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2012 Bartlesville Economic Outlook

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Executive Summary

Since the end of the Great Recession, consistent growth in U.S. real gross domestic product (GDP) has returned it to levels slightly above the pre-recession peak. Real GDP is forecast to continue to grow in 2012 and 2013, though at a pace below trend growth. Payroll employment in contrast lies well below the peak achieved prior to the recession. Weak GDP growth combined with strong productivity growth is responsible for the sluggish growth in employment, a pattern that also was evident following the recessions of 1990-1991 and 2001. Continued subdued employment growth of 1.1 percent is expected in 2012, rising to a more robust pace of 1.6 percent in 2013.

The Oklahoma economy was late into the recession but emerged from recession into recovery at the same time as the national economy. The absence of a housing market bubble and energy prices that initially ran counter to the national economic cycle were responsible for Oklahoma's relatively stronger economic performance during the recession. According to U.S. Bureau of Labor Statistics Current Employment Statistics data, Oklahoma's total nonfarm employment growth greatly exceeded that of the nation during the middle of 2011. Average annual Oklahoma nonfarm employment is forecast to finish 2011 two percent higher than that of 2010. Growth is forecast to slow to 1.8 and 1.4 percent in 2012 and 2013, only reaching the pre-recession peak in 2013.

The employment cycles of the state's two largest metropolitan areas fairly closely follow the state cycle, particularly that of the Oklahoma City metropolitan area. Only in the Tulsa metropolitan area is employment growth forecast to accelerate, rising above that of the state. Forecasted quarterly employment growth in the Oklahoma City metropolitan area will exceed that of the state by the end of 2012.

Employment in Washington County (Bartlesville Micropolitan Area) generally tracked the rest of the state and the Tulsa Metro. Yet, Washington County entered the recession two quarters later, and has since experienced some volatility in its recovery. The initial recovery, though weaker, is forecast to accelerate. The employment decline of 0.5 percent in 2011 is forecast to rebound to 2.1 and 3.3 percent for 2012 and 2013 respectively. Population growth for the past decade was 4.1 percent. Looking forwards, Washington County employment growth should continue very much like the Tulsa Metro and the rest of the state.

Despite the positive momentum in the economy, considerable uncertainty remains. A worsening debt crisis in Europe, slowing growth in China, and policy mistakes in the U.S. could derail the recovery and send the economy back into recession. IHS Global Insight assesses the probability of the U.S. economy falling back into recession at 30%. Oklahoma employment is forecast to decline nearly 0.3 percent under this scenario, approximately two percentage points lower than the baseline forecasted growth rate.

National Economic Conditions

Following two years of decline during the longest and most severe economic contraction since the Great Depression, U.S. real gross domestic product (GDP) increased three percent in 2010 (Figure 1). Long and severe declines in economic activity have historically characterized the aftermath of financial crises. U.S. GDP is forecast to finish year 2011 at 1.7 percent higher than in 2010. Real GDP growth is forecast to continue at approximately the same growth rate (1.8 percent) in 2012, moderately accelerating to 2.4 percent in 2013.

While the losses in real GDP experienced during the Great Recession have since been recouped, U.S. payroll employment lies well below the peak attained prior to the onset of the recession. Following the pattern established during the 1990-1991 and 2001 recessions, employment has been slow to recover. During what has been referred to as “jobless recoveries” employment continues to decline early in the recovery phase and only gradually begins to increase later. The causes of jobless recoveries are a combination of weak real GDP growth and strong productivity growth. Only as GDP growth strengthens and cyclical productivity gains are exhausted, does employment begin to grow robustly.

U.S. payroll employment is forecast to finish 2011 one percent higher, and only grow about 1.1 percent in 2012. These rates approximate the growth rate in the labor force; thus, the unemployment rate should be largely unaffected over this period. Only in 2013 is employment forecast to grow more robustly, at a rate of 1.6 percent. The unemployment rate is only expected to approach the full employment level by the end of the decade.

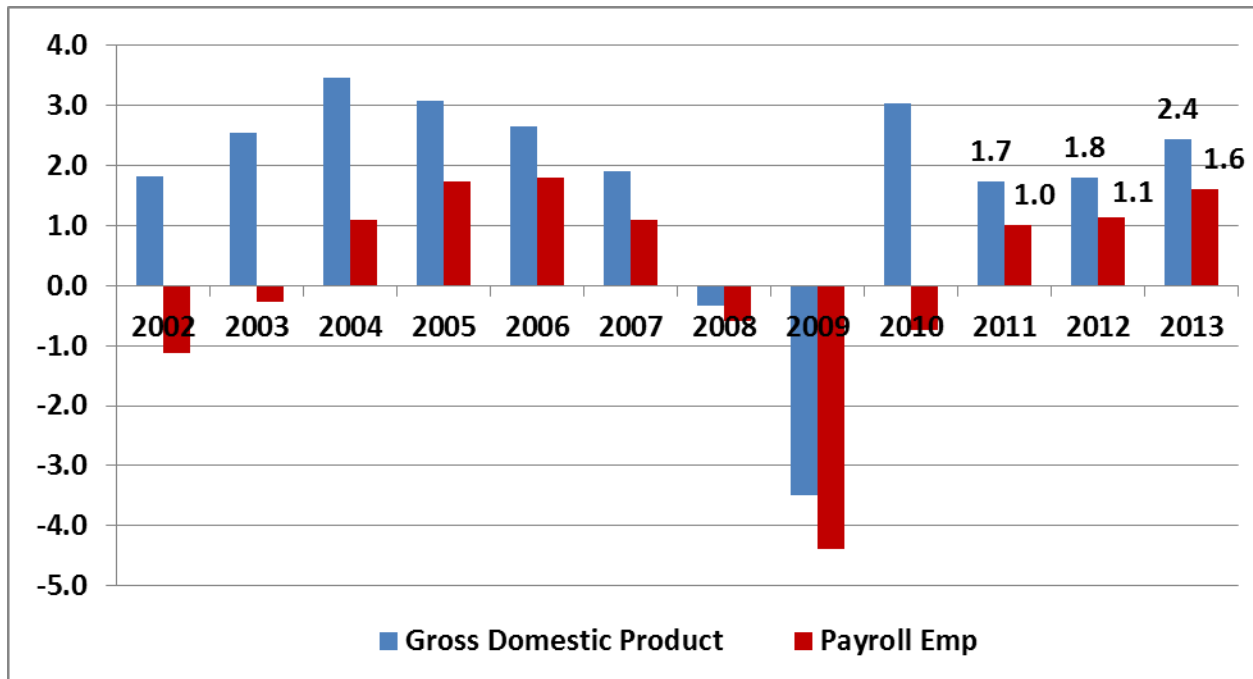


Figure 1. U.S. Real GDP and Payroll Employment Growth: Percent Change

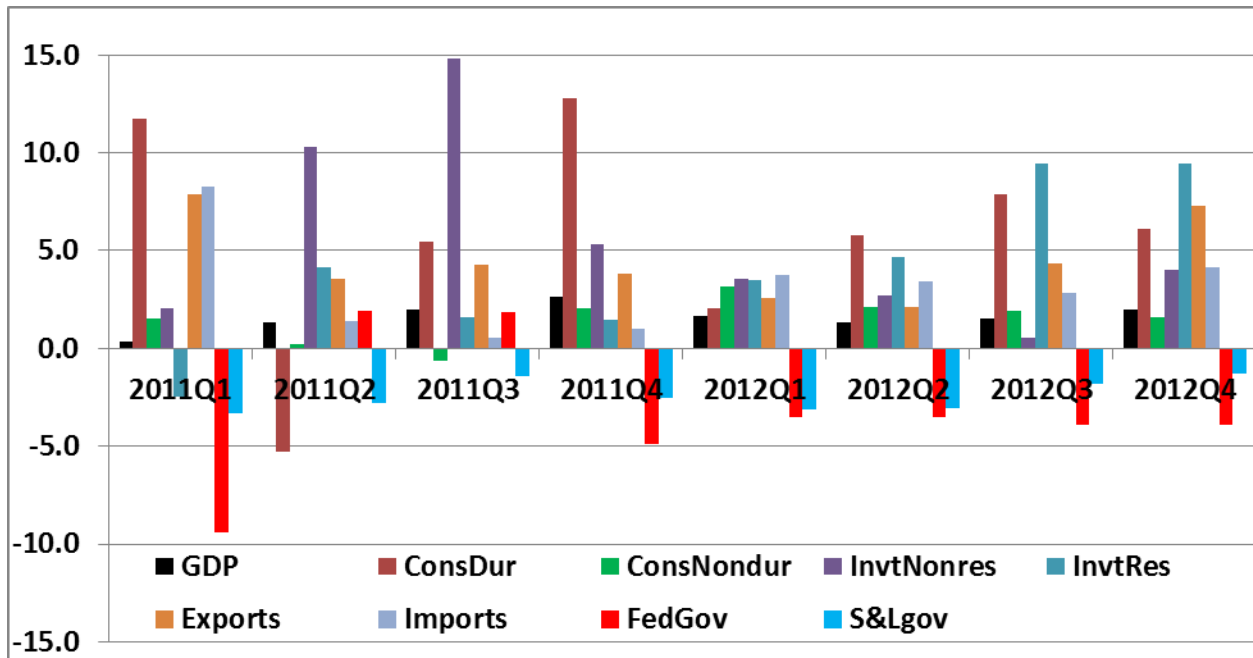


Figure 2. U.S. Real GDP Component Growth: Percent Change

As shown in Figure 2, the fastest growing spending components in 2011 were nonresidential investment, durable consumption and exports. Spending in nonresidential investment in part reflected spending related to energy development. The largest drags on the economy were the spending declines by local, state, and federal governments. In 2012, strong growth in spending is forecast by the end of the year for residential investment, durable consumption, and exports. Negative growth in the government sectors is forecast to continue but at more moderate rates.

The energy sector is expected to remain strong, though with growth moderating in 2012. As shown in Figure 3, the price of West Texas Intermediate Oil is forecast to decline slightly by the end of 2012, but then rise sharply by the end of 2013 with the strengthening of the national economy. The price of natural gas (Henry Hub) is forecast to increase robustly throughout both years. Clearly, these energy price forecasts are sensitive to the resulting economic growth in the country and world, and geopolitical events as evidenced by recent tensions with Iran. Stronger than expected economic growth in 2012 would shift some of the forecasted prices increases for 2013 into 2012. Likewise, increased uncertainty in the energy markets could cause prolonged rises in energy prices. However, significant downside risks also exist such as the unfolding debt crisis in Europe and slowing of growth in China.

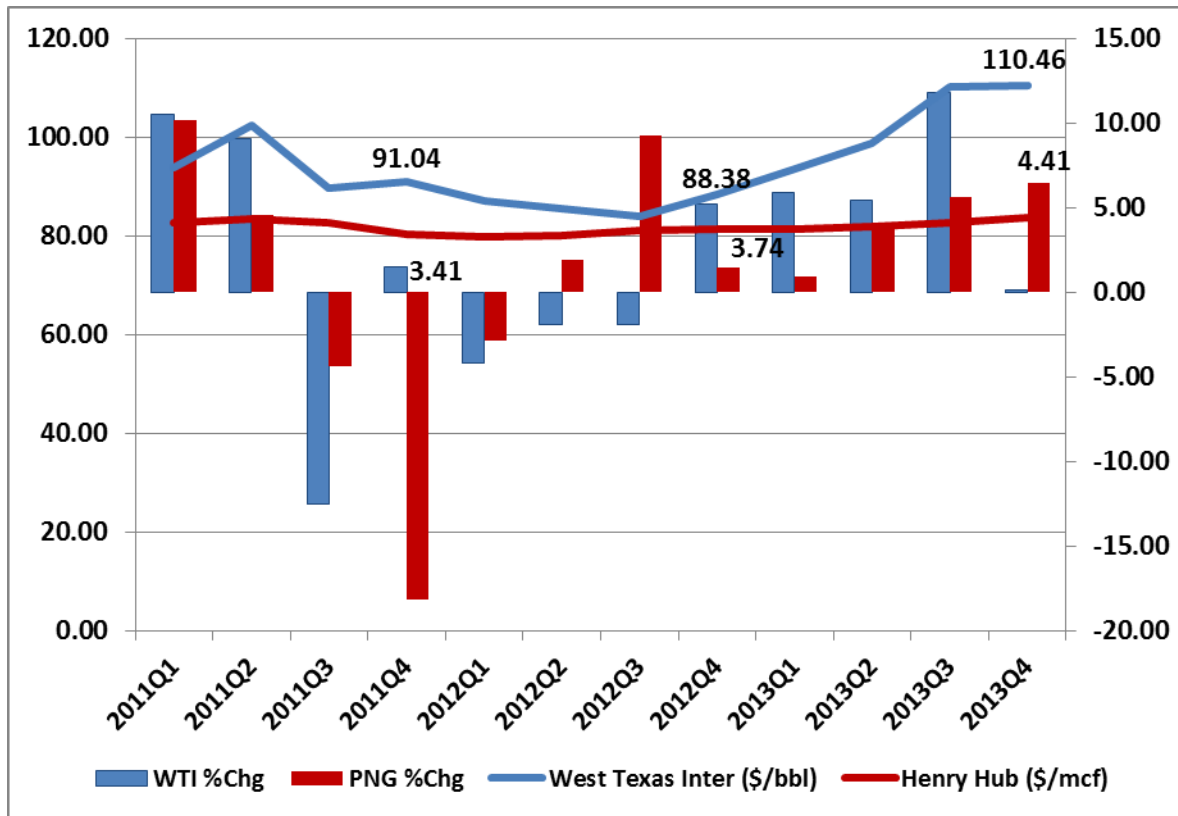


Figure 3. Energy Price Forecasts

Figures 4 and 5 show forecasts of U.S. employment by sector. These are important to understand as they factor into the sector forecasts for the Oklahoma state and local economies. Following strong growth in 2011, employment in the Natural Resources and Mining sector is expected to become much more moderate in 2012 and 2013. Energy prices affect employment in the sector, but with a time lag. Thus, a large part of the sector growth benefit of the forecasted surge of energy prices at the end of 2013 is expected to occur in 2014. Following growth in 2011, employment in Durable Goods Manufacturing is expected to be flat in 2012 and decline slightly in 2013. Employment in both Nondurable Goods Manufacturing and Construction is expected to decline in 2012, but increase mildly in 2013.

Employment growth in both the Retail Trade and Wholesale Trade sectors is expected to strengthen in each of the next two years. Health Services employment growth is forecast to hold steady at approximately two percent. Corresponding to forecasted declines in spending, employment is forecast to decline in both State and Local Government and Federal Government in 2012, though slight gains are forecast for State and Local Government in 2013.

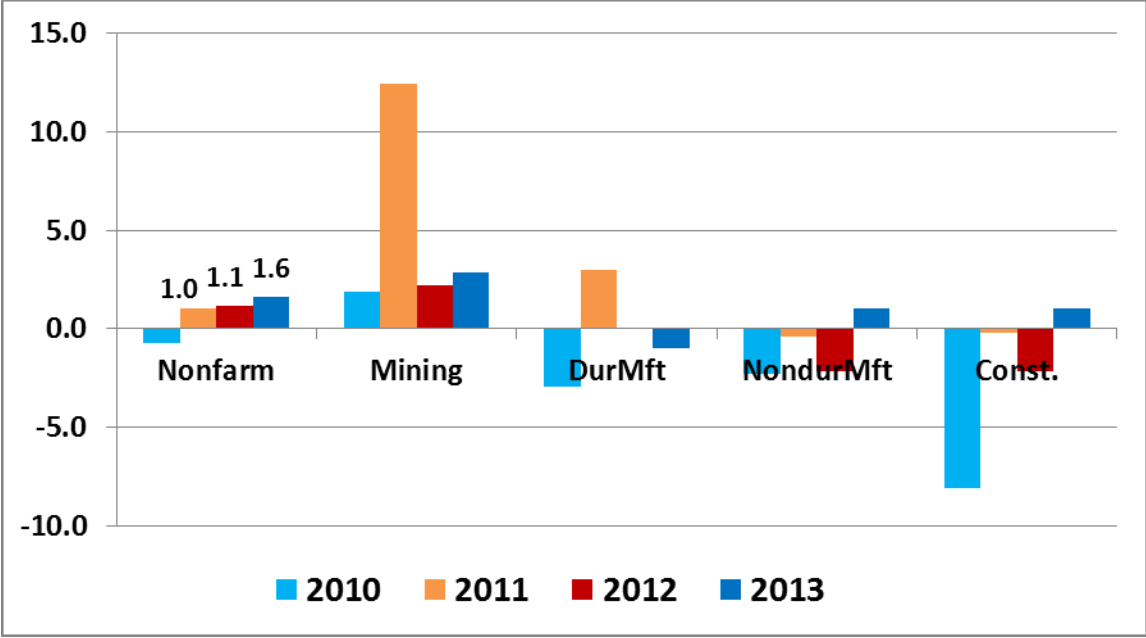


Figure 4. U.S. Employment Forecasts, Total Nonfarm and by Sector: Percent Growth

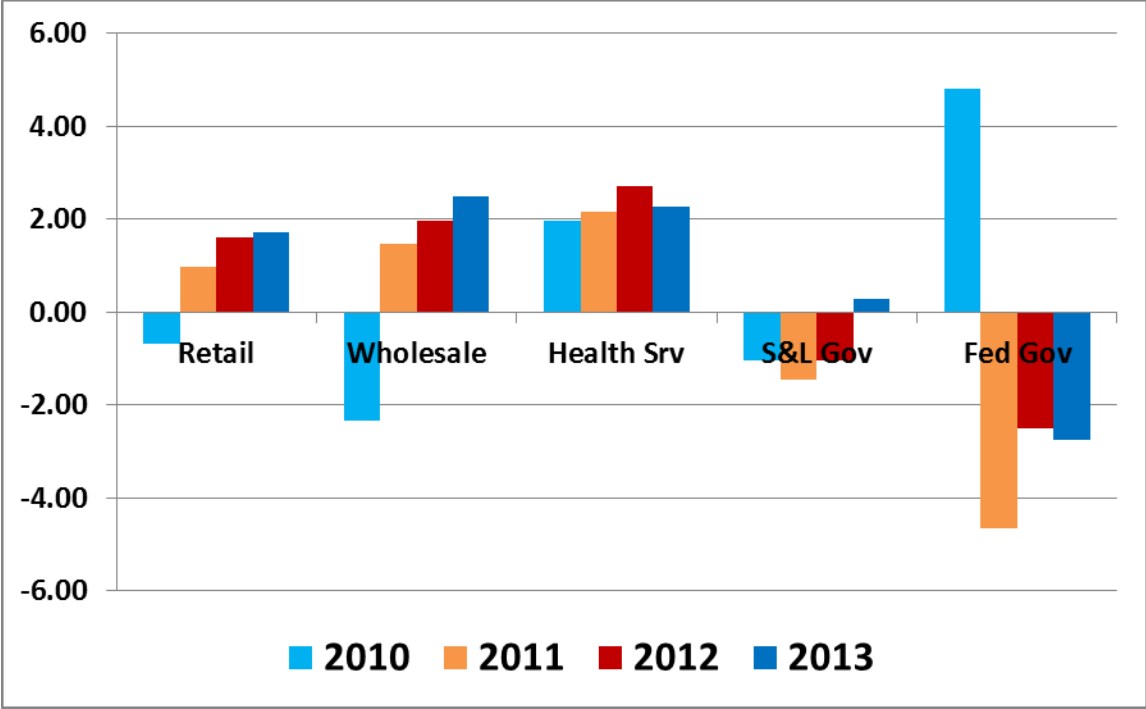


Figure 5. U.S. Employment Sector Forecasts: Percent Growth

Oklahoma Economic Forecast

The Oklahoma economy lagged behind the nation in falling into recession (Figure 6). While the national economic recession began in December of 2007, the first negative quarterly growth rate in Oklahoma did not occur until the fourth quarter of 2008. Two primary factors accounted for the disparity. First, the regions that led the nation into recession were those that experienced the largest housing market bubbles. Second, energy prices initially ran counter to the national economic cycle.

Areas in the southwest, southeast, northwest and Rocky Mountain regions of the nation saw rapid increases in housing prices, household leverage and booms in construction employment during the 2002-2006 period. However, when the housing bubble burst, many of these areas began to falter as wealth and consumer credit declined with the fall in housing prices, leading to spending declines on consumer durable goods and housing (Mian and Sufi, 2009). The declines in spending then spread across the nation as producers of consumer and housing goods elsewhere were adversely affected.

Natural gas and oil prices held up during the onset of the national recession, peaking in the second quarter of 2008. Subsequently, energy prices declined dramatically and Oklahoma and most other energy producing states fell into recession with the nation. In fact, Oklahoma experienced a quarterly negative employment growth rate approximately equal to the most negative rate experienced nationwide. Although Oklahoma was late going into recession, it emerged from recession at the same time as the nation.

Recent employment growth in Oklahoma has greatly exceeded that of the nation, particularly during the second quarter of 2011 (Figure 6). Based on data through the third quarter of the year, employment is expected to have averaged two percent higher in 2011 when compared to 2010 (Figure 7). Growth is forecast to moderate to approximately 1.8 percent in 2012 and 1.4 percent in 2013. Only in 2013 does the level of employment exceed the peak established in 2008. The 2013 employment growth forecast is roughly on par with the forecast for the nation. The strong energy price growth in latter 2013 is expected to have most of its growth effect in 2014.

Other states are likely to catch up to Oklahoma as the housing market bottoms out and improved national economic conditions lead to renewed household interest in natural amenities. Yet, any deterioration of quality of life that arose from fast growth in these states during the previous decade may limit their future growth (Rickman and Rickman, 2011). Likewise, strong world demand for energy could continue to boost growth in energy producing states.

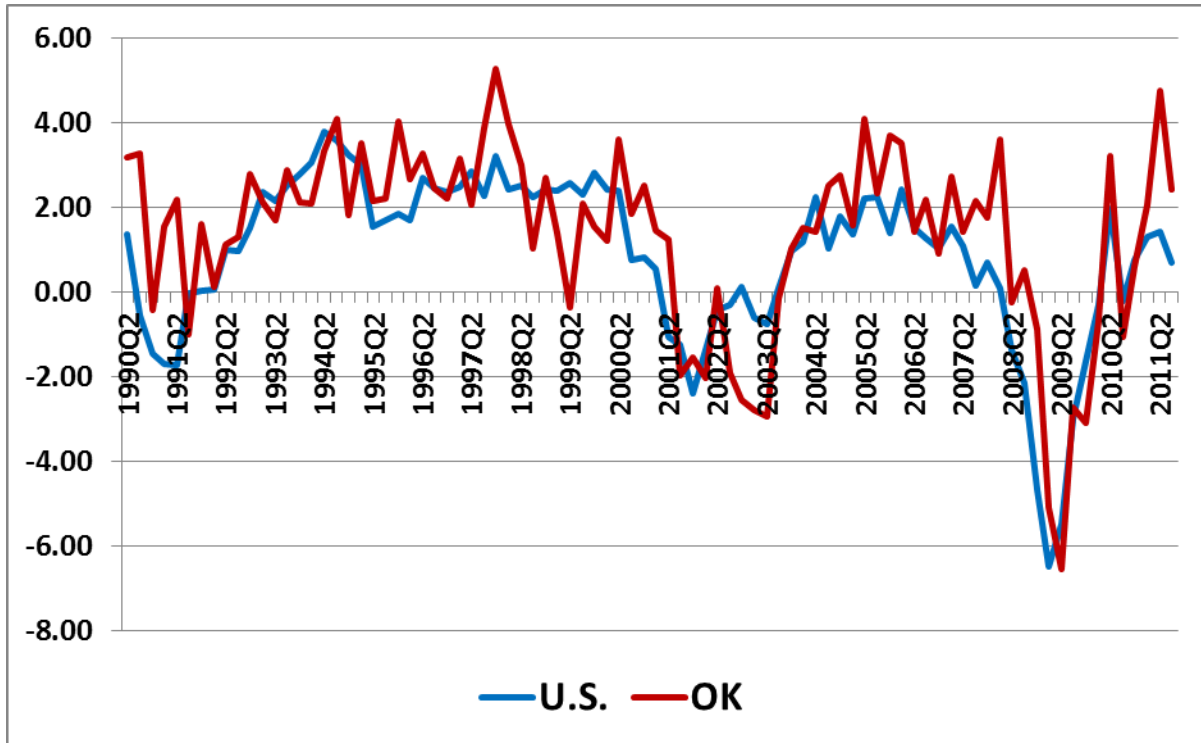


Figure 6. Quarterly U.S. and Oklahoma Nonfarm Employment Growth 1990Q1-2011Q3: (Seasonally-Adjusted Annualized Percent Change)

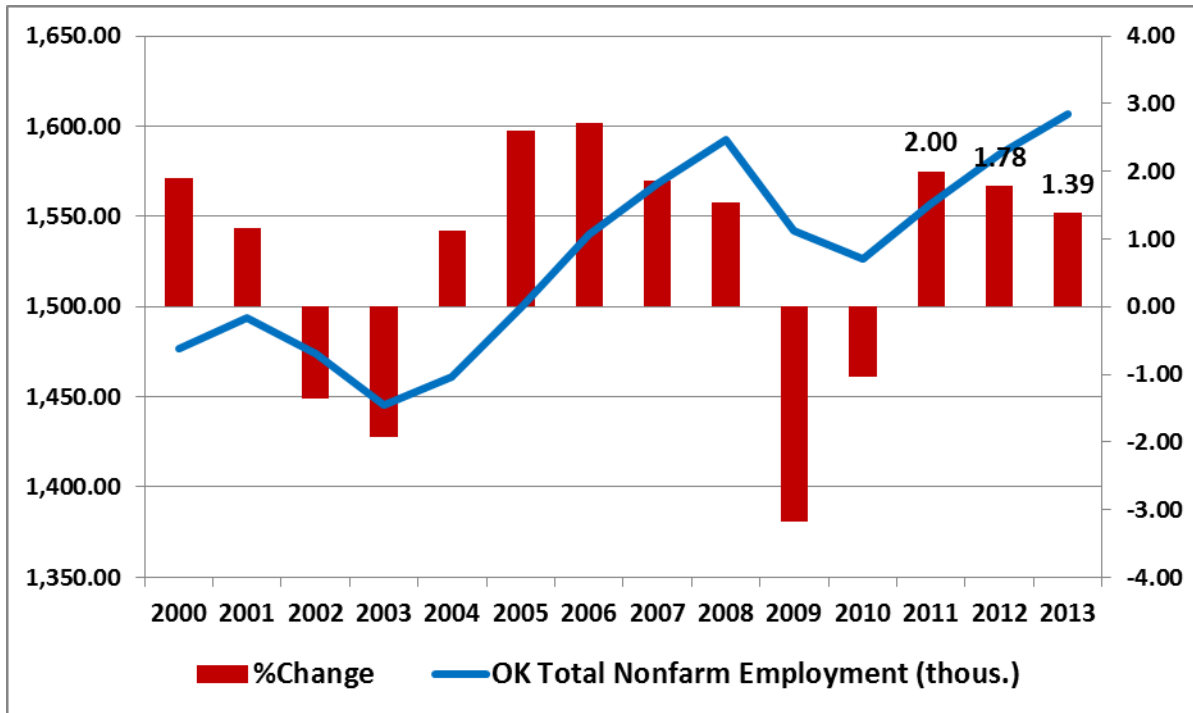


Figure 7. Oklahoma Total Nonfarm Employment: Level and Percent Change

Figures 8 and 9 display the forecasted growth rates of key sectors of the Oklahoma economy. Following the nation, employment growth in the Natural Resources and Mining sector is expected to moderate along with energy prices. Yet, any deviation in energy prices from the forecasts will greatly affect the forecast for employment in this sector. Employment growth in both Durable Goods Manufacturing and Construction is forecast to moderate over the next two years. Growth in Nondurable Goods Manufacturing is forecast to turn slightly negative over the period. State and Local Government employment is forecast to rise slightly as the state budget recovers, but this is highly dependent on the political process. Federal Government employment in the state is forecast to continue declining.

Employment in the service sectors of the state, which often depends on the export sectors of the economy, generally is expected to grow over the next two years. Growth in Wholesale Trade is forecast to strengthen, while that in Retail Trade is forecast to ebb. Health Services and Education Services employment is forecast to continue at approximately the current pace in 2012, though slowing in 2013. Strong growth in Professional and Business Services is forecast to continue. Employment growth in Transportation Services and Public Utilities is forecast to turn from negative in 2011 to positive in 2012 and more robustly positive in 2013.

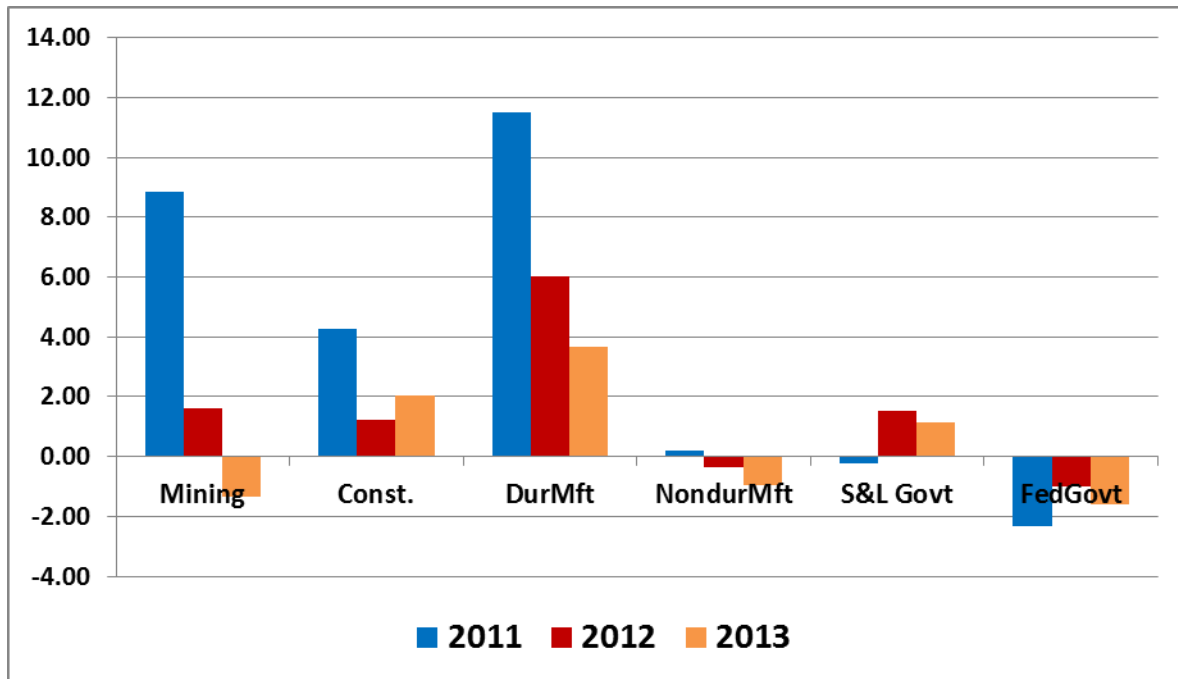


Figure 8. Employment Forecasts of Key Oklahoma Sectors

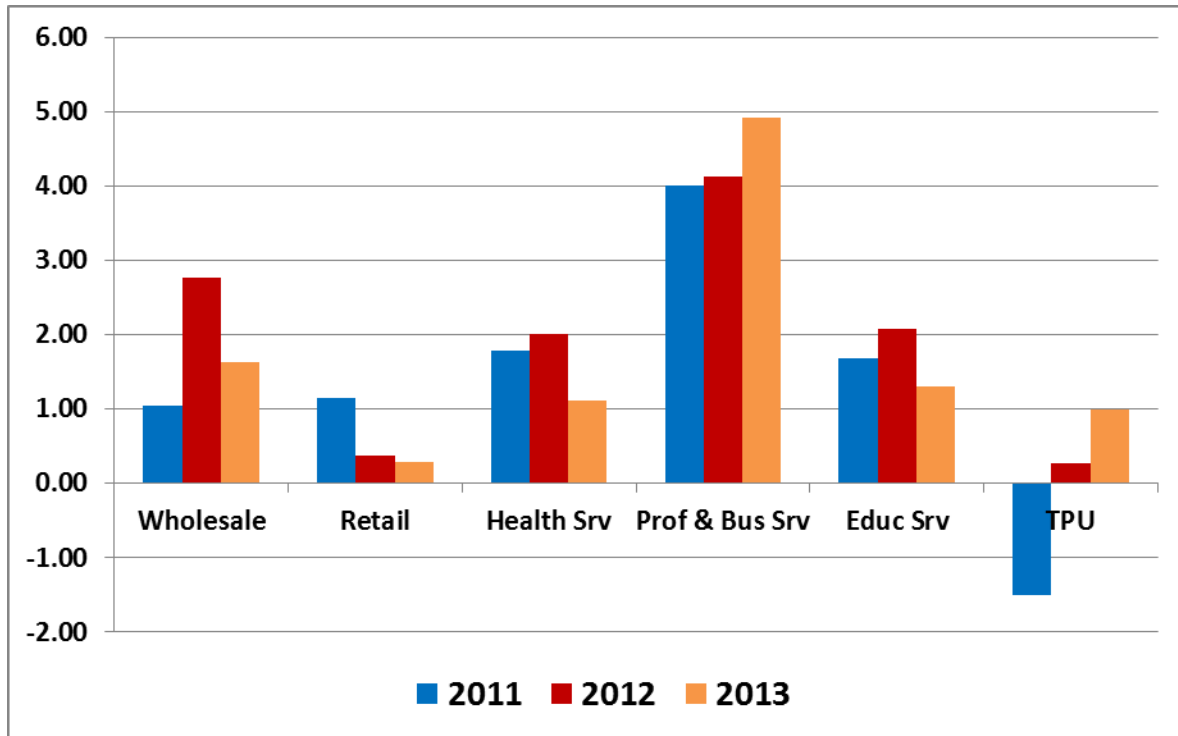


Figure 9. Employment Forecasts of Key Local Service Sectors in Oklahoma

Following declines in 2009, both Real Personal Income and Nonfarm Real Gross State Product (GSP) increased in 2010. Based on data through 2010 from the U.S. Bureau of Economic Analysis (BEA), real GSP is forecast to increase approximately 4.7 percent in 2011, declining to 3.2 percent in 2012. Using BEA data through the second quarter of 2011, and the consumer price index for all urban consumers produced by the U.S. Bureau of Labor Statistics through the third quarter of 2011, real income is forecast to increase 3.1 percent in 2011, with growth declining to 2.8 percent in 2012.

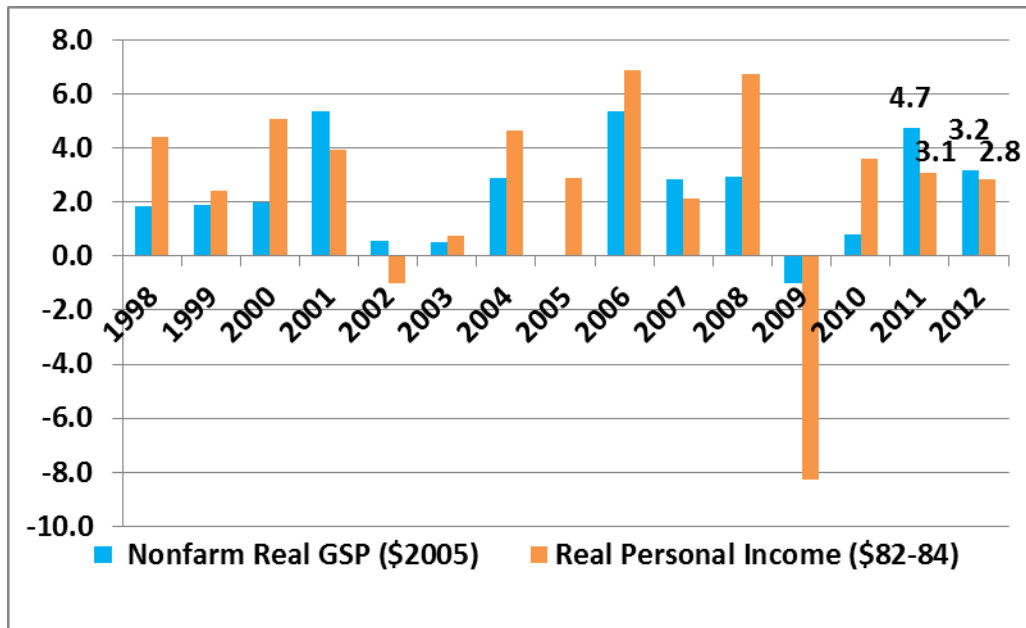


Figure 10. Real Personal Income and Nonfarm Real Gross State Product Growth (percent change)

Oklahoma City and Tulsa Metro Area Forecasts

The employment cycles of the state’s two largest metropolitan areas fairly closely follow the state cycle, particularly that of the Oklahoma City metropolitan area (Figure 11). This should not come as a surprise because employment in the two metro areas comprises over 60 percent of state payroll employment. State employment growth in 2011 exceeded that of the metro areas, particularly during the second quarter.

Annual average employment growth for the state and the two metropolitan areas are displayed in Figure 12. Only in the Tulsa metropolitan area is employment growth forecast to accelerate, rising above that of the state. Although not evident in the annual growth numbers, forecasted quarterly employment growth in the Oklahoma City metropolitan area exceeds that of the state by the end of 2012.

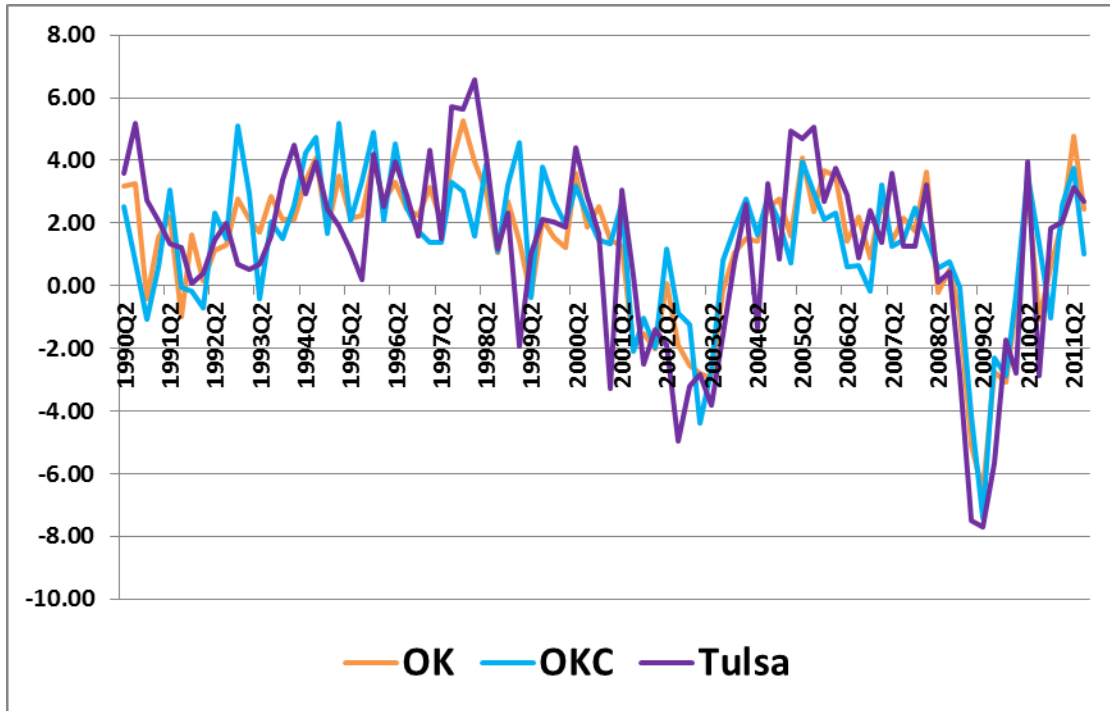


Figure 11. Quarterly Oklahoma, OKC and Tulsa Nonfarm Employment Growth (Seasonally-Adjusted Annualized Percent Growth)

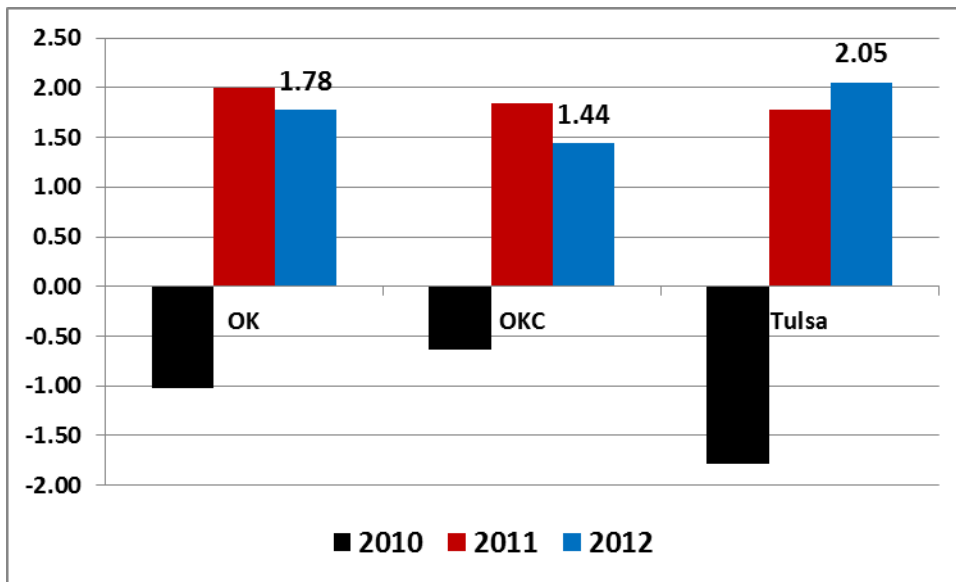


Figure 12. Annual Growth of Payroll Employment (percent change)

Bartlesville Economic Outlook

Washington County did not follow the state's economy's path in and out of the recession as closely as the Tulsa Metro did (Figure 13). While the state and the Tulsa metro experienced severe declines in employment growth starting the fourth quarter of 2008, Washington County's decline started in the second quarter of 2009, rebounding at a fairly similar pace, only to experience another dip in activity in the first quarter of 2011. Based on Quarterly Census of Employment and Wage (QCEW) data through the second quarter of 2011, Washington County employment is forecast to decline -0.46 percent in 2011, turning positive at 2.06 and 3.33 percent in 2012 and 2013, respectively.

As shown in Figures 13-15, the Professional and Business Services sector will be critical in sustaining the recovery as its employment is forecast to grow at around 8 percent for both 2012 and 2013. This sectoral growth should account for close to 38% of overall county job growth. Much of the gains in this sector in the past have come from temporary employment (the Administrative, Support, and Waste Management sector). The Accommodations, Food Services and Leisure sector is another source of strength in the near future in 2012 as it is projected to be responsible for a quarter of the jobs added to the area. Job gains in the Natural Resource and Mining sector should be steady and remain close to their 2011 gains. Manufacturing is expected to remain weak and continue shedding jobs, albeit at a much slower pace than its 2010 free-fall. The number of manufacturing establishments between 2007 and 2010 decreased from 52 to 45 according to the QCEW data and has lost 24% of its workforce during the given period.

Employment declines in Construction should continue until 2013 when positive growth is forecast. The Construction subsectors in this area include construction of buildings, heavy and civil engineering construction, and specialty trade contracting. Between 2005 and 2010, the construction of buildings subcategory has been the driver of the job losses (46% of the losses). As the housing market slowly recovers, we should see a boost to the overall Construction sector.

The Information sector (NAICS 51), which has shrunk nationwide from 3.6 to 2.8 million workers from 2000 to 2009, has the following subcategories: Publishing Industries (except the internet), Motion Picture and Sound Recording Industries, Broadcasting (except the internet), Telecommunications, and ISP's Search Portals and Data Processing. In Washington County, the number of establishments has dropped to 12 in 2010 from a high of 19 in 2007. Most of the job losses were experienced in Publishing, Broadcasting and Telecommunications. Starting in 2011, the sector should rebound to its prerecession levels (based on data through the second quarter of the year), though subsequently experience modest declines; this sector however only represents 0.5% of the economy. These patterns are consistent with that of the nation where Publishing and Telecommunications continue to decrease but show some dips and lurches throughout. The Other Services (NAICS 81) also has seen job losses in all three of its subsectors (Repair and Maintenance, Personal and Laundry Services, Membership Associations and Organizations) over the whole decade and it is forecast to continue experiencing a decline. The number of

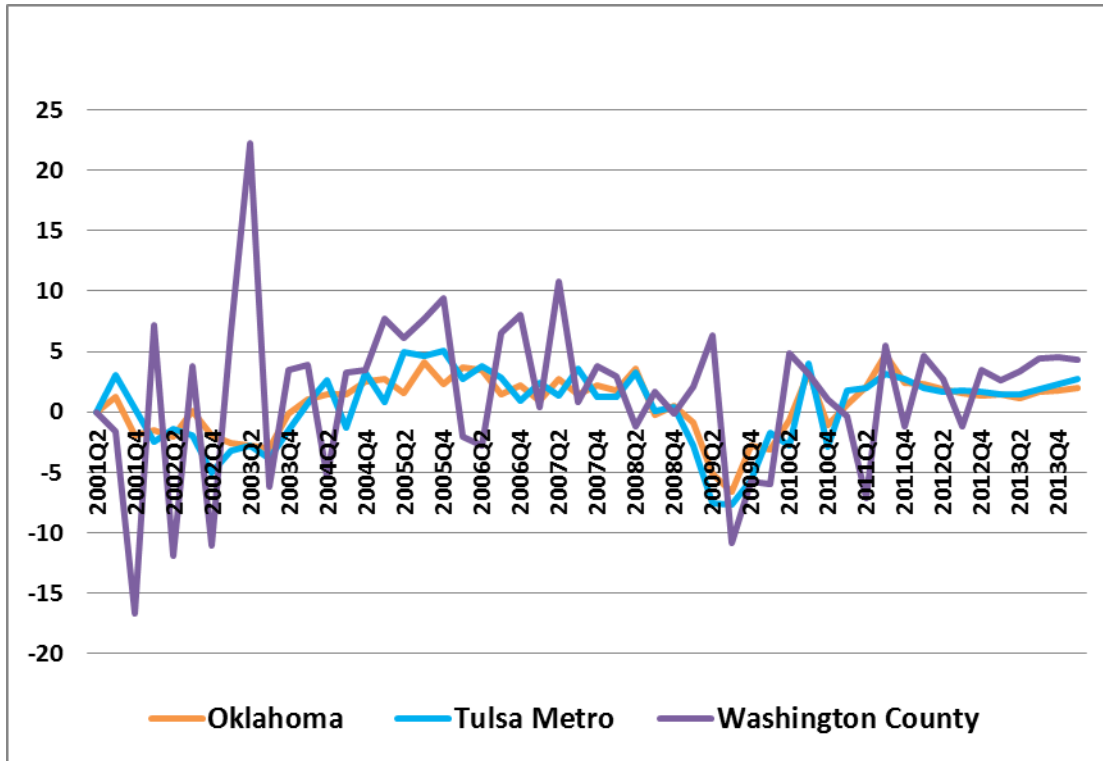


Figure 13: Tulsa Metro, U.S and Washington County Nonfarm Employment Growth 2002-2013 (Seasonally-Adjusted Annualized Percent Change)

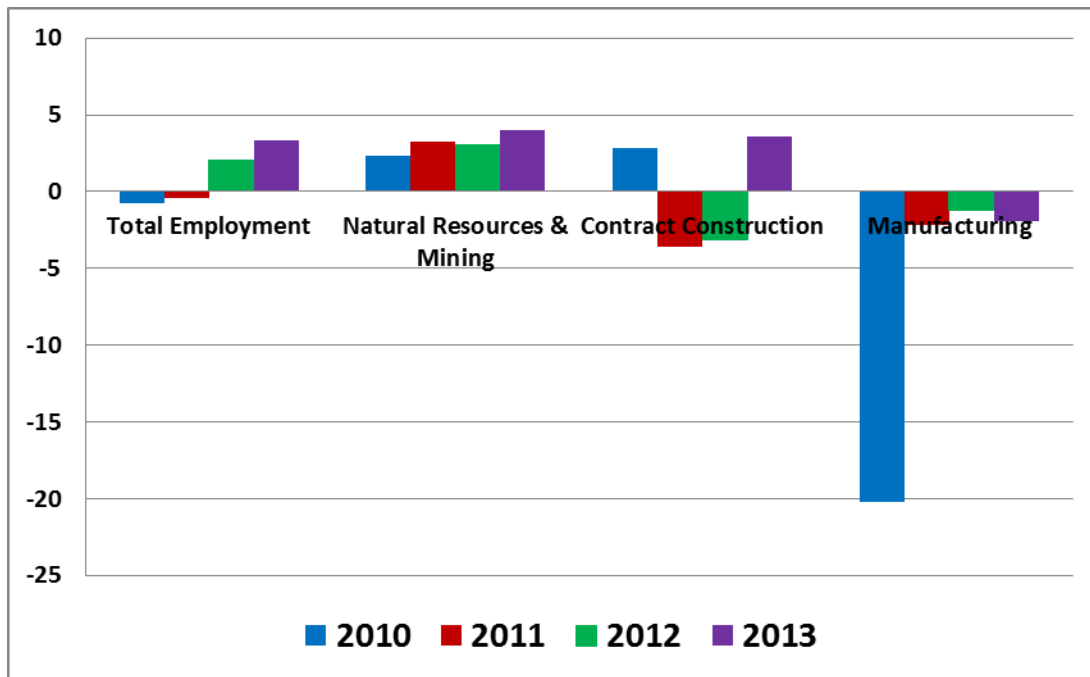


Figure 14: Washington County QCEW Employment Growth: Total and Sector Forecasts (Percent Change)

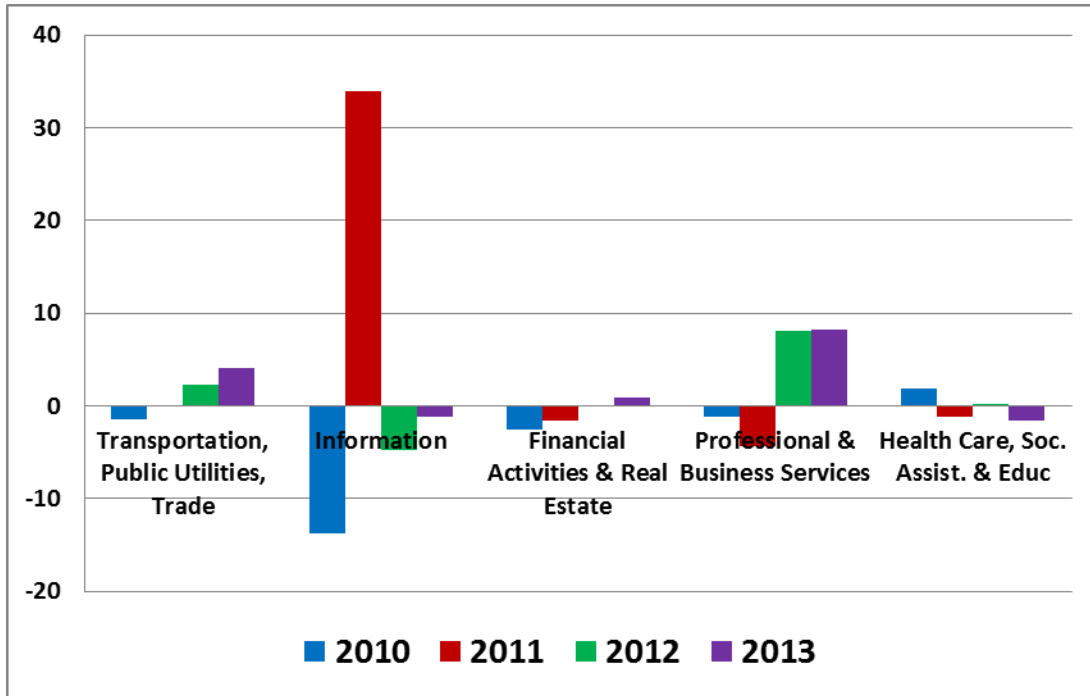


Figure 15: Washington County QCEW Employment Growth: Sector Forecasts (Percent Change)

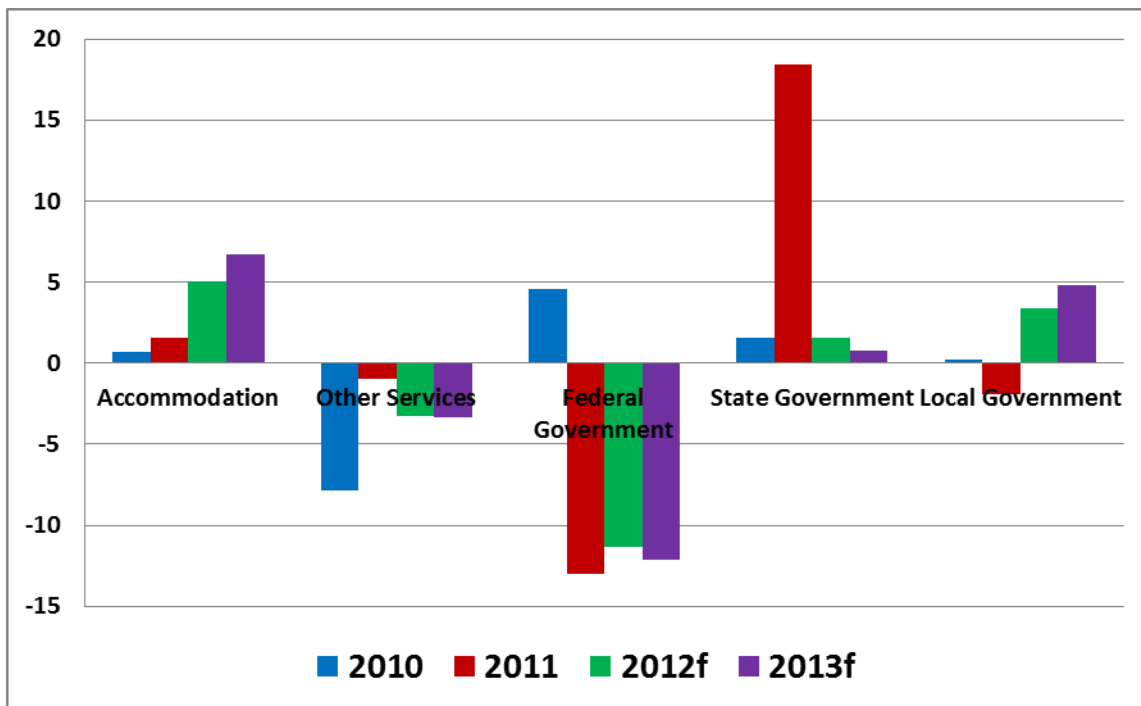


Figure 16: Washington County QCEW Employment Growth: Sector Forecasts (Percent Change)

manufacturing establishments between 2007 and 2010 has decreased from 52 to 45 according to the QCEW data and has lost 24% of its labor force during the given period.

Population growth in Washington County was 4.08 percent during the last decade. Because of its economic performance relative to many other parts of the country and late entry into the recession, it grew at 0.57 percent over the period of July 1st 2010 and July 1st 2011(Figure 17). Similar to other parts of the state which have outperformed the nation, it will see its population adjust downward as the gap in employment growth between itself and the rest of the nation narrows.

Figure 18 contains both historical and forecasts of the tax collections of the City of Bartlesville. After experiencing a significant decline in 2009, the collections are estimated to grow by about 4.5 percent in 2011 . Forecasts for 2012 and 2013 are for 3.6 and 3.0 percent growth respectively.

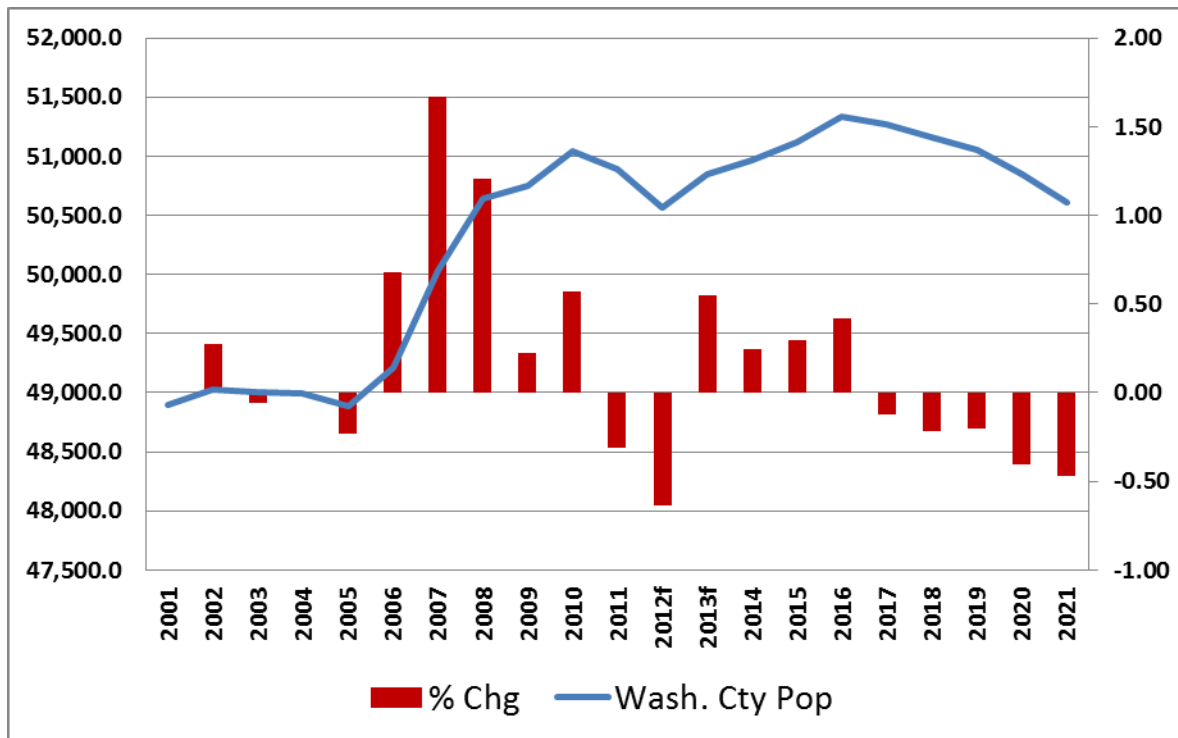


Figure 17: Washington County Population: Level and Percent Change

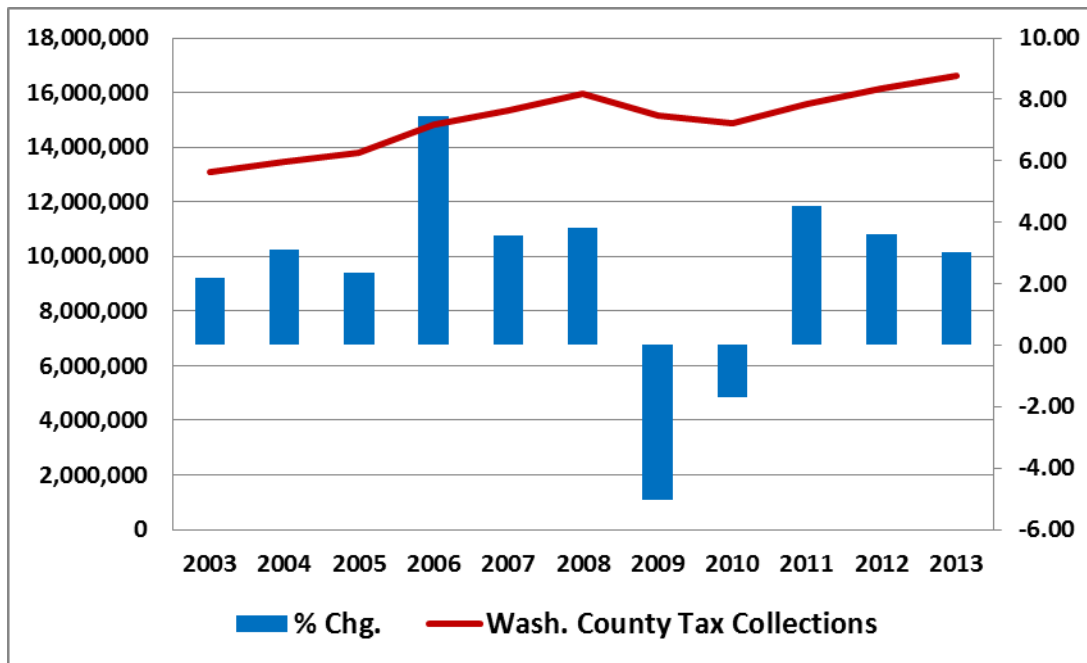


Figure 18: City of Bartesville Sales Tax Collections: Level and Percent Change

Pessimistic Scenario

Despite the positive momentum in the economy, considerable uncertainty remains. A worsening debt crisis in Europe, slowing growth in China, and policy mistakes in the U.S. could derail the recovery and send the economy back into recession. IHS Global Insight assesses the probability of the U.S. economy falling into recession at 30% (down from 40% in November). Figure 14 displays the employment forecasts associated with this scenario.

U.S. employment is forecast to decline nearly 0.8 percent in the recession scenario, a large change from the baseline forecast of over 1 percent growth. Oklahoma employment is forecast to decline nearly 0.3 percent under this scenario, approximately two percentage points lower than the baseline forecast. What is evident is how sensitive the Oklahoma economy is to national and world conditions. With energy prices dependent on national and worldwide growth, as shown during the last recession, they cannot be expected to completely buffer the state from a national and worldwide economic downturn.

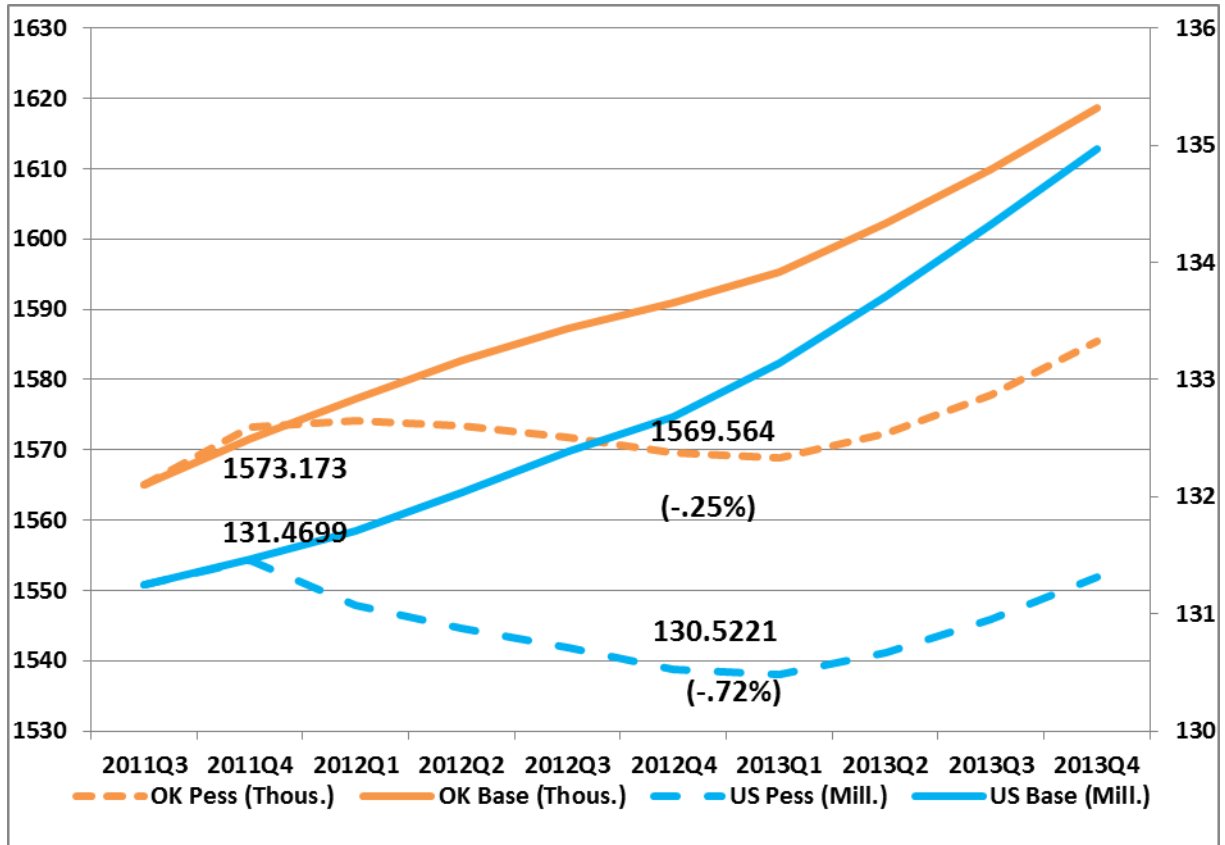


Figure 19: Pessimistic Scenario: U.S. and Oklahoma

References

Mian, Atif and Amir Sufi, 2009. "Household Leverage and the Recession of 2007 to 2009," 10th Jaques Polak Annual Research Conference, International Monetary Fund, November 5-6.

Rickman, Dan S. and Shane D. Rickman, 2011. "Population Growth in High-Amenity Nonmetropolitan Areas: What's the Prognosis," *Journal of Regional Science* 51(5), 863-879.

Table 1. Washington County and City of Bartlesville Economic Indicators (percent changes in parentheses below levels)

Indicator	2010	2011e	2012f	2013f
U.S. Gross Domestic Product (%Chg)	3.0	1.7	1.8	2.4
U.S. Employment (%Chg)	-0.7	1.0	1.1	1.6
U.S. Unemployment Rate (%)	9.6	9.0	9.0	8.8
U.S. Consumer Price Index (%Chg)	1.6	3.1	1.5	1.7
Oklahoma Nonfarm Employment (thous.)	1,526.20 (-1.03)	1,556.74 (2.00)	1,584.50 (1.78)	1,606.49 (1.39)
Bartlesville Micropolitan Area/Washington County Employment	20,303.5 (-0.76)	20,210 (-0.46)	20,628 (2.07)	21,316 (3.33)
Natural Resources & Mining	3,887.9 (2.35)	4,014.1 (3.24)	4,136.4 (3.05)	4,302.7 (4.02)
Manufacturing	646.0 (-20.2)	631.9 (-2.19)	623.9 (-1.26)	612.0 (-1.91)
Construction	518.7 (2.84)	500.1 (-3.59)	484.3 (-3.15)	501.8 (3.61)
Transportation Services, Public Utilities, Trade	4,033 (-1.49)	4,028.3 (-0.14)	4,122.7 (2.34)	4,289.3 (4.04)
Information	117.5 (-13.81)	157.5 (33.98)	149.9 (-4.84)	148.2 (-1.13)
Financial Services & Real Estate	915.4 (-2.53)	901.1 (-1.56)	900.00 (-0.13)	908.5 (0.94)
Professional & Business Services	1926.7 (-1.13)	1841.8 (-4.41)	1990.6 (8.08)	2,154 (8.21)
Health, Social & Education Services	3,071.1 (1.87)	3,033.4 (-1.23)	3,041.4 (0.26)	2,992.7 (-1.60)
Accommodation, Food Services & Leisure Services	1999.4 (0.69)	2030.2 (1.54)	2132.2 (5.02)	2274.7 (6.69)
Other Services	613.3 (-7.82)	607.4 (-0.97)	587.5 (-3.28)	568.1 (-3.30)
Federal Government	113.6 (4.56)	98.8 (-13.01)	87.6 (-11.37)	77.0 (-12.13)
State Government	142.2 (1.54)	168.3 (18.39)	171 (1.56)	172.3 (0.78)
Local Government	2,317.7 (0.19)	2,274.1 (-1.88)	2,350.6 (3.36)	2,462.8 (4.77)
Washington County Population	51,045 (0.57)	50,886 (-0.53)	50,564 (-0.63)	50,843 (0.55)
Washington County Unempl. Rate (%)	6.03	4.90	5.39	5.59
Bartlesville Sales Tax Collections	14,893,743 (-1.70)	15,567,162 (4.52)	16,131,161 (3.62)	16,618,523 (3.02)