

## Labor Force Participation and the Future Path of Unemployment

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Although the labor market has slowly begun to recover, unemployment remains stubbornly high. The pace at which unemployment comes down over the next two years depends in part on the cyclical recovery of labor force participation and the extent to which that offsets or adds to ongoing structural changes in labor force behavior related to increased school enrollment, access to disability benefits, and movement of baby boomers into retirement.

Almost all would agree that recent U.S. job growth has been unsatisfactorily slow. But experts debate how many jobs the economy must create in order to bring the unemployment rate back to pre-recession levels. Underlying this debate are fundamental disagreements about the share of the population that will be in the labor market over the next few years. This *Economic Letter* examines how uncertainty about who will be active in the labor force has important implications for the path of unemployment. This uncertainty reflects hard-to-predict behavioral patterns of teenagers, prime-age men, and older workers that make forecasting near-term changes in the labor force participation rate difficult.

### Movements in labor force participation

The labor force participation rate is defined as the percentage of the civilian noninstitutional population age 16 or older that is employed or actively seeking employment. The rate is driven by structural factors such as demographics and culture, as well as cyclical factors such as demand for workers and the generosity of unemployment or other government benefits. Although the rate is a key variable for agencies charged with assessing the economy's long-term growth prospects, forecasters have traditionally paid limited attention to short-run movements in labor force participation. In the past, such scant attention was defensible because cyclical changes in labor force participation were relatively small and predictable so that forecasting errors had little effect on key variables such as unemployment.

The current situation is quite different. Movements of the labor force participation rate have been relatively large since the beginning of the recession that began in December 2007. In addition, they have departed from regular cyclical patterns, making them hard to predict.

As of August 2010, labor force participation was 64.7%, down from its pre-recession level of about 66%. This decline reflects a large-scale exit of workers from the labor force over the past few years. Its future path is uncertain and will be shaped both by the cyclical rebound from a severe recession and structural changes that will unfold as the baby-boom generation reaches retirement age. These dual changes—cyclical and structural—have magnified the difficulty of predicting the near-term path of labor force participation.

As the United States recovers from recession, the cyclical response of labor force participation hinges on whether those who lost their jobs and left the labor force return. This in turn depends on what they did when they were out of the labor force. Were they waiting for a better economy? Did they go back to school, retire, join the disability benefit rolls, or something else? These cyclical uncertainties are compounded by secular trends that affect labor force participation, including the movement of the population into age groups with lower participation rates and the continued increase in school enrollment rates among teenagers and young adults. The secular patterns may in turn be affected by lost wealth and declines in household earnings stemming from recessionary cyclical disruptions. Forecasters must estimate the net effect on labor force participation of all these behavioral changes. As we show below, this has resulted in widely different estimates by government forecasting agencies.

### Some accounting exercises

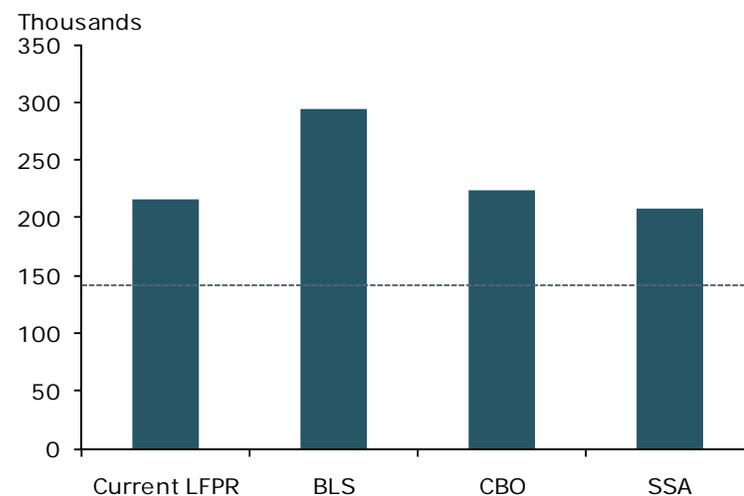
To get a sense of how small changes in labor force participation can have large impacts on the unemployment rate, it is helpful to do a little accounting. U.S. population growth averages about 1% per year. Assuming no change in labor force participation, the economy would need to create about 100,000 jobs per month on net to keep the unemployment rate at its August 2010 value of 9.6%.

Holding the labor force participation rate constant, job growth above 100,000 per month would bring the unemployment rate down, while job growth below 100,000 would push the unemployment rate up. However, changes in participation can make a huge difference. The higher the participation rate, the greater the number of jobs needed to keep the unemployment rate down. Consider Congressional Budget Office forecasts. The CBO expects the unemployment rate to decline to 7.96% in 2012 and participation to tick up a notch to 64.8%. This implies average job growth of about 227,000 per month over the next two years. But if the CBO participation forecast is 0.1 percentage point too low, the economy will need to create 237,000 jobs, an additional 10,000 per month, in order to reach a 7.96% unemployment rate in June 2012.

Forecasts from the CBO, the Bureau of Labor Statistics (BLS), and the Social Security Administration (SSA) suggest that, absent cyclical movements, labor force participation will trace a downward course driven by the aging of the baby boom generation. However, forecasters disagree over the trajectory participation will take in the next few years as the economy recovers from the recession. Projections for the labor force participation rate in 2012 range from 64.6% (SSA 2009) to 65.5% (BLS 2010), a very substantial difference.

Given that the U.S. civilian noninstitutional population was 238 million in August 2010, these alternative forecasts imply dramatically different numbers of jobs that must be created, as shown in Figure 1. Average job growth during the last economic expansion was about

**Figure 1**  
**Job creation needed per month**  
Assuming 8% unemployment in June 2012



Sources: BLS, CBO, SSA, authors' calculations.

142,000 per month. If the SSA is right and labor force participation falls to 64.6% in 2012, we will need to create an average of 208,000 jobs per month over the over the 22 months beginning in September 2010 to bring the unemployment rate down to 8% in June 2012. But if the labor force participation rate rises to 65.5%, as the BLS predicts, we will need to add 294,000 jobs per month in order to reach that level.

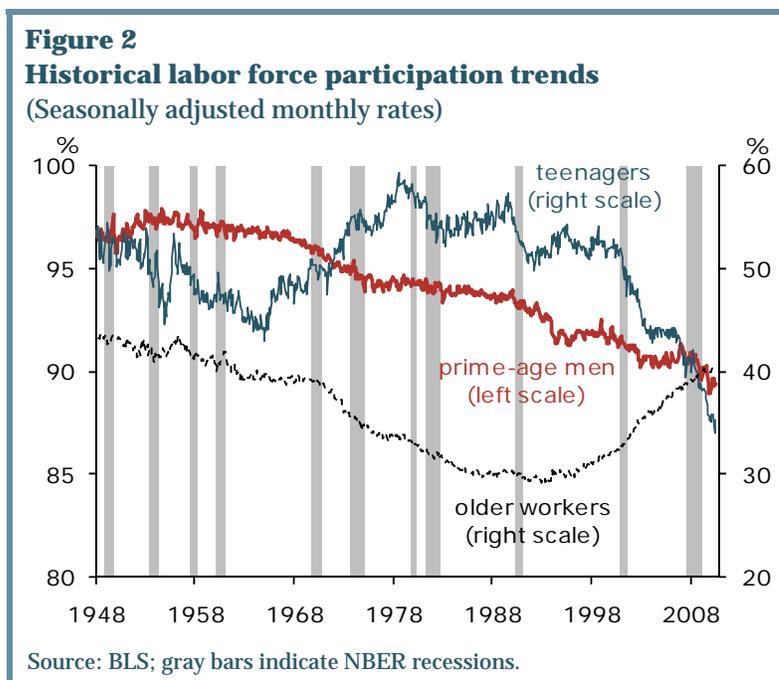
### Sources of uncertainty

The labor force participation rate is highly uncertain because the aggregate trend is determined by heterogeneous patterns among separate demographic groups. The behavior of teenagers age 16 to 19, men age 25 to 54 in their working prime, and workers age 55 and over are particularly difficult to predict.

Figure 2 plots the historical labor force participation rates of these groups.

#### Teenagers

The participation rate of teenagers has fallen steadily since the late 1970s through both business-cycle expansions and contractions. The decline largely reflects increased school enrollment and greater intensity with which teenagers pursue their studies, illustrated by declining participation among those attending school. The percentage of teenagers enrolled in school but not participating in the labor force has gone from about 40% to almost 60% over the past 25 years.



Teenagers tend to be more sensitive to cyclical downturns than other age groups due to relatively weak labor force attachment and low skill levels. Since December 2007, 7% of teenagers—more than a million individuals—have withdrawn from the labor force. Decreased student participation accounted for much of the decline. The share of teenagers who are neither in school nor in the labor force has increased only modestly.

Interestingly, in recent decades teen labor force participation rates during cyclical downturns have tended to merge into the longer-term declining trend. The result is that teen participation has generally not recovered significantly during cyclical expansions. Continued increases in teen school enrollment are expected in the near future, but it is not clear whether the decline in teen labor force participation among those in school will persist. The significant wealth shocks that many families experienced during the recession combined with higher college costs and reduced access to financial aid could prompt more teen students to seek jobs.

#### Prime-age men

The labor force participation of men age 25 to 54 has also declined steadily in recent decades, albeit at a much slower rate than that of teenagers. At the end of 2009, it reached 88.9%, almost 9 percentage

points below its peak in the mid-1950s. Many prime-age men who leave the labor force during downturns stay out even after the economy recovers, although not to the same extent as teenagers.

The weak cyclical recoveries of the labor force participation rate of prime-age men are related to a secular decline. Labor force participation among prime-age men has fallen for two main reasons: increased access to Social Security disability benefits and decreased demand for less-skilled workers (Autor and Duggan 2003). These two factors are related. Decreased demand for less-skilled workers has driven down relative wages of high school dropouts. That in turn has increased the extent to which disability benefits are able to replace earned income. Almost 4.5% of the adult male population is receiving disability benefits in 2010. Those who enter the disability benefit system generally exit the labor force permanently and don't return when economic conditions improve. The number of disability insurance applications has increased by 26.4% over the past two years, suggesting that many prime-age men who recently left the labor force may never come back.

Certainly, some prime-age men who left the labor force will seek work when conditions improve. Since December 2007, the number of discouraged workers—those who want a job but stopped actively looking because they don't think they can find a suitable one—has increased dramatically. Such individuals are not counted as part of the labor force. To the extent that they reenter the job market over the next few years, the labor force participation rate of prime-age men may register some cyclical recovery.

#### Older workers

In the case of the labor force participation rate of older workers, secular trends generally overwhelm cyclical patterns. Labor force participation of workers 55 and over consistently fell from the 1950s through the 1990s, when Social Security, pension, and retiree health benefits increased substantially and conditions were generally favorable for early retirement. However, in the 1990s, as the value of those retirement programs eroded, older workers reversed the downward trend. Since then, their labor force participation rate has risen steadily, even through cyclical downturns. Even though their unemployment rate more than doubled over the past three years, older workers have generally stayed in or entered the labor force.

Many factors potentially explain the recent increase in older-worker labor force participation. People in this age group increasingly are able to delay retirement because they are healthier and longer lived than previous generations of older workers. They have an incentive to work longer in order to build assets in defined-contribution pension plans and to qualify for larger Social Security benefits. And the rapid growth of health-care costs and decreased availability of retiree health benefits push older people to continue working in order to get health insurance, at least until they are 65 and eligible for Medicare.

The upward trend may continue in the near future. The trends in retirement and health benefits will probably remain in place and the recession's severe shock to wealth will likely compel even greater numbers of retirement-age workers to stay in the labor force (Daly, Hobijn, Kwok 2009). Although it is very difficult to predict the magnitude of future increases in the labor force participation rate of older workers, it's something labor market experts must watch closely. Older people now make up almost a third of the population. Their labor force participation has particularly important implications for the aggregate labor supply.

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