

Recovered or Not: What's Really Happening with U.S. Unemployment?



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Takeaways

Everyone has heard the stat: the recovery has finally brought unemployment down to 5%—near what the Fed has called full employment. But that number only tells a part of the story of our recovery.

There's another argument that says that while the economy has added more than 13 million jobs since 2010, the U.S. jobs market is far from recovery. In 2011, the over-16 population was 58% employed, down from a 2007 peak of 63%. And in 2015, that figure has ticked up only to 59%. That is a stark contrast with the official unemployment rate.

So what's really going on?

In this paper, we lay out three different ways to measure unemployment and the jobs market. Each measurement comes from the government and paints a different portrait of the jobs recovery. Under one measure, America has almost completely recovered.

Under a second, we've barely moved the needle. And under a third, the job market has steadily improved, but we're just past halfway there.

Understanding the different ways unemployment is measured can help explain how people at home feel about the economy, how economists view it, and how businesses and markets react to changes in the labor market.

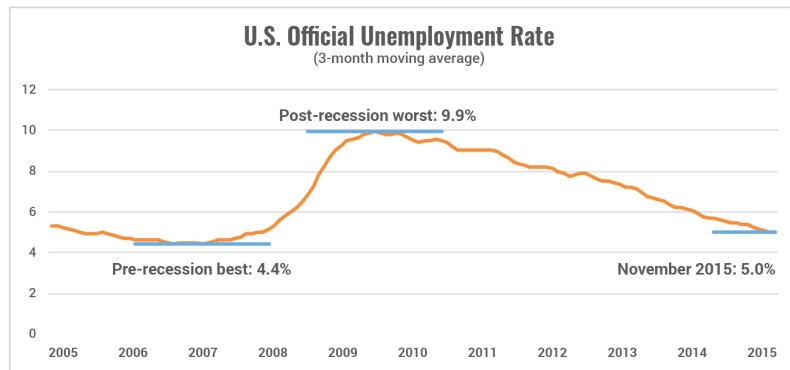
The official unemployment rate: Nine-tenths of the way to full recovery

TOP LINE: The official unemployment rate is the most cited and most optimistic—but it fails to capture workers who have not actively sought work in the previous four weeks.

The Bureau of Labor Statistics (BLS) has six separate unemployment indexes, and one of them gets all the attention: the official unemployment rate, also known as U-3. Judging the jobs recovery by U-3, the U.S. may be only months away from wiping out the losses of the Great Recession. The pre-recession best of 4.4% in April 2007 rapidly deteriorated to 9.9% in November 2009. But since then, a steady march downward has pushed the unemployment rate all the way back to 5.0%. Based on U-3, we've gained back 89% of the damage caused by the recession.

So what exactly is U-3? It measures the total number of full- and part-time workers, divided by the number of Americans considered to be in the labor force. Who's in the labor force, and how does the BLS decide? First, anyone with a job is, including those who are part-time or temporary. So is anyone who has *actively* looked for a job—by submitting resumes or contacting employers, for example—in the previous four weeks. Those not considered part of the workforce are people

who are stay-at-home parents, retired people, students, and workers *marginally attached* to the labor force. The latter group consists of people who would like a job, are available to work, and have sought work in the previous 12 months—but not in the last four weeks.¹ And that's what's controversial about the headline unemployment rate. During many months since the recession, the unemployment rate dropped even though the underlying job market wasn't doing so well. With so many discouraged workers giving up looking for a job, the percentage of the workforce employed ticked upwards.



Source: Bureau of Labor Statistics²

What's going on:

The orange line in this chart shows the official unemployment rate over the last decade.

Based on this measurement, you can see that our rate before the recession was 4.4%, which shot up to 9.9% at the height of the recession. The official rate is now 5%.

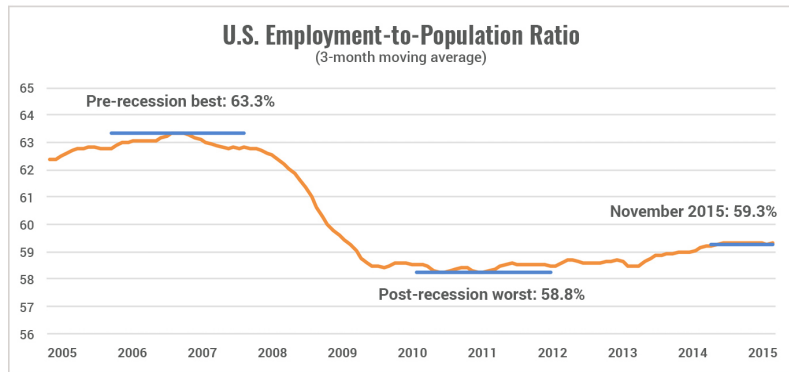
The employment-to-population ratio: Two-tenths of the way to a full recovery

TOP LINE: *The employment-to-population ratio is overly pessimistic—it doesn't account for the aging of the population or the rising number of people in school.*

The marginally attached workers excluded from U-3 are one reason some are motivated to consider a much broader index: the *employment-to-population ratio*. This one is simpler: take all full- and part-time workers, and divide it by the total number of Americans ages 16 and older. That way, both unemployed workers looking for jobs and those who have given up are treated as they are—without employment.

The employment-to-population ratio portrays a much darker picture of the jobs recovery. At its pre-recession peak, in December 2006, the index showed that 63.3% of all Americans 16 and older had jobs. Even after the unemployment rate had started rebounding in late 2009 and 2010, the employment-to-population ratio was still sliding and didn't bottom out until July 2011, at 58.2%. The implication of that drop is startling: over the course of four years, some 7.1 million fewer Americans were working than otherwise could have been. And the story since then hasn't gotten much better. Four years on, we've regained only one percentage point, to reach today's 59.3% employment-to-population ratio.

How can the unemployment rate decline while the share of people with jobs also falls? The reason is a change in the *labor force participation rate*, which is the share of the over-16 population that is either working or seeking work. Judging the recovery this way, to include people who have stopped *participating* in the workforce (including retirees), the jobs market has only repaired 20% of the recession's damage. Some have argued that the recession caused a structural shift in the U.S. economy; it has shifted to a more lasting state in which a smaller share of the population is able to find work.



Source: Bureau of Labor Statistics ³

What's going on:

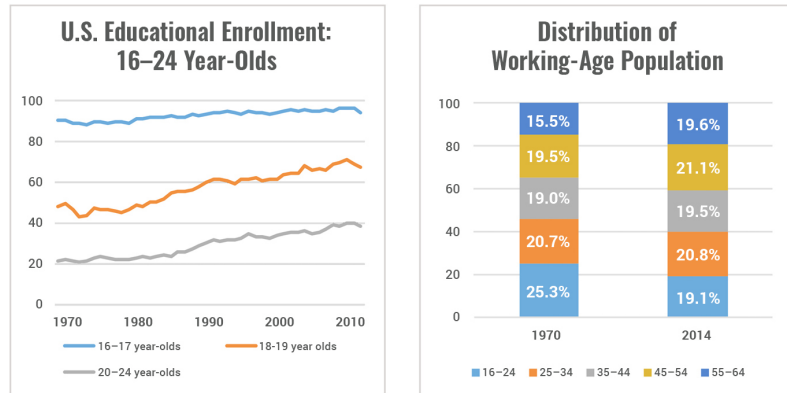
The orange line in this chart shows the employment-to-population ratio over the last decade.

It shows a far more pessimistic picture—our current ratio of 59.3% is barely above the recession's worst level of 58.2% and a far cry from our pre-recession best of 63.3%.

But the story doesn't end with the employment-to-population ratio, an index that, while helpful, is about more than the just the recession. The thing is, about seven years before the housing market started to come apart in 2007, the employment-to-population ratio had already begun a long-term decline. It was a downward trend that was temporarily reversed during the bubble years of the mid-2000s, but that we should have expected to continue, even without a bruising recession.

There are three major factors contributing to that long-term decline in the employment-to-population ratio: one positive, one neutral, and one negative. The positive reason is rising educational attainment. Simply put, Americans in their late teens and 20's are staying in school. High school graduation rates are higher and, most significantly, so is college enrollment. Because this is a decades-long trend, we know it's not merely attributable to job losses from the recession. ⁴

Rather, it indicates more Americans are able to attain more education, boosting their productivity when they do enter the workforce. It also means that a huge number of people in the 16–24 year-old tier of the population are going to be counted as out of work—when measured by the employment-to-population ratio—even though they aren’t looking for work.



Source: Department of Education and Bureau of Labor Statistics ⁵

What’s going on:

The first chart shows the percent of certain age groups in school. Rising rates of high school completion and college enrollment mean that the percentage of Americans ages 16 and older who are employed has decreased.

The second chart breaks up the working age population (ages 16–64) into five groups and shows how various age bands have changed from 1970 to 2014. A larger portion of Americans are near retirement age than ever before—the dark blue box went from 15.5% to 19.6%—a significant reason for the declining rate of workforce participation.

The neutral reason is our aging population. It is always the case that middle-age people, from their 30’s to mid-50’s, participate in the labor market at higher rates than seniors and even those in their mid-50’s to mid-60’s. In the early 2000s, Baby Boomers began leaving their most productive

years. As Boomers aged, they made the American workforce older on average. In 1970, people aged 55–64 made up 15.5% of the working-age population. In 2014, that age group accounted for 19.6% of the working-age population. The result is relatively fewer of the people who tend to work at very high rates, and relatively more people who tend to work at lower rates. The employment-to-population ratio also counts people who have clearly aged out of the workforce, and one of the fastest growing segments of our population is people over the age of 85.

The negative force contributing to the declining employment-to-population ratio, discussed in the next section, is that many working-age Americans have stopped participating in the workforce—they are no longer looking for jobs.

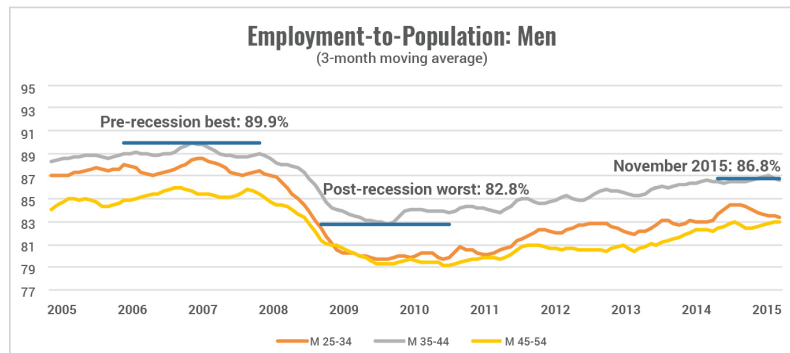
Age-specific employment rates: Just better than halfway to a full recovery

TOP LINE: Measuring the employment-to-population ratio of specific age-gender groups filters out demographic and education trends—providing the closest thing we have to a control group.

So the headline unemployment rate fails to capture discouraged workers who've quit looking for jobs. But the employment-to-population ratio is influenced by long-term trends unrelated to the business cycle.

One solution is to look instead at the employment-to-population ratios of middle-age workers. The chart below shows three groups: men ages 25–34, men ages 35–44, and men ages 45–54. In particular, men ages 35–44 function as a steady control group. First, zooming in on one age group filters out the effect of our aging population. And second, this group is the least affected by social forces affecting younger workers (education), those affecting older workers (changing retirement choices), and evolving workforce participation among women, which has changed greatly since the 1970s.

The result is one less rosy than the unemployment rate, but far more positive than the overall employment-to-population ratio. Take men ages 35-44. This group is employed at a higher rate than any other age-gender group. At its pre-recession best, 89.9% of this group had jobs. The recession dropped the rate to 82.8% in 2010, but this group has been steadily recovering ever since. Now, with 87.1% working, these middle-age men have recovered 60% of the damage done by the recession. The result is roughly the same for the subgroups just older and just younger.



Source: Bureau of Labor Statistics

What's going on:

The chart above shows the employment-to-population ratios for three specific groups: men ages 25-34, 35-44, and 45-54.

For men ages 35-44 (the gray line), the most highly employed group, workers have clawed back about 60% of their losses from the recession.

Should we count on a continuing recovery to pull their employment rate higher, or is there something fundamentally different about this group of workers? For men, one important difference is the rising incidence of disability.⁶ The reasons behind the rise in male disability claims are debatable—and beyond the scope of this paper. But whatever the cause, it is reasonable to expect that this

heightened rate of disability will make for a lasting effect in the employment rate of middle-age men.⁷ That's because the portion of disability beneficiaries who leave the program to return to work full time is small. One study shows that 5.2% of disability beneficiaries, five years after their initial benefit, had left the program because of having attained a sufficient amount of work.⁸

The participation of working-age women in the U.S. labor force tells another mixed story. Women of the same middle-age brackets showed a similar, although less steep decline in employment-to-population ratios during this period. The recession dropped the employment-to-population ratio of women ages 35-44 from 73.4% to 68.8%, and the ratio has since recovered to 71.0%. That's a 48% recovery. What stands out as a possible explanation is weak family leave policies. Whereas female workers in other developed economies have continued to increase their workforce participation over the last decade, American women peaked around 2000 and have yet to recover.⁹

Conclusion

The encouraging headline unemployment rate shows that for those who want to work, finding employment is growing less difficult. But when you delve into the segment of Americans not seeking work, and ask why, the story is more mixed. One reason for the declining workforce-to-population ratio is positive: more people are graduating high school and more are pursuing higher education. Another reason is neither good nor bad: the population is simply growing older. But there remains a segment of middle-age Americans who have reclaimed only about half the recession's losses—and for whom more concerning factors are at play. For men, a rising rate of disability stands out. For women there is stagnating growth—possibly prematurely—in workforce participation.

These groups may also explain what's happening with wages. Normally when the headline unemployment rate is as low as today's, the competition for talent bids up wages for

American workers. But wage growth, while starting to kick in, has been disappointing. The reason may be that, as age-specific labor-to-population rates show, there are still some workers returning from the sidelines. Whether they continue to come back in, or our workforce settles into a new normal, is yet to be seen.

APPENDIX

The following are some key labor market terms as defined by the Bureau of Labor Statistics.¹⁰

- **Labor force:** the number of people who are either working or actively seeking work.
- **Unemployment rate:** the number of unemployed people as a percentage of the labor force. *Only people without a job who have actively looked for work in the prior four weeks are considered unemployed.*
- **Labor force participation rate:** the number of people in the labor force as a share of the civilian noninstitutional population ages 16 and older.
- **Employment-to-population ratio:** the number of people employed as a share of the civilian noninstitutional population ages 16 and older.
- **Discouraged workers:** people who report they are not currently looking for work because they believe no job is available in their line of work, because they previously couldn't find work, because they lack necessary qualifications, or they face age or some other type of discrimination. *Discouraged workers are not considered unemployed as part of the headline rate.*

- **Marginally attached workers:** people who are not looking for work but report they currently want a job, have sought work in the last 12 months, and are available for work (including, but not limited to, all discouraged workers). *Marginally attached workers are not considered unemployed as part of the headline rate.*

BLS Measures of Unemployment

U-3, the headline unemployment rate is most cited, but there are five other measures published by the BLS, which vary in who they count as unemployed.¹¹

Rate	How it's defined	Pre-recession best	Post-recession worst	November 2015
U-1	A definition narrower than U-3; counts only people who have been unemployed for 15 weeks or longer.	1.4% Feb 2007	5.9% Mar 2010	2.1%
U-2	Similar to U-1; counts those unemployed for 15 weeks or longer, plus people who have completed temporary jobs.	2.1% Mar 2007	6.5% Sep 2009	2.5%
U-3	The headline rate; unemployed people are those who do not have a job, are available for a job, and have actively looked for work in the prior 4 weeks.	4.4% May 2007	10.0% Oct. 2009	5.0%
U-4	A broader definition than U-3; adds to U-3 all discouraged workers.	4.6% Mar 2007	10.6% Apr 2010	5.4%
U-5	Also a broader definition than U-3; adds to U-3 both discouraged workers and marginally attached workers.	5.2% Dec 2006	11.4% Oct 2009	6.1%
U-6	The broadest definition; adds to U-3 discouraged workers, marginally attached workers, and those who work part-time but would like to work full-time.	7.9% Dec 2006	17.1% Oct 2009	9.9%

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END NOTES

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