

# Economic Trends

February 2013: Supplemental (February 6, 2013-February 12, 2013)

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# Behind the Slowdown of Potential GDP

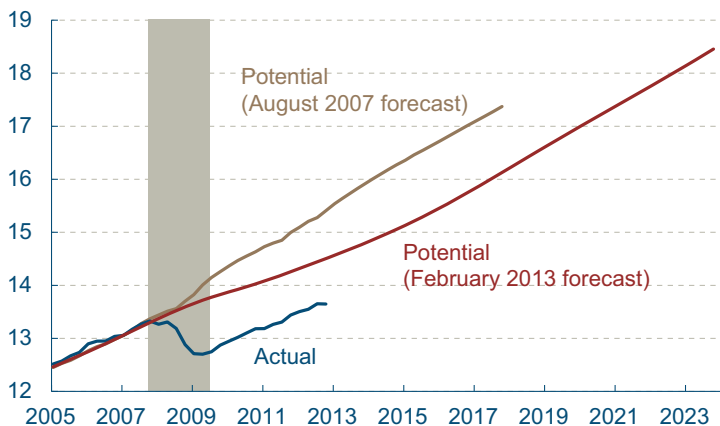
02.12.13

by Margaret Jacobson and Filippo Occhino

The current level of real GDP is 11.4 percent below the forecast that the Congressional Budget Office (CBO) made back in 2007, before the beginning of the crisis. One reason for the lower-than-expected output is that the recovery has been slow and the economy is still producing much less than its potential output level—the level that could be reached if all available capital and labor were being used at a high rate. The other reason is that the level of potential output itself is now estimated by the CBO to be lower. This downward revision accounts for a little more than 50 percent of the gap between the current level of real GDP and the pre-crisis forecast. The CBO has revised forecasts of future potential output revised downward as well, and this will have long-lasting implications for economic activity. Future potential GDP is now expected to be lower by about 7 percent relative to its pre-crisis path. Since actual output is expected to converge to its potential over time, the long-run path of real GDP is now expected to be lower by about 7 percent as well.

## Actual and Potential Real GDP

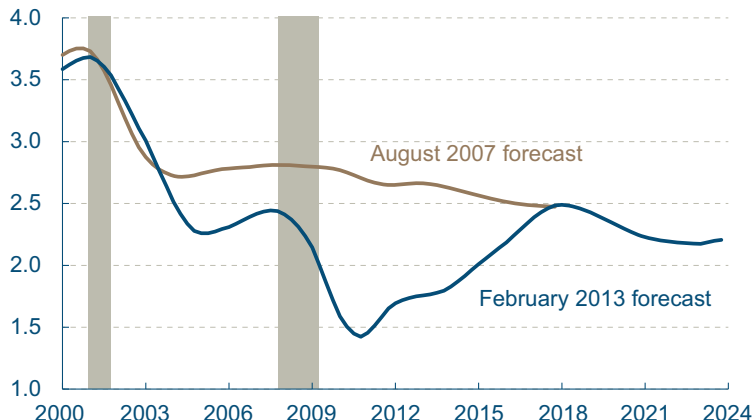
Trillions of dollars



Notes: The 2007 forecast potential GDP is deflated using the 2013 GDP deflator. The shaded bar indicates a recession.  
Sources: Bureau of Economic Analysis; Congressional Budget Office.

## Potential Real GDP

Four-quarter percent change



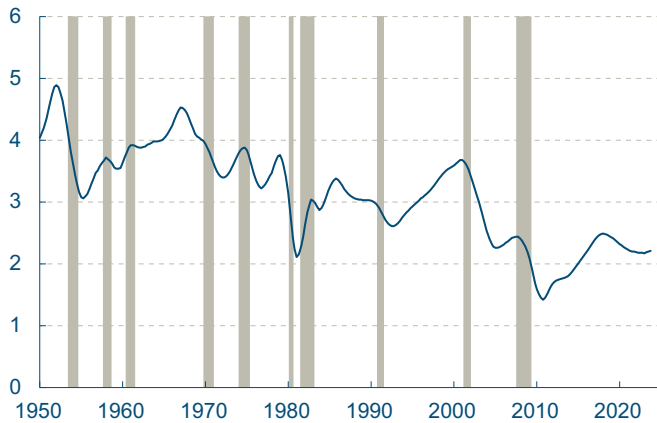
Note: The shaded bars indicate recessions.  
Source: Congressional Budget Office.

The potential growth rates for the years 2004 through 2016 were all revised downward, with particularly sizeable revisions for the years 2008 through 2015. The long-run growth rate of potential GDP was revised down as well, but by a smaller amount. This pattern suggests that the main factor behind the near-term revisions was the occurrence of the 2007 crisis. The ensuing recession damaged the supply side of the economy, temporarily reduced the potential growth rate and permanently shifted the future path of potential output downward.

It is quite typical to see potential GDP slowing down after the economy enters a recession. This is because investment generally falls during an economic contraction, which slows down capital accumulation and reduces the growth rate of potential GDP. In the most recent downturn, however, the drop in investment has been exceptionally large and

## Potential Real GDP

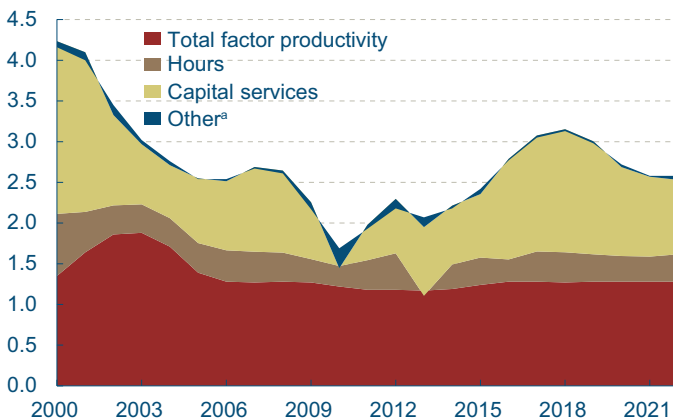
Four-quarter percent change



Note: The shaded bars indicate recessions.  
Source: Congressional Budget Office.

## Contributions to Potential GDP Growth

Percentage points



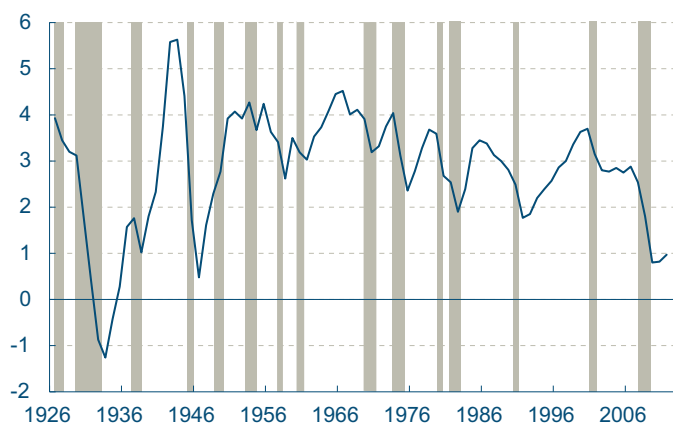
a. Other is a discrepancy between the authors' decomposition and the aggregate series.

Note: Nonfarm business sector.

Sources: Congressional Budget Office; authors' calculations.

## Capital Stock

Annual percent change



Note: Net capital stock of fixed assets and consumer durables.  
Source: Bureau of Economic Analysis.

persistent, and this has caused potential GDP to decelerate more and for longer than is typical (see “A Return to Lower Levels of Investment Activity”).

In an accounting sense, there are three determinants of potential GDP—the capital stock, potential hours worked, and potential multifactor productivity—and changes in any one could be behind the slowdown of potential GDP. The growth rates of potential hours and potential productivity have remained stable since 2006, so they have hardly contributed to the slowdown. The contribution of capital services, however, has decreased significantly since 2008, and almost entirely accounts for the subsequent slowdown of potential GDP. It also accounts for a temporary snapback of potential output growth that is forecasted to occur from 2016 to 2020. This forecasted snapback, however, will not be enough to compensate for the current decline and to bring back potential GDP to its pre-crisis path.

This evidence points to the drop in investment and the resulting slowdown of capital accumulation as the main causes behind the loss of potential GDP. Capital growth dropped from rates consistently above 2.5 percent before the recession to rates below 1 percent after the economy bottomed out. This decline was larger and more extended than was typical in past business cycles. The smaller stock of capital will have long-lasting consequences, permanently lowering the future path of capital, potential GDP, and actual GDP relative to their pre-crisis paths.

## Uneven Debt Burdens across the United States

02.08.13

by Yuliya Demyanyk and Samuel Chapman

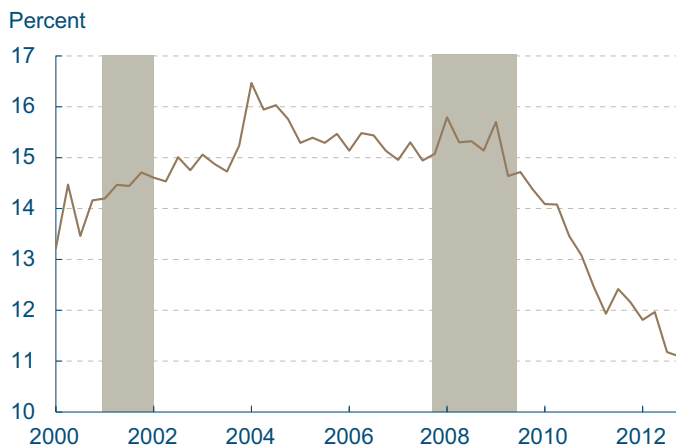
Americans' debt burden—the ratio of debt payments to disposable income—grew steadily before the last recession and fell sharply once the recession began. But the changes were not spread uniformly across all states. Some states saw dramatic swings in the overall indebtedness of their residents. Others experienced little change.

The total U.S. debt burden peaked before the recession at 16.5 percent in the first quarter of 2004 but is now at 11.1 percent. Since incomes have generally been rising, falling debt burdens are likely the result of deleveraging and falling interest rates. Americans had been increasing their debt since the turn of the century but turned course during the recession. By the third quarter of 2012, debt was back down to its 2001 level.

The changes in consumer indebtedness did not go in the same direction for all states. To compare debt burdens across states, we look at the fraction of debt payments—excluding student loans—to total income, since disposable income is not available on the state level at this time. This fraction was 3.02 percent for the U.S. as a whole. In the first quarter of 2000, the states with the highest debt burden were mostly in the West, with a few exceptions. Utah was the highest with a debt burden of 3.89 percent, followed by Montana at 3.85 percent. Washington D.C. had the lowest debt burden at 1.83 percent, followed by New York at 2.02 percent.

Eight years later, the debt burden was no longer primarily focused in the West but had spread across the nation. The average debt burden in the first quarter of 2008 was 3.64 percent, a slight increase of 62 basis points from its 2000 level. Minnesota had the highest burden at 8.40 percent, followed by Montana at 5.74 percent and Arizona at 5.25 percent. The state with the lowest debt burden was New York at 2.32 percent, followed by Texas at 2.54 percent and Wyoming at 2.64 percent.

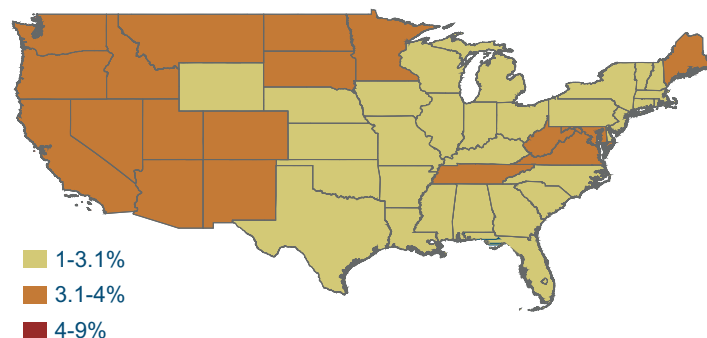
### Debt Burden: Payments as a Percent of Disposable Personal Income



Notes: Debt burden is defined as the aggregated sum of all minimum payments that the consumers are required to make on all of their debt obligations (excluding student loans), as a fraction of aggregate disposable income. Disposable income is seasonally adjusted. Shaded bars indicate recessions.

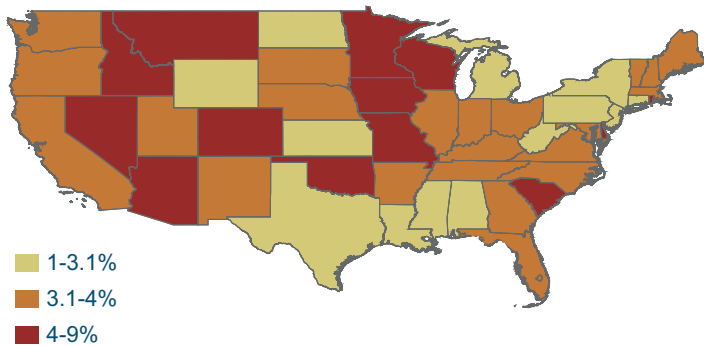
Sources: authors' calculations based on the Bureau of Economic Analysis, Haver Analytics, the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

### Total Debt as a Percentage of Total Income, 2000:Q1



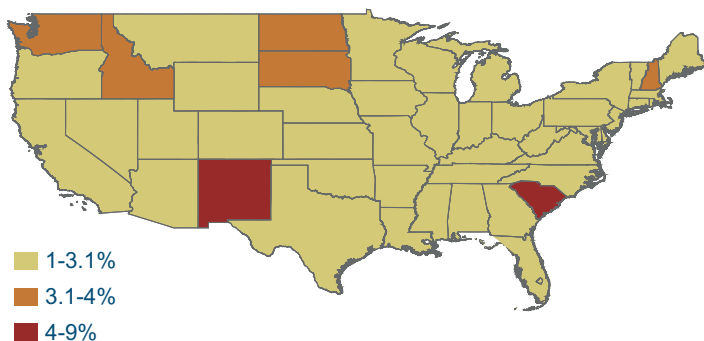
Sources: authors' calculations based on the Bureau of Economic Analysis, Haver Analytics, the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

## Total Debt as a Percentage of Total Income, 2008:Q1



Sources: authors' calculations based on the Bureau of Economic Analysis, Haver Analytics, the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

## Total Debt as a Percentage of Total Income, 2012:Q1



Sources: authors' calculations based on the Bureau of Economic Analysis, Haver Analytics, the Federal Reserve Bank of New York's Consumer Credit Panel/Equifax.

Finally, in the first quarter of 2012, we see a large drop in the average U.S. debt burden. It stood at 2.73 percent, a drop of 91 basis points from 2008 and 29 basis points from 2000. The state with the highest debt burden was New Mexico at a mere 4.41 percent, followed by South Carolina at 4.00 percent and North Dakota at 3.84 percent. The state with the lowest burden was Washington D.C. at 1.40 percent, followed by New York at 1.76 percent and Texas at 2.11 percent.

Even though the aggregate debt burden was drastically increasing before the crisis and plummeting after it, some states did not change their debt-level category as measured in the charts above. Fifteen states remained in the same debt group through all three periods analyzed, with 12 of them in the 1 percent–3.1 percent group and 3 states in the 3.1 percent–4 percent group. For example, Connecticut, Wyoming, Alabama, and Texas all remained in the 1 percent–3.1 percent group and changed a total of only 40 basis points or less across the three time periods. Nine states actually decreased their debt burden between 2000 and 2008 by an average of 22 basis points. The other 42 states increased their burden by an average of 79 basis points between 2000 and 2008; all of these states, however, decreased their debt burden later, from 2008 to 2012. Furthermore, of the 42 states that increased their debt burden between 2000 and 2008, 36 had a lower debt burden in 2012 than in 2000. A remarkable 49 states decreased their debt burden between 2008 and 2012, with only North Dakota and New Mexico increasing by 98 and 99 basis points, respectively.

Forty-one states ended up with a lower debt burden in 2012 than in the first quarter of 2000; this difference was on average 45 basis points. The 10 states that increased their debt levels did so by an average of 33 basis points. Minnesota saw the largest changes across the three periods: this state's debt burden started at 3.2 percent, increased to 8.4 percent, then returned to 3.0 percent in the first quarter of 2012. The state with the second-highest movement was Montana, which started at 3.9 percent, went to 5.7 percent, and then fell back to 3.0 percent.

# The State of the U.S. Labor Market Recovery

02.07.13

by Murat Tasci and Chris Vecchio

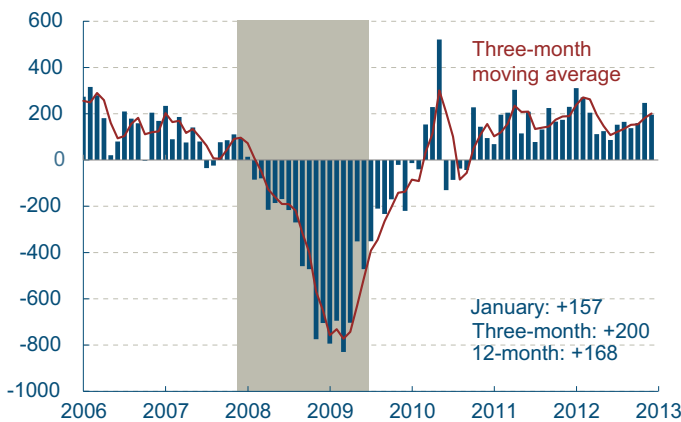
It has been five years since the beginning of the Great Recession, and the labor market recovery, while far from great, has been steady. The total number of jobs lost between the business cycle peak in January 2008 and the trough in February 2010 exceeded 8.7 million and represented a 6.3 percent decline. Since then, the labor market has gained 5.5 million jobs. Nevertheless, we are still more than 3 million jobs short of the pre-recession level. While these numbers underscore the severity and depth of the recession, looking at a host of labor market indicators gives one a mixed message about where we are in terms of the recovery; even though there has been gradual improvement, there are still persistent weaknesses.

Total nonfarm payrolls have grown in each of the past 28 months. The growth in payrolls averaged 181,000 per month during 2012, a healthy number judging by the pace of the recovery. Moreover, with the exception of the government sector, employment growth was widespread across all major sectors of the aggregate economy. Over the last year, payrolls expanded every month by an average of 39,000 in professional and business services, 36,000 in education and health, 36,700 in trade, transportation, and utilities, 28,000 in leisure and hospitality, 9,000 in manufacturing, and 9,000 in financial activities. Even one of the hardest-hit sectors during the recession, construction, registered some expansion in the second half of the year, about 9,000 per month.

This gradual improvement in payroll employment is fairly consistent with the best measure of near-term-hiring demand we have: job openings. The Job Openings and Labor Turnover Survey (JOLTS), which is conducted by the Bureau of Labor Statistics, shows that job vacancies have rebounded significantly from a low of 2.2 million since the recession ended. According to the most recent release of the monthly survey in November 2012, there are almost 3.7 million vacancies that firms are looking

## Payroll Employment Monthly Change

Seasonally adjusted, thousands

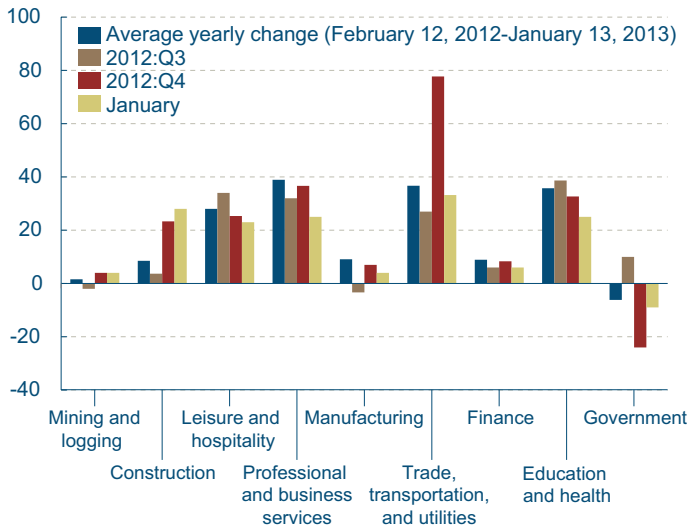


Notes: Payroll employment data comes from the BLS's survey of business establishments, formally called the Current Employment Statistics (CES) survey, and also known as the payroll or establishment survey. Shaded bar indicates a recession.

Source: Bureau of Labor Statistics.

## Payroll Employment: Changes by Industry

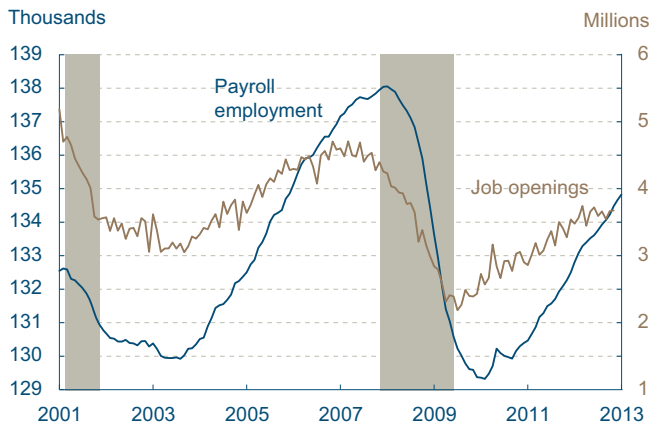
Seasonally adjusted, thousands



Note: Payroll employment data comes from the Bureau of Labor Statistic's survey of business establishments, formally called the Current Employment Statistics (CES) survey, and also known as the payroll or establishment survey.

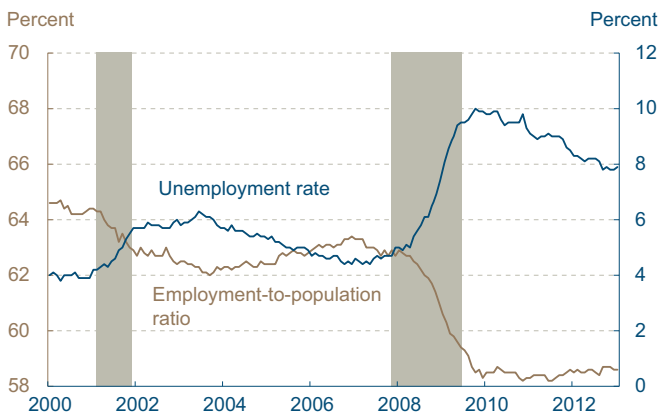
Source: Bureau of Labor Statistics.

## Employment and Job Openings



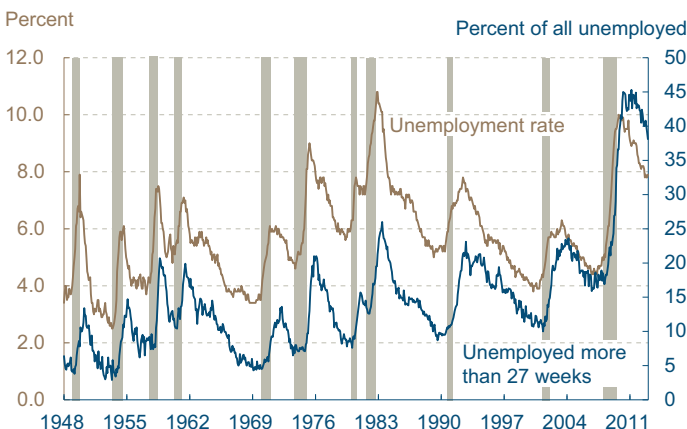
Notes: Employment data come from the Current Employment Statistics (CES) survey and the job openings data come from the Job Openings and Labor Turnover Survey (JOLTS). Shaded bars indicate recessions.  
Source: Bureau of Labor Statistics.

## Unemployment and Employment-to-Population Ratio



Notes: The unemployment rate and the employment-to-population ratio come from the Bureau of Labor Statistics's survey of households, formally called the Current Population Survey (CPS). Shaded bars indicate recessions.  
Source: Bureau of Labor Statistics.

## Unemployment Rate and Long-Term Unemployment



Notes: Shaded bars indicate recessions.  
Source: Bureau of Labor Statistics.

to fill. This constitutes a significant improvement over the level at the end of the recession. However, vacancies are still about 20 percent below their pre-recession high of 4.7 million. Looking into the numbers for different sectors reveals that the construction and government sectors have relatively low demand and are dragging down the overall level of job openings.

Similarly, the unemployment data show a mixed picture of gradual improvement in some areas and persistent weaknesses in others. The unemployment rate came down from its cyclical high of 10 percent in late 2010 to its current level of 7.9 percent as of January. This decline accompanied a substantial fall in the number of unemployed workers, about 3 million. Even though the unemployment rate improved somewhat, albeit slowly, the employment-to-population ratio, another important gauge of the labor market, declined drastically during the recession and has been hovering around 58.5 percent ever since. In spite of the net job gains over time, employment growth did not keep up with population growth, leaving this rate at its lowest level since the late 1980s.

The major contributor to persistently high unemployment is the large fraction of long-term unemployed, those unemployed for six months or more. During recessions, this group of unemployed workers often expands, as it takes longer during such times for newly laid-off workers to find jobs. However, the expansion usually subsides and the pool of long-term unemployed workers starts declining once the recovery picks up. This time around however, long-term unemployment is more severe and persistent; not only has the share of long-term unemployed workers soared to unprecedented levels, it has also stayed at those high levels since. As of January 2013, 4.7 million unemployed workers have been out of work for more than six months. This constitutes 38.1 percent of all the unemployed. This is only slightly less than the peak of 45.3 percent, which was hit in the wake of the recession. The fact that this recession was a long one can partly explain the depth of the problem. Nevertheless, the fact that this ratio declined almost 5 percentage points over the last 12 months is encouraging.

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ISSN 0748-2922

