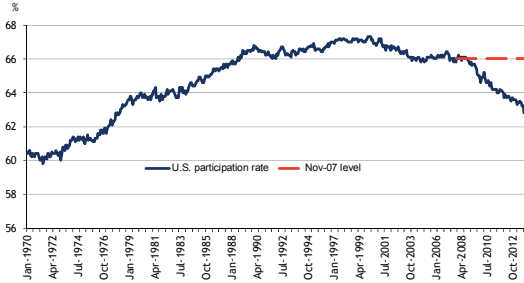


CURRENT ANALYSIS

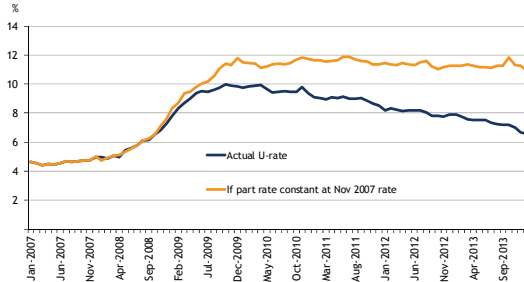
March 2014

Chart 1: U.S. Labour Force Participation Rate



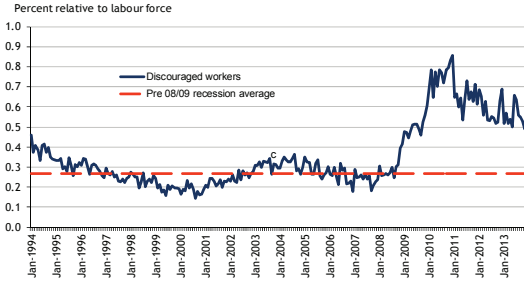
Source: Bureau of Labor Statistics, RBC Economics Research

Chart 2: US Unemployment Rate



Source: Bureau of Labor Statistics, RBC Economics Research

Chart 3: Discouraged Workers



Source: Bureau of Labor Statistics, RBC Economics Research

Why are U.S. Workers Dropping Out of the Labour Force?

A hallmark of the current U.S. business cycle has been a quickening in the pace of decline in the participation rate (the share of the population 16 years and over who are either working or actively looking for work) which dropped to 63.0% as of January 2014 from a 66.0% level in November 2007 just prior to the 2008/09 recession. Outside of readings of 62.8% in December and October of 2013, this marked the lowest level of labour force participation since the 1970s. As Chart 1 indicates, the rate was already trending lower prior to the last recession from a peak of 67.3% in the spring of 2000 although the pace of decline was more modest in the earlier period.

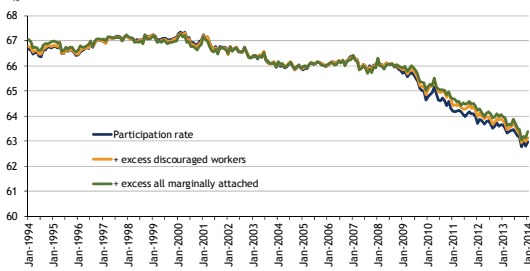
The decline in the participation rate has led some to conclude that the unemployment rate is falling not just due to growth in the economy, which has averaged a historically modest 2.4% during the economic recovery, but also because unemployed workers are giving up their job search and, therefore, are no longer being counted as either in the labour force or unemployed. The exit of these discouraged workers from the labour force lowers both the participation rate and the unemployment rate. A calculation assuming an unchanged participation rate since the beginning of the recession yields an unemployment rate in January 2014 of almost 11%, more-than 4 percentage points higher than the currently reported 6.6% rate in the month (Chart 2). Calculations like this are often used to argue that much of the decline in the officially-reported unemployment rate could be a result of worker discouragement rather than real improvement in labour markets.

Detailed data from the Bureau of Labor Statistics (BLS), however, suggest that while the exit of discouraged workers from the ranks of unemployed has played a role it explains a relatively small share of the overall decline in the participation rate during the recession and recovery. The BLS provides an actual count of discouraged workers (people who want a job but did not look in the previous 4 weeks because of discouragement about job prospects) each month which allows an accurate calculation of the impact of the exit of these workers from the labour force on the participation rate. Chart 3 shows that the number of discouraged workers is indeed significantly elevated at roughly double the pre-recession long-run average for the measure; however, adding the excess discouraged workers (the number above the pre-recession long-run average) back into the labour force would still only increase the participation rate by 0.2 ppts (Chart 4). Adding all “excess” marginally attached workers (all those who want a job and have looked for work in the past year but not in

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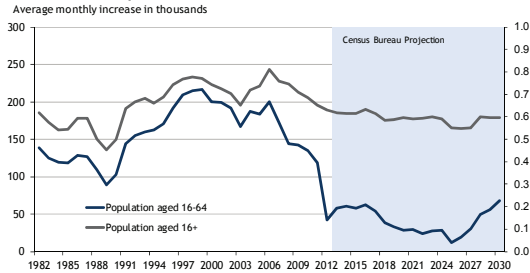
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Chart 4: US Participation Rate



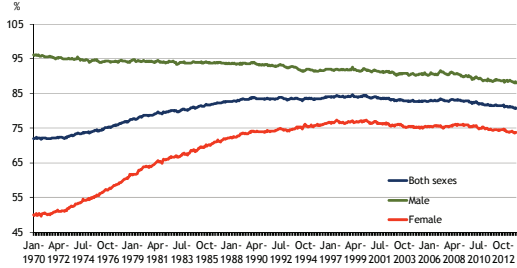
Source: Bureau of Labor Statistics, RBC Economics Research

Chart 5: US Population Growth



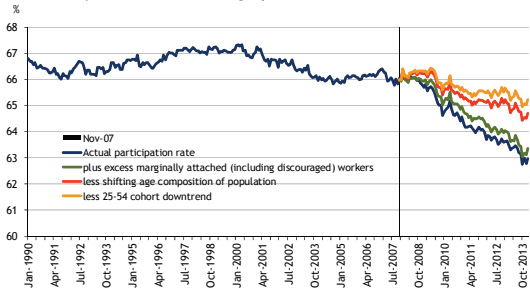
Source: U.S. Census Bureau, RBC Economics Research

Chart 6: U.S. Participation Rate by Sex: 25-54 Age Cohort



Source: Bureau of Labor Statistics, RBC Economics Research

Chart 7: Cyclical versus Demographic Factors



Source: Bureau of Labor Statistics, RBC Economics Research

the last four weeks for all reasons, including discouragement) would boost the participation rate by 0.4 ppts (Chart 4). While not an insignificant amount, this still explains just a fraction of the overall 3.0 ppt decline in the participation rate during the recession and recovery to-date.

Two important longer-term, non-cyclical, factors that have played a more significant role in the decline in the participation rate in recent years are the aging of the U.S. population and longer-run underlying patterns in female and male participation rates. The main channel through which the former has occurred is through a rising share of population moving towards retirement years as the baby boom generation grows older. The resulting increase in the share of the population in age cohorts that historically have a much lower rate of labour force participation is putting downward pressure on the overall rate. For example, a calculation breaking the population and labour force down into age cohorts and recalculating what the aggregate participation rate would have been if the age composition of the population had been unchanged from November 2007 suggests that about 1.3 ppts, or almost half, of the total drop in the aggregate participation rate has resulted simply from the shifting towards an older population. Normally demographic effects like these are thought to occur only gradually over time; however, Chart 5 shows a relatively rapid slowing in growth in the population aged 16-64 since 2007 with growth increasingly concentrated in older age-cohorts. This reflects the first wave of the baby boom generation reaching retirement age.

Another significant factor in explaining the decline in the participation rate, not just through the current economic cycle but also over the longer period since the spring of 2000, is the shifting pattern of female labour force participation and a long-established downward trend in male participation rates. Rising female participation rates in the 25-54 age cohort, which makes up the bulk of the working population and are not as significantly impacted by the shifting age composition of the population as the headline rate, provided a significant boost to labour force growth and the labour force participation rate through the 1970s, 1980s, and 1990s. Female rates levelled off around the turn of the century, however, and have since begun to trend lower. In effect, after closing about two-thirds of the gap with male participation rates in earlier decades, the pattern in the female rate has begun to look a lot more like that of the 25-54 aged male rate, which has already been trending gradually lower for more than 50 years (chart 6). This pre-existing long-run downward trend in participation rates for the population aged 25-54 alone (which we assume matches the 20-year pre-recession average monthly decline in the male 25-54 rate) explains an additional 0.5 ppts of the decline in the headline participation rate since November 2007.

Chart 7 summarizes the impact that each of these factors have had on the labour force participation rate over the recession and recovery. As already shown in Chart 4, adding all marginally attached workers (not just discouraged workers) back into the labour force still explains only a relatively mi-

nor portion of the overall decline in the participation rate from its pre-recession level. Accounting for the aging of the population explains close to half of the overall decline while the longer-term downward trend in the participation rate in the 25-54 age cohort accounts for about another sixth. There is still a remaining downward trend even accounting for all of these factors. Some of that may also reflect cyclical effects not fully captured in the discouraged worker data; however, part could also be reflecting other structural social or demographic factors which also impact the labour force participation rate but are difficult to identify or measure. What seems clear is that most of the decline in the U.S. participation rate can be explained by longer-term structural issues (eg. demographic factors) rather than cyclical weakness (eg. discouraged workers). As a consequence, caution should be exercised when viewing the decline in the participation rate, and coincident decline in the unemployment rate, as largely the result of discouraged workers dropping out of the labour force. Cyclical weakness has been a contributing factor in the decline in the participation rate; however, the impact has been small compared to the impact of underlying, and longer-lived, demographic factors.

It should be noted that to the extent that the drop in the participation rate is due to demographic factors, like retirements, it has no downward impact on the unemployment rate. This is because a retiring worker, for example, lowers both the labour force, and thus the participation rate, and employment by an equal amount which negates any impact on the unemployment rate. The fact that most of the decline in the participation rate can be explained by structural factors suggests that, as we have argued before in an earlier note, [*US Unemployment Rate and Discouraged Workers*](#), the unemployment rate is indeed falling as a result of underlying improvement in labour market conditions.

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