



THE CHANGING ROLE OF OIL AND GAS IN OKLAHOMA

by

Mark C. Snead
Research Economist

**Business and Economic Research
College of Business Administration
Oklahoma State University**
(405) 744-7405
econmcs@okstate.edu

December 2000

The article is available online at <http://economy.okstate.edu>



Oklahoma State University
College of Business Administration

INTRODUCTION

The historical dependence of the state economy upon the oil and gas industry cannot be overstated. Towns such as Tulsa, Cushing, Ponca City, Bartlesville, Enid, and others, owe much of their heritage and current economic clout to the boom of the oil and gas industry in the twentieth century.

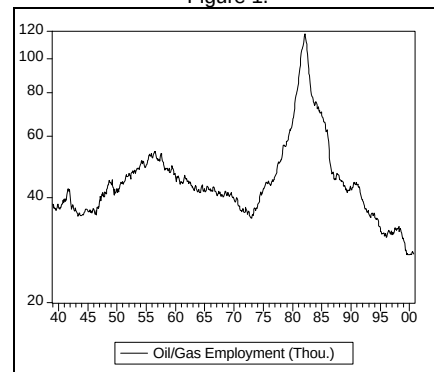
Just how important was the oil patch to state prosperity in its heyday? In a word, vital. From 1975 to the height of the boom in 1982, oil and gas companies operating in Oklahoma

increased their payrolls from about 40,000 to nearly 120,000 employees while riding the wave of high prices in the energy complex. In 1982, 1 in 12 state workers were employed in the oil patch. (Figure 1 documents employment trends in the industry since 1939.)

The unusual profitability of the oil and gas companies not only allowed them to pay well above state average wages, but also provided the wherewithal to fund an enormous number of city development and philanthropic activities. These companies, along with their well-paid

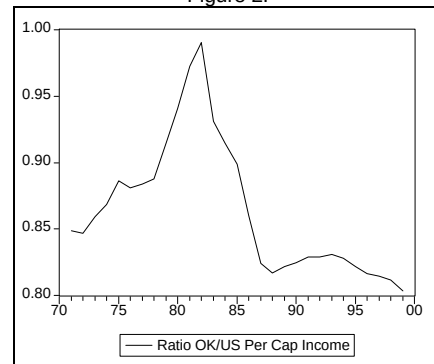
employees, were the financial engines behind the expansion of many Oklahoma cities.

Figure 1.



The state's economic health also compared much more favorably with the nation during this period. After lagging the nation for decades in per capita personal income, the state jumped from a mere 85% of the national average to near parity with the nation in relative per capita income in 1982. Figure 2 highlights this remarkable reversal that was due in large part to the unusually good health of the oil and gas sector.

Figure 2.



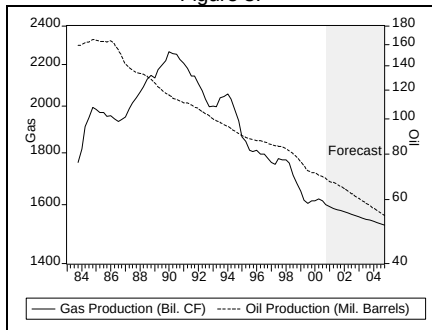
CURRENT TRENDS

Unfortunately the boom is over in Oklahoma, leaving the oil bust of the 1980s as arguably the defining economic event in Oklahoma the past 50 years.

Oil production within the state has declined steadily to less than 40% of 1986 levels, with natural gas faring better but now producing only 65% of 1990 levels. Figure 3 documents the steady decline in both gas and oil production within the state's borders.

The trend in employment, however, is much more troubling than the production numbers. Only 25,000 oil and gas workers remain in the state, or approximately 20% of the peak hiring level reached in 1982. More than 90,000 workers have been forced out of the industry in less than 20 years, leaving only 1 in 60 state workers in oil and gas related jobs today.

Figure 3.



In the Tulsa metro area alone, long known as the 'Oil Capital of the World', oil and gas-related wage and salary workers now number less than 7,000, down from a peak of nearly 29,000 in 1982. The percentage of total Tulsa area workers employed in the oil and gas sector has dropped from approximately 10% of the workforce in 1982 to only 1.7% forecasted for 2001. Several smaller Oklahoma cities including Bartlesville, Enid, and Ponca City continue to struggle against the decline of large oil patch-related paychecks.

Possibly most troubling is the decline in Oklahoma's per capita income relative to the nation since 1982. Not only has the state given back all of the gains enjoyed in the boom, but has fallen below the pre-boom level to only 80% of U.S. per capita income.

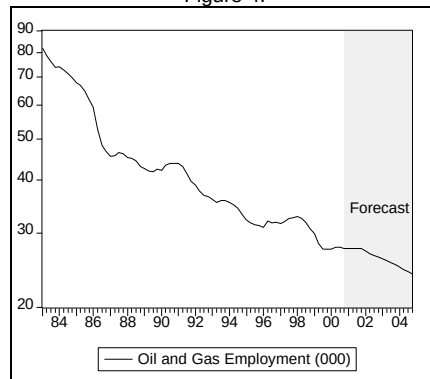
FORECASTS

Where is the industry headed from here? In our most recent forecast in the *Oklahoma Economic Outlook*, we project that the industry will benefit temporarily from the recent rise in oil and gas prices and remain mostly steady in 2001, but likely has not yet reached a long run bottom.

Figure 3 highlights the downward trend we see for production in the industry through 2004. Annual oil production is forecasted to fall below 55 million barrels, and annual gas production below 1,530 billion CF, by 2004.

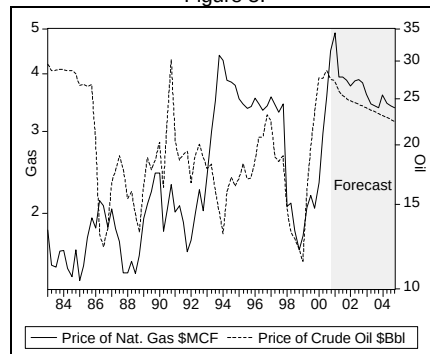
The employment forecast in Figure 4 shows a similar pattern. We project a -2.4% decline in oil and gas related wage and salary employment for all of 2000, a modest decline of -0.4% in 2001, and then declines of -3.0% in 2002 and -3.8% in 2003.

Figure 4.



The relatively stable employment forecast for 2001 reflects the expected stimulus to the state economy from the spike in both oil and gas prices experienced in 1999 and 2000 (see Figure 5). Prices are expected to moderate through 2004 from the peak levels posted this year, but should remain above 10-year average levels. These forecasts are provided by The Standard & Poor's DRI Division of the McGraw-Hill Companies (Lexington, MA) and are used as inputs to the *Oklahoma State Econometric Model*.

Figure 5.



The projected continued downturn in the oil and gas sector will likely contribute to a further decline in the state's per capita income relative to the nation. Our forecast calls for Oklahoma per capita income to fall to 77% of the national average by 2004. The loss of jobs at the high end of the wage scale will inevitably pull down the state average.

SUMMARY

It has been a long, bumpy road to recovery from the collapse of the state energy sector, and our recent forecast suggests more contraction ahead. The industry should hold its ground in 2001, but look for continued weakness in production and hiring as energy prices moderate once again.

The oil and gas industry, nevertheless, will remain an important component of the Oklahoma economy. The sector pays the highest average wages among all major industries in the state and will continue to play an important, though diminishing, role across the state.

The industry also is not likely to disappear altogether in the near future given that the state possesses significant refining capacity and vast natural gas reserves. But the excessive windfall profits enjoyed during past energy price spikes will instead produce merely a modest temporary bonus to the state.

At least there is a silver lining in this story. We now have a much less oil and gas-dependent Oklahoma that is more representative of the national economy. No longer will the excessive volatility of the energy sector transmit such tremendous shocks through the state economy. It has been a gut-wrenching two decades in reaching this point, but that is the price of having a more diversified, insulated, and stable Oklahoma economy in the long run.