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Stillwater Economic Outlook 2012

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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 at 2.1 and 2.3 percent, respectively. 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. Employment growth is expected to accelerate in 2012 to 1.5 percent, continuing at 1.6 percent in 2013.

The Oklahoma economy arrived late in the recession but emerged 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 2011. Average annual Oklahoma nonfarm employment is estimated to have finished 2011 two percent higher than that of 2010. Growth is forecast to continue at two percent in 2012, slowing to 1.6 percent in 2013, reaching the pre-recession peak.

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, the source of the national forecast for this report, assesses the probability of the U.S. economy falling back into recession at 25%. Oklahoma employment is forecast to be flat under this recession scenario

Although the Stillwater Micropolitan Area, consisting of Payne County, experienced robust population growth during the previous decade, the national recession hit the area hard. With the closing of the MerCruiser plant and expected closure of the Quad/Graphics facility this year, the Stillwater area faces significant economic headwinds. Yet, the national economic recovery will help push Payne County to one percent employment growth in 2012 and two percent growth in 2013. Contributing to the forecasted total employment growth is growth in most sectors and moderated rates of decline in others. Following the nation, the housing sector is expected to begin to rebound. Growth in wages and salaries and sales tax collections are forecast to accelerate, though at rates below those achieved prior to the onset of the recent recession.

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 worldwide. U.S. GDP is estimated to have finished year 2011 at 1.7 percent higher than the level produced in 2010. Real GDP growth is forecast at 2.1 percent in 2012 and 2.3 percent in 2013, which falls below long-run trend growth. IHS Global Insight, Inc. assesses the probability of the U.S. economy falling back into recession at 25 percent.

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.

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 begins to increase later. Following the end of the recession in 2001, employment declines continued until the fall of 2003. 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 estimated to have finished 2011 1.2 percent higher than the level achieved in 2010. Growth of 1.5 percent is forecast for each of 2012 and 2013. These employment growth rates are expected to bring unemployment down from 9 percent in 2010, to 8.3 percent in 2011 and 8.1 percent in 2012. The unemployment rate is only expected to approach the full employment level by the end of the decade.

The oil sector is expected to remain strong, while the natural gas sector has softened. As shown in Figure 3, the price of West Texas Intermediate Oil is forecast to increase throughout 2012 and 2013. The price of natural gas (Henry Hub) is forecast to decrease in 2012 in response to increased domestic supply and a warm winter nationwide. 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. Every ten dollar per barrel increase in the price of oil is estimated to reduce U.S. GDP growth by 0.2 percent in the first year and 0.5 percent in the second year.

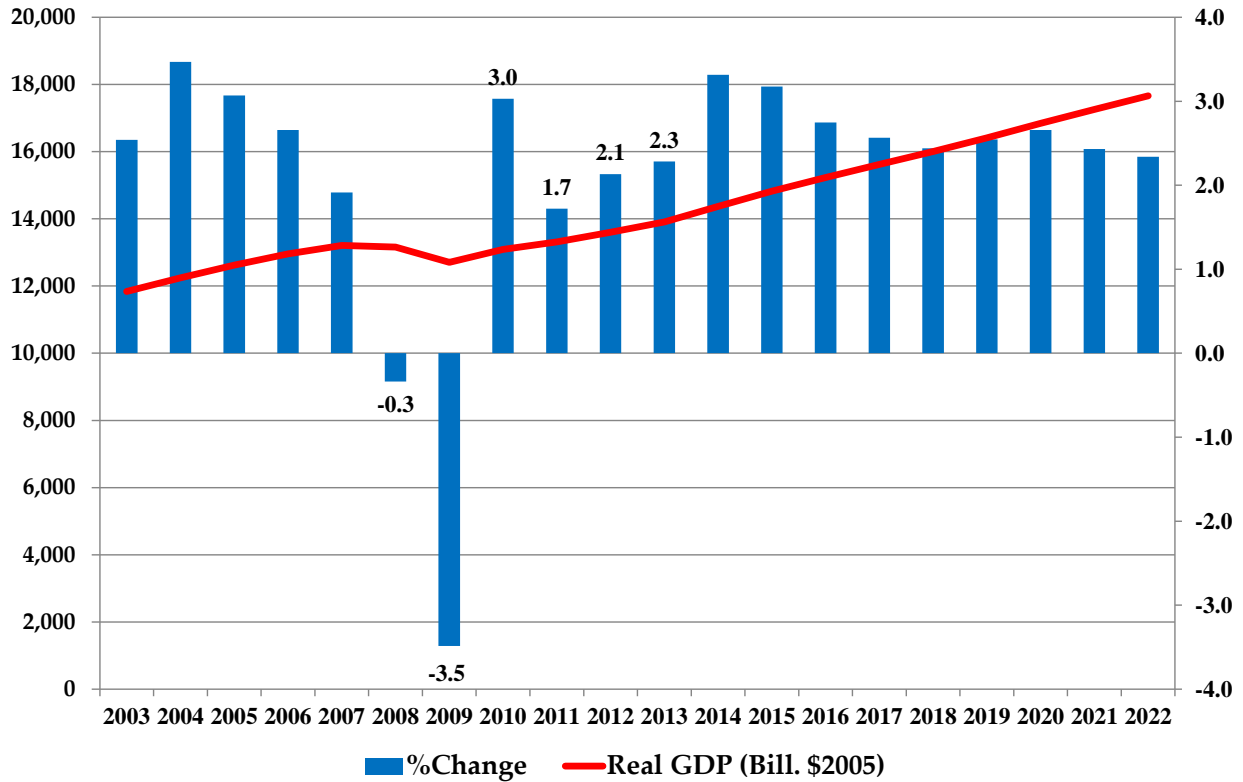


Figure 1. U.S. Real GDP: Percent Change (IHS Global Insight)

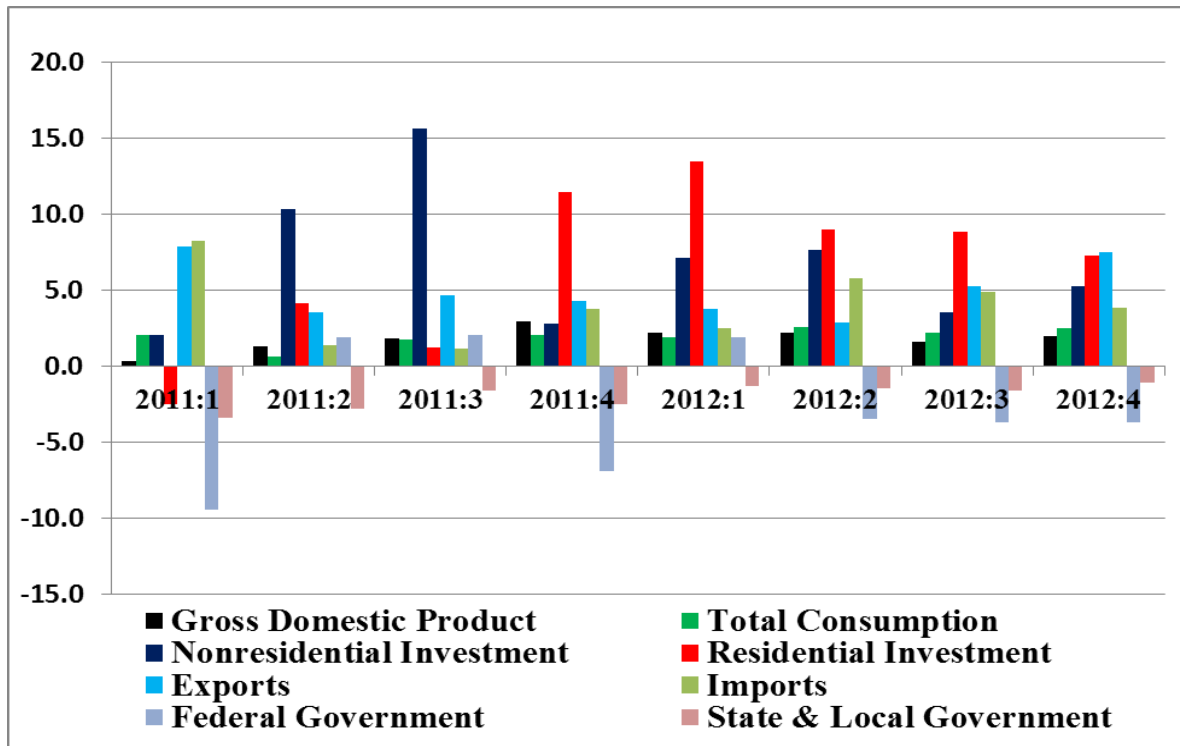


Figure 2. U.S. Real GDP Component Growth: Percent Change (IHS Global Insight)

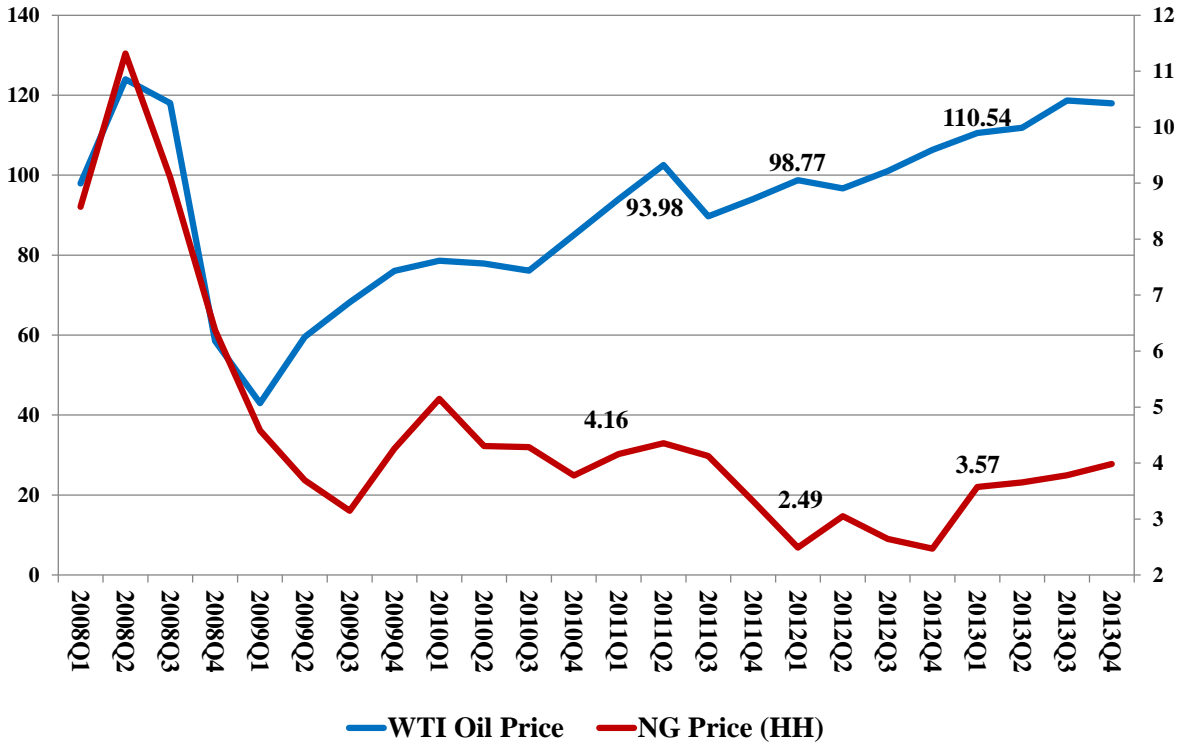


Figure 3. Energy Price Forecasts: Current Dollars (IHS Global Insight)

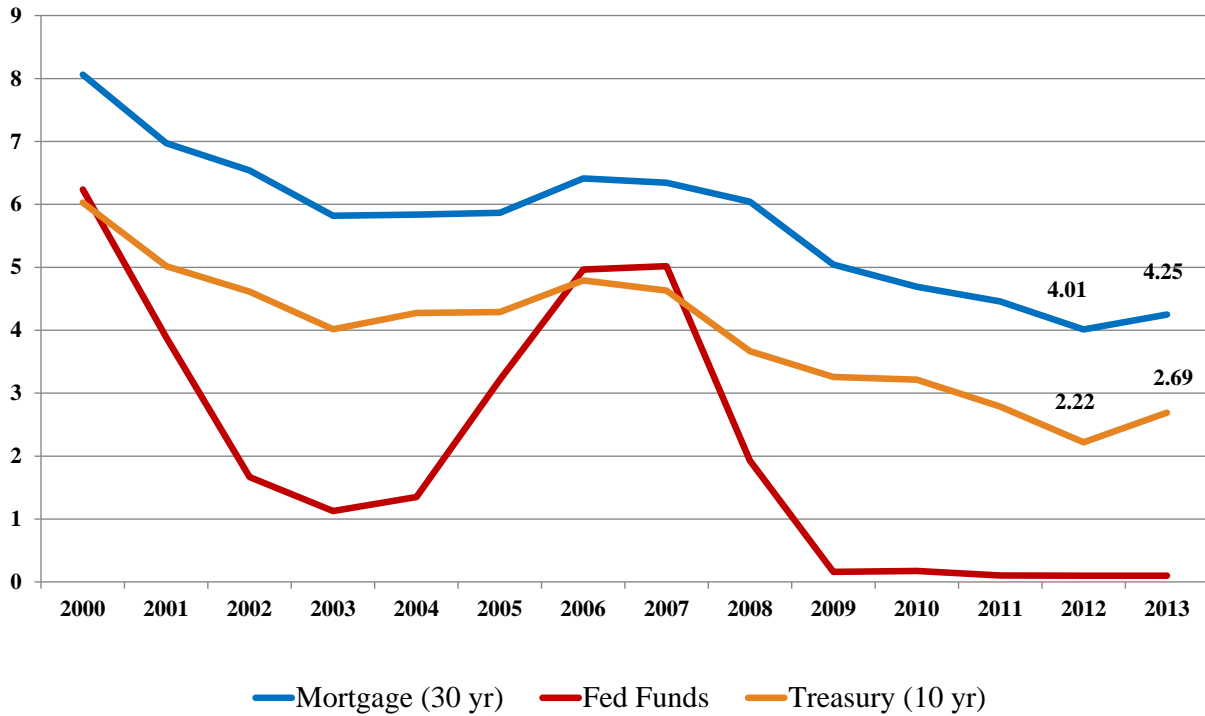


Figure 4. U.S. Interest Rate Forecast: Percent (IHS Global Insight)

As shown in Figure 4, the Federal Funds Rate is expected to remain at approximately zero percent through 2013. The Federal Reserve is not expected to significantly begin raising interest rates until 2015. Longer term interest rates are forecast to hit bottom in 2012 and then rise slightly in 2013 as the economy expands and no further quantitative easing is expected from the Federal Reserve.

Oklahoma Economic Forecast

The Oklahoma economy lagged behind the nation in falling into recession (Figure 5). 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 (mostly areas with high levels of natural amenities) saw rapid increases in housing prices, household leverage and booms in construction employment during the period of 2002 to 2006. 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 and the financial sector collapsed.

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 5). Based on data through the end of 2011, employment is estimated to have averaged two percent higher in 2011 when compared to 2010. Growth is forecast to continue approximately at two percent in 2012 and moderate to 1.6 percent in 2013. Only in 2013 does the level of employment exceed the peak established in 2008. The 2013 employment growth rate forecast is roughly on par with the forecast for the nation.

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.

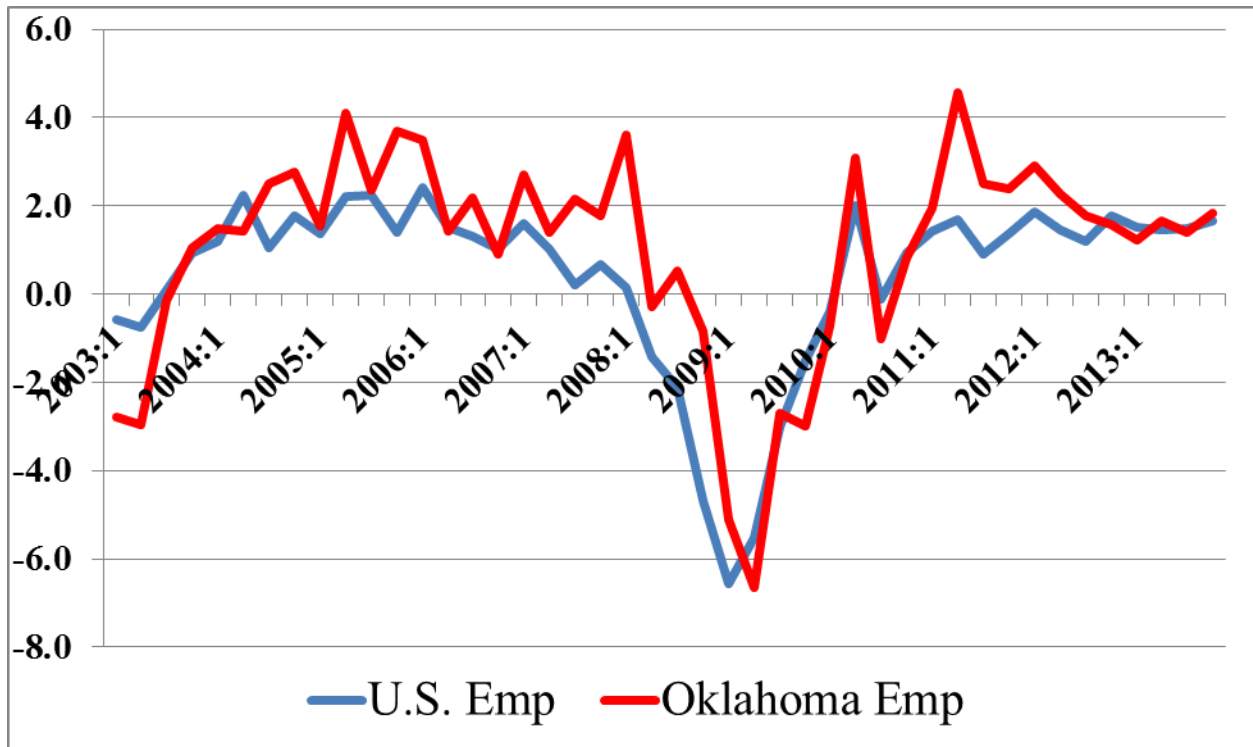


Figure 5. Quarterly U.S. and Oklahoma Nonfarm Employment Growth (Seasonally-Adjusted Annualized Percent Change)

Stillwater Economic Outlook:

The Stillwater Micropolitan Area, consisting of Payne County, experienced strong population growth during the previous decade. Among the 576 micropolitan areas, the Stillwater area experienced the 76th fastest rate of growth at 13.4 percent (Figure 6). Most of the top fifteen fastest growing micropolitan areas were those commonly perceived to have a high quality of life. Most of the fifteen slowest growing areas were located in the South. Within Oklahoma, as shown in Figure 7, only the Durant Micropolitan area experienced faster population growth. Among Oklahoma metropolitan areas, only the Oklahoma City area experienced faster employment growth than Stillwater.

Along with the rest of the nation, however, Stillwater suffered economic losses near the end of the decade. Most notably, the closing of the MerCruiser plant hit the area economy hard. Subsequently, Quad/Graphics Inc. announced plans to shut down its facility in Stillwater. While manufacturing employment declined nationally during the Great Recession, consolidation of manufacturing production in the U.S. appears to have hurt smaller and remote areas the most. A consistent trend in recent decades has been slower manufacturing employment growth in non-metropolitan areas which are smaller and more remote (Partridge, Rickman, Ali and Olfert, 2008). This trend represents a significant challenge to Stillwater going forward.

| Rank | Micropolitan Area | 2010 Pop. | % Chg. (2000-2010) |
|-----------|---------------------------------|---------------|--------------------|
| 1 | The Villages, FL | 93,420 | 75.1 |
| 2 | Heber, UT | 23,530 | 54.7 |
| 3 | Fernley, NV | 51,980 | 50.7 |
| 4 | Gillette, WY | 46,133 | 36.9 |
| 5 | Cedar City, UT | 46,163 | 36.7 |
| 6 | Culpeper, VA | 46,689 | 36.3 |
| 7 | Pahrump, NV | 43,946 | 35.3 |
| 8 | Hilton Head Island-Beaufort, SC | 187,010 | 32.1 |
| 9 | Bozeman, MT | 89,513 | 32.0 |
| 10 | Statesville-Mooresville, NC | 159,437 | 30.0 |
| 11 | Daphne-Fairhope-Foley, AL | 182,265 | 29.8 |
| 12 | Jackson, WY-ID | 31,464 | 29.7 |
| 13 | Rexburg, ID | 50,778 | 29.3 |
| 14 | Vernal, UT | 32,588 | 29.2 |
| 15 | Fort Leonard Wood, MO | 52,274 | 27.0 |
| 76 | Stillwater, OK | 77,350 | 13.4 |
| 562 | El Dorado, AR | 41,639 | -8.7 |
| 563 | Camden, AR | 31,488 | -8.8 |
| 564 | Wahpeton, ND-MN | 22,897 | -8.9 |
| 565 | St. Marys, PA | 31,946 | -9.0 |
| 566 | Garden City, KS | 36,776 | -9.2 |
| 567 | Bastrop, LA | 27,979 | -9.8 |
| 568 | Blytheville, AR | 46,480 | -10.6 |
| 569 | Tuskegee, AL | 21,452 | -11.0 |
| 570 | Greenwood, MS | 42,914 | -11.9 |
| 571 | Tallulah, LA | 12,093 | -11.9 |
| 572 | Indianola, MS | 29,450 | -14.3 |
| 573 | Clarksdale, MS | 26,151 | -14.6 |
| 574 | Cleveland, MS | 34,145 | -16.0 |
| 575 | Helena-West Helena, AR | 21,757 | -17.7 |
| 576 | Greenville, MS | 51,137 | -18.8 |

Figure 6. U.S. Micropolitan Population Growth 2000-2010 (Source: U.S. Census Bureau)

| Rank | Micropolitan Area | 2010 Pop. | % Chg. (2000-2010) |
|-----------|-------------------|---------------|--------------------|
| 58 | Durant | 42,416 | 16.1 |
| 76 | Stillwater | 77,350 | 13.4 |
| 100 | Elk City | 22,119 | 11.7 |
| 117 | Tahlequah | 46,987 | 10.5 |
| 156 | Woodward | 20,081 | 8.6 |
| 193 | Ada | 37,492 | 6.7 |
| 212 | Shawnee | 69,442 | 6.0 |
| 234 | Weatherford | 27,469 | 5.1 |
| 245 | Enid | 60,580 | 4.8 |
| 248 | Ardmore | 56,980 | 4.6 |
| 260 | Duncan | 45,048 | 4.3 |
| 262 | McAlester | 45,837 | 4.3 |
| 275 | Bartlesville | 50,976 | 4.0 |
| 320 | Guymon | 20,640 | 2.7 |
| 335 | Muskogee | 70,990 | 2.2 |
| 500 | Ponca City | 46,562 | -3.2 |
| 517 | Miami | 31,848 | -4.1 |
| 555 | Altus | 26,446 | -7.0 |
| Rank | Metropolitan Area | 2010 Pop. | % Chg. (2000-2010) |
| 114 | Oklahoma City | 1,252,987 | 14.4 |
| 187 | Fort Smith | 298,592 | 9.3 |
| 197 | Tulsa | 937,478 | 9.1 |
| 216 | Lawton | 124,098 | 7.9 |

Figure 7. Oklahoma Urban Area Population Growth 2000-2010 (Source: U.S. Census Bureau)

As shown in Figure 8, based on U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wage data through the second quarter of 2011, following two years of decline during the recession, manufacturing employment is forecast to rebound in 2011, and continue growing in 2012 and 2013. Total employment is forecast to increase one percent in 2011 and two percent in 2012. Growth also is expected in Education Services, while employment is expected to remain fairly flat over the next two years in Hospitality Services (Accommodations, Food Services and Leisure). Following the boom and bust in Construction employment associated with the Keystone Pipeline project, employment in Construction is projected to rebound slightly in 2012, losing some of the gains in 2013. With the exception of Retail Trade, each of the sectors shown in Figure 8 followed their national counterparts during the previous decade. Retail Trade employment exhibited a downward long-term trend in employment during the previous decade, with fluctuations around the trend driven by local wages and salaries.

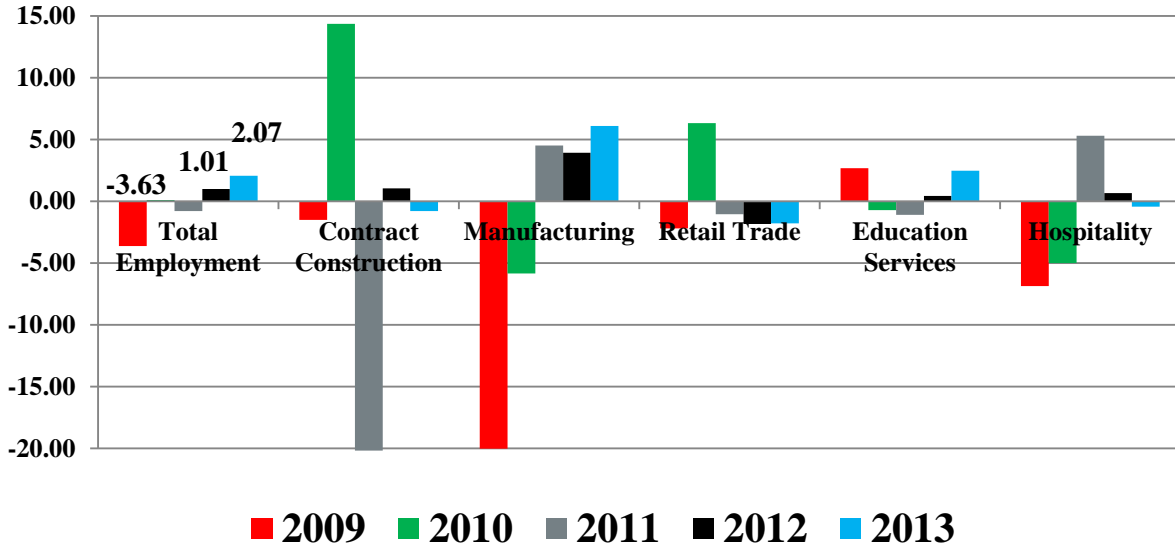


Figure 8. Payne County QCEW Employment Growth (Percent): Total and Key Sectors

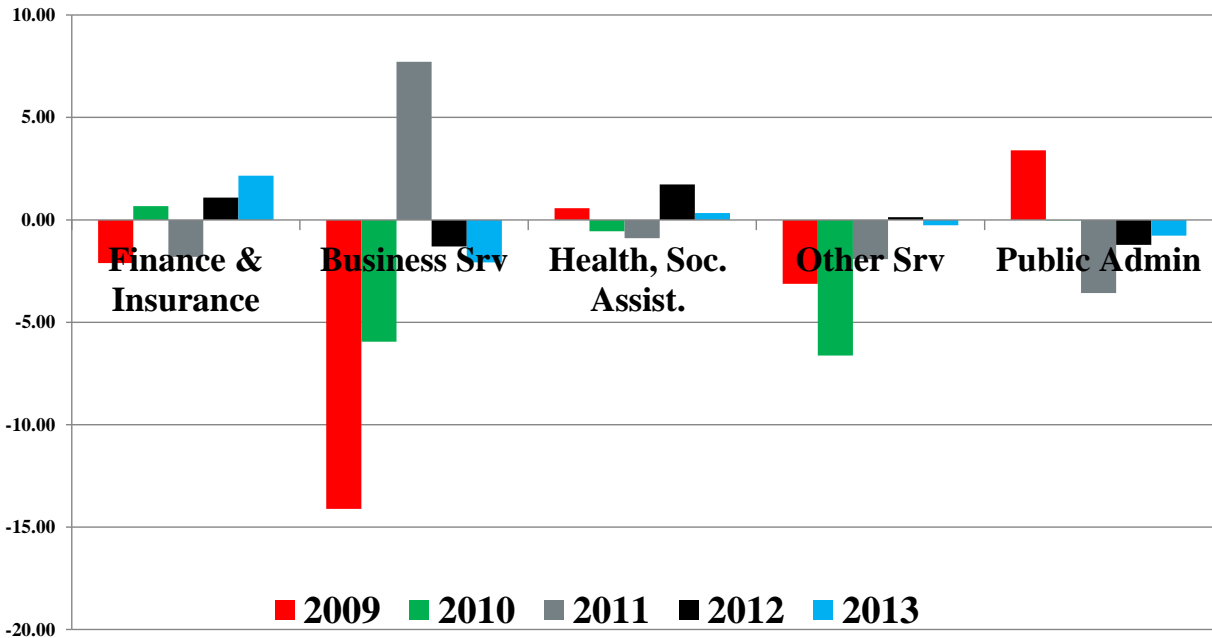


Figure 9. Payne County QCEW Employment Growth (Percent): Key Sectors

Forecasts of other key sectors for Payne County are shown in Figure 9. Growth is forecast to rebound in Financial and Insurance Services and Health and Social Assistance Services. Following a rebound in 2011, slight losses in employment are forecast for Business Services, with slight losses also forecast to occur in Public Administration. Employment in Other Services is expected to remain steady. With the exception of Other Services, each of the sectors shown in Figure 9 followed their national counterparts during the previous decade. Employment in Other Services exhibited a steady downward trend, with fluctuations around the trend driven by total employment in the county.

Figure 10 displays Payne County population over recent decades and projections for 2011-2013. Also included in the figure is total wage and salary employment from the U.S. Bureau of Economic Analysis. Until the previous decade, population followed employment. In recent years, population continued to increase despite stagnation of (or losses in) employment. Population is forecast to continue growing, in large part likely driven by natural (births in excess of deaths) increases in population. Migration data from the U.S. Internal Revenue Service Statistics of Income series for 2009-2010 (not shown) reveals in-migration of individuals from nearby nonmetropolitan counties into Payne County, particularly from Kay County and Garfield County. Significant out-migration of individuals from Payne County to counties in the metropolitan areas of Oklahoma City and Tulsa occurred, particularly to Oklahoma County and Tulsa County.

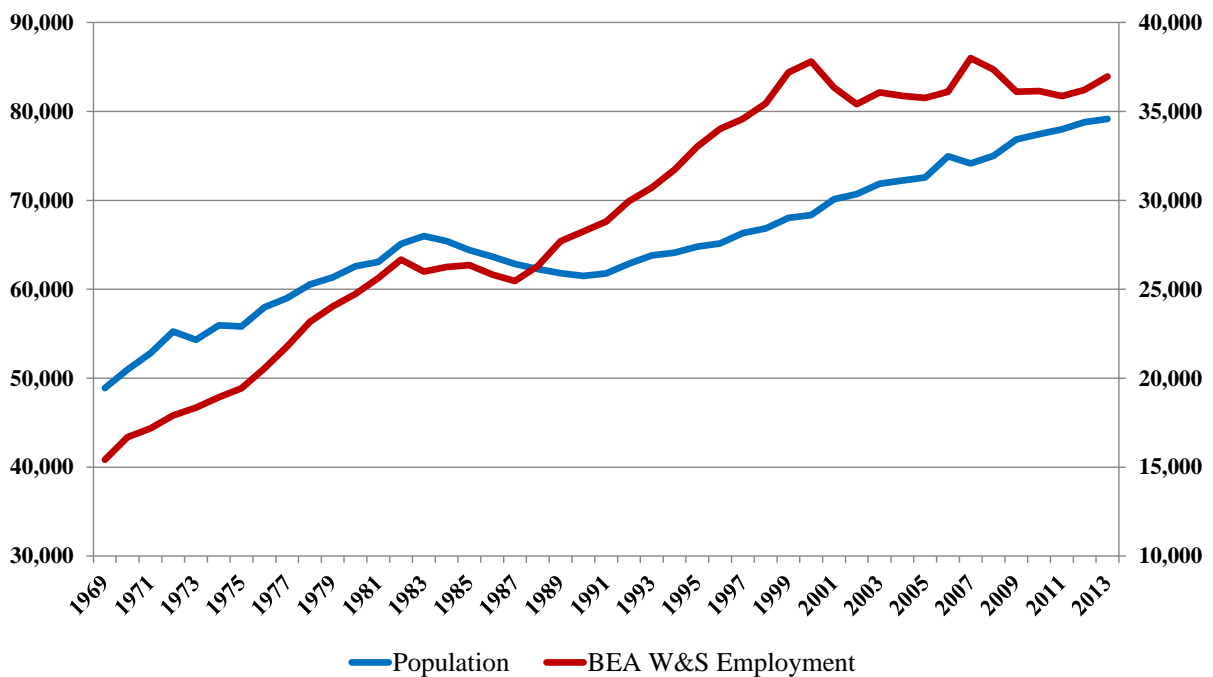


Figure 10. Payne County Population

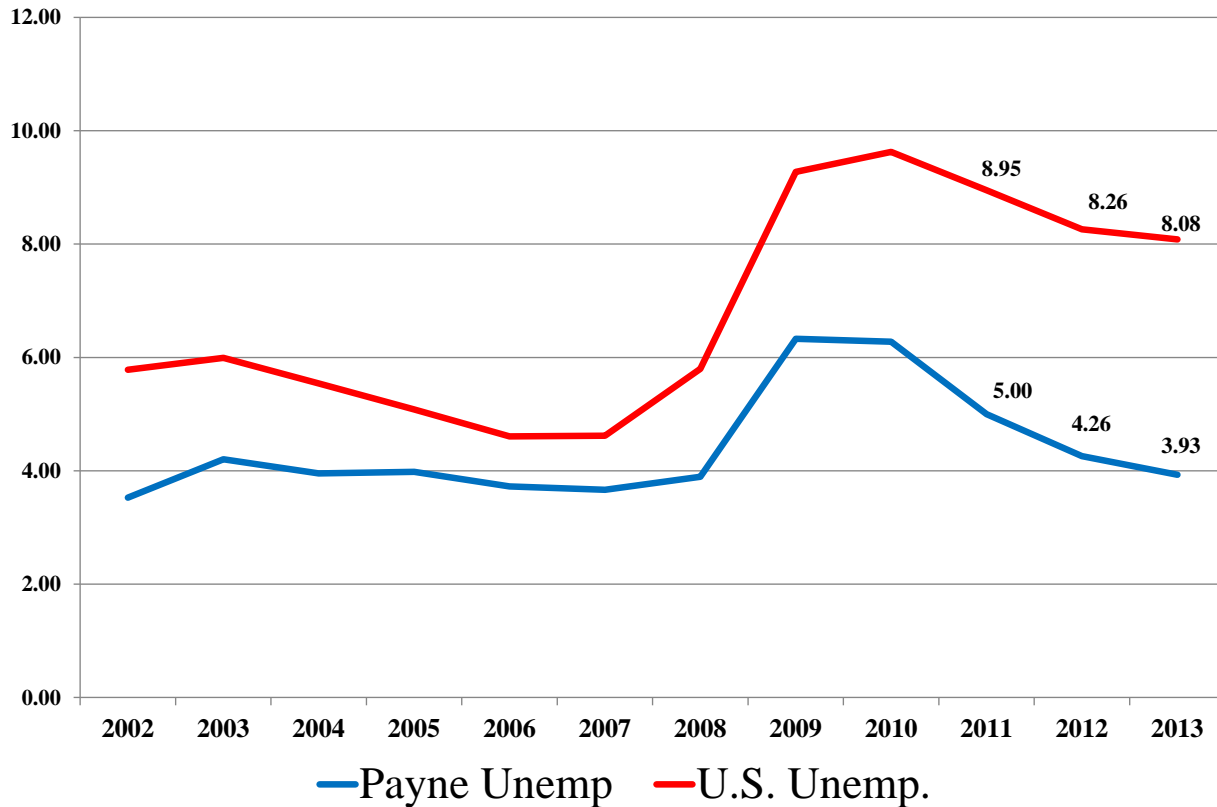


Figure 11. U.S. and Payne County Unemployment Rate Forecasts (Percent)

As shown in Figure 11, following the national trend, the Payne County unemployment rate is forecast to decline in 2012 and 2013 with the growth in employment. The Payne County unemployment rate is forecast to reach the level at which it entered the recession, around four percent. The U.S. unemployment rate is forecast to remain significantly higher, and is not expected to reach the full employment rate, around 5.0-5.5 percent, until the end of the decade.

Corresponding to the forecasted growth in employment, growth is forecast for total wages and salaries in Payne County during 2012 and 2013, though the rates of growth are expected to remain below those achieved during the middle of the decade prior to the onset of the recession (Figure 12). Likewise, as shown in Figure 13, based on data through the end of 2011, Stillwater sales tax collections are forecast to follow the rebound in wage and salary growth. Again, the rate of sales tax collection growth is expected to remain below the rates achieved just prior to the onset of the recession.

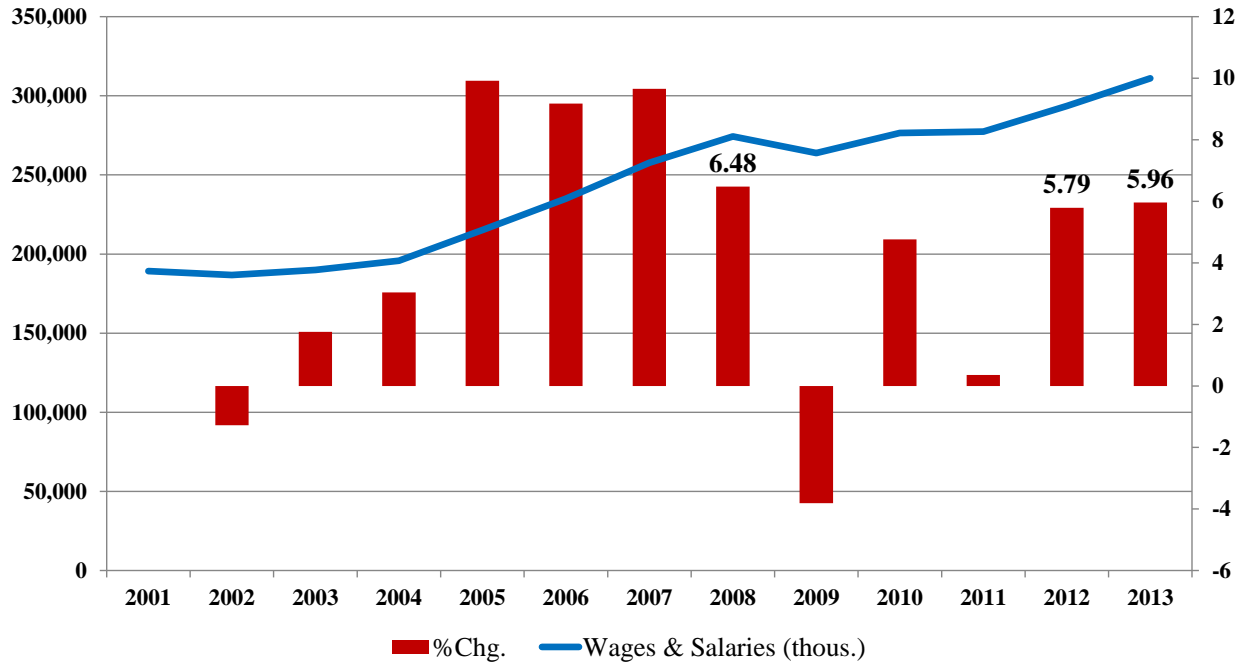


Figure 12. Payne County QCEW Wages and Salaries

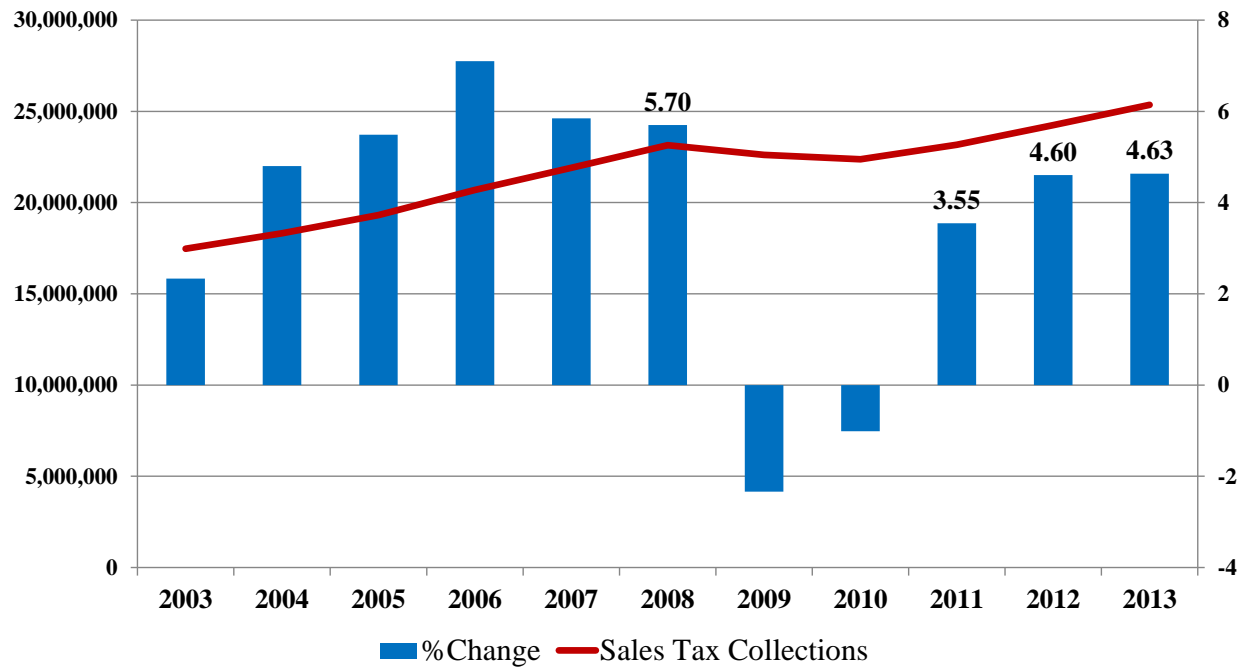


Figure 13. City of Stillwater Sales Tax Collections (Current Dollars and Percent Change)

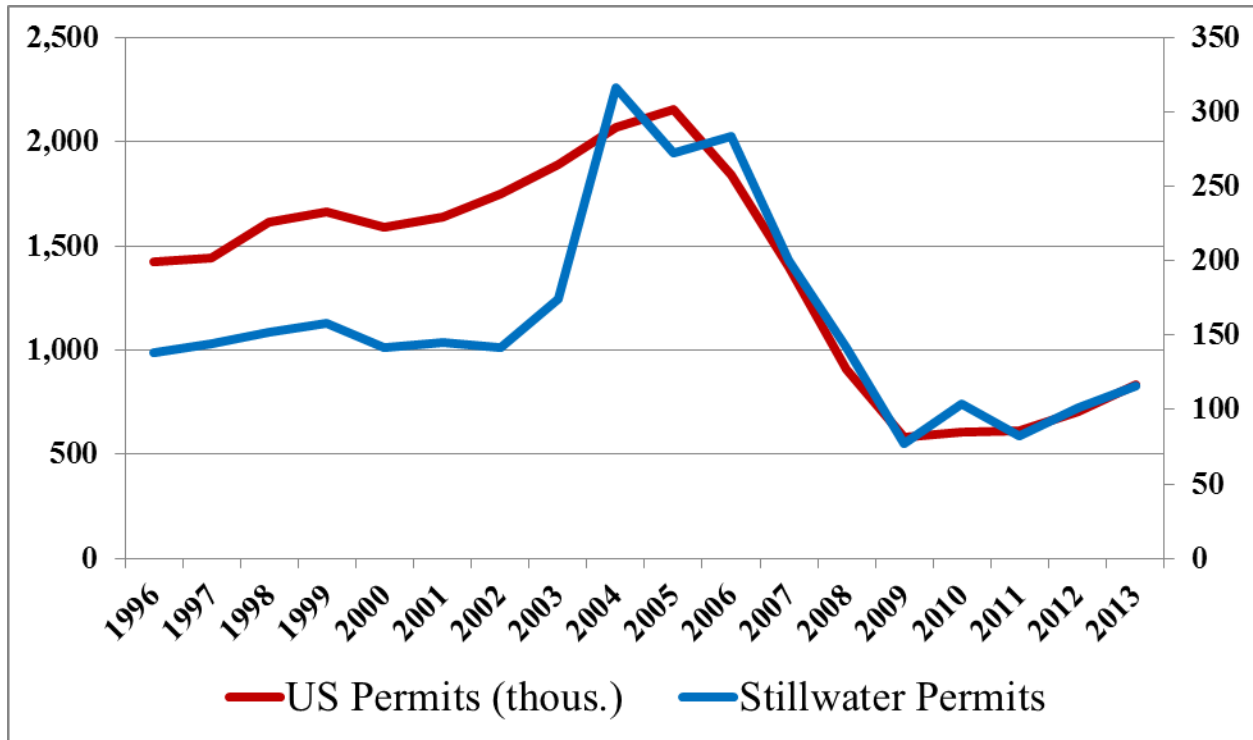


Figure 14. Stillwater City Census Building Permits (Number of Buildings)

Figure 14 shows the number of building permits for the nation and the City of Stillwater. Stillwater’s increase in permits prior to the recession occurred over a shorter period of time than that of the nation. However, the decline in Stillwater permits follows the national decline very closely. IHS Global Insight, Inc. forecasts the beginning of a rebound in the housing sector in 2012 and into 2013. Therefore, based on the historical relationship with the national housing sector, the number of Stillwater building permits is forecast to increase slightly in 2012 and 2013.

References

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Partridge, Mark D., Dan S. Rickman, Kamar Ali and M. Rose Olfert, 2008. “Employment Growth in the American Urban Hierarchy: Long Live Distance,” *The B.E. Journal of Macroeconomics: Contributions* 8(1), Article 10.

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Table 1. Payne County/Stillwater Economic Indicators (percent changes in parentheses below levels)

| Indicator | 2010 | 2011 | 2012 | 2013 |
|---|---------------------|--------------------|--------------------|--------------------|
| U.S. Gross Domestic Product (%Chg) | 3.0 | 1.7 | 2.1 | 2.3 |
| U.S. Employment (%Chg) | -0.7 | 1.2 | 1.5 | 1.5 |
| U.S. Unemployment Rate (%) | 9.6 | 9.0 | 8.3 | 8.1 |
| U.S. Consumer Price Index (%Chg) | 1.6 | 3.1 | 2.0 | 1.8 |
| Oklahoma Nonfarm Employment (thousands, history ends 2011q2) | 1,526.22 (-1.03) | 1,556.90 (2.01) | 1,588.82 (2.05) | 1,613.13 (1.53) |
| Payne County Employment | 31,382 (0.10) | 31,135 (-0.79) | 31,448 (1.01) | 32,100 (2.07) |
| Natural Resources & Mining | 925 (8.37) | 897 (-3.06) | 1,055 (17.67) | 1,314 (24.53) |
| Manufacturing | 2,154 (-5.84) | 2,251 (4.51) | 2,339 (3.94) | 2,482 (6.10) |
| Construction | 1,613 (14.37) | 1,287 (-20.18) | 1,301 (1.05) | 1,291 (-0.78) |
| Transportation & Warehousing | 345 (-2.34) | 346 (0.50) | 351 (1.26) | 356 (1.41) |
| Public Utilities | 256 (-0.66) | 257 (0.45) | 259 (0.84) | 262 (1.15) |
| Retail Trade | 3,751 (6.33) | 3,712 (-1.05) | 3,644 (-1.83) | 3,579 (-1.78) |
| Wholesale Trade | 524 (3.51) | 530 (0.97) | 558 (5.31) | 590 (5.80) |
| Information | 358 (5.97) | 300 (-16.19) | 292 (-2.47) | 309 (5.71) |
| Finance and Insurance | 781 (0.68) | 767 (-1.80) | 776 (1.09) | 792 (2.15) |
| Real Estate | 394 (-4.90) | 431 (9.35) | 469 (8.88) | 524 (11.58) |
| Business Services | 781 (-5.95) | 841 (7.72) | 830 (-1.30) | 813 (-2.08) |
| Professional Services | 1,000 (4.72) | 1,008 (0.83) | 1,006 (-0.28) | 1,005 (-0.04) |
| Health Care, Social Assistance | 3,158 (-0.55) | 3,129 (-0.90) | 3,183 (1.73) | 3,194 (0.33) |
| Education Services | 9,540 (-0.72) | 9,436 (-1.10) | 9,478 (0.45) | 9,712 (2.46) |
| Accommodation, Food Services & Leisure Services | 3,450 (-4.99) | 3,633 (5.31) | 3,657 (0.66) | 3,641 (-0.44) |
| Other Services | 828 (-6.63) | 812 (-1.92) | 813 (0.13) | 811 (-0.27) |
| Public Administration | 1,509 (-0.02) | 1,455 (-3.58) | 1,437 (-1.22) | 1,426 (-0.77) |

| | | | | |
|--|-------------------------------|------------------------------|------------------------------|------------------------------|
| Payne County Wages and Salaries (thousands current dollars) | 276,468 (4.76) | 277,444 (0.35) | 293,507 (5.79) | 311,001 (5.96) |
| Payne County Population (history ends 2010) | 77,448 (0.77) | 77,997 (0.71) | 78,786 (1.01) | 79,152 (0.47) |
| Stillwater Sales Tax Collections (history ends 2011) | 22,378,792 (-1.01) | 23,172,261 (3.55) | 24,239,076 (4.60) | 25,362,281 (4.63) |
| Stillwater Building Permits (history ends 2011) | 104 (35.06) | 82 (-21.15) | 101 (22.99) | 116 (14.54) |
| | | | | |