

The Employment and Mal-Employment Situation for Recent College Graduates: An Update

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How did Young College Graduates Fare during the Jobs Recovery after the Great Recession?

Even as the job market has rebounded over the last two years, the employment prospects for young college graduates have continued to deteriorate.

Over the last two years, young college graduates saw their employment rates fall at the same time as their mal-employment rates increased.

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Introduction

Over the past several years the American labor market has begun to slowly recover from the Great Recession. Since the beginning of 2010, payroll employment levels have increased by about 3.8 million jobs and the nation's unemployment rate has declined modestly from 9.9% to 8.2%. Many of the employment gains that have occurred in the nation have been concentrated among individual aged 55 and over. Indeed, during the 2007 to 2010 period of job losses, the largest employment declines occurred among teens and college graduates. Furthermore, the rebound in employment among young people has been slow.¹ In response to the deteriorating job market conditions, many young people opted to enroll in the nation's post-secondary system, seeking shelter in the nation's higher education system from the extreme turbulence that characterized the nation's job market during the Great Recession. Over the past few years the nation's high schools have sent near record numbers of their graduating senior classes into college. Indeed, among the nation's high school graduating class of 2009, 70 percent of students were enrolled in a

¹ Neeta P. Fogg and Paul E. Harrington, Rising Demand for Older Workers Despite the Economic Recession: Accommodation and Universal Design for the New American Workforce, *Public Policy and Aging Report*, 12(1) p. 11-17.

post-secondary program in the fall term following high school graduation.²

A key question that emerges from these trends is what have been the job market experiences of those who have been able to earn a college degree? How are young college graduates faring as the nation's job market recovers. Have their job prospects improved as the nation's labor market has recovered? This research brief updates a study by the authors that was published in 2011 which examined some of the labor market problems experienced by young college graduates during the period of job losses between 2007 and 2010.³ This Brief updates some of the findings of that study through the spring of 2012 to examine the job market experiences of recent college graduates over the course of the economic recovery. We begin by examining fundamental labor force status measures including job market participation, unemployment rate, and the employment rate. We then examine recent developments in measures of mal-employment, a key measure of underutilization among recent college graduates.

Trends in Labor Force Outcomes

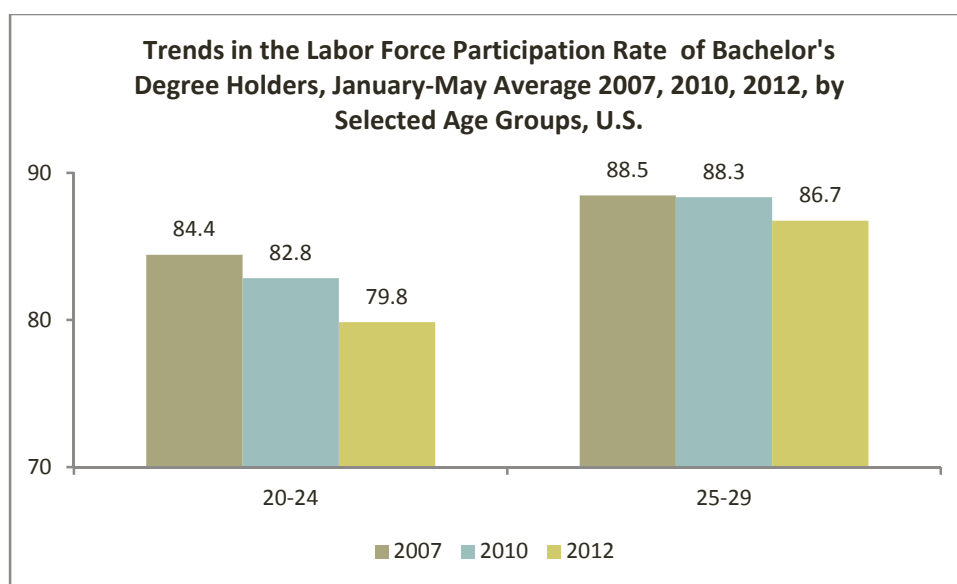
Three of the most important gauges of the job market success of different groups in the economy are the labor force participation rate, the unemployment rate and the employment to population ratio (E/P); sometimes referred to as the employment rate. Each of these gauges measures a different dimension of a population group's engagement and success in the job market at a point in time. Comparing these measures over time allows us to gain insights into how different groups have fared in the job market as economic conditions change. Using data from the monthly Current Population Survey (CPS), we have produced estimates for each of these measures of labor market outcomes for bachelor's degree holders aged 20 to 24 and 25 to 29. These estimates provide insights into their experiences as they attempt to transfer from college to a career job. We examine combined monthly average data for the January through May period (winter-spring) of 2007 to 2010 to assess the impact of the recession on the labor market outcomes of young college graduates, and then over the 2010 to 2012 period to understand how

² U.S. Bureau of Labor Statistics, *College Enrollment and Work Activity of 2009 High School Graduates*. April 2010. The graduating senior class of 2011 sent a near record 68.3 percent of its graduates to college in the fall of 2011. See: U.S. Bureau of Labor Statistics, *College Enrollment and Work Activity of 2011 High School Graduates*. April 2012.

³ Neeta P. Fogg and Paul E. Harrington, 2011. Rising Mal-Employment and the Great Recession: The Growing Disconnection between Recent College Graduates and the College Labor Market. *Continuing Higher Education Review*, Vol. 75, p.51-65.

their job market experiences might have improved as the nation's job market began a slow recovery from the recession.

The labor force attachment of the youngest college graduates declined from 84.4 percent to 82.8 percent from the pre-recession winter-spring 2007 to winter-spring 2010. The labor force participation among bachelor's degree holders aged 25 to 29 remained essentially unchanged over the same period of time. As the labor market began to recover in early 2010 through the spring of 2012, the labor force participation rates of new college graduates *declined* further. The fraction of bachelor's degree holders participating in the labor market declined by three percentage points from 82.8% in the winter-spring 2010 to 79.8 by winter-spring 2012. Similarly, the labor force participation rate of bachelor's degree holders aged 25 to 29 declined from 88.3% to 86.7% over the same two year period. These declines are not trivial: if the labor force attachment of these young bachelor's degree holders remained at its pre-recession level, then an additional 222,000 young bachelor's degree holders would have been actively engaged in the job market—one indicator of the loss of potential production and earnings to the U.S. economy as these individuals fail to engage in the job market.

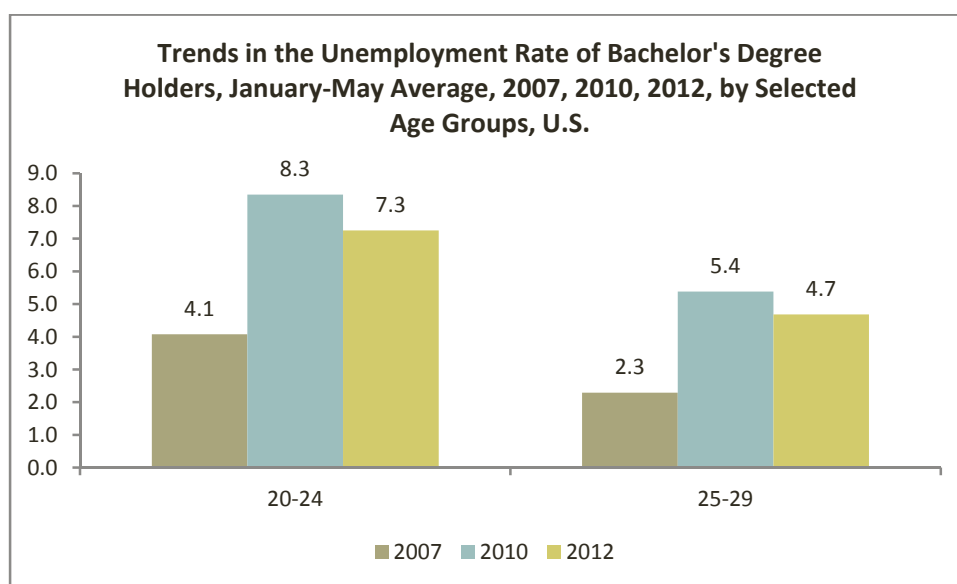


Source: U.S. Bureau of the Census, Current Population Survey, Public Use Datafiles, various years. Tabulations by the Center for Labor Markets and Policy, Drexel University, Philadelphia, Pennsylvania

The unemployment rate is certainly the best known and most reported measure of labor market outcomes available today. We have estimated the January-May average unemployment rate for young bachelor's degree holders for 2007, 2010 and 2012 using the monthly CPS data.

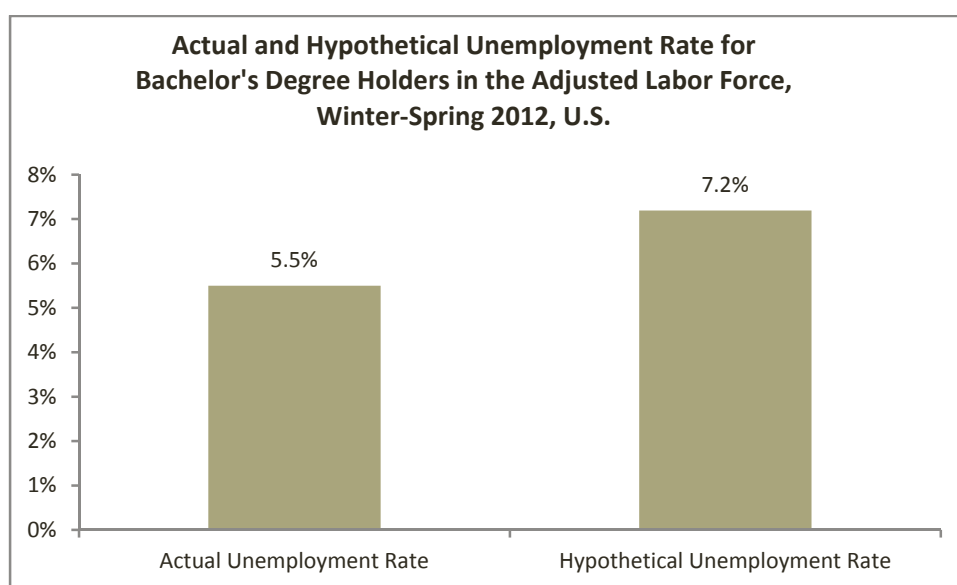
These data reveal that the unemployment rate among the youngest college graduates rose sharply between winter-spring of 2007 and 2010, doubling from 4.1 percent to 8.3 percent by the winter-spring of 2010. Over the next two years the unemployment rate among the youngest college graduates declined gradually to 7.3 percent. College graduates aged 25 to 29 who were actively engaged in the labor market saw their unemployment rate double as well from 2.3 percent in winter-spring 2007 up to 5.4 percent by 2010. Since then, the unemployment rate among 25- to 29-year-old bachelor's degree holders has fallen modestly to 4.7 percent.

The unemployment rate decline that occurred over the past two years among young college graduates was partially the result of increases in the number of employed college graduates, but also a consequence of the reduction in the participation of young bachelor's degree holders in the labor market. As we noted above, the labor force attachment of young bachelor's degree holders has declined considerably since 2007, with much of the decline occurring between 2010 and 2012. We further observed that had the rate of labor force participation for young bachelor's degree holders remained the same, an additional 222,000 young college graduates would be seeking work today. Thus the unemployment rate decline is partially the product of a reduction in the number of young college graduates seeking employment in this adverse labor market environment.



Source: U.S. Bureau of the Census, Current Population Survey, Public Use Datafiles, various years. Tabulations by the Center for Labor Markets and Policy, Drexel University, Philadelphia, Pennsylvania

We have produced estimates of the number of young college graduates who are not active participants in the labor market as they have stopped looking for work, but report that they would like to have a job. In most instances these individuals are excluded from the labor force since they have not actively sought a job. During the January to May 2012 period a total of 127,400 young college graduates (20-29) were out of the labor force, but had a job desire. If we were to add this group to both the unemployment and labor force estimates for this time period then the unemployed rate among college graduates would have been 7.2 percent instead of the actual unemployment rate of 5.5 percent for all bachelor's degree holders between the ages of 20 to 29 during the winter-spring of 2012.



Source: U.S. Bureau of the Census, Current Population Survey, Public Use Datafiles, various years. Tabulations by the Center for Labor Markets and Policy, Drexel University, Philadelphia, Pennsylvania

Over the last several years the number of employed bachelor degree holders has increased both during the jobs recession of 2007 to 2010 as well as during the jobs recovery through the spring of 2012. This rise in employment has helped reduce the unemployment rate of young college graduates—especially in the context of reductions in the labor force participation among those recent graduates. But the pace of employment growth among young college graduates has not kept pace with growth in the size of the overall bachelor's degree population between the ages of 20 and 29. Between winter-spring of 2007 and 2012, the number of bachelor degree holders aged 20 to 24 rose by nearly 500,000 or 21.6 percent, but employment among this group rose by about 210,000 or 11.2 percent. Similarly, the population of bachelor degree

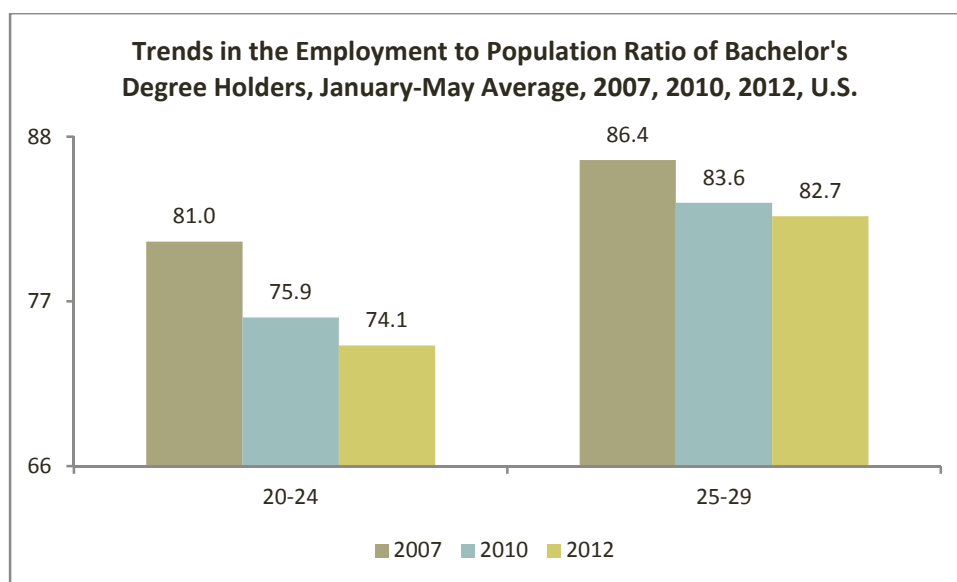
holders aged 25 to 29 rose by 14 percent while employment among these college graduates rose by just 9 percent.

Table 1: Trends in the Total Number of Bachelor's Degree Holders and the Number of Employed Bachelor's Degree Holders, by Selected Age Groups, 2007, 2010 and 2012, U.S.

	January- May 2007	January-May 2010	January-May 2012	2007 to 2012	
				Absolute Change	Relative Change
20-24 Population	2,296,229	2,618,887	2,791,968	495,739	21.6%
20-24 Employed	1,859,751	1,988,506	2,067,656	207,905	11.2%
25-29 Population	4,813,537	5,228,816	5,487,044	673,507	14.0%
25-29 Employed	4,160,600	4,370,397	4,537,079	376,479	9.0%

Source: U.S. Bureau of the Census, Current Population Survey, Public Use Datafiles, various years. Tabulations by the Center for Labor Markets and Policy, Drexel University, Philadelphia, Pennsylvania

This slow pace of employment growth relative to the growth in the size of the young bachelor's degree population means that the fraction of new college graduates who had a job has declined—even during the period of the jobs recovery. During the period of the jobs recession between 2007 and 2010 the employment to population ratio of college graduates aged 20-24 fell from 81.0 to 75.9 percent, a very large decline in a measure that is generally quite stable. Over the next two years of jobs recovery in the nation, the E/P ratio of the youngest college graduates failed to improve and in fact fell by an additional 1.8 percentage points. Among the 25 to 29 year

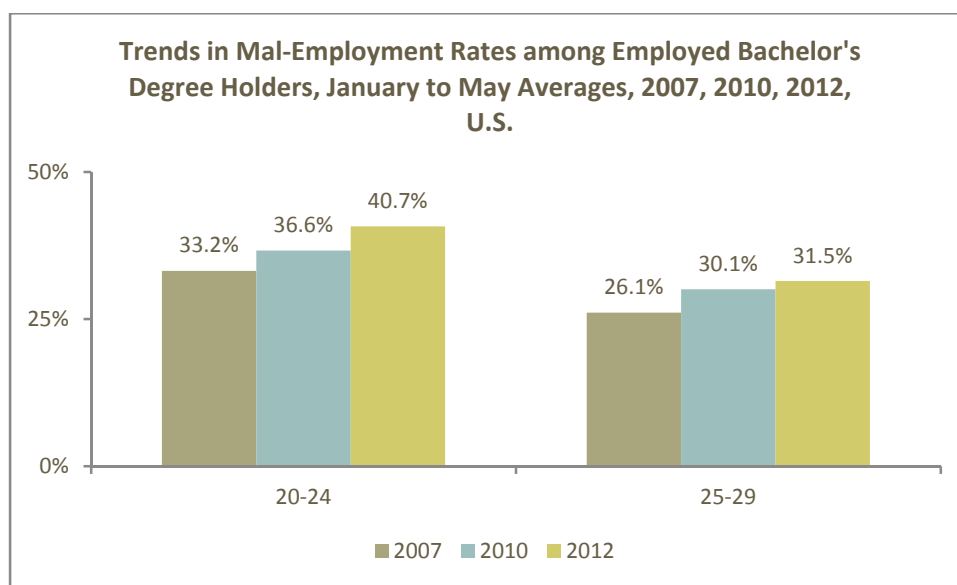


Source: U.S. Bureau of the Census, Current Population Survey, Public Use Datafiles, various years. Tabulations by the Center for Labor Markets and Policy, Drexel University, Philadelphia, Pennsylvania

old bachelor's degree population in the nation, the fraction that were employed fell from 86.4 percent to 83.6 percent during the jobs recession and declined further to 82.7 percent during the jobs recovery. Thus, employment rates for young college graduates continued to fall, even in the face of a slowly recovering job market.

Trends in Mal-Employment

One of the ways that college graduates, especially new college graduates, adjust to poor labor market conditions is to choose mal-employment over the alternative of unemployment. That is, young college graduate increasingly will choose to work in occupations that do not use much of the knowledge, skills and abilities usually developed by earning a college degree rather than accept the alternative of joblessness. In general, our definition of a college labor market occupation includes professional, technical, managerial and high levels sales jobs. Occupations outside of these four broad groupings are generally classified as non-college labor market jobs. We classify all college graduates who are employed outside of the college labor market as mal-employed. Note that we do not consider whether the job is related to the undergraduate field of study when we define a college labor market job. The measure of mal-employment that we have developed would, for example, classify a political science major who is employed as a claims representative in an insurance firm as working in the college labor market. If the same political



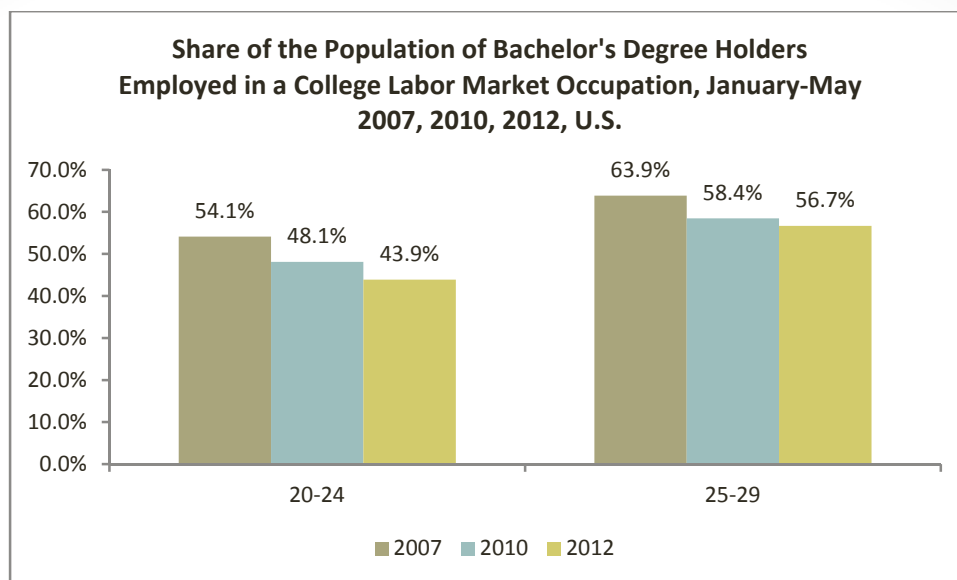
Source: U.S. Bureau of the Census, Current Population Survey, Public Use Datafiles, various years. Tabulations by the Center for Labor Markets and Policy, Drexel University, Philadelphia, Pennsylvania

science major is working as a bartender, we would categorize him as mal-employed, even though one might reasonably claim that neither occupation was related to the undergraduate field of study.⁴

The mal-employment rate of young adults with a bachelor's degree has continued to climb over the last five years—through both the period of the jobs recession between 2007 and 2010 as well as over the period of jobs recovery—through the spring of 2012. Our analysis reveals that among the youngest employed college graduates with just a bachelor's degree, the share that were mal-employed rose from 33.2 to 36.6 percent between the winter-spring of 2007 and 2010. During the period of jobs recovery over the next two years, the mal-employment rate rose again to 40.7 percent by the winter-spring of 2012. Among employed bachelor's degree holders aged 25-29 the share that were mal-employed rose from 26.1 percent to 30.1 percent during the jobs recession, but continued to rise to 31.5 percent during the winter-spring of this year.

The share of all college graduates who were employed has declined and among those college graduates who did find employment, the fraction that worked outside the college labor market (measured by the mal-employment rate) has increased. These trends--declining employment rates combined with rising mal-employment rates—have resulted in a sharp decline in the share of all college graduates that were employed in college labor market jobs. Indeed, we find that among those aged 20 to 24 the share of all those with a bachelor's degree employed in college labor market jobs declined from 54.1 percent in the pre-recession period to just 43.9 percent by the winter-spring of this year (2012). Over 40 percent of that decline occurred during the 2010 to 2012 period of job market recovery. Among the population of 25- to 29-year-old college graduates with just a bachelor's degree, 63.9 percent were employed in a college labor market job in the winter-spring of 2007 and by the winter-spring of this year (2012) that proportion had fallen to 56.7 percent. About one-quarter of this decline occurred during the jobs recovery period of the last two years.

⁴ For a more careful discussion of 'overeducation' or mal-employment See: Neeta P. Fogg and Paul E. Harrington. 2011. Rising Mal-Employment and the Great Recession: The Growing Disconnection between Recent College Graduates and the College Labor Market. *Continuing Higher Education Review*, vol. 75, p.51-65.



Source: U.S. Bureau of the Census, Current Population Survey, Public Use Datafiles, various years. Tabulations by the Center for Labor Markets and Policy, Drexel University, Philadelphia, Pennsylvania

Mal-employment represents an important labor market problem for college graduates. We find that at the bachelor's degree level those who work in a college labor market occupation have mean annual earnings that are 77 percent higher than those who are mal-employed. Thus most of the economic benefits of completing a four-year college degree program are closely connected to access to employment in the college labor market. For those who do not find a college labor market job, the economic gains to earning a college degree are greatly diminished.

Key Findings

Over the past two years of job market recovery, the labor market conditions for young college graduates have shown little improvement. We find reduced attachment to the labor market, sharp reductions in the fraction of young college graduates who are employed and a substantial rise in the prevalence of mal-employment among young college graduates. While unemployment rates of young college graduates have declined somewhat, this is largely a result of reduced participation in the job market among them and an increased willingness to trade-off unemployment for mal-employment among those who do opt to stay engaged in the job market.

We find that even as the job market has rebounded over the last two years there is little evidence that this has improved the employment prospects for young college graduates. Rather,

we find that even during this period of net job creation, young bachelor's degree holders saw their employment rates fall at the same time as their mal employment rates increased.

The deteriorating labor market prospects for young college graduates might best be summarized by the measure of the proportion of young college graduates who do find work in a college labor market occupation and thus are able to capture the earnings advantages that a college degree can offer. There was a sizable decline between the winter-spring of 2007 and 2012 in the proportion of all young college graduates who worked in a college labor market job; a decline from 54.1 percent to 43.9 percent among 20- to 24-year-olds and 63.9 percent to 56.7 percent among 25- to 29-year-olds. A large part of these declines occurred in the jobs recovery period over the last two years.

The promise of an economic return to a college investment is, at its most fundamental level, found in the labor market. The ability of young Americans to prosper through investments in human capital has diminished as access to jobs that utilize the skills, knowledge and abilities developed in college has declined.