

**Economic
Policy
Institute**

Class of 2018

High school edition

Report • By [Elise Gould](#), [Zane Mokhiber](#), and [Julia Wolfe](#) • June 14, 2018

Summary

The members of the high school Class of 2018 who enter the labor market right after graduating have better job prospects than members of the Classes of 2009–2017 did, a result of the steady (if slow) progression of the economic recovery and substantial declines in the unemployment rate since the Great Recession. However, compared with those who graduated into the 2000 labor market, the Class of 2018 still faces real economic challenges, as demonstrated by elevated levels of underemployment as well as worsened wage gaps for black workers.

Those high school graduates who wish to pursue further education also face significant challenges. Because of stagnating family incomes and the rising cost of a college degree, many young high school graduates are only able to access the benefits (economic and otherwise) of a college degree by taking on significant debt. And many take on such debt without actually experiencing significantly improved employment outcomes after college; this is particularly likely to be true for those who complete some college but do not graduate and those who attend for-profit colleges.

The economy needs to continue on track toward full employment for economic growth to reach all corners of the labor market while ensuring equal access to the economic (and intrinsic) benefits of a college education.

Overview and key findings

In this study, we analyze data on recent young high school graduates (ages 18–21) to learn about the Class of 2018’s economic prospects as they start their careers. We begin the report by providing a snapshot of the educational attainment of all young adults in this age group (not just graduates) and of all working-age adults (ages 18–64) to provide context and get a sense of these graduates’ likely future educational prospects. In the second section, we look specifically at those in this age group who have

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graduated from high school to learn what shares of these young adults are now enrolled in further schooling, employed, both, or neither. Third, we narrow our focus to only those graduates who are not enrolled in further schooling to find out how they are faring in the labor market—specifically, looking at their unemployment and underemployment rates. In the fourth section, we analyze the wages of those who are employed (and not enrolled in further schooling), making comparisons with wages in earlier periods as well as looking at important differences by gender and race/ethnicity. In the fifth and final section, we discuss the challenges facing those students who wish to pursue a college degree: stagnating family incomes, the rising price of college and resulting student loan debt, uncertain future wage prospects, and the complicating role of for-profit colleges.

This report focuses exclusively on those graduating from high school. Outcomes for recent college graduates are the subject of a separate report, *Class of 2018: College Edition* (Gould, Mokhiber, and Wolfe 2018).

Key findings

While 44.1 percent of all 18- to 21-year-olds have some college education, the vast majority (68.2 percent) of the overall working-age population (ages 18–64) do not have a four-year college degree.

- About one in three young adults (ages 18–21) have a high school diploma only. One in five have less than a high school diploma.
- Young men are more likely to have not yet completed high school than young women.
- Young women are more likely than young men to enroll in college right away after graduating from high school.
- Asian Americans/Pacific Islanders are significantly more likely to have begun on the college path at this age than any other racial/ethnic group.

The share of young high school graduates who are employed only (not enrolled in further schooling) has declined significantly since 1990, while the share who are enrolled only (and not employed) has increased.

- A larger share of high school graduates are idled—neither employed nor enrolled in further schooling—now than they were when the economy was at full employment in 2000.
- Young male graduates are more likely to be employed only than young female graduates, but they are less likely to be enrolled and employed simultaneously.
- Young black high school graduates have the highest likelihood of being idled, while Asian Americans/Pacific Islanders are the group least likely to be sidelined.

Roughly one in eight young high school graduates not enrolled in further schooling are unemployed. This share is below where it was before the start of the Great Recession but higher than it was when the economy was at full employment in 2000.

- Among these young graduates, all racial/ethnic groups except Asian Americans/Pacific Islanders have higher rates of unemployment in 2018 than they did in 2000.
- The black unemployment rate remains far higher than the rate for any other group and is about twice as high as the white unemployment rate.

The *underemployment* rate for high school graduates in this age group currently sits at 25.0 percent, slightly above where it was in 2007.

- Among these graduates, both genders and all racial/ethnic groups have higher underemployment rates now than they did in 2000.
- Black underemployment among this group is 40.5 percent, much higher than its 2000 level (33.9 percent). The black underemployment rate also continues to be much higher than the rates for young white, Hispanic, and Asian American/Pacific Islander graduates.

From 1990 to 2018, average wages for young high school graduates grew only 9.7 percent in total. And if it hadn't been for the expansionary economy of the late 1990s and 2000, wages would actually be 4.3 percent *lower* today than in 1990.

- The gender wage gap for young high school graduates narrowed over the past 18 years due to a slight increase in women's wages and a decline in men's wages. The current gap is \$1.31 per hour, or about \$2,700 per year for a full-time worker.
- Asian American/Pacific Islander graduates still have the highest wages of any group at \$12.53 per hour, while black graduates have the lowest hourly pay at \$10.46 per hour.
- Between 2000 and 2018, white high school graduates experienced a mild loss in wages of 0.7 percent while black graduates experienced a larger drop in pay of 4.4 percent, increasing the black–white pay gap to 11.4 percent.

As incomes stagnate and the price of college increases, students must increasingly rely on loans to finance their education, further complicating the decision to enroll in college.

- Black students take on a disproportionate amount of debt, in part because their families generally accumulate less wealth than white families.
- Those who take on student debt but do not complete their degree are more likely to have trouble repaying their loans.
- Students at for-profit colleges generally take on more debt than students at nonprofit private and public schools do, but they are less likely to finish their degrees.

Notes about our data sample

Throughout this report, we examine the outcomes for young high school graduates, whom we define as adults between the ages of 18 and 21 with a high school diploma but without a bachelor's degree. When looking at labor market outcomes (unemployment/underemployment rates and average wages), we further restrict our sample to only those young high school graduates who have not taken any college classes and are not enrolled in further schooling.

Most of the analysis in this report uses Current Population Survey (CPS) basic monthly microdata. For the wage analysis, we use CPS Outgoing Rotation Group (ORG) microdata; in the ORG survey, a quarter of the respondents to the CPS basic survey are asked additional questions about wages.

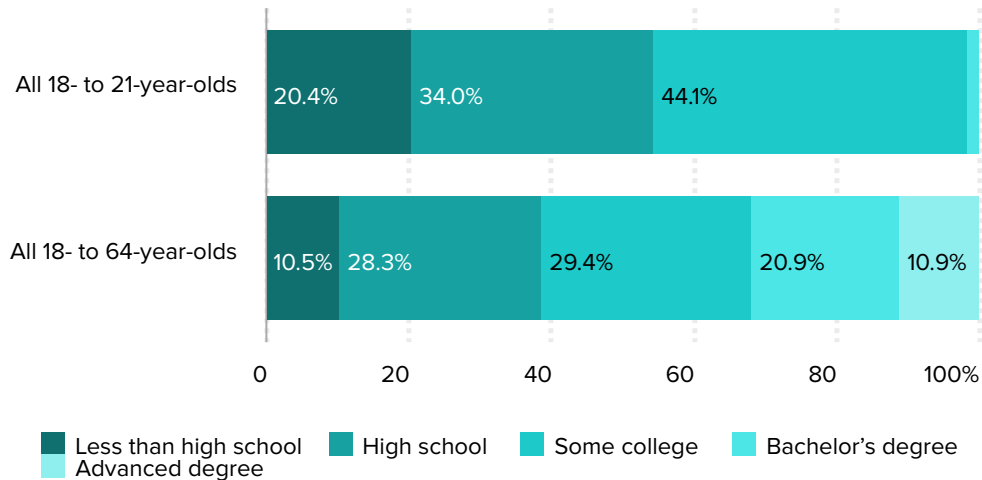
Because we are examining such a small subset of the population, we use moving averages to increase the sample size and mitigate some of the volatility in the series. Unless otherwise specified, when looking at “overall” trends in the data, we use a 12-month moving average, which also has the added advantage of removing any seasonal effects. We use 36-month averages to look at trends by gender and race/ethnicity, since breaking the population down by demographics restricts the sample further and therefore any conclusions we can draw from it. In general, that means that analyses for 2018 use the most recent 36-month period, specifically March 2015 through February 2018. Our comparison of longer-run trends by gender and race/ethnicity uses two fixed points in time: the most recent 36-month period and the averages of January 1998 through December 2000, when the economy was close to or at full employment. Occasionally we use 2007 as a third comparison point in the text of this paper, which, when using 36-month averages, refers to the averages of January 2005 through December 2007.

The CPS asks respondents about both race and ethnicity, so respondents may be categorized as having Hispanic ethnicity and being of any race. To avoid including observations in multiple categories, we create five mutually exclusive categories for race/ethnicity: white (non-Hispanic), black (non-Hispanic), Hispanic (any race), Asian American and Pacific Islander (non-Hispanic; sometimes referred to as “AAPI” in this report), and “other.” Because of sample limitations, we do not report the results of our analysis for this “other” group. Likewise, gender is restricted to the two predominant binary categories: women and men.

Figure A

The majority of adults have less than a four-year college degree

Shares of 18- to 21-year-olds and 18- to 64-year-olds with a given level of education, 2018



Note: The 2018 analysis here uses the average of the most recent 36 months, March 2015–February 2018.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau

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What are the likely future educational prospects for young high school graduates?

Figure A displays the shares of all 18- to 21-year-olds and all 18- to 64-year-olds by highest level of educational attainment. Looking at these data allows us to compare the educational attainment of those just beginning their careers with that of the entire working-age population, and to draw conclusions about the likely eventual educational attainment of those just graduating from high school.

One in five 18- to 21-year-olds have not graduated from high school; this share shrinks to one in ten for 18- to 64-year-olds, suggesting that about half of those young people who have not yet finished high school will eventually receive a high school diploma. Just over one-third of 18- to 21-year-olds have a high school diploma and no further education, while 44.1 percent have “some college.”¹ Very few young adults between the ages of 18 and 21 have graduated from college.²

While many of the 18- to 21-year-olds with a high school diploma or some college will go on to obtain at least a bachelor’s degree, adults without a four-year college degree still

make up the majority of the overall working-age population (68.2 percent). When considering how to strengthen the economy, policymakers should remember that most workers will never attain a four-year college degree and that these workers need viable options in the labor market to reach a reasonable standard of living with decent wages, work supports, and benefits.

Figure B displays the shares of 18- to 21-year-olds at each level of educational attainment, overall and by gender and race/ethnicity. The overall shares clearly mask important differences among demographic groups. Young men are less likely to have completed high school than young women, and young women are more likely to go on to college right away than young men. (As discussed in *The Class of 2018: College Edition*, among 21- to 24-year-olds, women are also more likely than men to have completed a bachelor's degree [Gould, Mokhiber, and Wolfe 2018].) Asian Americans/Pacific Islanders are significantly more likely to have begun on the college path by ages 18–21 than members of any other racial/ethnic group, while Hispanic young adults are least likely to have a high school diploma.

What are recent high school graduates doing?

In this section, we look at the employment and enrollment outcomes of young adults with a high school diploma but without a college degree, whom we refer to as “young high school graduates.” We group these graduates into four mutually exclusive categories based on their outcomes: employed and not enrolled (“employed only”), employed and also enrolled in further schooling (“enrolled and employed”), enrolled in further schooling and not employed (“enrolled only”), and neither employed nor enrolled in further schooling (“idled”). **Figure C**, which shows the share of all young high school graduates that are experiencing each outcome, uses 12-month moving averages to ensure an adequate sample. **Figure D** shows outcomes by gender and race/ethnicity; these outcomes are based on a three-year moving average to allow us to make these comparisons.

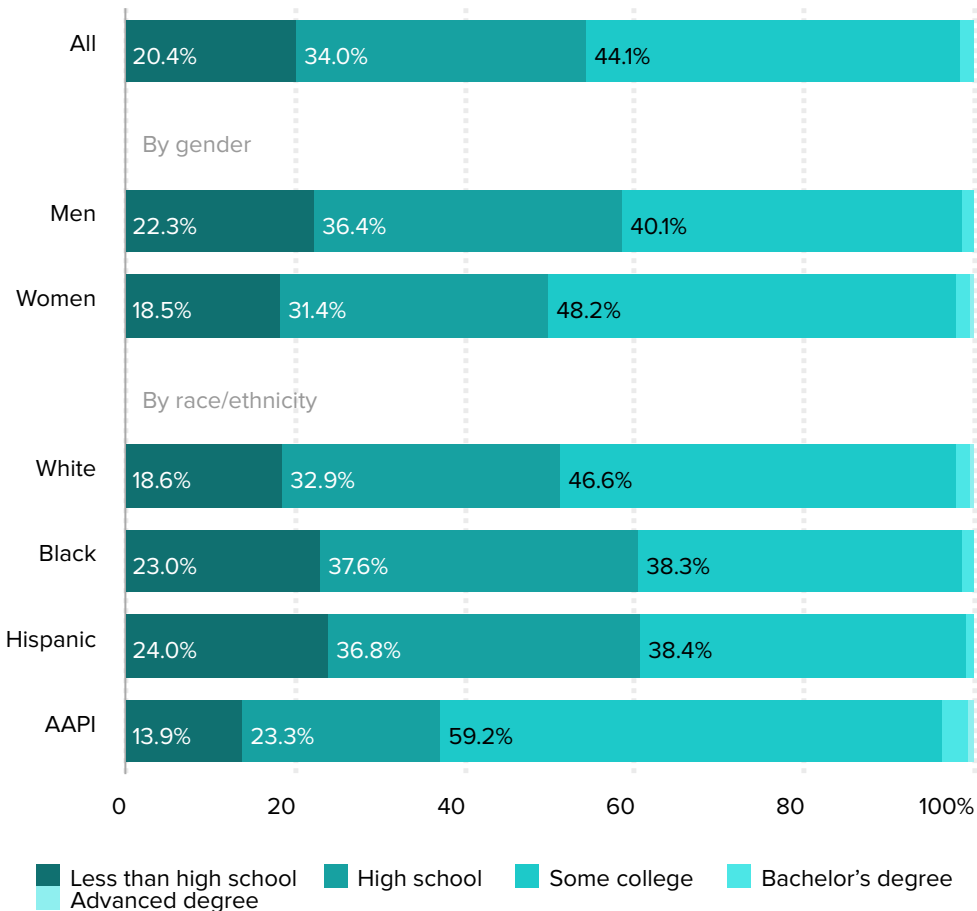
Figure C shows that the share of young high school graduates who are employed (the sum of those who are “employed only” and those who are “employed and enrolled”) has declined significantly since 1990, driven by the declining share of young graduates who are employed and not enrolled in further education (“employed only”). In 1990, 44.3 percent of young high school graduates were employed only. That share declined over the next 20 years, particularly during the Great Recession, bottoming out in 2010 when roughly a quarter of young graduates were employed only. Since 2010, the employed-only share has increased somewhat, although it remains below its pre-recession level.

The share of young high school graduates who are enrolled in further education without being employed (“enrolled only”) has increased steadily from one in five in 1990 to nearly one in three in 2018. During the immediate aftermath of the Great Recession, the enrolled-only share was slightly above trend, although it has softened a bit since 2012. For most of the period shown in Figure C, the enrolled-only share mirrors the share of graduates who

Figure B

Educational attainment among young adults varies by gender and race/ethnicity

Shares of 18- to 21-year-olds with given level of education, overall and by gender and race/ethnicity, 2018



Notes: AAPI stands for Asian American/Pacific Islander. The 2018 analysis here uses the average of the most recent 36 months, March 2015–February 2018.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau

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are employed only—that is, when the employed-only share goes up, the enrolled-only share goes down, and vice versa. However, the enrolled-only share remained mostly flat in the last few years, while the employed-only share was increasing.

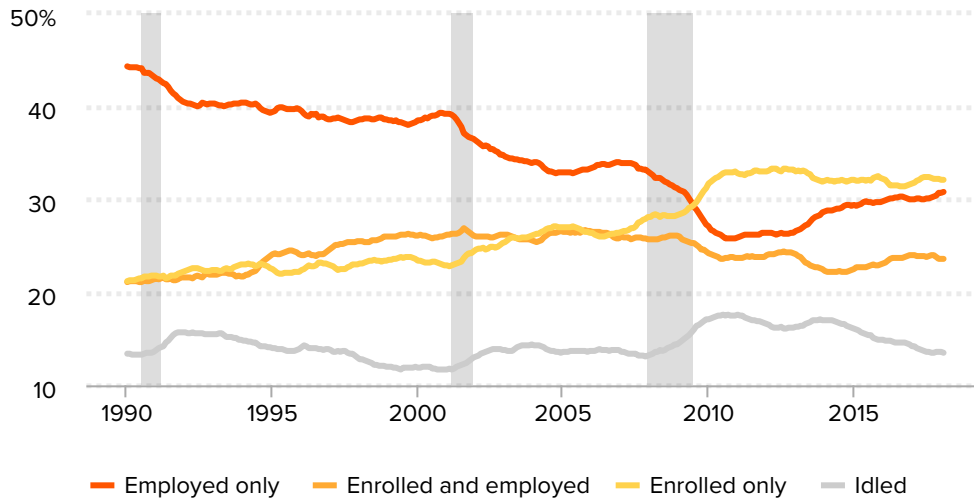
The share of young high school graduates who are enrolled and employed simultaneously has changed little since 1990, increasing slightly through the 1990s, holding steady in the 2000s, and then falling again in the 2010s. From 1990 through the beginning of the Great Recession, this share increased in tandem with the increasing enrolled-only share.

However, while the enrolled-only share continued to increase in the immediate aftermath of the Great Recession, the enrolled-and-employed share began to decline.

Figure C

What are young high school grads doing?

Shares of young high school graduates (ages 18–21) by employment and enrollment outcomes, 1990–2018



Notes: “Idled” refers to those who are neither employed nor enrolled in further schooling. This series is based on a 12-month moving average. The most recent data point is the average of March 2017 through February 2018. Shaded areas denote recessions.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau

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While some of the decline in the employment shares during the Great Recession is reflected in the increasing enrolled-only share, there was also a pickup in the share that were idled (neither employed nor enrolled). On the eve of the recession, 13.2 percent of recent high school graduates found themselves idled. During the recession, that share peaked at 17.6 percent, and it has since declined to just above its pre-recession level, now at 13.5 percent. Still, a larger share of high school graduates are idled now than were when the economy was at full employment in 2000, when the idled rate dropped to a low of 11.7 percent.

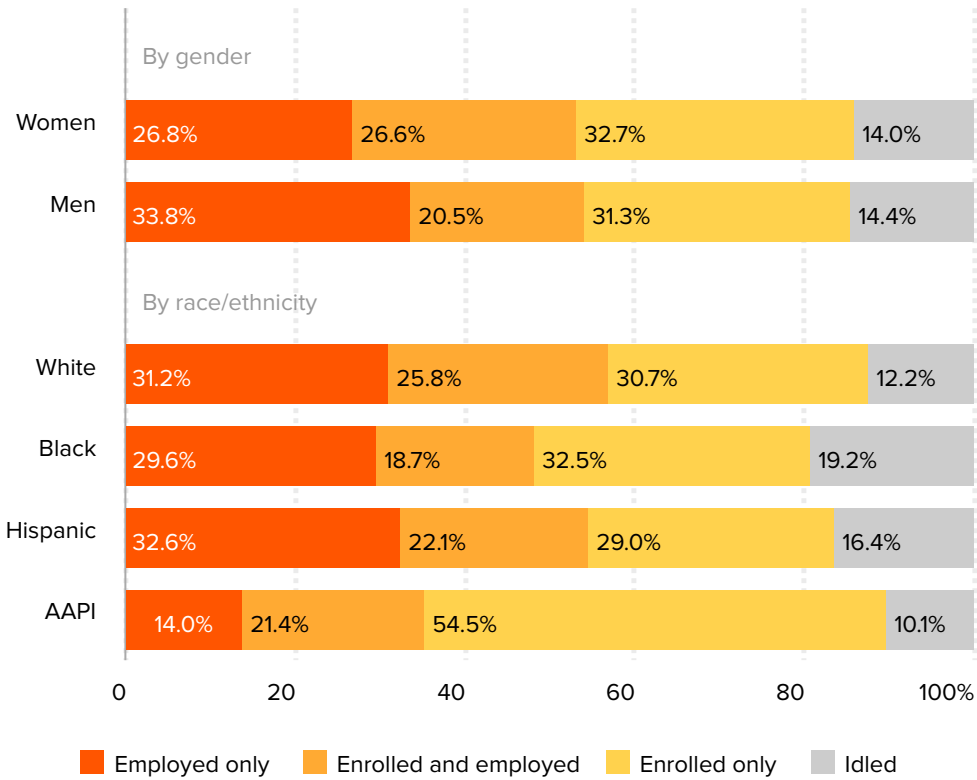
Figure D illustrates, by gender and race/ethnicity, what young high school graduates are doing now, using the same four mutually exclusive categories: employed only (dark orange), employed and enrolled (light orange), enrolled only (yellow), and idled (gray). The first set of bars shows the differences in outcome shares by gender and the next set shows differences by race and ethnicity.

To highlight total employment, we examine the dark orange (“employed only”) and light orange (“enrolled and employed”) bars combined. The overall employment rate for men and women is quite similar. However, men are more likely to be employed only, while women are more likely to be enrolled and employed simultaneously. Similar shares of men and women are enrolled only, but, because of their higher enrolled and employed rate, women have a higher overall enrollment rate. Male and female graduates are also idled at similar rates.

Figure D

Most young high school graduates are enrolled in further schooling

Employment and enrollment outcomes of young high school graduates (ages 18–21), by gender and race/ethnicity, 2018



Notes: AAPI stands for Asian American/Pacific Islander. “Idled” refers to those who are neither employed nor enrolled in further schooling. The 2018 analysis here uses the average of the most recent 36 months, March 2015–February 2018.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau

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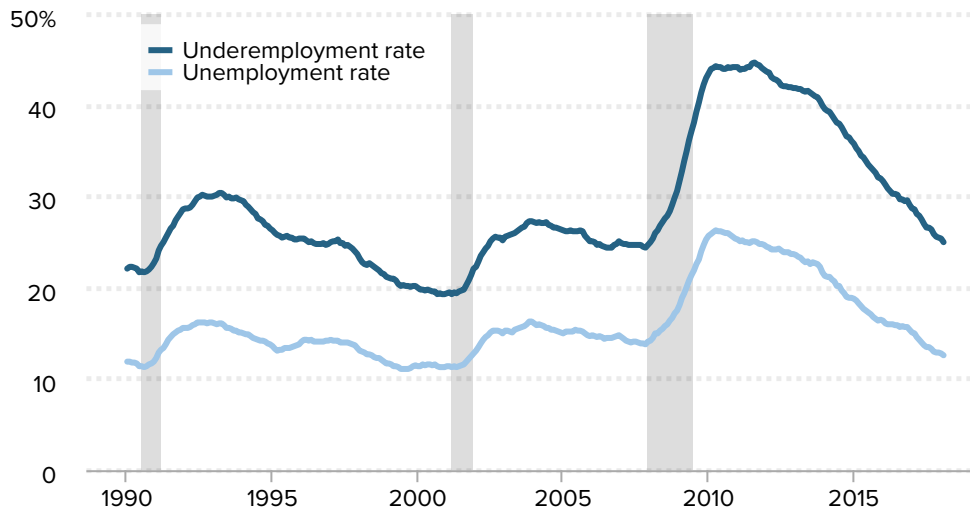
Three-quarters of young Asian American/Pacific Islander (AAPI) graduates are enrolled in further education, a much larger share than any other racial group. This difference is driven by the fact that these graduates are far more likely to be enrolled only. In fact, 54.5 percent of young AAPI graduates are enrolled only, a greater share than the *overall* enrollment shares for both Hispanic and black graduates (the sum of enrolled-only shares and enrolled-and-employed shares for those groups). Only 14.0 percent of AAPI graduates are employed only, making them less than half as likely as the other groups to be employed but not enrolled.

Asian Americans and Pacific Islanders are the group least likely to be idled (10.1 percent), while young black high school graduates have the highest likelihood of being sidelined (19.2 percent). Hispanic graduates are also more likely than their white or AAPI peers to be idled.

Figure E

The unemployment and underemployment rates for young high school grads are still higher than in 2000

Unemployment and underemployment for young high school graduates (ages 18–21) not enrolled in further schooling, 1990–2018



Notes: This series is based on a 12-month moving average. The most recent data point is the average of March 2017 through February 2018. Shaded areas denote recessions.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau

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What are the employment prospects for recent high school graduates not enrolled in further schooling?

In this section, we examine unemployment and underemployment rates for young high school graduates. To do this, we narrow the sample of young high school graduates to those who are not currently enrolled in further schooling. This allows us to better assess the employment prospects of otherwise similar groups. **Figure E** presents unemployment and underemployment rates for young high school graduates, showing that both of these rates shot up during the Great Recession and its immediate aftermath.

The unemployment rate reflects the share of people in the labor market who are jobless and have reported that they are actively seeking work. The unemployment rate for young high school graduates is currently 12.6 percent, meaning that one in eight young high school graduates are unemployed. The rate of unemployment has improved significantly in the last several years as the economy has improved, and the young high school graduate unemployment rate is now 1.5 percentage points below where it was before the start of the Great Recession in December 2007 (14.1 percent). However, it remains higher than it was in 2000 (11.3 percent), when the economy was last at levels unambiguously

approaching full employment. Furthermore, the current unemployment rate likely understates the slack in the labor market, given that, in recent months, seven out of 10 newly employed workers were not actively searching for work in the prior month (Gould 2018b)—these workers would not have been counted in the official unemployment rate, even though they were clearly interested in working.

Looking at the *underemployment* rate also broadens our understanding of the labor market for young high school graduates. The underemployment rate for high school graduates ages 18–21 currently sits at 25.0 percent, just slightly above where it was in December 2007 (24.7 percent). This rate includes the officially unemployed (see above), but also includes “involuntary” part-timers (those who are working 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 who have given up actively seeking work in the last four weeks and therefore are not captured in the official unemployment rate). This suggests that many young high school graduates are still having difficulty finding full-time jobs or are working in positions in which they are underutilized. In a full-employment economy, the young high school graduate underemployment rate would be significantly lower. In 2000, it hit a low of 19.3 percent. (Still, this means that even in a strong economy, nearly 1 in 5 graduates were having a hard time finding full-time work.)

Figure F compares the unemployment rate by gender and race/ethnicity in 2018 with the rate in 2000, the last time the economy was at or close to full employment. While the overall unemployment rate (shown in Figure E) has dropped below its pre-recession level and is creeping down toward its 2000 level, some groups are faring better than others.

Although the unemployment rate for young men with a college degree tends to be higher than for young women with a college degree (Gould, Mokhiber, and Wolfe 2018), among young high school graduates the levels and trends are quite similar across genders. Both men and women continue to have higher unemployment rates today than in 2000.

Except for young Asian Americans and Pacific Islanders, the racial/ethnic groups studied have higher rates of unemployment in 2018 than they did in 2000. The white unemployment rate is significantly higher, increasing from 8.9 percent to 11.9 percent. Hispanic unemployment is 2.2 percentage points higher than it was in 2000. The black unemployment rate is far higher than the rate for any other group and is about twice as high as the white unemployment rate (23.5 percent versus 11.9 percent).

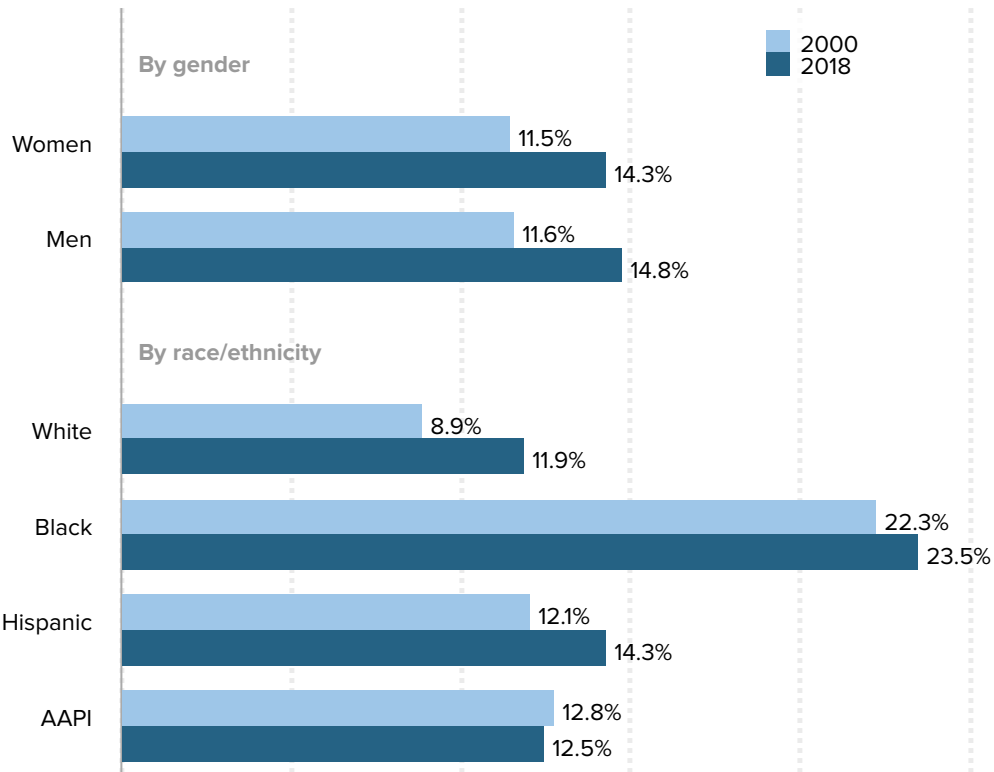
One would think there would be little disparity in the unemployment rates of young high school graduates, who have the same basic level of education and are in the same labor market position (i.e., high school diploma only, ages 18–21, not enrolled in school, and either employed or actively seeking work). It is notable that having an equivalent amount of education and little variation in work experience (given their young age) still does not result in parity in unemployment rates across races and ethnicities. This suggests other factors may be at play, such as discrimination or unequal access to the informal networks that often lead to job opportunities.

Figure G shows underemployment rates for young high school graduates, which, like most of their unemployment rates, are elevated above their 2000 levels, but to a greater

Figure F

Among young high school grads, almost all gender and racial/ethnic groups face higher unemployment rates today than in 2000

Unemployment rates of young high school graduates (ages 18–21) not enrolled in further schooling, by gender and race/ethnicity, 2000 and 2018



Notes: AAPI stands for Asian American/Pacific Islander. Data for 2000 and 2018 use an average of January 1998–December 2000 and March 2015–February 2018, respectively.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau

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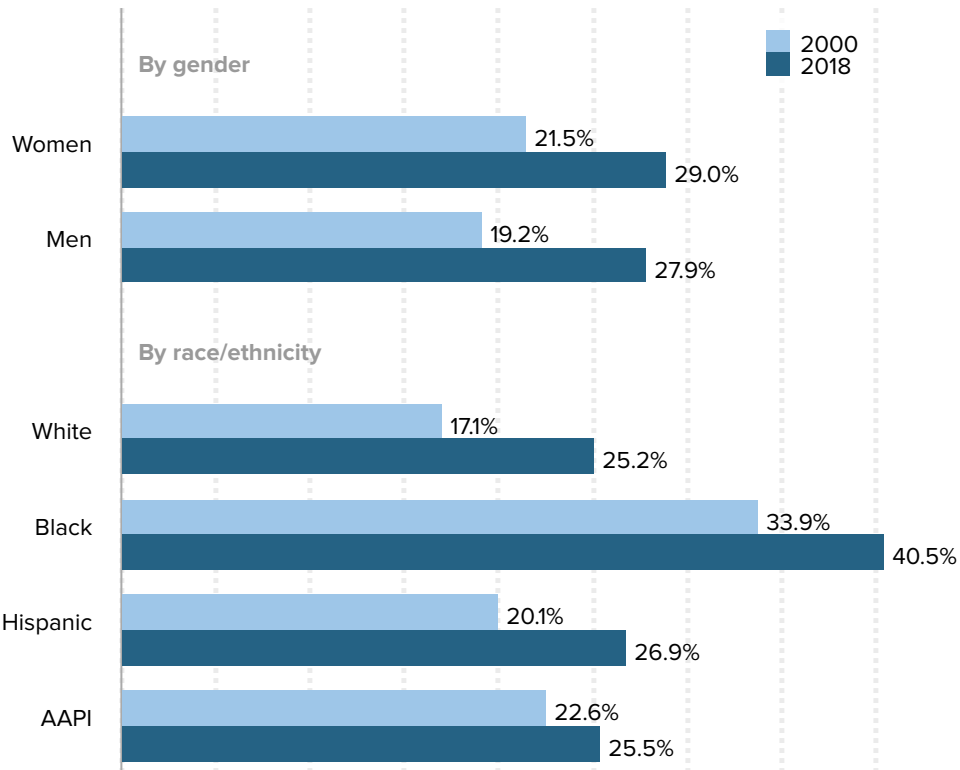
degree. The increases in underemployment rates have been substantially larger than the increases in unemployment. And key differences in the underemployment rates of different demographic groups persist in 2018, as they do with unemployment rates.

The underemployment rate for young women with a high school diploma is slightly higher than that for men, while the rates for both are much higher today than in 2000. Black underemployment is 40.5 percent, much higher than its 2000 level (33.9 percent) and also much higher than the 2018 levels for their white, Hispanic, and AAPI peers. AAPI high school graduates have the smallest gap between their underemployment rate today and their 2000 rate, but it's still 2.9 percentage points higher now.

Figure G

Among young high school grads, all gender and racial/ethnic groups face significantly higher underemployment rates today than in 2000

Underemployment rates of young high school graduates (ages 18–21) not enrolled in further schooling, by gender and race/ethnicity, 2000 and 2018



Notes: AAPI stands for Asian American/Pacific Islander. Data for 2000 and 2018 use an average of January 1998–December 2000 and March 2015–February 2018, respectively.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau

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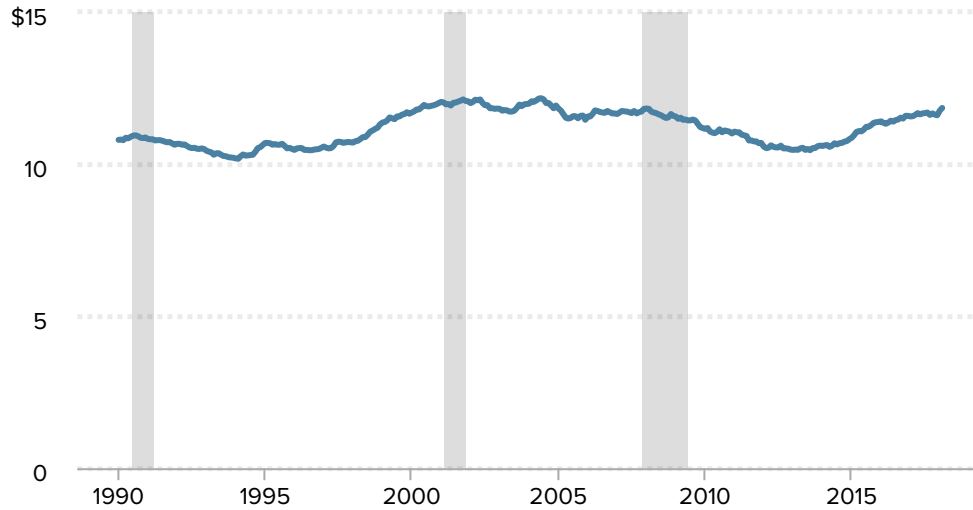
What are the wages of young high school graduates not enrolled in further schooling?

Over much of the last three decades, wage growth for young high school graduates has been essentially flat. **Figure H** presents average hourly wages for young high school graduates (ages 18–21, not enrolled in further schooling) from 1990 to 2018 (in 2017 dollars). Over that entire period, average wages cumulatively grew only 9.7 percent. If it hadn't been for the wage growth spurred by the extended period of very low unemployment in the late 1990s and 2000, wages would be 4.3 percent lower today than

Figure H

Wages of young high school graduates today are still below their 2000 levels

Real hourly wages of young high school graduates (ages 18–21) not enrolled in further schooling, 1990–2018



Notes: The wage series is based on a 12-month moving average. The most recent data point is the average of March 2017 through February 2018. Dollar amounts are adjusted for inflation to 2017 dollars. Shaded areas denote recessions.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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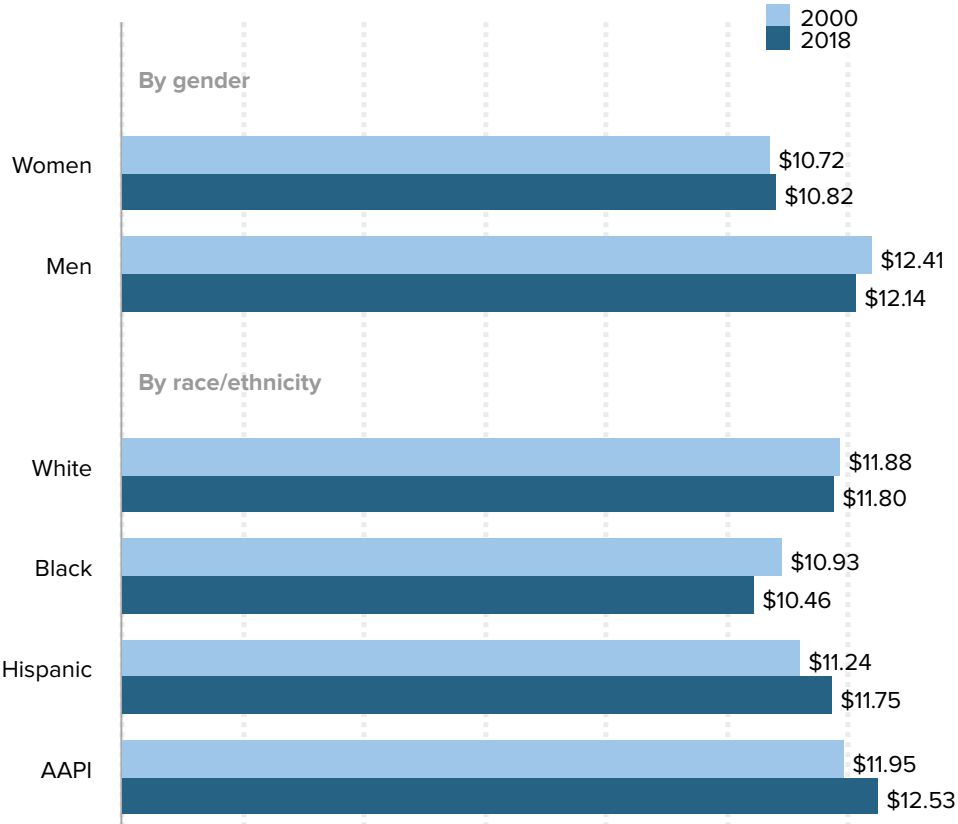
in 1990. Wages at the last business cycle peak in 2007 were below where they were in 2000. And then the Great Recession hit, and young high school graduates experienced the loss in wages felt throughout the economy. Wages for young high school graduates have been slowly recovering lost ground since 2013 and have just reached where they were in 2007, immediately before the Great Recession hit; however, they are still 1.3 percent lower than they were in 2000. In today's tightening labor market, we should expect to see continued and stronger wage growth, which should help make up for losses experienced by young high school graduates in the aftermath of the Great Recession. But a high-pressure labor market will have to be sustained for quite some time to offset the longer-run wage stagnation this group has experienced.

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 2018a). Like graduates ages 18–21, high school graduates in the labor force at large (all workers ages 18–64) saw a brief period of strong wage growth in the 1990s, but have had stagnant wages since—with their wages rising only 2.1 percent from 2000 to 2018 (Gould 2018a). 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).

Figure I

Among young high school grads, men and black workers have lower wages today than in 2000

Real hourly wages of young high school graduates (ages 18–21) not enrolled in further schooling, by gender and race/ethnicity, 2000 and 2018



Notes: AAPI stands for Asian American/Pacific Islander. Average wages for 2000 and 2018 use an average of January 1998–December 2000 and March 2015–February 2018, respectively, adjusted for inflation to 2017 dollars.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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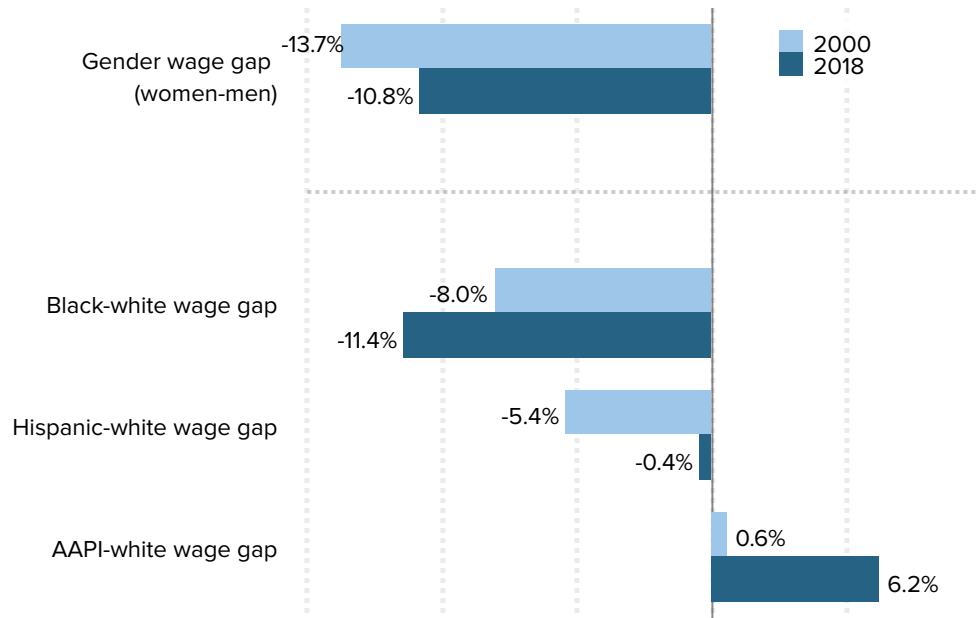
In 2018, young workers with a high school diploma have an average hourly wage of \$11.85, which translates to annual earnings of around \$24,600 for a full-time, full-year worker. This overall average masks important differences in wages by gender and race. **Figure I** looks at average wages for young men and women with a high school diploma as well as for young white, black, Hispanic, and Asian American/Pacific Islander (AAPI) high school graduates, in 2000 and 2018, using a three-year average for more reliable comparisons among groups and across time. **Figure J** compares wage gaps between women and men as well as between white workers and black, Hispanic, and AAPI workers, in turn.

Young women with a high school diploma have average hourly wages of \$10.82 in 2018, just barely above their 2000 wage of \$10.72, an increase of just under 1.0 percent. Over

Figure J

Among young high school grads, the gender wage gap has narrowed and the black–white wage gap has widened since 2000

Average gender and racial/ethnic wage gaps for employed young high school graduates (ages 18–21) not enrolled in further schooling, 2000 and 2018



Notes: AAPI stands for Asian American/Pacific Islander. Wage gaps are calculated from average wages for 2000 and 2018 using an average of January 1998–December 2000 and March 2015–February 2018, respectively, adjusted for inflation to 2017 dollars.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata from the U.S. Census Bureau

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this same time, men’s wages fell from \$12.41 to \$12.14, a decline of 2.2 percent. These different trends have meant that the gender wage gap for young high school graduates has fallen over the last 18 years from 13.7 percent to 10.8 percent (as shown in Figure J). The current gap of \$1.31 per hour translates into about \$2,700 per year for a full-time worker, still a substantial difference in pay.

The second set of bars in Figure I shows average wages for young white, black, Hispanic, and AAPI high school graduates in 2000 and 2018. AAPI graduates still have the highest wages of any group, at \$12.53 per hour, while black graduates have the lowest hourly pay at \$10.46 per hour, a difference of more than two dollars. Asian American/Pacific Islander and Hispanic high school graduates saw the strongest wage growth between 2000 and 2018, at 4.9 percent and 4.5 percent, respectively. White and black high school graduates both saw declines in pay between 2000 and 2018, though for whites it was only a mild decline, 0.7 percent. Black high school graduates experienced a larger drop in pay of 4.4 percent.

The second set of bars in Figure J compares black, Hispanic, and AAPI wages with white wages in both 2000 and 2018. Asian Americans/Pacific Islanders have seen an increase to their pay premium vis-à-vis white high school graduates, moving from near equality to a 6.2 percent advantage. Gains in Hispanic pay alongside mild losses in white pay have essentially closed the Hispanic–white wage gap. Although both white and black graduates saw declines in pay between 2000 and 2018, the losses were much larger for black graduates, increasing the black–white pay gap to 11.4 percent by 2018.

Financial challenges facing those who want to pursue higher education

As they prepare to graduate from high school, young people are faced with one of their first major life decisions: whether to enter the workforce or enroll in some form of higher education. There is immense societal pressure on high school graduates to go to college; for many, the idea that a college degree is needed to achieve a middle-class lifestyle is a foregone conclusion. Statements like “from almost any individual’s perspective, college is a no-brainer. It’s the most reliable ticket to the middle class and beyond,” from *The New York Times*, reinforce this idea (Leonhardt 2014).

To be clear, the average economic benefits an individual gains from attending college are large. But the decision of whether to attend college is more complicated than just examining average differences in wages or employment between those with and without a college degree. This is particularly true for those who are starting out with limited financial resources. While college graduates, on average, have higher wages than workers without a college degree, increasing costs of college mean additional obstacles to enrolling in college. And a corresponding rise in the financing of education through student loans means that students who choose to go to college often take on financial risks and burdens that could have long-term consequences for their financial security and well-being.

Amid the immense pressure to go to college combined with the financial barriers to entry, many for-profit institutions have sprung up in recent decades, using aggressive marketing strategies while facilitating financial aid processing in order to enroll large numbers of students (Cottom 2017). These for-profits schools are often more costly than traditional public or private nonprofit schools and yet confer lower economic returns to their graduates (Looney and Yannelis 2015). Students who borrow money to attend for-profit colleges take on more student loan debt, on average, than traditional students (NCES 2017a); they are more likely to leave college without finishing their degree; and they are more likely to default or be delinquent on student loans (Looney and Yannelis 2015).

Family incomes have stagnated while college costs have risen dramatically

Though the Great Recession officially ended in June 2009, the recovery following it has been slow, and family incomes by 2016 were just slightly above their 2007 levels (U.S.

Census Bureau 2017). It is likely that many of the families of the students in the Class of 2018 faced real financial challenges because of job loss or depressed wages after the Great Recession and have only recently seen their incomes begin to recover.

The cost of higher education has risen faster than typical family incomes, making it harder for families to pay for college. Many students face financial challenges in addition to paying tuition, such as food and housing insecurity or the need to contribute to their family's household income (Goldrick-Rab 2016). From the 1978–1979 enrollment year to the 2017–2018 enrollment year, the inflation-adjusted cost of a four-year education, including tuition, fees, and room and board, increased 173.0 percent for private school and 160.0 percent for public school. Median family income increased only 22.7 percent over this 38-year period, leaving families and students increasingly unable to pay for most colleges and universities in full (College Board 2017b; U.S. Census Bureau 2017).

During the downturn, college tuition increased to make up for endowment losses (mostly at private universities) and funding cuts (at public universities), further shifting the costs of college onto students and their families. 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; in response, public colleges and universities steeply increased tuition (Mitchell, Leachman, and Masterson 2016). Other sources show a similar trend.

Figure K shows that, from 1992 to 2017, full-time enrollment increased while educational appropriations per full-time-equivalent student decreased in real terms (SHEEO 2018). Figure K also shows that over time students have taken on an increasing share of the cost burden for public education, with tuition's share of total educational revenue rising from less than one-third (28.8 percent) in 1992 to nearly one-half (46.4 percent) in 2017. In 28 states, the tuition share was greater than 50 percent in 2017 (SHEEO 2018).

In the 2017–2018 school year, the total cost of attendance for an on-campus student—including in-state tuition, books, room and board, and transportation expenses—at a four-year in-state public school averaged \$25,290. For a four-year private nonprofit school, it was \$50,900 (College Board 2017a). Including total grant aid and tax benefits, public four-year in-state costs still averaged about \$19,460, or \$30,690 for a four-year private nonprofit school.

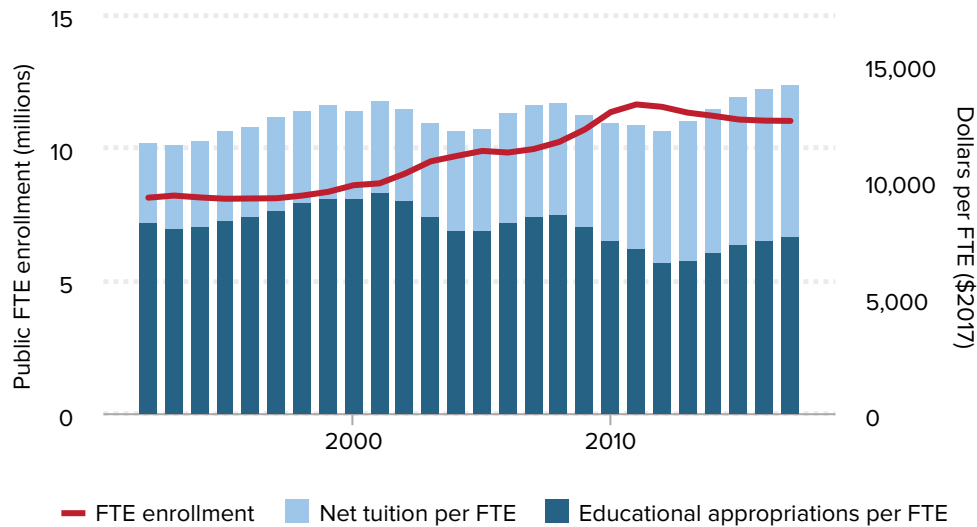
Students are forced to take on increasing levels of debt if they want to attend college

As tuition costs have risen at rates vastly exceeding household 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 in 2010 was \$26,682 while the median was \$13,410 (reported in 2011 dollars). The average amount is higher than the median because of very high amounts of debt owed by some: 10 percent of households owe \$61,894 or more (Fry 2012).

Figure K

Public spending on education has not kept pace with rising enrollment

Public FTE enrollment (millions), educational appropriations per FTE (\$2017), and net tuition per FTE (\$2017), FY 1992–2017



Notes: “FTE enrollment” refers to the number of full-time-equivalent students enrolled in public (state) colleges and universities. “Educational appropriations per FTE” refers to the dollar amount contributed by the states, on average, for each student’s education. “Net tuition per FTE” refers to the average net dollar amount spent by each student on tuition after financial grants have been taken into account. Constant 2017 dollars adjusted by SHEEO Higher Education Cost Adjustment (HECA).

Source: State Higher Education Executive Officers Association, *State Higher Education Finance: FY 2017*, Figure 1

Economic Policy Institute

The real average student debt amount has nearly tripled since 1989 and household incomes have failed to keep up. In 1989, student loan debt was equivalent to 1.2 percent of household income on average; this ratio had steadily increased to 6.1 percent by 2010 (Fry 2012). Using the Federal Reserve Board of New York’s Consumer Credit Panel, Brown et al. (2015) find that between 2004 and 2014, the number of student loan borrowers increased by 92 percent, and average debt per borrower increased by 39 percent in real terms.

Debt can be damaging to graduates’ future incomes and lifelong earnings. After graduation, those with higher student debt are more likely to accept jobs that offer higher initial wages yet slower wage growth over time (Minicozzi 2005; Rothstein and Rouse 2011). High debt can also steer graduates into worse-fitting careers than their debtless peers and lower their lifelong earnings. Moreover, many students who take on debt do not actually complete their degree, putting them at an economic disadvantage in the workforce; while the prospect of paying off student loans is daunting for college graduates entering the workforce, those who took on debt but never completed a degree face a greater likelihood of defaulting or becoming delinquent on loans (Nguyen 2012).

Those who have borrowed to finance their education are increasingly struggling to repay

their debts. In the first quarter of 2018, 10.7 percent of student loan debt was seriously delinquent³—this is a higher rate than for any other type of consumer debt. In the first quarter of 2003, the first period for which this data is available, that rate was 6.1 percent. Unlike for other forms of consumer debt, serious delinquency rates for student loan debt spiked during the recovery from the Great Recession and have remained high ever since (Federal Reserve Bank of New York 2018).⁴

Black students, in particular, rely disproportionately on loans to finance their education, largely because black families tend to hold much less wealth than white families, even at the same income levels (Goldrick-Rab, Kelchen, and Houle 2014). Furthermore, low-income students of color are disproportionately more likely to leave college before completing a degree (Huelsman 2015); as discussed above, these students face even steeper challenges to paying off their debt (Nguyen 2012).

For-profit college students had even higher levels of debt than students at nonprofit private or public schools. In the 2011–2012 school year, the cumulative amount borrowed by full-time undergraduate students at for-profit institutions was \$24,950, compared with \$22,810 for private nonprofit institutions, and \$17,320 for public institutions, in 2015–2016 dollars (NCES 2017a). Outcomes for for-profit students tend to be worse as well. A Brookings Institution study compared for-profit graduates with student debt (“borrowers”) with traditional four-year college borrowers from 2002 to 2011. For-profit borrowers had worse labor market outcomes than traditional four-year college borrowers. They tended to have higher unemployment rates, and median earnings of for-profit borrowers in 2011 were \$20,900 (in 2014 dollars), compared with \$29,100 for borrowers from nonselective four-year institutions and \$42,300 for those graduating from selective four-year institutions. For-profit borrowers also tended to come from lower-income families and were much less likely to finish their degree. As a result of all of these factors, they were much more likely to default or be delinquent on their loans (Looney and Yannelis 2015).

Flat wage growth for recent college graduates makes it harder to pay back debt

The rising cost of college and stagnating public investment in higher education, combined with the failure of wages to grow for young college graduates, signals that entering college is becoming a potentially more risky 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 2018a). Much of the rise in the premium that has occurred in the last 18 years is attributable to large wage losses for high school graduates, rather than strong wage growth for college graduates. As shown in *The Class of 2018: College Edition*, young college graduates have an average hourly wage of \$20.37, which translates to an annual salary of roughly \$42,300 (in 2017 dollars) for a full-time, full-year worker (Gould, Mokhiber, and Wolfe 2018). This is only slightly higher than what a typical college graduate would have made in 2000 (\$40,300). In comparison, from the 1999–2000 enrollment year to the 2017–2018 enrollment year, the average cost of college (including room and board) rose

75.1 percent for a public university and 48.9 percent for a private school (College Board 2017b).

Although wages of recent college graduates continue to be much higher than those of recent high school graduates, wages of college graduates are failing to keep pace with the rising cost of college and rising student loan debt, meaning that college is becoming an increasingly risky investment. On top of this, the only way to access the full college wage premium is by completing a four-year college degree. Of the 69.3 percent of young adults who have at least some college education, over half (54.4 percent) haven't completed a bachelor's degree by age 31 (BLS 2018); often, these young adults are leaving college with substantial debt but without the relative benefits in employment and wages that the college premium offers. Average college premiums in wages and employment outcomes are large, but they are far from certain and they are also increasingly eroded when held up against the rising cost of financing college.

For those who think that having a larger share of the population attain college degrees carries large, positive spillovers for society at large (and we certainly think this), the weak labor market for some recent college graduates (particularly young black graduates), along with the rising cost of education, should be very worrisome indeed.

Financial challenges are often exacerbated by for-profit schools

Even though students who attend for-profit colleges tend to have worse outcomes than those who attend traditional four-year institutions, over the past two decades for-profit students have grown to represent a significant share of all those enrolled. From 2000 to 2016, the number of students enrolled at for-profit institutions grew by 127 percent, compared with 25 and 27 percent enrollment growth at public and private nonprofit institutions, respectively. In total, about 915,000 of the 13.1 million students enrolled in college in 2016 attended a for-profit institution (NCES 2018). For many for-profit institutions, the amount spent per student on actual instruction is much lower than the amount spent at a traditional four-year institution, while the amount spent on marketing, recruitment, and lobbying is disproportionately higher. In the 2015–2016 school year, for-profit institutions spent \$3,948 on instruction per student, compared with \$10,221 at public nonprofits and \$17,567 at private nonprofits (NCES 2017b).

Targeted advertisements and aggressive sales strategies are used to recruit students. Admissions officers often enroll—and facilitate financial aid processing for—low-income workers, people working multiple jobs, or other people in precarious positions who don't have the time or necessary information to gain a full understanding of the type of education they are signing up for or the debt they are taking on. Even after students are enrolled, 65 percent never know that they are enrolled at a for-profit organization (Cottom 2017). In an environment where people recognize they need to get some sort of qualification in order to achieve financial stability, but are unsure how to get it, the for-profit colleges' aggressive strategies are quite effective in getting people to sign up for their programs. Unfortunately, these programs are too often not worth the cost.

Conclusion

While there may be many reasons someone might choose to enter the labor force after high school rather than attend college, college should at least be a viable option; a person's economic resources should not be the determining factor in whether they get to go to college. But, as things stand, the prospect of staggering debt may discourage students from less wealthy families from enrolling in further education or prevent them from completing a degree.

In addition to the intrinsic value of education, both to individuals and society, college graduates tend to have better employment outcomes and higher wages than workers without a degree. These benefits, economic and otherwise, should be made available to all those who wish to pursue them through increased state funding for higher education, stemming tuition hikes, support for the students who are most in need both financially and academically, and appropriate monitoring of loan terms as well as regulations to protect consumers from the predatory practices of for-profit colleges.

The 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. The most direct way to quickly bring down the unemployment rate and spur wage growth of young workers—and all workers—is to institute measures that would boost aggregate demand and encourage full employment, bolster labor standards, and strengthen workers' collective bargaining rights. Most immediately, this means ensuring high aggregate demand, particularly through strategic public investments targeting the communities that need them most in areas such as infrastructure, energy efficiency, and early child care and education. Policies that generate demand for U.S. goods and services in turn generate demand for the workers who provide them—bringing down unemployment, giving workers more leverage, and raising workers' wages. Policies that reduce work hours, including paid family and medical leave and overtime protections, will also ensure that job growth spurred by high aggregate demand is more widely shared (Bivens 2018).

Additional policies that will improve young high school graduates'—and all workers'—job quality include raising the minimum wage; protecting workers from wage theft; providing undocumented workers with a path to citizenship (which will give these workers, as well as authorized workers in similar fields, more leverage to command higher pay); and ending discriminatory practices that contribute to race and gender inequities (Bivens et al. 2014). Further, we should pursue stronger safety nets, such as more generous unemployment insurance and more affordable health care, which would allow for basic economic security that is not directly dependent on employment (Bivens 2018)—ensuring that new graduates don't fall through the cracks as they navigate the challenges of the labor market.

Endnotes

1. The category “some college” includes anyone who has taken a college course but does not hold a four-year degree. People in this category may have begun a college program but left college without completing a four-year degree; they may be currently enrolled; or they may have an associate degree.
2. For a discussion of labor market outcomes for young college graduates, see *The Class of 2018: College Edition* (Gould, Mokhiber, and Wolfe 2018).
3. An account is considered seriously delinquent if it is delinquent by 90 days or more.
4. The delinquency rates for student debt are likely understated, since they are calculated as a share of all borrowers, including students who are currently enrolled or have recently graduated and therefore are exempt from making payments (and therefore cannot be delinquent) (Brown et al. 2012).

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