



OKLAHOMA Economic Indicators

December 2012

OKLAHOMA ECONOMIC INDICATORS

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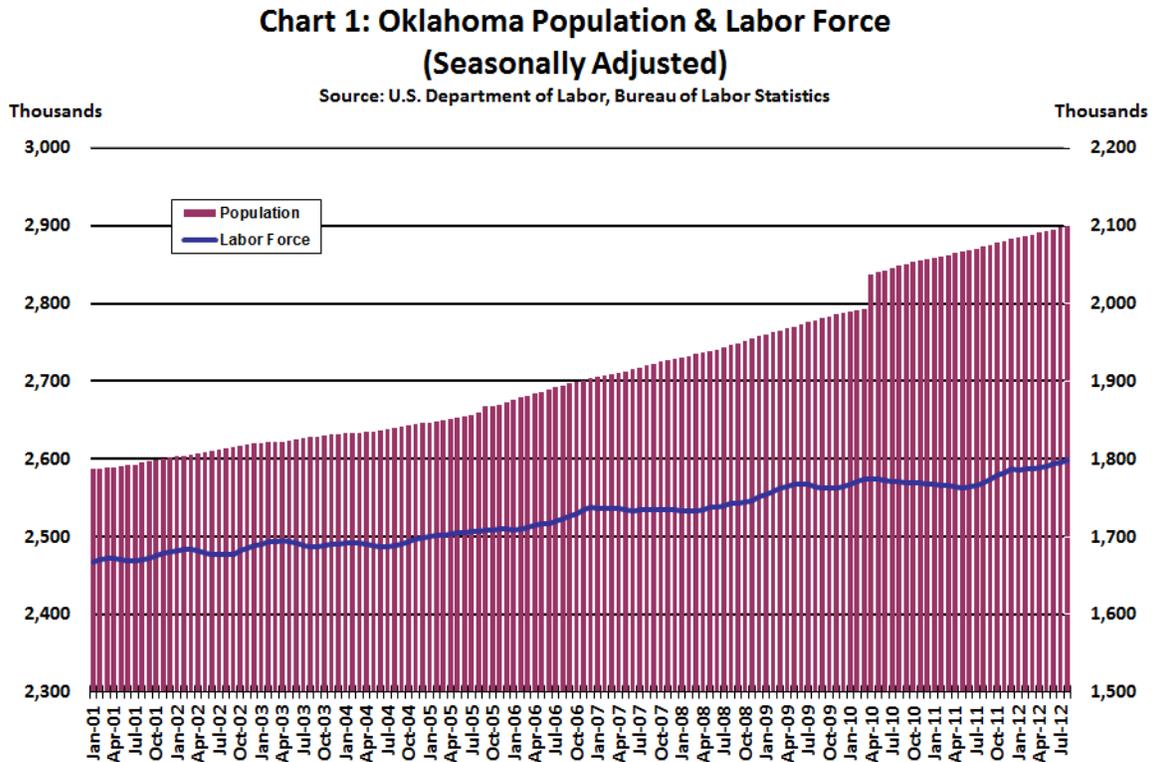
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SPECIAL REPORT: Changes in the Female Labor Force in Oklahoma: 2001-2011

Data from the Bureau of Labor Statistics (BLS) shows that between January 2001 and August 2012, Oklahoma's non-institutionalized civilian population, (herein referred to as simply 'population'), increased from 2,587,395 to 2,900,217, or 12.1 percent. The labor force grew at a much slower pace for the period, increasing only 7.9 percent from 1,667,995 to 1,798,940. In comparison, the United States as a whole had a population increase of 13.9 percent and a labor force increase of 7.5 percent. In general, Oklahoma was consistent with the national trends in population and labor force growth rates during the past 12 years. Chart 1 displays the trends in Oklahoma population and labor force.

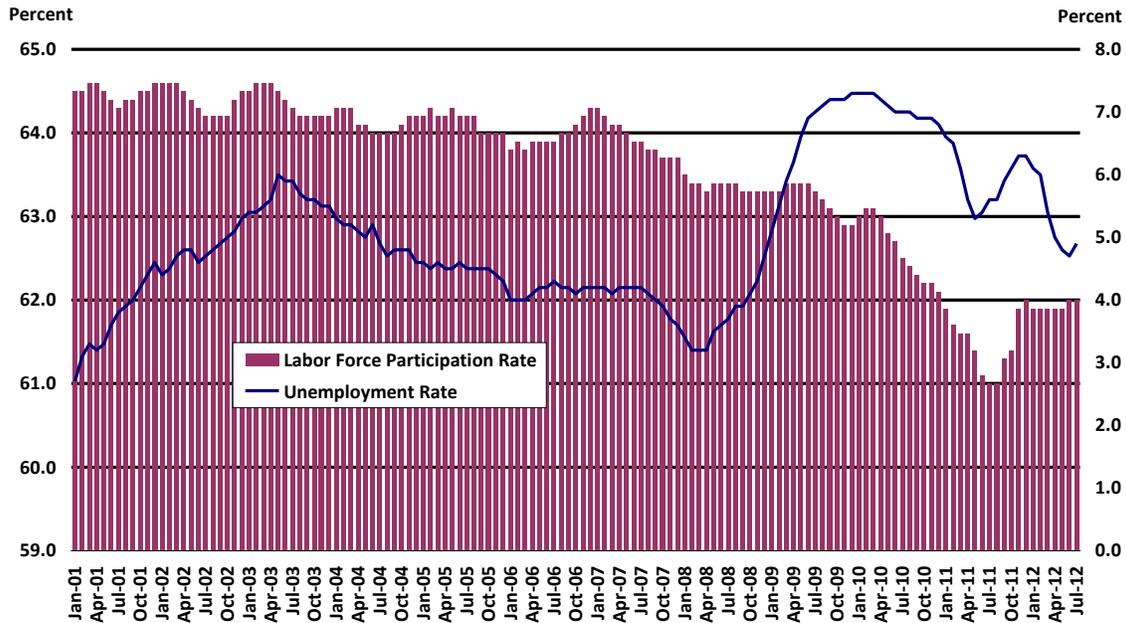


The labor force participation rate (LFPR) is determined by dividing the labor force into the population age 16 and over. Labor force is defined as the number of non-institutionalized civilians age 16 and over who are either employed or actively seeking employment. Over the last 12 years, Oklahoma's LFPR has declined 2.5 percentage points from 64.5 percent to 62.0 percent.

In particular, a rapid decline in LFPR of 3.3 percentage points occurred recently, with LFPR going from 64.3 percent in January 2007 to 61.0 percent in July 2011, despite the population growing by 6.1 percent. The unemployment rate also rose 2.1 percent. The main causes of this significant change were baby boomers (those born between 1946 and 1964) entering retirement age and the normal business cycle (Aaronson, Davis and Hu, 2012; Van Zandweghe, 2012). Cyclical movement may have also played an important role in the recent decline (Van Zandweghe, 2012) as people gave up actively seeking employment in the labor market because of scarce job opportunities brought about by the recent recession. In August 2011, discouraged workers began reentering the labor market because of increasing job opportunities, causing an increase in the LFPR and a falling unemployment rate. That may be an important factor in explaining a rising LFPR and declining unemployment rate after July 2011. Chart 2 illustrates these changes.

Chart 2: Oklahoma Unemployment & Labor Force Participation Rates (Seasonally Adjusted)

Source: U.S. Department of Labor, Bureau of Labor Statistics



Utilizing data from the Current Population Survey (CPS), a nationwide household survey conducted by the U.S. Census Bureau, changes in female labor force trends were analyzed. Between 2003 and 2011, females in Oklahoma had declining LFPR, but higher unemployment rates. In Oklahoma, the female LFPR decreased 2.7 percentage points from 57.1 percent in 2003 to 54.4 percent in 2011. This rate peaked at 57.8 percent in 2009. The female unemployment rate increased from 5.5 percent to 6.5 percent between 2003 and 2011.

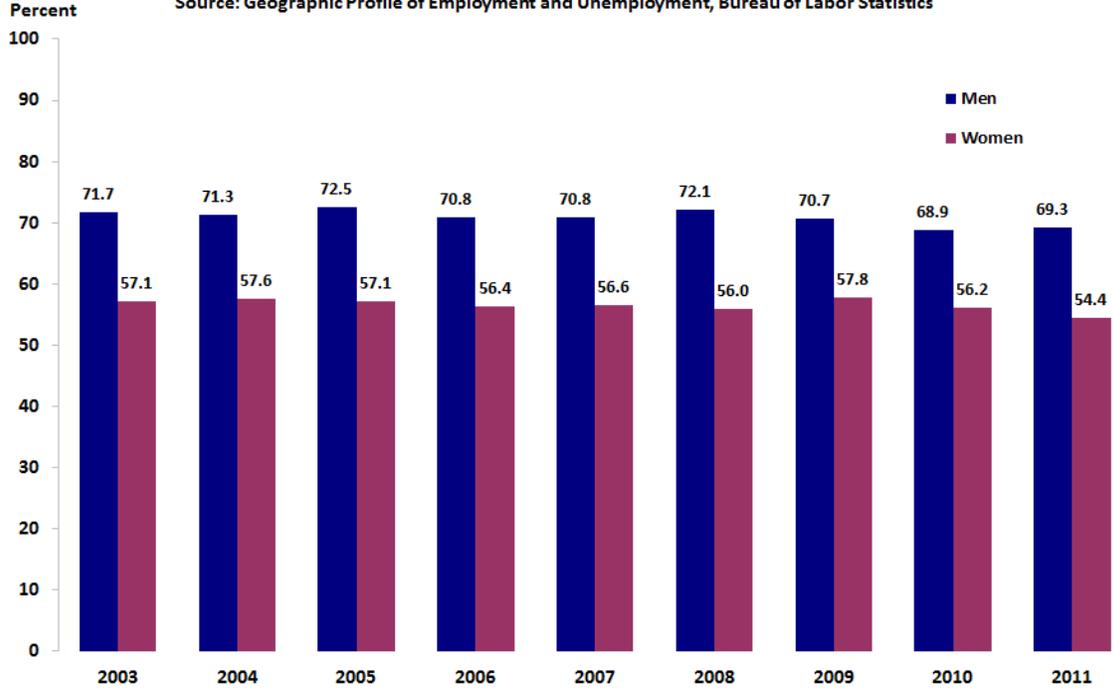
Compared to their male counterparts who saw a 2.4 percentage point decrease in LFPR, but only a 0.2 percentage point increase in their unemployment rate, Oklahoma females experienced a smaller reduction in LFPR and a greater rise in unemployment rate during the past nine years.

In 2003, Oklahoma had the ninth lowest female LFPR in the nation at 57.1 percent. By 2011, Oklahoma had fallen to the fifth lowest female LFPR at 54.4 percent. In comparison, the national average female LFPR in 2011 was 58.1 percent, or 3.7 percentage points higher than Oklahoma's female LFPR.

In contrast, Oklahoma's male LFPR improved from the 14th lowest in 2003 to 17th lowest in 2011, as it fell from 71.7 percent in 2003 to 69.3 percent in 2011. Chart 3, below, indicates changes in the female and male LFPR over the past nine years.

Chart 3: Oklahoma Labor Force Participation Rates by Gender

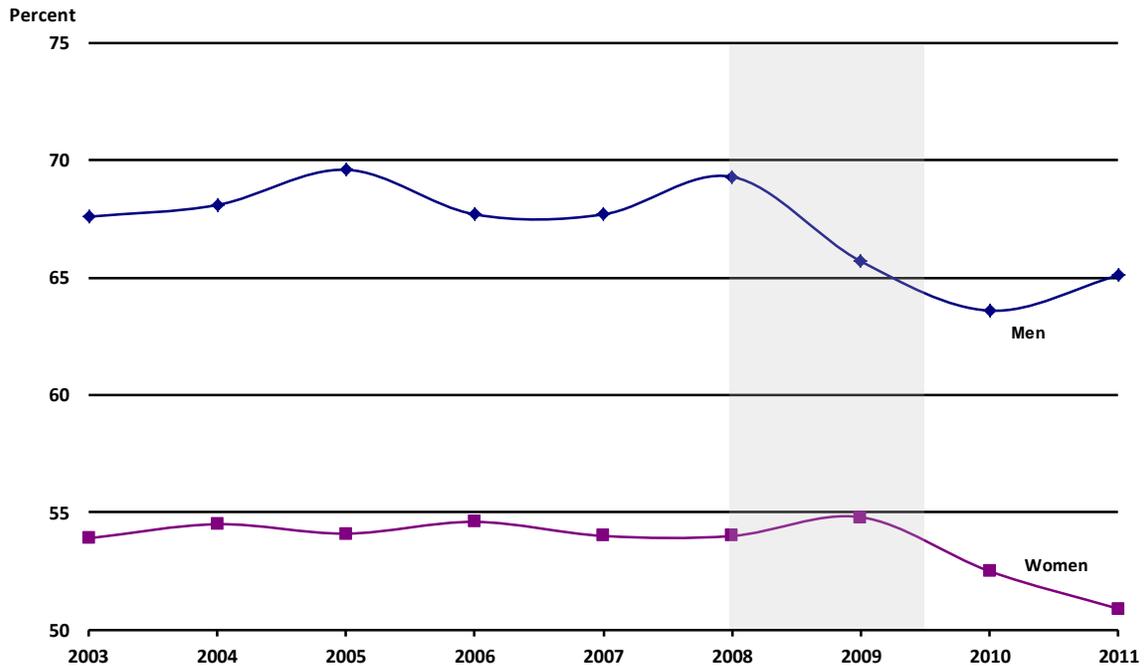
Source: Geographic Profile of Employment and Unemployment, Bureau of Labor Statistics



The Great Recession, which started in December 2007 and ended in June 2009, impacted men in Oklahoma more negatively than women with regards to employment rate, or the employment-population ratio, which reflects the proportion of employed persons in the labor force.

Chart 4: Oklahoma Employment-Population Ratios by Gender

Source: Geographic Profile of Employment and Unemployment, Bureau of Labor Statistics



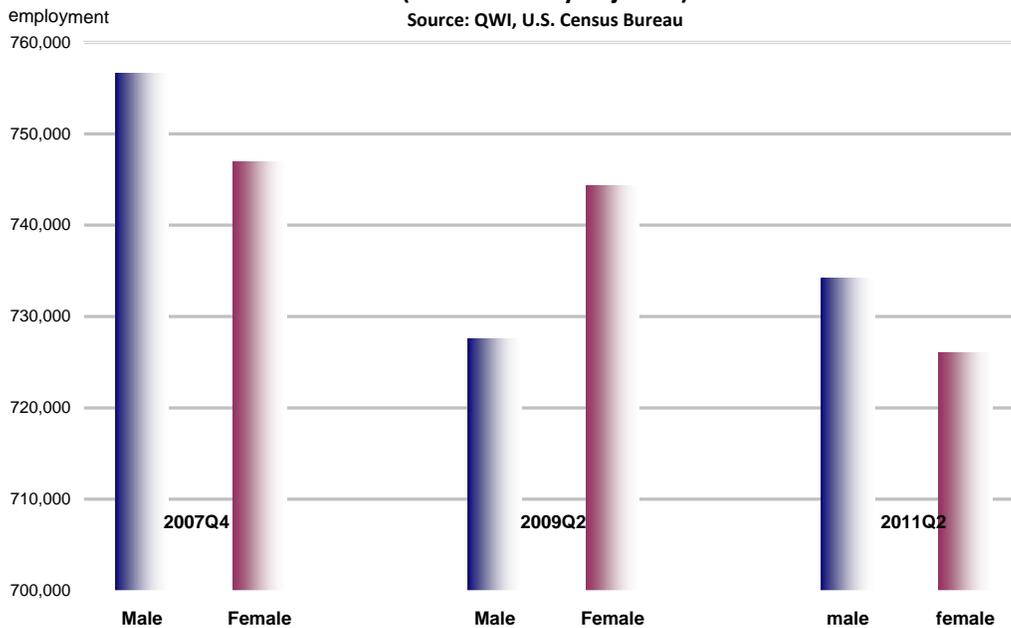
Note: The shaded area represents the "Great Recession", defined by the National Bureau of Economic Research (NBER).

Chart 4 shows that the male employment rate fell significantly compared with that for females during the recession, because the three industry sectors of Manufacturing; Administrative and
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Support and Waste Management and Remediation Services; and Mining, Quarrying, and Oil and Gas Extraction were hit hardest for males. The recovery following the recession has been dubbed the “he-covey,” because the reemployment rate of men has far outpaced that of women. The men’s employment rate rebounded while the women’s employment rate continued to drop throughout 2010.

The U.S. Census Bureau’s Quarterly Workforce Indicators (QWI) dataset includes quarterly employment statistics for each state across all NAICS (North American Industry Classification System) sectors. Chart 5, based on the QWI dataset, shows the total employment for both males and females in Oklahoma at the beginning and end of the recession and for second quarter 2011. Men had an employment loss of 29,096 jobs during the recession, but their employment rebounded during the recovery. In contrast, despite some decreases in employment for women in Oklahoma during the recession, female employment dropped substantially after the recession, declining by 18,338 jobs two years after the end of the recession. Chart 5 plots the different employment trends of male and female workers before, during and after the recession.

**Chart 5: Oklahoma Total Employment by Gender
During and After the Recession
(Not Seasonally Adjusted)**
Source: QWI, U.S. Census Bureau



In addition, the QWI dataset indicates that Oklahoma’s Manufacturing, Information, and Administrative and Support and Waste Management and Remediation Services industry sectors accounted for a majority of male job losses, while the Educational Services; Health Care and Social Assistance; Arts, Entertainment, and Recreation; and Accommodation and Food Services industry sectors accounted for a majority of female job gains during the recession (4th quarter 2007 through 2nd quarter 2009).

The two years after the end of the recession, male employment had added 6,723 jobs, driven by the Mining; Administrative and Support and Waste Management and Remediation Services; Retail Trade; Information; and Health Care and Social Assistance sectors. In comparison, female employment suffered losses of 18,338 jobs, mainly from the Education Services (a loss 5,547 jobs since the recovery); Finance and Insurance; Manufacturing; Administrative and Support and Waste Management and Remediation Services; and Arts, Entertainment, and Recreation

industry sectors. See Tables 1 and 2 below for details.

Table 1: Oklahoma Male Employment across Sectors during and after the Recession

NAICS	2007Q4	2009Q2	2011Q2	2007-2009 change	2009-2011 change
Total	756,625	727,529	734,252	-29,096	6,723
Agriculture, Forestry, Fishing and Hunting	5,221	7,992	7,516	2,771	-476
Mining	37,584	31,028	38,122	-6,556	7,094
Utilities	10,685	12,619	12,230	1,934	-389
Construction	62,660	60,655	58,059	-2,005	-2,596
Manufacturing	114,854	100,128	98,751	-14,726	-1,377
Wholesale Trade	44,258	42,161	41,292	-2,097	-869
Retail Trade	81,284	79,724	82,402	-1,560	2,678
Transportation and Warehousing	36,588	35,135	33,599	-1,453	-1,536
Information	16,654	13,520	15,165	-3,134	1,645
Finance and Insurance	18,066	18,011	17,510	-55	-501
Real Estate and Rental and Leasing	12,556	12,356	11,890	-200	-466
Professional, Scientific, and Technical Services	31,456	31,926	33,153	470	1,227
Management of Companies and Enterprises	7,233	7,825	8,475	592	650
Administrative and Support and Waste Management and Remediation Services	60,680	52,066	56,542	-8,614	4,476
Educational Services	50,357	49,144	48,081	-1,213	-1,063
Health Care and Social Assistance	37,907	39,237	41,017	1,330	1,780
Arts, Entertainment, and Recreation	15,417	17,396	16,675	1,979	-721
Accommodation and Food Services	51,924	55,181	54,893	3,257	-288
Other Services (except Public Administration)	19,754	18,739	18,638	-1,015	-101
Public Administration	41,487	42,686	40,243	1,199	-2,443

Source: QWI, U.S. Census Bureau

Table 2: Oklahoma Female Employment across Sectors during and after the Recession

NAICS	2007Q4	2009Q2	2011Q2	2007-2009 change	2009-2011 change
Total	746,885	744,353	726,015	-2,532	-18,338
Agriculture, Forestry, Fishing and Hunting	2,055	3,287	3,077	1,232	-210
Mining	10,717	8,537	11,609	-2,180	3,072
Utilities	3,367	3,938	3,922	571	-16
Construction	13,444	12,736	11,866	-708	-870
Manufacturing	37,476	32,527	30,061	-4,949	-2,466
Wholesale Trade	17,263	16,572	16,557	-691	-15
Retail Trade	87,845	85,645	85,805	-2,200	160
Transportation and Warehousing	9,788	8,831	8,283	-957	-548
Information	14,270	12,259	11,470	-2,011	-789
Finance and Insurance	40,516	40,910	37,694	394	-3,216
Real Estate and Rental and Leasing	12,257	11,583	10,203	-674	-1,380
Professional, Scientific, and Technical Services	32,354	32,932	33,192	578	260
Management of Companies and Enterprises	6,555	6,456	7,406	-99	950
Administrative and Support and Waste Management and Remediation Services	46,323	40,664	38,692	-5,659	-1,972
Educational Services	109,826	114,137	108,590	4,311	-5,547
Health Care and Social Assistance	157,144	163,273	163,538	6,129	265
Arts, Entertainment, and Recreation	17,199	19,101	17,170	1,902	-1,931
Accommodation and Food Services	68,981	70,670	69,927	1,689	-743
Other Services (except Public Administration)	19,450	19,480	17,801	30	-1,679
Public Administration	40,055	40,816	39,149	761	-1,667

Source: QWI, U.S. Census Bureau

References:

Aaronson, D., Davis, Jonathan and Hu, Luoia, *Explaining the decline in the U.S. labor force participation rate*, Chicago Fed Letter, March 2012, Number 296, The Federal Reserve Bank of Chicago,
http://chicagofed.org/digital_assets/publications/chicago_fed_letter/2012/cflmarch2012_296.pdf

Geographic Profile of Employment and Unemployment, Bureau of Labor Statistics, <http://www.bls.gov/gps>

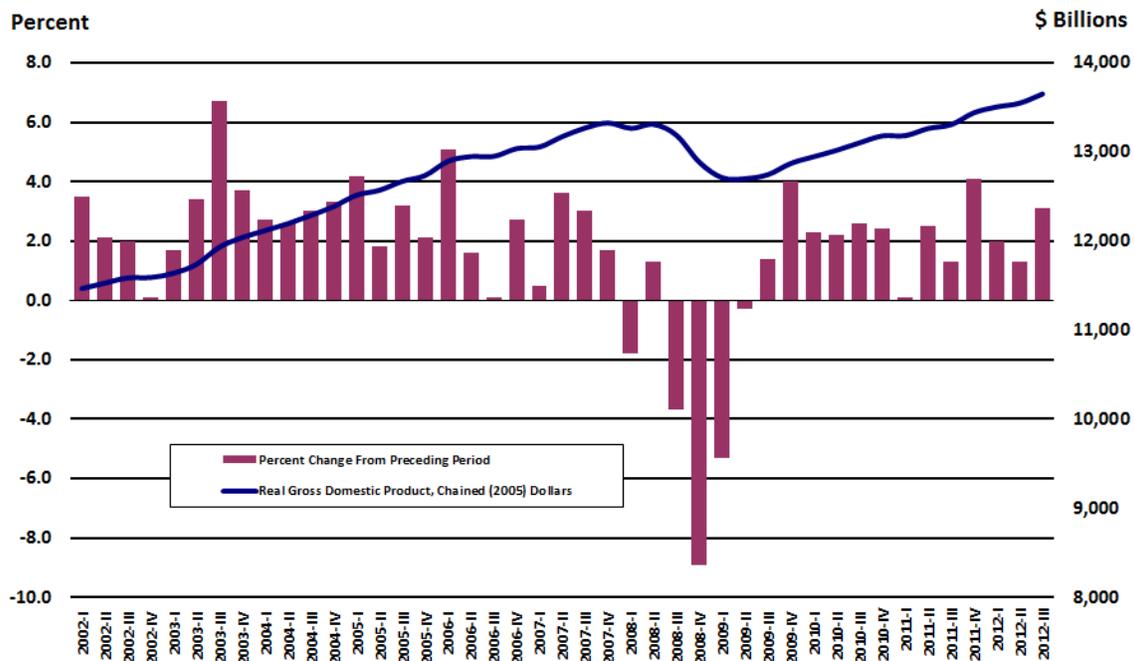
Oklahoma Employment Security Commission, State Ranking 2011,
http://www.ok.gov/oesc_web/documents/lmisterankings11.pdf

Quarterly Workforce Indicators (QWI), U. S. Census Bureau,
<http://lehd.did.census.gov/led/datatools/qwiapp.html>

Zandweghe, W.V., *Interpreting the Recent Decline in Labor Force Participation*, Economic Review, First quarter 2012, The Federal Reserve Bank of Kansas City,
<http://www.kc.frb.org/publicat/econrev/pdf/12q1VanZandweghe.pdf>

Real Gross Domestic Product and Quarterly Change

Source: U.S. Department of Commerce, Bureau of Economic Analysis



Definition & Importance

Gross Domestic Product (GDP)—the output of goods and services produced by labor and property located in the United States—is the broadest measure of economic activity. It is also the measure that is most indicative of whether the economy is in recession. In the post-World War II period, there has been no recession in which GDP did not decrease in at least two quarters, (the exceptions being during the recessions of 1960-61 and 2001).

The Bureau of Economic Analysis (BEA), U.S. Department of Commerce releases GDP data on a quarterly basis, usually during the fourth week of the month. Data are for the prior quarter, so data released in April are for the 1st quarter. Each quarter's data are revised in each of the following two months after the initial release.

Background

There are four major components to GDP:

1. *Personal consumption expenditures*: Individuals purchase durable goods (such as furniture and cars), nondurable goods (such as clothing and food) and services (such as banking, education and transportation).
2. *Investment*: Private housing purchases are classified as residential investment. Businesses invest in nonresidential structures, durable equipment and computer software. Inventories at all stages of production are counted as investment. Only inventory changes, not levels, are added to GDP.
3. *Net exports*: Equal the sum of exports less imports. Exports are the purchases by foreigners of goods and services produced in the United States. Imports represent domestic purchases of foreign-produced goods and services and are deducted from the calculation of GDP.
4. *Government*: Government purchases of goods and services are the compensation of government employees and purchases from businesses and abroad. Data show the portion attributed to consumption and investment. Government outlays for transfer payments or interest payments are not included in GDP.

The four major categories of GDP—personal consumption expenditures, investment, net exports and government—all reveal important information about the economy and should be monitored separately. This allows one to determine the strengths and weaknesses of the economy.

Current Developments

The U.S. economy grew faster than previously thought in the 3rd quarter, helped by exports and government spending. Real gross domestic product increased at an annual rate of 3.1 percent in the 3rd quarter of 2012, according to the "third" estimate released by the Bureau of Economic Analysis (BEA). It was the fastest pace since late 2011 and more than double the 2nd quarter's 1.3 percent rate.

Consumer spending, which typically accounts for more than two-thirds of the U.S. economy, was the single largest driver of economic growth between July and September. Real personal consumption expenditures increased 1.6 percent in the 3rd quarter, compared with an increase of 1.5 percent in the 2nd quarter. Durable goods increased 8.9 percent, in contrast to a decrease of 0.2 percent. Nondurable goods increased 1.2 percent, compared with an increase of 0.6 percent. Spending on services increased 0.6 percent in the 3rd quarter, compared with an increase of 2.1 percent.

In the meantime, businesses built up their inventories and were hesitant to make new investments, weighing on growth. The change in real private inventories added 0.73 percentage point to the 3rd-quarter change in real GDP, after subtracting 0.46 percentage point from the 2nd-quarter change. Businesses spending on equipment and software fell at an annual rate of 2.6 percent in the 3rd quarter, marking the first decline since the depths of the recession in spring 2009.

A rebound in the housing market and continued strength in homebuilding also added to 3rd quarter growth. Real residential fixed investment increased 13.5 percent, compared with an increase of 8.5 percent in the 2nd quarter.

Output during the 3rd quarter was also revised up to show a smaller trade deficit as export growth outpaced the rise in imports. Net exports of goods and services contributed 0.38 percentage point to GDP growth instead of 0.14 percentage point, as previously thought.

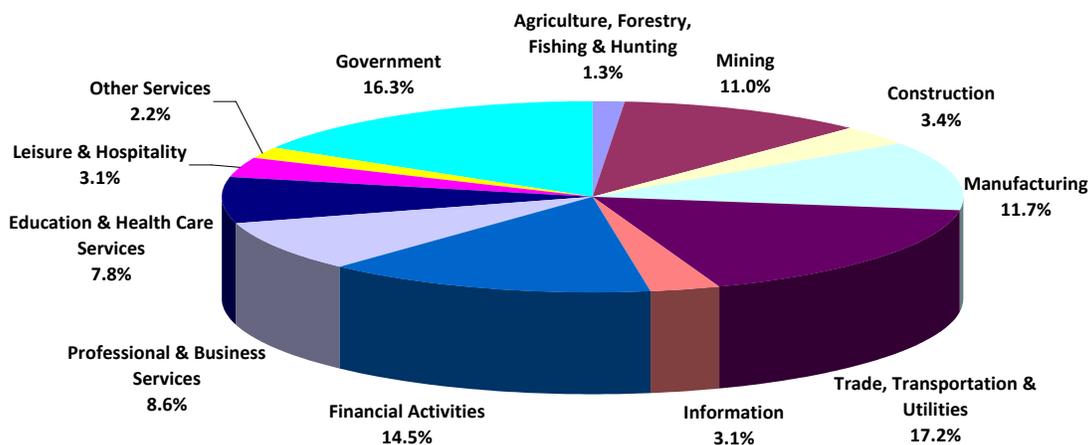
Government spending was revised to a 3.9 percent growth rate from 3.5 percent, with spending by state and local government growing for the first time in three years. The increase was driven by a big jump in defense spending. Real federal government consumption expenditures and gross investment increased 9.5 percent in the 3rd quarter. National defense spending increased 12.9 percent while nondefense spending increased 3.0 percent. Real state and local government consumption expenditures and gross investment increased 0.3 percent, in contrast to a decrease of 1.0 percent.

Taking out the boost from inventories and government, demand in the economy remained weak in the 3rd quarter, rising at just a 1.5 percent rate—the slowest since the end of 2009—and a step down from the 1.9 percent pace logged in the 2nd quarter.

2011 Industry Share of Oklahoma's Economy

(by percentage of Gross Domestic Product)

Source: U.S. Department of Commerce, Bureau of Economic Analysis



Definition & Importance

Oklahoma's economy typically follows a similar trend to that of the nation. State GDP data lags behind national data and is only available annually. As a result, it is not a good indicator of current economic conditions and does not fully reflect the recent changes in Oklahoma's economic climate. However, it is still valuable to understand the state's growth trend compared to the nation and what industries are the largest contributors to Oklahoma's economy.

Current Developments

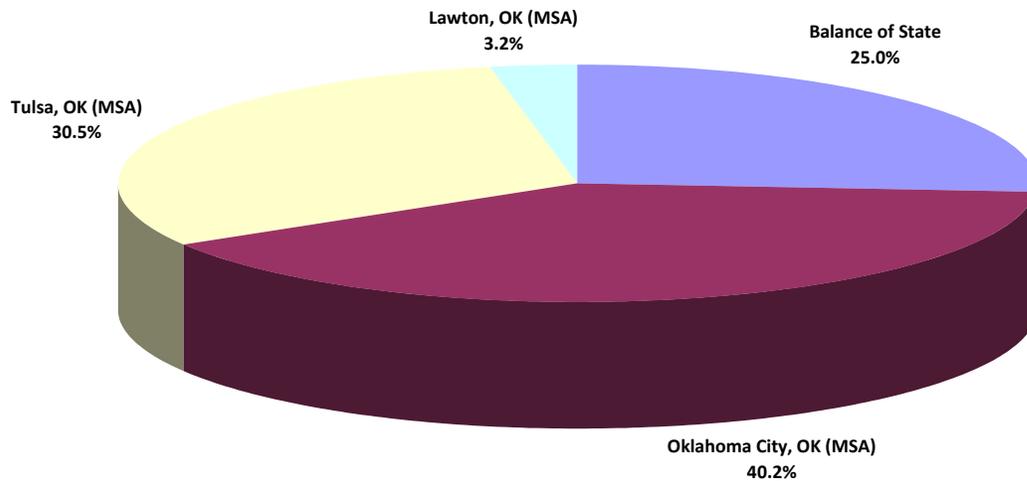
Oklahoma was among 43 states and the District of Columbia experiencing growth in real GDP in 2011, according to the advance estimate from the Bureau of Economic Analysis (BEA). Oklahoma's 2010 advance estimate was revised upward from 1.0 percent to 2.0 percent while the state's 2009 GDP was further revised downward reflecting depressed energy prices during that period.

Oklahoma registered a real GDP of \$134.2 billion in 2011, a 1.0 percent gain from the revised \$132.8 billion in 2010. U.S. real GDP by state grew 1.5 percent in 2011 after a 3.1 percent increase in 2010. Real GDP increased in all eight BEA regions in 2011, although growth slowed in most regions. The Southwest region, which includes Oklahoma, grew the fastest at 2.7 percent, led by Texas with a 3.3 percent increase.

Durable-goods manufacturing was the leading contributor to real GDP growth in 26 states including Oklahoma, where it contributed 0.54 percentage points to overall growth. Other industries adding to 2011 GDP growth in Oklahoma were wholesale trade (0.29 percent); health care & social assistance (0.26 percent); mining (0.24 percent); and professional, scientific & business services (0.20 percent). Subtracting from Oklahoma GDP growth were agriculture, forestry, fishing & hunting (-0.26 percent); utilities (-0.19 percent); real estate, rental & leasing (-0.17 percent); government (-0.13 percent); and nondurable goods manufacturing (-0.11 percent).

Metropolitan Area Contribution to State Real Gross Domestic Product 2010

Source: U.S. Department of Commerce, Bureau of Economic Analysis



Definition & Importance

Metropolitan Statistical Areas (MSA) are the county-based definitions developed by the Office of Management and Budget for federal statistical purposes. A metropolitan area is defined as a geographic area consisting of a large population nucleus together with adjacent communities having a high degree of economic and social integration with the nucleus.

Nationally, metropolitan statistical areas represent approximately 90 percent of total GDP. In Oklahoma, the three MSAs of Oklahoma City, Tulsa and Lawton accounted for roughly 75 percent of total state GDP in 2010.

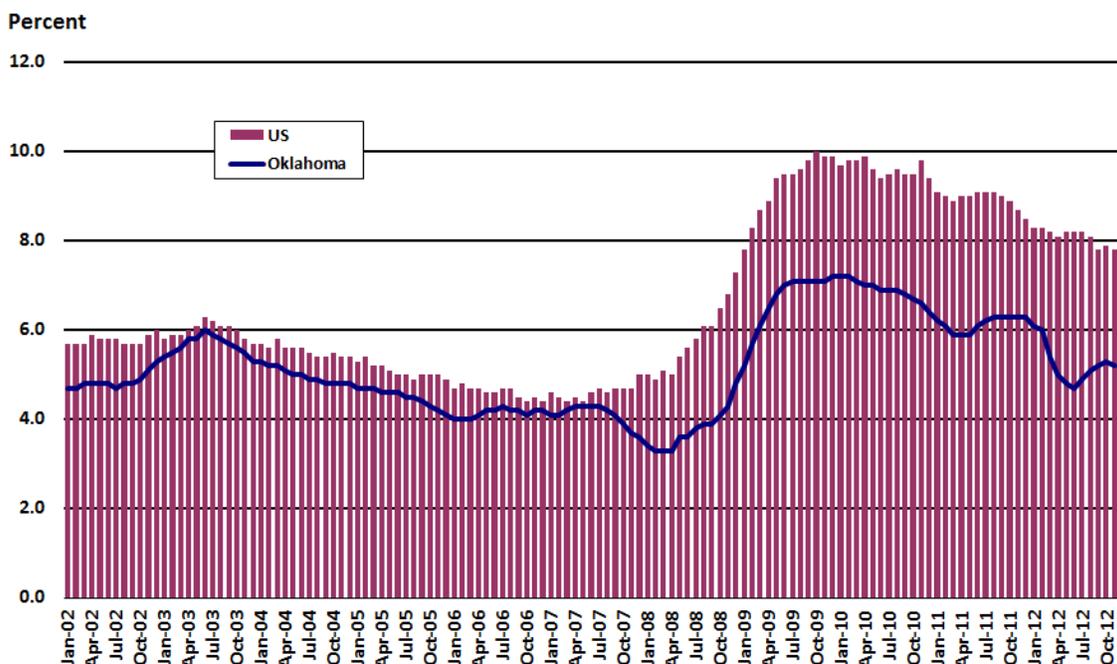
Current Developments

Real U.S. GDP by metropolitan area increased 2.5 percent in 2010 after declining 2.5 percent in 2009, according to the most current statistics from the U.S. Bureau of Economic Analysis (BEA). The economic growth was widespread as real GDP increased in 304 of 366 (83 percent) metropolitan areas, led by national growth in durable-goods manufacturing, trade, and financial activities.

In terms of growth in real GDP, Lawton MSA ranked 15th out of the 366 U.S. metropolitan areas growing by 6.9 percent to \$4.21 billion in 2010. Oklahoma City MSA ranked 205th growing by 1.7 percent to \$53.7 billion followed by Tulsa MSA ranked at 329th declining by -0.6 percent to \$40.7 billion.

U.S. and Oklahoma Unemployment Rate (Seasonally Adjusted)

Source: U.S. Department of Labor, Bureau of Labor Statistics



Definition & Importance

The Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS) program produces monthly estimates of total employment and unemployment from a national survey of 60,000 households. The unemployment rate measures the percentage of people who are without work and is calculated by dividing the estimated number of unemployed people by the civilian labor force. The result expresses unemployment as a percentage of the labor force.

The unemployment rate is a lagging indicator of economic activity. During a recession, many people leave the labor force entirely, as a result the jobless rate may not increase as much as expected. This means that the jobless rate may continue to increase in the early stages of recovery because more people are returning to the labor force as they believe they will be able to find work. The civilian unemployment rate tends towards greater stability than payroll employment on a monthly basis and reveals the degree to which labor resources are utilized in the economy.

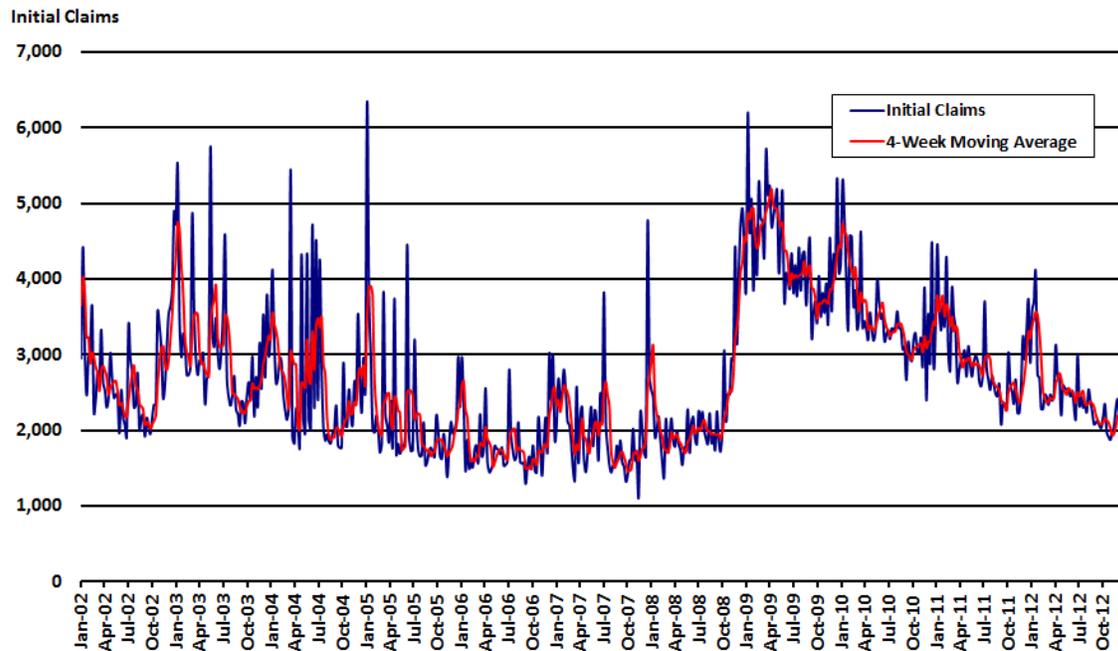
Current Developments

The U.S. unemployment rate held steady in December. The unemployment rate held steady at 7.8 percent and has been at or near that level since September, according to the Bureau of Labor Statistics (BLS). The civilian labor force fell by 192,000 to 155.5 million in December, and the labor force participation rate held at 63.6 percent.

Oklahoma's seasonally adjusted unemployment rate edged down to 5.2 percent in November, maintaining its rank as the 7th lowest jobless rate among states. In November, Oklahoma's labor force added 2,403 while the number of unemployed dropped by 2,176. The state's seasonally adjusted unemployment rate was down by 1.1 percentage points over the year.

Oklahoma Initial Weekly Claims for Unemployment Insurance (Not Seasonally Adjusted)

Source: U.S. Department of Labor, Employment and Training Administration



Definition & Importance

Initial unemployment claims are compiled weekly by the U.S. Department of Labor, Employment and Training Administration and show the number of individuals who filed for unemployment insurance benefits for the first time. This particular variable is useful because it gives a timely assessment of the overall economy.

Initial claims are a leading indicator because they point to changes in labor market conditions. An increasing trend signals that layoffs are occurring. Conversely, a decreasing trend suggests an improving labor market. The four-week moving average of initial claims smoothes out weekly volatility and gives a better perspective on the underlying trend.

Current Developments

More Americans sought unemployment benefits in the last week of December, although the winter holidays likely distorted the data for the second straight week. In the week ending December 29, the advance figure for seasonally adjusted initial claims was 372,000, an increase of 10,000 from the previous week's revised figure of 362,000. The less volatile four-week moving average was 360,000, an increase of 250 from the previous week's revised average of 359,750.

Many state unemployment offices were closed during the week for the New Year's holiday and did not submit complete data for the last week of the year. As a result, the Labor Department relied on estimates for nine states. Two weeks earlier, the department estimated 19 states because of Christmas closings.

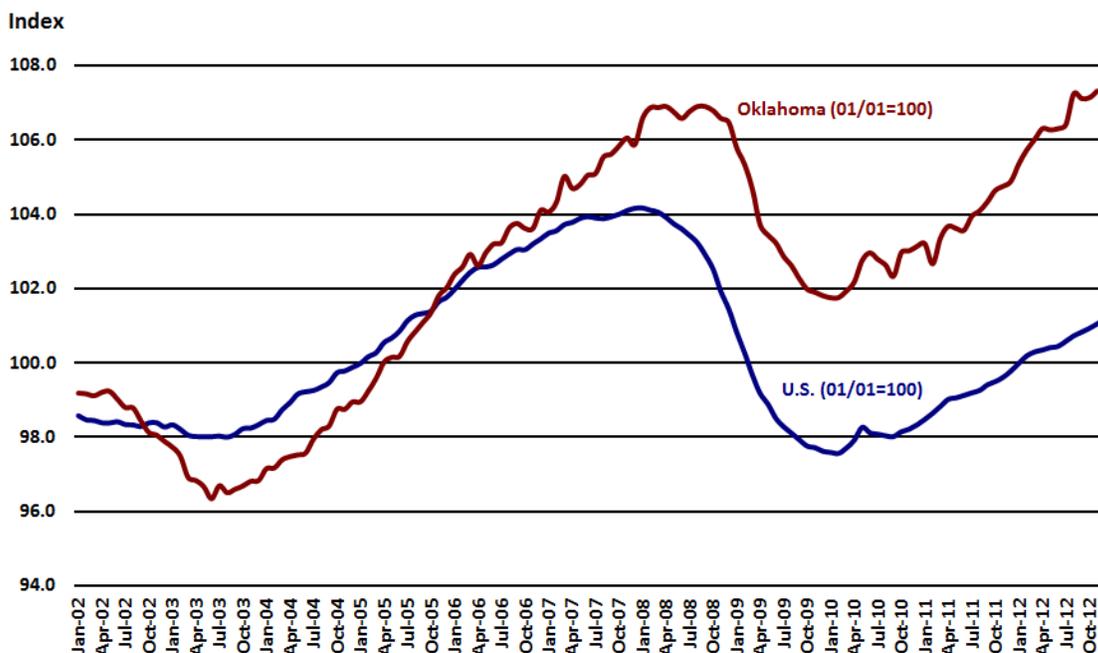
More Oklahomans also filed for jobless benefits in December. For the file week ending on December 22, unadjusted initial claims increased by 1,198 from 2,310 to 3,508. For the same file week ending, the less volatile initial claims four-week moving average increased by 304 from 2,183 to 2,223.

For the file week ending December 22, Oklahoma continued UI claims rose by 311 from 21,911 to 22,222.

U.S. and Oklahoma Nonfarm Payroll Employment (Seasonally Adjusted)

Index: January 2001=100

Source: U.S. Department of Labor, Bureau of Labor Statistics



Definition & Importance

Nonfarm payroll employment data is produced by the Current Employment Statistics (CES) program of the Bureau of Labor Statistics (BLS). The CES Survey is a monthly survey of approximately 140,000 nonfarm businesses and government agencies representing approximately 440,000 individual worksites. The CES program has provided estimates of employment, hours, and earnings data by industry for the nation as a whole, all States, and most major metropolitan areas since 1939. In order to account for the size disparity between of U.S. and Oklahoma employment levels, we have indexed the data with January 2001 as the start value.

Payroll employment is one of the most current and reliable indicators of economic conditions and recessionary trends. Increases in nonfarm payrolls translate into earnings that workers will spend on goods and services in the economy. The greater the increases in employment, the faster the total economic growth.

Current Developments

Robust hiring in manufacturing and construction fueled steady job gains in December. Nonfarm payroll employment increased by 155,000 in December following an increase of 161,000 in November, according to the Bureau of Labor Statistics (BLS). Health care employment increased by 45,000 over the month, food services and drinking places employment rose by 38,000, construction employment rose by 30,000, and manufacturing employment grew by 25,000 jobs.

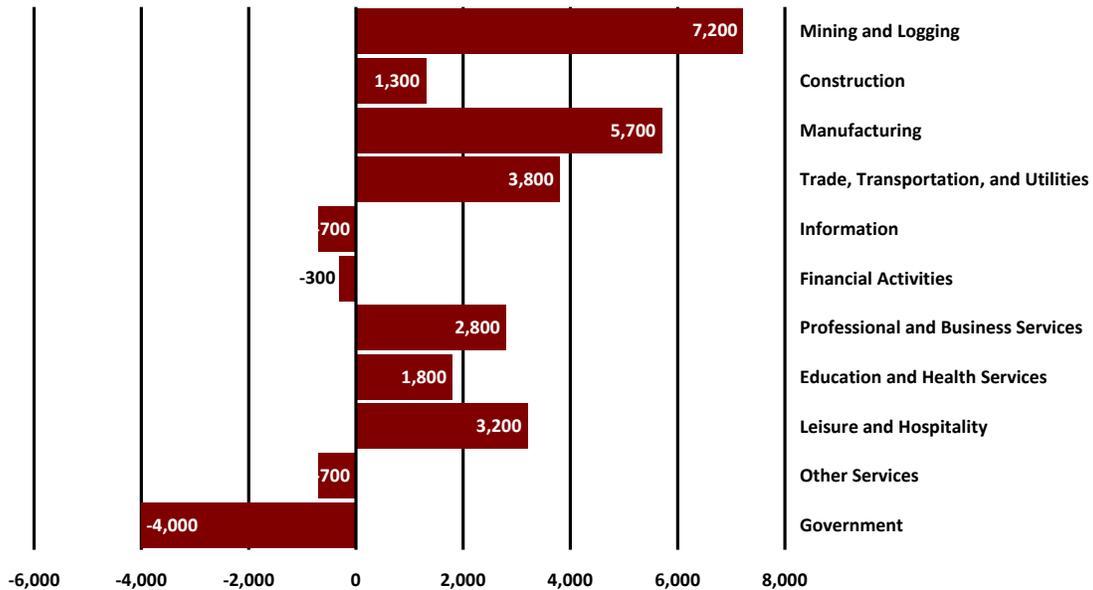
Oklahoma's seasonally adjusted nonfarm employment grew by 2,700 jobs (+0.2 percent) in November with six of Oklahoma's 11 statewide supersectors added jobs with government (+1,900 jobs), construction (+1,100 jobs), and manufacturing (+1,100 jobs) leading the way. Trade, transportation & utilities; professional & business services; and other services all shed jobs over the month. Financial activities and educational & health services reported no change.

Over the year, nine Oklahoma supersectors added jobs with trade, transportation & utilities (+10,600 jobs) and government (+7,200 jobs) topping the list. Over-the-year job losses were seen in information (-300 jobs), and educational & health services (-1,600 jobs).

Oklahoma Employment Change by Industry

2010 - 2011

Source: Current Employment Statistics (CES), U.S. Department of Labor, Bureau of Labor Statistics



Definition & Importance

Employment growth by industry identifies the types of jobs being created in the state. Conversely, industries with a declining employment trend indicate those which are becoming less important in the state's economy. There may also be industries which behave more cyclically, growing during expansion and decreasing in times of economic slowdown or contraction. These changes are crucial in that they help to recognize the types of jobs being lost by individuals. Anticipating what will happen in recovery helps identify whether those jobs will return or what types of new jobs will be created. Consequently, key information for planning re-employment, retraining, and other workforce and economic development programs is contained within these data. For this analysis, we are using CES annual averages to compare year-over-year employment changes.

Current Developments

After back-to-back years of job losses, nonfarm employment in Oklahoma turned around in 2011. Nonfarm employment grew at a healthy 1.3 percent growth rate in 2011, adding approximately 20,000 jobs.

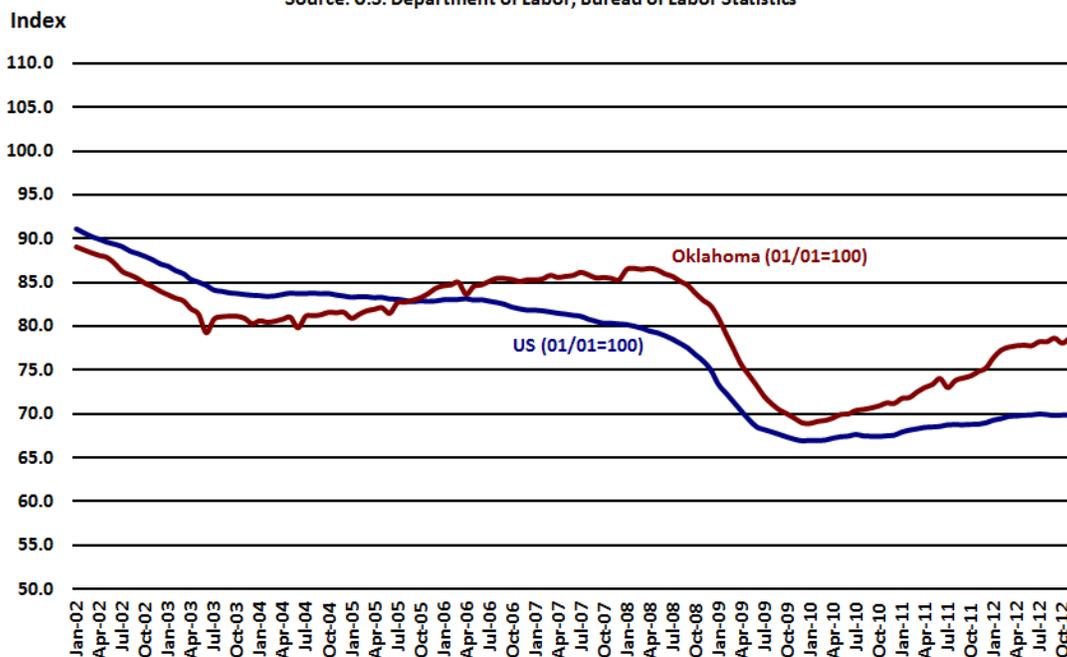
Job gains were registered in seven out of Oklahoma's 11 statewide supersectors. Mining & logging saw the largest employment increase adding 7,200 jobs with the bulk of hiring occurring in support activities for mining. Manufacturing followed with an addition of 5,700 jobs and almost all of the growth coming from durable goods manufacturing. The broad trade, transportation & utilities group added 3,800 employees with most of the growth in wholesale trade. Leisure & hospitality added 3,200 jobs with nearly all of the job gains being in accommodation and food services. Professional and business services employment grew by 2,800 driven by job gains in administrative and support & waste management and remediation services and employment services. Education & health services added 1,800 jobs with nearly all the job growth in ambulatory health care services.

By far, the largest job losses were seen in government which shed approximately 4,000 jobs with almost all of the losses coming from local government.

U.S. and Oklahoma Manufacturing Employment (Seasonally Adjusted)

Index: January 2001 = 100

Source: U.S. Department of Labor, Bureau of Labor Statistics



Definition & Importance

Manufacturing employment data is also produced by the Bureau of Labor Statistics' Current Employment Statistics (CES) program. Manufacturing and production are still important parts of both the U.S. and Oklahoma economies. During the 2007-09 recession, employment in manufacturing declined sharply. Although manufacturing plunged in 2008 and early 2009 along with the rest of the economy, it is on the rebound today while other key economic sectors, such as construction, still suffer. In Oklahoma, manufacturing accounts for one of the largest shares of private output and employment in the state. In addition, many manufacturing jobs are among the highest paying jobs in the state. In order to account for the size disparity between the U.S. and Oklahoma employment levels, we have indexed the data with January 2001 as the starting value.

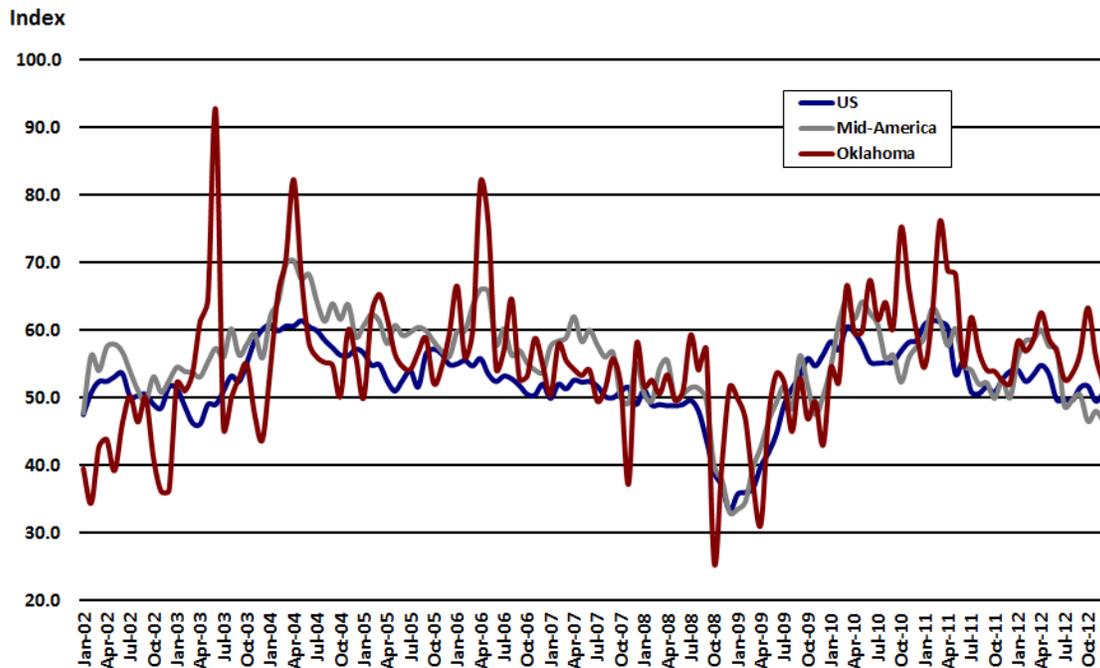
Current Developments

U.S. manufacturing employment in December had its strongest monthly gain since March. In December, manufacturing employment grew by 25,000, with small gains in a number of component industries, according to the Bureau of Labor Statistics (BLS). The largest job gains were seen in the motor vehicle and parts (+4,800), food manufacturing (+4,500), chemicals (+4,300), nonmetallic mineral products (+3,500), plastics and rubber products (+2,100), and machinery (+2,000). In 2012, manufacturing added 180,000 jobs; most of the growth occurred during the 1st quarter of the year.

Oklahoma's factory employment growth surged in November adding 1,000 jobs (0.8 percent) over the month and fueled by strong gains in durable goods manufacturing. Leading sectors of November's manufacturing employment growth were transportation equipment (+400); fabricated metal products (+300); machinery (+100); and aerospace products & parts (+100). Nondurable goods manufacturing added 100 jobs with plastic & rubber products contributing to almost all the employment gains. Over the year, Oklahoma manufacturing employment has added 6,800 jobs (+5.2 percent).

Purchasing Managers' Index (Manufacturing)

Sources: ISM Manufacturing Report On Business® and Business Conditions Index for Mid-America, Creighton University



Definition & Importance

Economists consider the Institute for Supply Management's Purchasing Managers' Index (PMI™) a key economic indicator. The Institute for Supply Management (ISM) surveys more than 300 manufacturing firms on employment, production, new orders, supplier deliveries, and inventories. The ISM manufacturing index is constructed so that any level at 50 or above signifies growth in the manufacturing sector. A level above 43 or so, but below 50, indicates that the U.S. economy is still growing even though the manufacturing sector is contracting. Any level below 43 indicates that the economy is in recession.

For the region, since 1994, the Creighton Economic Forecasting Group at Creighton University has conducted a monthly survey of supply managers in nine states (including Arkansas, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma and South Dakota), to produce leading economic indicators for the Mid-America economy using the same methodology as the national survey by the ISM.

Current Developments

The manufacturing sector closed 2012 on an upbeat note, reflecting growth in orders, employment and exports that indicate the U.S. expansion will be sustained in 2013. The PMI™ registered 50.7 percent, an increase of 1.2 percentage points from November's reading of 49.5 percent, indicating expansion in manufacturing for only the third time in the last seven months, according to the latest Manufacturing ISM Report On Business®.

The ISM's report showed the new orders index expanded for the fourth consecutive month in December, prompting the biggest advance in the supply managers' employment index in more than three years. The export index showed sales overseas grew for the first time in seven months.

Manufacturing, which accounts for about 12 percent of the U.S. economy, was at the forefront of the recovery that began in June 2009.

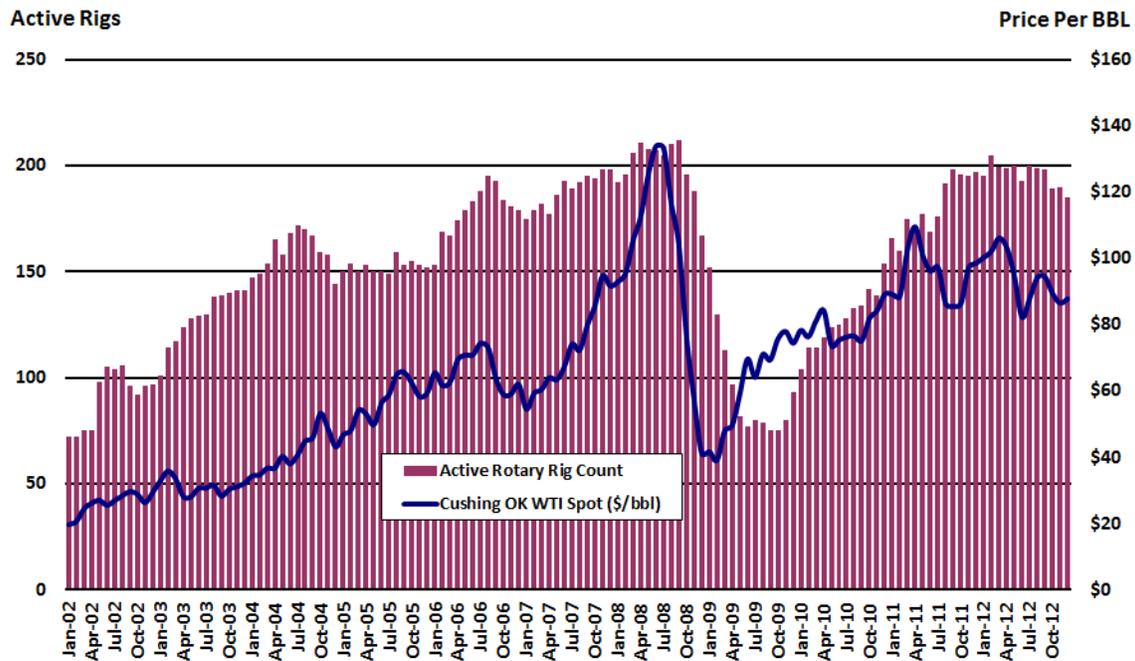
A monthly economic index report suggests an economic slump will continue over the next three to six months for nine Midwest and Plains states. For the fifth time in the past six months, the monthly Mid-America Business Conditions Index, a leading economic indicator for a nine-state region, remained below growth neutral. The Mid-America Business Conditions index rose slightly in December to a weak 49.5 from 48.0 in November, according to the Creighton Economic Forecasting Group. The index continues to point to slightly negative to zero growth for the region in the next three to six months, but still no recession.

Oklahoma's Business Conditions Index sank to 52.1 from 56.1 in November. Components of the December survey of supply managers in the state were new orders at 56.9, production or sales at 43.7, delivery lead time at 46.0, inventories at 67.7, and employment at 46.1.

"Oklahoma was one of only three states in the region to expand its labor force over the past year. Since the national economic recovery began in July 2009, Oklahoma gained almost 12,000 manufacturing jobs. Our surveys over the past several months point to positive job and economic gains for the first half of 2013," noted Dr. Ernie Goss, director of Creighton University's Economic Forecasting Group.

Oklahoma Active Rotary Rigs & Cushing, OK WTI Spot Price

SOURCES: U.S. Department of Energy, Energy Information Administration and Baker Hughes Rig Counts



Definition & Importance

Crude oil is an important commodity in the global market. Prices fluctuate depending on supply and demand conditions in the world. Since oil is such an important part of the economy, it can also help determine the direction of inflation. In the U.S. consumer prices have moderated whenever oil prices have fallen, but have accelerated when oil prices have risen. The U.S. Energy Information Administration (EIA) provides weekly information on petroleum inventories in the U.S., whether produced here or abroad.

The Baker Hughes rig count is an important indicator for the energy industry and Oklahoma. When drilling rigs are active they consume products and services produced by the oil service industry. The active rig count acts as a leading indicator of demand for products used in drilling, completing, producing and processing hydrocarbons.

West Texas Intermediate (WTI-Cushing) is a light crude oil produced in Texas and southern Oklahoma which serves as a reference or "marker" for pricing a number of other crude streams and which is traded in the domestic spot market at Cushing, Oklahoma.

Background

Oklahoma produces a substantial amount of oil, with annual production typically accounting for more than 3 percent of total U.S. production in recent years. Crude oil wells and gathering pipeline systems are concentrated in central Oklahoma. Two of the 100 largest oil fields in the United States are found in Oklahoma.

The city of Cushing, in central Oklahoma, is a major crude oil trading hub connecting Gulf Coast producers to Midwest refining markets. In addition to Oklahoma crude oil, the Cushing hub receives supply from several major pipelines that originate in Texas. Traditionally, the Cushing Hub has pushed Gulf Coast and Mid-Continent crude oil supply north to Midwest refining markets. However, production from those regions is in decline, and an underused crude oil pipeline system has been reversed to deliver rapidly expanding heavy crude oil supply produced in Alberta, Canada to Cushing, where it can access Gulf Coast refining markets. For this reason, Cushing is the designated delivery point for the New York Mercantile Exchange (NYMEX) crude

oil futures contracts. Crude oil supplies from Cushing that are not delivered to the Midwest are fed to Oklahoma's five refineries, which have a combined distillation capacity of over 500 thousand barrels per day—roughly 3 percent of the total U.S. refining capacity.

Current Developments

According to the December 2012 *Short Term Energy Outlook*, the U.S. Energy Information Administration (EIA) forecasts that the Brent crude oil spot price will average \$110 per barrel in the 4th quarter of 2012, while the West Texas Intermediate (WTI) crude oil spot price will average \$89 per barrel. The Brent and WTI crude oil spot prices are expected to average \$104 per barrel and \$88 per barrel, respectively, in 2013. The projected WTI discount to Brent crude oil, which averaged \$23 per barrel in November 2012, falls to an average of \$11 per barrel by the 4th quarter of 2013. This forecast rests on the assumption that U.S. real gross domestic product (GDP) grows by 2.1 percent in 2012 and 1.8 percent in 2013, while world oil-consumption-weighted real GDP grows by 2.7 percent and 2.4 percent in 2012 and 2013, respectively.

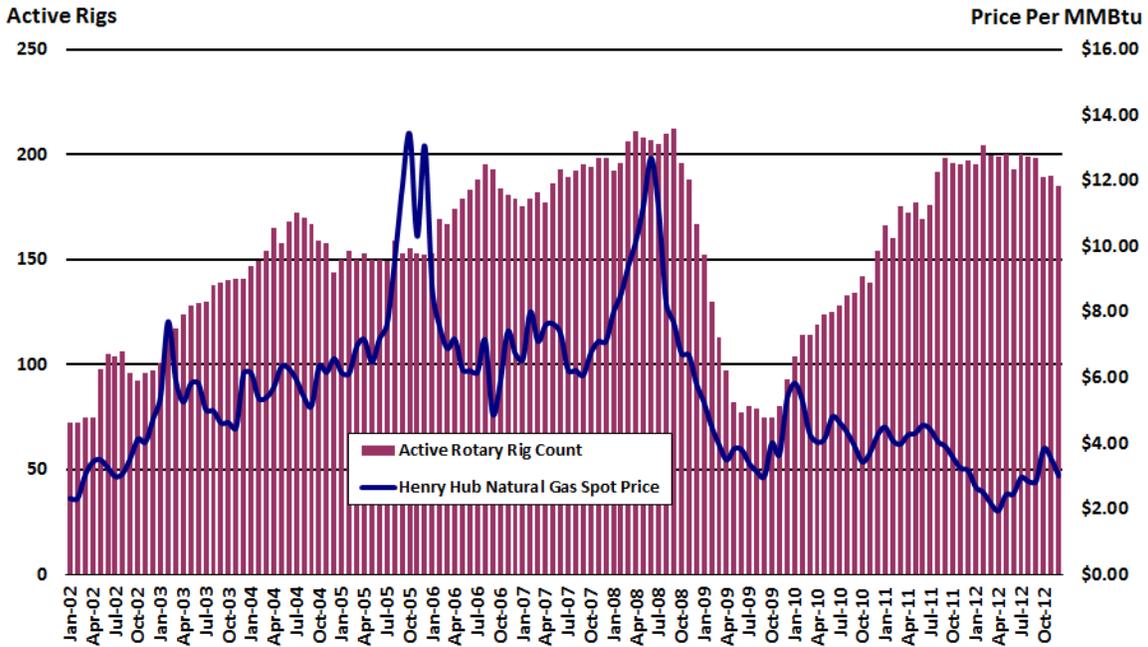
The EIA expects U.S. total crude oil production to average 6.4 million barrels per day (bbl/d) in 2012, an increase of 0.8 million bbl/d from the previous year. Projected domestic crude oil production is forecast to increase to 7.1 million bbl/d in 2013, or 0.2 million bbl/d higher than projected in November's *Short Term energy Outlook* and the highest annual average rate of production since 1992.

WTI-Cushing spot prices averaged \$87.86 per barrel in December as, up \$1.33 from November's average of \$86.53 per barrel.

Oklahoma's rotary rig activity averaged 185 in December, falling by five rigs from the previous month's count of 190 rigs. Over the year, December's active rotary rig count in Oklahoma was down by 13 rigs.

Oklahoma Active Rotary Rigs & Henry Hub Natural Gas Spot Price

Sources: U.S. Department of Energy, Energy Information Administration and Baker Hughes Rig Counts



Definition & Importance

The U.S. Energy Information Administration (EIA) provides weekly information on natural gas stocks in underground storage for the U.S., and three regions of the country. The level of inventories helps determine prices for natural gas products. Natural gas product prices are determined by supply and demand—like any other good and service. During periods of strong economic growth, one would expect demand to be robust. If inventories are low, this will lead to increases in natural gas. If inventories are high and rising in a period of strong demand, prices may not need to increase at all, or as much. During a period of sluggish economic activity, demand for natural gas may not be as strong. If inventories are rising, this may push down oil prices.

The Henry Hub in Erath, Louisiana is a key benchmark location for natural gas pricing throughout the United States. The Henry Hub is the largest centralized point for natural gas spot and futures trading in the United States. The New York Mercantile Exchange (NYMEX) uses the Henry Hub as the point of delivery for its natural gas futures contract. Henry Hub “spot gas” represents natural gas sales contracted for *next day* delivery and title transfer at the Henry Hub. The settlement prices at the Henry Hub are used as benchmarks for the entire North American natural gas market. Approximately 49 percent of U.S. wellhead production either occurs near the Henry Hub or passes close to the Henry Hub as it moves to downstream consumption markets.

Background

Oklahoma is one of the top natural gas producers in the United States with production typically accounting for almost one-tenth of the U.S. total. More than a dozen of the 100 largest natural gas fields in the country are found in Oklahoma and proven reserves of conventional natural gas have been increasing in recent years.

Most natural gas in Oklahoma is consumed by the electricity generation and industrial sectors. About three-fifths of Oklahoma households use natural gas as their primary energy source for home heating. Nevertheless, only about one-third of Oklahoma’s natural gas output is

consumed within the state. The remaining supply is sent via pipeline to neighboring states, the majority to Kansas, including the natural gas trading hubs in Texas and Kansas.

Current Developments

Shipping some of the newly abundant U.S. natural gas overseas would benefit the nation's economy more than keeping it all at home, according to a long-awaited government study that has the potential to reshape the global energy market. The administration had said the study would be central to its decision on approving exports. The study analyzed more than a dozen scenarios for U.S. production and exports of natural gas. It found that "across all these scenarios, the U.S. was projected to gain net economic benefits" from liquefying and then exporting natural gas. The study, conducted by NERA Economic Consulting, a nonpartisan Washington, D.C. firm, concluded that exports could raise the domestic price of natural gas by between 22 cents and \$1.11 per thousand cubic feet within five years. The impending prospect of the U.S. becoming a major exporter of natural gas underscores how the energy revolution is transforming the nation's economic prospects.

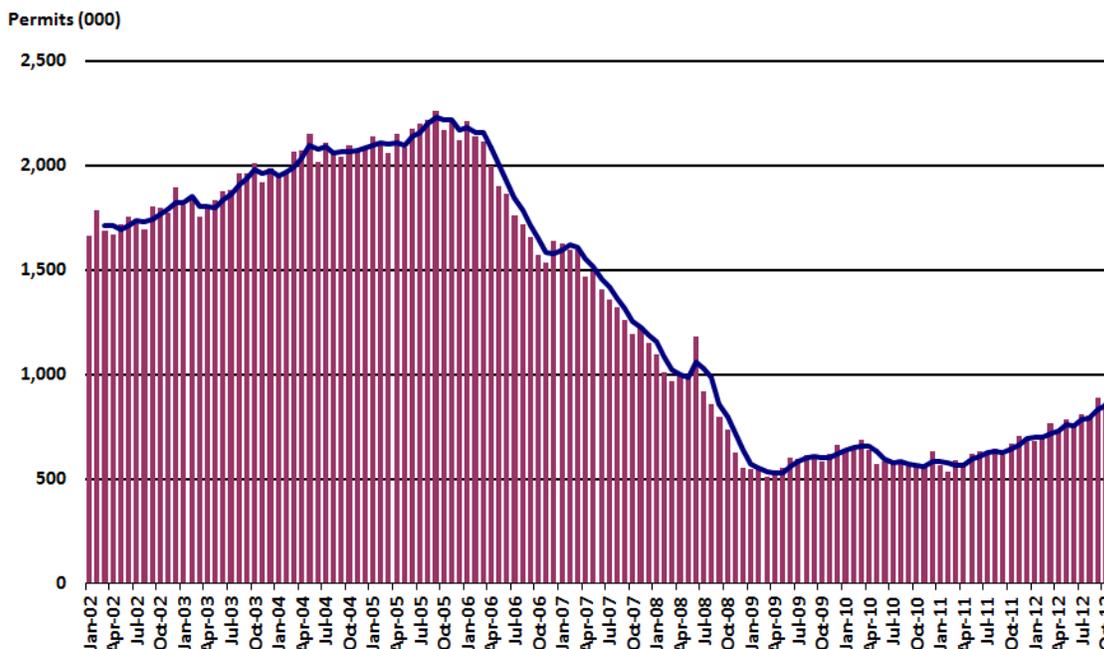
Natural gas working inventories, which reached an all-time weekly record in early November, ended the month at an estimated 3.8 trillion cubic feet (Tcf), almost equal to the level at the same time last year. The EIA expects the Henry Hub natural gas spot price, which averaged \$4.00 per million British thermal units (MMBtu) in 2011, will average \$2.78 per MMBtu in 2012 and \$3.68 per MMBtu in 2013.

Natural gas prices fell modestly in December. Henry Hub spot prices averaged \$3.40 per million British thermal units (MMBtu) for the month in November, down 13 cents per MMBtu from November's average of \$3.53 per MMBtu.

U.S. Total Residential Building Permits, 2002-2012

Seasonally Adjusted

Source: U.S. Census Bureau and Department of Housing and Urban Development



Definition & Importance

The U.S. Census Bureau and the Department of Housing and Urban Development jointly provide monthly national and regional data on the number of new housing units authorized by building permits; authorized, but not started; started; under construction; and completed. The data are for new, privately-owned housing units (single and multifamily), excluding "HUD-code" manufactured homes. Because permits precede construction, they are considered a leading indicator for the residential construction industry and the overall economy. Most of the construction begins the same month the permit is issued. The remainder usually begins construction during the following three months; therefore we also use a three-month moving average.

While home construction represents a small portion of the housing market, it has an outsize impact on the economy. Each home built creates an average of three jobs for a year and about \$90,000 in taxes, according to the National Association of Home Builders. Overall, homebuilding fell to its lowest levels in 50 years in 2009, when builders began work on just 554,000 homes.

Current Developments

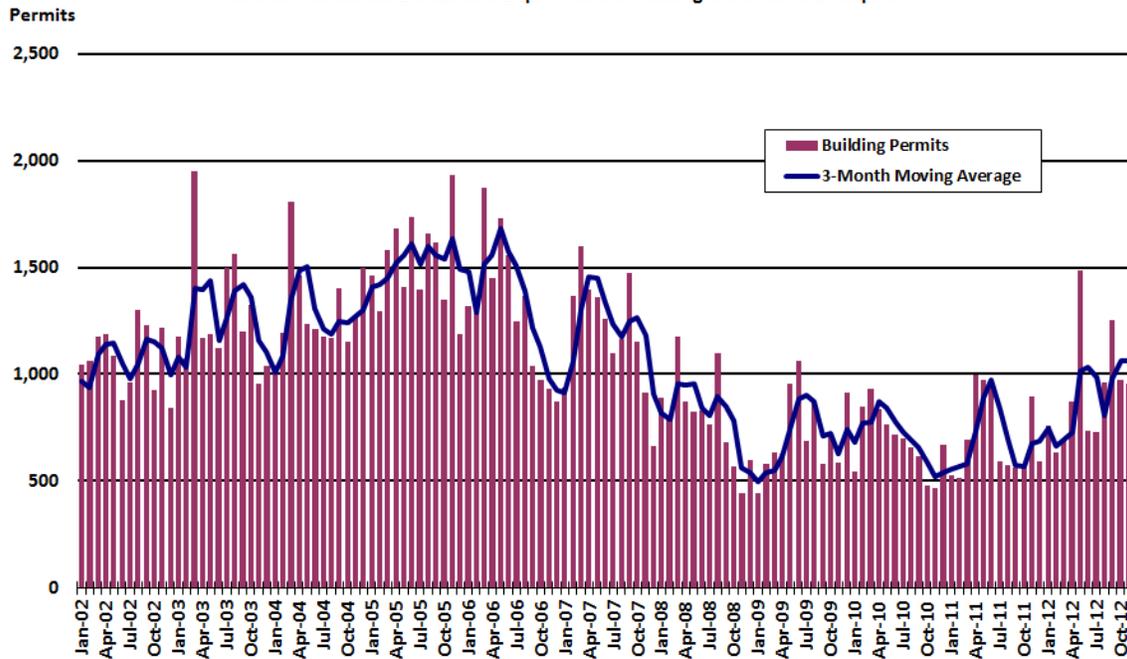
In November, U.S. builders requested the most building permits since July 2008, a positive sign for future construction. Privately-owned housing units authorized by building permits in November were at a seasonally adjusted annual rate of 899,000, 3.6 percent above the revised October rate of 868,000 and 26.8 percent above the November 2011 estimate of 709,000, according to the U.S. Census Bureau and the Department of Housing and Urban Development. However, builders broke ground on fewer homes in November after starting work in October at the fastest pace in four years.

Still, the decline in housing starts follows months of strong gains. Housing starts remain on track for their best year in four years, and the housing market overall appears to be sustaining its recovery.

Oklahoma Total Residential Building Permits, 2002-2012

Not Seasonally Adjusted

Source: U.S. Census Bureau and Department of Housing and Urban Development



With both Tulsa and Oklahoma City primed to end 2012 with double-digit home construction sales gains, many builders and brokers report it's the best they've seen in three years. Total unadjusted residential building permits for November edged down 1.4 percent from the previous, according to figures from the U.S. Census Bureau and the Department of Housing and Urban Development. November single-family permitting activity accounted for more than two-thirds of all residential permitting activity for the month. Multi-family permitting was up 136.9 percent from October.

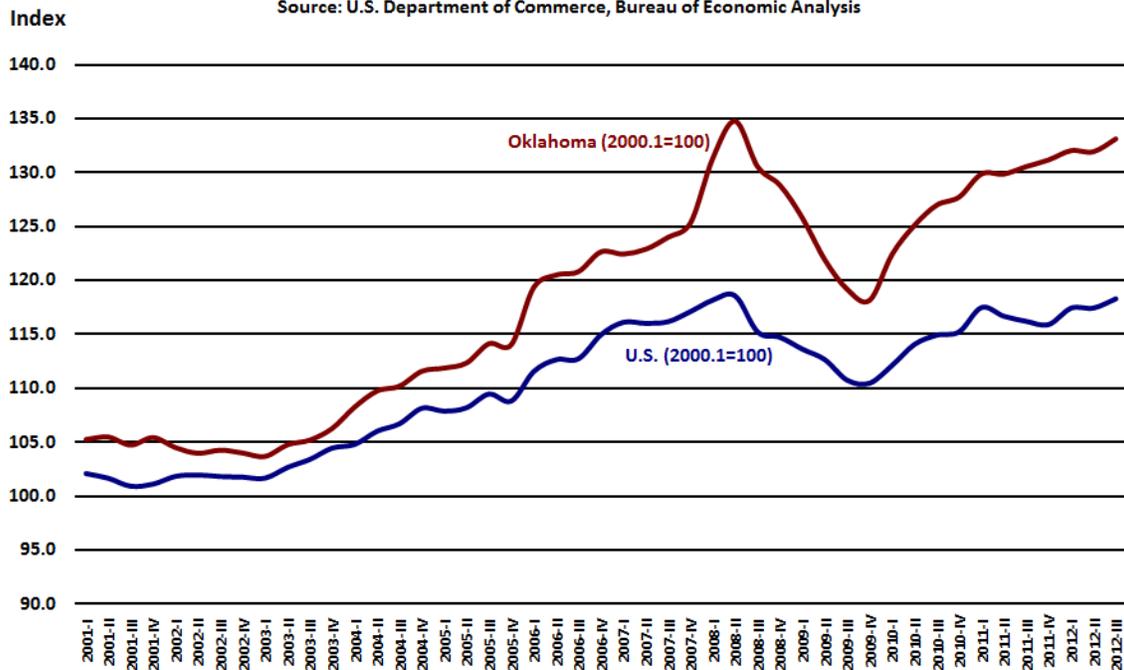
Over the year, total residential permitting was 6.7 percent better than November 2011. Single-family permitting was up 29.4 percent while the more volatile multi-family component was down 25.3 percent.

Residential permitting activity in 2012 continues to outpace 2011. Year to date, total residential permitting activity was 28.1 percent above the first eleven months of 2011. Single-family permitting was 31.7 percent greater than 2011 while multi-family activity was 21.1 percent more.

U.S. and Oklahoma Real Personal Income

Index: 1st Quarter 2000 = 100

Source: U.S. Department of Commerce, Bureau of Economic Analysis



Definition & Importance

Personal income is a broad measure of economic activity and one for which relatively current data are available. Personal income includes earnings, property income such as dividends, interest, and rent and transfer payments, such as retirement, unemployment insurance, and various other benefit payments. It is a measure of income that is available for spending and is seen as an indicator of the economic well-being of the residents of a state. Earnings and wages make up the largest portion of personal income.

To show the vastly different levels of total personal income for the U.S. and Oklahoma on the same chart, these data have been converted to index numbers. This chart shows a comparison of Oklahoma and U.S. growth in real personal income with 1st quarter 2000 as the base year.

Current Developments

Personal income got some lift in November as businesses in the Northeast re-opened and employees returned to work after Hurricane Sandy. Personal income increased \$85.8 billion, or 0.6 percent, and disposable personal income (DPI) increased \$74.7 billion, or 0.6 percent, in November—the biggest gain in 11 months, according to the Bureau of Economic Analysis (BEA). Wages and salaries rose \$41.1 billion in November. Hurricane Sandy had reduced wages at an annual rate of \$18.2 billion in October.

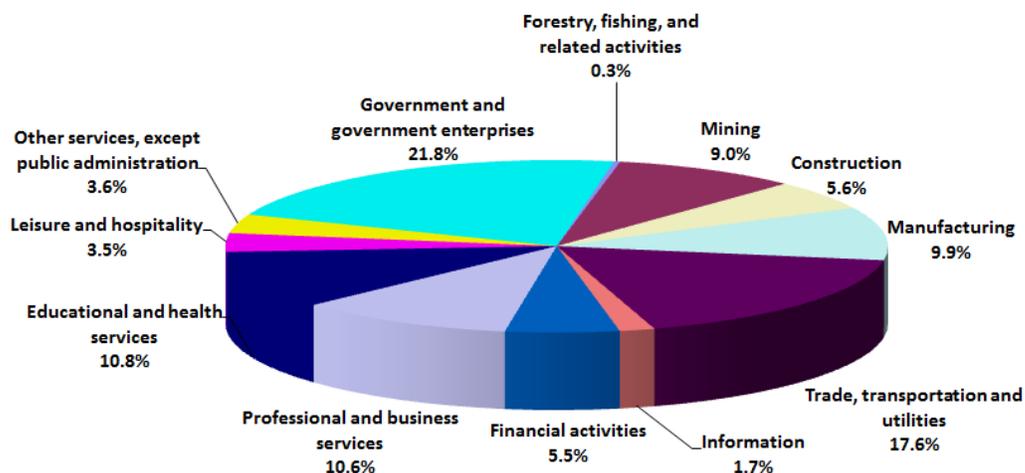
Consumer spending rebounded in November after slipping in October. Personal consumption expenditures (PCE) increased \$41.3 billion, or 0.4 percent, in November. Spending had fallen 0.1 percent in October compared with September. By components for spending, durable goods rebounded 2.7 percent, following a 1.1 percent decline the prior month. Nondurables fell 1.0 percent, following a 0.1 percent dip in October. Services jumped 0.5 percent, following a 0.1 percent rise in October.

With income growing faster than spending, the saving rate rose to 3.6 percent of income in November, up from 3.4 percent in October.

Oklahoma Nonfarm Industry Contribution to Earnings

Third Quarter 2012

Source: U.S. Department of Commerce, Bureau of Economic Analysis



Definition & Importance

Quarterly estimates of state personal income are seasonally adjusted at annual rates by the Bureau of Economic Analysis (BEA). Quarterly personal income estimates are revised on a regular schedule to reflect more complete than the data that were available when the estimates were initially prepared and to incorporate updated seasonal factors.

Current Developments

State personal income growth slowed to 0.5 percent in the 3rd quarter of 2012, from 0.7 percent in the 2nd quarter, according to estimates by the U.S. Bureau of Economic Analysis (BEA). Growth slowed in 34 states, accelerated in 11, and was unchanged in five states (including Oklahoma). Growth across states ranged from 1.4 percent in North Dakota to -1.6 percent in South Dakota.

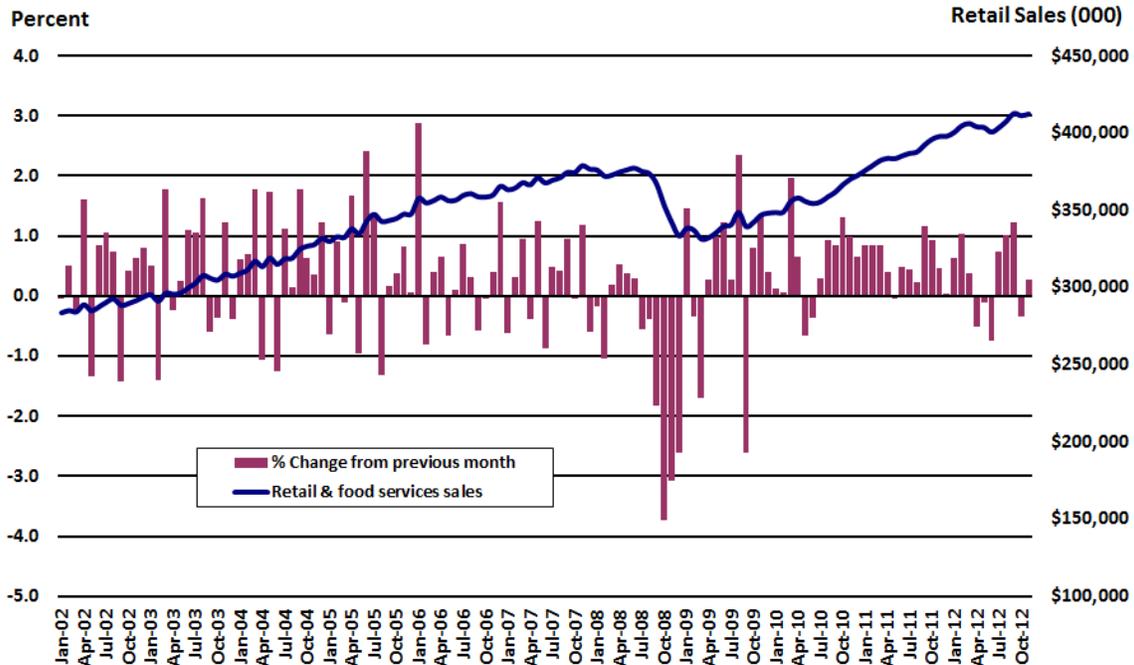
Personal income grew to \$148.7 billion in Oklahoma, up from \$147.7 billion in the 2nd quarter. Oklahoma's personal income growth rate held steady at 0.7 percent for the quarter and ranked 13th in the nation.

Earnings in the construction industry grew 3.6 percent in Texas and 3.3 percent in Oklahoma in the 3rd quarter. Earnings growth of \$2.3 billion in these two states was more than one half the \$4.4 billion of construction earnings growth in the other forty-eight states. In Oklahoma, farm earnings saw the highest percentage increase, growing 13.7 percent during the 2nd quarter. Mining earnings (including oil and gas earnings) fell in most states, including major energy producers such as Texas, Oklahoma, Louisiana, Wyoming, Alaska, and West Virginia.

Earnings in the administrative services industry declined in Oklahoma (down 3.7 percent), Nevada (down 2.5 percent), and West Virginia (down 2.3 percent) and brought administrative services earnings in those states to their lowest levels since the 1st quarter of 2011.

U.S. Retail Sales (Adjusted for Seasonal, Holiday, and Trading-Day Differences)

Source: U.S. Census Bureau, Advance Monthly Sales for Retail and Food Services



Definition & Importance

Retail sales measure the total receipts at stores that sell merchandise and related services to final consumers. Sales are by retail and food services stores. Data are collected from the Monthly Retail Trade Survey conducted by the U.S. Bureau of the Census. Essentially, retail sales cover the durables and nondurables portions of consumer spending. Consumer spending accounts for roughly two-thirds of the U.S. GDP and is therefore essential to Oklahoma's economy. Retail sales account for around one-half of consumer spending and economic recovery calls for consumption growth.

Current Developments

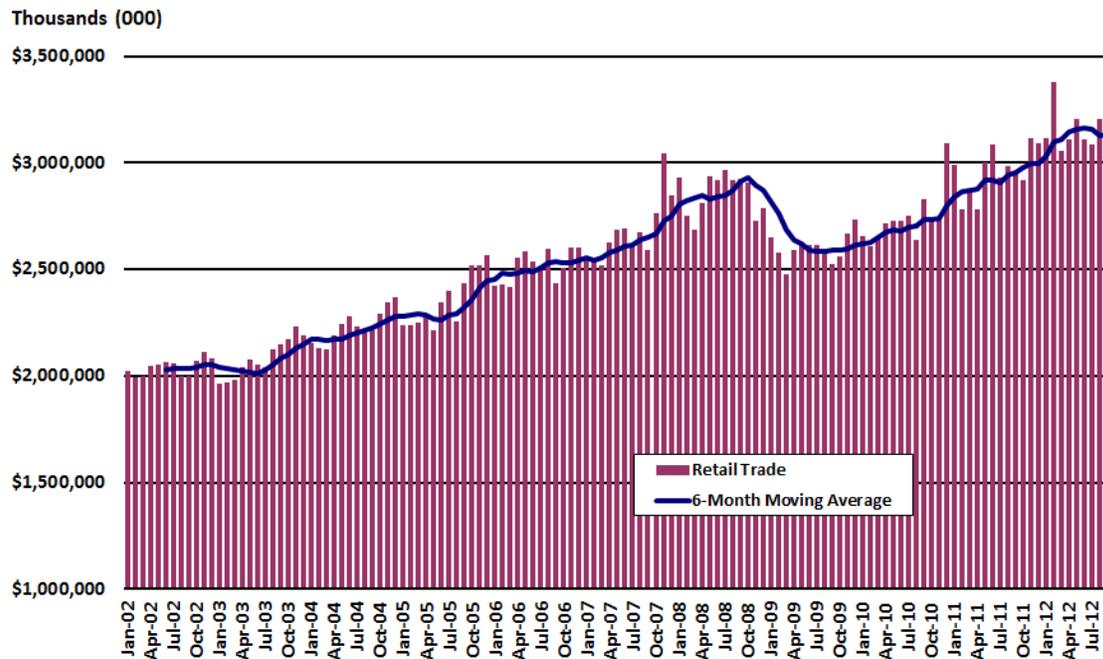
Americans spent more on autos, electronics and building supplies in November, and shopped more frequently online. Advance estimates of U.S. retail and food services sales for November, adjusted for seasonal variation and holiday and trading-day differences, but not for price changes, were \$412.4 billion, an increase of 0.3 percent from the previous month and 3.7 percent above November 2011, according to the U.S. Census Bureau. The September to October 2012 percent change was unrevised from -0.3 percent.

Motor vehicle sales rebounded 1.4 percent after a 1.9 percent decrease in October. Lower pump prices pushed gasoline station sales lower to -4.0 percent in November, following a 1.0 percent rise the prior month. Excluding both autos and gasoline components, sales gained a healthy 0.7 percent, following a 0.1 percent decline in October (originally down 0.3 percent).

Other retail sales gains were widespread except at department stores, where sales dropped 0.9 percent in November. However, sales at non-store retailers, which include online shopping, rose 3.0 percent—the biggest monthly gain in 13 months. Also, leading the sales were electronics & appliance stores, (+2.5 percent), and building materials & garden equipment, (+1.6 percent). Also gaining were furniture & home furnishings; health & personal care; clothing, sporting goods, hobby, book & music stores; miscellaneous store retailers; and food services & drinking places.

Oklahoma Total Adjusted Retail Trade

Source: Center for Economic & Management Research, University of Oklahoma



Definition & Importance

The Center for Economic and Management Research (CEMR) Price College of Business, at the University of Oklahoma produces the Oklahoma Monthly Retail Sales Series containing monthly estimates of retail sales for Oklahoma, the Oklahoma City, Tulsa and Lawton Metropolitan Statistical Areas and 48 selected cities in Oklahoma. The series is based on sales tax collection data provided by the Business Tax Division, Oklahoma Tax Commission (OTC). In order to take out monthly volatility, we have used a six-month moving average.

Current Developments

Monthly retail sales slipped in September as Oklahoma consumers took a break from strong back-to-school shopping activity in August. Total adjusted retail sales for September was at a level of \$3,079,101,793 or 4.0 percent above August's sales figure of \$3,206,806,551 and 4.3 percent above September 2011.

Durable goods sales advanced 0.4 percent in September with the largest gains seen in lumber & hardware (+4.0 percent), auto accessories & repair (+1.9 percent), and furniture (+0.03 percent). Declining sales were seen in electronics & music stores (-5.3 percent), miscellaneous durable goods (-4.5 percent), and used merchandise (-2.7 percent). Over the year, durable goods sales were 8.3 percent more than September 2011.

Total nondurable goods sales fell 5.3 percent in September with the largest decline in estimated gasoline sales (-22.0 percent). Other declines were seen in apparel sales (-3.3 percent), drugs (-2.6 percent), liquor (-2.0 percent), general merchandise (-2.0), and miscellaneous non-durable goods (-1.6 percent). Advancing non-durable categories were eating & drinking sales (1.9 percent) and food sales (+1.3 percent). Compared to September 2011, non-durable goods sales improved 3.1 percent.