer-sponsored health insurance policy. Gould (2013) showed that this provision has improved rates of health insurance coverage for adults age 19–25. However, it should be noted that young adults whose parents do not have employer-sponsored health insurance (disproportionately non-whites and/or those with less education and/or lower incomes and/or who are unemployed) are unable to take advantage of this provision. That said, other Affordable Care Act provisions—namely, Medicaid expansions and the institution of health insurance exchanges with their accompanying subsidies—should accelerate the increase in health insurance coverage of young adults (particularly for those living in states that chose to expand Medicaid).

Though the Affordable Care Act has made positive strides in providing some protections for some young graduates facing an especially harsh labor market, young workers do not have a strong public safety net to fall back on, even in times of persistent high unemployment. Therefore, many new graduates turn to their families for assistance. In 2013, for example, 55.3 percent of 18- to 24-year-olds were living with their parents, an increase of 4.1 percentage points

since 2007 (CPS ASEC, Table AD-1). This trend may be burdensome to parents, many of whom may have also been hit hard by the recession, facing job loss; hour reductions; and/or the loss of their home, home equity, or retirement savings. Unfortunately for many young workers, family and friends are the only safety net available in a labor market with severely limited opportunities.

Conclusion: We can help the Class of 2015 by implementing policies that boost employment and wages

Although the economy is slowly improving, the Class of 2015 still faces a difficult job market. Young workers who have the bad luck to enter the labor market during a downturn not only have worse outcomes in the short run than if they had entered in a healthy labor market; these negative effects can last a very long time. Research shows that entering the labor market in a severe downturn can lead to reduced earnings, greater earnings instability, and more spells of unemployment over the ensuing 10 to 15 years. Unsurprisingly, given the data presented earlier on underemployment, the evidence suggests that part of the decline in earnings is due to the fact that young workers entering the labor market in a downturn often have to settle for jobs at less-attractive employers or in lower-level occupations than they otherwise would have (this is often referred to as "cyclical downgrading"). This initial effect does tend to fade over time as workers find better jobs or move up within their companies, but that process can take well over a decade. In short, the labor market consequences of graduating in a bad economy are not just large and negative, but also long-lasting (Oreopolous, von Wachter, and Heisz 2013; Kahn 2010; Hershbein 2012; Altonji, Kahn, and Speer 2013).

Though there has been improvement since the unemployment rate for young workers peaked in 2010, the labor market has still not completely recovered. Thus, the Class of 2015 will be the seventh consecutive graduating class to enter the labor market during a period of profound weakness. The evidence suggests that because of their unlucky timing—in other words, through absolutely no fault of their own—this cohort is very likely to fare poorly for at least the next decade.

It doesn't have to be this way. Although young workers are a unique group, their current higher levels of unemployment and underemployment do not have a solution unique to them. The most direct way to quickly bring down the unemployment rate and spur wage growth of young workers is to institute measures that would boost aggregate demand and encourage full employment, and to bolster labor standards.

In order to create full employment, the Federal Reserve Board must prioritize low rates of unemployment when making monetary policy and not raise interest rates, which would prematurely slow the economy. Greater public investment would also help; Congress can enact targeted employment programs and direct funds to infrastructure improvements to create jobs. (Public-sector employment is still down half a million jobs since the Great Recession began, without even accounting for population growth.) In order to spur wage growth, we must pursue policies that strengthen workers' collective bargaining rights, as well as update and strongly enforce labor standards. In particular, we should raise the minimum wage, update the overtime threshold, provide earned sick leave and paid family leave, regularize undocumented workers, and end discriminatory practices that contribute to race and gender inequities.

The bottom line is that policies that will generate demand for U.S. goods and services and therefore demand for workers who provide them, policies that will bring down unemployment, policies that will give workers more power, and poli-

cies that will raise workers' wages are the keys to giving young people a fighting chance as they enter the labor market during the aftermath of the Great Recession.

*– The authors thank the **Ford Foundation** for their generous support of this research, and EPI programmer **Jin Dai** for his valuable contributions.*

About the authors

Alyssa Davis joined EPI in 2013 as the Bernard and Audre Rapoport Fellow. She assists EPI's researchers in their ongoing analysis of the labor force, labor standards, and other aspects of the economy. Alyssa aids in the design and execution of research projects in areas such as poverty, education, health care, and immigration. She also works with the Economic Analysis and Research Network (EARN) to provide research support to various state advocacy organizations. Alyssa has previously worked in the Texas House of Representatives and the U.S. Senate. She holds a B.A. from the University of Texas at Austin.

Will Kimball joined EPI in 2013. As a research assistant, he supports the research of EPI's economists on topics such as wages, labor markets, macroeconomics, international trade, and health insurance. Prior to joining EPI, Will worked at the Center on Budget and Policy Priorities and the Center for Economic and Policy Research. He holds a B.A. in economics and political science from the University of Connecticut.

Elise Gould, senior economist, joined EPI in 2003 and is the institute's director of health policy research. Her research areas include wages, poverty, economic mobility, and health care. She is a co-author 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;* co-authored 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.

APPENDIX TABLE A1

Unemployment rates of workers under age 25 and all workers*, by state, 2000–2014

	Workers under 25				All workers*			
State	2000	2007	2013	2014	2000	2007	2013	2014
Alabama	12.5%	11.0%	16.2%	15.9%	4.5%	4.0%	6.9%	7.1%
Alaska	14.0%	12.8%	12.3%	13.5%	6.7%	6.2%	6.6%	7.1%
Arizona	7.5%	8.9%	19.7%	16.8%	4.0%	3.9%	8.0%	7.0%
Arkansas	11.2%	10.3%	19.6%	11.5%	4.4%	5.6%	7.8%	6.0%
California	10.5%	11.6%	18.3%	14.6%	4.9%	5.3%	8.9%	7.5%
Colorado	7.2%	8.7%	14.7%	11.0%	2.8%	3.7%	6.6%	4.9%
Connecticut	5.6%	10.0%	13.8%	12.1%	2.2%	4.5%	7.7%	6.6%
Delaware	9.6%	7.3%	15.4%	13.2%	3.9%	3.5%	7.0%	5.8%
District of Columbia	14.3%	12.7%	14.8%	15.2%	5.7%	5.5%	8.6%	7.8%
Florida	9.2%	9.2%	12.0%	14.0%	3.6%	4.1%	7.1%	6.3%
Georgia	8.2%	10.6%	18.7%	16.7%	3.7%	4.3%	8.2%	7.2%
Hawaii	11.8%	8.2%	12.0%	11.2%	4.3%	2.9%	4.8%	4.4%
Idaho	9.3%	7.3%	13.9%	11.3%	4.9%	3.0%	6.5%	4.7%
Illinois	9.9%	10.4%	19.5%	15.0%	4.3%	5.1%	9.1%	7.0%
Indiana	8.3%	11.4%	15.3%	13.5%	3.2%	4.6%	7.7%	6.1%
Iowa	6.8%	8.0%	9.5%	7.6%	2.6%	3.7%	4.7%	4.6%
Kansas	8.6%	9.3%	12.1%	8.8%	3.7%	4.1%	5.6%	4.6%
Kentucky	9.8%	12.7%	16.1%	15.0%	4.1%	5.4%	8.1%	6.5%
Louisiana	13.3%	9.0%	14.3%	13.1%	5.4%	4.3%	7.0%	6.4%
Maine	8.7%	11.6%	13.4%	12.7%	3.5%	4.7%	6.8%	5.7%
Maryland	9.6%	11.4%	14.6%	14.1%	3.8%	3.6%	6.7%	5.8%
Massachusetts	6.7%	9.1%	16.0%	13.4%	2.6%	4.6%	7.0%	5.8%
Michigan	8.0%	13.9%	17.9%	15.5%	3.5%	7.1%	8.6%	7.2%
Minnesota	6.4%	9.2%	9.8%	8.3%	3.3%	4.6%	4.9%	4.0%
Mississippi	14.1%	14.7%	24.2%	18.7%	5.6%	6.1%	8.8%	7.7%
Missouri	8.1%	11.3%	13.7%	12.4%	3.4%	5.0%	6.6%	6.4%
Montana	10.0%	7.6%	10.1%	7.7%	5.0%	3.6%	5.5%	4.6%
Nebraska	6.7%	6.8%	8.3%	6.7%	3.0%	3.1%	4.1%	3.3%
Nevada	7.7%	8.4%	17.3%	14.5%	4.0%	4.6%	9.8%	7.7%
New Hampshire	6.9%	8.3%	12.2%	9.1%	2.8%	3.6%	5.2%	4.2%
New Jersey	9.6%	9.9%	16.7%	13.7%	3.7%	4.2%	8.2%	6.7%
New Mexico	12.0%	8.8%	11.7%	16.0%	5.0%	3.7%	7.2%	7.0%
New York	10.4%	11.9%	15.7%	13.3%	4.6%	4.6%	7.6%	6.4%
North Carolina	9.8%	10.3%	19.4%	15.8%	3.6%	4.5%	7.9%	6.2%
North Dakota	6.6%	5.5%	5.2%	6.2%	3.0%	3.2%	2.9%	2.8%
Ohio	8.7%	12.0%	15.0%	12.1%	4.0%	5.6%	7.6%	5.6%
Oklahoma	6.6%	8.7%	11.0%	10.3%	3.1%	4.4%	5.6%	4.5%
Oregon	9.6%	11.2%	17.1%	17.3%	4.9%	5.2%	7.9%	7.1%
Pennsylvania	9.9%	10.9%	15.1%	13.2%	4.1%	4.3%	7.5%	5.7%
Rhode Island	11.5%	9.5%	16.5%	14.9%	4.1%	4.9%	9.2%	7.7%

APPENDIX TABLE A1 (CONTINUED)

State	Workers under 25				All workers*			
	2000	2007	2013	2014	2000	2007	2013	2014
South Carolina	10.6%	14.0%	16.6%	15.4%	3.8%	5.6%	7.6%	6.4%
South Dakota	5.6%	6.5%	8.2%	7.7%	2.3%	2.9%	3.6%	3.5%
Tennessee	8.9%	11.6%	18.9%	14.5%	3.9%	4.6%	8.0%	6.6%
Texas	10.2%	9.8%	13.5%	11.1%	4.2%	4.3%	6.3%	5.0%
Utah	5.8%	6.1%	8.9%	7.8%	3.3%	2.6%	4.4%	3.9%
Vermont	6.3%	9.6%	10.9%	11.1%	2.9%	4.0%	4.3%	4.2%
Virginia	6.0%	7.5%	14.8%	12.6%	2.2%	3.1%	5.6%	5.2%
Washington	12.8%	11.8%	17.6%	16.5%	5.2%	4.6%	7.0%	6.3%
West Virginia	11.9%	12.8%	13.5%	13.9%	5.5%	4.6%	6.6%	6.6%
Wisconsin	7.2%	11.8%	12.9%	13.1%	3.6%	5.0%	6.7%	5.6%
Wyoming	9.8%	7.5%	10.4%	10.4%	3.9%	2.9%	4.6%	4.4%
United States	9.3%	10.5%	15.5%	13.4%	4.0%	4.6%	7.4%	6.2%

* Includes all workers age 16 and older.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

APPENDIX TABLE A2

Underemployment rates of workers under age 25 and all workers*, by state, 2000–2014

	Workers under age 25				All workers*			
State	2000	2007	2013	2014	2000	2007	2013	2014
Alabama	19.5%	17.2%	26.9%	25.4%	8.2%	7.1%	12.2%	12.6%
Alaska	23.6%	22.4%	21.5%	20.1%	12.1%	11.2%	12.1%	11.6%
Arizona	11.9%	15.1%	32.3%	27.6%	6.7%	7.4%	16.0%	14.7%
Arkansas	17.7%	16.7%	30.3%	18.7%	7.5%	9.5%	13.7%	10.2%
California	16.6%	19.1%	32.4%	28.4%	8.8%	9.9%	17.3%	15.2%
Colorado	12.0%	15.2%	25.3%	19.0%	5.2%	7.3%	12.5%	9.4%
Connecticut	10.3%	17.2%	24.8%	23.4%	4.2%	8.2%	13.9%	12.6%
Delaware	15.5%	12.7%	30.2%	23.9%	6.4%	6.4%	13.5%	11.2%
District of Columbia	22.0%	19.0%	26.2%	22.1%	9.8%	9.3%	14.1%	11.9%
Florida	14.4%	16.0%	23.8%	24.2%	6.5%	8.0%	14.2%	12.8%
Georgia	13.1%	17.7%	30.7%	28.7%	6.0%	8.1%	14.8%	13.3%
Hawaii	19.7%	15.5%	24.1%	23.1%	9.4%	6.4%	11.5%	10.2%
Idaho	14.6%	12.9%	24.9%	23.1%	8.5%	6.1%	12.7%	10.3%
Illinois	15.4%	16.6%	32.0%	23.7%	7.2%	8.6%	16.0%	12.7%
Indiana	12.6%	17.5%	25.4%	23.0%	5.6%	7.8%	13.2%	11.3%
Iowa	9.9%	12.5%	17.7%	14.8%	5.0%	7.0%	9.2%	8.8%
Kansas	13.3%	15.0%	22.1%	16.4%	6.1%	7.3%	11.0%	9.0%
Kentucky	15.0%	19.6%	30.5%	23.4%	6.9%	9.3%	15.0%	11.7%
Louisiana	20.4%	13.3%	24.2%	20.8%	9.2%	7.2%	12.7%	11.3%
Maine	13.1%	19.9%	26.4%	25.4%	6.9%	8.9%	13.7%	11.9%
Maryland	13.7%	16.7%	26.7%	25.4%	5.7%	6.3%	12.5%	10.7%
Massachusetts	10.6%	13.5%	28.6%	22.0%	4.8%	7.3%	13.2%	11.5%
Michigan	13.0%	23.8%	30.6%	28.2%	6.3%	12.8%	15.3%	13.9%
Minnesota	11.3%	15.5%	19.5%	16.0%	5.7%	8.2%	10.6%	8.7%
Mississippi	22.7%	22.9%	33.0%	31.0%	9.5%	10.8%	14.6%	13.6%
Missouri	12.5%	18.5%	23.1%	21.1%	5.7%	8.3%	11.6%	11.8%
Montana	16.9%	12.7%	20.9%	18.3%	9.8%	7.1%	11.6%	10.3%
Nebraska	10.5%	12.1%	15.7%	12.7%	5.3%	5.7%	8.0%	7.0%
Nevada	12.8%	12.5%	30.9%	28.0%	6.8%	7.6%	18.1%	15.3%
New Hampshire	11.5%	13.9%	25.1%	21.3%	4.8%	6.5%	10.9%	9.7%
New Jersey	14.7%	16.9%	29.4%	25.0%	6.3%	7.4%	14.7%	12.4%
New Mexico	18.7%	15.2%	22.3%	28.0%	8.6%	7.3%	13.8%	13.1%
New York	17.2%	18.5%	27.4%	26.9%	7.9%	8.1%	13.8%	12.4%
North Carolina	14.3%	18.1%	31.9%	26.3%	6.2%	8.5%	14.7%	12.1%
North Dakota	10.1%	9.2%	9.7%	11.0%	6.1%	5.8%	5.6%	5.4%
Ohio	13.4%	19.8%	25.4%	21.6%	6.8%	9.7%	13.6%	10.9%
Oklahoma	11.8%	15.1%	19.4%	17.1%	6.0%	7.5%	10.2%	8.6%
Oregon	17.8%	19.7%	31.7%	29.8%	8.5%	10.0%	16.5%	14.2%
Pennsylvania	15.6%	16.2%	26.9%	24.7%	7.3%	7.7%	13.4%	11.6%
Rhode Island	17.3%	15.3%	28.4%	23.7%	6.9%	8.3%	15.5%	13.5%

APPENDIX TABLE A2 (CONTINUED)

State	Workers under age 25				All workers*			
	2000	2007	2013	2014	2000	2007	2013	2014
South Carolina	16.3%	21.3%	27.6%	27.7%	6.7%	9.5%	14.0%	12.5%
South Dakota	9.8%	11.6%	14.7%	13.1%	4.9%	5.7%	7.1%	6.4%
Tennessee	14.9%	19.8%	31.1%	27.5%	7.5%	8.0%	14.7%	13.1%
Texas	16.3%	15.9%	22.6%	19.6%	7.4%	7.7%	11.3%	9.9%
Utah	10.7%	10.5%	16.9%	16.1%	5.9%	5.0%	9.7%	8.2%
Vermont	12.3%	15.0%	19.2%	21.0%	5.8%	7.0%	9.3%	8.8%
Virginia	11.1%	13.6%	25.9%	24.4%	4.2%	6.1%	11.5%	10.4%
Washington	20.7%	20.5%	30.3%	29.3%	9.6%	8.8%	14.0%	12.5%
West Virginia	20.6%	22.6%	26.2%	26.4%	10.2%	9.2%	12.0%	12.4%
Wisconsin	12.8%	17.8%	21.8%	21.8%	6.4%	8.4%	12.1%	10.3%
Wyoming	15.9%	12.0%	17.2%	17.2%	7.1%	5.6%	8.4%	7.5%
United States	14.9%	17.3%	27.0%	24.0%	7.0%	8.3%	13.8%	12.0%

* Includes all workers age 16 and older.

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

APPENDIX TABLE A3

College enrollment rates of those under age 25 with at least a high school degree, by state, 2000–2014

State	2000	2007	2013	2014
Alabama	39.5%	34.7%	34.4%	37.8%
Alaska	27.0%	33.9%	31.1%	29.1%
Arizona	34.4%	36.3%	45.6%	40.9%
Arkansas	27.0%	31.7%	31.7%	38.3%
California	44.0%	48.3%	49.1%	49.6%
Colorado	28.5%	34.7%	42.6%	40.2%
Connecticut	45.8%	46.7%	51.2%	47.6%
Delaware	35.3%	41.1%	40.4%	36.9%
District of Columbia	36.1%	39.6%	35.2%	31.4%
Florida	37.5%	38.1%	44.3%	44.6%
Georgia	29.6%	43.7%	40.2%	42.5%
Hawaii	42.5%	39.8%	40.7%	36.6%
Idaho	31.1%	27.5%	36.8%	35.8%
Illinois	37.6%	45.3%	45.8%	44.5%
Indiana	36.6%	37.8%	45.5%	40.0%
Iowa	37.6%	41.2%	39.1%	34.4%
Kansas	45.0%	41.6%	40.3%	42.4%
Kentucky	39.9%	36.7%	34.8%	34.8%
Louisiana	38.2%	39.9%	36.0%	33.1%
Maine	34.2%	41.0%	38.7%	37.9%
Maryland	38.4%	47.3%	43.5%	44.4%
Massachusetts	39.6%	46.4%	47.4%	47.0%
Michigan	37.5%	45.0%	48.2%	41.3%
Minnesota	35.0%	43.6%	42.9%	46.6%
Mississippi	38.1%	40.0%	42.6%	42.6%
Missouri	37.1%	38.2%	38.3%	39.1%
Montana	34.3%	34.4%	28.6%	32.2%
Nebraska	37.6%	41.8%	40.4%	41.7%
Nevada	31.7%	29.5%	31.1%	35.3%
New Hampshire	35.9%	41.8%	40.6%	37.0%
New Jersey	43.5%	49.4%	48.7%	48.7%
New Mexico	38.8%	45.3%	40.6%	43.4%
New York	42.4%	48.6%	48.5%	48.8%
North Carolina	32.1%	41.2%	41.8%	42.1%
North Dakota	37.2%	39.9%	33.5%	34.8%
Ohio	38.2%	38.6%	40.5%	35.5%
Oklahoma	35.0%	38.8%	30.9%	30.8%
Oregon	29.6%	34.3%	42.1%	38.9%
Pennsylvania	41.2%	40.3%	39.9%	38.7%
Rhode Island	37.6%	44.0%	45.1%	41.6%
South Carolina	37.0%	38.8%	39.1%	41.0%
South Dakota	32.9%	34.9%	38.6%	38.9%

APPENDIX TABLE A3 (CONTINUED)

State	2000	2007	2013	2014
Tennessee	36.1%	39.0%	33.0%	34.3%
Texas	34.2%	41.3%	36.9%	36.3%
Utah	33.7%	33.1%	32.6%	32.9%
Vermont	38.2%	40.7%	37.0%	37.3%
Virginia	38.3%	39.4%	38.8%	41.3%
Washington	36.4%	31.2%	35.3%	33.9%
West Virginia	34.9%	31.1%	31.2%	36.9%
Wisconsin	30.4%	37.7%	40.7%	39.0%
Wyoming	36.6%	35.0%	35.8%	32.2%
United States	37.9%	41.8%	42.4%	41.9%

Source: EPI analysis of basic monthly Current Population Survey microdata

ECONOMIC POLICY INSTITUTE

Endnotes

1. Racial and ethnic categories in this paper are mutually exclusive—i.e., white non-Hispanic, black non-Hispanic, and Hispanic of any race.

2. When referring to 2015, we are indicating a 12-month moving average over April 2014–March 2015.

3. These data include salaried workers (their earnings are converted to hourly rates based on the number of hours they work).

4. The decline in average wages from 2007 to 2015 is less than the decline for both men and women separately due to compositional effects. As men became a larger share of young high school graduate workers (who are not enrolled in further schooling), their relatively higher wages compared with women pushed overall wages up, leading to a smaller decline in average wages over this period.

5. Average college wages were affected by similar compositional effects as described in the previous endnote.

References

Abel, Jaison R., and Richard Deitz. 2014. "Are the Job Prospects of Recent College Graduates Improving?" *Liberty Street Economics* (blog of the Federal Reserve Bank of New York), September 4. http://libertystreeteconomics.newyorkfed.org/2014/09/are-the-job-prospects-of-recent-college-graduates-improving.html#.VUt7TvlVhBc

Altonji, Joseph, Lisa Kahn, and Jamin Speer. 2013. *Cashier or Consultant? Entry Labor Market Conditions, Field of Study, and Career Success.* National Bureau of Economic Research, Working Paper No. 20531. http://www.nber.org/papers/w20531

Beaudry, Paul, David A. Green, and Benjamin M. Sand. 2013. *The Great Reversal in the Demand for Skill and Cognitive Tasks.* National Bureau of Economic Research, Working Paper No. 18901. http://www.nber.org/papers/w18901

Bivens, Josh, Elise Gould, Lawrence Mishel, and Heidi Shierholz. 2014. *Raising America's Pay: Why It's Our Central Economic Policy Challenge*. Economic Policy Institute, Briefing Paper #378. http://www.epi.org/publication/raising-americas-pay/

Brown, Meta, Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw. 2015a. "The Student Loan Landscape." *Liberty Street Economics* (blog of the Federal Reserve Bank of New York), February 18. http://libertystreeteconomics.newyorkfed.org/2015/02/the_student_loan-landscape.html#.VVtLPZPrNtF

Brown, Meta, Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw. 2015b. "Looking at Student Loan Defaults through a Larger Window." *Liberty Street Economics* (blog of the Federal Reserve Bank of New York), February 19. http://libertystreeteconomics.newyorkfed.org/2015/02/looking_at_student_loan_defaults_through_a_larger_window.html#.VVtLRJPrNtE

Bureau of Labor Statistics (BLS). 2014. *Employment Experience of Youths: Results from a Longitudinal Survey.* "Table 1, Highest Grade Completed by Young Adults at Age 27 in 2007-2011 by Sex, Race, and Hispanic or Latino Ethnicity." http://www.bls.gov/news.release/nlsyth.toc.htm

College Board. 2014. *Trends in College Pricing*. College Board, Advocacy and Policy Center. Excel file accompanying report accessed May 2015 via http://trends.collegeboard.org/college-pricing.

Current Population Survey Annual Social and Economic Supplement (CPS ASEC). Historical Tables, "Table AD-1, Young Adults Living at Home." Various years. http://www.census.gov/hhes/families/data/adults.html

Current Population Survey Annual Social and Economic Supplement (CPS ASEC). Historical Tables, "Table F-5, Race and Hispanic Origin of Householder–Families by Median and Mean Income." Various years. http://www.census.gov/hhes/www/income/data/historical/families/

Current Population Survey Annual Social and Economic Supplement (CPS ASEC) microdata. Various years. Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics [machine-readable microdata file]. Washington, D.C.: U.S. Census Bureau. http://www.bls.census.gov/ftp/cps_ftp.html#cpsmarch

Current Population Survey basic monthly microdata. Various years. Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics [machine-readable microdata file]. Washington, D.C.: U.S. Census Bureau. http://www.bls.census.gov/cps_ftp.html#cpsbasic

Current Population Survey Outgoing Rotation Group microdata. Various years. Survey conducted by the Bureau of the Census for the Bureau of Labor Statistics [machine-readable microdata file]. Washington, D.C.: U.S. Census Bureau. http://www.bls.census.gov/cps_ftp.html#cpsbasic

Current Population Survey public data series. Various years. Aggregate data from basic monthly CPS microdata are available from the Bureau of Labor Statistics through three primary channels: as Historical 'A' Tables released with the BLS Employment Situation Summary (http://www.bls.gov/data/#historical-tables), through the Labor Force Statistics database (http://www.bls.gov/cps/#data), and through series reports (http://data.bls.gov/cgi-bin/srgate).

Fry, Richard. 2012. *A Record One-in-Five Households Now Owe Student Loan Debt: Burden Greatest on Young, Poor*. Pew Research Center on Social & Demographic Trends. http://www.pewsocialtrends.org/files/2012/09/09-26-12-Student_Debt.pdf

Fry, Richard. 2014. *Young Adults, Student Debt and Economic Well-Being*. Pew Research Center on Social & Demographic Trends. http://www.pewsocialtrends.org/files/2014/05/ST_2014.05.14_student-debt_complete-report.pdf

Gould, Elise. 2013. *Employer-Sponsored Health Insurance Coverage Continues to Decline in a New Decade*. Economic Policy Institute, Briefing Paper No. 353. http://www.epi.org/publication/bp353-employer-sponsored-health-insurance-coverage/

Hershbein, Brad J. 2012. "Graduating High School in a Recession: Work, Education, and Home Production." *The B.E. Journal of Economic Analysis and Policy*, vol. 12, no. 1. http://www.degruyter.com/view/j/bejeap.2012.12.issue-1/1935-1682.2599/1935-1682.2599.xml

Kahn, Lisa B. 2010. "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy." *Labour Economics*, vol. 17, no. 2.

Lovenheim, Michael, and C. Lockwood Reynolds. 2013. "The Effect of Housing Wealth on College Choice: Evidence from the Housing Boom." *Journal of Human Resources*, vol. 14, no. 1, 3–37.

Mishel, Lawrence, Josh Bivens, Elise Gould, and Heidi Shierholz. 2012. *The State of Working America, 12th Edition*. An Economic Policy Institute book. Ithaca, N.Y.: Cornell University Press.

Mitchell, Michael, and Michael Leachman. 2015. *Years of Cuts Threaten to Put College Out of Reach for More Students*. Center on Budget and Policy Priorities. http://www.cbpp.org/research/state-budget-and-tax/years-of-cuts-threaten-to-put-college-out-of-reach-for-more-students

Oreopolous, Philip, Till von Wachter, and Andrew Heisz. 2013. "Short- and Long-Term Career Effects of Graduating in a Recession." *American Economic Journal: Applied Economics*, vol. 4, no. 1, 1–29.

Shierholz, Heidi. 2014. *Is There Really a Shortage of Skilled Workers?* Economic Policy Institute commentary. http://www.epi.org/publication/shortage-skilled-workers/

Shierholz, Heidi, Alyssa Davis, and Will Kimball. 2014. *The Class of 2014*. Economic Policy Institute, Briefing Paper #377. http://www.epi.org/publication/class-of-2014/