Economic Policy Institute

Class of 2019 College edition

Report • By Elise Gould, Zane Mokhiber, and Julia Wolfe • May 14, 2019

Fallout from the Great Recession did a lot of damage to the employment prospects of young adults just entering the workforce after graduating from high school or college—and that damage persisted well into the recovery. However, with sustained improvements in economic conditions in recent years, young graduates' prospects for employment and wage growth have been slowly improving.

In this study, we analyze data on recent young college graduates (ages 21–24) to learn about the Class of 2019's economic prospects as they start their careers. This report focuses exclusively on those graduating from college. Outcomes for recent high school graduates will be the subject of a forthcoming report, *Class of 2019: High School Edition*.

We begin this report by providing a demographic snapshot of this population of young college graduates. In the second section, we discuss what shares of these young graduates 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. We also draw on literature that highlights the likelihood that many young college graduates will end up working at jobs that do not require a college degree. In the fourth section, we analyze the wages of those who are employed (and not enrolled in further schooling), making comparisons with earlier periods as well as looking at important differences by gender and race/ethnicity.

While by many measures the labor market for young graduates is now almost—or perhaps even fully—back to where it was before the recession, the economy of 2007 represents a low bar for economic opportunity. We should instead be striving for the high-pressure economy of the late 1990s and 2000, in which an

extended period of labor market strength translated into better opportunities for workers across the board.

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Because of the progression of the economic recovery and substantial declines in the unemployment rate, members of the college Class of 2019 currently have better job prospects than the classes who graduated into the immediate aftermath of the recession. However, compared with those who graduated into the 2000 labor market, the Class of 2019 still faces real economic challenges, as demonstrated by elevated levels of underemployment as well as worsened wage gaps for women and black workers.

Note: When we refer to "college graduates" in this report, we are talking specifically about adults ages 21–24 who have a four-year college degree but who do not have an advanced degree. See "Notes about our data sample" for more information.

Key findings

Fewer than one-fifth of adults ages 21–24 are college graduates.

- Women in this age group are more likely than men to have a college degree. Women make up half of 21- to 24-year-olds but well over half (57.4 percent) of young college degree holders.
- White and Asian American/Pacific Islander (AAPI) young adults are more likely than black and Hispanic young adults to hold a college degree. White young adults represent just over half (54.3 percent) of the young adult population but two-thirds of those with a college degree; AAPI young adults are also disproportionately represented among those young adults with a college degree. Young black and Hispanic adults between the ages of 21 and 24 are far less likely to be college graduates relative to their representation in the population.

The overall employment rate for young college graduates has declined, and the share who are idled—neither employed nor enrolled in further schooling—has increased between 1989 and 2019.

- This trend was driven primarily by a decline in the share who are employed and not enrolled in additional schooling.
- Of those graduates who are enrolled, about half are working while in school.

Employment and enrollment outcomes vary by gender and by race/ethnicity.

- The most likely outcome for every group is being employed only. The least likely outcome for every group, with the exception of AAPI young adults, is being idled, meaning they are neither enrolled in further schooling nor employed.
- Young men and women graduates have similar idled rates and similar overall employment rates.

- Young AAPI graduates are more likely than other graduates to be enrolled only, while young white graduates are the most likely group to be employed only and the least likely to be idled.
- Young black graduates enroll in additional schooling at higher rates than their white and Hispanic peers.

The unemployment rate among young college graduates is at pre-recession levels, but it is still higher than the full-employment economy of 2000.

- One out of every 20 young college graduates is unemployed, a higher rate than in 2000, when only one in 25 was.
- While the unemployment rate for white graduates has essentially recovered to within 0.2 percentage points of its 2000 level, unemployment rates for other racial/ethnic groups remain well above their 2000 levels, and the gaps between the white unemployment rate and the black, Hispanic, and AAPI unemployment rates for young graduates are significantly larger than they were in 2000.

The overall *under*employment rate of young college graduates has improved markedly since its peak in 2011 but remains higher than it was in 2007 and is much higher than it was in 2000.

- Underemployment counts include those who are unemployed *plus* those part-time workers who want to work full time (involuntary part-time workers) *plus* those workers 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 (and are therefore not officially counted as "unemployed").
- One in 10 young college graduates are underemployed, more than in 2007 (9.0 percent) and 2000 (6.5 percent).
- Underemployment rates for all gender and race/ethnicity groups are significantly higher than they were in 2000.
- In 2019, nearly one in seven black, Hispanic, and AAPI graduates are underemployed while one in 11 white graduates are.
- Other research on underutilization suggests that more college graduates are taking jobs that do not require a college degree than they have in stronger labor markets.

Over much of the last four decades, young college graduates have experienced lackluster wage growth.

- From 1989 to 2019, average wages of young college graduates grew only 13.9 percent in total. Without the few years of strong growth in the tight labor market of the late 1990s and 2000, wages would be no higher today than they were in 1989.
- After falling in the aftermath of the Great Recession, wages for young college graduates have been growing steadily since 2014 and have (just barely) surpassed the 2000 benchmark; however, nearly two decades of wage growth for young college

graduates have been lost.

Young women and black college graduates face large and growing pay penalties in the labor market relative to young men and white graduates, respectively.

- While men's and women's wages have both grown slowly between 2000 and 2019, men's wages grew slightly faster, resulting in a widening of the gender wage gap for young college graduates from 10.7 percent to 12.9 percent.
- In 2000, as well as for much of the late 1990s, the hourly pay of black college graduates closely tracked that of their white counterparts, but black wages have seen large declines in the Great Recession and its aftermath, translating into lower wages and significantly larger pay penalties right out of college. Today, young black college graduates are paid, on average, 12.2 percent less than their white counterparts.

Notes about our data sample

Throughout this report, we examine the outcomes for young college graduates, whom we define as adults between the ages of 21 and 24 with a bachelor's degree but without an advanced degree. (We use "college degree" and "bachelor's degree" interchangeably throughout to refer to a four-year degree.)

We restrict our sample to ensure that its characteristics are as similar as possible to the characteristics of the graduating class of 2019. We limit it by age (to adults ages 21 to 24) to minimize variations in outcomes based on differing amounts of work experience, and we limit it to those who have a college degree but not an advanced degree since members of the graduating class of 2019 would (typically) not yet have had the opportunity to achieve an advanced degree.

When looking at labor market outcomes (unemployment rates, underemployment rates, and average wages), we further restrict our sample to only those young college graduates (without an advanced degree) who 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 pool 12 or 36 months of data 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 pool 12 months of data to create a pooled moving average, which also has the added advantage of removing any seasonal effects. We use 36-month pooled data to look at trends by gender and race/ethnicity, since breaking the

population down by demographics restricts the sample further and therefore limits the conclusions we can draw from it. In general, that means that analyses for 2019 use the most recent 36-month period, specifically April 2016 through March 2019. 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 pooled average of January 1998 through December 2000, when the economy was close to or at full employment.

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/Pacific Islander (non-Hispanic; sometimes referred to as "AAPI" in this report), and "other." As shown in Figure B, the "other" category accounts for just 0.6 percent of young college graduates. Because of sample limitations, we do not report the results of our analysis for this "other" group nor are we able to analyze any other groups, such as Native American young college graduates. Likewise, gender is restricted to the two predominant binary categories: women and men.

What are the demographics of young college graduates?

In this report we examine the employment, enrollment, and wages of recent college graduates in order to glean the Class of 2019's economic prospects as they start their careers after college. To do this, we look at recent college graduates (ages 21–24) who are in the labor market or enrolled in further education. Because the sample sizes are small, particularly when we examine specific demographic groups, we combine 36 months of data to strengthen the estimates (see the text box above for extensive information about our sample and sample restrictions). **Figure A** displays the shares of 21- to 24-year-olds at each level of educational attainment, overall and by gender and race/ethnicity (combining data from April 2016 through March 2019 for all categories, including "overall").

Among adults ages 21 to 24, fewer than one-fifth (18.6 percent) have completed a bachelor's degree but have not attained an advanced degree. An additional 1.7 percent have already completed an advanced degree. By comparison, just under two-fifths of the overall workforce (ages 16 and up) have at least a college degree (EPI 2019b). While many Americans go on to increase their educational attainment throughout their 20s and 30s, the vast majority do not wind up completing a four-year college degree.

In this paper, we restrict our sample to just recent young college graduates (ages 21–24) in order to best predict the economic prospects of those who attend and complete college following closely on the heels of receiving their high school diploma or GED. By limiting

our sample to college graduates in their early 20s, we can restrict any variation in outcomes attributable to both later degree-acquiring and higher amounts of labor market experience. This allows us to compare employment outcomes and wages across gender and race/ethnicity while assuming that the individuals have similar levels of education and work experience. Among 21- to 24-year-olds, more than two in five (43.3 percent) have had some college education (but have not completed a four-year degree), while nearly three in 10 (29.4 percent) have a high school diploma only, with no further schooling.

The overall shares displayed by the first bar in Figure A clearly mask important differences among demographic groups. Among young adults, women are more likely to have a bachelor's degree than men. Asian American/Pacific Islander young adults are significantly more likely to have a four-year college degree than young adults from any other racial/ ethnic group, while Hispanic young adults are least likely to have a college degree.

The population of young adults with a college degree has a different composition than the overall 21-to-24-year-old population. **Figure B** illustrates these variations in composition, confirming what we saw in Figure A about the disproportionate likelihood that members of certain groups have completed a four-year college degree. While men and women represent equal shares of those ages 21 to 24, women in this age group are disproportionately more likely to hold a college degree. Well over half (57.4 percent) of young college degree holders are women, while men make up only 42.6 percent of that group. Figure A indicates that women in this age group are also more likely than men to hold an advanced degree.

Just over half (54.3 percent) of the 21-to-24-year-old population is white, yet two-thirds (66.0 percent) of young college grads are white. Asian Americans/Pacific Islanders also make up a disproportionate share of the young college graduate population (12.5 percent), relative to their representation in the overall 21-to-24-year-old population (7.3 percent). Young college graduates are less likely to be black or Hispanic: 15.1 percent and 21.8 percent of all 21- to 24-year-olds are black and Hispanic, respectively, while they account for only 10.0 percent and 10.9 percent of young college graduates.

What are young college graduates doing?

In this section, we look at the employment and enrollment outcomes of young adults with a college degree. We group these graduates into four mutually exclusive categories based on their outcomes: employed and not enrolled in further schooling ("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 college graduates with each outcome, uses 12-month moving pools of data to ensure an adequate sample. **Figure D** shows outcomes by gender and race/ethnicity; these outcomes are based on a 36-month pool of data to ensure an adequate sample to allow us to make these comparisons.

Figure A Fewer than 20 percent of young adults have a college degree



Share of 21- to 24-year-olds with a given level of education, overall and by gender and race/ethnicity, 2019

Notes: AAPI stands for Asian American/Pacific Islander. The 2019 analysis here pools the most recent 36 months of data, April 2016–March 2019.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau (EPI 2019a)

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Figure C shows that being idled—being neither employed nor enrolled—has consistently been the least likely outcome for young college graduates, although the idled share has increased since 1989. Prior to the most recent recession, just over 8 percent of young graduates were idled (8.4 percent in 2007), about the same share that were idled when the economy was at full employment in 2000 (8.6 percent). During the recession, the share of idled young graduates increased, peaking at 11.9 percent in 2011. The idled share has not quite recovered to its pre-recession level and has even increased somewhat over the past year, with 9.7 percent of young graduates still idled in 2019. The increase in the share of disconnected young adults represents an enormous loss of opportunities for this

Figure B Young adults with a college degree are disproportionately women, white, or Asian American/ Pacific Islander (AAPI)

Shares by gender and by race/ethnicity of the overall 21-to-24-year-old population and of 21- to 24-year-olds with bachelor's degrees, 2019



Notes: The 2019 analysis here pools the most recent 36 months of data, April 2016–March 2019. Data sample includes only those college graduates ages 21–24 who have not attained an advanced degree.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau (EPI 2019a)

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cohort, as the loss of work experience or further education will have a lasting negative impact on their lifetime earnings.

Nearly four in five young graduates (77.0 percent) are employed. (The overall employment rate is the sum of "employed only" and "enrolled and employed" and is represented in Figure C by the darker and lighter orange areas combined.) The overall employment rate has declined over the period shown in Figure C (down 7.3 percentage points from 84.4 percent in 1989). This was driven by a steady decline in the share who are employed only, from 74.2 percent in 1989 down to 64.9 percent in 2019. During that 30-year period, the share who were simultaneously employed and enrolled increased slightly, although not enough to offset the decline in the share who were employed only.

Particularly during the Great Recession, the growing idled share reflected not only a

Figure C What are young college grads doing?

Shares of young college graduates (ages 21–24) by employment and enrollment outcomes, 1989–2019



Notes: "Idled" refers to those who are neither employed nor enrolled in further schooling. This series is based on 12-month moving pools of data. The most recent data point uses pooled data from April 2018 through March 2019. Data sample includes only those college graduates ages 21–24 who have not attained an advanced degree. Vertical shaded areas denote recessions.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau (EPI 2019a)

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decline in employment rates, but a decline in enrollment as well (which could reflect the stemming of longer-term structural increases in enrollment). While enrolling in school is often thought of as an alternative to employment in a weak economy, this option is not available to all students. Students and workers are not distinct groups; many students must work to pay for school or cover living expenses. A weak economy can therefore prevent would-be students from pursuing additional education by disrupting their own financial stability. Many students also depend on the support of parents—but if a student's parents saw the value of their home drop when the housing bubble burst, or one or both lost their jobs in the aftermath of the Great Recession, then financial support from parents for continued schooling may not have been available (see, for example, Lovenheim and Reynolds 2013). For these reasons, young graduates are at increased risk of being idled during a recession, with neither a job nor the resources to go back to school. Graduating into a weak labor market not only limits immediate economic opportunities, but it can also have a significant effect on lifetime earnings and even health (Schwandt and von Wachter 2018).

Of those young graduates who decide to pursue further education (the sum of "enrolled only" and "enrolled and employed," the light orange and yellow areas combined), an increasing share are not working while enrolled. The share of recent graduates who are enrolled only has increased since 1989. In 1989, just 7.8 percent of young graduates were

Figure D Most young college graduates are working

Employment and enrollment outcomes of young college graduates (ages 21–24), by gender and race/ethnicity, 2019



Notes: AAPI stands for Asian American/Pacific Islander. "Idled" refers to those who are neither employed nor enrolled in further schooling. The 2019 analysis here pools the most recent 36 months of data, April 2016–March 2019. Data sample includes only those college graduates ages 21–24 who have not attained an advanced degree.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau (EPI 2019a)

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enrolled in further schooling but not working while enrolled. By 2007, that share had increased to 11.9 percent. Today, about half of the young graduates who are enrolled in further schooling are also working (13.3 percent) and half are not (12.2 percent).

Figure D illustrates, by gender and race/ethnicity, what these young college grads are doing now using four distinct 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 see total employment, we look at the dark orange ("employed only") and light orange ("enrolled and employed") bars combined. We see that similar shares of young women and men with college degrees are employed. Although a somewhat smaller share of

women are employed without being enrolled, that is balanced by the fact that young women are more likely to be enrolled and employed at the same time than men. Young graduates of both genders have about the same likelihood of being enrolled in further education without being employed, but young women with college degrees are more likely to be enrolled in further schooling overall (with 26.3 percent total enrollment) than their male peers (24.1 percent enrollment). While both working men and women (ages 16 and up) have been increasing their education, women's attainment of college and advanced degrees has grown faster than men's. By the early 2000s, a larger share of women than men in the workforce had at least a college degree. In 2018, two in five (40.3 percent) working women had at least a college degree while just under a third (35.0 percent) of men did (EPI 2019b).

Similar shares of male and female graduates are idled (neither enrolled nor employed). As we will show later, young women with bachelor's degrees have a lower unemployment rate than their male peers. But because these women are both employed and idled at similar rates to men, we can infer that their lower unemployment rate reflects lower labor force participation, not higher levels of employment.

In the second set of bars, similar comparisons are made with respect to the four mutually exclusive racial and ethnic groups we are looking at: white, black, Hispanic, and Asian American/Pacific Islander.

Young Asian American/Pacific Islander graduates are much more likely to be enrolled in further schooling and much less likely to be employed than their peers. Just under half (48.5 percent) of AAPI young college graduates are employed only. They are disproportionately likely to be enrolled in further schooling, driven by an outsize share of AAPI graduates who are enrolled without being employed. In fact, they are the only racial/ ethnic group in which more graduates are enrolled only than are both employed and enrolled. Young AAPI graduates are also the racial/ethnic group with the largest idled share.

After young AAPI graduates, young black graduates have the second highest rate of enrollment, summing those enrolled only and those enrolled while working. In total, over a quarter of young black graduates (27.2 percent) are enrolled in further schooling. Young black graduates are simultaneously employed and enrolled at a higher rate than any other racial/ethnic group. At the same time, young black graduates are less likely than their white and Hispanic peers to be employed. Since young black graduates actually have the highest rates of being both employed and enrolled, their lower employment rate is driven by their low likelihood of being employed only.

Young Hispanic graduates are more likely to be employed only than their black and AAPI peers, but less likely than their white peers to be employed only. This trend holds true for the overall employment rate as well. More than four in five young white college graduates (81.0 percent) are employed, a larger share than any other group. This is driven by the fact that over two-thirds (68.9 percent) of young white college graduates are employed and not enrolled in further education. Young white college graduates are less likely than their peers to be enrolled, with under a quarter (22.9 percent) total enrolled in further schooling.

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

In this section, we examine unemployment and underemployment rates for young college graduates. To do this, we narrow the sample of young college graduates to those who are not currently enrolled in further schooling. This allows us to better assess the employment prospects of otherwise similar groups.

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 rates. 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 even those jobs not necessarily requiring a college degree—unemployment among young workers with a college degree is substantially lower than among other young workers (EPI 2019b). However, young college graduates' job prospects are significantly worse than they would be if the economy were at genuine full employment.

Figure E presents unemployment and underemployment rates for young college graduates, both of which shot up during the Great Recession and its aftermath.

The unemployment rate reflects the share in the labor market who are jobless and have reported that they are actively seeking work. The unemployment rate for young college graduates is currently 5.1 percent, just below where it was at the labor market peak of 2007 before the start of the Great Recession (5.2 percent). However, it remains significantly higher than it was in 2000 (4.0 percent). And the current unemployment rate likely understates the slack in the labor market, given that, in recent months, 7 out of 10 newly employed workers were not actively searching for work in the prior month¹—these workers would not have been counted in the official unemployment rate, even though they were clearly interested in working. Further evidence that the low unemployment rate is overstating the strength of the labor market is the fact that the share of the prime-age population with a job remains lower than in prior business cycles (Gould 2019b).

Looking at the *under*employment rate also broadens our understanding of the labor market for young college graduates (ages 21–24). The underemployment rate for college graduates in this age group, currently at 9.9 percent, remains nearly a percentage point higher than it was in 2007 (9.0 percent). This rate includes the officially unemployed (see above) and also includes "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 who have given up actively seeking work in the last four weeks and therefore are not captured in the official unemployment rate).

Figure F compares the unemployment rates by gender and race/ethnicity in 2019 to the

Figure E The underemployment rate for young college grads is still higher than it was before the recession



Unemployment and underemployment for young college graduates (ages 21–24) not enrolled in further schooling, 1989–2019

Notes: This series is based on 12-month moving pools of data. The most recent data point uses pooled data from April 2018 through March 2019. Data sample includes only those college graduates ages 21–24 who have not attained an advanced degree. Shaded areas indicate recessions.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau (EPI 2019a)

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rates in 2000, the last time wage growth was strong for all workers in the U.S. economy. While the overall unemployment rate (shown in Figure E) has dropped to its pre-recession level and is creeping down toward its 2000 level, some groups are faring better than others.

Men continue to have a higher unemployment rate than women (6.4 percent vs. 4.1 percent), and the gap between those two rates has grown since 2000, when men's unemployment rate was 4.7 percent to women's 3.9 percent. However, this does not necessarily indicate that women are having an easier time finding jobs than men are. Rather, it in large part reflects the fact that women participate in the labor force at lower rates than men. To be considered unemployed by the CPS survey, an individual must be actively looking for work. We show in Figure D that men and women are idled at similar rates, and we note that the "idled" category includes *all* individuals who are neither employed nor enrolled, not just those who are actively looking for work. In this case, the similar idled rates for men and women indicate that women's lower unemployment rate does not actually translate into a higher employment rate—it simply means women who are not working are less likely to be counted in the official unemployment rates is smaller than the gap in unemployment rates; the gap in underemployment rates fills out the picture, allowing us to account for some portion of those women who are idled but are

Figure F

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

Unemployment rates of young college graduates (ages 21–24) not enrolled in further schooling, by gender and race/ethnicity, 2000 and 2019



Notes: AAPI stands for Asian American/Pacific Islander. Data for 2000 and 2019 use pooled data from January 1998–December 2000 and March 2016–February 2019, respectively. Data sample includes only those college graduates ages 21–24 who have not attained an advanced degree and are not enrolled in further schooling.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau (EPI 2019a)

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not counted as "unemployed."

The white unemployment rate in 2019 is slightly above its 2000 low, up from 4.0 percent to 4.2 percent. The unemployment rates for all other races are even higher and have recovered less since the Great Recession, further widening the racial gaps. 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, ages 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 result in parity in

unemployment rates across races and ethnicities: The unemployment rates of young black, Hispanic, and Asian American/Pacific Islander college graduates are much more elevated than those of their white peers. This suggests other factors may be at play, such as discrimination or unequal access to the informal professional networks that often lead to job opportunities.

Figure G shows *under*employment rates for young college graduates, which, like their unemployment rates, remain elevated significantly above their 2000 levels, but to a greater degree. The increases in underemployment rates have been substantially larger than the increases in unemployment. Although there are still key differences in the underemployment rates of different demographic groups, the gaps are smaller than they are for unemployment.

In 2000, young men with college degrees had a slightly higher underemployment rate (7.3 percent) than young women graduates did (6.6 percent). Over the next 19 years, underemployment increased significantly for both groups, but somewhat more for men (by 4.1 percentage points, to 11.4 percent) than for women (3.0 percentage points, to 9.7 percent), widening the gap.

In 2000, the underemployment rate of young black graduates was 8.2 percent, higher than the rate for young white graduates (6.7 percent). By 2019, the black underemployment rate had increased to 14.1 percent, while the white rate rose to just 8.9 percent. The underemployment rates of young Hispanic and Asian American/Pacific Islander graduates were also higher than the white underemployment rate in 2000 and grew more than white underemployment by 2019, increasing the already existing disparities.

Although the measure of underemployment used in Figures E and G 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; the authors then 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 necessarily require a 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 ages 22–27 worked in jobs that did not require a college degree (Federal Reserve Bank of New York 2019). No matter how strong the labor market is, recent college graduates often require some time to transition into their desired career track.

However, the share of young college graduates working in jobs not requiring a college degree increased over the weak 2000–2007 business cycle, increased further during the Great Recession and its aftermath, and has been slow to fall since. In 2007, 41.8 percent of

Figure G

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

Underemployment of young college graduates (ages 21–24) not enrolled in further schooling, by gender and race/ethnicity, 2000 and 2019



Notes: AAPI stands for Asian American/Pacific Islander. Data for 2000 and 2019 use pooled data from January 1998–December 2000 and April 2016–March 2019, respectively. Data sample includes only those college graduates ages 21–24 who have not attained an advanced degree and who are not enrolled in further schooling.

Source: EPI analysis of Current Population Survey basic monthly microdata from the U.S. Census Bureau (EPI 2019a)

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employed college graduates under age 27 were working in a job that did not require a college degree. This share increased to 46.3 percent in the aftermath of the Great Recession and has been falling steadily since, reaching 41.4 percent by December 2018 (Federal Reserve Bank of New York 2019).

Furthermore, more of these workers are ending up in lower-quality "noncollege" jobs now than previously. 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 2019). 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 now employed in occupations with low average wages, 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, Green, and Sand 2013).

Taken together, these findings underscore that in recent years the elevated unemployment rate among young workers did not arise because these workers lacked sufficient education or skills. Rather, there remains somewhat weak demand for goods and services, which makes it unnecessary for employers to significantly ramp up hiring for workers—regardless of the workers' level of education. In fact, when we look at the overall labor market for workers ages 16 and up, we see only slight increases in the college premium—the expected boost to workers' pay from a four-year college degree—over the last 18 years (Gould 2019a). If there had been a disproportionate demand for these credentialed workers overall, then we should be seeing even lower rates of unemployment and underemployment and a lower share of young college graduates who are otherwise underutilized in the labor market.

What are the wages of young college graduates?

Over much of the last four decades, young college graduates have experienced lackluster wage growth. **Figure H** presents average hourly wages for young college graduates (ages 21–24, not enrolled in further schooling) between 1989 and 2019 (in 2018 dollars). Over that entire period, average wages grew only 13.9 percent in total, less than half a percent per year on average. If it hadn't been for the expansionary economy of the late 1990s and 2000, wages would be no higher today than in 1989. Wages at the last business cycle peak in 2007 were just below where they were in 2000. And then the Great Recession hit, and young college graduates experienced the loss in wages felt throughout the economy. Wages for young college graduates have been growing steadily since 2012 and have surpassed the 2000 benchmark. In today's tightening labor market, we should expect to see continued wage growth, which will help make up for losses experienced by young college 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 facing this group.

Although it may be tempting to point to young graduates' age or lack of previous work experience as the reason their wages have grown slowly since 2000, we observe similar wage trends for the population as a whole (Gould 2019a). While young graduates have lower wages than the overall (ages 18–64) workforce of college graduates (which is to be expected given their relative lack of work experience), their wages display the same trends: Both groups saw a brief period of strong wage growth in the 1990s but have had stagnant wages for much of the 2000s and only saw stronger growth in the recent recovery in two of the last five years (Gould 2019a). This is indicative of an economywide

Figure H

Wages of young college graduates today are just above their 2000 levels

\$25 20 15 10 5

2005

2010

2015

2020

Real hourly wages for employed young college graduates (ages 21–24) not enrolled in further schooling, 1989–2019 (2018\$)

Notes: The wage series is based on 12-month moving pools of data. The most recent data point uses pooled data from April 2018 through March 2019. Data sample includes only those working college graduates ages 21–24 who have not attained an advanced degree and who are not enrolled in further schooling. Dollar amounts are adjusted for inflation to 2018 dollars. Shaded areas indicate recessions. **Source:** EPI analysis of Current Population Survey Outgoing Rotation Group microdata (EPI 2019a)

2000

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1990

1995

0

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).

In 2019, young college-degreed workers have an average hourly wage of \$20.74, which translates to annual earnings of around \$43,100 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 college-degreed men and women as well as for young white, black, Hispanic, and Asian American/Pacific Islander (AAPI) college graduates, in 2000 and 2019, using a three-year pool of data 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 college degree have average hourly wages of \$19.20 in 2019, just above their 2000 wage of \$18.68. Over this same time, men's wages rose significantly, from \$20.91 to \$22.04, an increase of just over 5 percent. These different trends have meant that the gender wage gap for young college graduates has grown over the last 19 years from 10.7 percent to 12.9 percent (as shown in Figure J). The current gap of \$2.84 per hour is not only statistically significant, but also of practical significance—it translates into about \$5,900 per year for a full-time worker, a large and economically meaningful

Figure 1 The gender and black–white wage gaps are larger today than in 2000

Real hourly wages of employed young college graduates (ages 21–24) not enrolled in further schooling, by gender and race/ethnicity, 2000 and 2019 (2018\$)



Notes: AAPI stands for Asian American/Pacific Islander. Average wages for 2000 and 2019 use pooled data from January 1998–December 2000 and April 2016–March 2019, respectively, adjusted for inflation to 2018 dollars. Data sample includes only those working college graduates ages 21–24 who have not attained an advanced degree and who are not enrolled in further schooling.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata (EPI 2019a)

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difference.

While, as discussed earlier, young women are earning bachelor's degrees at higher rates than men (21.3 percent vs. 15.8 percent, setting aside those who also get advanced degrees), this advantage is doing little to insulate them from wage gaps within educational categories. And different amounts of experience cannot account for these wage gaps: Given the tight age restriction in our estimates, both groups should have relatively similar work experience on average. The particularly disquieting fact is that these gaps exist from the very beginning of women's careers.

The second set of bars in Figure I shows average wages for young white, black, Hispanic,

Figure J

Among recent college graduates, women, black, and Hispanic workers face a substantial wage penalty

Average gender and racial/ethnic wage gaps for employed young college graduates (ages 21–24) not enrolled in further schooling, 2000 and 2019



* The black–white and Hispanic–white wage gaps in 2000 are not statistically different from zero.

Notes: AAPI stands for Asian American/Pacific Islander. Wage gaps are calculated from average wages for 2000 and 2018 using pooled data from January 1998–December 2000 and April 2016–March 2019, respectively, adjusted for inflation to 2018 dollars. Data sample includes only those working college graduates ages 21–24 who have not attained an advanced degree and who are not enrolled in further schooling.

Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata (EPI 2019a)

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and AAPI college graduates in 2000 and 2019. Asian American/Pacific Islander graduates had the highest wages in both 2000 and 2019. White, Hispanic, and AAPI college graduates all experienced wage growth, at 5.8, 7.4, and 4.5 percent, respectively. Young black college graduates experienced a large drop in pay—\$2.27 per hour—for a total decline of 11.2 percent.

The second set of bars in Figure J compares black, Hispanic, and AAPI wages with white wages in both 2000 and 2019. Asian American/Pacific Islander graduates have seen a slight decrease in their pay premium vis-à-vis white college graduates, while Hispanic college graduates have seen a small reduction in their pay penalty with respect to white college graduates.

The most striking finding from this analysis of wages is what has happened to young black college graduates. In 2000, as well as for most of the late 1990s, the hourly pay of black college graduates closely tracked that of their white counterparts. The 4.6 percent pay

premium shown in Figure J is not statistically distinguishable from zero, meaning that white and black wages were basically the same in that period. What is stunning is the sharp decline in black wages over the last several years, during the Great Recession and its aftermath. Young black college graduates are the only group that saw outright declines, and these declines are quite large and economically meaningful.

These trends in black–white pay differentials for young college graduates mirror what we are seeing in the larger economy. Wilson and Rodgers (2016) find that the growth in the divergence between black and white wages is largely unexplained by *observable* factors and that discrimination is likely the most significant of the *unobservable* factors at play. It is clear from the trends in the late 1990s and into 2000 that tight labor markets can reduce discrimination and may have some lasting power even as the economy cools, as it did in the early 2000s. But the Great Recession and its aftermath clawed back those gains and then some.

The average hourly wage of black college graduates bottomed out in 2014 at \$15.84 per hour and has only recently edged up to \$18.07 in 2019 (trends not shown).² As of the latest year of data, young black college graduates now face a 12.2 percent pay penalty relative to their white counterparts. This \$2.51 hourly pay gap translates to about \$5,200 on an annual basis for a full-time worker.

Conclusion

Although the Class of 2019 is entering into a markedly stronger economy than those who graduated during the immediate aftermath of the most recent recession, the Class of 2019's labor market prospects are still not as strong as the Class of 2000's. Unemployment and underemployment rates for young college graduates remain above their 2000 levels, substantially so in the case of the underemployment rate. At the same time, young graduates have experienced lackluster wage growth, with the strong wage growth of the late 1990s and 2000 accounting for most of the improvements over the past three decades.

It is also important to note that these steady improvements have not been felt by all young college graduates. Both unemployment and underemployment rates for young black, Hispanic, and AAPI graduates remain well above their 2000 levels. While wages have improved for young white, Hispanic, and AAPI graduates, young black college graduates have actually experienced a substantial decline in their average wage.

The recent wage growth for college graduates, on average, does not make up for the long period of wage stagnation, and it certainly does not make up for the rising cost of college and resulting debt (Gould, Mokhiber, and Wolfe 2018). 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 173.6 percent for private school and 159.4 percent for public school while median family income increased just 24.5 percent (College Board 2018; U.S. Census Bureau 2018). As a result, an increasing share of students must take on substantial debt to access the benefits of a college education.

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 (Brown et al. 2015).

While the Class of 2019's prospects in the labor market show some signs of improvement over recent cohorts, those improvements are nowhere near significant enough to offset the heightened financial challenges many of these graduates face in the form of rising college costs and debt loads. As a result, the overall financial health of these graduates is likely to falter relative to those who graduated into a stronger economy and with lower levels of debt.

Endnotes

- 1. EPI analysis of monthly jobs and unemployment data from the Bureau of Labor Statistics, December 2018–May 2019. See, e.g., Gould 2018.
- 2. EPI analysis of Current Population Survey Outgoing Rotation Group microdata.

References

Abel, Jaison R., and Richard Deitz. 2014. "Are the Job Prospects of Recent College Graduates Improving?" *Liberty Street Economics* (Federal Reserve Bank of New York blog), September 4, 2014.

Beaudry, Paul, David A. Green, and Benjamin M. Sand. 2013. "The Great Reversal in the Demand for Skill and Cognitive Tasks." National Bureau of Economic Research Working Paper no. 18901, March 2013.

Bivens, Josh, Elise Gould, Lawrence Mishel, and Heidi Shierholz. 2014. *Raising America's Pay: Why It's Our Central Economic Policy Challenge*. Economic Policy Institute Briefing Paper no. 378, June 2014.

Brown, Meta, Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw. 2015. "The Student Loan Landscape." *Liberty Street Economics* (Federal Reserve Bank of New York blog), February 18, 2015.

College Board. 2018. "Table 2: Average Tuition and Fees and Room and Board (Enrollment-Weighted) in Current Dollars and in 2018 Dollars, 1971–72 to 2018–19." Downloadable Excel file accompanying the report *Trends in College Pricing 2018*. Accessed May 2019.

Economic Policy Institute (EPI). 2019a. Current Population Survey Extracts, version 0.6.7.

Economic Policy Institute (EPI). 2019b. *State of Working America Data Library*. Last updated February 2019.

Federal Reserve Bank of New York. 2019. *The Labor Market for Recent College Graduates* (interactive). New York Fed website. Last updated February 6, 2019.

Gould, Elise. 2018. "What to Watch on Jobs Day: Will We See Signs of Stronger Wage Growth?" *Working Economics* (Economic Policy Institute blog), December 6, 2018.

Gould, Elise. 2019a. State of Working America Wages 2018. Economic Policy Institute, February

2019.

Gould, Elise. 2019b. "What to Watch on Jobs Day: Stronger Wage Growth as Prime-Age Labor Force Participation Continues to Climb." *Working Economics* (Economic Policy Institute blog), March 7, 2019.

Gould, Elise, Zane Mokhiber, and Julia Wolfe. 2018. *Class of 2018: High School Edition*. Economic Policy Institute, June 2018.

Lovenheim, Michael F., and C. Lockwood Reynolds. 2013. "The Effect of Housing Wealth on College Choice: Evidence from the Housing Boom." *Journal of Human Resources* 48, no. 1: 1–35.

Schwandt, Hannes, and Till M. von Wachter. 2018. "Unlucky Cohorts: Estimating the Long-Term Effects of Entering the Labor Market in a Recession in Large Cross-Sectional Data Sets." National Bureau of Economic Research Working Paper no. 25141, October 2018.

U.S. Census Bureau. 2018. "Table F-5. Race and Hispanic Origin of Householder—Families by Median and Mean Income: 1947 to 2017" [Excel file]. Data from the Current Population Survey Annual Social and Economic Supplement (CPS-ASEC), downloadable from *Historical Income Tables: Families*. Accessed May 2019.

Wilson, Valerie, and William M. Rodgers III. 2016. *Black–White Wage Gaps Expand with Rising Wage Inequality*. Economic Policy Institute, September 2016.