ECONOMIC UPDATE
REGIONS
February 2018

Measures Of Labor Underutilization: Regions Footprint

Our original title for this piece was "Everything You Ever Wanted To Know About Labor Utilization Rates But Were Afraid To Ask" but, sadly, this proved too long to fit in the above space reserved for the title. In any event, perhaps the single most watched economic indicator for the U.S., and even more so for individual states and metro areas, is the unemployment rate. It is often referred to as the "headline" unemployment rate, which simply reflects that fact that each month upon its release, the unemployment rate frequently shows up in the headline above the story on that month's labor market data. In reality, though, the headline unemployment rate is but a partial measure of the true extent to which labor resources are being underutilized. Other forms of underutilization of labor resources, which are not captured in the headline unemployment rate, include those who would prefer a full-time job but are only able to find part-time work, or those who would prefer to be employed but have, for various reasons, given up looking for work.

While it is always useful to be aware of these alternative measures of labor market slack, we think that is especially the case at present, when headline unemployment rates in many states and metro areas across the Regions footprint and the U.S. are at or near "record" lows. In what follows, we'll describe the alternative measures of labor underutilization and present data on these measures as well as on trends in labor force participation for the states in the Regions footprint (most of the data herein are not available on the metro area level). Our motivation for doing so is not to rain on the parade of anyone wishing to celebrate these low unemployment rates, nor does this reflect either a stubborn refusal or an inherent inability to engage in any such celebration. Instead, as we've said more times than we could possibly count, in any given data release the headline number is usually the least important number while the often ignored details tell the more relevant story, and the monthly employment reports are no exception to this general rule. We think it is quite useful to be able to put the headline unemployment rate in proper context, which the following discussion hopefully helps to do. After that, anyone still wishing to celebrate "record low" unemployment rates can feel free to, in the immortal words of Jack Buck, "go crazy folks."

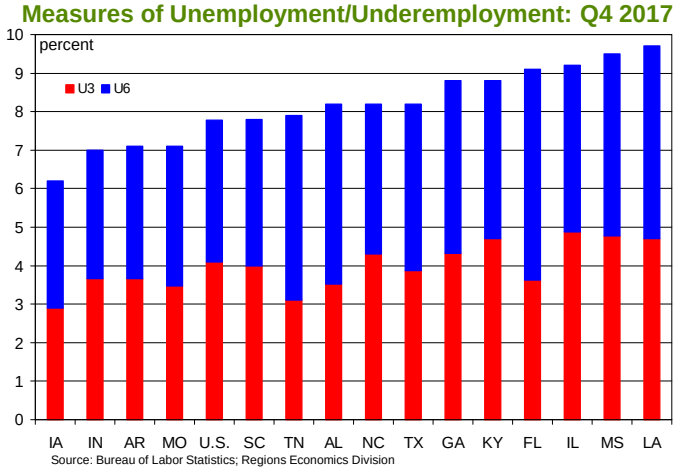
Each monthly employment published by the Bureau of Labor Statistics (BLS) presents data for the U.S. as a whole on six alternative measures of labor underutilization (Table A-15). The six measures available on the state level are based on the same definitions as those published for the U.S., and are summarized below:

- U-1 – the percentage of the civilian labor force unemployed 15 weeks or longer;
- U-2 – the percentage of the civilian labor force who have either lost a job or completed a temporary job;
- U-3 – the percentage of the civilian labor force that is unemployed – one must be actively looking for work and ready to start a job to be counted as unemployed;
- U-4 – the percentage of the civilian labor force either unemployed or discouraged (i.e., those who want a job but have given up looking because they believe there is no work available for them);
- U-5 – the percentage of the civilian labor force either unemployed, discouraged, or marginally attached to the labor force (i.e., those who want a job but have not looked in the past 12 months for reasons other than discouragement);
- U-6 – total of those who are unemployed, discouraged, marginally attached to the labor force, or working part-time for economic reasons, measured as a percentage of the civilian labor force plus the number of marginally attached persons.

On the state level, the various measures of labor underutilization are derived from the Current Population Survey (CPS), but the state level unemployment rate derived from the CPS data is not strictly comparable to the official state unemployment rates published by the BLS. The difference being that the official rate is partly survey drawn (i.e., from the CPS) and partly modeled. While the broader trends in the two measures are consistent, since there are no model based components of the estimates of the other measures of labor underutilization, for consistency these alternative measures must be viewed in the context of the CPS measure of the U-3 unemployment rate. The data presented in the following discussion/charts all come from the CPS data, and in keeping with how the BLS reports the data, all observations are quarterly and reflect running four-quarter averages to help smooth out the inherent volatility (small sample sizes) in the data. One drawback to the data is that there is limited history – for most of the data the first observation is Q4 2008. As such, we cannot make judgments about the value of any indicator for an individual state relative to historical norms, but we can at least compare the data to national averages, for which the data go back decades.

REGIONS

Measures of Unemployment/Underemployment: Q4 2017



Source: Bureau of Labor Statistics; Regions Economics Division

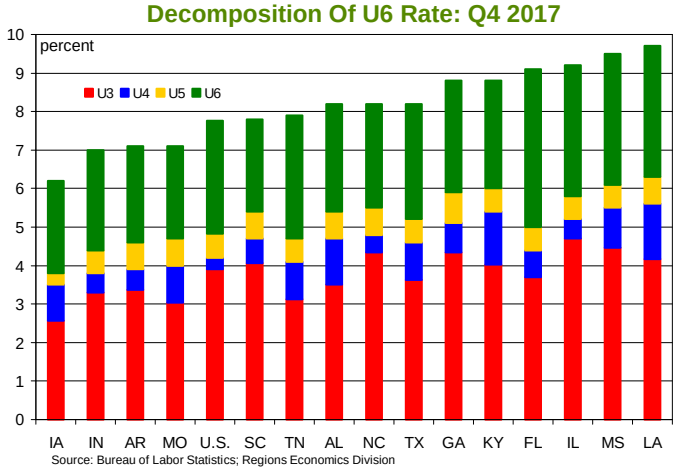
With the housekeeping out of the way, we can discuss some of the data. Aside from the "headline" (or, U-3) unemployment rate, perhaps the measure people are the most familiar with is the U-6 measure, which includes underemployment (measured by those working part-time for economic reasons) and those marginally attached to the labor force. One thing immediately apparent in the chart to the side is that the U-3 unemployment rate does not fully capture the true degree of labor market slack. For instance, at 3.63 percent, Florida's Q4 2017 U-3 unemployment rate was one of the lowest in the Regions footprint (indicated by the red portion of the bars in the chart to the side). But, once accounting for those who are either underemployed or marginally attached to the labor force, Florida's U-6 rate stood at 9.10 percent as of Q4 2017, the fourth highest in the footprint. Indeed, at 547 basis points, Florida had the highest "add-on" to the baseline U-3 unemployment rate in the footprint, followed by 500 basis points in Louisiana, 480 basis points in Tennessee, and 467 basis points in Alabama (for the U.S. the add-on is 387 basis points). At 8.20 percent, Alabama's U-6 rate conveys a considerably higher degree of labor market slack than does its headline U-3 rate, which ended 2017 at 3.50 percent, the lowest on record for the state. Mississippi also ended 2017 with a record-low U-3 unemployment rate, but at 9.50 had the second-highest U-6 rate in the Regions footprint.

Having the alternative measures of labor market slack is useful in breaking down the difference between the U-3 and U-6 rates. For instance, our premise as to why the gap in Florida is so large is that the state has a higher than average incidence of people working part-time for economic reasons due to its considerably above-average share of total employment accounted for by retail trade and leisure & hospitality services. These are the two industry groups in which average weekly hours are the lowest, at 30.9 hours and 26.1 hours, respectively, in 2017 (note the BLS standard for full-time work is 35.0 hours per week). Thus, it could be that a significant number of Florida residents employed in these two industry groups are so employed not by choice but rather due to an inability to find a full-time position in another industry group.

Breaking down the U-6 rate into its different components indeed shows that Florida has a notably high incidence of people working part-time for economic reasons. The chart to the side presents this decomposition of the U-6 rate; note that the sum of the bars is simply the U-6 rate, thus the ranking of the states from low-to-high is the same in this chart as in the prior chart. The "base" in this chart is again the U-3 unemployment rate, and the bars for the U-4, U-5, and U-6 rates represent the incremental change in labor underutilization attributed to the various factors – discouraged workers, marginally attached for other reasons, and working part-time for economic reasons, respectively. For Florida, 410 basis points of the overall U-6 rate (910 basis points, or, 9.1 percent) reflects those working part-time who would rather be working full-time, far and away the highest in the Regions footprint and second only to Nevada (450 basis points) of any state (the U.S. average is 293 basis points). Those working part-time for economic reasons account for 240 basis points of the U-6 measure in Iowa, Missouri, and South Carolina, the smallest contribution of the states in the Regions footprint.

REGIONS

Decomposition Of U6 Rate: Q4 2017



Source: Bureau of Labor Statistics; Regions Economics Division

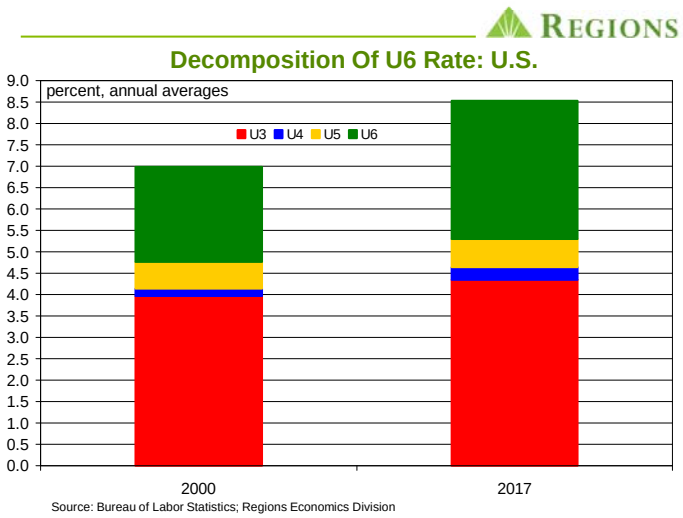
Nationally, discouraged workers account for 30 basis points of the overall U-6 rate, but the average for the Regions footprint is 86 basis points. As of Q4 2017, discouraged workers accounted for 143 basis points of Louisiana's broad U-6 rate, not only far and away the highest in the Regions footprint but also the highest in the nation, with Kentucky tying Alaska at 137 basis points for the nation's second largest add-on due to discouraged workers and Alabama posting the nation's fourth largest contribution at 120 basis points. There is a common theme here, and it helps to recall what constitutes "discouraged workers" – those who would like a job and are available to work but who have given up looking because they are convinced there is no work for them. The struggles of the energy sector, whether coal or oil, throughout 2015, 2016, and at least part of 2017, could easily account for the high incidence of discouragement in these

states, as workers displaced from the energy sector may have had harder times finding work in other industries in part because of an actual or perceived skills gap, i.e., they may not have had, or prospective employers may not have believed them to have, skills that would translate into another industry group. More generally, given the dynamic nature of the U.S. economy, a certain degree of discouragement is to be expected at any given time as industry groups evolve and the underlying structure of the economy changes. This of course becomes more pronounced during downturns, especially during significant downturns, but even during expansions discouraged workers are a constant component of the labor market. The difference, however, comes when you move down from the aggregated national level data to the state level (and, by extension, the metro area level), and a given geography has a greater exposure to a structurally changing industry or a fading industry. In such cases, that narrower geography will have an above-average incidence of discouragement, as the states highlighted above now do. In contrast, North Carolina had the lowest incidence of discouraged workers in the Regions footprint as of Q4 2017, with this group accounting for 47 basis points of the state's total U-6 rate (820 basis points, or, 8.2 percent).

The U-5 measure accounts for those marginally attached to the labor force for reasons other than discouragement over job prospects, which includes factors such as transportation issues, child care requirements, health issues, and similar factors. Nationally, this group accounted for 63 basis points of the broad U-6 rate, which also happens to be the average contribution for each state in the Regions footprint. At 30 basis points, this group makes the smallest contribution to Iowa's U-6 rate of any state in the footprint, with the largest contribution, 80 basis points, found in Georgia.

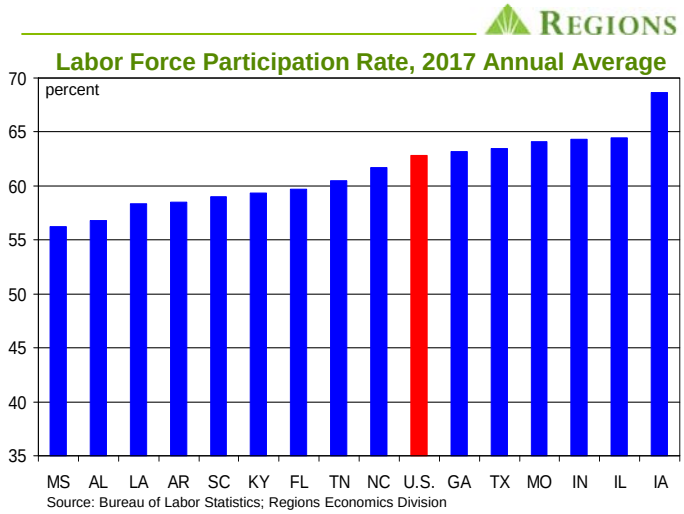
As noted above, the state level data on alternative measures of labor utilization have a very short history, making it impossible to estimate a long-term "norm" that would serve as a basis for comparing current readings. As time goes on and more data become available this will become less of an issue, so one alternative is to check back with us in, oh, let's say 30 or so years. For those either lacking the patience for this alternative or simply unwilling to commit to anything that far in advance, an alternative is to look at the historical national data. But, as the national data only go back to 1994 the history here is also relatively short, at least for an economic data series.

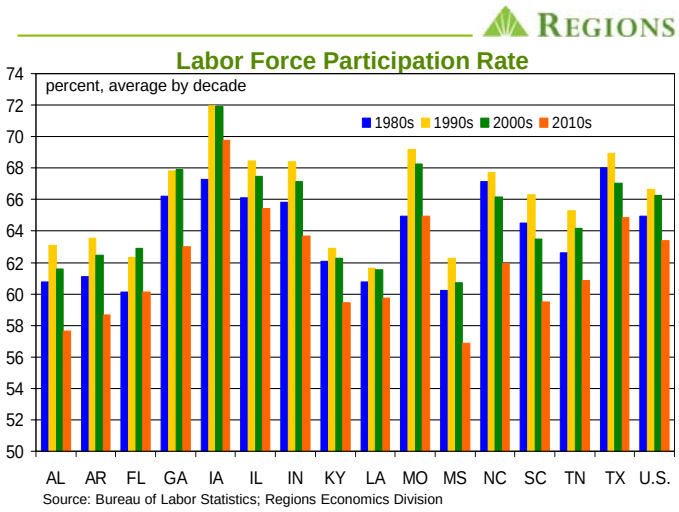
In addition to the spike in the (headline) U-3 unemployment rate brought on by the 2007-09 recession, the number of those marginally attached to the labor force, either due to discouragement or other factors, and the number of those working part-time for economic reasons also rose significantly. While each of these measures has since fallen sharply, they still remain a bit above pre-recession norms. With the current economic expansion now in its ninth year and the unemployment rate on the cusp of falling below 4.0 percent, there is considerable debate/discussion as to whether the labor market is stretched to capacity. As such, we thought it would be interesting to compare current values of the various measures of labor underutilization to the last time the U.S. economy was in a similar spot, i.e., the year 2000, which turned out to be the latter stages of the 1990s expansion that saw the unemployment rate fall below 4.0 percent.



The chart to the side shows the decomposition of the broad U-6 measure for 2000 and 2017, using annual averages for each year. As can be seen in the chart, each measure of labor underutilization is higher now than was the case in 2000. To be fair, at 10.6 percent, the peak U-3 unemployment rate associated with the 2007-09 recession was much higher than the 8.2 percent peak associated with the 1990-91 recession (we use not seasonally adjusted data here in order to be consistent with the state level data which only come on a not seasonally adjusted basis). The incidence of marginal attachment, both due to discouragement and due to other factors, is at present nominally greater than was the case in 2000, but the incidence of people working part-time for economic reasons is significantly greater now than was the case in 2000. For instance, in December 2017 people working-part time for economic reasons contributed 340 basis points to the U-6 rate, whereas in December 2000 the contribution from this source was 230 basis points. Decomposing the broad U-6 rate in this manner supports our often made contention that there is considerably more slack in the labor market at present than is implied by the headline unemployment rate. Those who focus solely on the U-3 rate as a gauge of labor market slack have consistently missed the mark on their forecasts of wage growth, whereas our below-consensus forecasts have been closer to the mark. And, as the above discussion hopefully helped illustrate, the state level data measuring labor underutilization tell a different story than do "record low" U-3 unemployment rates.

Another way in which simply focusing on the headline unemployment rate can lead one to misleading conclusions is that the U-3 rate can easily deflect attention from trends in labor force participation. Or, as we frequently note, the unemployment can be falling for the right reason or for the wrong reason, the "right" reason being steadily rising employment, the "wrong" reason being steadily declining labor force participation. Conversely, the unemployment rate can increase either because the level of employment is falling or because labor force participation is rising. Though generally any change, either up or down, in the unemployment rate is due to some combination of changes in employment and changes in participation, the broader point is that without knowing why the unemployment rate is changing, it is simply not possible to make any kind of informed assessment of what the change in the unemployment rate means.



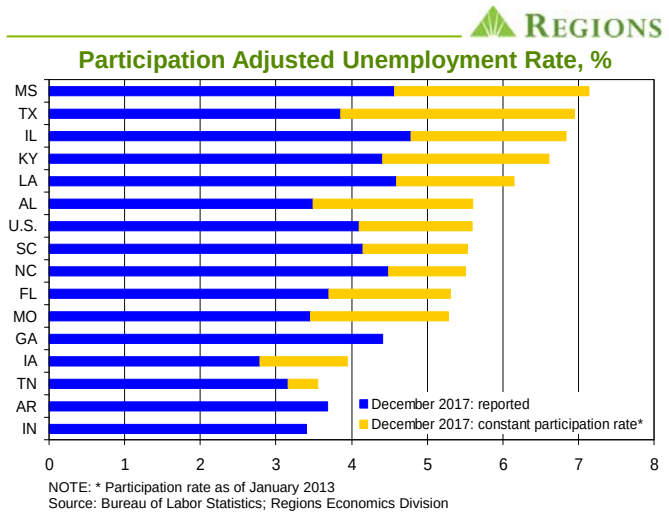


The first chart above shows the average 2017 labor force participation rate for the U.S. and each state in the Regions footprint, while the second chart above shows the average for each decade starting with the 1980s (the state data begin in 1976). As seen in the second chart, participation rates have been trending lower for some time now – with the exceptions of Florida (2007) and North Carolina (1989), each state in the footprint saw the labor force participation rate peak at some point in the 1990s; the peak for the U.S. came in early 2000. What is more striking, however, is how persistently low participation rates have been in many of the states in the Regions footprint, which is a reflection of a number of economic and demographic factors. As to the ongoing declines since the 2007-09 recession, there is considerable debate as to whether this is a reflection of structural or cyclical factors, and as is typically the case, the reality is that it is a reflection of both. There is no doubt the severity and duration (particularly notable in the labor market) of the 2007-09 recession triggered a sizeable cyclical decline in participation. In the context of the above discussion, those who are marginally attached to the labor force are incorporated into the U-4, U-5, and U-6 measures, but are not included in the U-3 unemployment rate since, by definition, they have not actively looked for work in the most recent four-week period. Though this effect has dissipated as the current expansion has endured, structural changes in the economies of certain states have sustained discouragement as a factor holding down labor force participation.

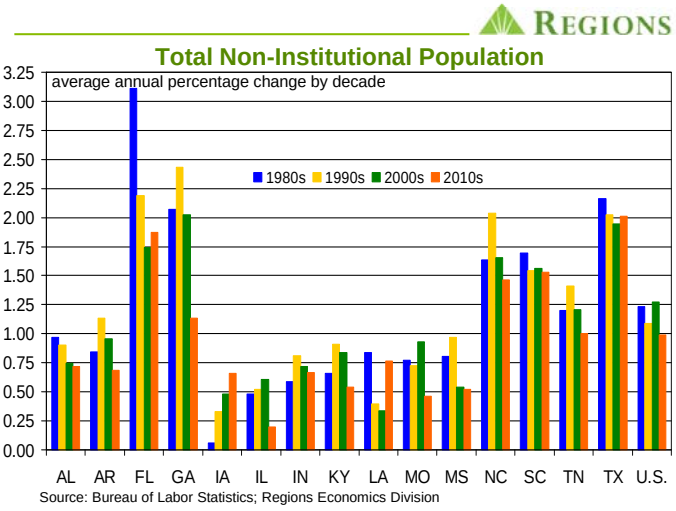
Discouragement is only one factor that can drag down the participation rate, but other factors, such as people voluntarily withdrawing from the labor market to go to/return to school in order to enhance or update their skill set, are factors that, ultimately, can be positive rather than negative. In the years since the 2007-09 recession, this has played a significant role in holding down participation, but we are likely now seeing this effect reverse, and this reversal has further to run. Demographic factors also play a key role in labor force participation rates and, at present, the aging of the Baby Boom generation is helping pull participation rates down which, in turn, acts to hold down the U-3 unemployment rate. This, however, is a structural, not a cyclical, factor behind lower participation. Another factor that has helped hold down overall participation rates in recent years has been a falling participation rate amongst females. What is unclear, however, is the primary cause of this decline, i.e., we do not know whether it is structural or cyclical. Some have pegged child care costs as a factor behind declining female participation, in the sense that the comparison between child care costs and earnings makes it feasible for females to withdraw from the labor force. Though surely part of the answer, this is not likely the entire answer.

In any event, our broader point is that understanding trends in labor force participation rates is a critical part of being able to properly assess changes in the unemployment rate, in terms of what the change in the unemployment rate is actually telling us about underlying economic conditions. As an illustration of this, we've calculated "constant participation" unemployment rates (the U-3 rate) for the U.S. and each state in the Regions footprint based on the participation rate as of January 2013. To be clear, this is not to say the January 2013 participation rate is "the" appropriate, or equilibrium, participation rate, instead we picked this as it falls roughly in the middle of what has been a prolonged decline in participation rates. Moreover, to the extent there is still at least a portion of the cyclical decline in

participation rates stemming from the 2007-09 recession yet to be unwound, using the January 2013 participation rate helps illustrate how diminished participation has helped hold down measured unemployment.



The blue portions of the bars in the chart to the side represent the reported December 2017 unemployment rate for each state; the gold portion represents our estimate of how much higher each state's unemployment rate would be if the January 2013 participation rate still prevailed. Note that participation rates in Arkansas, Georgia, and Indiana were higher in December 2017 than in January 2013, so there is no add-on to their reported unemployment rates. Again, without claiming that these are the "real" unemployment rates for each state, this at least illustrates how one can be lulled into a false sense of comfort over a given state or metro area's economic condition if one simply uses the headline unemployment rate as a guide without understanding what is driving the unemployment rate. The broader point is that, to the extent there is still a cyclical component to declining participation rates that has not yet been unwound, measured unemployment rates understate the degree of labor market slack, both nationally and across the Regions footprint.



Finally, while the participation rate tends to get considerable attention as an indicator of labor market conditions, it is important to also account for how the population base from which the labor force is drawn is changing. The base for all of the labor market data is not the total population of a given geography, it is instead the Civilian Non-Institutional Population, or, those people 16-and-over who are not confined in an institutional setting (such as penal or mental institutions or homes for the aged) and who are not on active duty in the Armed Forces. In other words, this is the subset of the total population more likely to be engaged in the labor market and, as such, this group is the base for calculations of labor force participation and is also the denominator in the calculation of the employment-to-population ratio. The chart to the side shows average annual growth by decade in the Civilian Non-Institutional Population for the U.S. and each state in the Regions footprint. The patterns here are largely in keeping with those we presented in our recent piece on state level population trends. This series is worth exploring, however, as it is a key component in determining the sustainable rate of growth in any economy, which is a function of the rate of labor force growth and the rate of productivity growth. While the labor force participation rate is obviously important in this calculation, even the highest participation rate can be negated by persistently low growth in the population from which participation is drawn. In a worst-case scenario, an economy can be beset by persistently slow growth in the non-institutional population and a persistently low labor force participation rate. Such an economy has much more limited capacity for growth than would an economy characterized by rapid growth in its non-institutional population and an above-average labor force participation rate.

To be sure, we get that it can sometimes seem that with the economic data, the number is never really the number and for every data point you might see, it seems as though there are ten others you have to examine in order to interpret the one in which you're interested. Other than "welcome to our world," we'd simply say that unless it's your job, you probably have neither the time nor the inclination for conducting such an examination, which is fine. But, we'd also say (and often do say) that it's important to not only know what the numbers are, but to also understand why the numbers are what they are. The various materials we distribute represent our efforts to facilitate that understanding. At the very least, this discussion helps illustrate that those making business/strategic decisions on the basis of summary economic statistics without having at least some understanding of how those statistics are measured and at least some understanding of the limitations of those statistics can easily be led astray.