Analysis of the Strong Labor Force Growth in the Pittsburgh MSA

When the Bureau of Labor Statistics (BLS) released the July household data many were happy to learn that the labor force for the seven-county Pittsburgh Metropolitan Statistical Area (MSA) had reached a high-water mark of more than 1.281 million. The previous high was recorded just one month earlier in June 2012. How “bullish” a signal is it for the region’s economy? To answer the question, we’ll need to take a closer look at the data.

The labor force is defined by the BLS as the number of people in the civilian, non-institutionalized working-age population who are employed and those unemployed who are looking for work. The BLS surveys a sample of households each month to obtain the data necessary to calculate the labor force and related statistics.

Comparing data for July 1992 to July 2012 shows the Pittsburgh MSA labor force grew by 5.6 percent over the twenty years. However, most of that growth has come in the last seven years. From July 2006 to July 2012 the area’s labor force increased by 4.7 percent. Indeed, just in the last twelve months, the labor force increased by 2.5 percent. The July 2011 to July 2012 growth in the Pittsburgh MSA was better than the national rise (1.1 percent) and the state increase (2.4 percent). In fact, the growth in Pittsburgh’s labor force has been so robust recently that every month but one since August 2011 has posted a new record high for that month, with the lone exception being January 2012.

When compared to other similar MSAs, the Pittsburgh region’s labor force year-over-year growth of 2.5 percent in July 2012 was better than Philadelphia (1.26 percent), Cincinnati (0.83 percent), Denver (0.76 percent), Minneapolis (0.70 percent), Baltimore (0.56 percent), Richmond (0.43 percent) and Charlotte (-0.06 percent).

Given the labor force definition as those who are working and those who are not working but looking we can examine the factors that could be driving the growth in the Pittsburgh MSA. A helpful way of gauging labor force changes is through a statistic called the labor force participation rate (LFP). This statistic is simply the ratio of the number in the labor force to the civilian, non-institutional population of working age (CP). Thus, it is simply a matter of arithmetic to capture the causes of labor force changes. If the civilian population (CP) rises while the labor force participation rate remains constant, labor force will rise concomitantly with the population. If the CP is constant and the LFP increases,
labor force can grow even if the working age civilian population has not increased. Obviously, if CP and LFP both rise, labor force will rise faster than the CP.

There are other combinations of movement in the CP and the LFP. One might rise while the other falls or both could fall at the same time. In the first case, whether labor force falls, stays the same or rises will depend on the magnitude of the two opposite direction changes in CP and LFP. Clearly, in the case where both fall, labor force will decline.

Civilian working age population increases can occur from normal overall population gains, in-migration of people of working age or age distribution changes within a population that are disproportionately in the working ages. The region’s total population fell by 108,500 between 1990 and 2011. Over the same period, the region’s labor force rose by just over 80,000. The labor force rise could be the result of two factors. One, the working age population could have grown even with a declining total population. Or there could have been more people in working age groups entering the workplace. Most likely, the long term rising trend of the fraction of women working accounts for most of the rise in the labor force. At the same time, a declining population usually is the result of labor force age heads of household moving away which could have lowered the civilian working population even faster than the overall population and would have a negative effect on the number in the labor force.

The slow 5.7 percent growth in the Pittsburgh MSA labor force over the last twenty years compares very unfavorably to the national figure of just under 20 percent and the rise in many MSAs across the country; Charlotte (47.3 percent), Denver (41.5 percent) and Richmond (26.6 percent) to name a few. By the same token, the Pittsburgh MSA compares much more favorably to Philadelphia (7.9) and Boston (8.3).

One thing is evident from the monthly data over the years. The labor force figures are quite volatile—month to month and year to year. But considering the last ten years saw growth of only 3.5 percent but the last year alone saw a 2.5 percent jump indicates a level of volatility that suggests it would be prudent to expect revisions to the latest numbers.

Meanwhile, how have household employment figures behaved during the periods being discussed? In July 2012 the number of employed in the Pittsburgh MSA reached 1.184 million—the second highest level on record (only July 2008 was higher). Over the last twenty years, the increase to the number of employed has risen by 5.4 percent (61,000 since 1992) with the bulk of that increase coming in the first decade (3.8 percent) while growth in the last ten years was only 1.5 percent. Thus, the jump of 2.5 percent from July 2011 to July 2012 represents a sharp rebound from the drop from 2008 to 2010.

The 2.5 percent employment gain was better than both the twelve month national rise (1.95 percent) and the state gain (2.20 percent). But over the longer term, the region’s growth in employment fared worse than the national growth over the last twenty years (18.54 percent) and even in the last ten (4.10 percent).
When compared to other MSAs over the last twenty years, Pittsburgh region employment growth at 5.4 percent stacks up poorly with Charlotte (41.4 percent), Denver (37 percent) and Richmond (26.6 percent). In fact of all the MSAs listed earlier, Pittsburgh had the lowest twenty year increase.

What explains the recent stronger than national performance in the Pittsburgh MSA? It is almost certainly due to the fact that the Pittsburgh area did not experience the booming years of the 1990s or the strong years between 2002 and 2007 and therefore didn’t suffer the enormous bust that struck much of the country when the recession hit in 2008. The Pittsburgh area didn’t experience a boom in its housing market as did some of the other MSAs, so when the housing market and its related industries crashed, it wasn’t as devastating here. Furthermore the Pittsburgh area has been fortunate to have received a powerful boost by the drilling activity in the Marcellus Shale formation over the last few years. In sum, the region is enjoying a relatively good upturn while the nation struggles to find its footing.

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