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THE CLASS OF 2012

Labor market for young graduates remains grim

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Though the labor market is slowly improving, the Great Recession that began in December 2007 was so long and severe that the crater it left in the labor market continues to be devastating for workers of all ages. Unemployment has been above eight percent for more than three years, and 12.7 million workers remain unemployed today. The weak labor market has been, and continues to be, particularly tough on young workers: At 16.4 percent, the March unemployment rate for workers under age 25 was twice as high as the national average. Though the labor market is now headed in the right direction, the prospects for young high school and college graduates remain grim. This briefing paper examines the labor market that confronts young graduates who are not enrolled in additional schooling—specifically, high school graduates age 17–20 and college graduates age 21–24—and details the following findings:

- Unemployment and underemployment rates of young graduates have only modestly improved since their peak in 2010.

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- For young high school graduates, the unemployment rate was 32.7 percent in 2010 and 31.1 percent over the last year (April 2011–March 2012), while the underemployment rate was 55.9 percent in 2010 and 54.0 percent over the last year.
- For young college graduates, the unemployment rate was 10.4 percent in 2010 and 9.4 percent over the last year, while the underemployment rate was 19.8 percent in 2010 and 19.1 percent over the last year.

- There is no evidence that young high school graduates have been able to "shelter in school" from the labor market effects of the Great Recession; college and university enrollment rates for both men and women have not meaningfully departed from their long-term trend since the start of the Great Recession.
- The long-run wage trends for young graduates are bleak, with wages substantially lower today than they were in 2000. Between 2000 and 2011, the real (inflation-adjusted) wages of young high school graduates declined by 11.1 percent, and the real wages of young college graduates declined by 5.4 percent.
- Young graduates lack opportunities for advancement, a trend underscored by the fact that there are now nearly 30 percent fewer voluntary quits each month than there were each month in 2007.
- Graduating in a bad economy has long-lasting economic consequences. For the next 10 to 15 years, the Class of 2012 will likely earn less than they would have if they had graduated when job opportunities were plentiful.
- The safety net of federal and state assistance programs often does not cover young workers due to eligibility requirements such as significant prior work experience.
- The cost of higher education has grown far more rapidly than median family income, leaving students with little choice but to take out loans, which, upon graduating into a labor market with limited job opportunities, they may not have the funds to repay.
- The scarcity of job opportunities for the Class of 2012 is a symptom of weak demand for workers in the overall economy. What will bring down the unemployment rate of young workers most quickly and effectively are policies that will generate strong job growth overall, such as fiscal relief to states, substantial additional investment in infrastructure, expanded safety net measures, and direct job creation programs in communities particularly hard-hit by unemployment.

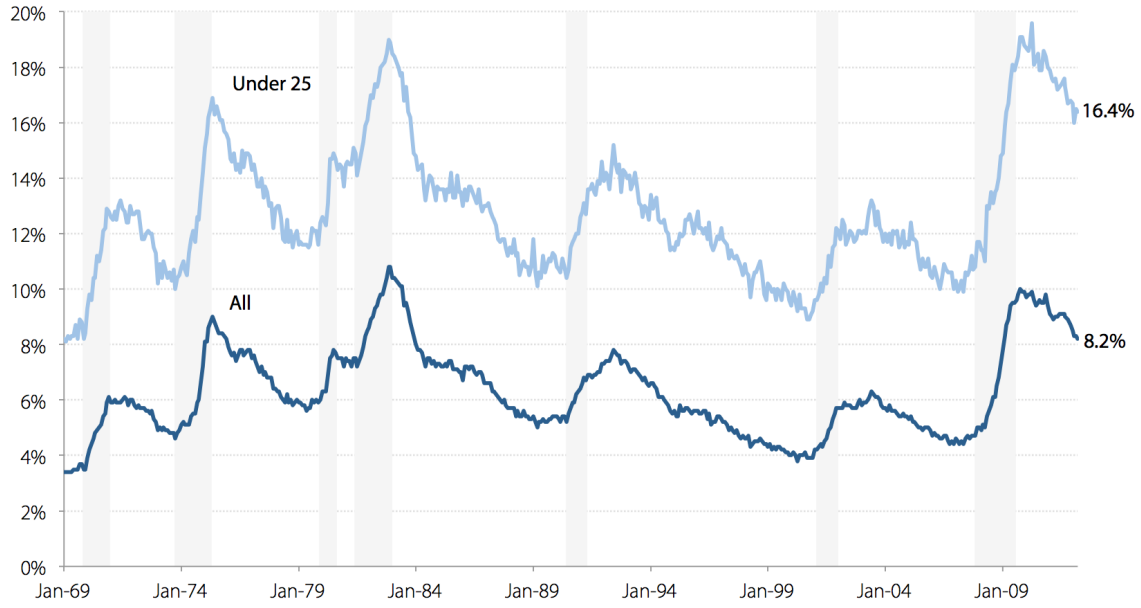
Unemployment rate twice as high for young workers

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

The historical fact that the unemployment rate for young workers tends to be around twice the overall rate continues to be true today. In March, the overall unemployment rate averaged 8.2 percent, and the unemployment rate of workers under age 25, at 16.4 percent, was exactly twice as high.

FIGURE A

Unemployment rate of workers under age 25 and all workers, 1969–2012



Note: Shaded areas denote recessions. Data are not seasonally adjusted.

Source: Authors' analysis of Current Population Survey public data series

This raises two key points. First, because the unemployment rate of young workers is always around twice as high as the overall rate, young workers experience much greater-than-average increases in unemployment during economic downturns. When the overall unemployment rate rises by one percentage point, the unemployment rate for young workers will likely rise by around *two* percentage points.

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

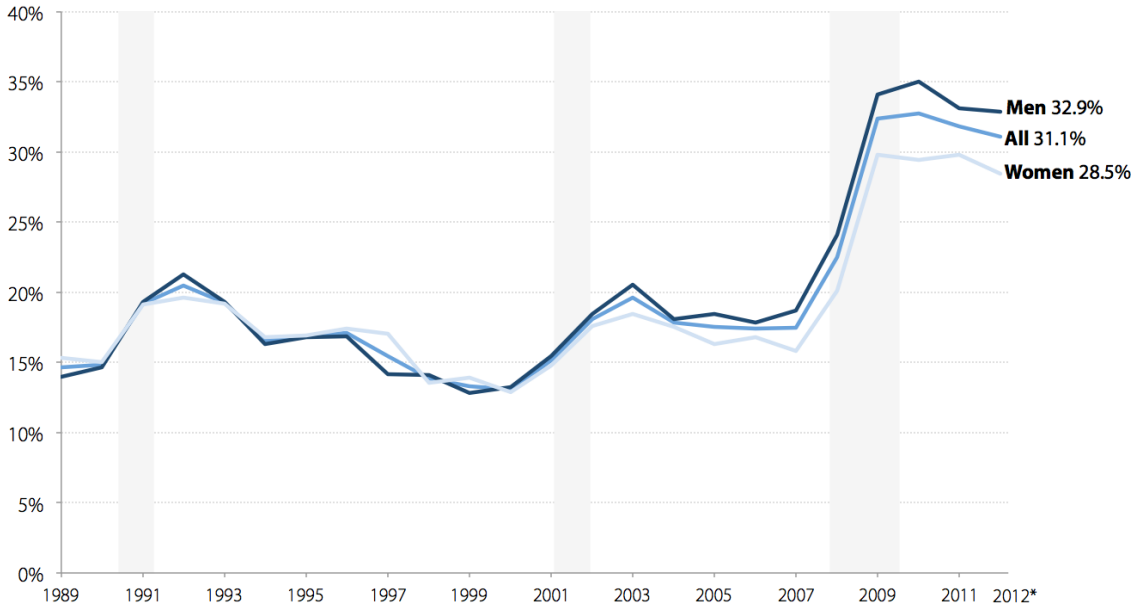
The title of this paper, "Class of 2012," is admittedly something of a misnomer, because we do not yet know the labor market outcomes of these soon-to-be graduates. However, by presenting the labor market outcomes of recent high school and college graduates, we can get a good sense of the labor market conditions confronting the young men and women graduating in the Class of 2012 this spring.

For young high school graduates, very high unemployment and no great increase in college enrollment

Among young high school graduates, unemployment and underemployment rates are astonishingly high. **Figure B** shows the unemployment rate for young high school graduates between age 17 and 20 who are not enrolled in additional schooling. (All data on graduates who are

FIGURE B

Unemployment rate for young high school graduates, by gender, 1989–2012*



*Latest 12-month average: April 2011–March 2012.

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

Source: Authors' analysis of basic monthly Current Population Survey microdata

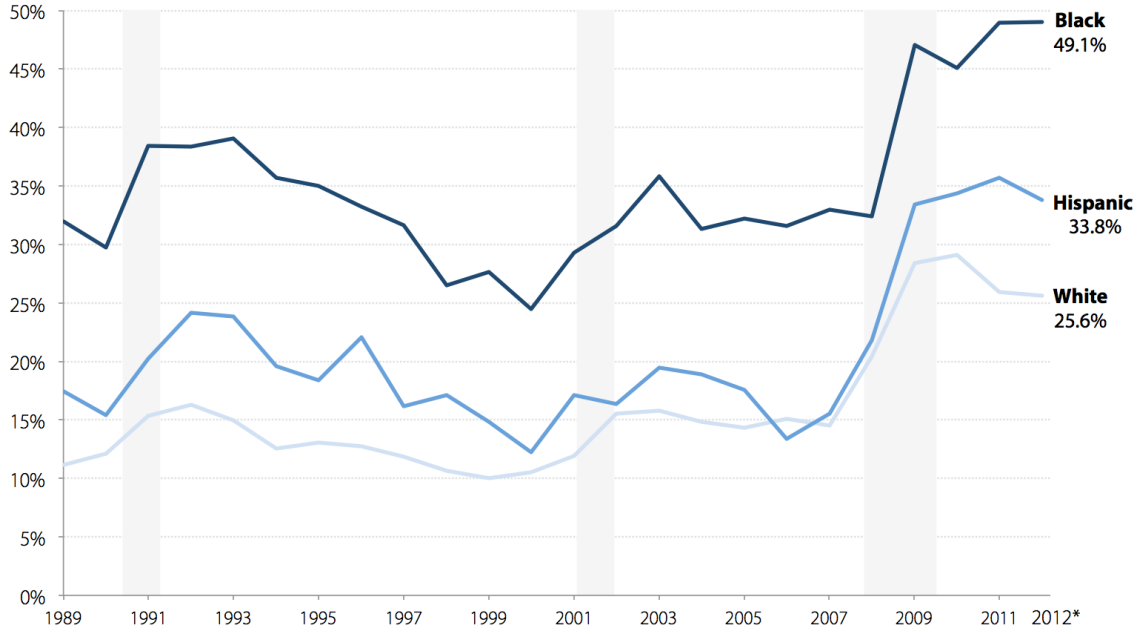
not enrolled, or on enrollment itself, presented in this paper begin in 1989, the first business cycle peak in which enrollment data are available from the Bureau of Labor Statistics.)

As Figure B shows, the unemployment rate for young high school graduates jumped from 17.5 percent in 2007 to 32.7 percent in 2010, dwarfing the increases in prior recessions. The rate has since declined slightly, to an average of 31.1 percent over the last year (April 2011–March 2012). The increase since 2007 was larger for young male high school graduates (from 18.7 percent in 2007 to an average of 32.9 percent over the last year) than for young female high school graduates (from 15.8 percent in 2007 to an average of 28.5 percent over the last year). Men's unemployment rates tend to disproportionately increase during downturns because men are more concentrated in industries, such as manufacturing and construction, that are particularly hard-hit by recessions.

Figure C shows that among young high school graduates, the unemployment rate for racial and ethnic minorities—particularly young black graduates—tends to be higher than that of whites, in good times and bad. In 2007, the unemployment rate of young white high school graduates was 14.5 percent. It rose to 29.1 percent in 2010 and improved slightly to an average of 25.6 percent over the last year. In 2007, the unemployment rate of young black high school graduates was 33.0 percent. It continued on a general upward trend until 2011, when it was 48.9 percent, and continued creeping up, to 49.1 percent over the last year. In 2007, the unemployment rate for young Hispanic high school graduates was 15.5 percent. That rate also continued to rise until 2011, when it

FIGURE C

Unemployment rate for young high school graduates, by race/ethnicity, 1989–2012*



*Latest 12-month average: April 2011–March 2012.

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

Source: Authors' analysis of basic monthly Current Population Survey microdata

was 35.7 percent, and improved to 33.8 percent over the last year.

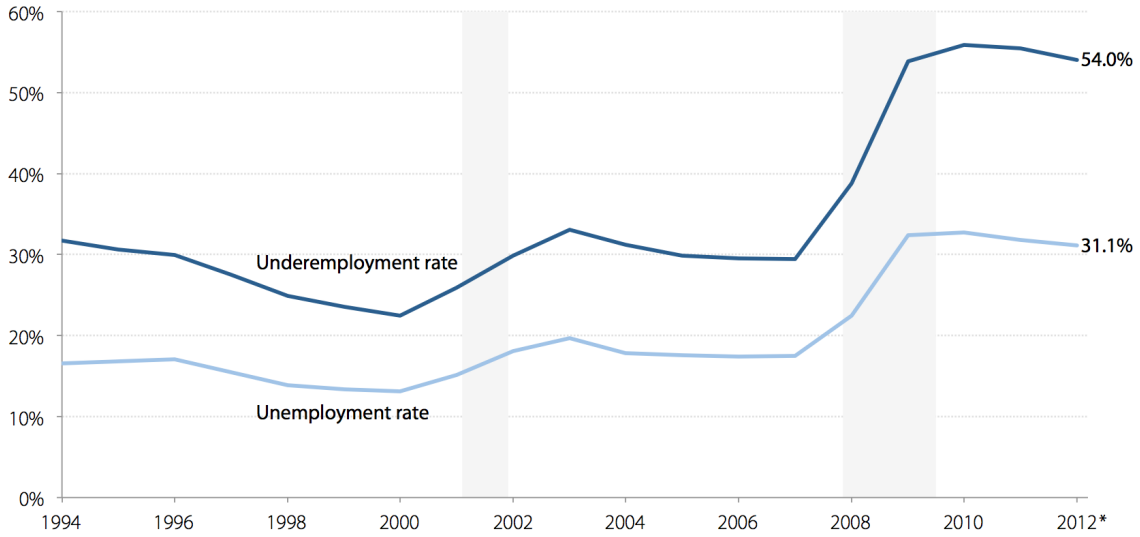
Because the definition of unemployment includes only jobless workers who report that they are actively seeking work, the unemployment rate overlooks those who are "underemployed": jobless workers who want a job but have given up looking, and workers who have a job but cannot get the hours they want or need.

Figure D presents national data on both unemployment and underemployment among young high school graduates, providing a more comprehensive look at slack in the labor market. Underemployment rates include not just workers who are unemployed but also those who are working part time but want full-time work ("involuntary" part-timers), and those who want a job and who have looked for work in the last year but have given up actively seeking work ("marginally attached" workers).

Currently, while the unemployment rate for young high school graduates is 31.1 percent, the *underemployment* rate of young high school graduates is over 50 percent (54.0 percent). In other words, in addition to the officially unemployed, a significant share of these young people either want a job but have simply given up looking for work, or have a job that does not provide the hours they need. While state breakdowns of underemployment by educational attainment are not available, **Appendix Table A2** shows state-level underemployment rates for all workers by age.

FIGURE D

Unemployment and underemployment rates of young high school graduates, 1994–2012*



*Latest 12-month average: April 2011–March 2012.

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

Source: Authors' analysis of basic monthly Current Population Survey microdata

Young people are not sheltering from the Great Recession in school

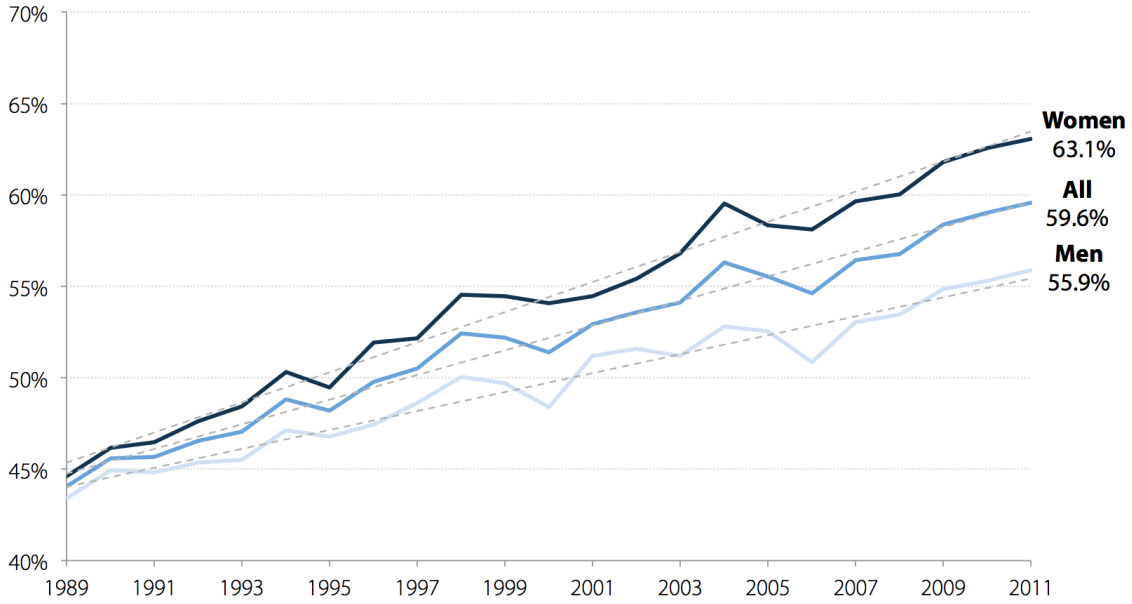
Educational opportunity is often cited as a silver lining to the dark cloud of unemployment that looms over today's young people. The assumption is that a lack of job opportunities propels young workers to "shelter" from the downturn by getting additional schooling, which will improve their long-run career prospects. But, while it may be comforting to believe that school can provide a safe haven from a desperate labor market, there is no evidence of an uptick in enrollment due to the Great Recession.

Figure E shows the share of young high school graduates who are enrolled in college or university. This share has greatly increased (from 44.0 percent in 1989 to 59.6 percent in 2011), with particularly steep increases for women (44.6 percent to 63.1 percent) compared with men (43.4 percent to 55.9 percent). Notably, although the enrollment rate has risen since the start of the Great Recession in 2007, the increase is *not* a departure from the longer-term trend. For reference, the dotted lines show the linear trend based on 1989–2007 data. The dotted lines after 2007 thus show what enrollment rates would have been if they had simply continued their long-run trend. Enrollment since the start of the Great Recession has continued to grow at its long-run pace, with no meaningful departure from that trend for either men or women.

It is also worth mentioning that while the enrollment rates in Figure E are just for high school graduates between the ages of 17 and 20, the same conclusions hold true when analyzing enrollment data for all high school graduates under age 25. Since the start of the Great Recession, college and university enrollment rates have

FIGURE E

Share of young high school graduates who are enrolled in college or a university, by gender, 1989–2011



Notes: Straight lines are linear trends based on the period 1989–2007. Data are for high school graduates age 17–20.

Source: Authors' analysis of basic monthly Current Population Survey microdata

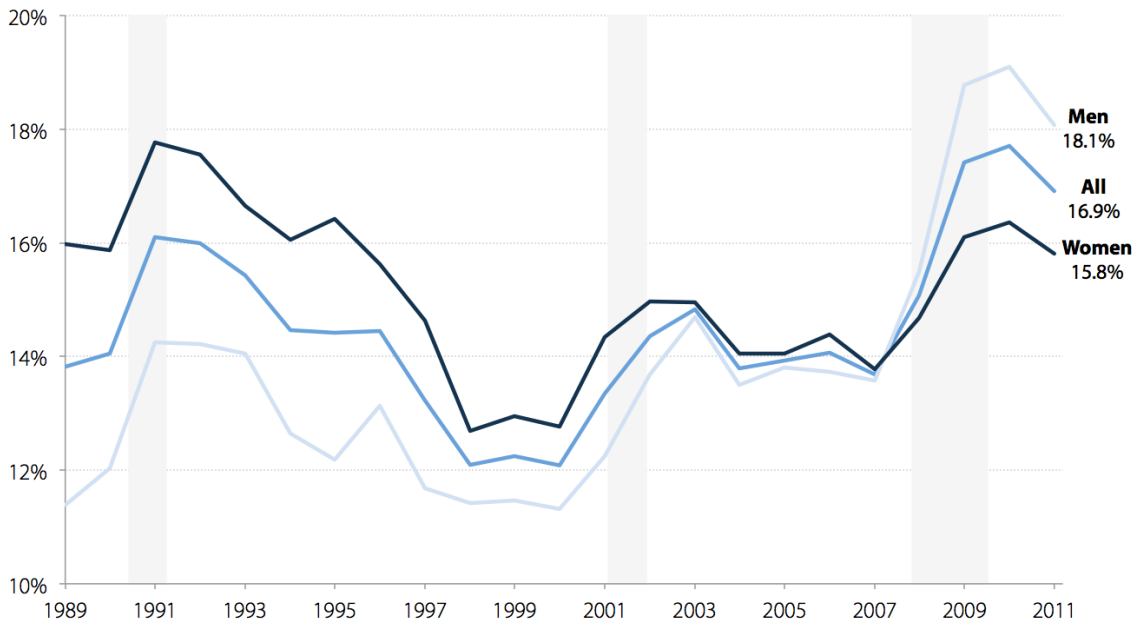
not meaningfully departed from their long-term trend for either men or women. **Appendix Table A3** shows enrollment rates by state for high school graduates under age 25.

That enrollment has not increased above its long-run trend despite the lack of job opportunities in the Great Recession and its aftermath is likely largely due to an often-overlooked fact: *Students and workers are not two distinct groups*. Many students must work to pay for school or cover living expenses. In 2007, before the recession began, more than half (51.2 percent) of college students were employed. By 2011, the share of college students with a job had dropped to 45.2 percent. For students who must work in order to afford school, but cannot find work due to the poor labor market, "sheltering in school" is not an option. In this downturn, certainly some students have had the financial resources to take shelter in school, but the lack of a substantial increase in enrollment suggests that this group has been offset by students who have been forced to drop out of school because a lack of work meant they could not afford to attend.

The lack of a Great Recession-fueled increase in college or university enrollment, combined with the lack of job prospects, means a large share of young high school graduates are now "disconnected," neither enrolled nor employed (**Figure F**). In 2007, 13.7 percent of young high school graduates were neither enrolled nor employed, and that share spiked to 17.7 percent in 2010. It has since declined slightly, to an average of 16.9 percent in 2011. The increase was larger for young male high school graduates (from 13.6 percent in 2007 to 19.1 percent in 2010 to 18.1 percent in 2011) than young female high school graduates (from 13.8 percent in 2007 to 16.4 percent in 2010 to 15.8 percent in 2011). The increase in the share

FIGURE F

Share of young high school graduates who are not enrolled in college or a university and not employed, by gender, 1989–2011



Note: Shaded areas denote recessions. Data are for high school graduates age 17–20.

Source: Authors' analysis of basic monthly Current Population Survey microdata

of "disconnected" young people represents an enormous loss of opportunities for this young cohort, as the lack of work experience and/or education will have a lasting negative impact on their lifetime earnings. The long-term scarring effects of the Great Recession and its aftermath on young graduates are discussed in depth later in this paper.

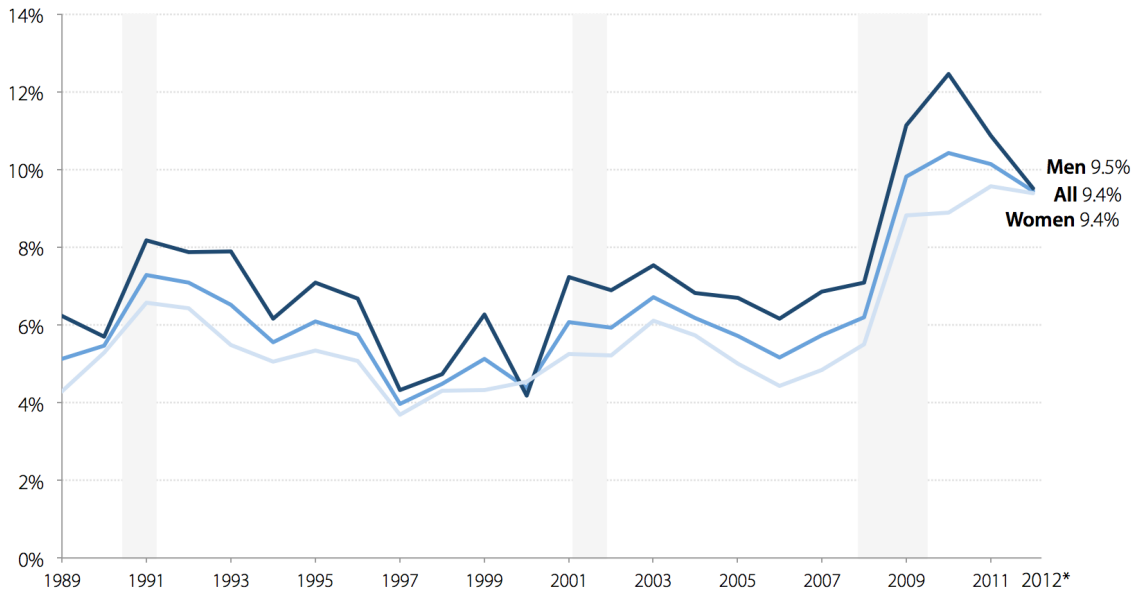
Young college graduates also struggle to find work

Young college graduates typically have very strong labor force attachment. By attending and graduating from college, they make a significant down payment on their career in terms of both time and money. And because a college degree affords one more opportunities in the labor market, unemployment and underemployment among young workers with a college degree is substantially lower than among other young workers. However, young college graduates have also seen a dramatic deterioration in their job prospects since the start of the Great Recession. In this section we examine the labor market outcomes of college graduates between the ages of 21 and 24 who do not have an advanced degree and are not enrolled in additional education.

Figure G shows that the unemployment rate for young college graduates jumped from 5.7 percent in 2007 to 10.4 percent in 2010, dwarfing the increases in prior recessions. It has since declined slightly, to an average of 9.4 percent over the last year. Given that the unemployment picture for young college graduates has yet to show substantial improvement, the Class of 2012 will be joining a significant backlog of unemployed college graduates from the Classes of 2009, 2010, and 2011 in an extremely difficult job market.

FIGURE G

Unemployment rate for young college graduates, by gender, 1989–2012*



*Latest 12-month average: April 2011–March 2012.

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

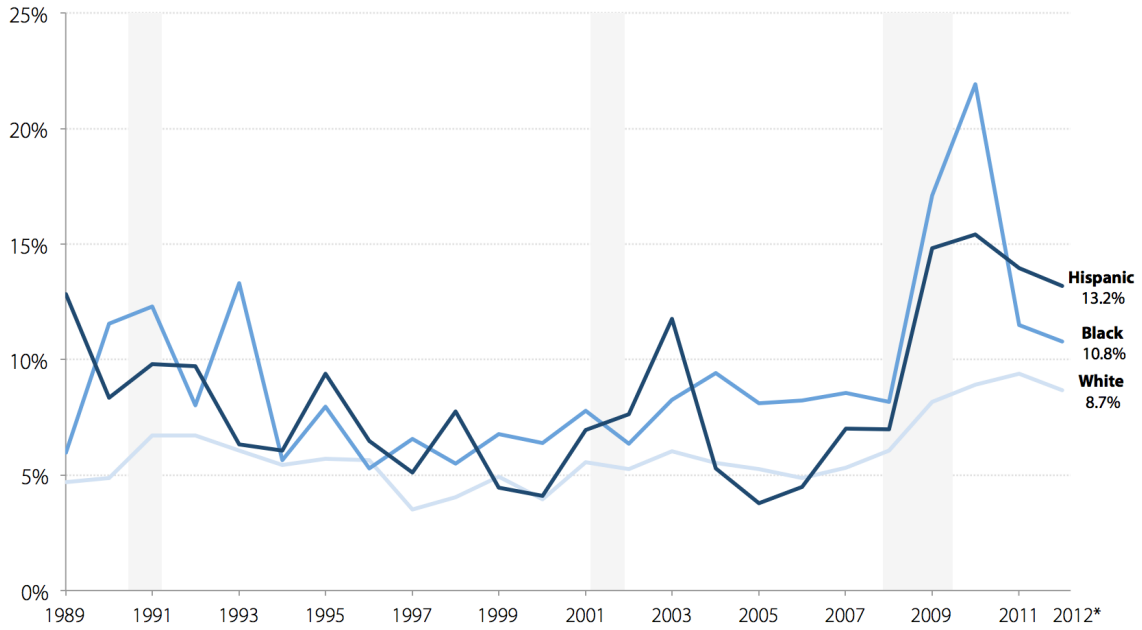
Source: Authors' analysis of basic monthly Current Population Survey microdata

Unemployment data by gender, though somewhat volatile due to relatively small sample sizes, show that the increase in unemployment was larger for young male college graduates (from 6.9 percent in 2007 to a peak of 12.5 percent in 2010) than young female college graduates (from 4.8 percent in 2007 to a peak of 9.6 percent in 2011). This gender gap in unemployment, which was also found among young high school graduates, is likely due in large part to industry concentration. Young women are more likely to be employed in industries, such as health and education, that see relatively less job loss and more hiring during downturns. The unemployment rate for young male college graduates has made greater improvement in the last year, to 9.5 percent, nearly matching the female average of the last year, 9.4 percent.

Figure H shows unemployment rates by race and ethnicity for young college graduates. As was the case with gender, the data by race and ethnicity are volatile due to relatively small sample sizes, but it is nevertheless clear that the unemployment rate of young college graduates who are racial and ethnic minorities tends to be higher than that of young white college graduates, in good times and bad. In 2007, the unemployment rate of young black college graduates was 8.5 percent, rose to 21.9 percent by 2010, and improved to 10.8 percent over the last year. In 2007, the unemployment rate for young Hispanic high school graduates was 7.0 percent, rose to 15.4 percent by 2010, and improved to 13.2 percent over the last year. Among young white college graduates, the unemployment rate was 5.3 percent in 2007, rising to 9.4 percent in 2011, and improving slightly to an average of 8.7 percent over the last year. Arguably, there should be little disparity in the unemployment rates of young college graduates, who have the same basic degree and are in the same labor market position (i.e., college graduates, age 21–24,

FIGURE H

Unemployment rate for young college graduates, by race and ethnicity, 1989–2012*



*Latest 12-month average: April 2011–March 2012.

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

Source: Authors' analysis of basic monthly Current Population Survey microdata

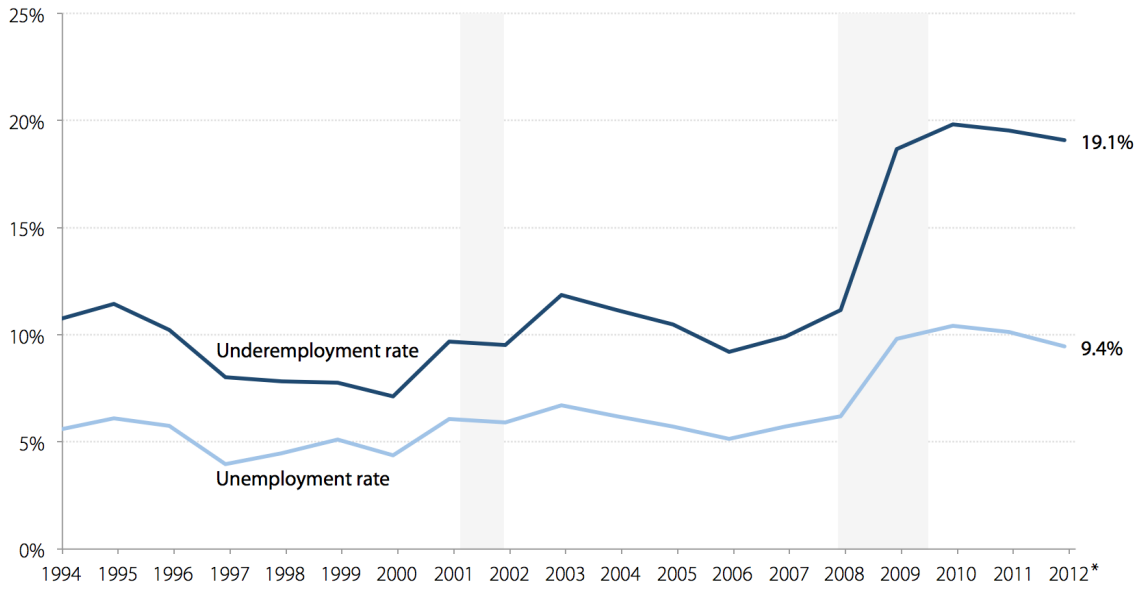
not enrolled in school, either employed or actively seeking work). It is notable that having an equivalent amount of higher education and a virtual blank slate of prior work experience still does not create parity in unemployment across races and ethnicities.

Figure I presents unemployment and underemployment data for young college graduates. Currently, while the unemployment rate for this group is 9.4 percent, the underemployment rate is more than twice that, at 19.1 percent. In other words, in addition to the substantial share who are officially unemployed, a large swath of these young, highly educated workers either have a job but cannot get the hours they need, or want a job but have given up looking for work.

Although this measure of underemployment 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). Andrew Sum offers some insight into skills/education-based underemployment by categorizing and analyzing occupations according to whether they require a college degree (Sum 2012). He shows that while always present, underemployment of young college graduates increased in the Great Recession and has not yet started to show improvement. He finds that among college graduates under the age of 25 who were working in 2011, 37.8 percent were not working in a job that required a college degree, up from 35.2 percent in 2010 and 31.1 percent in 2007. Later we discuss how young workers entering the labor market in a downturn must often settle for lower-level jobs, which contributes to the severe and long-lasting negative impact on earnings of starting out when the economy is weak.

FIGURE I

Unemployment and underemployment rates for young college graduates, 1994–2012*



*Latest 12-month average: April 2011–March 2012.

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

Source: Authors' analysis of basic monthly Current Population Survey microdata

Wages of new high school and college graduates have fallen over the last decade

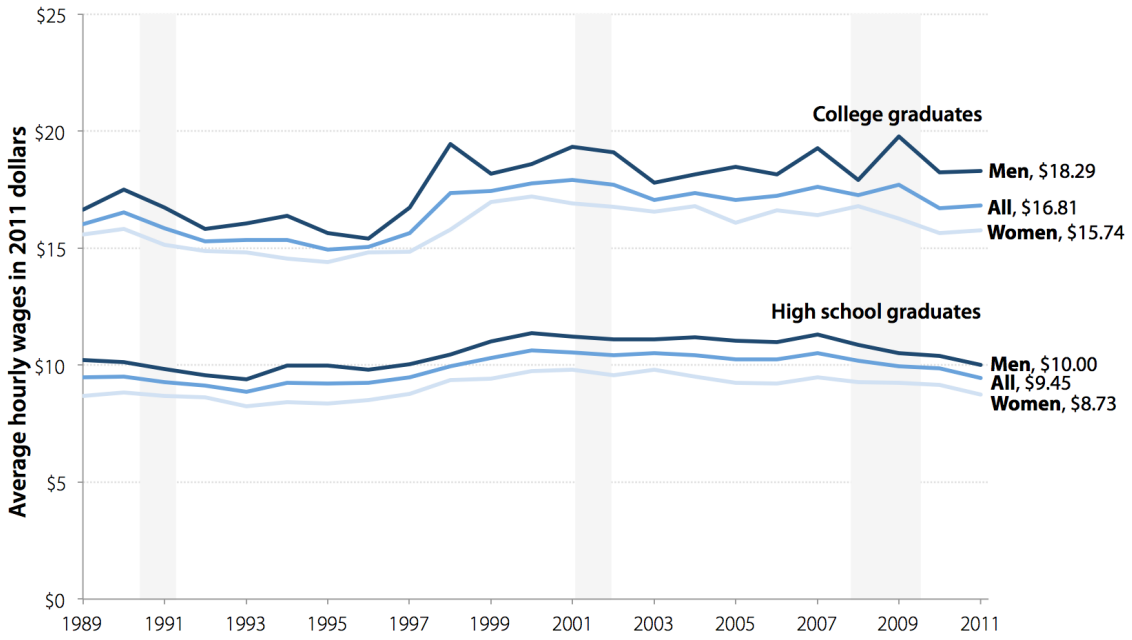
Figure J presents average hourly wages for young high school graduates and young college graduates; the underlying data are provided in **Table 1**. On average, young high school graduates in 2011 had an hourly wage of $9.45 per hour, which would yield an annual income of roughly $19,700 for a full-time, full-year worker. Young college graduates had an average hourly wage of $16.81 per hour, which translates into an annual income of roughly $35,000 for a full-time, full-year worker. Wages for young female graduates remain far less than those for young male graduates on average, regardless of educational attainment. Among young high school graduates, women earn 12.7 percent less than men, while among young college graduates, women earn 13.9 percent less than men.

The wages of all groups of young graduates have fared extremely poorly during the Great Recession and its aftermath, as shown in Table 1. The wages of young high school graduates dropped by 10.1 percent (11.6 percent for men and 7.9 percent for women) between 2007 and 2011, and the wages of young college graduates dropped by 4.6 percent (5.1 percent for men and 4.1 percent for women) over the same period.

As Figure J shows, however, the wages of young graduates were dropping even before the Great Recession began; they fared poorly over the entire period of general wage stagnation that began during the business cycle of 2000–2007. Between 2000 and 2011, the wages of young high school graduates dropped by 11.1 percent (12.0 per-

FIGURE J

Average hourly wages for young workers, by education, 1989–2011



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

Source: Authors' analysis of Current Population Survey Outgoing Rotations Group microdata

cent for men and 10.5 percent for women), and the wages of young college graduates dropped by 5.4 percent (1.6 percent for men and 8.5 percent for women). These drops translate into substantial amounts of money. For full-time, full-year workers, the hourly wage declines from 2000 to 2011 represent a roughly $2,500 decline in annual earnings for young high school graduates and a roughly $2,000 decline in annual earnings for young college graduates.

The wage declines since 2000 stand in sharp contrast to the strong wage growth for these groups from 1995 to 2000. During that period of low unemployment and strong wage growth, wages rose 15.4 percent for young high school graduates and 19.1 percent for young college graduates. The stark difference between these two economic periods illustrates how the wages for young graduates vary considerably depending on whether the overall economy is experiencing low unemployment and strong wage growth, or high unemployment and wage stagnation. Young graduates who enter the labor market during periods of strength (e.g., 1995–2000) face much stronger wage prospects than young graduates who enter the labor market during periods of weakness (e.g., 2001 to the present).

Low voluntary quits underscore lack of advancement opportunities for young workers

While finding a stable job is important for workers of all ages, it is nevertheless true that one way many workers gain advancement is by leaving one job and taking another that offers better pay or opportunities. This is

TABLE 1

Real average hourly wages for young workers, 1989–2011

	HIGH SCHOOL GRADUATES			COLLEGE GRADUATES		
	All	**Men**	**Women**	**All**	**Men**	**Women**
1989	$9.48	$10.21	$8.69	$16.02	$16.65	$15.57
1995	9.21	9.98	8.36	14.92	15.65	14.40
2000	10.63	11.37	9.75	17.77	18.58	17.21
2007	10.51	11.31	9.47	17.61	19.27	16.41
2011	9.45	10.00	8.73	16.81	18.29	15.74
1989–2000	12.1%	11.3%	12.1%	10.9%	11.6%	10.5%
1989–1995	-2.9	-2.3	-3.9	-6.9	-6.0	-7.5
1995–2000	15.4	13.9	16.6	19.1	18.7	19.5
2000–2011	-11.1	-12.0	-10.5	-5.4	-1.6	-8.5
2000–2007	-1.1	-0.5	-2.8	-0.9	3.7	-4.6
2007–2011	-10.1	-11.6	-7.9	-4.6	-5.1	-4.1

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

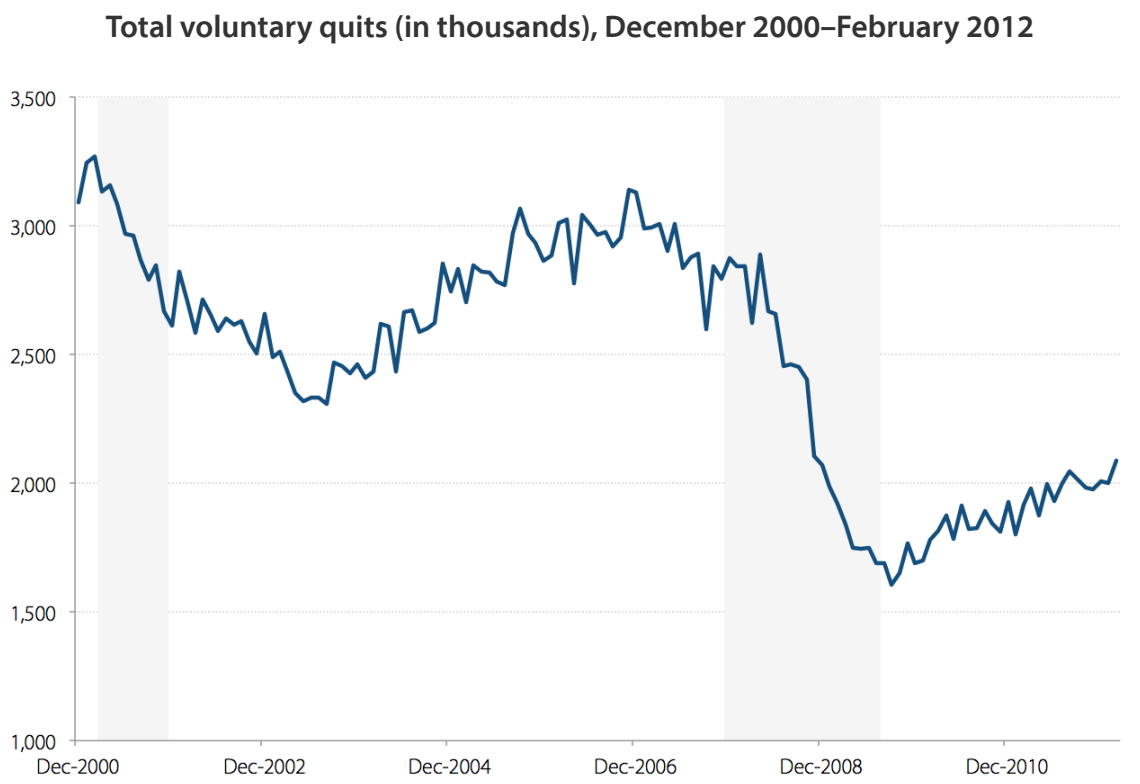
Source: Authors' analysis of Current Population Survey Outgoing Rotation Group microdata

particularly true for young workers, who are more likely to be in the process of identifying their own abilities and interests and tend to change jobs more frequently than older workers as they search for a job that is a good match and that either pays more or has better potential for wage growth.

One measure of such opportunities for advancement is the number of *voluntary quits* throughout the workforce. All else equal, a larger number of people voluntarily quitting jobs indicates a labor market in which job opportunities are plentiful and employed workers have the flexibility to look for jobs that pay better and more closely match what they want to do and excel at doing. During downturns, the number of voluntary quits falls as outside job opportunities become scarce. While the low level of voluntary quits represents lost opportunities for workers of all ages, it illustrates a critical loss of opportunities for young workers, because they in particular often benefit from leaving one job and moving on to another that is a better fit. Think, for example, of a young person who was lucky enough to graduate and find a job in 2007, the last spring graduation before the Great Recession began. Under normal circumstances that young person may have benefited at some point in the last five years from leaving her job for one that was a better match or offered better pay. Instead, she may have been stuck, unable to move on, because of the lack of outside job opportunities.

Data on voluntary quits are not available by age, so **Figure K** simply presents the total number of voluntary quits over time. Between 2007 and 2009, the average number of voluntary quits dropped by around 40 percent, from 2.9 million per month to 1.8 million per month. The vol-

FIGURE K



Note: Shaded areas denote recessions.

Source: Bureau of Labor Statistics, Job Openings and Labor Turnover Survey

untary quit level has picked up somewhat since that time, but by early 2012 it was still nearly 30 percent below its 2007 level. This represents millions of lost opportunities for young workers, and is one of the factors underlying their wage declines since 2007.

Downturn affects young workers' futures

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

Though there has been some increase in job opportunities over the last year, the underemployment rate for young high school graduates is still extremely high, at 54.0 percent, as is the underemployment rate for young college

graduates, at 19.1 percent. Thus, the Class of 2012 will be the fourth consecutive graduating class to face the severe short-term and long-term consequences of entering the labor market during a period of profound weakness.

Weak safety net for young workers

As previously demonstrated, unemployment rates for most groups of young workers have roughly doubled since 2007. Without jobs or the benefits that often accompany employment (including health insurance and retirement savings), what safety net exists for new entrants to the labor market who are unemployed?

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

Temporary Assistance for Needy Families (TANF) program benefits have work requirements and are only available to individuals with children, which excludes most young graduates. The Supplemental Nutrition Assistance Program (SNAP), which is responsible for distributing food stamps, is offered to young adults without work experience or dependents. However, if they are not currently working or participating in a work-training program, benefits are only available for three months in a 36-month period. The Earned Income Tax Credit (EITC), a refundable federal income tax credit for low- to moderate-income people, also requires work experience.

The Patient Protection and Affordable Care Act (PPACA), enacted in 2010, expanded health insurance options and improved affordability for young adults. Most importantly, individuals may now be insured as dependents on their parents' health insurance plans until they turn 26. Additionally, starting in 2014, all unemployed single workers with an annual income less than $15,000, including young adults, may be eligible for Medicaid insurance benefits, and single workers without employer-sponsored insurance who earn less than about $43,000 per year may also qualify for tax credits to help pay for health insurance.

Though the PPACA has made positive strides in providing protections for young graduates facing an especially harsh labor market, young workers do not have a strong public safety net to fall back on, even in times of persistent high unemployment. Therefore, many new graduates likely turn to their families for assistance. In 2011, for example, 54.6 percent of 18- to 24-year-olds were living with their parents, an increase of 3.4 percentage points since 2007. This trend may be burdensome to parents, many of whom may have also been hit hard by the recession, facing job loss; hours reductions; and the loss of homes, home equity, and retirement savings. Unfortunately for many young workers, family and friends are the only safety net available in a labor market with severely limited opportunities.

High cost of education, not enough money to pay for it

One likely reason that college and university enrollment rates have not increased above their long-run trend despite the lack of job opportunities during the Great Recession and its aftermath is the high cost of college. In the 2011–12 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 public school averaged $21,447. For a four-year private school, it was $42,224. The cost of higher educa-

tion has been rising faster than family incomes, making it harder for families to pay for college. From the 1981–82 enrollment year to the 2010–11 enrollment year, the cost of a four-year education increased 145 percent for private school and 137 percent for public school. Median family income only increased 17.3 percent from 1981–2010, far below the increases in the cost of education, leaving families and students unable to pay for most colleges and universities in full (authors' analysis of College Board 2011).

Unsurprisingly, the great majority of students and recent graduates take on debt to pay for college. Two-thirds of recent college graduates have student loans, and trends indicate that the level of student loans has been increasing. Between 1993 and 2008, average student debt for graduating seniors increased by 68 percent, from $14,410 to $24,238. Average debt for graduating seniors at public universities was $21,105 in 2008, and average debt for graduating seniors at private non-profit universities was $28,888 (authors' analysis of Project on Student Debt 2010).

Most Class of 2012 college graduates enrolled in college four years ago, near the beginning of the Great Recession. During the time they were in college, it is likely that many of their families faced real income declines due to job loss, cut hours, or lack of wage growth. At the same time, the cost of higher education was increasing to make up for asset losses (at private universities) and funding cuts (at public universities). Thus, it is likely that the share of graduates from the Class of 2012 with large student loans has risen accordingly.

In taking on these loans, students often do not realize that upon graduation they may not find a job that provides the income needed to repay the loans. And although most student loans have a grace period of six months before payments are expected, recent graduates who do not find a stable source of income may be forced to miss a payment or default altogether on their loans. Default can ruin young workers' credit scores and set them back years when it comes to saving for a house or a car. Researchers at the Federal Reserve Bank of New York calculated that 27 percent of total student loan borrowers had at least one past-due balance in the third quarter of 2011, and 25 percent of delinquent borrowers were under the age of 30, meaning many young graduates are piled with debt they cannot shoulder (Brown et al. 2012).

One contributing factor to these exceptionally high delinquency rates may be risky loans from private banks that recent graduates took on while they were in school. Underscoring that the practice of offering large loans to students who don't have an ability to repay them has become more widespread, settlements in 2007 with Citigroup and Sallie Mae required Sallie Mae to adopt a new code of conduct, including discontinuing its "opportunity loan" program in which Sallie Mae could make loans to students with little or no credit history, and required both Citigroup and Sallie Mae to pay $2 million to educate students and families about student loans (Freifeld 2007). To counteract riskier private loans, Congress passed the Student Aid and Fiscal Responsibility Act in 2010 (as part of the Health Care and Education Reconciliation Act) to end private lending of federally subsidized loans and expand federal Pell Grants. Additionally, in an effort to help keep student loans affordable, the Stop the Student Loan Interest Rate Hike Act of 2012 was introduced in April in an effort to keep interest rates of Stafford loans at their current 3.4 percent rate instead of their scheduled increase to 6.8 percent in July. While these policies are steps in the right direction, many recent graduates nevertheless face repayment of large loans in a very volatile job market.

Conclusion: Strong overall job growth is needed to boost young workers' employment

Although the job situation is slowly beginning to improve, the Class of 2012 faces an extremely difficult job market. The dramatic increase in unemployment among new college graduates since 2007 in particular under-

scores the fact that today's unemployment crisis among young workers did not arise because workers do not have the right skills. Instead, the Class of 2012 is one of the many casualties of weak demand for workers in the overall economy. Continued improvement in the labor market is expected to be slow, with the overall unemployment rate likely not falling below 7 percent for another two years. Given that the unemployment rate for young workers generally parallels the overall unemployment rate but at a much higher level—recall Figure A—improvement in the unemployment rate for young workers is also expected to be slow, with the Classes of 2013 and 2014 also facing the negative consequences of entering the labor market during a period of very high unemployment.

It doesn't have to be this way. Although young workers are a unique group, their currently high unemployment levels do not require a unique solution. The thing that will bring down the unemployment rate of young workers most quickly and effectively is strong job growth overall. Focusing on policies that will generate demand for U.S. goods and services (and therefore demand for workers who provide them)—policies such as fiscal relief to states, substantial additional investment in infrastructure, expanded safety net measures, and direct job creation programs in communities particularly hard-hit by unemployment—is the key to giving young people a fighting chance as they enter the labor market during the aftermath of the Great Recession.

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APPENDIX TABLE A1

State unemployment rates, by age

	WORKERS UNDER AGE 25				ALL WORKERS			
	2000	2007	2010	2011	2000	2007	2010	2011
Alabama	12.5%	11.0%	23.4%	20.4%	4.5%	4.0%	10.5%	9.8%
Alaska	14.0	12.8	14.1	15.3	6.7	6.2	8.0	7.6
Arizona	7.5	8.9	21.0	17.5	4.0	3.9	10.4	9.5
Arkansas	11.2	10.3	16.5	15.6	4.4	5.6	8.6	8.6
California	10.5	11.6	22.8	21.7	4.9	5.3	12.2	11.6
Colorado	7.2	8.7	16.6	16.5	2.8	3.7	8.7	8.4
Connecticut	5.6	10.0	18.2	18.2	2.2	4.5	9.2	8.9
Delaware	9.6	7.3	18.2	14.3	3.9	3.5	8.5	7.5
District of Columbia	14.3	12.7	21.0	20.7	5.7	5.5	9.2	10.4
Florida	9.2	9.2	21.6	18.5	3.6	4.1	11.1	10.0
Georgia	8.2	10.6	22.8	18.6	3.7	4.3	10.7	10.1
Hawaii	11.8	8.2	14.7	12.0	4.3	2.9	7.0	7.3
Idaho	9.3	7.3	18.9	20.0	4.9	3.0	9.0	8.7
Illinois	9.9	10.4	17.2	16.8	4.3	5.1	10.2	9.7
Indiana	8.3	11.4	21.9	17.2	3.2	4.6	10.6	9.0
Iowa	6.8	8.0	11.6	12.3	2.6	3.7	6.1	5.8
Kansas	8.6	9.3	14.8	12.3	3.7	4.1	7.4	6.7
Kentucky	9.8	12.7	20.6	19.9	4.1	5.4	10.3	9.5
Louisiana	13.3	9.0	18.8	18.9	5.4	4.3	7.8	7.8
Maine	8.7	11.6	17.4	17.7	3.5	4.7	8.2	8.0
Maryland	9.6	11.4	15.5	12.8	3.8	3.6	7.7	7.0
Massachusetts	6.7	9.1	16.1	13.8	2.6	4.6	8.5	7.3
Michigan	8.0	13.9	18.4	18.1	3.5	7.1	12.2	10.2
Minnesota	6.4	9.2	13.1	12.7	3.3	4.6	7.3	6.5
Mississippi	14.1	14.7	22.7	22.6	5.6	6.1	10.9	10.5
Missouri	8.1	11.3	18.5	18.4	3.4	5.0	9.5	8.4
Montana	10.0	7.6	16.2	16.2	5.0	3.6	7.7	7.3
Nebraska	6.7	6.8	9.4	9.3	3.0	3.1	4.8	4.5
Nevada	7.7	8.4	23.0	21.3	4.0	4.6	14.4	13.1
New Hampshire	6.9	8.3	11.9	12.2	2.8	3.6	5.9	5.4

APPENDIX TABLE A1 (CONTINUED)

	WORKERS UNDER AGE 25				ALL WORKERS			
	2000	2007	2010	2011	2000	2007	2010	2011
New Jersey	9.6	9.9	15.9	16.6	3.7	4.2	9.3	9.4
New Mexico	12.0	8.8	15.7	15.2	5.0	3.7	8.5	7.4
New York	10.4	11.9	16.5	15.7	4.6	4.6	8.5	8.1
North Carolina	9.8	10.3	20.6	22.5	3.6	4.5	10.5	10.5
North Dakota	6.6	5.5	8.7	8.4	3.0	3.2	3.8	3.6
Ohio	8.7	12.0	20.4	14.3	4.0	5.6	10.1	8.7
Oklahoma	6.6	8.7	14.0	14.4	3.1	4.4	7.2	6.2
Oregon	9.6	11.2	18.7	19.8	4.9	5.2	11.0	9.4
Pennsylvania	9.9	10.9	17.5	14.2	4.1	4.3	8.6	7.8
Rhode Island	11.5	9.5	19.0	19.4	4.1	4.9	11.3	11.1
South Carolina	10.6	14.0	23.8	21.6	3.8	5.6	11.0	10.5
South Dakota	5.6	6.5	11.9	10.6	2.3	2.9	5.1	4.9
Tennessee	8.9	11.6	18.5	21.3	3.9	4.6	9.4	9.2
Texas	10.2	9.8	14.8	16.2	4.2	4.3	8.0	7.8
Utah	5.8	6.1	14.7	11.1	3.3	2.6	8.2	7.0
Vermont	6.3	9.6	12.3	15.0	2.9	4.0	6.2	5.8
Virginia	6.0	7.5	15.6	14.9	2.2	3.1	7.5	6.5
Washington	12.8	11.8	22.1	21.8	5.2	4.6	10.2	9.4
West Virginia	11.9	12.8	21.7	19.8	5.5	4.6	9.0	8.1
Wisconsin	7.2	11.8	16.3	15.1	3.6	5.0	8.7	7.8
Wyoming	9.8	7.5	15.0	12.7	3.9	2.9	6.6	5.9
United States	9.3	10.5	18.4	17.3	4.0	4.6	9.6	8.9

Source: Authors' analysis of basic monthly Current Population Survey microdata

APPENDIX TABLE A2

State underemployment rates, by age

	WORKERS UNDER AGE 25				ALL WORKERS			
	2000	2007	2010	2011	2000	2007	2010	2011
Alabama	19.5%	17.2%	36.4%	31.8%	8.2%	7.1%	17.3%	16.2%
Alaska	23.6	22.4	25.3	27.2	12.1	11.2	14.2	13.5
Arizona	11.9	15.1	33.9	31.6	6.7	7.4	18.4	18.0
Arkansas	17.7	16.7	26.0	25.9	7.5	9.5	14.4	14.1
California	16.6	19.1	37.1	36.3	8.8	9.9	22.1	21.1
Colorado	12.0	15.2	27.1	28.6	5.2	7.3	15.4	15.1
Connecticut	10.3	17.2	30.7	31.6	4.2	8.2	15.7	15.4
Delaware	15.5	12.7	30.5	26.2	6.4	6.4	14.3	13.3
District of Columbia	22.0	19.0	31.3	30.7	9.8	9.3	14.0	15.8
Florida	14.4	16.0	34.8	31.6	6.5	8.0	19.3	17.6
Georgia	13.1	17.7	36.1	32.7	6.0	8.1	17.9	17.2
Hawaii	19.7	15.5	32.7	24.7	9.4	6.4	16.9	15.1
Idaho	14.6	12.9	32.4	32.8	8.5	6.1	16.3	16.1
Illinois	15.4	16.6	30.2	29.7	7.2	8.6	17.5	17.0
Indiana	12.6	17.5	35.0	30.2	5.6	7.8	17.4	15.7
Iowa	9.9	12.5	20.7	22.1	5.0	7.0	11.6	11.3
Kansas	13.3	15.0	24.5	22.8	6.1	7.3	12.4	12.1
Kentucky	15.0	19.6	33.1	31.3	6.9	9.3	16.4	15.7
Louisiana	20.4	13.3	26.7	27.9	9.2	7.2	12.9	13.4
Maine	13.1	19.9	31.5	31.8	6.9	8.9	15.2	15.1
Maryland	13.7	16.7	25.2	23.5	5.7	6.3	13.0	12.6
Massachusetts	10.6	13.5	25.6	27.8	4.8	7.3	14.3	14.3
Michigan	13.0	23.8	33.2	32.8	6.3	12.8	21.0	18.8
Minnesota	11.3	15.5	24.6	22.7	5.7	8.2	13.8	12.8
Mississippi	22.7	22.9	33.5	31.6	9.5	10.8	17.6	16.4
Missouri	12.5	18.5	30.7	29.3	5.7	8.3	15.8	14.4
Montana	16.9	12.7	27.2	28.1	9.8	7.1	15.0	15.4
Nebraska	10.5	12.1	14.9	17.4	5.3	5.7	8.6	8.9
Nevada	12.8	12.5	35.5	36.0	6.8	7.6	23.6	22.7
New Hampshire	11.5	13.9	24.0	23.3	4.8	6.5	11.8	11.3

APPENDIX TABLE A2 (CONTINUED)

	WORKERS UNDER AGE 25				ALL WORKERS			
	2000	2007	2010	2011	2000	2007	2010	2011
New Jersey	14.7	16.9	27.3	28.4	6.3	7.4	15.7	16.0
New Mexico	18.7	15.2	28.0	27.4	8.6	7.3	15.6	14.7
New York	17.2	18.5	26.8	27.2	7.9	8.1	14.8	14.3
North Carolina	14.3	18.1	33.0	34.6	6.2	8.5	17.4	17.9
North Dakota	10.1	9.2	14.3	13.8	6.1	5.8	7.4	6.6
Ohio	13.4	19.8	31.7	23.9	6.8	9.7	16.9	14.7
Oklahoma	11.8	15.1	22.8	22.6	6.0	7.5	11.4	10.7
Oregon	17.8	19.7	36.0	34.1	8.5	10.0	20.0	17.5
Pennsylvania	15.6	16.2	28.4	24.6	7.3	7.7	14.7	13.9
Rhode Island	17.3	15.3	33.2	32.6	6.9	8.3	19.2	18.6
South Carolina	16.3	21.3	34.8	32.4	6.7	9.5	18.1	18.2
South Dakota	9.8	11.6	20.1	17.8	4.9	5.7	9.7	9.3
Tennessee	14.9	19.8	31.8	30.4	7.5	8.0	16.6	15.5
Texas	16.3	15.9	25.3	26.9	7.4	7.7	14.4	14.0
Utah	10.7	10.5	24.6	20.1	5.9	5.0	15.1	13.3
Vermont	12.3	15.0	22.5	27.7	5.8	7.0	12.5	11.6
Virginia	11.1	13.6	25.4	25.1	4.2	6.1	12.9	11.8
Washington	20.7	20.5	36.5	35.3	9.6	8.8	18.4	17.8
West Virginia	20.6	22.6	32.5	32.0	10.2	9.2	14.0	13.7
Wisconsin	12.8	17.8	26.9	26.5	6.4	8.4	14.8	14.2
Wyoming	15.9	12.0	24.1	20.9	7.1	5.6	11.6	10.6
United States	14.9	17.3	30.4	29.3	7.0	8.3	16.7	15.9

Source: Authors' analysis of basic monthly Current Population Survey microdata

APPENDIX TABLE A3

College/university enrollment rates for high school graduates under age 25, by state

	2000	2007	2010	2011
Alabama	39.5%	34.7%	42.7%	41.5%
Alaska	27.0	33.9	30.8	31.0
Arizona	34.4	36.5	43.3	46.7
Arkansas	27.0	32.0	31.6	35.7
California	44.1	48.3	51.1	50.1
Colorado	28.5	34.8	40.2	41.6
Connecticut	45.9	46.8	52.4	48.6
Delaware	35.4	41.2	41.7	45.4
District of Columbia	36.2	39.7	38.3	40.7
Florida	37.7	38.2	50.2	47.5
Georgia	29.5	43.7	45.3	47.1
Hawaii	42.5	40.0	41.2	37.1
Idaho	31.1	27.6	32.1	36.7
Illinois	37.6	45.3	45.2	45.1
Indiana	36.6	37.9	42.0	41.1
Iowa	37.6	41.2	42.7	39.4
Kansas	45.0	41.6	44.4	39.6
Kentucky	39.9	36.8	36.9	39.3
Louisiana	38.2	39.9	40.8	41.3
Maine	34.2	41.0	41.4	39.7
Maryland	38.6	47.3	47.8	46.7
Massachusetts	39.8	46.6	50.6	47.9
Michigan	37.5	45.1	51.2	50.7
Minnesota	35.0	43.6	41.2	46.3
Mississippi	38.1	40.0	43.4	45.3
Missouri	37.1	38.2	39.6	43.9
Montana	34.3	34.7	38.1	39.4
Nebraska	37.6	41.8	43.1	43.1
Nevada	31.6	29.9	37.5	40.1
New Hampshire	35.9	41.8	42.8	44.8
New Jersey	43.6	49.4	52.6	51.3

APPENDIX TABLE A3 (CONTINUED)

	2000	2007	2010	2011
New Mexico	38.8	45.0	49.5	49.7
New York	42.4	48.8	48.2	50.5
North Carolina	32.2	41.3	41.8	43.5
North Dakota	37.2	39.9	37.7	39.2
Ohio	38.2	38.5	41.2	44.6
Oklahoma	35.0	38.8	36.3	34.2
Oregon	30.0	34.4	39.2	40.9
Pennsylvania	41.2	40.4	41.8	41.6
Rhode Island	37.6	44.0	47.4	48.4
South Carolina	37.0	38.9	38.7	41.6
South Dakota	32.9	35.0	41.1	36.2
Tennessee	36.2	39.0	40.7	39.3
Texas	34.3	41.4	40.5	39.8
Utah	33.7	33.1	33.0	39.7
Vermont	38.4	40.7	39.0	40.0
Virginia	38.3	39.4	41.1	43.8
Washington	36.5	31.2	38.8	42.1
West Virginia	34.9	31.3	34.7	33.3
Wisconsin	30.4	37.8	42.0	41.2
Wyoming	36.6	35.0	33.4	33.4
United States	37.9	41.9	44.5	44.8

Source: Authors' analysis of basic monthly Current Population Survey microdata