

## The U-3 Unemployment Rate vs. The U-6 Real Rate of Unemployment

Last Friday Nonfarm Payrolls came in at 156,000 new jobs, missing estimates of about 175,000. Q3 of 2016 thus had average job growth of 192,000 which is an improvement from Q2's average of just 146,000. Although, when compared with Q3 of 2015, job growth is down year-over-year from an average of 229,000.

There was also an unusual bit of data in which the unemployment rate rose by one tenth to 5% in spite of strong job growth. The reason for this was because the labor force participation rate rose. In other words, because the Unemployment Rate is the number of unemployed workers divided by the total workforce, when the workforce increases it adds to the numerator and denominator at a rate of 1:1, which will have the effect of raising the UE rate, all else constant.

Last week's results were in stark contrast to the statistical anomaly that our economy has enjoyed for years now, in which the rate of UE has declined steadily along with falling labor force participation. Because of this, economists have become wary of ascribing too much weight to the improving UE rate recently and instead have focused more attention on the real rate of UE.

The U-6 UE rate includes all unemployed persons in the numerator but unlike the commonly quoted U-3 UE rate, the U-6 also includes part-time workers and discouraged workers who may have stopped looking for work and are only marginally attached to the workforce. The U-3 rate does not include discouraged workers who have stopped looking for work, while the U-6 rate does. Because of this, when discouraged workers re-enter the workforce they drive the U-3 rate up unless they immediately find work. The U-6 rate on the other hand, is often unaffected because it is already factoring in these workers.

For years now the UE rate has decreased in lock step with a decrease in the labor force. Friday's NFP report was a perfect example of how a change in the labor force participation rate can skew the U-3 Unemployment Rate. Let's have a look at an example:

Consider a labor force of 100 people to start and 10 are UE. UE Rate = 10%. Now 5 of those 10 unemployed workers become discouraged and stop looking for a job. They are no longer included in the labor force (denominator) or counted as unemployed (numerator). U-3 UE Rate is now  $5/95 = 5.3\%$ . So in this example the unemployment rate was just cut in half without any job growth at all. This hypothetical scenario would be indicative of poor labor market conditions despite the huge reported improvement in the UE Rate.

Now let's analyze the same example using the U-6 UE Rate. In this case, those 5 discouraged workers who left the workforce would still be included and the rate would not have changed month over month, remaining stable at 10%. This is obviously a better reflection of the true economic situation.

In September we had the reverse take place. New workers joined the workforce, which is a positive signal showing there is labor market slack and room for expansion. It also shows positive sentiment surrounding the economy as the longest stretch of uninterrupted job growth in US history is finally drawing some formerly discouraged Americans back to the employment market. In September the U-3 Rate increased marginally but the real rate of unemployment (U-6) remained steady month-to-month, at 9.7% (just like in the example). In my opinion this past week's data was a positive for the labor

market. It looks as though investors agree as the market has sold-off into today's much-awaited FOMC minutes release.