



---

# 2010 Economic Forecast: U.S. and State Conditions

Russell R. Evans

Director and Research Economist  
Center for Applied Economic Research  
Oklahoma State University – Stillwater  
russell.evans@okstate.edu

<http://www.spears.okstate.edu/caer>



Spears School  
**OF BUSINESS**  
Center for Applied  
Economic Research

# National Economic Commentary

---

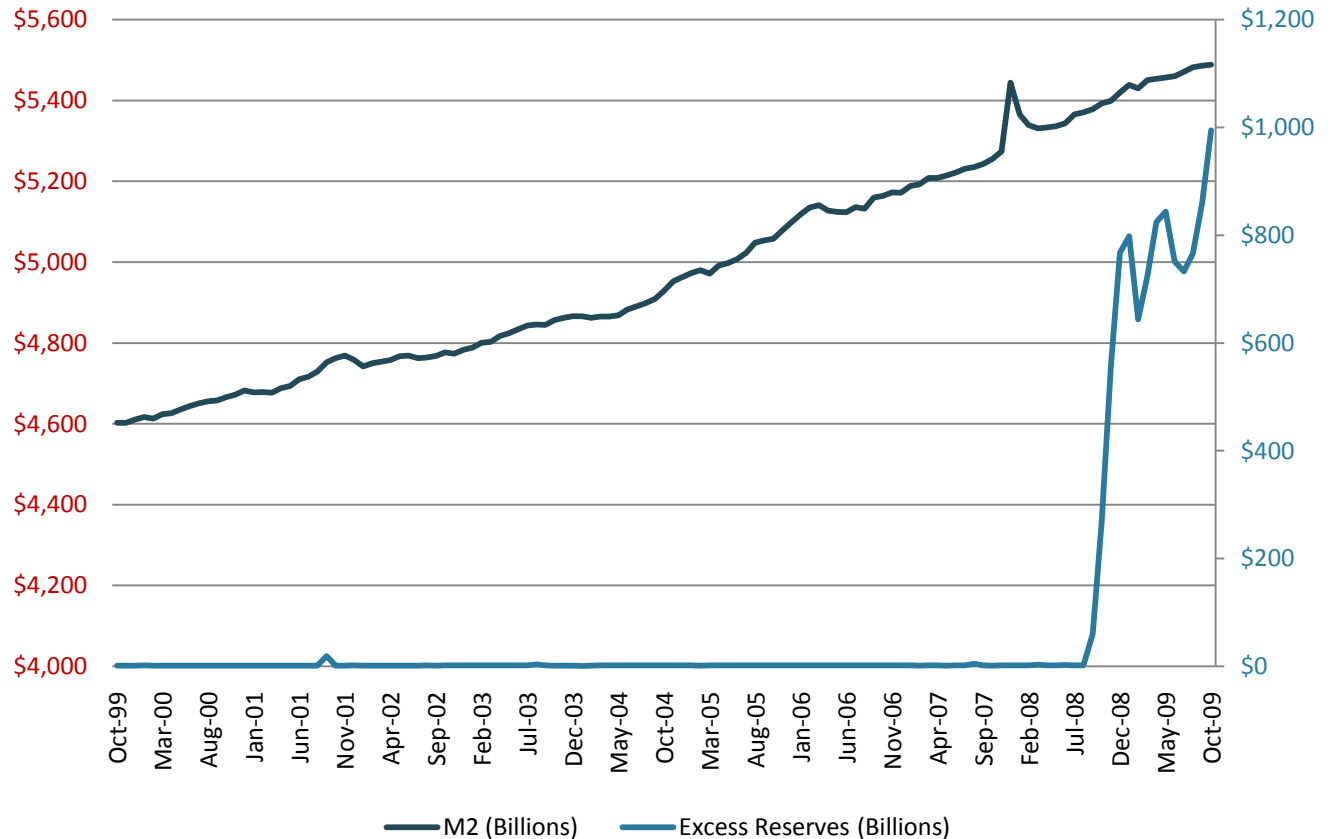
## ✦ Prospects for Inflation

- Governments print money; banks create money
- Money is created through successive rounds of lending and borrowing
- Money multiplier = the maximum increase in the money stock resulting from a change in excess reserves
- In late summer/early fall of 2008 the money multiplier collapses



# National Economic Commentary

## Money Supply vs Excess Reserves



# National Economic Commentary

---

## ✦ Prospects for a “jobless recovery”

- GDP = volume of goods and services produced
- $GDP = GDP * (Hours/Hours)$
- $GDP = (GDP/Hours) * Hours$
- $GDP = (output\ per\ hour) * hours\ worked$
- Conclusion: GDP is a function of labor productivity and employment
- In order to generate jobs growth, GDP growth must outpace productivity growth



# National Economic Commentary

---

## Average Annual Percent Change, 1980-2008

| Years     | Hours Worked | Labor Productivity | GDP   |
|-----------|--------------|--------------------|-------|
| 1980-1989 | 1.77%        | 1.38%              | 3.15% |
| 1990-1999 | 1.59%        | 1.96%              | 3.55% |
| 2000-2008 | -0.03%       | 2.62%              | 2.59% |

At projected productivity growth rates U.S. GDP would need to grow at 2.5% – 3.5% per year in 2010-2011 to significantly increase employment.



# Is Oklahoma Recession Proof?



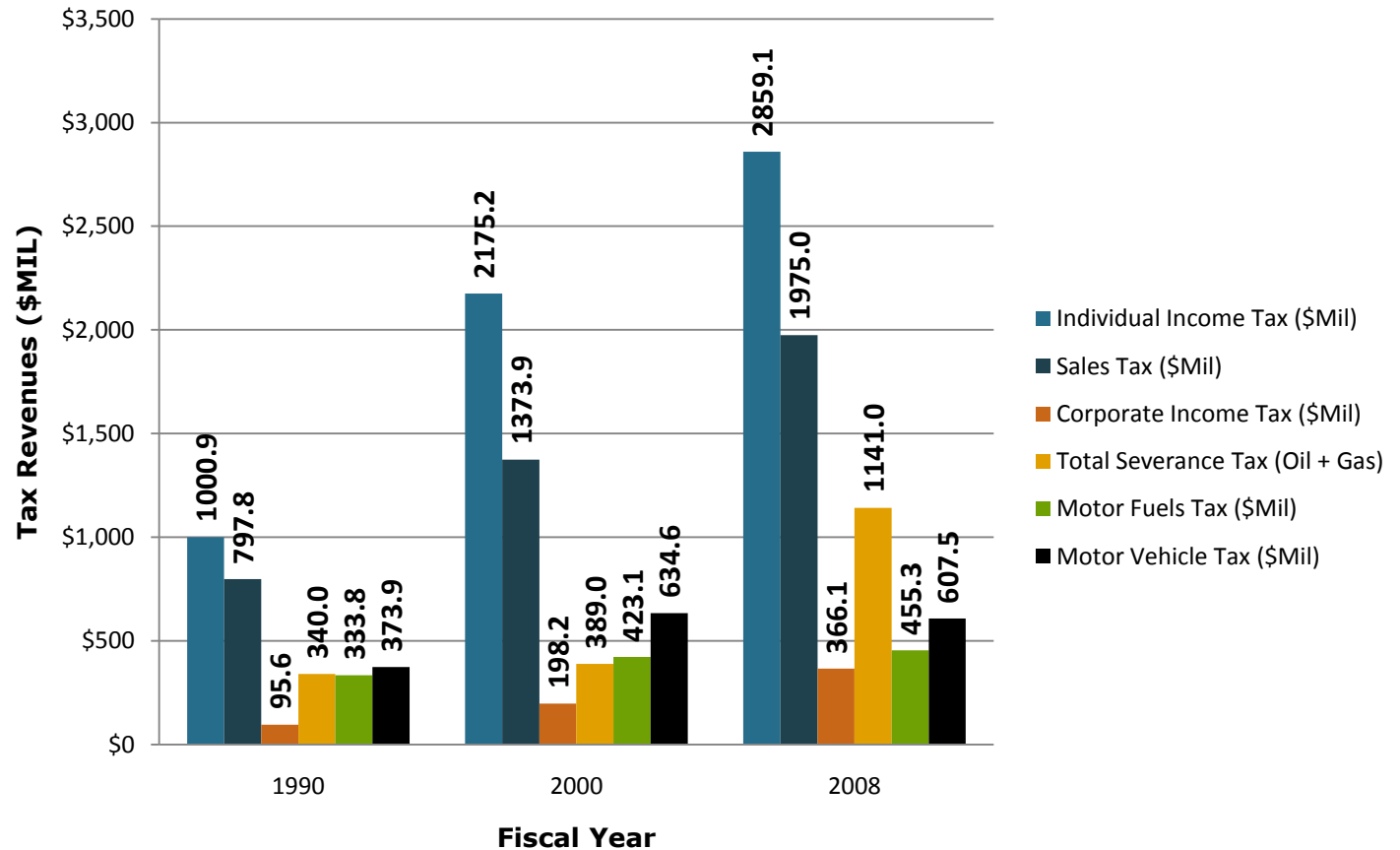
|   | Pre-Recession<br>(May 2008) | Present (Aug.<br>2009) | Difference       | Monthly<br>Production<br>Tax Revenue<br>Difference |
|---|-----------------------------|------------------------|------------------|--|
| Total Non-Farm Employment - CES         | 1,597,600                   | 1,554,100              | -43,500          |  |
| Total Employment – QCEW                 | 1,566,236*                  | 1,517,012*             | -49,224          |  |
| Wage and Salary Disbursements           | \$64,221,000,000            | \$61,321,000,000       | \$2,900,000,000  |  |
| Total Income                            | \$132,134,000,000           | \$128,958,000,000      | \$3,176,000,000  |  |
| Rig Count                               | 208                         | 79                     | -129             |  |
| Natural Gas Wellhead Price (per<br>MCF) | \$9.81                      | \$3.43                 | -6.38            |  |
| Monthly Natural Gas Production<br>(MCF) | 159,092,000                 | 159,154,000            | 62000            |  |
| Revenue                                 | \$1,560,692,520             | \$545,898,220          | -\$1,014,794,300 | -\$71,035,601                                      |
| Crude Oil Price (per bbl)               | \$125.40                    | \$69.41                | -\$55.99         |  |
| Monthly Crude Oil Production<br>(bbl)   | 5,854,000                   | 5,718,000              | -136000          |  |
| Revenue                                 | \$734,091,600               | \$396,886,380          | -\$337,205,220   | -\$23,604,365                                      |

\* - Data Available Through March 2009



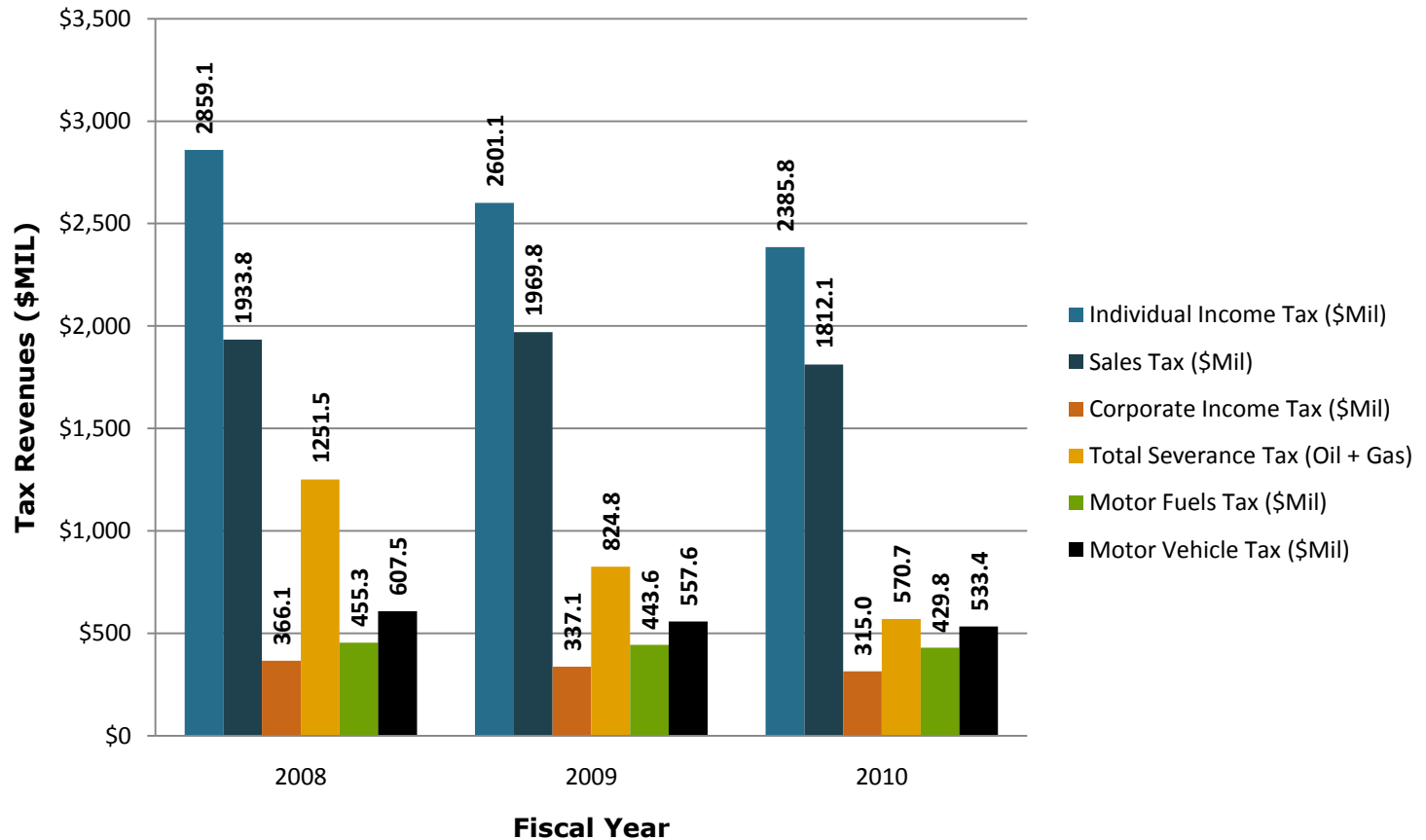
# Is Oklahoma Recession Proof?

## Oklahoma Tax Revenues



# Is Oklahoma Recession Proof?

## Oklahoma Tax Revenues





# Selected U.S Indicators, 2001-2011



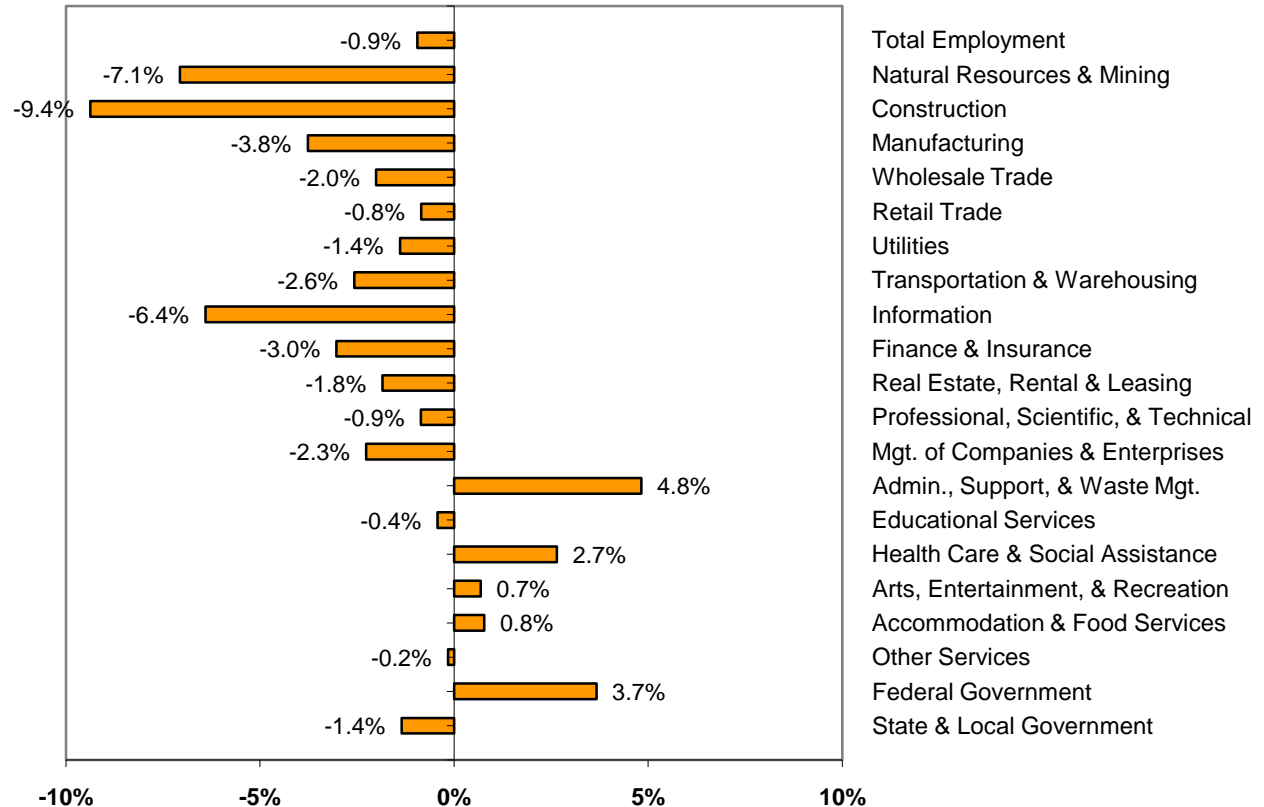
|   | 2001     | 2002     | 2003     | 2004     | 2005     | 2006     | 2007     | 2008     | 2009e    | 2010f    | 2011f    |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Real GDP (Chain2000 \$Bil)                  | 11,347.2 | 11,553.0 | 11,840.7 | 12,263.8 | 12,638.4 | 12,976.3 | 13,254.1 | 13,312.2 | 12,985.5 | 13,276.9 | 13,659.5 |
|   | 1.1%     | 1.8%     | 2.5%     | 3.6%     | 3.1%     | 2.7%     | 2.1%     | 0.4%     | -2.5%    | 2.2%     | 2.9%     |
| Nominal GDP (\$Bil)                         | 10,286.2 | 10,642.3 | 11,142.2 | 11,867.8 | 12,638.4 | 13,398.9 | 14,077.7 | 14,441.4 | 14,267.0 | 14,754.5 | 15,412.2 |
|   | 3.4%     | 3.5%     | 4.7%     | 6.5%     | 6.5%     | 6.0%     | 5.1%     | 2.6%     | -1.2%    | 3.4%     | 4.5%     |
| Non-Ag Employment (Mil)                     | 131.83   | 130.34   | 130.00   | 131.42   | 133.70   | 136.10   | 137.60   | 137.05   | 131.89   | 130.65   | 132.92   |
|   | 0.0%     | -1.1%    | -0.3%    | 1.1%     | 1.7%     | 1.8%     | 1.1%     | -0.4%    | -3.8%    | -0.9%    | 1.7%     |
| Unemployment Rate (%)                       | 4.74     | 5.78     | 5.99     | 5.54     | 5.08     | 4.62     | 4.63     | 5.81     | 9.23     | 10.02    | 9.42     |
|   | 19.5%    | 22.0%    | 3.6%     | -7.5%    | -8.4%    | -9.0%    | 0.4%     | 25.4%    | 58.8%    | 8.6%     | -6.0%    |
| Total Personal Income (\$Bil)               | 8,883.3  | 9,060.1  | 9,378.2  | 9,937.3  | 10,485.9 | 11,268.1 | 11,894.1 | 12,238.8 | 11,972.8 | 12,291.1 | 12,794.7 |
|   | 3.8%     | 2.0%     | 3.5%     | 6.0%     | 5.5%     | 7.5%     | 5.6%     | 2.9%     | -2.2%    | 2.7%     | 4.1%     |
| Wage & Salary Disbursements (\$Bil)         | 4,952.2  | 4,997.3  | 5,139.6  | 5,425.7  | 5,701.0  | 6,068.9  | 6,408.9  | 6,545.9  | 6,253.9  | 6,376.2  | 6,635.1  |
|   | 2.6%     | 0.9%     | 2.8%     | 5.6%     | 5.1%     | 6.5%     | 5.6%     | 2.1%     | -4.5%    | 2.0%     | 4.1%     |
| Consumer Price Index (82-84=1.0)            | 1.77     | 1.80     | 1.84     | 1.89     | 1.95     | 2.02     | 2.07     | 2.15     | 2.15     | 2.18     | 2.22     |
|   | 2.8%     | 1.6%     | 2.3%     | 2.7%     | 3.4%     | 3.2%     | 2.9%     | 3.8%     | -0.3%    | 1.5%     | 2.0%     |
| US Refiner Acq Price Crude (\$/Bbl)         | 22.95    | 24.00    | 28.60    | 36.91    | 50.31    | 60.09    | 67.98    | 94.29    | 58.70    | 63.38    | 71.76    |
|   | -18.6%   | 4.6%     | 19.2%    | 29.1%    | 36.3%    | 19.4%    | 13.1%    | 38.7%    | -37.7%   | 8.0%     | 13.2%    |
| US Wellhead Nat Gas Price (\$/MiiBTU)       | 4.00     | 2.88     | 4.83     | 5.34     | 7.31     | 6.25     | 6.23     | 7.84     | 3.28     | 3.38     | 4.01     |
|   | 10.7%    | -27.9%   | 67.8%    | 10.4%    | 36.9%    | -14.5%   | -0.3%    | 25.8%    | -58.1%   | 3.0%     | 18.7%    |
| Federal Budget Surplus (\$Bil)              | 40.50    | -252.75  | -376.38  | -379.45  | -283.03  | -203.80  | -236.50  | -642.55  | -1224.18 | -1262.55 | -977.52  |
|   | -78.1%   | -724.1%  | 48.9%    | 0.8%     | -25.4%   | -28.0%   | 16.0%    | 171.7%   | 90.5%    | 3.1%     | -22.6%   |
| <sup>e</sup> Estimate <sup>f</sup> Forecast | 2001     | 2002     | 2003     | 2004     | 2005     | 2006     | 2007     | 2008     | 2009e    | 2010f    | 2011f    |



# U.S. Employment Forecast, 2010



U.S. Non-Farm Wage & Salary Employment  
2010 Forecast



# Selected Oklahoma Indicators, 2001-2011



|                                | Sector                                    | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007      | 2008      | 2009e     | 2010f     | 2011f     |
|--------------------------------|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Labor Force                    | CES Non-Farm W&S Employment (Thou)        | 1,493.9   | 1,473.7   | 1,445.4   | 1,461.5   | 1,499.5   | 1,540.0   | 1,568.4   | 1,595.5   | 1,563.1   | 1,553.3   | 1,580.0   |
|                                |   | 0.9%      | -1.4%     | -1.9%     | 1.1%      | 2.6%      | 2.7%      | 1.8%      | 1.7%      | -2.0%     | -0.6%     | 1.7%      |
|                                | QCEW Wage & Salary Employment             | 1,463,632 | 1,439,764 | 1,411,013 | 1,427,635 | 1,465,883 | 1,507,133 | 1,534,715 | 1,550,497 | 1,503,534 | 1,492,039 | 1,516,432 |
|                                |   | 1.2%      | -1.6%     | -2.0%     | 1.2%      | 2.7%      | 2.8%      | 1.8%      | 1.0%      | -3.0%     | -0.8%     | 1.6%      |
|                                | QCEW Wage & Salary Employment - Metro     | 992,298   | 976,840   | 955,044   | 967,641   | 992,885   | 1,020,610 | 1,036,821 | 1,045,165 | 1,010,498 | 1,002,903 | 1,019,185 |
|                                |   | 1.1%      | -1.6%     | -2.2%     | 1.3%      | 2.6%      | 2.8%      | 1.6%      | 0.8%      | -3.3%     | -0.8%     | 1.6%      |
|                                | QCEW Wage & Salary Employment - Non-Metro | 471,331   | 462,917   | 455,967   | 459,983   | 473,006   | 486,544   | 497,923   | 505,345   | 493,084   | 489,492   | 497,558   |
|                                |   | 1.6%      | -1.8%     | -1.5%     | 0.9%      | 2.8%      | 2.9%      | 2.3%      | 1.5%      | -2.4%     | -0.7%     | 1.6%      |
|                                | LAUS Total Employment                     | 1,614,588 | 1,602,014 | 1,598,501 | 1,605,522 | 1,624,944 | 1,648,732 | 1,667,444 | 1,681,840 | 1,663,719 | 1,665,856 | 1,684,446 |
|                                |   | 0.3%      | -0.8%     | -0.2%     | 0.4%      | 1.2%      | 1.5%      | 1.1%      | 0.9%      | -1.1%     | 0.1%      | 1.1%      |
| Civilian Labor Force LAUS      | 1,676,222                                 | 1,683,096 | 1,693,939 | 1,689,583 | 1,701,551 | 1,719,479 | 1,737,943 | 1,748,363 | 1,776,241 | 1,791,240 | 1,801,885 |           |
|                                | 0.9%                                      | 0.4%      | 0.6%      | -0.3%     | 0.7%      | 1.1%      | 1.1%      | 0.6%      | 1.6%      | 0.8%      | 0.6%      |           |
| Unemployment Rate LAUS (%)     | 3.7                                       | 4.8       | 5.6       | 5.0       | 4.5       | 4.1       | 4.1       | 3.8       | 6.3       | 7.0       | 6.5       |           |
|                                | 18.4%                                     | 31.1%     | 17.0%     | -11.7%    | -9.5%     | -8.6%     | -1.4%     | -6.3%     | 66.5%     | 10.5%     | -6.9%     |           |
| Total Unemployment LAUS (Thou) | 61,634                                    | 81,082    | 95,437    | 84,061    | 76,607    | 70,747    | 70,499    | 66,523    | 112,522   | 125,385   | 117,439   |           |
|                                | 19.6%                                     | 31.6%     | 17.7%     | -11.9%    | -8.9%     | -7.6%     | -0.4%     | -5.6%     | 69.1%     | 11.4%     | -6.3%     |           |



# Selected Oklahoma Indicators, 2001-2011



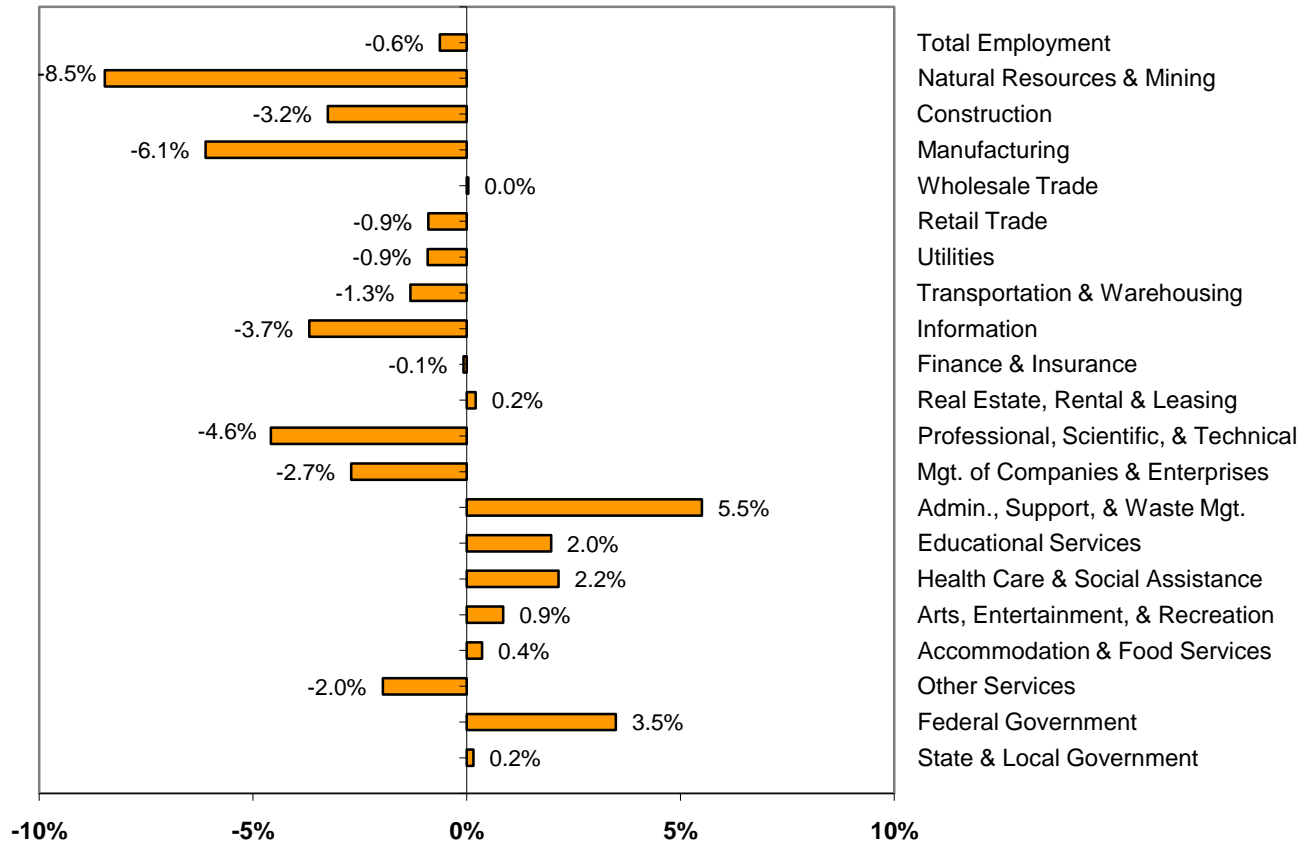
|   |  |          |          |          |           |           |           |           |           |           |           |           |
|---|--|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Income                                      | Nominal Personal Income (\$Mil)          | 90,837.3 | 91,364.5 | 94,148.5 | 101,178.8 | 107,640.8 | 118,747.0 | 123,888.8 | 131,070.3 | 128,944.0 | 131,910.8 | 137,177.5 |
|   |  | 6.9%     | 0.6%     | 3.0%     | 7.5%      | 6.4%      | 10.3%     | 4.3%      | 5.8%      | -1.6%     | 2.3%      | 4.0%      |
|   | Real Personal Income (Chain2000 \$Mil)   | 99,287.5 | 98,521.4 | 99,495.8 | 104,193.6 | 107,628.0 | 115,567.4 | 117,419.6 | 120,212.8 | 118,007.8 | 119,020.9 | 121,706.0 |
|   |  | 4.9%     | -0.8%    | 1.0%     | 4.7%      | 3.3%      | 7.4%      | 1.6%      | 2.4%      | -1.8%     | 0.9%      | 2.3%      |
|   | Wage and Salary Income (\$Mil)           | 44,607.0 | 45,196.3 | 46,260.3 | 48,522.3  | 51,177.3  | 56,434.0  | 59,831.5  | 63,504.8  | 61,735.7  | 62,896.6  | 65,246.6  |
|   |  | 5.0%     | 1.3%     | 2.4%     | 4.9%      | 5.5%      | 10.3%     | 6.0%      | 6.1%      | -2.8%     | 1.9%      | 3.7%      |
|   | Per Capita Personal Income (\$Thou)      | 26.228   | 26.232   | 26.929   | 28.809    | 30.491    | 33.279    | 34.335    | 35.984    | 35.117    | 35.660    | 36.828    |
|   |  | 6.6%     | 0.0%     | 2.7%     | 7.0%      | 5.8%      | 9.1%      | 3.2%      | 4.8%      | -2.4%     | 1.5%      | 3.3%      |
|   | Real Per Capita Personal Income (\$Thou) | 28.668   | 28.287   | 28.458   | 29.668    | 30.488    | 32.388    | 32.543    | 33.004    | 32.139    | 32.175    | 32.674    |
|   |  | 4.6%     | -1.3%    | 0.6%     | 4.2%      | 2.8%      | 6.2%      | 0.5%      | 1.4%      | -2.6%     | 0.1%      | 1.6%      |
| Ratio OK/US Per Capita Personal Income      | 84.3%                                    | 83.5%    | 83.6%    | 85.1%    | 86.2%     | 88.4%     | 87.2%     | 89.6%     | 90.3%     | 90.2%     | 90.3%     |           |
|   | 3.8%                                     | -1.0%    | 0.1%     | 1.9%     | 1.2%      | 2.5%      | -1.3%     | 2.8%      | 0.7%      | -0.1%     | 0.2%      |           |
| Taxable Retail Sales (\$Mil)                | 32,222                                   | 31,099   | 31,823   | 33,955   | 35,987    | 39,257    | 41,511    | 44,726    | 40,927    | 40,793    | 42,233    |           |
|   | 4.4%                                     | -3.5%    | 2.3%     | 6.7%     | 6.0%      | 9.1%      | 5.7%      | 7.7%      | -8.5%     | -0.3%     | 3.5%      |           |
| <sup>e</sup> Estimate <sup>f</sup> Forecast |  | 2001     | 2002     | 2003     | 2004      | 2005      | 2006      | 2007      | 2008      | 2009e     | 2010f     | 2011f     |



# Oklahoma Employment Forecast, 2010



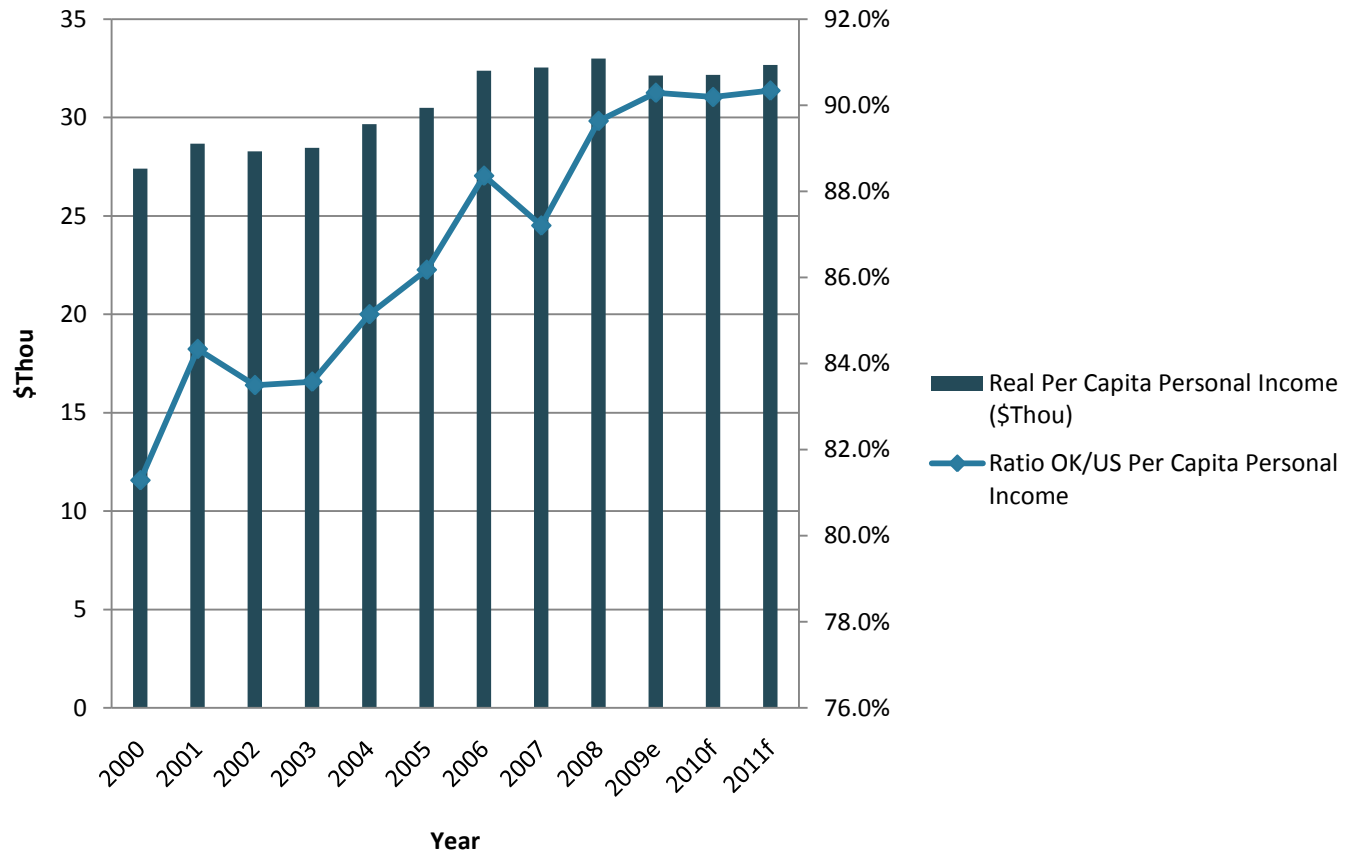
Oklahoma Non-Farm Wage & Salary Employment  
2010 Forecast



# Oklahoma Personal Income

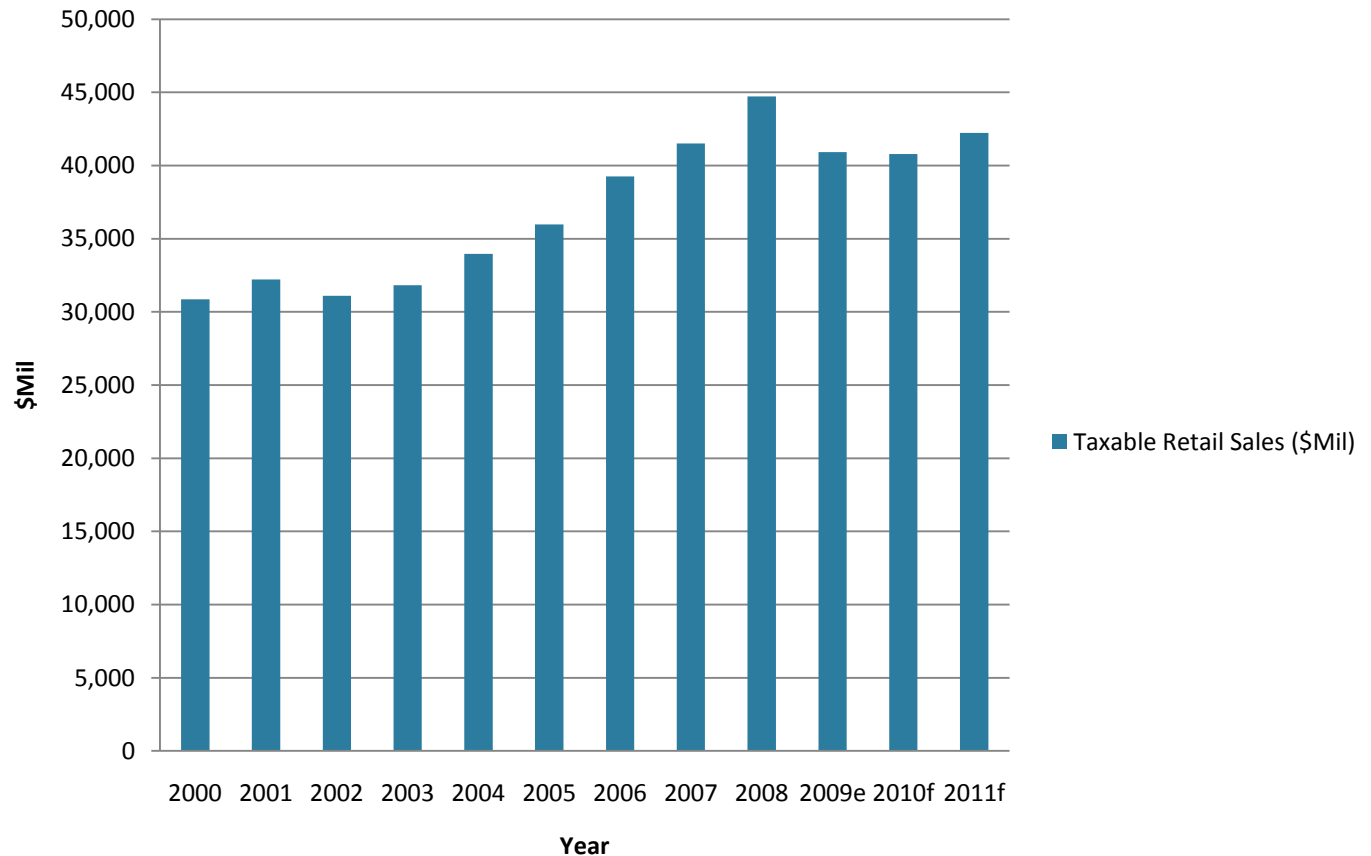


Real Personal Income and OK/US Per Capita Personal Income Ratio



# Oklahoma Retail Sales

## Taxable Retail Sales (\$Mil)



# Oklahoma Forecast, 2010

---



- ✦ No significant recovery until second half of 2010
  - FY 2010 will continue to strain budgets
  - Severance Tax revenue likely to fall further before stabilizing
- ✦ Employment flat to down for the year
- ✦ Unemployment rate likely to increase modestly before falling to 6.5% by end of 2010





# OK 2010 Economic Challenges

---

- ✦ Slow recovery in Oil/Gas prices
- ✦ “Negative Multiplier Impacts” of stressed government budgets
- ✦ Access to credit for Oklahoma small businesses

