



### The U.S. and Pennsylvania Economies from 1990 to 2016: Massive Growth Rate Shift

**Summary:** Reflecting many adverse factors including business-inhibiting policies, the trend in the pace of economic growth in the nation and Pennsylvania weakened significantly in the first seven years of the new century and even further after 2008. During the 2008 to 2016 period longer term gains as measured by increases in the nation's real GDP from 10 years earlier slowed to half the norm set during the period 1970 to 2000. Fortunately, it appears business-friendly policy changes in regulations and taxes made in 2017 have begun to reinvigorate the economy.

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To begin, it is important to note that in the 20-year period prior to 1990 (1970 to 1990), U.S. real GDP grew at an annual average rate of 3.2 percent. In light of the downturns in the mid-1970s and two recessions in the early 1980s resulting primarily from inflation spikes and the need for monetary restraint the growth rate over the period seems quite remarkable.

Indeed, average annual growth remained strong through the 1990s climbing at a 3.5 percent rate between 1990 and 2000. However, since 2000 the U.S. economy moved to a much slower growth path and averaged only a 1.8 percent growth rate over the 16 years through 2016. After slowing to a 2.4 percent average between 2000 to 2007, real GDP from 2007 (the pre-recession high point) and 2016 climbed at its slowest rate for a comparable time period in the modern era posting an annual average rate for the nine years of just 1.3 percent. Even more concerning is in the six years after the recession ended in 2010 through 2016, annual gains averaged only 2 percent and were far weaker than in the six-year periods following recessions in the 1980s and 1990s when yearly gains for the six-year post-recession period averaged 3.7 percent and 4.4 percent, respectively.

Indeed, calculating the change in each year's real GDP from the 10-year earlier level and smoothing the series with a moving average to remove effects of recessionary slowdowns and the fast gains during recoveries shows a slowing in 10-year growth beginning in 2008 to a pace barely half its historic norm.

Similar to the pattern in the U.S., growth in Pennsylvania's real GDP slowed from 2.6 percent annually over the 1990 to 2000 period to a 1.8 percent per year average from 2000 to 2007 and then slipped further to just 1.3 percent in the 2007 to 2016 time frame. In the post-recession period between 2010 and 2016 the annual pace averaged 1.7 percent, a significantly slower pace than the 1990 to 2000 growth. And while the slowdown pattern is similar to the nation, it is important to note that the commonwealth lagged behind the pace of U.S. GDP gains in each period. What's more, from 1990 to 2016, the nation saw real output expand by 84 percent while

Pennsylvania grew only 63 percent making the national gain over the period 33 percent faster than the state's.

As for the Pittsburgh seven county MSA, a comparable period of analysis of real GDP is not possible since those data were not produced until 2001. It is noteworthy however that from 2001 to 2008 real GDP in the Pittsburgh MSA was basically flat, rising only 0.1 percent during the seven years. Contrary to the national pattern, output actually grew 4 percent from 2008 to 2010 while the U.S. and Pennsylvania had no net growth over the two years. And from 2010 to 2016, the MSA had output gains averaging 2 percent per year, the same as the nation and faster than the state's 1.7 percent. One possible explanation could be the advent of the Marcellus Shale gas operations.

Still, this must be viewed in the context of the very slow 1.1 percent per year average growth since 2001. This is much slower than the national rate of 1.8 percent and below Pennsylvania's 1.4 percent during the period.

To be sure, the shift to much weaker national gains posted in the 2007 to 2016 period can be attributed to many factors but a lack of fiscal and monetary stimulus were certainly not among them. Working through the financial crisis created by subprime mortgages, massive increases in healthcare regulations including mandates and costs on businesses and individuals along with tighter regulations on the environment, financial activities and labor relations all figured prominently in acting as a drag on business formation, expansion and hiring during the period.

But there is another factor that undoubtedly had a major impact on output and employment growth throughout the 2000s. In the late 1990s the U.S. trade deficit in goods and services rose from \$96.4 billion in 1995 to \$372.5 billion in 2000. During that period, the trade deficit on goods climbed from \$174.2 billion to \$446.8 billion. And that was just the beginning. The goods and services gap increased further to \$705.2 billion in 2008 as the goods gap rose to \$821.2 billion. During the 2009-2010 recession the goods deficit shrank considerably but started to rise again as the economy began to recover. By 2016 it was up to \$751 billion, still below 2008's record level.

Meanwhile, real GDP nationally slowed from the healthy 3.5 percent per year pace in the 1990 to 2000 period to just 2.4 percent in the 2000 to 2008 period. Jobs growth also shifted to match the slower output gains. In the decade of the 1990s private sector employment grew at an average yearly pace of 2 percent. However, from 2000 to 2008 private jobs managed only 0.4 percent yearly growth. And from 2007 to 2016 grew only 0.6 percent per year despite stronger gains after 2010 through restored losses during the recession.

In Pennsylvania, private jobs rose an average of 1.2 percent per year from 1990 to 2000 but slowed dramatically to 0.25 percent over the next seven years to 2007 and only 0.4 percent from 2007 to 2016. Meanwhile, MSA private employment climbed 1.1 percent annually or about half the national rate in the 1990s. Between 2000 and 2008 jobs managed a tiny annual gain of 0.03 percent far below the national pace. Employment gains picked up after 2010 rising 0.8 percent annually through 2016 but less than half of the national rate.

In light of the massive increase in the goods trade deficit it is not a surprise that manufacturing jobs suffered the greatest losses over the last 20 years. After recovering from the early 1990s downturn and rising to 17.56 million jobs in 1998, manufacturing employment fell every year through 2010 shedding 6.03 million workers, 34 percent of the employment posted in 1998. With the economy recovering and the goods deficit falling for a couple of years before picking back up

and stabilizing to just under \$800 billion, there was a modest job gain of 824,000 from 2010 to 2016. Still, that left manufacturing employment 5.2 million below the 1998 mark.

Moreover, from 1997, just before manufacturing employment reached the highest level of the last 20 years, manufacturing value-added as a percent of national GDP has dropped from 16.1 percent to 11.6 percent in the fourth quarter of 2016. Manufacturing supports jobs in many other sectors through its multiplier effects. Thus, it is not surprising that big declines in manufacturing's share of output have had a slowing effect on overall employment gains.

Pennsylvania's manufacturing employment count also suffered a big loss during the 1998 to 2010 period falling by 313,700 jobs or 36 percent. This is close to the 34 percent decline in U.S. manufacturing jobs in that period. Pittsburgh MSA manufacturing jobs were steady in the 1990s but fell sharply from 2000 through 2010 losing 3.9 percent annually. Since 2010 there has been no net gain in the MSA's manufacturing employment.

In both Pennsylvania and the U.S. there was a slow and very modest recovery in manufacturing employment from 2010 through the middle of 2016 that left the jobs count well below the pre-recession levels of 2007. Then in mid-2016 manufacturing jobs started to weaken somewhat both nationally and in the commonwealth. Fortunately however, manufacturing job gains in Pennsylvania and the U.S. returned in the second half of 2017 and have continued through June 2018. The U.S. gains have been more robust than Pennsylvania with 362,000 jobs added since December 2016. U.S. factory jobs in June 2018 stood at their highest level since December 2008. Meanwhile, Pennsylvania's June count is the highest posted for the month since June 2008.

The abrupt slowing in the U.S. long-term growth rate—as measured by growth over 10-year spans—that began in 2008 appears to be showing signs of being replaced by a return to more normal historical levels but it will take some time to make up for the prolonged weakness. An upturn in new business formation and increased business investment in the country and in the state will be key factors in the process of restoring a long-term growth rate more in line with the norms of the 30 years prior to the weaker growth since 2007. The business friendlier regulatory and tax climate recently put in place should prove extremely beneficial in fostering a sustained strengthening in the economy.

Pennsylvania will need to do far more than it has been able to do in the past to keep up with U.S. trends in output and employment. Regulations, labor laws and taxation that inhibit business expansion must be addressed.

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**Jake Haulk, Ph.D., President**

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| <p>Allegheny Institute for Public Policy<br/>305 Mt. Lebanon Blvd.* Suite 208* Pittsburgh PA 15234<br/>Phone (412) 440-0079 * Fax (412) 440-0085<br/>E-mail: <a href="mailto:aipp@alleghenyinstitute.org">aipp@alleghenyinstitute.org</a></p> |
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