

**Economic
Policy
Institute**

The Class of 2017

Report • By [Teresa Kroeger](#) and [Elise Gould](#) • May 4, 2017

What this report finds: After years of elevated unemployment and depressed wages, young graduates' economic prospects have finally begun to brighten. Members of the Class of 2017 have better job prospects than their peers who graduated in the aftermath of the Great Recession. Unemployment rates for young high school and young college graduates have returned to within one percentage point of their pre-recession levels and wages are continuing to slowly recover. While young high school graduates on average are still paid less than they were in 2007 (adjusted for inflation), the average wages of young college graduates have finally surpassed the 2007 level.

Yet the economy of 2007 is a low bar for economic opportunity. Relative to the full employment economy of the late 1990s and 2000, the shares of young graduates who are unemployed and underemployed, and generally "idled" by the economy (neither working nor in school), are still quite high. And economic growth has not yet reached all corners of the labor market. Unemployment rates for young black and Hispanic graduates entering the workforce are still substantially higher than that of their white peers. Young female graduates are paid less than their male peers directly out of school, when they have fairly comparable labor market experience. We need the economy to continue toward full employment in order to ensure healthy job prospects and decent wages for all young graduates.

How we can improve the job prospects and wages of young graduates: The policy solutions to lower unemployment rates of young high school and college graduates and lift their pay are the same solutions needed to help all workers:

- Keep interest rates low until the economy strengthens and gets back to full employment
- Raise the minimum wage
- Make it easier for workers to bargain collectively for higher wages
- Make more workers eligible for overtime pay
- Combat wage theft by employers
- Provide earned sick time and paid family leave

- Provide undocumented workers a path to citizenship (which will give these workers and native workers in similar fields of work more leverage to command higher pay)
- End discriminatory practices that contribute to race and gender inequities

These policies are articulated in EPI's [Agenda to Raise America's Pay](#).

Introduction and key findings

The Great Recession and its aftermath have had long-lasting effects on the employment prospects of young people entering the workforce after graduating from high school or college. Despite officially ending in June 2009, the recession has left millions of people unemployed for extended spells, with recent workforce entrants such as young graduates particularly vulnerable to unemployment. The slow pace of the recovery has meant that, since 2007, 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.

But after a long and sluggish recovery, young graduates' economic prospects have finally begun to look up. Sustained improvements in economic conditions in recent years have brightened young graduates' job prospects for employment and wage growth, particularly for those graduating from college. Young workers are taking notice of the stronger labor market: Among 18- to 30-year-olds surveyed in 2015, 61 percent were optimistic about their employment opportunities—up from 45 percent in 2013 (Federal Reserve Board 2016).

This paper focuses on recent high school graduates (age 17–20) and college graduates (age 21–24) who are not enrolled in further schooling. We analyze their employment, enrollment, and wage trends in order to glean the Class of 2017's economic prospects as they start their careers.

While by many measures the labor market for young graduates is now almost or fully back to where it was before the recession, the economy of 2007 represents a low bar for economic opportunity. We should instead strive for the full employment economy of the late 1990s and 2000, one in which the strong economy translated into better opportunities for workers across the labor market. The economy needs to continue on track toward full employment for economic growth to reach all corners of the labor market.

Due to the progression of the economic recovery and a substantial improvement in the unemployment rate, members of the Class of 2017 currently have better job prospects than the classes of 2009–2016. However, compared with those who graduated into the 2000 labor market, the Class of 2017 still faces real economic challenges, as demonstrated by elevated levels of unemployment and underemployment, and the large share of graduates who still remain “idled” by the economy (because they are neither enrolled in further schooling nor employed). Furthermore, the overall measures mask large gaps in employment outcomes between young graduates of different races and genders—some of which have worsened since the Great Recession.

Key findings include:

- **The labor market for young graduates remains weaker today than it was in 2000 or 2007.** There is nothing unique about the Great Recession and its aftermath that affected young people in particular. Rather, young workers always experience disproportionate increases in unemployment during periods of labor market weakness—and the Great Recession and its aftermath constituted the longest, most severe period of economic weakness in more than seven decades.
- **High school graduates matter.** Only 36.7 percent of people in their prime working years (age 25 to 54) have a bachelor’s degree or higher, while 36.3 percent have a high school diploma or less. We need an economy that works for everyone not just those with the highest credentials. Access to good jobs for those without a college degree is especially critical, as stable employment allows them to build a career or pay for further schooling.
- **Unemployment among young graduates is close to where it was in 2007 but still far higher than in 2000.** Unemployment rates among young graduates have nearly returned to where they were before the recession. Yet the unemployment rates for young graduates today remain much higher than unemployment rates for young graduates in the full employment economy of 2000.
 - For young high school graduates, the unemployment rate is 16.9 percent (compared with 15.9 percent in 2007 and 12.1 percent in 2000).
 - Among young high school graduates, the unemployment rate for men has nearly returned to its pre-recession level while the unemployment rate for women is still elevated. Neither men nor women have reached the unemployment rates of the full employment economy of 2000.
 - For young college graduates, the unemployment rate is currently 5.6 percent (compared with 5.5 percent in 2007 and 4.3 percent in 2000).
 - Among young college graduates, women have made a full recovery since the recession and reached the unemployment rate they had in 2000—4.4 percent. Their male peers have made progress at a slower pace. At 7.1 percent, their unemployment rate comes close to their 2007 unemployment rate (6.6 percent) but far from that of 2000 (4.1 percent).
- **Underemployment rates among young graduates have improved but remain higher than before the recession began.**
 - In addition to the unemployed (jobless workers who report that they are actively seeking work), the underemployment rate also includes those who are “involuntary” part-timers (those who work part time but want full-time work) and “marginally attached” workers (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).
 - For young high school graduates, the underemployment rate is 30.9 percent (compared with 26.8 percent in 2007 and 20.8 percent in 2000).
 - For young college graduates, the underemployment rate is 11.9 percent (compared with 9.6 percent in 2007 and 7.1 percent in 2000).

- While *unemployment* rates for young graduates draw near to pre-recession levels, *underemployment* rates remain elevated. This suggests that young graduates in the weakened labor market are taking less desirable positions than they used to.
- **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—obtaining further education or getting more work experience—that enable future career success.
 - Among young high school graduates, 15.1 percent are neither enrolled nor employed (compared with 13.7 percent in 2007 and 12.1 percent in 2000).
 - Among young college graduates, 9.9 percent are neither enrolled nor employed (compared with 8.4 percent in 2007 and 8.6 percent in 2000).
- **The overall unemployment rates and idling rates of young graduates mask substantial racial and ethnic disparities in these measures.**
 - The unemployment rates of young black and Hispanic graduates are substantially higher than the unemployment rates of white non-Hispanics, for both young high school graduates and young college graduates.
 - Young black college graduates have an unemployment rate of 8.0 percent—and only recently (in 2016) did their unemployment rate fall below the peak unemployment rate of young white college graduates during the recession (9.0 percent).
 - The shares of young black and Hispanic graduates who are not employed and not enrolled in further schooling are substantially higher than that of white graduates.
- **Wages have stagnated—or fallen—for most young graduates since 2000.**
 - Young high school graduates are paid less today than they were in 2007 (after adjusting for inflation). Among young high school graduates, real (inflation-adjusted) average wages are \$10.89 per hour—4.3 percent lower than in 2000.
 - Young college graduates’ wages have recovered since the recession, but only enough to make up lost ground rather than raise living standards. Among young college graduates, average wages are \$19.18 per hour—only 1.4 percent higher than in 2000.
 - Wages of young high school and college graduates follow the same trends as wages of older workers, signaling that the slowdown in young graduates’ wages stems from a wider wage growth problem.
- **The wage gap between male and female young high school graduates has narrowed since 2000, while the wage gap between male and female young college graduates has widened.**
 - Stark wage disparities between men and women occur even at this early part of their careers, when they have fairly comparable labor market experience.

- Among young high school graduates, women are currently paid 90 cents for every dollar paid to men (compared with 86 cents in 2000). Among young college graduates, women are paid 86 cents for every dollar paid to men (compared with 92 cents in 2000).
- Young male college graduates earn 5.4 percent more than young male college graduates in 2000, while young female college graduates earn 2.2 percent less than young female college graduates in 2000. These gender wage discrepancies are primarily driven by faster wage growth for top-earning men than for top-earning women, which drives up the average male wage.
- **Young graduates are burdened by substantial student loan balances.** Because the cost of higher education has grown far more rapidly than median family income, many students must take out loans that they may find difficult to repay once they graduate.
 - From the 1978–1979 enrollment year to the 2016–2017 enrollment year, the inflation-adjusted cost of a four-year education, including tuition, fees, and room and board, increased 162.0 percent for private school and 151.1 percent for public school (according to the College Board). Median family income increased only 20.2 percent over this 37-year period, leaving families and students increasingly unable to pay for the ticket price for colleges and universities.
 - 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).
 - For young college graduates, limited job opportunities, stagnating wages, and the rising cost of higher education make college an increasingly difficult investment.

In good times and in bad, many young workers struggle to find employment

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 restructured. 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 February 2017, the overall unemployment rate was 4.7 percent, and the unemployment rate of workers under age 25, at 9.9 percent, was 2.1 times as high.

This raises two key points. First, because the unemployment rate of young workers is typically slightly more than twice 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 economy many young workers face today is not unexpected given the current labor market overall. The labor market for young workers continues to be weaker today not because something unique about the Great Recession and its aftermath has affected young people in particular. Rather, young workers always experience disproportionate increases in unemployment during downturns—and the Great Recession and its aftermath was the longest, most severe period of economic weakness in more than seven decades. As the economy improved overall in the last several years, it also picked up for younger workers. While the unemployment rate for all workers fell from its peak of 10.0 percent in 2009 to 4.7 percent today, the unemployment rate for young workers fell from a peak of 19.5 percent in 2010 to 9.9 percent today.

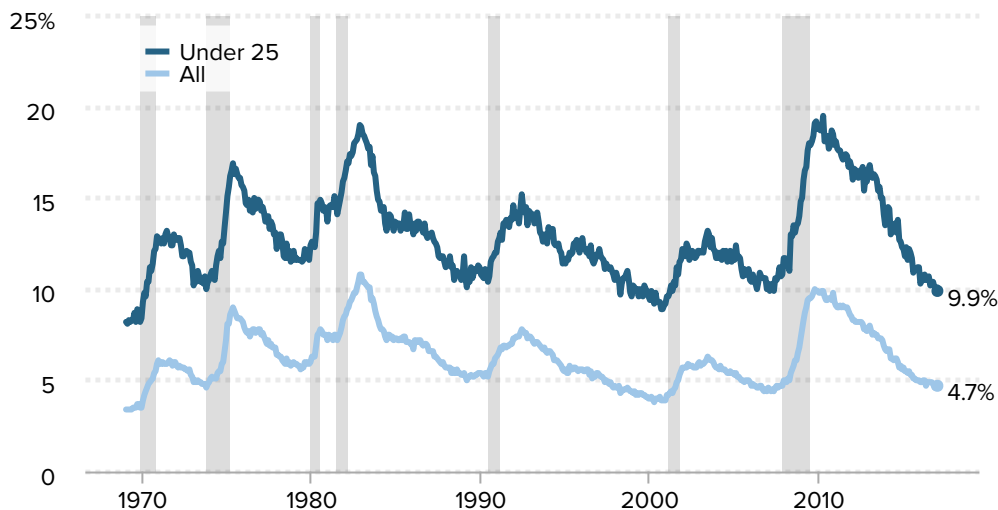
Most workers do not have a bachelor's degree

In this paper we examine the employment, enrollment, and wages of recent graduates in order to glean the Class of 2017's economic prospects as they start their careers. To do

Figure A

Young workers' unemployment rate is more than twice the overall rate

Unemployment rate of workers under age 25 and all workers, 1969–2017*



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

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

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this, we look at recent high school graduates (age 17–20) and college graduates (age 21–24) who are not enrolled in further schooling. This allows us to take a close look at those who have just finished schooling and are entering the labor market. Because the sample sizes for these groups are small, we have combined 12 months of data on a rolling basis to strengthen the estimates (e.g., data for 2017 reflect March 2016–February 2017).

Young high school graduates (with no additional schooling) make up about a quarter (27.1 percent) of those between the ages of 17 and 20 (see **Table 1**). Workers in this age group are too young to expect that they would have completed college, but we can see that nearly 30 percent have some college experience.

Among people age 21 to 24, 17.6 percent have completed a bachelor’s degree but have not attained an advanced degree. We examine this group throughout this report and refer to them as young college graduates—again, focusing only on those who are not enrolled in further schooling.

It is important to note that the young high school graduates and young college graduates are not comparable because they are mutually exclusive age groups. But we can, and do, make within-group comparisons by gender and race/ethnicity.

People *without* a college degree make up the vast majority of the workers age 25 to 54 (63.4 percent). A significant share of those who begin a college program do not end with a four-year degree (a subject of future research). And, high school graduates make up a

Table 1

Share of population with given level of education, by age and gender, 2017*

	Age 17–20			Age 21–24			Age 25–54		
	All	Men	Women	All	Men	Women	All	Men	Women
<i>Less than high school</i>	43.1%	44.7%	41.3%	7.7%	8.7%	6.6%	9.7%	10.5%	8.8%
<i>High school</i>	27.1%	28.7%	25.4%	29.6%	33.4%	25.8%	26.6%	29.5%	23.8%
<i>Some college</i>	29.1%	25.9%	32.5%	43.5%	41.8%	45.1%	27.1%	25.7%	28.5%
<i>Bachelor's degree</i>	–	–	–	17.6%	14.9%	20.4%	23.6%	22.3%	24.8%
<i>Advanced degree</i>	–	–	–	1.7%	1.2%	2.1%	13.1%	11.9%	14.1%

* Data reflect the 12-month average ending in February 2017.

Note: Data are not shown when sample sizes are too small for analysis.

Source: EPI analysis of basic monthly Current Population Survey microdata

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significant portion of our prime-age population (26.6 percent) and should be considered in important policy solutions. Access to good jobs for these individuals is especially critical, as stable employment allows them to build a career or pay for further schooling.

The labor market for young high school graduates continues to make its way toward full employment

Young high school graduates were hit especially hard by the Great Recession. While there is still a long road to a healthy economy, unemployment rates have dropped significantly since the aftermath of the recession. **Figure B** shows the unemployment rate of high school graduates between age 17 and 20 who are not enrolled in additional schooling.

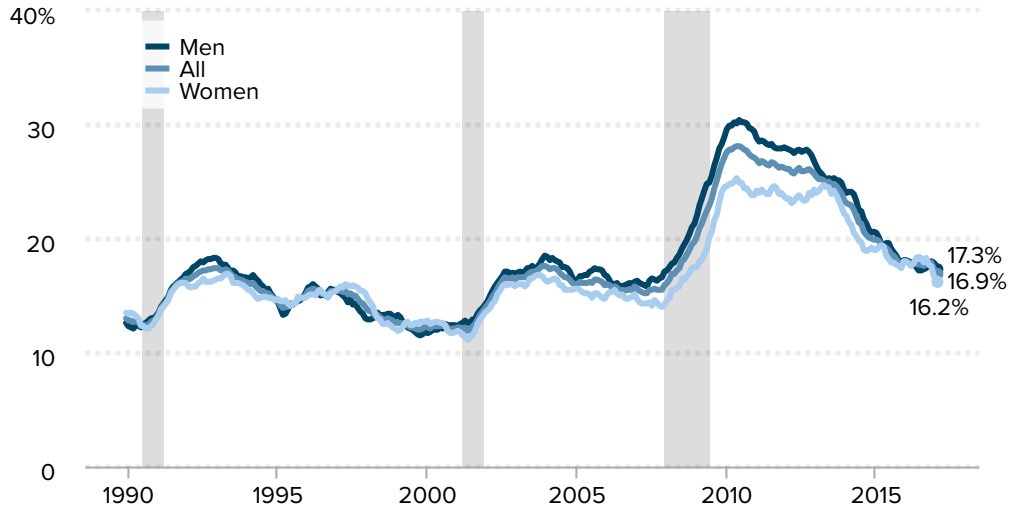
As Figure B shows, the unemployment rate of young high school graduates who are not enrolled in additional schooling jumped from 15.9 percent in 2007 to a peak of 28.1 percent, reached in 2010, dwarfing the increases in prior recessions. The rate has since declined significantly to 16.9 percent. The increase between 2007 and the peak rate in 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 17.3 percent for young male high school graduates, compared with 16.2 percent for young female high school graduates. While young male high school graduates have mostly recovered from

Figure B

For young high school graduates, unemployment has nearly returned to its pre-recession level

Unemployment rate of young high school graduates, by gender, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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the sizeable increase in unemployment they experienced during the Great Recession, their female peers have not made the same recovery. In fact, the unemployment rate for young women high school graduates is 16.2 percent—two percentage points higher than their 2007 rate of 14.2 percent.

Among young high school graduates, neither men nor women have seen unemployment rates reach the levels of 2000—12.4 percent and 11.8 percent, respectively. Even at these “full employment” levels, about one-in-six labor force participants are left without a job.

Data in this report

In this paper, most data presented 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, for all figures in the body of the report (excluding Figures A and H), the data from the Current Population Survey [CPS] basic monthly and CPS Outgoing Rotation Group are presented in 12-month moving averages, as this provides sufficient sample sizes and removes any need for seasonal adjustment. For example, the

most recent data point is a 12-month average from March 2016 to February 2017, and appears in the figures as February 2017. Consequently, references to data points in the text may not represent calendar-year averages. When we are generally comparing two years, we compare the December rolling averages of each year. However, when we are pointing out a peak or trough for a particular measure, we note in the text that we are referring to the peak or trough within a particular year.

Figure C shows that among young high school graduates, the unemployment rate of racial and ethnic minorities—particularly young non-Hispanic black graduates—is substantially 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 not enrolled in further schooling was 13.1 percent. It rose to a peak of 25.9 percent in 2010 and has since been cut nearly in half, to 14.0 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 at its peak in that year, and has since declined to 26.5 percent. In 2007, the unemployment rate of young Hispanic high school graduates was 14.3 percent. Similar to the trajectory for young white high school graduates, this rate also rose until 2010, when it reached a peak of 30.0 percent, and has since improved to 17.3 percent.

It's interesting to note that young black high school graduates are the only group whose unemployment rate has dipped below its pre-recession level. Of course, these graduates had remarkably high unemployment rates before the Great Recession. After the increase following the 2001 recession, their unemployment rate only shrank marginally. The gap between the unemployment rates of white and black young high school graduates is narrower today than in 2000; the black unemployment rate was 2.3 times as high as the white unemployment rate in 2000 but is 1.9 times as high today. Young black high school graduates are also still much more likely—1.5 times as likely—to be unemployed than their Hispanic peers.

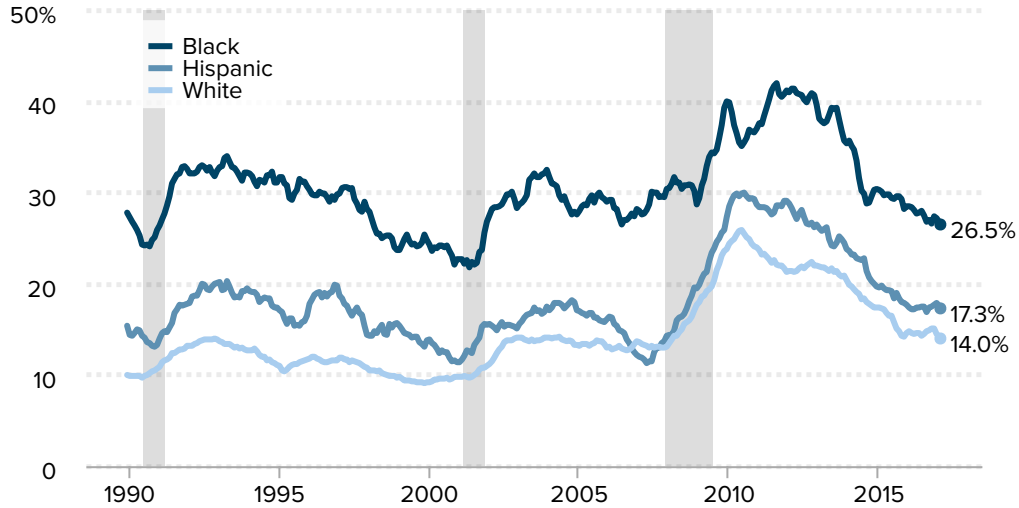
The gap in unemployment between white and Hispanic young high school graduates is not narrower today than in 2000: the unemployment rate of Hispanic workers remains 1.2 times as high as that of young white high school graduates. Young workers of color (age 17 to 20) who graduate from high school with relatively similar knowledge and skills face a tougher labor market from the moment they enter the workforce.

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

Young high school graduates of color have higher unemployment rates than their white peers

Unemployment rate of young high school graduates, by race/ethnicity, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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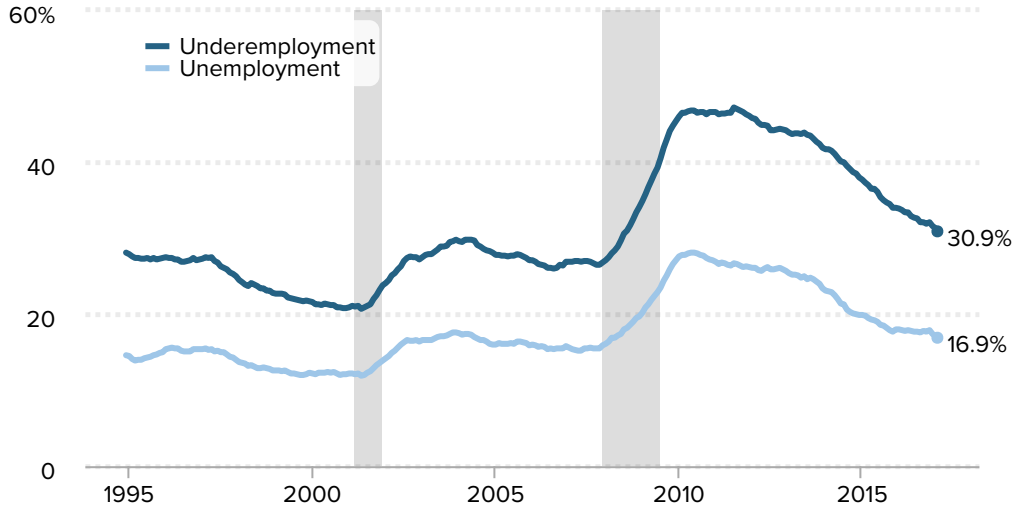
Figure D presents data on both unemployment and underemployment among young high school graduates (those age 17–20 who are not enrolled in further schooling). The unemployment rate of young high school graduates is 16.9 percent while their underemployment rate is 30.9 percent. In other words, in addition 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 (26.8 percent in 2007). For young high school graduates, the ratio of the underemployment rate to the unemployment rate is no better in 2017 (1.8-to-1) than it was in 2007 (1.7-to-1). The underemployment rate remains 10.1 percentage points higher today than it was in 2000. 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 we have seen the unemployment rate for young high school graduates approach its pre-recession level, the underemployment rate remains elevated. This suggests that young graduates face less desirable employment options than they used to in response to the recent labor market weakness for young workers.

Figure D

More than one-quarter of young high school graduates are underemployed

Unemployment and underemployment rates of young high school graduates, 1994–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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While state breakdowns of underemployment by educational attainment are not reliable, **Appendix Table A2** shows state-level underemployment rates of all workers and young workers.

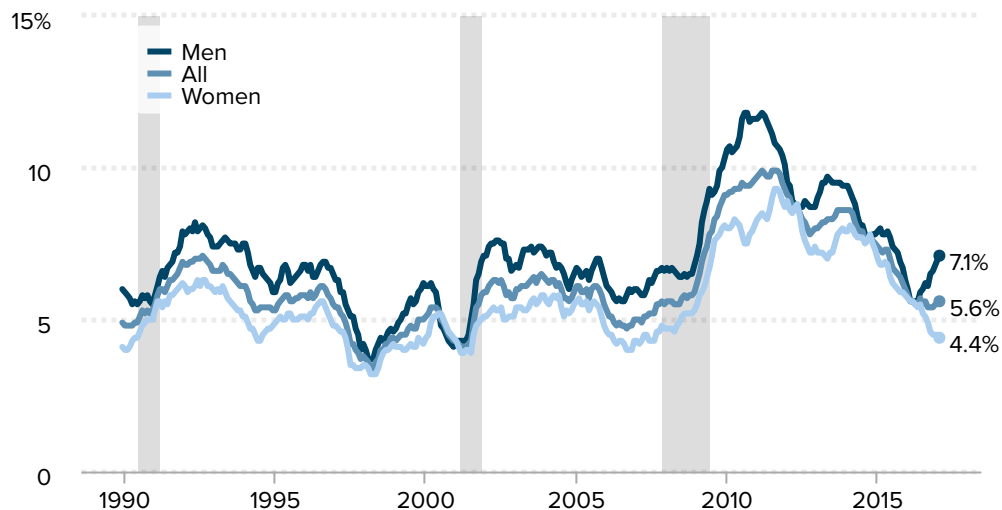
Young college graduates face a more promising labor market

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 are significantly worse than they would be if the economy were at full employment. 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

Figure E

Young college graduates' unemployment rate signals that the labor market is on its way to full employment

Unemployment rate of young college graduates, by gender, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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additional schooling.

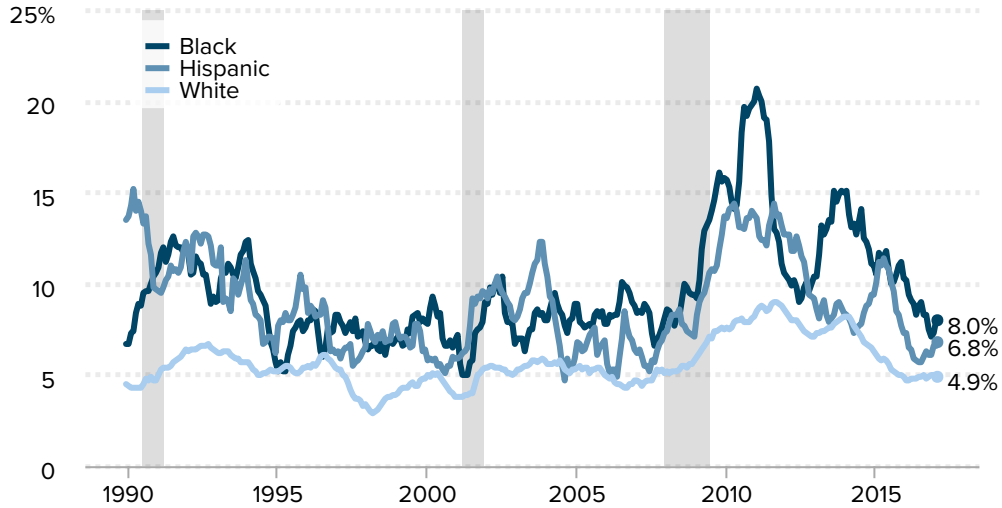
Figure E shows that the unemployment rate of young college graduates jumped from 5.5 percent in 2007 to 9.9 percent, its peak in 2011, dwarfing the increases in prior recessions. It declined somewhat between 2011 and 2012, primarily due to young college graduates either dropping out of, or never entering, the labor force because job opportunities were so weak. In 2013, some of the 2011–2012 trends reversed: The unemployment rate increased modestly 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. At 5.6 percent, the unemployment rate of young college graduates has nearly returned to where it was in 2007 but remains elevated from the rate in 2000, 4.3 percent.

Unemployment data by gender show that the recession-induced 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 for young female college graduates (from 4.7 percent in 2007 to a peak of 9.3 percent, in 2011). The unemployment rate for young male college graduates has fallen substantially in recent years but increased recently to 7.1 percent, while their female peers saw a more sustained downward trend and now have an unemployment rate of 4.4 percent. Young female college graduates have returned to an unemployment level lower than they had prior to the recession and equal to the rate

Figure F

Young college graduates of color have higher unemployment rates than their white peers

Unemployment rate of young college graduates, by race and ethnicity, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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during the labor market of 2000; their male peers, however, still have a long way to go.

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 more volatile due to small sample sizes, so it is important to focus on longer-run trends rather than year-over-year changes. The unemployment rates of young college graduates of color are almost always higher than that of young white 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 at its peak in 2011, and has since decreased to 8.0 percent, finally reaching the pre-recession levels of 2007. The unemployment rate of young Hispanic college graduates was 7.3 percent in 2007, rose to a peak of 14.4 percent in 2010, and has dropped to 6.8 percent in 2017. Among young white college graduates, the unemployment rate was 5.1 percent in 2007, rose to 9.0 percent at its peak in 2011, and has since improved to 4.9 percent. All three racial groups have nearly or fully returned to their pre-recession unemployment rates, but none have reached the much lower unemployment rates of 2000.

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 young black and Hispanic college graduates remain much more elevated than those of their white peers. In fact, young black college graduates have an unemployment rate of 8.0 percent—and only recently (in 2016) did their unemployment rate fall below the peak unemployment rate of young white college graduates during the recession (9.0 percent). 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 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 5.6 percent, the underemployment rate is more than twice that, at 11.9 percent. In other words, in addition to the substantial share who are officially unemployed, a large number of these young, highly educated workers either have a job but cannot attain the hours they need, or want a job but have recently given up looking for work. The underemployment-to-unemployment ratio for recent college graduates is close to the highest it's ever been, at 2.1-to-1. Although the unemployment rate is close to recovered, young college graduates have not yet reached the underemployment rates they had prior to the Great Recession or in the labor market of 2000. This illustrates that young college graduates are still experiencing significant labor market slack.

Young college graduates are still settling for lower-level jobs

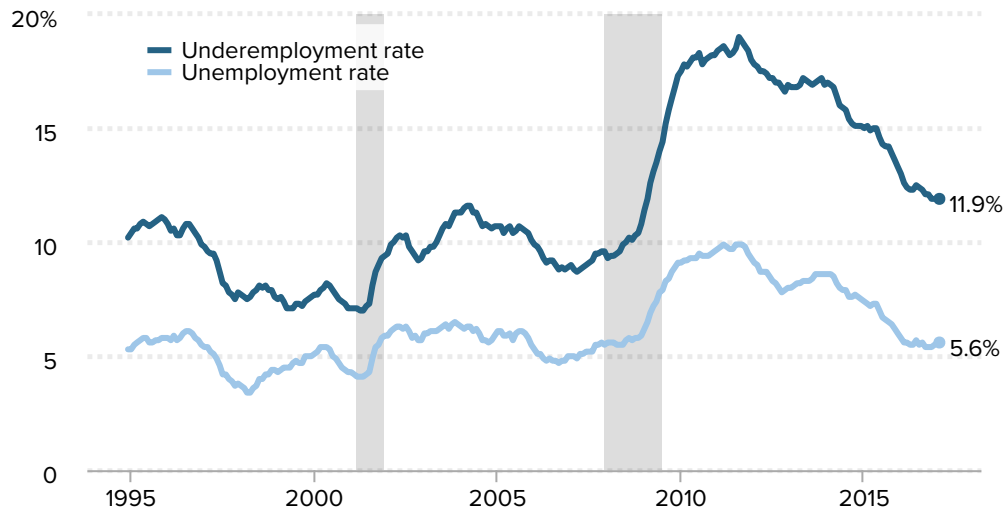
Although the measure of underemployment used in Figure G—the U-6 measure of labor underutilization—includes hours-based underemployment (i.e., part-time workers who want full-time work), it does not include “skills/education-based” underemployment (e.g., the young college graduate working as a barista). Research from the Federal Reserve Bank of New York (Abel and Deitz 2014) offers insight into skills/education-based underemployment of recent college graduates. The authors 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—38.3 percent of employed college graduates age 22–27 worked in jobs that did not require a college degree (Federal Reserve Bank of New York 2017). 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

Figure G

More than one in nine young college graduates is underemployed

Unemployment and underemployment rates of young college graduates, 1994–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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degree increased over the weak 2000–2007 business cycle, increased further in the Great Recession, and has been slow to improve. In 2007, 41.8 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 43.5 percent by 2016 (Federal Reserve Bank of New York 2017).

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, about 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 (Federal Reserve Bank of New York 2017). That share has dropped substantially, to about one-third, 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, since 2000, among the workforce as a whole, there has been a decline in the demand for “cognitive skills” (Beaudry et al. 2013). Taken together, these findings underscore that in recent years the elevated unemployment rate among young workers did not arise because young people lack enough education or skills. Rather, there

remains relatively weak demand for goods and services, which makes it unnecessary for employers to significantly ramp up hiring for workers of all levels of education.

Job quality has eroded for young graduates

Figure H shows the share of employed young graduates who receive pension coverage from their own employer (either defined-benefit or defined-contribution). In 1989, 12.3 percent of new high school graduates (age 17–20) with jobs had a pension through their workplace, and that share fell by half to 6.0 percent by 2015. Pension coverage among employed 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 to 25.4 percent in 2015. 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.

Another measure of job quality, employer-provided health insurance, has displayed long-term losses for both young high school and college graduates (Shierholz et al. 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 Current Population Survey Annual Social and Economic Supplement, which make trend comparisons unreliable, we do not specifically look at those trends through 2015. The Affordable Care Act (ACA), however, did substantially expand coverage of young people as dependents on their parents’ policies (Gould 2013). Because of this expansion and other ACA provisions the uninsured rate for young adults, age 19 to 25, declined by more than half by 2016 (National Center for Health Statistics 2017). For an expanded discussion of the ACA, see the section on the safety net later in this report.

Young workers did not “ride out” the weak economy by “sheltering in school”

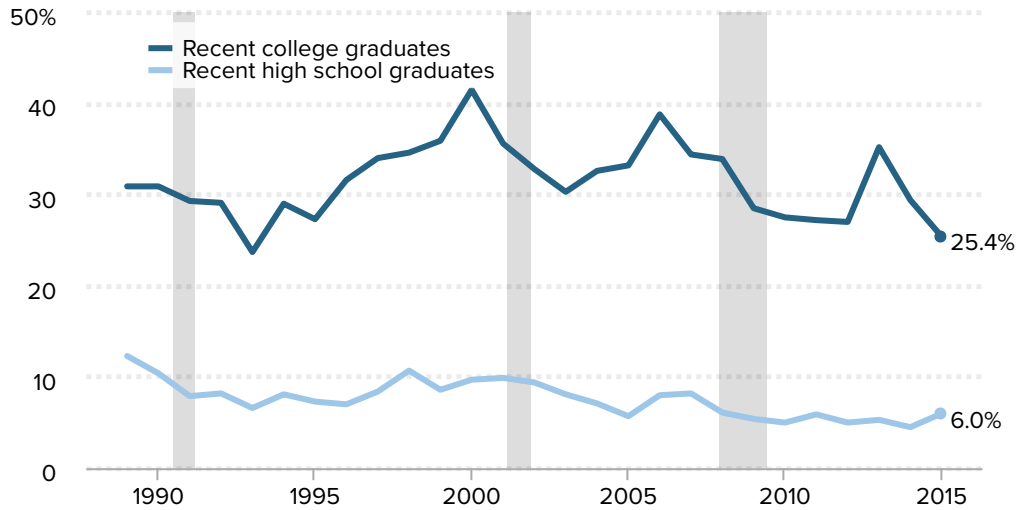
Educational opportunity is often identified as a possible silver lining to the cloud of unemployment and underemployment that looms over today’s young graduates. The assumption is that a lack of job opportunities propels young workers to “shelter” from the weak economy by attaining additional schooling, 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 I 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

Figure H

The vast majority of employed young graduates don't have employer-provided pension coverage

Share of employed recent high school graduates and college graduates with employer-provided pension coverage, 1989–2015



Note: Coverage is defined as being included in an employer-provided plan in which 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

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steadily increased over time, from 44.1 percent in 1989 to 58.1 percent in 2017. Women saw particularly steep increases in enrollment since 1989 (44.6 percent to 61.6 percent) compared with men (43.4 percent to 54.5 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 percentage points per year and 0.5 percentage points per year, respectively).

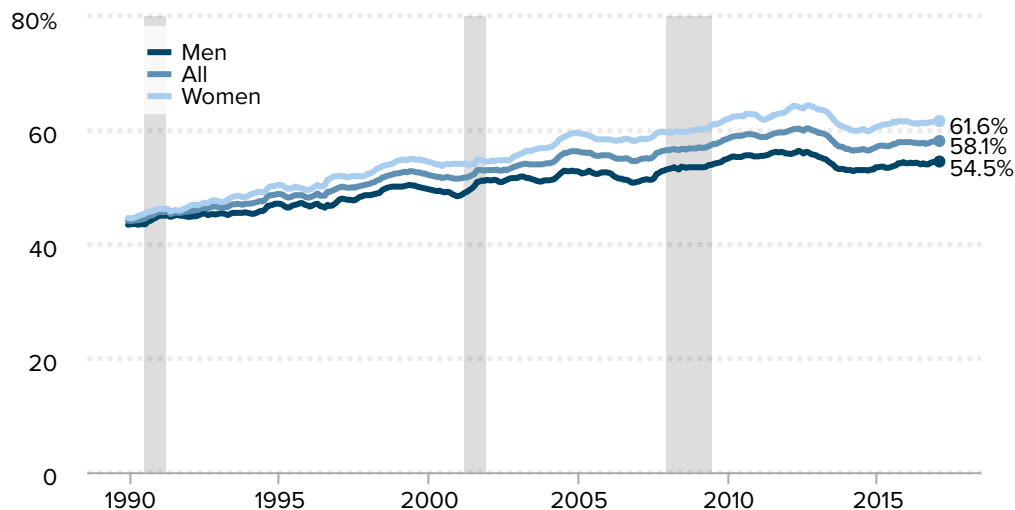
From 2012 to 2013, enrollment rates for both men and women dropped substantially. Enrollment rates have since experienced a slight upswing, in line with the historical trend, but have slowed in recent years and have yet to reach the peak levels of 2012. All of this suggests that young high school graduates did not “ride out” the recession-induced lack of job opportunities by “sheltering in school.”

The same holds true for young college graduates. **Figure J** 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

Figure I

Young high school graduates didn't ride out the weak economy by "sheltering in school"

Share of young high school graduates enrolled in college or a university, by gender, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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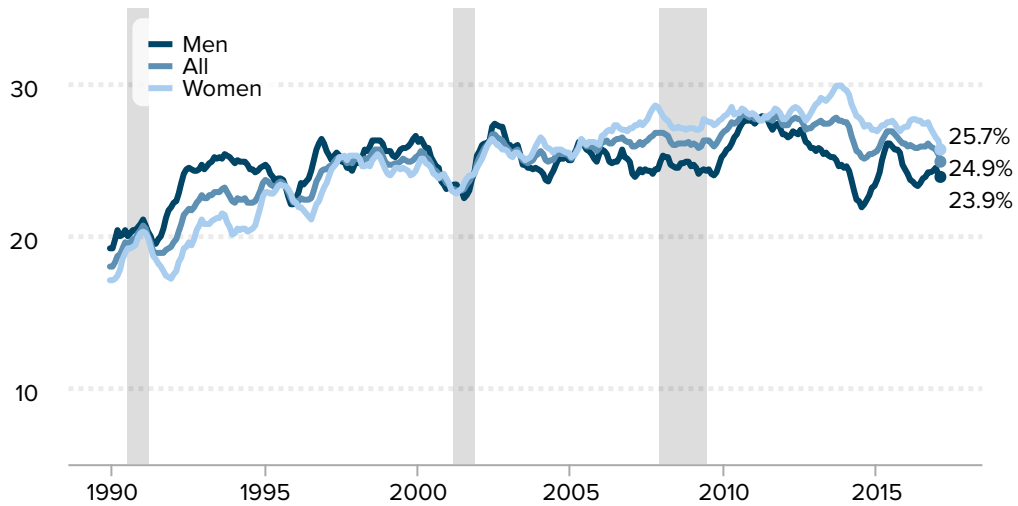
1989 to 24.9 percent in 2017), with steeper increases for women (from 17.1 percent to 25.7 percent) compared with men (from 19.2 percent to 23.9 percent). The data in Figure J are quite volatile due to small sample sizes, but they show that college graduates decreased their enrollment compared with where they were when the Great Recession hit. The overall enrollment rate increased 0.5 percentage points per year on average between 2000 and 2007, while it actually decreased 0.2 percentage points per year on average since 2007. Similar to the post-recession dip in college enrollment rates of high school graduates, graduate school enrollment rates of college graduates declined sharply in 2013 and 2014. Men in particular saw large decreases, with their graduate school enrollment rates declining 6.0 percentage points from the peak in 2011 to the trough in 2014. Women's enrollment rates experienced a decrease of 2.9 percentage points from the peak in 2013 to the trough in 2014. Since 2014, enrollment rates have not made any sustained progress and dropped to 24.9 percent in early 2017. While there was a small uptick immediately after the recession officially ended there is little evidence of a sustained Great Recession–induced increase in enrollment among college graduates.

While state breakdowns of enrollment by educational attainment are not reliable, **Appendix Table A3** shows enrollment rates by state of all high school graduates

Figure J

Young college graduates didn't respond to the Great Recession by going back to school

Share of young college graduates enrolled in further education, by gender, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

Note: Y-axis begins at 5% to increase clarity of data visualization. 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

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(including those with college degrees) under age 25.

The fact 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 largely due 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 2017, the share had dropped to 45.3 percent (not shown). 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 sustained 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 socioeconomic status (Mishel et al. 2012, Figure 3N), as well as racial and ethnic inequalities. Black families have significantly less wealth than white families—even between families with the same educational attainment (Jones 2017). When students rely on their parents’ support during college or economic hardships, black families are at a disadvantage. This translates into unequal opportunities for higher education by race and contributes to racial inequality in school and labor market outcomes.

Many young graduates are still left idled after the 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. (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.)

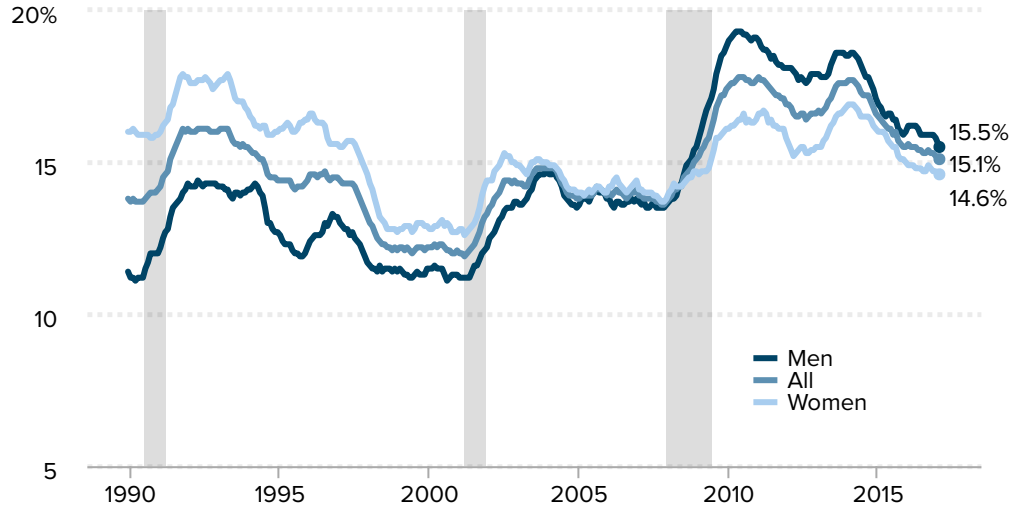
Figure K shows the share of young high school graduates age 17–20 (who may have previous college experience) who are idled, neither enrolled nor employed. In 2007, 13.7 percent of young high school graduates fell into this category, and that share spiked to 17.8 percent at its peak in 2010. It declined between 2010 and 2012, then shot back up to 17.7 percent in at its peak in 2014. Since then, it has declined again to 15.1 percent. From 2007 to 2010, idling rates rose more sharply for men than for women (from 13.6 percent in 2007 to a 2010 peak of 19.3 percent for men, and from 13.8 percent in 2007 to a 2010 peak of 16.7 percent for women). In 2017, the shares of men and women idled remain higher than in 2007 and far above the full employment economy of 2000. And, today, a slightly larger share of men (15.5 percent) than women (14.6 percent) are idled, a change from pre-recession trends.

The problem of young people being left idled disproportionately affects young black and Hispanic high school graduates. As shown in **Figure L**, 20.2 percent of young black high school graduates and 17.7 percent of young Hispanic high school graduates are currently not employed nor enrolled in further schooling, compared with 13.1 percent of their white peers. That means that a fifth of young black high school graduates and a sixth 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 a peak of 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. While young black high school graduates continue to have higher rates of idling compared with their white and Hispanic peers, they have returned to their own pre-recession levels. White and Hispanic idling rates remain higher than they were in the tight labor market of the late

Figure K

The Great Recession has left many young graduates neither employed nor in college

Share of young high school graduates not enrolled in college or a university and not employed, by gender, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

Note: Y-axis begins at 5% to increase clarity of data visualization. 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

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1990s and 2000.

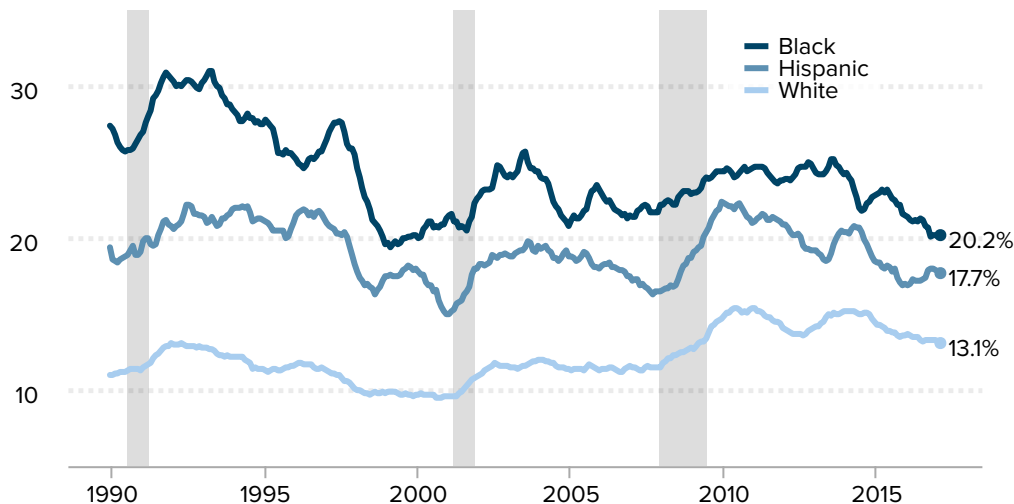
College graduates face a similar predicament, as many of them have been left idled in the wake of the Great Recession. **Figure M** shows the share of young college graduates age 21–24 who are neither enrolled nor employed. In 2007, 8.4 percent of young college graduates fell into this category, and that share spiked to 11.9 percent in 2011. It has since declined to 9.9 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 young high school and college graduates remain at least 1.1 times as high as they were before the recession began and as they were immediately 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.

As with young high school graduates, idling disproportionately affects young black and Hispanic college graduates. As shown in **Figure N** (which exhibits sample-size-driven volatility), 11.9 percent of young black college graduates and 12.1 percent of young

Figure L

Among young black high school graduates, one in five is neither employed nor in college

Share of young high school graduates not enrolled in college or a university and not employed, by race/ethnicity, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

Note: Y-axis begins at 5% to increase clarity of data visualization. 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

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Hispanic college graduates are currently not employed nor enrolled in further schooling, compared with 8.6 percent of their white peers. Black and Hispanic youth are less likely to obtain a college degree, and even when they do, they still face higher rates of idling without a job or additional schooling.

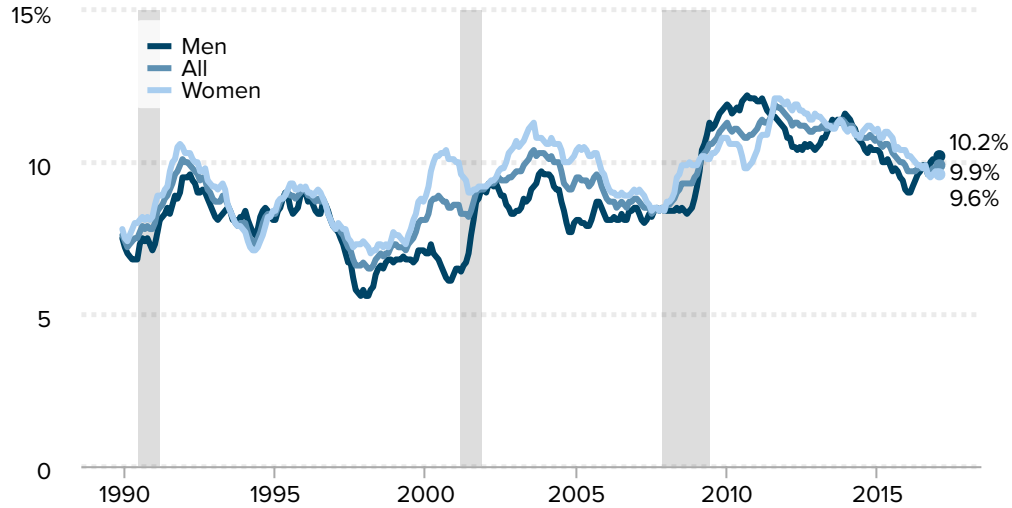
Wages have stagnated—or fallen—for most young graduates since 2000

Young high school and college graduates are confronting lackluster wage growth. Due in part to the sustained economic weakness in the wake of the Great Recession, young high school and college graduates have seen stagnant or declining wages overall since 2000. We expect to see stronger wage growth when the unemployment rate drops and the labor market tightens. Wages have grown in recent years, but not fast enough to make up for all the losses experienced since the Great Recession. **Figure O** 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**.²

Figure M

One in 10 young college graduates is neither employed nor pursuing more education

Share of young college graduates not enrolled in college or a university and not employed, by gender, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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On average, young high school graduates had an hourly wage of \$10.89 in 2017. This wage rate would yield an annual income of roughly \$22,700 for a full-time, full-year worker. Young college graduates had an average hourly wage of \$19.18, which would translate into an annual income of roughly \$39,900 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 are currently paid 90 cents for every dollar paid to men, while among young college graduates, women are paid 86 cents for every dollar paid to men. It is noteworthy that stark wage disparities between men and women occur even at this early part of their careers, when they have fairly comparable labor market experience.³]

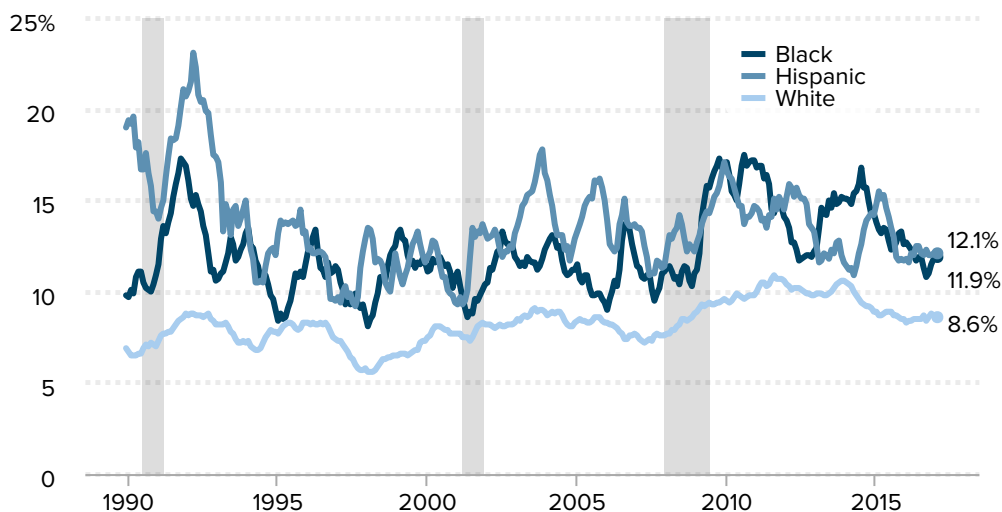
The wages of most groups of young graduates have declined or stagnated during the Great Recession and its aftermath, as shown in Table 2. The real (inflation-adjusted) wages of young high school graduates are 3.5 percent lower today than in 2007. Wages of high school-educated men declined 6.3 percent during this time, while high school-educated women’s wages increased a mere 0.5 percent.³

Young college graduates, on the other hand, are finally seeing their wages recover from the Great Recession. These gains are only enough to make up lost ground since the

Figure N

Among young black and Hispanic college graduates, more than one in nine is neither employed nor in college

Share of young college graduates not enrolled in college or a university and not employed, by race/ethnicity, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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

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recession, however, rather than providing substantial gains in living standards relative to pre-recession wages. Wages of young college graduates increased 2.0 percent overall since 2007. Men’s wages increased 1.2 percent over this period, while women saw their wages recover for the first time since the recession, up 1.8 percent.⁴ Yet with men’s wages growing faster than women’s, the gender wage gap for college graduates has widened since the Great Recession (currently 86 cents on the male dollar). This gap of \$2.99 per hour is particularly striking as young women (age 21–24) have higher rates of bachelor’s degree attainment (20.4 percent) than young men (14.9 percent) (see Table 1).

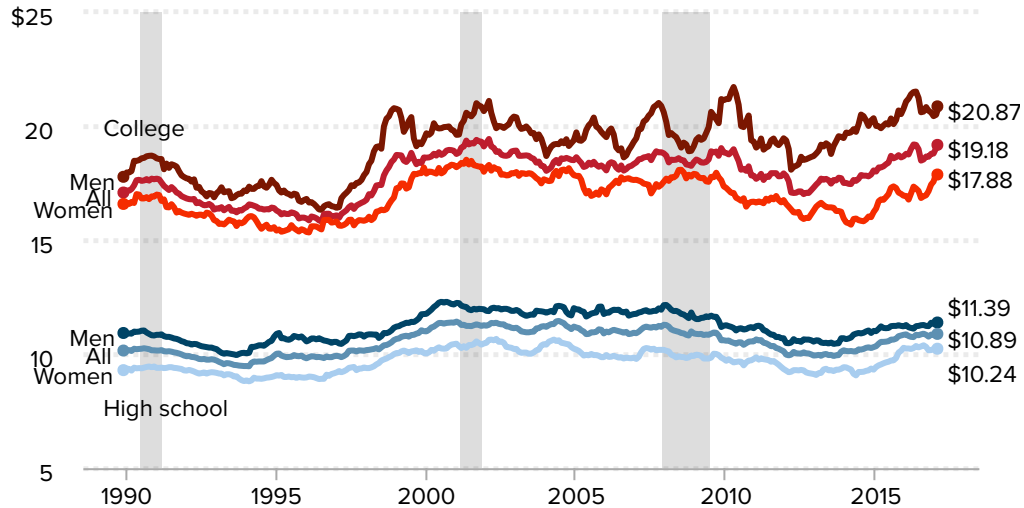
The lackluster wage growth during the Great Recession and its aftermath is a continuation of a longstanding trend. The wages of young graduates fared poorly even before the Great Recession; they saw virtually no growth over the entire period of broad wage stagnation that began during the business cycle of 2000–2007. Since 2000, the wages of young high school graduates have declined 4.3 percent (with a decline of 6.5 percent for men and 1.9 percent for women), as shown in **Figure P**. The wages of young college graduates, seen in **Figure Q**, have increased 1.4 percent overall, with men’s wages increasing 5.4 percent, and women’s wages falling 2.2 percent.

While wage inequality since 2000 has narrowed among young high school graduates, it

Figure O

Wages have stagnated for most young graduates since 2000

Real average hourly wages of young workers, by education and gender, 1989–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

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. Wages are in 2016 dollars. Shaded areas denote recessions.

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

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has increased among young college graduates. Young male college graduates were paid 5.4 percent more in 2017 than in 2000, while young female college graduates were paid 2.2 percent less than in 2000. These gender wage discrepancies are primarily driven by the wages of men at the top of the wage distribution rising faster than those of women, disproportionately driving up the average male wage (not shown).

The lackluster wage performance since 2000 stands 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 15.4 percent for young high school graduates and 18.3 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 have much stronger wage growth prospects than young graduates who enter the labor market during periods of weakness.

Young graduates aren't the only workers

Table 2

Real average hourly wages of young graduates, by gender and race/ethnicity, 1990–2017

Year*	High school graduates			College graduates		
	All	Men	Women	All	Men	Women
1990	\$10.17	\$10.82	\$9.46	\$17.67	\$18.67	\$16.91
1995	\$9.86	\$10.68	\$8.97	\$15.99	\$16.76	\$15.44
2000	\$11.38	\$12.18	\$10.44	\$18.92	\$19.80	\$18.29
2007	\$11.29	\$12.15	\$10.19	\$18.81	\$20.62	\$17.56
2017	\$10.89	\$11.39	\$10.24	\$19.18	\$20.87	\$17.88
Annualized percent change						
1990–2000	1.1%	1.2%	1.0%	0.7%	0.6%	0.8%
1990–1995	-0.6%	-0.3%	-1.1%	-2.0%	-2.1%	-1.8%
1995–2000	2.9%	2.7%	3.1%	3.4%	3.4%	3.4%
2000–2017	-0.3%	-0.4%	-0.1%	0.1%	0.3%	-0.1%
2000–2007	-0.1%	0.0%	-0.3%	-0.1%	0.6%	-0.6%
2007–2017	-0.4%	-0.6%	0.0%	0.2%	0.1%	0.2%

* Data for 2017 are 12-month averages from March 2016–February 2017. All other data represent 12-month averages as of December of the indicated year.

Note: Data are for high school graduates age 17–20 and college graduates age 21–24 who are not enrolled in further schooling. Wages are in 2016 dollars.

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

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experiencing stagnant wages

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, we observe similar wage trends for the population as a whole (Gould 2017). 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 today, high school and college graduates age 18–64 saw a brief period of wage growth in the 1990s but have had stagnant or declining wages since 2000 (Gould 2017). This is 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 employers for higher wages (Bivens et al. 2014).

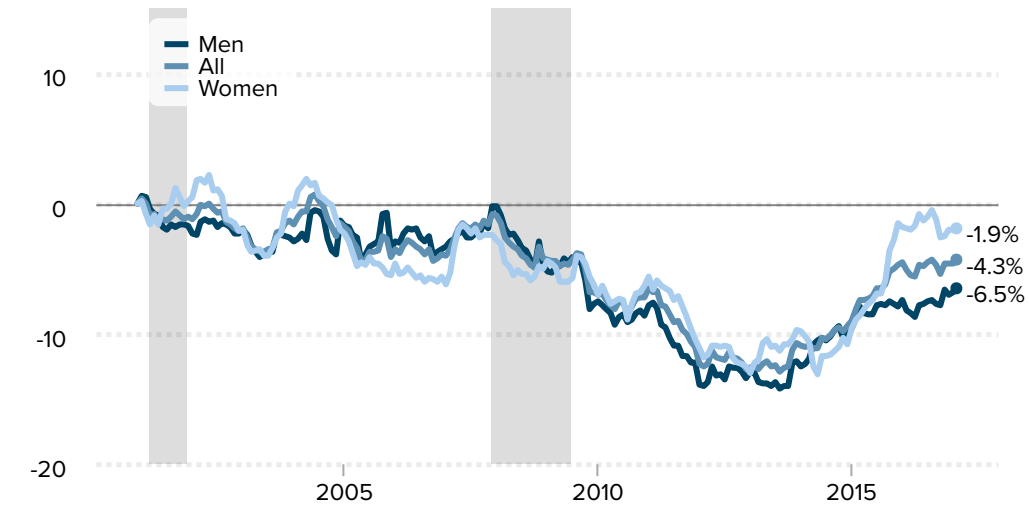
The high cost of higher education has put a strain on young graduates and their families

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 2016–2017 school year, the total cost

Figure P

For young high school graduates, wages are lower than they were in 2000

Cumulative percent change in real average hourly wages of young high school graduates, by gender, 2000–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

Note: Data are for high school graduates age 17–20 who are not enrolled in further schooling. Wages are in 2016 dollars. Shaded areas denote recessions.

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

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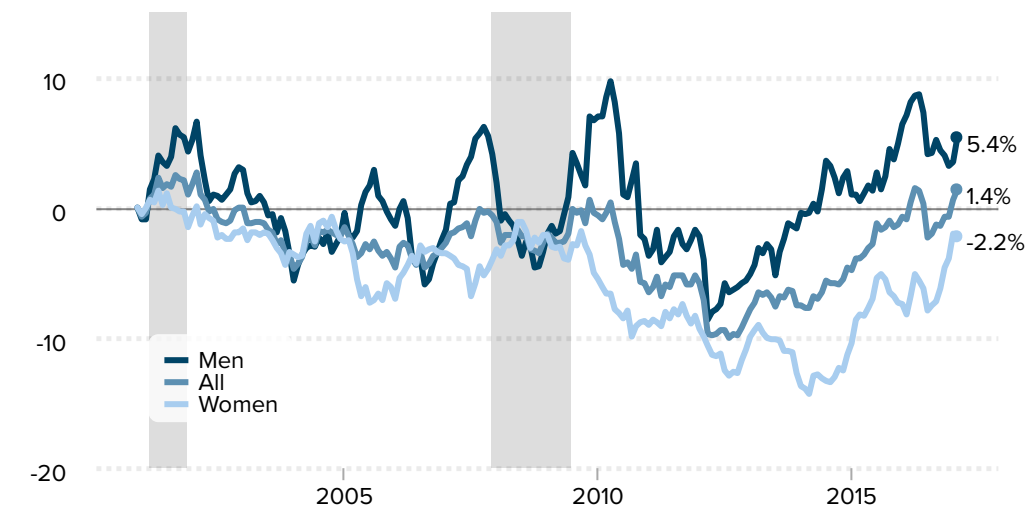
of attendance for an on-campus student—including in-state tuition, books, room and board, and transportation expenses—at a four-year in-state public school averaged \$24,610. For a four-year private school, it was \$49,320. The cost of higher education has risen faster than typical family incomes, making it harder for families to pay for college. From the 1978–1979 enrollment year to the 2016–2017 enrollment year, the inflation-adjusted cost of a four-year education, including tuition, fees, and room and board, increased 162.0 percent for private school and 151.1 percent for public school. Median family income increased only 20.2 percent over this 37-year period, leaving families and students increasingly unable to pay for most colleges and universities in full (College Board 2015; CPS ASEC).

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, Richard 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

Figure Q

Wages of young female college graduates have not caught up with the wages of their male peers

Cumulative percent change in real average hourly wages of young college graduates, by gender, 2000–2017*



* Data reflect 12-month moving averages; data for 2017 represent 12-month average from March 2016 to February 2017.

Note: Data are for college graduates age 21–24 who do not have an advanced degree and are not enrolled in further schooling. Wages are in 2016 dollars. Shaded areas denote recessions.

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

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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. Debt can be damaging to graduates’ future incomes and lifelong earnings. After graduation, those with higher education debt are more likely to accept jobs that offer higher initial wages yet slower wage growth over time (Minicozzi 2004). High debt can steer graduates into worse-fitting careers than their debtless peers and lower their lifelong earnings.

Most Class of 2017 college graduates enrolled in college four years ago, in fall 2013. 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 2013, it dropped by an additional 0.8 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 2017 faced real income declines due to job loss or lack of wage growth.

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 2015–2016 school year, state appropriations for higher education per full-time enrolled student fell by 18 percent, and in response, public colleges and universities have had to steeply increase tuition (Mitchell et al. 2016). The share of Class of 2017 graduates with large student loan amounts has likely risen accordingly.

Students in the Class of 2017, 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 sub-optimal 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 has been accompanied by a 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 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 (Gould 2017). Much of the rise in the premium that has occurred in the last 17 years is due to large 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 \$19.18, which translates to an annual salary of roughly \$39,900 for a full-time, full-year worker. This is nearly the same as what a typical college graduate would have made in 2000 (\$38,800). In comparison, over 2000–2017, the average cost of college rose 72.2 percent for a public university and 46.3 percent for a private school. 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 (College Board 2015; Brown et al. 2015a).

Although wages of new college graduates are much higher than those of their high school counterparts, wages of college graduates are failing to keep up with the rising cost of college and therefore the rising student loan debt, signaling that college is becoming an increasingly difficult investment. On top of this, the only way to access the full college wage premium is by completing a 4-year college degree. Of the 67.7 percent of young adults who began college, 37.7 percent haven't completed a bachelor's degree by age 29 (BLS 2016), often leaving with debt but without the relative benefits in employment and wages that the college premium offers.

The safety net for young workers is weak

As previously demonstrated, the unemployment rates of young workers remain higher than before the recession began and are even more elevated compared with the full employment economy of 2000. 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 times 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 policies. 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 for childless adults and the institution of health insurance exchanges with their accompanying subsidies accelerated 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

2016, for example, 55.7 percent of 18- to 24-year-olds were living with their parents, an increase of 4.6 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 limited opportunities.

Conclusion: We can help the Class of 2017 by implementing policies that boost employment and wages

Young workers who have the bad luck to enter the labor market during a downturn have worse outcomes in the short run than if they had entered in a healthy labor market—and 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 (Oreopolous et al. 2013; Kahn 2010; Hershbein 2012; Altonji et al. 2013). Although the economy is slowly improving, many graduates of the Class of 2017 will face a difficult job market.

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 weak economy are not just large and negative, but also long-lasting.

The labor market looks vastly different for young graduates of color compared with their white peers. Young black and Hispanic college graduates face higher rates of unemployment and lower wages—even black graduates with science, technology, engineering, and math (STEM) degrees (Jones and Schmitt 2014). In general, workers of color have worse labor market outcomes than their white peers even when comparing workers with the same level of educational attainment (Gould 2017). This suggests that policy solutions aimed at increasing skills and education of young workers will fall short on closing the gaps for workers of color.

Although young workers are a unique group, ways to improve their labor market outcomes are not 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 that would bolster labor standards.

In order to spur wage growth, we should use all tools of macroeconomic stabilization

policy to pursue full employment, pursue **policies that strengthen workers' collective bargaining rights, and update and strongly enforce labor standards**. Most immediately, this means the Federal Reserve can help by keeping interest rates low until full employment is achieved. In addition, we should raise the minimum wage, protect workers from wage theft, provide earned sick leave and paid family leave, provide undocumented workers with a path to citizenship (which will give these workers, and native workers in similar fields, more leverage to command higher pay), and end discriminatory practices that contribute to race and gender inequities.

The bottom line is that policies that will give young people a fighting chance as they enter the labor market in the aftermath of the Great Recession are the same policies that will help workers overall. These are policies that generate demand for U.S. goods and services and therefore demand for the workers who provide them, bring down unemployment, give workers more leverage, and raise workers' wages.

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About the authors

Teresa Kroeger is a Research Assistant supporting EPI's research on labor economics. She works closely with economists and researchers to analyze trends in the labor market affecting low- and middle-income workers. She specializes in research on gender and racial wage gaps, widespread wage stagnation and inequality, and the employment and wages of young high school and college graduates who are just entering the labor market. Kroeger's work has been cited by numerous broadcast, radio, print, and online news outlets, including *The New York Times*, *The Washington Post*, *The Wall Street Journal*, and the *Economic Report of the President*. Before joining EPI in 2016, Kroeger conducted research at the American Institutes for Research and the Center for Economic and Policy Research. She holds B.A. degrees in Economics and Sociology from the University of California, Santa Cruz.

Elise Gould, Senior Economist, joined EPI in 2003. 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 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.

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. These data include salaried workers (their earnings are converted to hourly rates based on the number of hours they work).
3. The decline in average wages from 2007 to 2017 is not equal to the changes for both men and women separately due to compositional effects.
4. Average college wages were affected by similar compositional effects as described in the previous endnote.

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Appendix

Unemployment rates of workers under age 25 and all workers, by state, 2000–2016

State	Workers under 25				All workers*			
	2000	2007	2015	2016	2000	2007	2015	2016
<i>Alabama</i>	12.5%	11.0%	13.5%	12.2%	4.5%	4.0%	6.1%	6.0%
<i>Alaska</i>	14.0%	12.8%	12.4%	12.2%	6.7%	6.2%	6.7%	6.6%
<i>Arizona</i>	7.5%	8.9%	12.5%	11.0%	4.0%	3.9%	6.0%	5.2%
<i>Arkansas</i>	11.2%	10.3%	11.2%	8.8%	4.4%	5.6%	5.2%	3.9%
<i>California</i>	10.5%	11.6%	13.4%	10.4%	4.9%	5.3%	6.2%	5.4%
<i>Colorado</i>	7.2%	8.7%	8.3%	6.7%	2.8%	3.7%	3.9%	3.3%
<i>Connecticut</i>	5.6%	10.0%	10.0%	10.7%	2.2%	4.5%	5.6%	5.2%
<i>Delaware</i>	9.6%	7.3%	11.7%	8.6%	3.9%	3.5%	5.0%	4.3%
<i>District of Columbia</i>	14.3%	12.7%	14.8%	14.6%	5.7%	5.5%	6.9%	6.1%
<i>Florida</i>	9.2%	9.2%	11.1%	10.0%	3.6%	4.1%	5.4%	4.9%
<i>Georgia</i>	8.2%	10.6%	14.8%	13.5%	3.7%	4.3%	5.8%	5.4%
<i>Hawaii</i>	11.8%	8.2%	8.9%	7.1%	4.3%	2.9%	3.7%	3.0%
<i>Idaho</i>	9.3%	7.3%	8.3%	7.0%	4.9%	3.0%	4.3%	3.9%
<i>Illinois</i>	9.9%	10.4%	13.3%	14.3%	4.3%	5.1%	5.9%	5.9%
<i>Indiana</i>	8.3%	11.4%	11.5%	10.8%	3.2%	4.6%	4.8%	4.5%
<i>Iowa</i>	6.8%	8.0%	8.6%	7.2%	2.6%	3.7%	3.6%	3.9%
<i>Kansas</i>	8.6%	9.3%	7.6%	8.5%	3.7%	4.1%	4.3%	4.2%
<i>Kentucky</i>	9.8%	12.7%	13.2%	9.7%	4.1%	5.4%	5.4%	4.9%
<i>Louisiana</i>	13.3%	9.0%	13.6%	13.2%	5.4%	4.3%	6.2%	6.2%
<i>Maine</i>	8.7%	11.6%	10.2%	9.3%	3.5%	4.7%	4.4%	3.9%
<i>Maryland</i>	9.6%	11.4%	12.3%	9.9%	3.8%	3.6%	5.2%	4.2%
<i>Massachusetts</i>	6.7%	9.1%	10.1%	6.5%	2.6%	4.6%	4.9%	3.7%
<i>Michigan</i>	8.0%	13.9%	11.9%	10.7%	3.5%	7.1%	5.4%	4.9%
<i>Minnesota</i>	6.4%	9.2%	7.7%	8.1%	3.3%	4.6%	3.8%	3.9%
<i>Mississippi</i>	14.1%	14.7%	14.5%	12.8%	5.6%	6.1%	6.5%	5.7%
<i>Missouri</i>	8.1%	11.3%	10.3%	10.1%	3.4%	5.0%	5.0%	4.4%
<i>Montana</i>	10.0%	7.6%	7.2%	8.9%	5.0%	3.6%	4.1%	4.2%
<i>Nebraska</i>	6.7%	6.8%	6.4%	6.2%	3.0%	3.1%	3.0%	3.4%
<i>Nevada</i>	7.7%	8.4%	13.6%	9.8%	4.0%	4.6%	6.9%	5.9%
<i>New Hampshire</i>	6.9%	8.3%	7.2%	6.1%	2.8%	3.6%	3.4%	2.8%
<i>New Jersey</i>	9.6%	9.9%	12.0%	11.2%	3.7%	4.2%	5.8%	4.9%
<i>New Mexico</i>	12.0%	8.8%	14.1%	15.8%	5.0%	3.7%	6.8%	6.8%
<i>New York</i>	10.4%	11.9%	14.2%	10.5%	4.6%	4.6%	5.3%	4.8%
<i>North Carolina</i>	9.8%	10.3%	14.4%	12.5%	3.6%	4.5%	5.9%	5.0%
<i>North Dakota</i>	6.6%	5.5%	4.4%	6.2%	3.0%	3.2%	2.7%	3.3%
<i>Ohio</i>	8.7%	12.0%	12.3%	10.9%	4.0%	5.6%	4.9%	4.9%
<i>Oklahoma</i>	6.6%	8.7%	8.9%	12.2%	3.1%	4.4%	4.3%	5.1%
<i>Oregon</i>	9.6%	11.2%	12.6%	12.5%	4.9%	5.2%	5.7%	4.9%
<i>Pennsylvania</i>	9.9%	10.9%	10.1%	10.8%	4.1%	4.3%	5.2%	5.6%
<i>Rhode Island</i>	11.5%	9.5%	10.5%	11.4%	4.1%	4.9%	5.9%	5.4%
<i>South Carolina</i>	10.6%	14.0%	16.3%	10.6%	3.8%	5.6%	5.9%	4.9%
<i>South Dakota</i>	5.6%	6.5%	9.5%	6.8%	2.3%	2.9%	3.5%	2.8%
<i>Tennessee</i>	8.9%	11.6%	12.5%	10.1%	3.9%	4.6%	5.7%	4.7%

Appendix
Table A1
(cont.)

State	Workers under 25				All workers*			
	2000	2007	2015	2016	2000	2007	2015	2016
<i>Texas</i>	10.2%	9.8%	9.2%	10.2%	4.2%	4.3%	4.4%	4.6%
<i>Utah</i>	5.8%	6.1%	6.9%	6.1%	3.3%	2.6%	3.6%	3.6%
<i>Vermont</i>	6.3%	9.6%	9.3%	7.2%	2.9%	4.0%	3.6%	3.3%
<i>Virginia</i>	6.0%	7.5%	10.0%	9.4%	2.2%	3.1%	4.5%	4.1%
<i>Washington</i>	12.8%	11.8%	11.7%	12.4%	5.2%	4.6%	5.6%	5.5%
<i>West Virginia</i>	11.9%	12.8%	17.3%	13.6%	5.5%	4.6%	6.9%	6.1%
<i>Wisconsin</i>	7.2%	11.8%	9.3%	6.6%	3.6%	5.0%	4.6%	4.1%
<i>Wyoming</i>	9.8%	7.5%	8.6%	9.5%	3.9%	2.9%	4.1%	5.4%
<i>United States</i>	9.3%	10.5%	11.6%	10.4%	4.0%	4.6%	5.3%	4.9%

* Includes all workers age 16 and older.

Source: EPI analysis of basic monthly Current Population Survey microdata

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Underemployment rates of workers under age 25 and all workers, by state, 2000–2016

State	Workers under age 25				All workers*			
	2000	2007	2015	2016	2000	2007	2015	2016
<i>Alabama</i>	19.5%	17.2%	23.4%	20.4%	8.2%	7.1%	11.2%	10.4%
<i>Alaska</i>	23.6%	22.4%	21.1%	23.0%	12.1%	11.2%	12.1%	12.8%
<i>Arizona</i>	11.9%	15.1%	22.9%	20.0%	6.7%	7.4%	12.8%	10.8%
<i>Arkansas</i>	17.7%	16.7%	19.4%	16.0%	7.5%	9.5%	9.5%	7.5%
<i>California</i>	16.6%	19.1%	24.6%	20.7%	8.8%	9.9%	12.7%	11.3%
<i>Colorado</i>	12.0%	15.2%	14.4%	14.5%	5.2%	7.3%	7.9%	7.3%
<i>Connecticut</i>	10.3%	17.2%	18.4%	21.8%	4.2%	8.2%	10.9%	10.8%
<i>Delaware</i>	15.5%	12.7%	21.7%	16.0%	6.4%	6.4%	9.6%	8.3%
<i>District of Columbia</i>	22.0%	19.0%	22.7%	22.9%	9.8%	9.3%	10.9%	9.5%
<i>Florida</i>	14.4%	16.0%	22.1%	18.7%	6.5%	8.0%	11.5%	10.3%
<i>Georgia</i>	13.1%	17.7%	25.4%	22.6%	6.0%	8.1%	11.1%	10.5%
<i>Hawaii</i>	19.7%	15.5%	21.7%	14.5%	9.4%	6.4%	9.7%	7.5%
<i>Idaho</i>	14.6%	12.9%	16.4%	14.1%	8.5%	6.1%	8.6%	7.8%
<i>Illinois</i>	15.4%	16.6%	22.8%	23.6%	7.2%	8.6%	11.0%	11.0%
<i>Indiana</i>	12.6%	17.5%	18.6%	18.5%	5.6%	7.8%	9.0%	8.3%
<i>Iowa</i>	9.9%	12.5%	13.7%	13.8%	5.0%	7.0%	7.0%	7.2%
<i>Kansas</i>	13.3%	15.0%	14.3%	16.5%	6.1%	7.3%	8.3%	8.2%
<i>Kentucky</i>	15.0%	19.6%	23.3%	19.3%	6.9%	9.3%	10.4%	9.7%
<i>Louisiana</i>	20.4%	13.3%	23.0%	20.9%	9.2%	7.2%	11.1%	10.7%
<i>Maine</i>	13.1%	19.9%	20.6%	18.1%	6.9%	8.9%	9.8%	8.7%
<i>Maryland</i>	13.7%	16.7%	20.8%	16.5%	5.7%	6.3%	9.3%	8.1%
<i>Massachusetts</i>	10.6%	13.5%	19.1%	15.5%	4.8%	7.3%	9.7%	8.1%
<i>Michigan</i>	13.0%	23.8%	23.0%	20.3%	6.3%	12.8%	11.4%	10.3%
<i>Minnesota</i>	11.3%	15.5%	15.7%	15.8%	5.7%	8.2%	8.2%	7.7%
<i>Mississippi</i>	22.7%	22.9%	24.8%	23.4%	9.5%	10.8%	11.7%	10.9%
<i>Missouri</i>	12.5%	18.5%	17.9%	17.1%	5.7%	8.3%	9.3%	7.8%
<i>Montana</i>	16.9%	12.7%	16.2%	15.9%	9.8%	7.1%	9.0%	8.5%
<i>Nebraska</i>	10.5%	12.1%	12.5%	10.7%	5.3%	5.7%	6.6%	6.2%
<i>Nevada</i>	12.8%	12.5%	24.9%	20.6%	6.8%	7.6%	13.9%	12.2%
<i>New Hampshire</i>	11.5%	13.9%	16.0%	14.1%	4.8%	6.5%	8.0%	6.4%
<i>New Jersey</i>	14.7%	16.9%	20.6%	20.4%	6.3%	7.4%	10.4%	9.7%
<i>New Mexico</i>	18.7%	15.2%	22.8%	25.7%	8.6%	7.3%	12.6%	12.6%
<i>New York</i>	17.2%	18.5%	25.4%	20.6%	7.9%	8.1%	10.6%	9.4%
<i>North Carolina</i>	14.3%	18.1%	24.1%	21.3%	6.2%	8.5%	11.3%	9.4%
<i>North Dakota</i>	10.1%	9.2%	9.3%	12.0%	6.1%	5.8%	5.3%	6.2%
<i>Ohio</i>	13.4%	19.8%	21.1%	18.8%	6.8%	9.7%	10.1%	9.7%
<i>Oklahoma</i>	11.8%	15.1%	15.6%	19.0%	6.0%	7.5%	8.1%	9.2%
<i>Oregon</i>	17.8%	19.7%	24.4%	23.4%	8.5%	10.0%	11.7%	10.3%
<i>Pennsylvania</i>	15.6%	16.2%	21.4%	19.5%	7.3%	7.7%	10.7%	10.6%
<i>Rhode Island</i>	17.3%	15.3%	20.3%	19.9%	6.9%	8.3%	11.4%	10.1%
<i>South Carolina</i>	16.3%	21.3%	26.6%	18.8%	6.7%	9.5%	11.4%	9.7%
<i>South Dakota</i>	9.8%	11.6%	14.7%	11.2%	4.9%	5.7%	6.3%	5.2%
<i>Tennessee</i>	14.9%	19.8%	21.5%	19.7%	7.5%	8.0%	10.7%	9.4%

Appendix
Table A2
(cont.)

State	Workers under age 25				All workers*			
	2000	2007	2015	2016	2000	2007	2015	2016
<i>Texas</i>	16.3%	15.9%	15.9%	17.2%	7.4%	7.7%	8.4%	8.6%
<i>Utah</i>	10.7%	10.5%	13.1%	13.0%	5.9%	5.0%	7.5%	7.5%
<i>Vermont</i>	12.3%	15.0%	18.4%	14.8%	5.8%	7.0%	8.2%	7.1%
<i>Virginia</i>	11.1%	13.6%	21.1%	18.7%	4.2%	6.1%	9.9%	9.1%
<i>Washington</i>	20.7%	20.5%	22.4%	21.1%	9.6%	8.8%	10.9%	10.3%
<i>West Virginia</i>	20.6%	22.6%	27.9%	23.7%	10.2%	9.2%	12.4%	11.0%
<i>Wisconsin</i>	12.8%	17.8%	14.8%	13.1%	6.4%	8.4%	8.2%	7.9%
<i>Wyoming</i>	15.9%	12.0%	14.6%	16.3%	7.1%	5.6%	8.2%	10.1%
<i>United States</i>	14.9%	17.3%	21.0%	19.1%	7.0%	8.3%	10.5%	9.6%

* Includes all workers age 16 and older.

Source: EPI analysis of basic monthly Current Population Survey microdata

Economic Policy Institute

College enrollment rates of those under age 25 with at least a high school degree, by state, 2000–2016

State	2000	2007	2015	2016
<i>Alabama</i>	39.5%	34.7%	38.9%	37.7%
<i>Alaska</i>	27.0%	33.9%	23.4%	28.4%
<i>Arizona</i>	34.4%	36.3%	41.7%	40.3%
<i>Arkansas</i>	27.0%	31.7%	37.8%	34.8%
<i>California</i>	44.0%	48.3%	50.1%	50.2%
<i>Colorado</i>	28.5%	34.7%	38.7%	32.2%
<i>Connecticut</i>	45.8%	46.7%	51.5%	53.8%
<i>Delaware</i>	35.3%	41.1%	39.6%	42.5%
<i>District of Columbia</i>	36.1%	39.6%	37.4%	38.1%
<i>Florida</i>	37.5%	38.1%	43.2%	44.9%
<i>Georgia</i>	29.6%	43.7%	41.9%	42.3%
<i>Hawaii</i>	42.5%	39.8%	38.9%	36.7%
<i>Idaho</i>	31.1%	27.5%	37.5%	36.1%
<i>Illinois</i>	37.6%	45.3%	46.6%	47.8%
<i>Indiana</i>	36.6%	37.8%	39.1%	35.0%
<i>Iowa</i>	37.6%	41.2%	37.7%	35.9%
<i>Kansas</i>	45.0%	41.6%	41.7%	37.2%
<i>Kentucky</i>	39.9%	36.7%	35.7%	36.9%
<i>Louisiana</i>	38.2%	39.9%	36.0%	37.6%
<i>Maine</i>	34.2%	41.0%	32.1%	41.1%
<i>Maryland</i>	38.4%	47.3%	39.4%	42.7%
<i>Massachusetts</i>	39.6%	46.4%	44.2%	42.7%
<i>Michigan</i>	37.5%	45.0%	38.5%	39.1%
<i>Minnesota</i>	35.0%	43.6%	41.9%	41.4%
<i>Mississippi</i>	38.1%	40.0%	37.5%	39.1%
<i>Missouri</i>	37.1%	38.2%	38.4%	35.1%
<i>Montana</i>	34.3%	34.4%	33.6%	36.7%
<i>Nebraska</i>	37.6%	41.8%	40.4%	41.1%
<i>Nevada</i>	31.7%	29.5%	35.6%	34.6%
<i>New Hampshire</i>	35.9%	41.8%	33.8%	37.8%
<i>New Jersey</i>	43.5%	49.4%	52.8%	49.1%
<i>New Mexico</i>	38.8%	45.3%	44.1%	37.5%
<i>New York</i>	42.4%	48.6%	47.7%	50.7%
<i>North Carolina</i>	32.1%	41.2%	39.1%	42.1%
<i>North Dakota</i>	37.2%	39.9%	34.4%	36.1%
<i>Ohio</i>	38.2%	38.6%	39.2%	41.9%
<i>Oklahoma</i>	35.0%	38.8%	30.2%	31.4%
<i>Oregon</i>	29.6%	34.3%	36.6%	38.4%
<i>Pennsylvania</i>	41.2%	40.3%	40.3%	40.5%
<i>Rhode Island</i>	37.6%	44.0%	42.3%	45.2%
<i>South Carolina</i>	37.0%	38.8%	36.0%	39.8%
<i>South Dakota</i>	32.9%	34.9%	34.4%	35.4%
<i>Tennessee</i>	36.1%	39.0%	36.7%	33.9%
<i>Texas</i>	34.2%	41.3%	40.8%	40.2%
<i>Utah</i>	33.7%	33.1%	35.7%	37.4%

Appendix
Table A3
(cont.)

State	2000	2007	2015	2016
Vermont	38.2%	40.7%	36.8%	36.3%
Virginia	38.3%	39.4%	42.3%	41.6%
Washington	36.4%	31.2%	30.4%	32.1%
West Virginia	34.9%	31.1%	33.9%	35.7%
Wisconsin	30.4%	37.7%	42.0%	39.3%
Wyoming	36.6%	35.0%	35.9%	38.2%
United States	37.9%	41.8%	42.2%	42.3%

Note: Data are limited to those age 17–24.

Source: EPI analysis of basic monthly Current Population Survey microdata

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