

## A Comparative Look at Pennsylvania's Recent Economic Performance

**Summary:** After holding its own and even enjoying a handful of years with better than national economic performance during the last recession and early recovery from the deep downturn that began in late 2008, Pennsylvania's economy has unfortunately returned to its long term pattern of lagging national growth. Part of the relatively good performance from 2010 to 2012 can be attributed to the rapid expansion of Marcellus Shale gas drilling and production. Unfortunately, that boost has diminished somewhat with the slowdown in drilling and the big drop in the price of gas.

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### *PA Gross Product Growth Compared to the National Performance*

Over the nine years ending in 2006, 41 states had faster real gross domestic product (GDP) growth than PA's 18.6 percent. The nation posted a gain for the period of 32.4 percent. Eighteen states had growth above the national rate, with nine of those higher than 40 percent. Except for Florida and South Dakota, all of the states with over forty percent increases were in the mountain west and Pacific coast.

During the next ten years from 2006 through 2016, PA's economy looked comparatively strong owing to the deep recession in many states that were hard hit by the subprime mortgage debacle and the devastating effects on construction, the financial sector and the overall economy created by a misguided policy disaster. During the ten year period the U.S. grew 14 percent while PA posted a better than national increase of 15.9 percent. Over the ten years PA's GDP performance was better than 36 states, with only twelve having stronger increases. One was about the same as PA. Some of the fastest growing states had horrendous declines in growth.

However, while PA performed slightly better than many states over the last ten years as a result of severe weakness in many states during the recession and early recovery period, signs have started to appear that suggest most hard hit states have shaken off the worst of the recession and returned to a stronger growth path after 2013. The recent pattern of jobs and jobs related data provide evidence that Pennsylvania's relative standing compared to the nation is quickly slipping back into its long term pattern established before the last recession in which it typically trails the national performance.

### *PA and U.S. Private Employment and Earnings Gains Compared*

In the four years since 2013, the comparative economic performance picture has begun to look more like the old, longer term scenario wherein PA's growth lagged well behind the country and most states. This comparison of recent performance looks at private sector employment indicators. For some reason the Bureau of Labor Statistics does not report data for government job related measures. That is a serious shortcoming that deserves explanation.

Comparisons of PA and the nation are made for total private employment; total hours worked by all private sector employees, total real earnings for all private employees and real weekly earnings for all private employees.

The last month of available data is July 2017. All comparisons are made using non-seasonally adjusted July data from 2007 to 2017.

U.S. private employment fell by eight million workers between 2007 and 2010, a drop of 6.9 percent of all jobs. Most of the decline occurred from 2008 to 2009. A slow recovery began in late 2010 but it took until 2014 to return employment to 2007 levels. Since the low point reached in 2010, jobs have risen by 15 percent. Obviously, that includes the eight million jobs that were recovered since the trough. Private employment in the U.S. now stands 7.2 percent or 8.44 million jobs above the pre-recession reading of 2007. That means that for the ten year period, jobs grew at an annual average rate of 0.7 percent. That modest pace is 40 percent slower than the 1.13 percent per year growth posted in the ten year period ending in 2007.

Meanwhile, PA's private employment traced a very different pattern. From 2007 the employment count fell by 232,000 to reach its low point of 4.855 million in 2009, a drop of 4.6 percent from the 2007 reading, a considerably smaller percentage decline than experienced in the U.S. where jobs continued to fall into 2010. By 2010 PA employment had already started to rise but nonetheless took until 2014 to get back to the 2007 level. Since 2013 private employment is up by five percent bringing the 2017 level to 5.299 million, a total increase of 212,000 since 2007—a very slim 4.15 percent rise (0.4 percent per year) over the ten years, and a massive 44 percent plunge from the 7.5 percent increase in the ten years ending in 2007. Thus, in both the 1997 to 2007 period and the 2007 to 2017 period, PA's private employment growth rate lagged behind the U.S. rate by around 40 percent, while national and PA growth are both down 40 percent from the earlier period.

Total hours worked by all private employees per week is also a revealing statistic. This statistic is obtained by multiplying private employment by average hours worked in the private sector for the U.S. and PA. Not surprisingly, this statistic tracks employment figures fairly closely but differences and variations in the work week also play an important part. Indeed, a very sharp contraction in the average hours worked nationally combined with the 6.7 percent decline in jobs from 2007 to 2009, caused the total hours worked for all employees to fall 9.4 percent in just two years. In PA, total hours worked

by all employees dropped eight percent from 2007 to 2009. However, for the years 2008 through 2011, PA averaged 1.2 percent more total employee hours worked than the U.S. figure compared to the level they would have worked if the 2007 pace had been maintained. Because output tracks fairly closely with hours worked, this finding could be a partial explanation of why PA GDP did not slow as much as the U.S in that period.

A companion measure to hours worked by all employees is total real weekly earnings of all employees. Total real weekly earnings are a rough proxy for private sector output, bearing in mind productivity changes created by shifting industry mix, new technology and process improvements are also important. This statistic is calculated by multiplying real weekly pay by the number of employees. Real weekly earnings are available for employees at the national level. However, only nominal earnings data are provided for states and industries.

Real PA earnings were determined by using the national deflation factor to adjust the nominal to real earnings. Since the national deflator might be slightly different from a PA deflator—if one were available, which it is not—there might be some errors in the comparisons but it is unlikely they will be significant enough to be concerned about. Over the last ten years, total real weekly earnings of all private employees have risen 14.8 percent nationally and 10.1 percent in PA.

From 2008 to 2012 PA's total real earnings held up better than in the nation. PA earnings fell a cumulative 22.6 percent compared to what they would have been if earnings each year through 2012 had held at the 2007 level. National earnings for the five years fell a cumulative 26.3 percent compared to the 2007 level, four percentage points more than in PA. As with hours worked, this measure suggests a more dramatic slowing in private sector output in the nation than in Pennsylvania during the 2008 to 2012 period.

However, in an enormous shift in performance since 2013, U.S. total real weekly earnings of all employees are up 16.2 percent while PA earnings rose only 9.5 percent over the period. Of particular concern is that since 2015, U.S. real earnings for all employees are up 8.1 percent compared to only a 3.6 percent pickup for PA.

Bear in mind too that average weekly earnings for private sector employees, not adjusted for inflation, stood at \$917.37 nationally in 2017, up from \$728.71 in 2007—a 25.8 percent rise. In PA weekly earnings in 2017 were placed at \$848.64, up from \$683.32 in 2007, a 24 percent increase. When adjusted for inflation, adjusted weekly earnings nationally climbed 7.1 percent over the ten years (well below one percent per year) while the ten year gain in real weekly earnings in PA was a slower 5.7 percent. Thus the gap in real weekly pay widened still further over the ten years.

### *Trends in PA's Service and Goods Producing Sectors*

Finally, it is important to note the very different paths goods producing jobs and service producing jobs, as well as weekly pay and total pay for the two sectors, have taken in PA since 2007. Goods producing jobs in PA fell by 120,000 between 2007 and 2017 to stand

at 842,000, a drop of almost 13 percent. Meantime, service jobs climbed by 331,000 or eight percent over the period to stand at 4.457 million in 2017. Weekly pay for goods producing workers was \$1,076.80 in 2017 compared to \$803.93 for service producing jobs. Moreover, real weekly pay in the goods sector rose 9.4 percent from 2007, while service pay moved only 5.6 percent higher.

Nonetheless, total real weekly earnings for all service producing employees climbed 14.1 percent over the ten years thanks to the eight percent increase in jobs. Total real earnings in goods production fell 4.2 percent because of the large 13 percent decline in employment. This held the total real earnings gain for all employees to ten percent. Note that goods employment with its higher weekly pay fell from 19 percent of total private jobs to 15.9 percent between 2007 and 2017.

Interestingly, the sizable gap in real weekly pay between goods and service producing jobs is due primarily to the much lower average hours worked per week in services—32 hours compared to 40 hours in goods producing jobs. The hourly pay is fairly close, \$24.51 in services and \$26.92 in goods. It happens that some service industries' jobs are well paid such as professional and business services, \$32.22 per hour, up 30 percent since 2007, and finance at \$33.42 per hour, 31 percent above the 2007 reading.

Of course some industries such as leisure and hospitality have both fewer hours worked per week (25) and much lower wages at \$14 per hour. This sector has accounted for 88,000 of the total services employment gain of 331,000 since 2007. Jobs in the sector are up a sharp 50,000 since 2014 and account for over a fourth of the overall private sector gain since 2014.

Thus, there should be little or no surprise that the increase in total real private pay trails the national gains badly over the last couple of years.

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