State Notes

TOPICS OF LEGISLATIVE INTEREST

Summer 2013

Does a Lower Unemployment Rate Mean the Economy is Improving?
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Every month, agencies at the state and Federal levels release statistics regarding the condition of the labor market. Among the released statistics, the one that tends to attract the most media attention is the unemployment rate. Both policymakers and members of the public tend to seize on the changes in the rate, with the assumption that if the unemployment rate is rising, then the economy is worsening; and if the unemployment rate is falling, then the economy is improving. The unemployment rate, however, is only one window through which to view the economy and it reflects changes in many different underlying factors. This paper will discuss how the unemployment rate is calculated, what it can reveal about the economy, and the importance of some alternative indicators that are also regularly published.

How the Unemployed Rate is Calculated

The unemployment rate is derived from a survey of approximately 60,000 households (translating into approximately 110,000 individuals) encompassing rural and urban areas from every state and the District of Columbia. Every month, one-fourth of the households in the survey are changed. The sample households are interviewed about a variety of demographic factors as well as any labor force activities, although respondents are not asked specifically if they are unemployed, nor do the interviewers determine the labor force classifications for respondents. Other controls are employed to ensure that truthful data have been obtained and responses are weighted to ensure a statistically accurate reflection of the total population. The unemployment rate is *not* determined by counting every single unemployed person each month nor is it based on the number of individuals filing unemployment insurance benefit claims.

Based on their responses to the survey, individuals are classified in one of three categories: 1) not in the labor force, 2) in the labor force and unemployed, and 3) in the labor force and employed. The number of individuals in each category is used to compute a variety of ratios, including the unemployment rate. Total population is, by definition, equal to the sum of the three groups and the labor force is defined as the sum of those fitting in the second and third categories. As a result, the labor force consists of those who are employed combined with those who are not employed but who are seeking work.

Many types of situations can result in an individual being counted as employed. Generally, people are considered employed if they did any work at all for pay or profit during the survey week, whether part-time or full-time. However, individuals are also counted as employed if they are on vacation, ill, on maternity or paternity leave, or experiencing child-care problems, personal problems, or other family obligations that kept them from working; they could not work due to the weather; or they are in a variety of other situations. Such individuals are counted as employed "with a job but not at work" because they have a specific job to which they will return.

Individuals are classified as unemployed if they do not have a job, were actively looking for work in the prior four weeks, and are currently available for work. The definition of "actively looking for work" includes sending out résumés or filling out applications, placing or answering an advertisement, checking employment registers, contacting employers or employment agencies, having a job interview, contacting friends or family about employment opportunities, or taking other measures to actively search for a job. Reading about job openings in a newspaper or on a web site, and engaging in job training are examples of activities that do not count as actively seeking work. As a result of this definition, the unemployed category includes more individuals than just those who have lost their jobs. It can also include individuals who have quit a job and are seeking another, who had temporary positions that have ended, who are returning to the labor force after attending school or having a child, or who are looking for their first job.

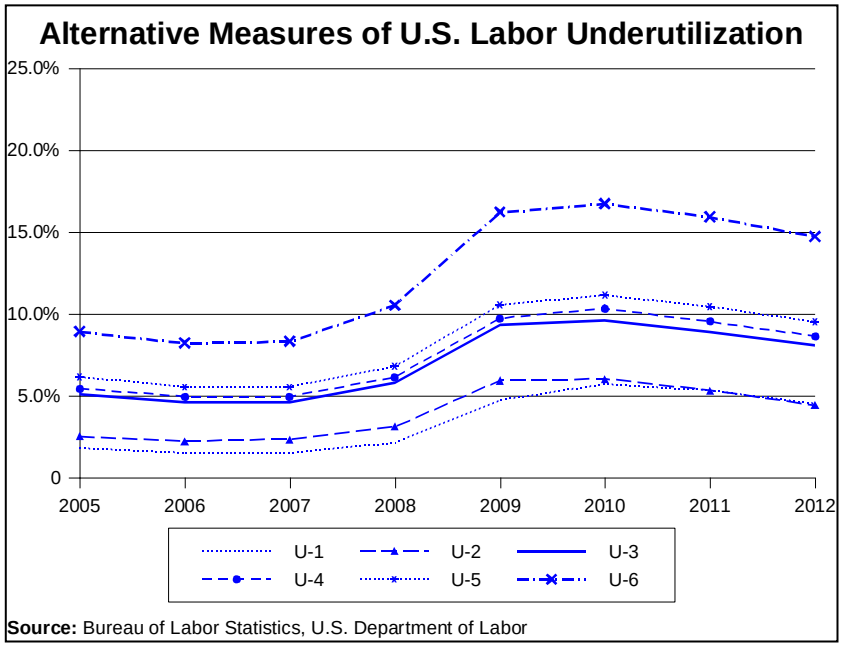
From these groupings, several statistics are computed. The "official" unemployment rate is determined by dividing the number of unemployed individuals by the number of individuals in the labor force. The labor force participation rate is calculated by first adding the number of people who are unemployed but seeking work to the number employed, and then dividing that sum by the total population. The groupings also have subsets, such as individuals who are "marginally attached to the labor force" and "discouraged workers". These subsets are measured to provide a richer picture of the employment situation, and evaluate such issues as long-term unemployment, those who lost their job as a percentage of the labor force, individuals who desire full-time work but are employed part-time for economic reasons, and individuals who are not looking for work for a job-market-related reason. These alternative concepts add another five "types" of unemployment rates to the "official" unemployment rate.

As a result, when monthly labor statistics are released there are actually six "unemployment rates" presented, although they are termed "alternative measures of labor underutilization". They are defined as:

U-1: Persons unemployed 15 weeks or longer, as a percentage of the civilian labor force
U-2: Job losers, and persons who completed temporary jobs, as a percentage of the civilian labor force
U-3: Total unemployed, as a percentage of the civilian labor force
U-4: Total unemployed plus discouraged workers, as a percentage of the civilian labor force
U-5: Total unemployed, plus discouraged workers, plus all other persons marginally attached to the labor force, as a percentage of the civilian labor force
U-6: Total unemployed, plus all persons marginally attached to the labor force, plus total employed part time for economic reasons, as a percentage of the civilian labor force

The official unemployment is represented by the U-3 measure, but the differences between the rates can be substantial. Figure 1 illustrates the difference between the six alternative measures for the United States from 2005 through 2012.

Figure 1



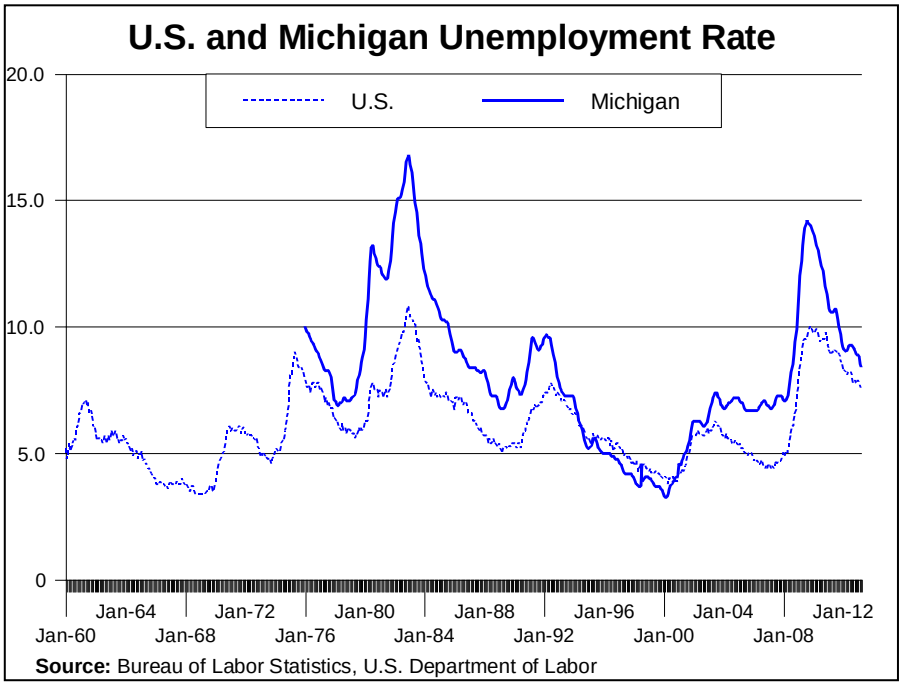
Source: Bureau of Labor Statistics, U.S. Department of Labor

The Michigan Unemployment Rate

The Bureau of Labor Statistics, in the U.S. Department of Labor, works with states to develop local unemployment measures for various areas, including census regions, states, a variety of metropolitan areas, small labor market areas, counties, and cities with a population of 25,000 or more. The same definitions are used to measure concepts such as the labor force, employment, and unemployment; when the data are adjusted for seasonal variation, however, the adjustments differ from those used in the national data. Furthermore, the statistics draw on a wider array of data sources than the national data, but are calibrated to sum to the national data.

Figure 2 depicts the official seasonally adjusted monthly unemployment rates (the U-3 measure) for the U.S. and Michigan from January 1960 through April 2013. (Monthly unemployment rates for Michigan are available only back to January 1976.) In those 53-plus years, the Michigan unemployment rate was at or below the U.S. rate only during the July 1994 through August 2000 period.

Figure 2



Just as there are alternative measures of labor underutilization for the United States, similar measures exist for states. Figure 3 provides the same information presented in Figure 1, but for Michigan rather than the United States. Not only is each measure higher for Michigan, but the changes were more dramatic, with the U-6 measure peaking at 21.5% in 2009, after being only 12.0% in 2005. A comparison of the U.S. and Michigan values for each underutilization measure for 2012 is presented in Figure 4.

Figure 3

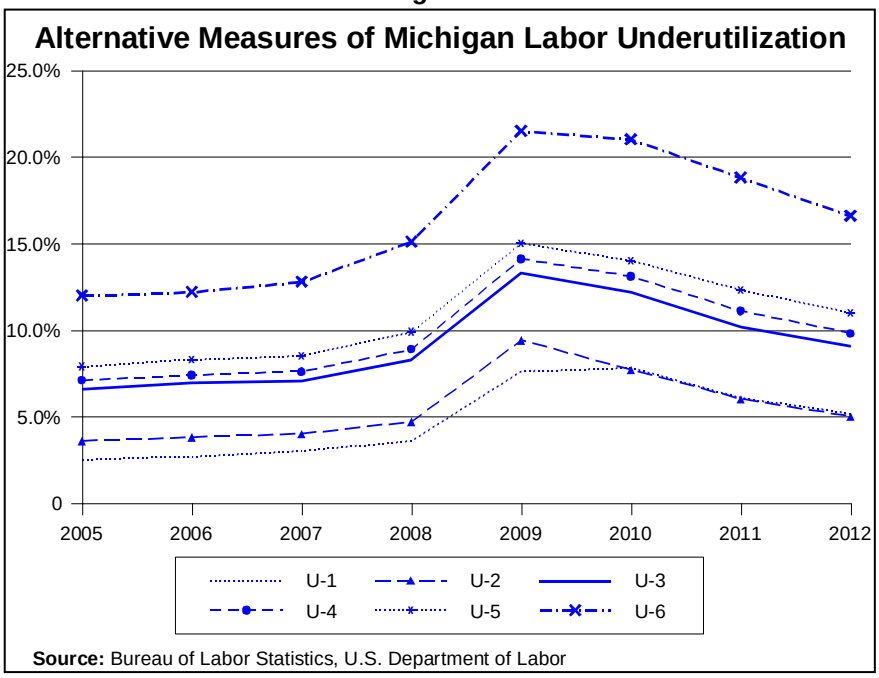
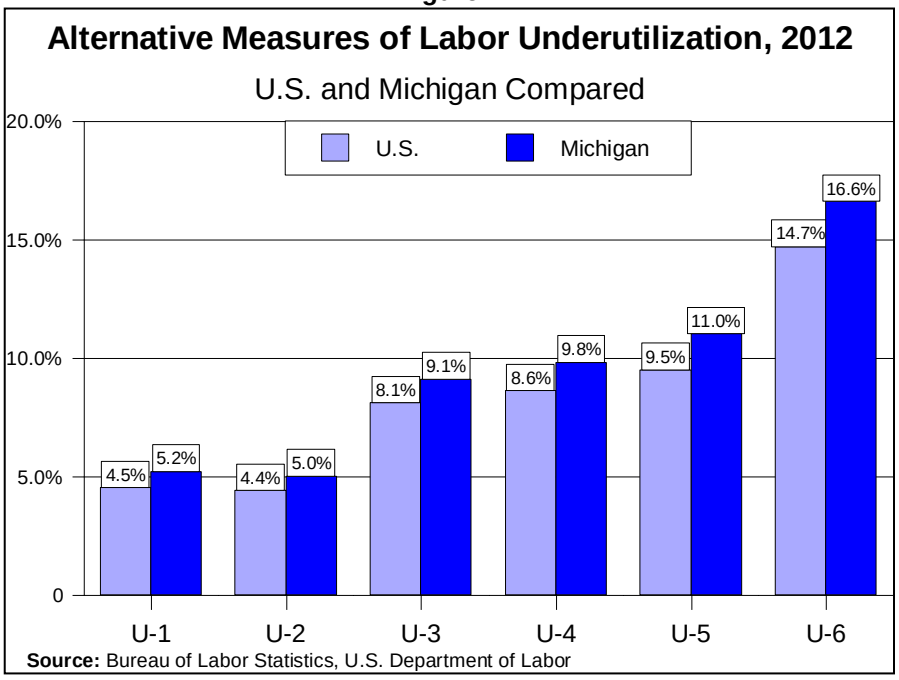


Figure 4



What the Unemployment Rate Reveals about the Economy

The preceding discussion focused on different ways to measure labor underutilization, but all of the measures shared a common structure: they all represented ratios of one portion of the population to another portion of the population. For example, the official unemployment rate (the U-3 measure) represents the total unemployed, as a percentage of the civilian labor force. As a result, the unemployment rate will change if either the numerator (the total unemployed) or the denominator (the size of the civilian labor force) changes. Furthermore, factors that can change either the numerator or denominator can represent either improving or deteriorating economic conditions, and some changes can affect both the numerator and the denominator at the same time. While similar issues are relevant for all six measures of labor underutilization, the discussion below focuses on the U-3 measure, the official unemployment rate.

The labor force participation rate is the most influential factor affecting whether changes in the unemployment rate reflect an improving or declining economy. By definition, those who participate in the labor force are individuals who are either currently working or actively seeking work. Labor force participation can vary for many reasons. Individuals might not participate in and/or might withdraw from the labor force due to illness or injury, retirement, pregnancy, a large lottery prize, marriage, college attendance, a belief that there are no positions that they perceive as desirable or for which they would be competitive, etc. Similarly, individuals may choose to enter the labor force for reasons that vary, and include circumstances such as high school or college graduation, improved perceptions of obtaining employment, increased maturity of children, etc. Figure 5 illustrates the labor force participation rate since 1976 for both Michigan and the United States. The impact of a poor economy on individuals' perceptions of being able to obtain employment from a job search is visible, particularly in Michigan, with participation growing more slowly or declining in periods of recession. How changes in labor force participation can affect the unemployment rate can be illustrated with four examples, discussed below.

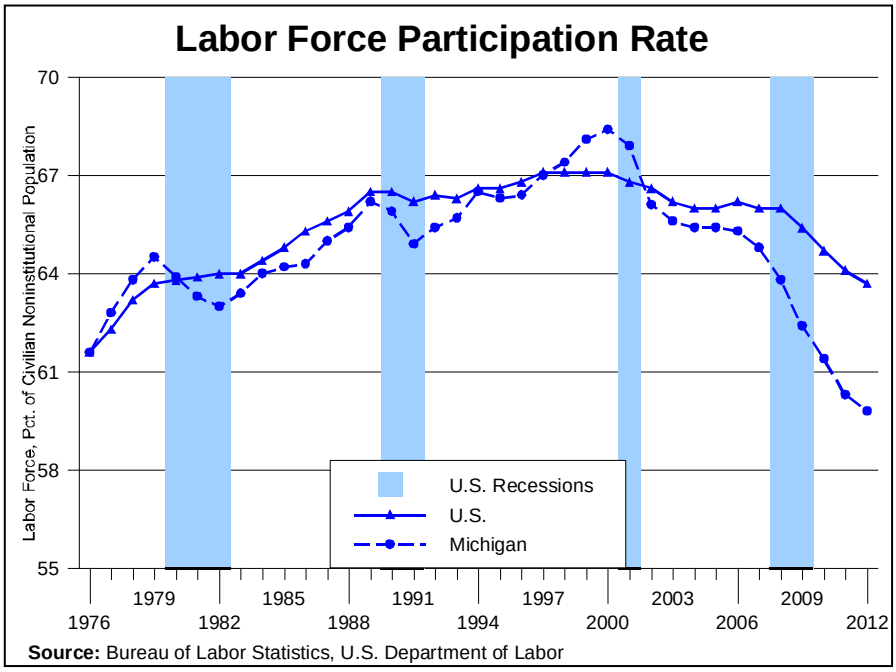
Case One: Both Employment and Labor Force Participation Rise, and Unemployment Falls, but Unemployment Falls More Rapidly than Labor Force Participation Rises

In 1998, the U.S. labor force grew 1.0%, expanding from 136.3 million to 137.7 million; while employment increased 1.5%, rising from 129.6 million to 131.5 million, and unemployment declined 7.8%, falling from 6.7 million to 6.2 million. As a result, the unemployment rate fell from 4.9% to 4.5%, and the decline reflected conditions generally associated with an improving economy: higher employment and lower unemployment.

Case Two: Both Employment and Labor Force Participation Rise, but Unemployment Increases

In 1992, the U.S. labor force grew 1.4%, expanding from 126.3 million to 128.1 million; while employment increased 0.7%, rising from 117.7 million to 118.5 million. However, unemployment also increased 11.4%, growing from 8.6 million to 9.6 million. As a result, the unemployment rate rose from 6.8% to 7.5%, despite the increase in employment. In this case, as the economy improved after the 1990-1991 recession, job seekers returned to the labor market more rapidly than new jobs were being created. This phenomenon is not uncommon after recessions, and is one reason that the unemployment rate is often termed a "trailing indicator" of the economy. Because the labor force often grows more rapidly than additional jobs are added to the economy, as a result of improving job prospects, the unemployment rate will often remain high or even increase even though the economy is growing and adding jobs.

Figure 5



Case Three: Employment Decreases, Unemployment Increases, and Labor Force Participation Rises (or Declines More Slowly than Employment Falls)

In 1991, the U.S. labor force grew 0.4%, expanding from 125.8 million to 126.3 million; while employment declined 0.9%, falling from 118.8 million to 117.7 million. As suggested by the increase in the labor force, many of those who lost their jobs remained in the labor force, and unemployment increased 22.4%, rising from 7.0 million to 8.6 million and raising the unemployment rate from 5.6% to 6.8%. This combination of events represents conditions generally associated with recessions: falling employment and rising unemployment.

Case Four: Employment Decreases, Labor Force Participation Declines, and the Unemployment Rate Declines

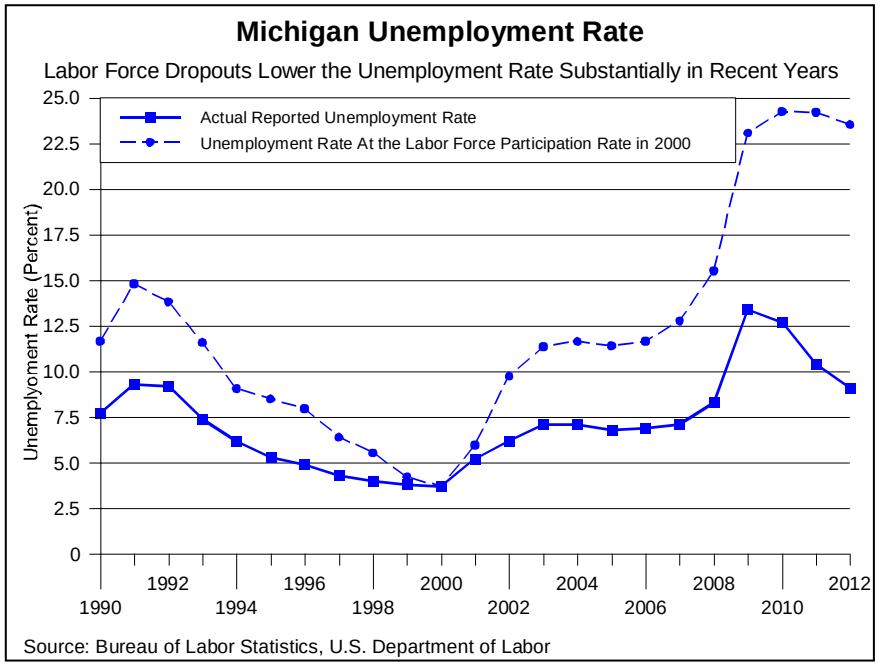
In 2010, the Michigan labor force declined 2.1%, falling from 4.85 million to 4.75 million; while employment declined 1.3%, falling from 4.20 million to 4.15 million. However, unemployment also declined 7.6%, from 0.65 million to 0.60 million. As a result, the unemployment rate fell from 13.4% to 12.7%, despite the loss of nearly 54,000 jobs. In this type of case, individuals who have lost their job or are unsuccessful in their job search have left the labor force in such numbers that, despite the declines in employment, the unemployment rate falls. In such circumstances, neither the declining unemployment rate nor declining employment reflects a positive economy.

Variants on these four cases can occur. For example, in Michigan during 2011 and 2012, the lower unemployment rate was driven more by the departure of unemployed persons from the labor force than by the increase in employment. Over the 2011-2012 period, Michigan employment increased by approximately 83,600 but more than 92,400 individuals dropped out of the labor force. While the increase in employment is positive for the economy, whether the decline in unemployment and the drop in the unemployment rate reflect positively on the economy depends on the reasons for the decline in the labor

force. If individuals leave the labor force because they believe the prospects of finding work are so poor that the search is not worth pursuing or because they are leaving the State, then the declining unemployment and decline in the labor force reflect negative economic circumstances. Conversely, if the declines represent the aging and retirement of individuals, then the implications are not nearly so negative.

Figure 6 also illustrates the impact of labor force participation on the unemployment rate. As displayed in Figure 5, Michigan's labor force participation rate peaked in 2000 at 68.4%. After declining through 2003, the participation rate remained fairly stable, averaging about 65.3%, until the 2008-2009 recession. Between 2007 and 2012, the labor force participation rate declined from 64.8% to 59.8%, the lowest level since the current data series began in 1976. As seen in Figure 6, during the less-drastic decline in labor force participation in the 2001-2003 period, the unemployment rate increased; and then stabilized as labor force participation stabilized. Similarly, in the early stage of the 2008-2009 recession, labor force participation declined and the unemployment rate increased. However, since 2009, labor force participation has declined and the unemployment rate has fallen.

Figure 6



Over the 2009-2012 period, employment initially decreased by 53,800 jobs, and then increased by approximately 41,800 per year in each of the next two years, leaving the net employment gain between 2009 and 2012 at 29,700 jobs -- approximately 0.4% of the civilian noninstitutional population. However, the unemployment rate declined from 13.4% in 2009 to 9.1% in 2012. The decline in the unemployment rate reflects the absence of 225,500 individuals, approximately 2.9% of the population, from the ranks of the unemployed. The decline in unemployment was more than 7.5 times greater than the increase in employment. As a result, the decline in unemployment (and the unemployment rate) was being driven not by increased employment but by individuals leaving the labor force. Approximately 2.5% of the population dropped out of the labor force over the 2009-2012 period.

The individuals who left the labor force during the 2009-2012 period did not migrate to another state or seek employment elsewhere. These individuals remained in Michigan but chose not to be employed or to

seek employment. As indicated in Figure 6, if the 487,500 individuals who exited the labor force between 2000 and 2012 had remained in the labor force, the unemployment rate in 2012 would have been 23.5%, not the official rate of 9.1%.

Because changes in the unemployment rate can provide a misleading or inaccurate view of the economy, economists generally incorporate a variety of additional information in their analysis. One common measure also examined is termed "payroll employment" or "wage and salary employment". Much like the statistics that survey households in determining the unemployment rate, there is a survey of business establishments to count the employees on the establishments' payroll. Payroll employment represents a majority of total employment, but is not computed as a ratio and is not self-reported, and thus often is a better indicator of what is happening in the labor market.

Conclusion

The unemployment rate receives a lot of attention from the public, policymakers, and the news media. However, changes in the unemployment rate can reflect a number of different factors, many of which can result in those changes not providing an accurate view of the economy. As indicated by the decline in the unemployment rate between 2009 and 2012, unemployment rates can fall despite limited employment growth if individuals exit the labor force. The reasons these individuals have left the labor force ultimately determine whether changes in the unemployment rate should be regarded positively or negatively. To the extent these individuals have made a leisure/work choice, such as choosing to retire, one can view the decline in the unemployment rate positively. If these individuals have exited the labor force because they are sufficiently pessimistic about the labor market to perceive it is not worthwhile to seek employment, then the declines in the unemployment rate are misleading and the effective unemployment rate is much higher than the official measure. Examining alternative measures of labor underutilization, such as the U-6 rate, can provide a perspective on how much individuals' decisions are affecting the unemployment rate and to what extent a decline in the unemployment rate reflects positive economic circumstances.