

◆ **REGIONAL
EMPLOYMENT
UPDATE**

◆ **SHIFT-SHARE
ANALYSIS**

◆ **ECONOMIC
INSIGHTS**

Growth

“If we are going to carry on growing, and we will, because no country is going to forfeit its right to economic growth, we have to find a way of doing it sustainably.”

~Tony Blair~

Ethics

“Have the courage to say no. Have the courage to face the truth. Do the right thing because it is right. These are the magic keys to living your life with integrity.”

~W. Clement Stone~

Winter

“If we had no winter, the spring would not be so pleasant: if we did not sometimes taste of adversity, prosperity would not be so welcome.”

~Anne Bradstreet~

“Blow, blow, thou winter wind
wind

Though art not so unkind,
kind,

As man’s ingratitude”

~William Shakespeare~

According to revised estimates released by the Bureau of Economic Analysis, real gross domestic product increased at an annual rate of 2.2 percent in the third quarter of 2006, according to final estimates released by the Bureau of Economic Analysis. In the first quarter, real GDP increased 5.6 percent, while in the second quarter GDP increased at a rate of 2.6 percent..

The Consumer Price Index for All Urban Consumers (CPI-U) decreased 0.7 percent in October, before seasonal adjustment. The October level of 201.8 was 1.3 percent higher than in October 2005

According to the Bureau of Labor Statistics, total non-farm payroll employment increased by 132,000 in November 2006. The unemployment rate, 4.5 percent, and the number of unemployed persons, 6.8 million, were little changed in November.

The employment- population ratio was unchanged in November 63.3 percent., The labor force participation rate—the proportion of the population 16 years of age and older who is either working or looking for work—at 66.3 percent, was unchanged over the year.

There were 1.4 million persons marginally attached to the labor force, the same as a year earlier. They had looked for work sometime in the last 12 months, but not in the last 4 weeks. There were 349,000 discouraged workers in November, little changed from a year earlier. Discouraged workers, a subset of the marginally attached, were not currently looking for work specifically because they believed no jobs were available for them.

The average workweek for production or non-supervisory workers on private non-farm payrolls was unchanged 33.9 hours in November, seasonally adjusted.

Table 1: Unemployment Rates

	Oct '06	Sept '06	Aug '06	Jul '06	Jun '06
United States	4.4	4.6	4.7	5.0	4.8
Maryland	4.0	4.0	4.1	4.5	4.1
Allegany	5.0	5.4	5.6	5.9	5.4
Garrett	3.8	3.9	4.3	5.1	4.5
Washington	4.0	4.3	4.6	4.6	4.4
Pennsylvania	3.9	4.2	4.8	4.9	4.8
Bedford	4.5	4.8	5.4	5.4	5.5
Franklin	2.8	2.9	3.3	3.3	3.3
Fulton	3.5	3.8	4.1	4.1	4.0
Somerset	4.3	4.5	5.3	5.4	5.6
West Virginia	4.4	4.7	5.6	5.1	5.1
Berkeley	3.9	4.0	4.4	4.5	4.3
Hampshire	3.0	3.0	3.4	3.8	3.6
Mineral	4.1	4.5	4.8	4.8	4.8
Morgan	4.1	3.8	4.4	4.8	4.2

Sources: MDEED, PADLI, and WVBEP

The manufacturing work week fell by 0.1 hour to 41.1 hours, and factory overtime was unchanged at 4.2 hours.

The regional unemployment rate was 3.8 percent in October, below the value for September 2006, and October 2005. The regional unemployment rate is below the national rate.

As shown in Table 2, the labor force and the number of employed both increased compared to the previous month and a year ago. Most of the regional counties experienced steady or slight decreases in unemployment rate in October 2006 compared to September 2006. Franklin County, PA had the lowest unemployment rate in October at 2.8%, much below the U.S. rate of 4.4%.

Table 2. Regional Labor Market Statistics

	Nov. 2006	Oct. 2006	Nov. 2005	Percent Change From	
				Last Month	Last Year
Labor Force	347,084	346,717	337,572	0.11%	2.82%
Employed	332,261	333,261	322,376	-0.30%	3.07%
Unemployed	14,733	13,366	15,206	10.23%	-3.11%
Unemployment Rate	4.24	3.86	4.50	0.39%	-0.26%

Shift-share analysis is commonly used to analyze employment growth in one sub-geographic area compared to the larger area. Shift-share analysis is one way to account for the competitiveness of a region's industries and to analyze the local economic base by disaggregating employment changes into national, local, and industrial components. In this case it is used to compare U.S. industry sector employment growth from 1994 to 2004 to employment growth for each regional county, and the Region as a whole. A second shift-share analysis is presented comparing employment growth by industry sector for the Region from 1994 to 2004, to employment growth in each regional county.

Shift-share analysis looks at employment for a particular industry in an area (Region or county) in 1994 and compares this employment growth to what it would have been if employment for each industry sector had grown at the same rate as the *national* rate of employment growth. The difference between actual area employment for each industry sector and expected employment based on the national employment growth rate, is called the national growth share. The national growth share is made of two components: industry mix effects and local share effects.

National Growth Share

This is the share of local job growth that can be attributed to growth of the national economy. Specifically, if the nation as a whole is experiencing employment growth, ("a rising tide lifts

all boats"), one would expect total national growth to exert a positive growth influence on the local area. This factor describes the change that would be expected simply by virtue of the fact that the local area is part of a changing national economy. The *national growth share*, or the number of jobs lost or gained in a region if total employment in the region had changed at the same rate as overall total national employment, shows whether industry has performed better or worse than at the national level.

Consider the values in Table 3. If Regional employment, or one county's employment, grew at the same rate as the nation, that area would maintain its share of national employment. The difference between the actual 2004 employment and 2004 employment expected at the national growth rate would be zero, and there would be no national growth share effects. For example, as shown in Table 3, Washington County, MD had employment growth over 1994 - 2004 period of 15.9%, slightly higher than the nationwide growth rate of 15.1%. The employment growth in this county was only 499 persons above what it would have been if county employment had grown at the same rate as the nation.

Compare this to Morgan County, WV. Employment growth in this county from 1994 - 2004 was -21.7% from 1992 - 2002, putting it 36.8% below the nationwide employment growth rate of 17.7% (-21.7% - 15.1%). Employment fell by 400 from 1994-2004, but it

would have risen by 278 if the county employment growth had been at the same growth rate as the U.S. The Region's employment growth over 1994 - 2004 period was 11.4% which trailed the 15.1% national employment growth by -3.7%.

Regional employment growth (30,497) was 9,986 less than it would have been if Regional employment had grown at the same rate as the nation (40,483).

National - Local Shift Share Analysis											
1994-2004											
	Total Non-Farm Emp. Growth (%)	Total Non-Farm Emp. Growth (#)	Expected Growth at Overall National Growth Rate (17.7%)	National Growth Share: (Actual Growth - Expected Growth at Overall National Levels)		=	Competitive or Differential or Regional Shift or Local Share Effect		+	Composition or Industry Mix Effect	
				#	National Share Growth 1994 Employment		#	Local Share 1994 Employment		#	Industry Mix/1994 Employment
U.S.	15.1%	21,448,300	21,448,300			=			+		
Maryland	17.1%	461,939	408,309	53,630	2.0%	=	-60,663	-2.2%	+	114,292	4.2%
Allegany	6.8%	2,235	4,927	-2,692	-8.2%	=	-2,510	-7.7%	+	-182	-0.6%
Garrett	-11.8%	-1,756	2,240	-3,996	-26.9%	=	-4,147	-27.9%	+	151	1.0%
Washington	15.9%	9,742	9,243	499	0.8%	=	1,109	1.8%	+	-610	-1.0%
Pennsylvania	8.3%	523,388	950,280	-426,892	-6.8%	=	-449,884	-7.1%	+	22,992	0.4%
Bedford	13.3%	2,356	2,682	-326	-1.8%	=	643	3.6%	+	-969	-5.5%
Franklin	12.8%	7,521	8,900	-1,379	-2.3%	=	1,943	3.3%	+	-3,322	-5.6%
Fulton	-1.7%	-71	649	-720	-16.7%	=	-276	-6.4%	+	-444	-10.3%
Somerset	3.0%	1,019	5,116	-4,097	-12.1%	=	-3,053	-9.0%	+	-1,044	-3.1%
West Virginia	6.0%	46,178	115,570	-69,392	-9.1%	=	-48,618	-6.3%	+	-20,775	-2.7%
Berkeley	25.6%	6,961	4,107	2,854	10.5%	=	3,489	12.8%	+	-636	-2.3%
Hampshire	-12.1%	-616	770	-1,386	-27.2%	=	-1,600	-31.4%	+	256	5.0%
Mineral	-6.4%	-399	946	-1,345	-21.5%	=	-201	-3.2%	+	-1,144	-18.2%
Morgan	-21.7%	-400	278	-678	-36.8%	=	-494	-26.8%	+	-184	-10.0%
Region	11.4%	30,497	40,483	-9,986	-3.7%	=	-1,744	-0.7%	+	-8,241	-3.1%

Source: Bureau of Economic Analysis, Regional Information System, 2006

Industrial Mix Effects

The industry mix component seeks to address and answer the question: Did the area's employment growth lag (or exceed) the overall national average because employment was more concentrated in slower (or faster) growing industries when compared to the nation? This is the share of local job growth that can be attributed to the area's mix of industries being analyzed. This factor represents the portion of the national growth share for the industry that can be attributed to the growth or decline of the industry nationally. This component isolates the fact that nationwide, some industries have grown faster or slower than others. It represents the national employment growth contribution that a specific industry has made to the change in the number of jobs in the region. The most important result from the industry mix calculation is the total value, derived from summing over all industries. Negative values reported reveal that the industry composition employment for the area was concentrated in slower growing industries. Positive results have the opposite interpretation.

Local Share or Regional Shift Effects

This portion of the national growth share describes the extent to which factors unique to the local area have caused growth or decline in regional employment of an industrial group. Even during periods of general prosperity, some regions and some industries grow faster than others. This can be attributed to some local comparative advantage such as natural resources, linked industries, or favorable local labor situations. The local share provides some evidence of a local area's economic strengths. This element of the analysis is a representation of how a region's competitive position can contribute to regional job growth. When the local share component is positive it indicates that the industry enjoys some local comparative advantage.

As noted above, the national growth share for the Region as a whole was (-9,986) [-3.7%]. Accounting for the difference in the national growth share was an industry mix inclined toward industries that experienced slower growth (-8,241) coupled with the fact that a large share of local industries underperformed their counterparts nationally (-1,744). The Region experienced both slow employment growth (-3.1%) and a mix of industries that are slower growing (-0.7%). Slow employment growth was largely responsible for the differential.

The information in Table 3 shows some general patterns. Only Berkeley County, WV and Washington County, MD had positive national growth shares. This indicates that for most of the Regional counties, the 'rising tide' did not 'lift their boats'. In the two counties with positive national growth shares, most of this was the result of local share effect, not the industry mix, and this was most notable in Berkeley County, WV. In other words, for these counties there was employment growth above the national growth rate, but the mix industries is dominated by slower growing industries.

Table 4 shows a regional shift-share analysis comparing the regional counties to the Region as a whole. Overall, employment in the Region grew 11.4 percent from 1994 to 2004. Four Regional counties (Washington County, MD, Bedford and Franklin Counties, PA, and Berkeley County, WV, have positive regional growth shares indicating that their employment growth was greater than overall Regional employment growth. Six of the eleven regional counties have positive industry mix values, indicating that they have industries in relatively faster growing sectors.

Regional - Local Shift Share Analysis 1994-2004						
	Total Non-Farm Employment Growth (%)	Total Non-Farm Employment Growth (#)	Expected Growth at Overall Regional Growth Rate (11.6%)	Regional Growth Share: Actual Growth - Expected Growth at Overall Regional Growth Rates	Competitive or Differential or Regional Shift or Local Share Effect	Composition or Industry Mix Effect
Allegany	6.8%	2,235	3,712	-1,477	-1,497	20
Garrett	-11.8%	-1,756	1,687	-3,443	-3,767	323
Washington	15.9%	9,742	6,963	2,779	1,238	1,541
Bedford	13.3%	2,356	2,020	336	1,065	-729
Franklin	12.8%	7,521	6,705	816	3,451	-2,635
Fulton	-1.7%	-71	489	-560	-253	-307
Somerset	3.0%	1,019	3,854	-2,835	-3,661	826
Berkeley	25.6%	6,961	3,094	3,867	4,038	-172
Hampshire	-12.1%	-616	580	-1,196	-1,433	268
Mineral	-6.4%	-399	713	-1,112	-383	-729
Morgan	-21.7%	-400	210	-610	-1,427	497
Region	11.4%	30,497	30,497	0	0	0

Source: Bureau of Economic Analysis, Regional Information System, 2006

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