

ON THE MONEY

A Hannah News Service Publication

Vol. 131, No. 11

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June 12, 2015

Labor Force and Unemployment in Ohio

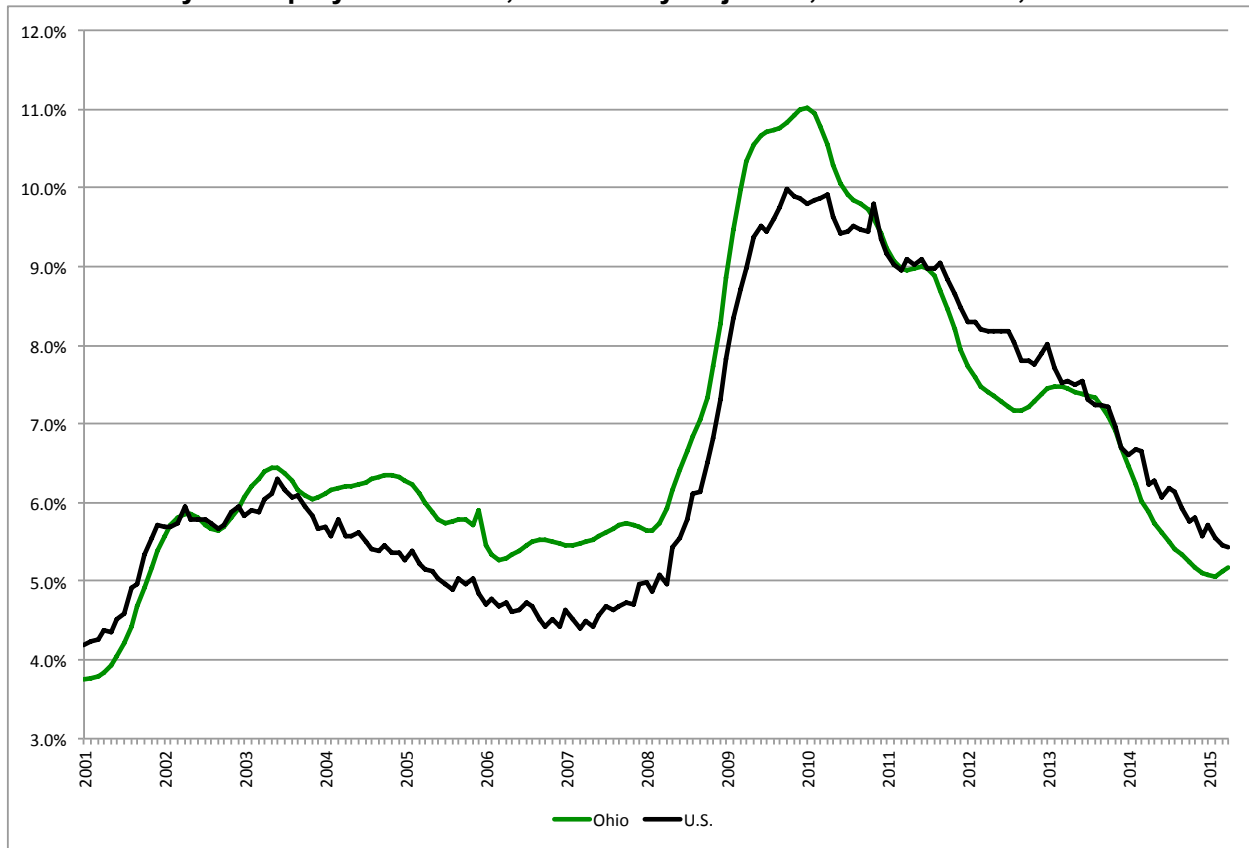
The issue of Ohio's labor force and the growth of that labor force is an extremely important one. Labor force is critical for Ohio's industries to produce goods and services that maintain and enhance our state's economic growth and the quality of life of our citizens. (Equally critical is that that labor force possess the appropriate skills, but that is an issue for a future article.) This issue of *On the Money* examines trends in unemployment, the meaning of those trends – which is somewhat more complex than commonly believed – and growth and change in the labor force historically and over the next ten years.

Unemployment Rate Trends and Concepts

Figure 1 shows monthly U.S. and Ohio unemployment rates beginning in January 2001. Thus, it shows the impact on the unemployment rate of the 2001 recession, the 2002-2003 jobless recovery, the 2003-2007 employment expansion, the 2007-2009 recession, and the employment recovery beginning in 2010.

Ohio's unemployment rate was greater than the national average throughout the 2003-2007 recovery and the 2007-2009 recession, and peaked at 11 percent, a full percentage point higher than the national peak. The 2003-2007 expansion was not at all kind to Ohio; this was one of only four states with employment at the end of 2007 less than it was at the end of the previous expansion in March 2001. Similarly, job losses in the recession began earlier than average and were much more severe than average. The news has been much better recently: from that 11 percent peak, the unemployment rate fell more rapidly than average to its April 2015 level of 5.2 percent – versus a national average of 5.4%

Figure 1
Monthly Unemployment Rates, Seasonally Adjusted, Ohio and U.S., 2001-2015



Source: U.S. Bureau of Labor Statistics.

However, it would be incorrect to conclude automatically from this that the Ohio economy is performing better than average. The unemployment rate is affected by two forces: changes in the number of people working and changes in the number of people looking for work. The unemployment rate is the number of unemployed individuals divided by the civilian labor force; the civilian labor force is *defined* as the number of people who worked during a specific week plus the number of people unemployed.

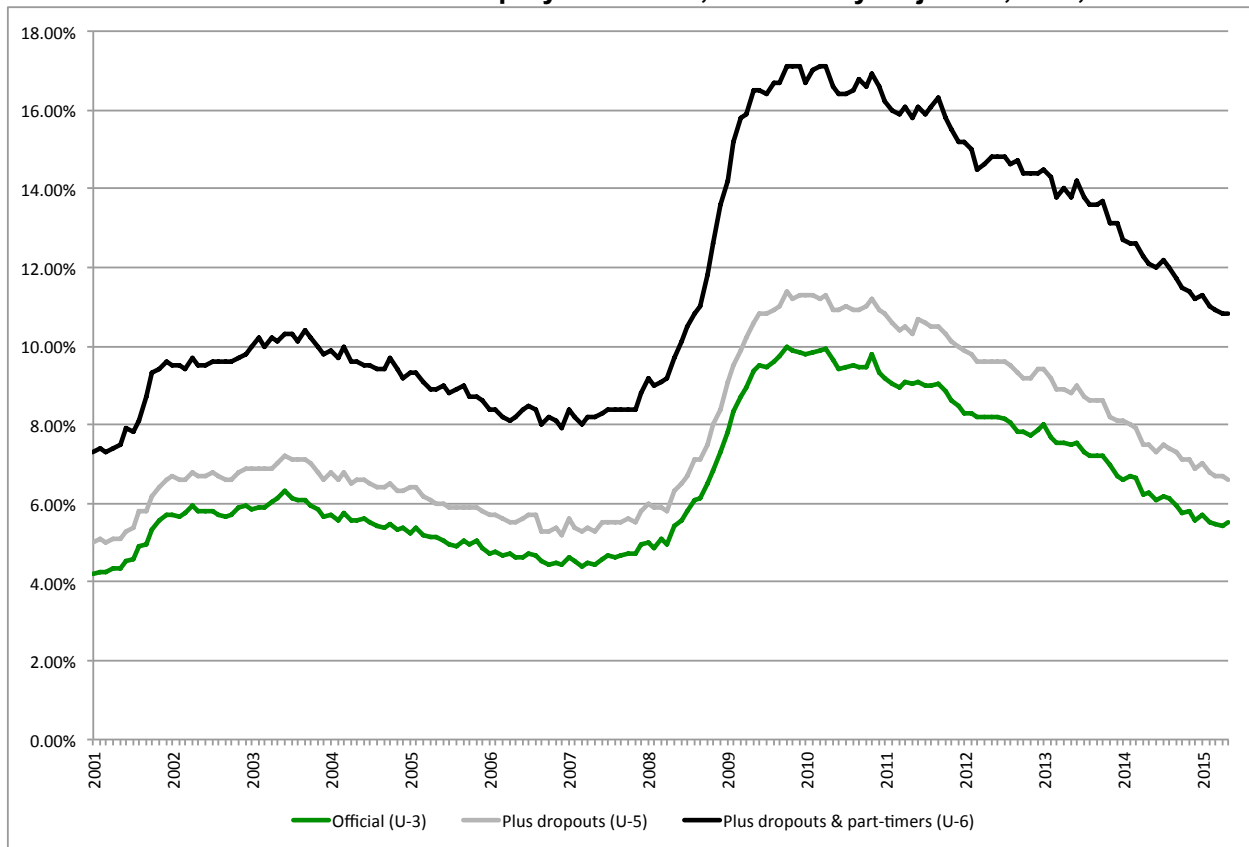
The number unemployed is from the Current Population Survey, a joint effort of the Census Bureau and the Bureau of Labor Statistics that surveys a random sample of about 60,000 households each month. Essentially, the survey asks whether the respondent worked *at all* during the specific week. If the answer is yes, the respondent is in the labor force and employed. If the answer is no, the respondent is asked whether she/he actively sought employment during the past four weeks. (Actively seeking employment involves more than looking at want ads; it involves activities that could directly lead to employment, such as sending out applications, going on interviews, or attending job fairs.) If the answer to that question is yes, then the individual is in the labor force and unemployed. If the answer is no, the individual is not counted in the statistics, even if she/he is able and ready to work and would take a job if one were offered.

This reduction of availability of work and not working to a yes-or-no question rather than the more-or-less matter that it actually is causes distortions in the measured unemployment rate. As economic conditions worsen and jobs disappear, people become discouraged over their job

prospects and drop out of the labor force (as defined). This puts downward pressure on the unemployment rate. Similarly, as conditions improve after a downturn, people begin to look for work again. This increases the unemployment rate, all else equal. Thus, the unemployment rate always understates the true extent of job-seekers' pain, but understates it more in bad times than in good. Also, it is not uncommon to see the seemingly paradoxical phenomenon of the unemployment rate increasing as employment increases and falling as employment falls.

The Bureau of Labor Statistics addresses these problems by publishing six different unemployment rates for the U.S. (but unfortunately not for states) using successively broader definitions of unemployment and the labor force. The familiar unemployment rate described above is actually the third broadest of the six, and is referred to as U-3. (The narrowest, U-1, counts as unemployed only those out of work at least 15 weeks.) U-4 includes U-3's active job seekers plus "discouraged workers," those who want to work but are not looking for a job because they don't believe there are any available for them. U-5 includes active job seekers, discouraged workers, and other "marginally attached" workers – those who are available for work and have looked for a job sometime in the past 12 months. U-6 includes all those in U-5 plus those working part-time because they can't find full-time work. Figure 2 charts U-3, U-5, and U-6 beginning in 2001.

Figure 2
Alternative Measures of the Unemployment Rate, Seasonally Adjusted, U.S., 2001-2015

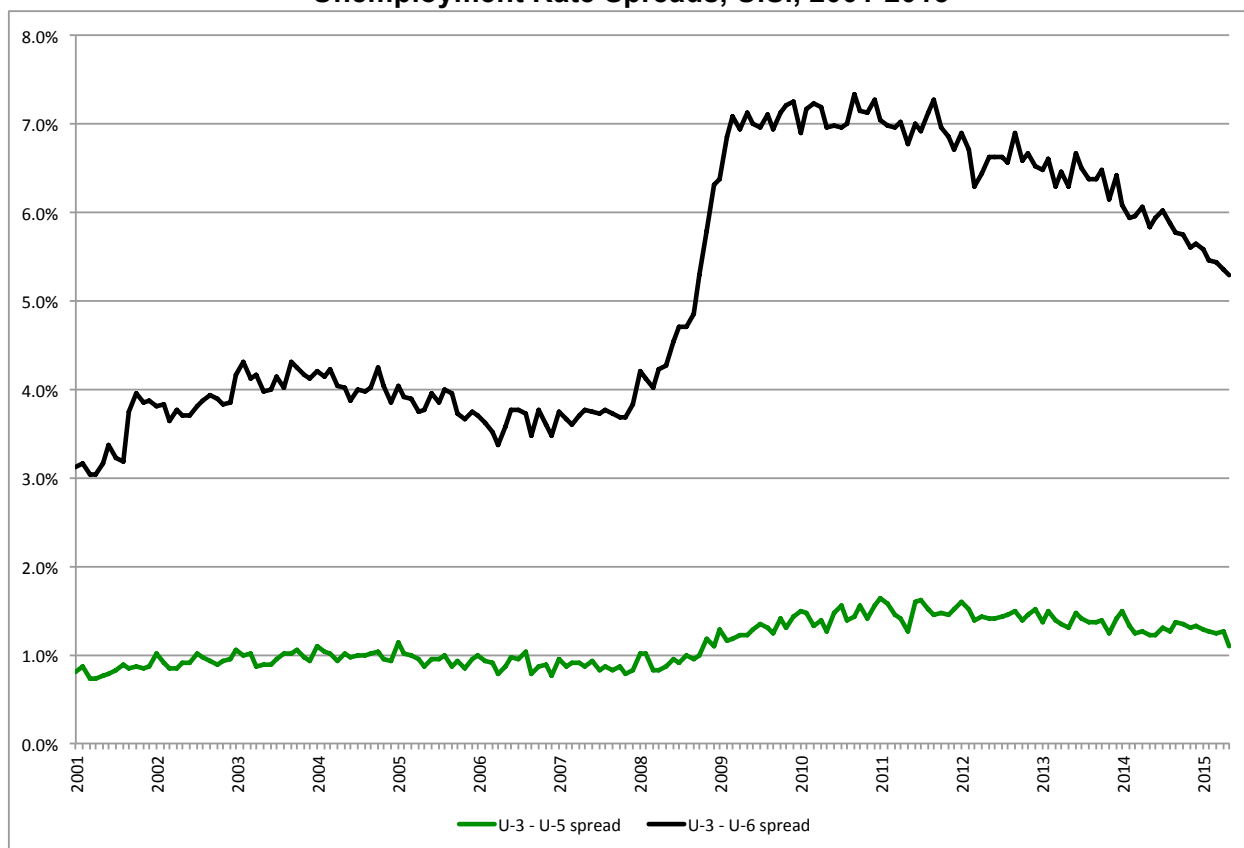


Source: U.S. Bureau of Labor Statistics.

As shown, the headline unemployment rate peaked at 10 percent in October and November 2009 and has declined to 5.5 percent as of May 2015. U-6, however, peaked at 17.1 percent in March and April 2010, and stood in May at 10.8 percent.

Tracking the spreads between various unemployment rates can provide useful insight into the health of the labor market. Figure 3 graphs the differences between U-5 and U-3 and U-6 and U-3. The U-3 – U-6 spread was around 3.75 percent entering the recession, rose quickly to seven percent by early 2009, and remained in that range until beginning to decline in early 2012. As job growth has continued, the decline in the spread has become more rapid recently. It stood in May 2015 at 5.3 percent – still elevated compared to its level before the recession, but its lowest point in seven years.

Figure 3
Unemployment Rate Spreads, U.S., 2001-2015



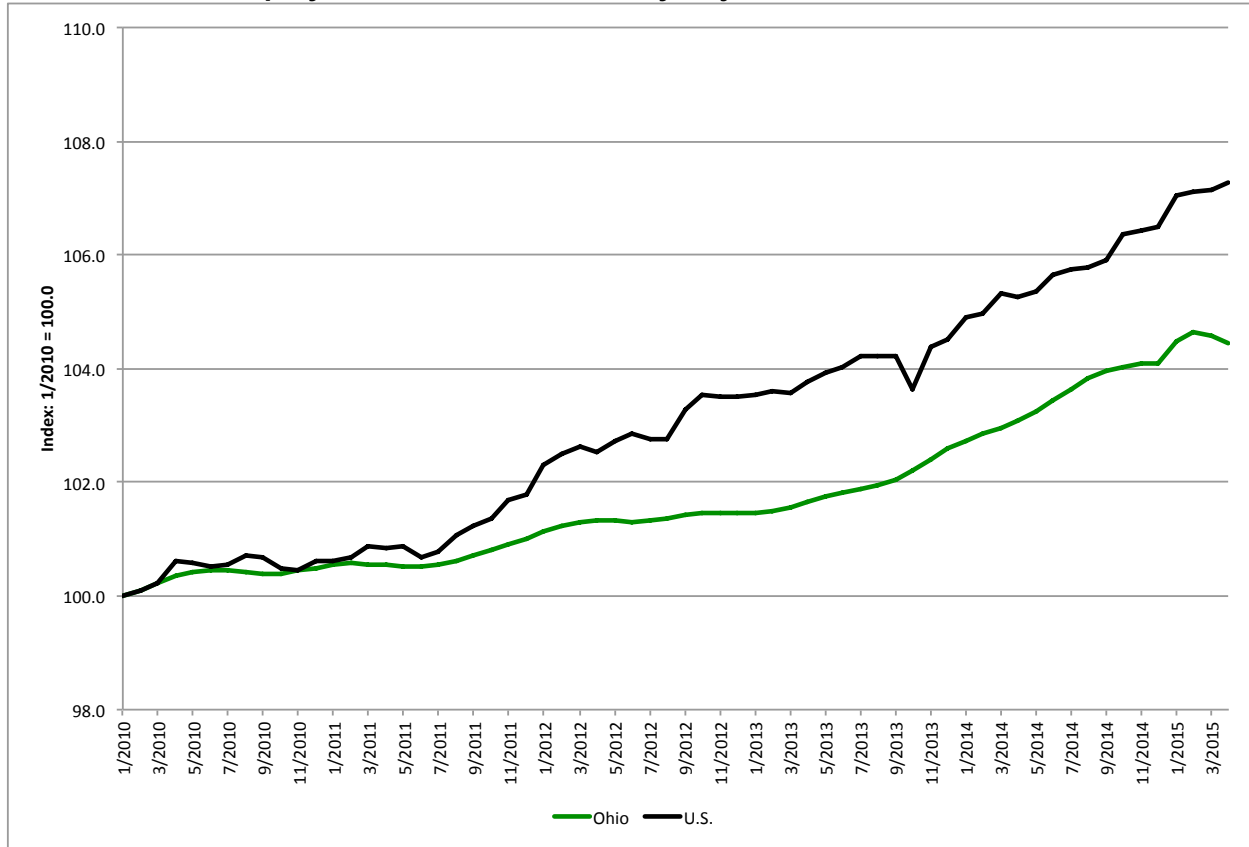
Source: Calculated from U.S. Bureau of Labor Statistics data.

Ohio Labor Force and Resident Employment

The preceding discussion begs the question of whether the steep decline in the Ohio unemployment rate is more indicative of more people finding work or fewer people looking for work. Figure 4 indicates that it is unfortunately the latter. This chart shows Ohio employment growth relative to the national average since January 2010, when employment started growing after the recession. Employment is graphed on an index basis, so the figure shows the cumulative percentage growth in employment. It is important to point out that this is a different measure of employment than that considered in most of these articles. Customarily, employment is defined as the number of jobs in Ohio or one of its sub-state areas; these jobs may be filled by those residing outside of the state or area. Here, though, employment is the number of Ohio residents working at jobs that may be either in Ohio or elsewhere. As shown in Figure 4, resident employment nationwide has increased 7.3 percent since January 2010; the

increase in Ohio has been only 4.5 percent. Meanwhile, the U.S. labor force has increased 2.3 percent since January 2010; Ohio's labor force has declined two percent.

Figure 4
Resident Employment Growth, Seasonally Adjusted, Ohio and U.S., 2010-2015

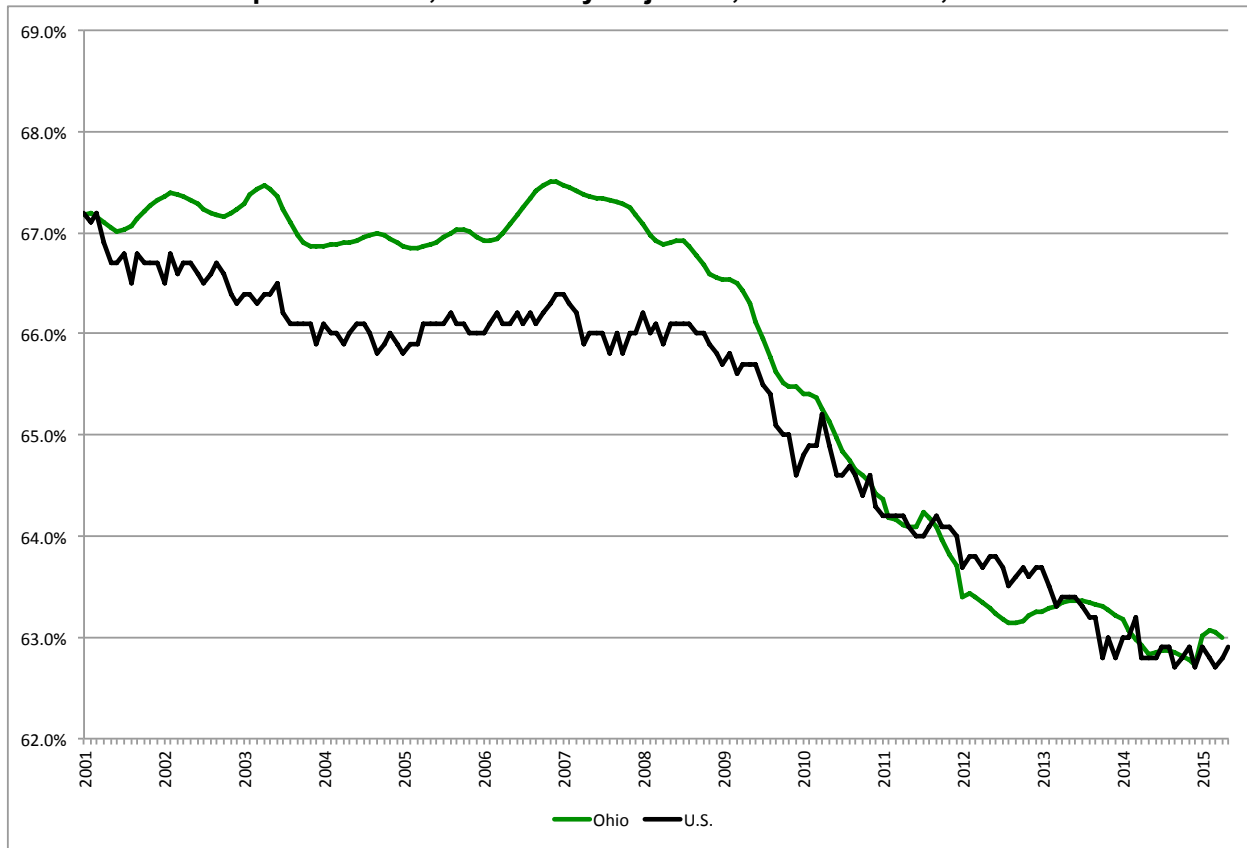


Source: Calculated from U.S. Bureau of Labor Statistics data.

Labor Force Participation

The relationship between the number of people in the labor force and the total adult population is an important indicator of the availability of workers to support economic growth – subject, of course, to the measurement limitations discussed above. This is summarized in a ratio called the labor force participation rate. Formally, this is defined as the labor force divided by the civilian noninstitutional population 16 years and older. (Note that there is no upper bound on the age.) Participation rates are provided for the U.S. by the Bureau of Labor Statistics and for Ohio by the Ohio Labor Market Information Bureau. These are graphed in Figure 5 beginning in 2001. (Ohio participation rates prior to 2010 are recalculated by the author based on revised population and labor force estimates.)

Figure 5
Participation Rates, Seasonally Adjusted, Ohio and U.S., 2001-2015



Source: U.S. Bureau of Labor Statistics, author's calculations, Ohio Labor Market Information Bureau.

As shown, the Ohio participation rate held steady through the 2003-2007 expansion at about a point higher than the national average. Both rates declined through the recession, but the Ohio rate declined more so that it is now comparable to the national average. The earlier discussion of the impact of people suspending job searches in recessions and resuming them when the economy improves suggests that the participation rate should decline in a recession but then increase subsequently. The fact that this did not occur after the 2007-2009 recession caused a great deal of concern, with some arguing that some workers' skills had deteriorated through their long spell of unemployment to the point that they had become unemployable and had become a "lost generation." Indeed, the 62.7 percent U.S. participation rate reached earlier this year is its lowest level since March 1978.

There is an alternative explanation, though – one that is more positive for individual welfare if not for workforce availability. That is that ongoing demographic shifts and aging of the population have given rise to a long-term decline in the participation rate that was merely hastened by the recession. Not surprisingly, the rate of workforce participation increases as individuals enter their 20s and declines markedly after age 55. Table 1 shows these age-specific participation rates for Ohio and the U.S. in 2013 (the most recent year for which Ohio rates are available).

Table 1
Labor Force Participation Rate by Age, Ohio and U.S., 2013

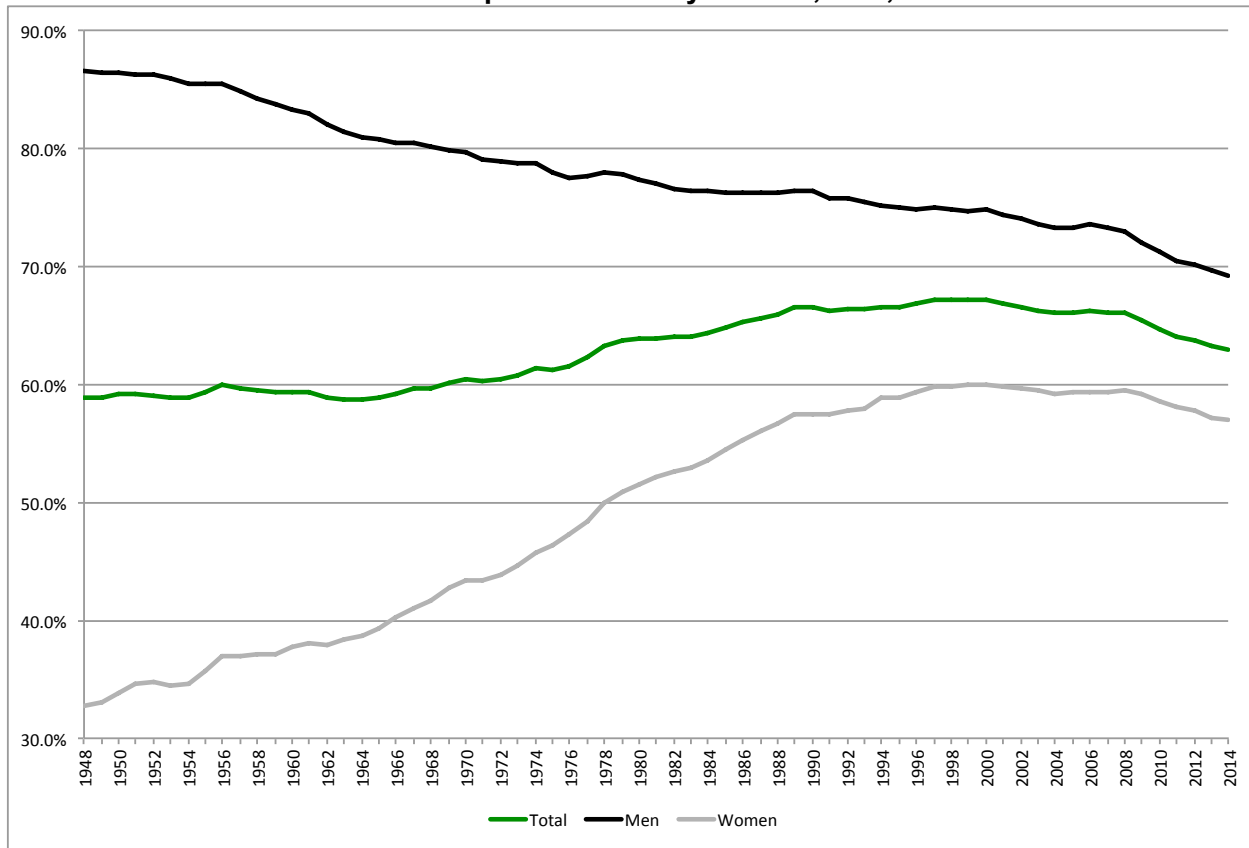
Age	Ohio	United States
Total – 16 years and older	63.2%	63.6%
16 to 19 years	44.2%	37.5%
20 to 24 years	76.8%	73.8%
25 to 44 years	82.7%	82.1%
45 to 54 years	79.7%	80.1%
55 to 64 years	63.6%	64.2%
65 to 74 years	24.4%	25.6%
75 years and older	5.8%	6.3%

Source: American Community Survey, U.S. Census Bureau.

Note that the participation rates for Ohio are higher than the corresponding national average in lower age ranges and somewhat lower in higher ranges. (The 65 to 74-year difference between Ohio and the U.S. is statistically significant, but the 75 and older difference is not.) Additionally, while participation rates in higher age ranges have increased somewhat over the past decade, rates for the 20 to 24-year age group have declined and the 16 to 19-year rate has plunged eight percentage points nationally and six points in Ohio since 2005. A frequent explanation for this is that more individuals in these younger age groups are attending college and relying on scholarships, student loans, and/or family support rather than work to provide their needs so that they can concentrate on their studies. In any case, this argument is that the participation rate is declining simply because fewer younger people are entering the labor force to replace the many Baby Boomers who are departing.

Figure 6 provides a complementary, intriguing argument for the decline in the participation rate recently, and suggests that the decline is likely to continue. This chart shows U.S. labor force participation rates by gender since 1948 (the first year for which these are available) through 2014. Overall participation rates were stable through the 1950s and 1960s, rose through the 1970s and 1980s, stabilized in the 1990s, and declined beginning in about 2000. However, the participation rate for men declined over the entire period – probably because as life span has increased, a greater number of men are getting the opportunity to retire. Women, meanwhile, were entering the labor force in greater and greater numbers. By 1970, they achieved numbers sufficient to overcome the ongoing decline in male participation and push the overall participation rate higher. By 2000, however, the female participation rate reached a maximum, and retirements began to outpace entry for women as was the case for men. This argument suggests not only that the continuing retirement of the Baby Boomers will continue to push labor force participation lower until the larger numbers in later generations cause the pendulum to swing back, but also that the seven-point increase in the participation rate over two decades was a one-time phenomenon that will not be repeated.

Figure 6
Labor Force Participation Rates by Gender, U.S., 1948-2014



Source: U.S. Bureau of Labor Statistics.

Projections of Ohio's Labor Force

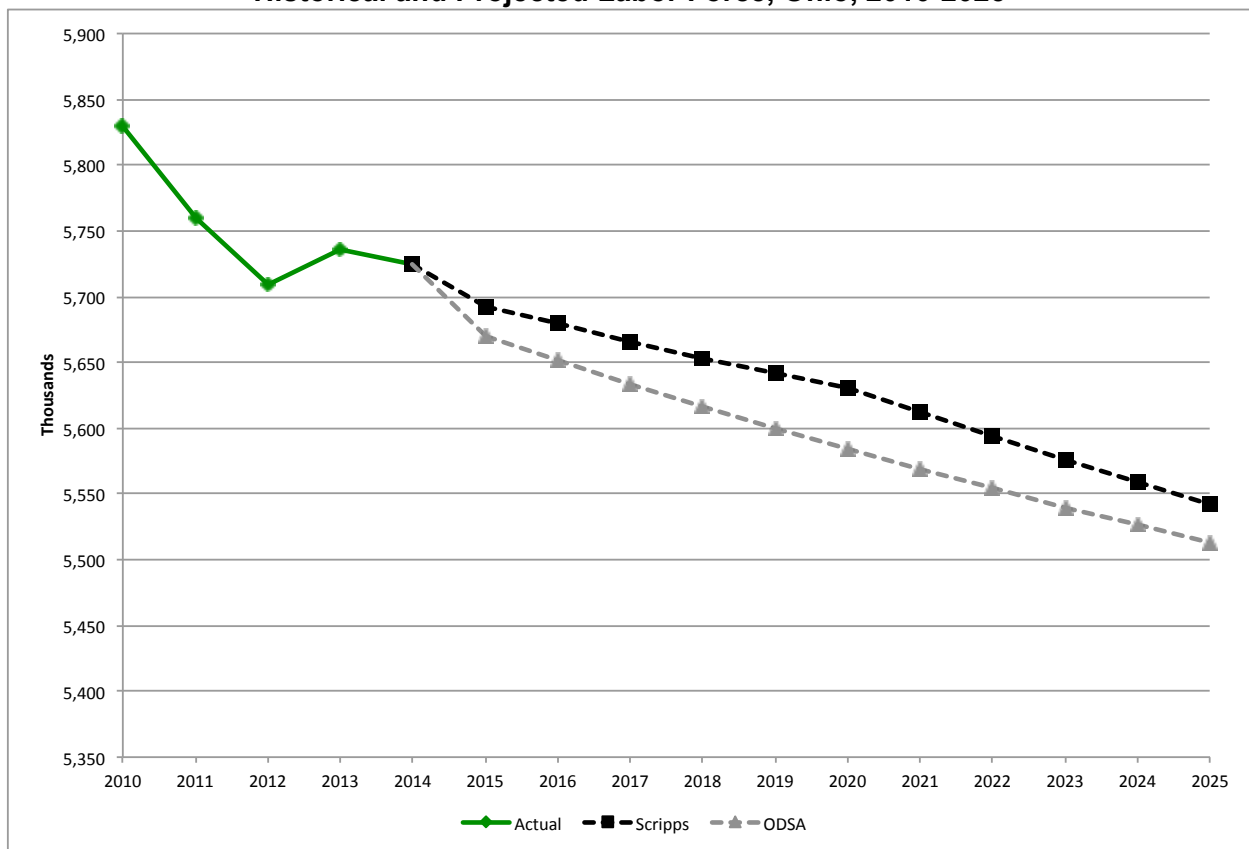
Consistent with the above analysis, long-term projections of the U.S. labor force participation rate are for a continuing gradual decline to 61.6 percent by 2022. This will by then be a 46-year low. The same forces causing this decline will be at work in Ohio as well – but to a greater extent given our older population. Combining age-specific participation rate projections and long-term age-specific population projections can yield projections of Ohio's labor force over the next decade. This involves extending the national BLS participation rates from 2022 to 2025, converting these to Ohio rates by assuming that Ohio's age-specific changes will be proportional to those at the national level, and converting the projections of total population to the civilian noninstitutional population that is needed to derive labor force from participation rates.

Two alternative population projections for Ohio are available – one from the Ohio Development Services Agency (ODSA) and the other from Miami University's Scripps Gerontology Center. Differences in the projections arise primarily from differences in assumptions of future rates of net migration. The Scripps projections are somewhat more optimistic overall and have a somewhat higher share of older population; both differences create differences in the labor force projections, even with the same assumed participation rates.

The results are presented in Figure 7, together with actual 2010-2014 labor force levels for comparison. The Scripps projections imply a 3.2 percent decline in Ohio's labor force over the

next decade and a 2025 participation rate of 59.4 percent. The ODSA projections yield a 3.7 percent decline in labor force and a 60.3 percent participation rate. Whether this decline constrains Ohio’s economic growth depends in part on the impact of technology, which will continue to allow firms to produce more goods and services with fewer workers. What is less ambiguous – and less positive – is the impact on Ohio’s governments, particularly its municipalities. There will be fewer workers supporting younger and older residents who are not working but who generally require higher levels of public services. The ratio of non-workers to workers – the “dependency ratio” – will rise, putting strains on state and local budgets. Municipalities receive the bulk of their general fund revenues from taxes on wage, salary, and self-employment income, and are prohibited by state law from taxing most other types of income, including retirement income. Consequently, the labor force decline will negatively impact municipal income growth, particularly in areas where employment is stagnant or declining already.

Figure 7
Historical and Projected Labor Force, Ohio, 2010-2025



Source: U.S. Bureau of Labor Statistics; author’s calculations from data provided by the Bureau of Labor Statistics, Scripps Gerontology Center at Miami University, and the Ohio Development Services Agency.

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