

LABOR MARKETS

The Stanford Center on Poverty and Inequality

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KEY FINDINGS

- Men's and women's prime-age employment declined more during and after the Great Recession than at any time since record keeping began in 1947 and shows only weak signs of recovery. In November 2013, six years after the start of the Great Recession, men's and women's prime-age employment ratios were almost five percent lower than they were in December 2007.
- Although job loss affected most sectors of the American society, people who lacked educational credentials bore a disproportionate burden. Over the course of the recession, the prime-age employment ratio dropped 15 points for men without a high school diploma compared to 10 points for men with high school diplomas and just 5 points for men with college degrees.
- Unemployment in industries that drove the recession, such as construction or financial services, rose from the onset of the recession until its end, but then almost fully recovered after the recession ended. "Bystander industries," such as public administration, education and health care, have failed to recover, implying that the austerity in public spending is delaying recovery.

Americans work for their living. For most people, a job is both an economic and moral imperative. The wages they earn fuel the rest of the economy. Employment begets the spending that begets more employment. In good times, it is a virtuous cycle reinforcing consumer-driven capitalism. Events like the financial crisis of 2007 and 2008 can reverse the cycle, spinning the economy downward with a momentum that can be hard to break. Job losses reduce spending, which kills more jobs, reducing spending even more.

The Great Recession of 2007 to 2009 played out these general principles of recession economics in every aspect, but with an uncommon intensity. The "housing bubble" burst, the financial sector tumbled, banks stopped lending, construction workers lost their jobs, sales of building materials and appliances plummeted, tax revenues fell, and the downward spiral threatened to spin ever lower. The government saved the banks and stimulus spending broke the fall in employment. But employment has barely kept pace with population growth since the recovery began in the summer of 2009. The U.S. economy enters 2014 with 7 percent of the labor force unemployed and millions more out of the labor force.

In this brief, our aim is to assess the current standing of the U.S. labor market, a task that inevitably requires us to address the enduring effects of the Great Recession. We will put the Great Recession in historical context, looking both at its overall impact and at how the burdens were distributed across

the population by gender, level of education, and industry.

Historical Context

The single best index of employment is the prime-age employment ratio—the ratio of employed 25-54 year-olds to the population of that age. The more familiar unemployment rate gives a reasonably accurate picture of employment during good times, but during recessions many people who would prefer to be working will stop looking. The unemployment rate does not count them so it makes the economy look better than it is. As a recovery starts, those people reenter the labor market, making unemployment look worse until they find a job. The prime-age employment ratio overcomes this "discouraged worker" problem by keeping tabs of everyone whether they are looking for work or not.

Figure 1 plots the prime-age employment ratio for men and women separately from the earliest to the most recent data, with recession months shaded gray. When the Great Recession began in December of 2007, 87.5 percent of American men 25-54 years old were employed; at the low point two years later, 80.4 percent were (a decline of 8.1 percent). The path upward from that low point has been very unsteady; by November of 2013, men's prime-age employment ratio was still a very low 82.8 percent (5.0 percent below its level at the onset of the recession). Women's employment declined more slowly but shows practically no sign of recovery. When the Great Recession began in December of 2007, 72.4 percent of prime-age

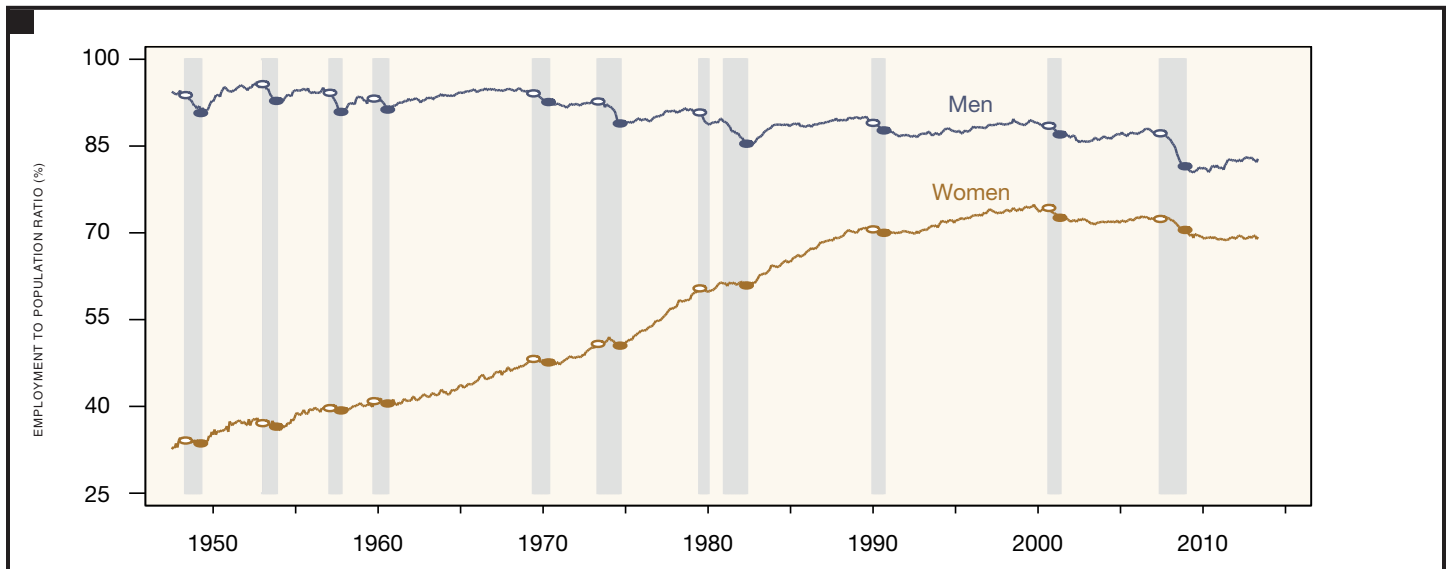
women were employed; women’s employment bottomed out in November 2011 at 68.7 percent (5.1 percent below its level at the onset of the recession) and it had increased by barely one-half of a percentage point to 69.4 percent by November of 2013. At the bottom of the recession, men’s prime-age employment was lower than at any time since the data were first collected in 1947; women’s employment was lower than at any time in the last twenty-five years.

Men’s and women’s prime-age employment declined more during and after the Great Recession than at any time on record. For men, that record shows a net decline from a long-ago peak of 96 percent in 1953 to the most recent 83 percent. Each postwar recession reduced prime-age employment, and since the 1970s post-recession employment always fell short of its pre-recession high. Women’s employment increased so dramatically during the twentieth century that recessions more often slowed growth than reversed it. After the 2001 recession, however, women’s prime-age employment failed to rebound to its pre-recession level for the first time on record; it has happened again after the Great Recession as women’s most recent prime-age employment ratio is about where it was when the recession officially ended in the summer of 2009. The point estimate for November 2013 is one point lower than the point estimate for June 2009. Because the margin of error on each is 1.5 percentage points, we cannot say for sure that the ratio is lower now than then.

To learn more about the Great Recession and its aftermath, we align the prime-age employment ratios of three recessions by measuring time relative to the onset of the recession. We picked two recessions for our comparison: the double-dip recession of 1980-1982 and the recession of 2001. The 1980-1982 recession is interesting because until the Great Recession it was the most severe recession of the post-war era; it is useful to compare one strong recession with another. The 2001 recession is interesting because it was the first one in which women’s employment failed to recover to pre-recession levels; some commentators referred to the post-recession period as a “jobless recovery.”

Figure 2 shows, for women and men separately, the change in prime-age employment relative to its level at the onset of recession plotted against months since the recession started (actually starting the time series six months prior to the onset of recession). We smoothed the time series to remove the distraction of short-term fluctuations best ascribed to statistical sampling error. Men’s prime-age employment fell almost 7 percent in the two years following the onset of the Great Recession, recovered two percentage points over the next two years, and changed little in the last two years. Women’s prime-age employment fell less but longer so that today, six years after the Great Recession began, men’s and women’s prime-age employment ratios are both almost five percent lower than they were in December 2007.

FIGURE 1. Prime-age Employment Ratio by Month and Gender, 1947-2013.



Source: Bureau of Labor Statistics
 Note: We used seasonally adjusted data for people who were 25 to 54 years old.

The 2001 recession lasted half as long and was much less severe than the Great Recession, but there were some similarities in the timing and gender patterns. Men's prime-age employment fell for two years before rebounding but failing to reach its pre-recession level. Women's employment fell slower but longer, and it too failed to recover to its pre-recession level.

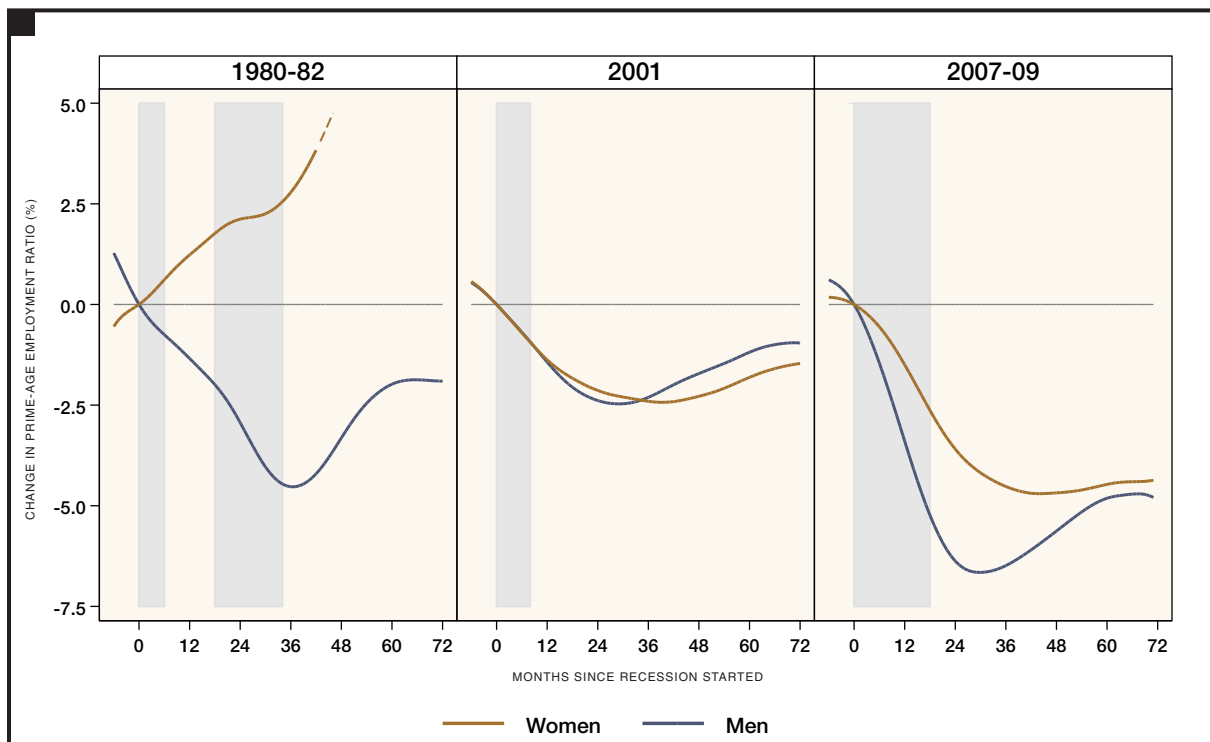
The double-dip recession of 1980-1982 lasted three years and raised the unemployment rate (not shown) to over 10 percent. Men's prime-age employment fell throughout the recession but began to rebound almost immediately after the recession ended. Five years after the recession began, men's employment was still almost two percent lower than it had been at the beginning in January 1980. Women's employment was on a sharp upward path as the recession started. It slowed but did not fall during the first part of the recession, plateaued during the second, and then resumed its climb as soon as the recession ended.

There are at least three reasons why conditions following the 1980-1982 recession differed from those in recent years. First, deregulation of the savings and loan industry sparked a housing bubble that dramatically increased employment in

the construction industry. When that bubble burst in 1990, many savings and loan banks failed and the economy went into recession, but its immediate impact was to put men (especially) to work building new housing. Second, personal computers became popular. Most were made in the United States, increasing employment in manufacturing. Third, Chrysler and other car makers started making minivans and sport utility vehicles that revived American automobile manufacturing. Nothing of that sort has emerged in recent years to stimulate employment growth.

None of these recoveries (and none of the others we looked at but do not show) produced significant employment gains beyond the sixtieth month (i.e., five years) after the recession began. In the 1950s, 1960s, and 1970s, recessions were about five years apart. Since 1980, recessions have been less frequent, but no recovery has been sufficient to return prime-age employment to pre-recession levels. That strongly suggests that full recovery from the Great Recession will not occur unless and until the federal government enacts a second stimulus package. The political environment makes a stimulus highly unlikely, but the slack in the U.S. job market implies that the economy needs it.

FIGURE 2. Change in Prime-age Employment Ratio by Gender and Months Since the Beginning of the Recession, 1980-1986, 2001-2007, and 2007-2013.



Source: Authors' calculations from seasonally adjusted data provided by the Bureau of Labor Statistics, 2013.
 Note: Time series smoothed to reduce the influence of statistical sampling error. Women's employment rose linearly from 2.5 at the end of the recession in 1982 to 10.0 in month 72. To highlight other aspects of the data we truncated the women's time series at 5.0 and indicated that it continued with dashes.

Human Capital

Accounts of the recession in the popular media frequently feature struggling college graduates. The data suggest that this storyline may not be totally without foundation, but it is misleading and overstated.

Figure 3 shows that prime-age employment is more likely among the better-educated—in good times and bad. The recession has amplified college graduates’ advantages, not eroded them. The need to take a lower-paying job may make paying back college loans harder, but at least college graduates are getting jobs. The jobs college graduates now get typically go to high school graduates in tighter labor markets. It is high school graduates and high school dropouts who have borne the brunt of the Great Recession.

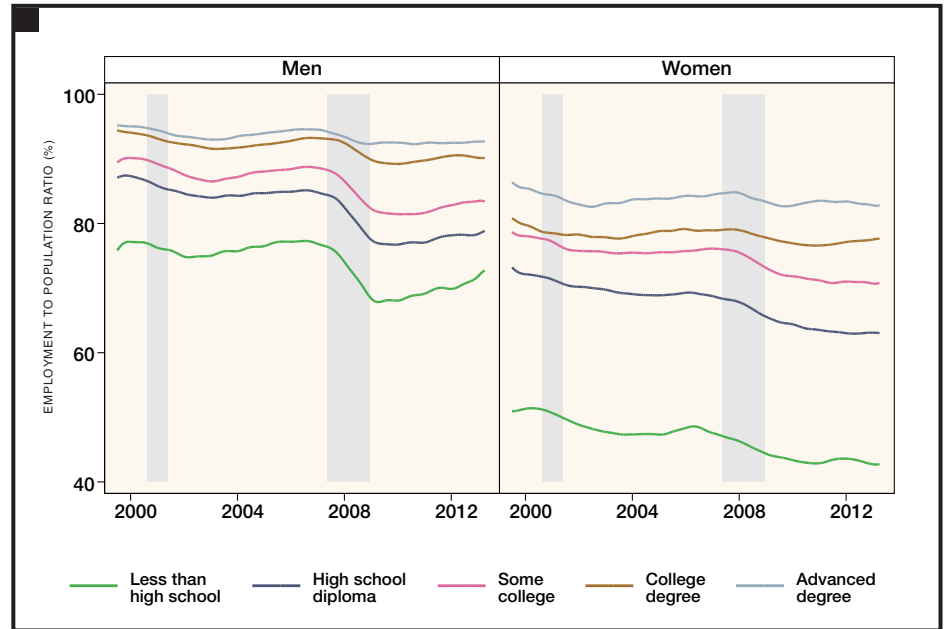
Prior to the recession, unemployment for people with less than a high school degree hovered around 7 percent, while unemployment for college graduates was only about 2 percent. As unemployment spread, the rate for each educational category rose more or less proportionally. At peak unemployment in 2010, the rate for people without a high school degree had increased from 7 to nearly 15 percent and the rate for college graduates had increased from 2 to about 4.7 percent. The baseline differences were so large that proportional increases raised unemployment most for the least-educated and least for the most-educated. Even though unemployment rose for everyone, people without a high school degree bore a much greater unemployment burden.

Industry

The Great Recession started with a financial crisis that pushed both banks and homeowners to the brink of insolvency. A federal bailout saved the banks and subsequent legislation helped some homeowners. But the immediate fallout was a credit crunch that reduced consumers’ ability to borrow money.

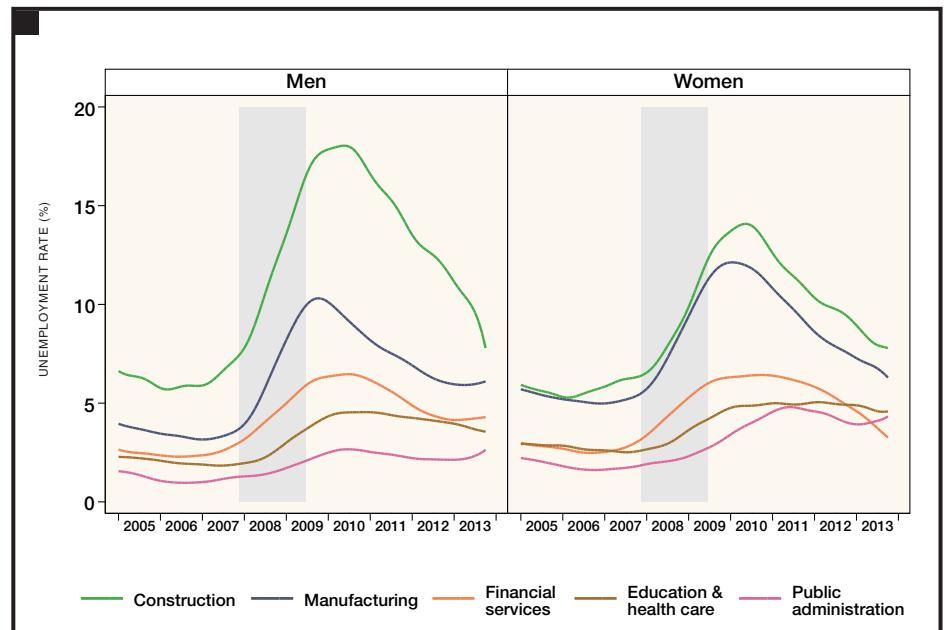
That, in turn, reduced the demand for manufactured goods. All of these changes affected employment. We should see the effects in data on employment in some industries more than others. For this analysis we switch from the prime-age employment ratio to the more conventional unemployment

FIGURE 3. Prime-age Employment Ratio by Month, Educational Attainment, and Gender, 2001-2013.



Source: Authors’ calculations from Bureau of Labor Statistics data, 2013.
 Note: Time series smoothed to reduce the influence of statistical sampling error.

FIGURE 4. Unemployment Rate by Month, Industry, and Gender, 2005-2013.



Source: Authors’ calculations from Bureau of Labor Statistics data, 2013.
 Note: Data restricted to persons 25-54 years old. Industries selected from a full set of 13. Time series smoothed to reduce the influence of statistical sampling error.

rate, though we do keep the age restriction and limit our attention to 25-54 year olds.

Figure 4 shows the unemployment rates in five key industries from January 2005 to November 2013. The recession months are marked in gray. Again we smooth the data because the relatively small sample sizes in specific industries produce substantial statistical sampling error.

Unemployment increased first in construction, manufacturing, and financial services—the three industries most affected by the financial crisis that precipitated the Great Recession. Construction workers typically live with spells of unemployment, so their unemployment rate was already 6.5 percent before the recession started. At its peak in the summer of 2010, the unemployment rate in construction was 15 percent for women and over 18 percent for men. Unemployment in manufacturing doubled for both women and men. Unemployment in financial services also rose from the onset of the recession until its end. Significantly, the unemployment rates in these three industries also started to decline almost as soon as the recession ended. The decline was faster for men than women, but the most recent data show that unemployment in all three of these most-affected industries is now only slightly higher than before the recession.

Unemployment in public administration and in education and health care increased later than it did in the industries that were directly affected by the recession. But these two industries show no signs of recovery. Unemployment is significantly lower in these industries than in construction or manufacturing in each year, but the lack of any recovery-based trend

since 2010 is telling. What it tells is the tale of austerity in public spending. The recession dramatically reduced tax revenues. Governments did not respond instantly, but once they did, their cutbacks raised unemployment in education and public administration.

Conclusions

The Great Recession was a jobs disaster that took unemployment to heights seen only once before in over fifty years—in 1982. In 2009 and 2010, the U.S. economy hit postwar highs in job loss, the portion of the labor force unable to find work, and the duration of unemployment spells.

The Great Recession was the sixth recession since 1970. In all six post-recession recoveries, men's prime-age employment was lower four years into recovery than when the recession started; in the last two, women's prime-age employment was also below the pre-recession level. It is almost as if the economy recovers because of job losses not despite them.

The latest employment data suggest that the consumer-driven private economy cannot spark an employment recovery on its own. Productivity increased, profits soared, and Wall Street recovered since 2009. But overall employment languishes at levels barely above recession lows.

Americans value work and need to work. The private sector economy seems incapable of delivering on that goal. The public sector seems incapable of anything but austerity. History and logic caution that full employment will not return without a private-sector breakthrough or a public sector stimulus. ■

ADDITIONAL RESOURCES

Jesse Rothstein, "The Labor Market Four Years into the Crisis: Assessing Structural Explanations." NBER Working Paper No. 17966. Available at: <http://www.nber.org/papers/w17966>.

Holzer, Harry. 2013. "Good Workers for Good Jobs: Improving Education and Workforce Systems in the U.S." University of Wisconsin Institute for Research on Poverty Discussion Paper No. 1404-13.

Gerson, Kathleen. 2011. *The Unfinished Revolution: Coming of Age in a New Era of Gender, Work, and Family*. Oxford U Press.