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9 Million Missing U.S. Workers: Where Did They Go? What Does Their Disappearance Mean for the Fed's Monetary Policy?

By: Robert F. Wescott, Ph.D., and Cameron Egan

Key Insights

- The U.S. labor force participation rate has fallen by 3.6 percentage points since 2007 to 62.8%, a level not seen since the late 1970s. If the participation rate had not declined since 2007, there would be nearly 9 million more U.S. workers today.
- Key temporary factors holding down the participation rate include: more young adults going to school, more mothers choosing to stay at home with children, and some rise in "discouraged workers".
- However, the largest portion of the decline is attributable to demographics—especially the aging of the baby boom generation. For this reason it seems likely that the participation rate will remain in the relatively low range of 62-64% for years to come.
- This suggests that the surprisingly rapid decline in the unemployment rate in the past couple of years is no statistical fluke and that labor markets may be tighter than some Fed officials believe.

If labor force participation remained at 2007 levels, the labor force would be larger by 8.8 million individuals. May's employment report showed continued solid job creation and the unemployment rate, at 6.3%, remained at its lowest rate since September 2008. However, the U.S. labor force participation rate, which tumbled during the recession of 2008-09, has continued to decline over the past five years, even as the economy has rebounded. In fact, in April and May, the labor force participation rate hit a 36-year low. Since January 2007, U.S. labor force participation has fallen an unprecedented 3.6 percentage points – from 66.4% to 62.8%. The current rate is at late-1970s levels, when barely half of women joined the labor force. Interestingly, if U.S. labor force participation today were at 2007 levels, the labor force would be larger by **8.8 million** individuals.

Who are these "missing" workers and where did they go? Better understanding of these dynamics is more than just an economic curiosity. It could significantly affect the Federal Reserve's monetary policy in coming quarters and years. If many of these people are lurking in the shadows of the labor force, potentially ready to rejoin it as economic conditions improve, there might be substantial "reserve labor" in the U.S. economy. This would suggest that wage demands

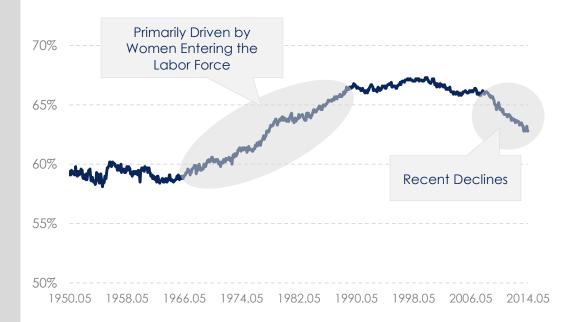


The forces behind falling participation have major implications for future Fed policy decisions.

might remain relatively tame as job growth continues, and it would support the case for prolonged easy monetary policy by the Fed. On the other hand, if the disappearance of many of these workers is more permanent, it would suggest that the rapid decline in the U.S. unemployment rate in the past couple of months is not a statistical fluke and that the economy does not have as much "slack" as some believe. Importantly, it might suggest that wage pressures could build faster than expected and that the Fed might be forced to tighten monetary conditions sooner than expected.

Figure 1. Labor Force Participation

Percent of 16-and-Over Civilian Non-Institutional Population



Source: Macrobond Financial

Who are the missing workers?

In short, all types of people. Both men and women and nearly every age and education group have contributed to the decline in labor force participation. The female labor participation rate rose slightly between 2007 and 2008, but has since fallen from 59.6% to 57.0%. Similarly, the male labor force participation rate fell from 73.8% in January 2007 to 69.1% today.

Furthermore, there have been declines in the labor force participation rate of nearly every age group since 2007: 16-24 year olds, 25-34 year olds, 35-44 year olds, and 45-54 year olds.

- Labor force participation of the 16-24 year old group has dropped the most, plunging from 60.7% in January 2007 to 55.0% this May.
- The participation rate of 55-64 year olds has risen modestly, from 63.5% in January 2007 to 64.5% today, while the participation rate of people 65 years and older is up from 15.2% in January 2007 to 18.9% today.

Both genders and nearly all age and education groups saw declines in their labor force participation rates in recent years.



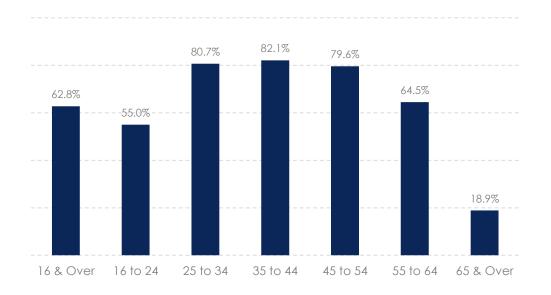
Lastly, labor force participation has declined for every level of educational attainment. College graduates have experienced the smallest decline in labor force participation, while high school graduates with no or some college have had even sharper drops than individuals with less than a high school diploma.

Where did they go?

Some of these individuals have dropped out of the labor force temporarily—to go to school or because they became discouraged by poor job prospects—while others have dropped out permanently by going on disability or choosing retirement.

Over a third of the drop in labor force participation was caused by shifting demographics. More than one third of the drop in labor force participation has been caused by the shifting composition of the U.S. population. The oldest of the "baby boom" generation turned 65 in 2011, and a wave of "boomer" retirements has begun. In 2007, the 65-year and older cohort was 15.6% of the 16-year and older civilian non-institutional U.S. population, but it now represents 18.1% of this population. Given that this 65-year and older age group has a labor force participation rate of 18.9%, this shift alone can explain 1.3 percentage points of the drop since 2007. This suggests that changing demographics alone have accounted for roughly 3.3 million of the "missing" workers. Think of these people as "phantom workers" who reduced the labor force simply by passing the normal retirement age.

Figure 2. Labor Force Participation by Age Group, May 2014 Percent of Civilian Non-Institutional Population



Other factors include increased school enrollment and greater numbers of disability insurance beneficiaries.

Source: Macrobond Financial

Another trend bringing down labor force participation is increased school enrollment, as suggested by the steep drop in 16-24 year olds' labor force participation in recent years. Total enrollment in post-secondary education



Additionally, the "discouraged worker" effect and a rise of "stay-athome" mothers pulled down labor force participation.

surged by 2.5 million individuals between 2007 and 2010, before falling modestly. In 2012, total enrollment in post-secondary education was 17.7 million – **2 million** more than in 2007.³ While rising school enrollment is a longer-term trend, the pace of growth accelerated during the recession and the slow recovery; average annual growth in enrollment was 2.7% between 2007 and 2012, compared to 1.7% between 1980 and 2007.

More individuals also went on disability insurance during the recession and recovery, further depressing participation. Between 2007 and 2013, the number of disability beneficiaries rose by **1.8 million** to 8.9 million, a 26% increase. This upward trend had roots before the recession, as the number of beneficiaries increased nearly 35% between 2001 and 2007.

Additionally, some individuals have simply given up on locating a job. The number of "discouraged workers" – defined by the Bureau of Labor Statistics as individuals who want a job, but have not actively looked for a job in the past month due to perceived poor job prospects – increased from 442,000 in January 2007 to a peak of 1.3 million in December 2010. The number has since fallen to 697,000. Still, the number of discouraged workers remains more than **250,000** above its January 2007 level.

Some of the temporary factors pushing down labor force participation are already lessening.

Another trend that also seems to have played a role is a rise in "stay-at-home" mothers. After falling steadily for over three decades, the share of mothers choosing to stay at home began increasing in 2000.² In 2012, the share of "stay-at-home" mothers was 29%, roughly a 3 percentage point increase from 2007. Holding the share of "stay-at-home" mothers constant at 2007 levels, an additional **1.1 million** mothers would currently be in the labor force.

Some of these factors pushing down labor force participation overlap. Therefore, the estimates above are not additive. However, they are illustrative of key trends and shed light on labor force participation dynamics.

Will they come back?

Some of the temporary, recession-related factors pushing down labor force participation have been abating. As previously mentioned, the number of "discouraged workers" has fallen nearly in half since the end of 2010. An improving economy in the second half of 2014 and 2015 will likely mean continued reductions in discouraged workers, potentially some reductions in the number of women who choose to be "stay-at-home" mothers, and potentially some declines in the number of people who enroll in school. However, the continued aging of the "baby boom" generation means that older individuals will make up an increasingly larger share of the population. Individuals 65-and-older already make up 18.1% of the 16 and older population today and they are expected to make up 22.1% by 2022. Because people over 65 have a much lower participation rate than younger cohorts, this demographic shift will continue to pull down overall labor force participation.

However, the aging of the "baby boom" generation will likely further bring down labor force participation.

Holding the 65-and-older and 16-to-64 year olds' labor force participation rates constant at their current levels, the aging of the population could



cause overall labor force participation to drop another 2.2 percentage points to 60.6% by 2022.

• These long-term demographic forces are a main reason why the Congressional Budget Office projects that the participation rate will fall to 60.8% by 2020 and the Bureau of Labor Statistics projects it will decline to 61.6% by 2022.

Implications for Monetary Policy?

Many analysts have noted that the Federal Reserve's economic forecasts in recent years have consistently over-estimated GDP growth, but underestimated the rate of decline in the unemployment rate.

- Indeed, several Federal Open Market Committee members have suggested that the substantial drops in the unemployment rate in the past couple of years seem to be overstated, and that there appears to be a substantial "reserve pool" of workers likely to come back in to the labor force in coming quarters.
- However, this analysis suggests this view may not be correct. If this view that the decline in labor force participation rate is more permanent becomes more widespread, it could suggest that monetary conditions in coming quarters and years may be tighter than market participants currently anticipate.

Conclusion

The decline in the labor force participation rate in recent years has been more due to underlying demographic factors than many believe. To the extent that it suggests tighter current labor market conditions than appreciated, it could mean a less accommodative monetary stance by the Fed in the next couple of years.

This analysis suggests that there is not a large "reserve pool" of workers waiting to return to the labor market – meaning that the Fed might choose to tighten monetary policy sooner than expected.

¹ Social Security Administration, (2014). "Selected Data From Social Security's Disability Program." Accessible at http://www.ssa.gov/OACT/STATS/dibStat.html.

² Pew Research Center, (2014). "After Decades of Decline, A Rise in Stay-at-Home Mothers." Accessible at http://www.pewsocialtrends.org/files/2014/04/Moms-At-Home 04-08-2014.pdf.

³ Digest of Education Statistics (2014). "Total Undergraduate Fall Enrollment in Degree-Granting Postsecondary Institutions." Accessible at http://nces.ed.gov/programs/digest/d13/tables/dt13 303.70.asp.