

Center for Applied Economic Research

Economic Outlook 2016: Summer Update

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August 2 2016

The declines in energy-related sectors have caused Oklahoma employment to fall and income growth to stagnate the first half of 2016. Slight energy-related employment declines are forecast for the rest of 2016, with a modest rebound forecast to begin in 2017. After falling to a low of 54 near the end of June, the number of drilling rigs climbed by five to reach 59 the third week of July. The low in the number of active drilling rigs is in the neighborhood of levels not seen since 1999, and is especially notable because it occurred after the number of rigs exceeded 200 in late 2014 and early 2015. But the bottoming out of the energy sector and growth of the national economy is expected propel Oklahoma employment to grow in 2017.

The July release of the Short-Term Energy Outlook by the U.S. Energy Information Administration (EIA) forecasts modest increases in both the West Texas Intermediate crude oil price and the Henry Hub cash market natural gas price (Figure 1). Both oil prices and natural gas prices are forecast to have reached their bottoms the first quarter of 2016 and continue to modestly increase through the remainder of the year and 2017.

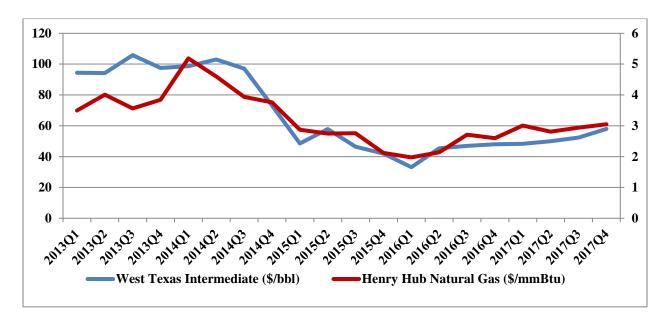


Figure 1: Oil and Natural Gas Prices (forecast begins 2016Q3)

As shown in Figure 2, employment in Oklahoma's mining sector generally follows the path of mining employment nationally. The swings in Oklahoma mining employment are greater than the nation's, in part likely because national mining employment activity outside of oil and gas (e.g., coal mining). Using the fourth quarter of 2014 as the benchmark, normalizing both U.S. and Oklahoma mining sector employment in the quarter to equal one, Oklahoma's mining employment decline off the peak exceeds that of the nation. Because mining sector employment responds with a time lag to changes in energy prices, employment in the sector is forecast to continue slightly declining in both Oklahoma and the U.S. during the last two quarters of 2016 before picking up in 2017. This would leave mining employment in the state nearly 30 percent below the peak level and approximately at the level posted at the end of 2010.

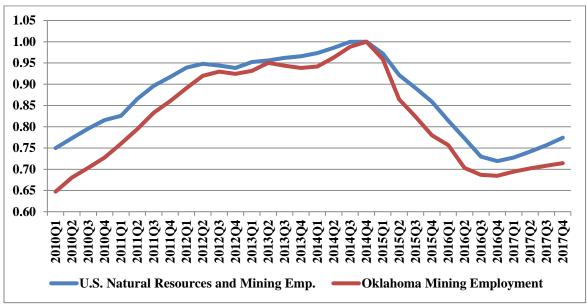


Figure 2: Oklahoma and U.S. Mining Employment (forecast begins 2016Q3)

The energy sector will be a drag on the Oklahoma economy throughout the rest of 2016 and only modestly contribute to growth in 2017. As shown in Figure 3, high energy prices delayed Oklahoma's entry into the Great Recession and caused the state economy to outperform the national economy during the initial years of the economic recovery. Oklahoma employment growth began to lag that of the nation in 2013 as Oklahoma's mining employment flattened out (Figure 2), well before the decline in energy prices. Oklahoma's nonfarm employment growth is forecast to turn positive the last quarter of 2016 and match that of the nation in the first quarter of 2017.

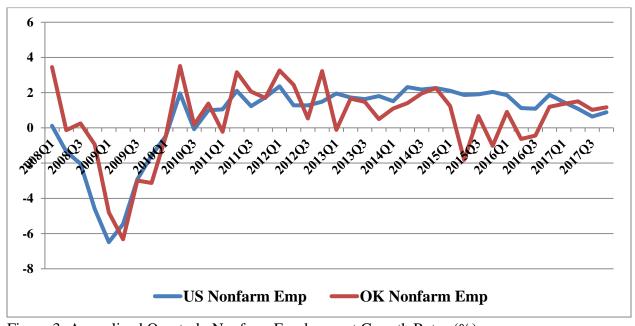


Figure 3: Annualized Quarterly Nonfarm Employment Growth Rates (%)

Average annual Oklahoma total nonfarm employment is forecast to rebound from a slight decline in 2016 to almost one percent growth in 2017 (Table 1). This falls below the corresponding forecasted U.S. growth rates of 1.7 and 1.3 percent. U.S. unemployment is forecast to decline slightly to 4.7 percent in 2017, which would allow the FED to raise short-term interest rates further. Rather than decline, Oklahoma unemployment rose slightly in response to weak employment growth brought about by the decline in the energy sector, but it should decline modestly in 2017 with the rebound in total employment.

Table 1. Oklahoma and National Employment Growth and Unemployment

	2014	2015	2016	2017
Oklahoma Nonfarm Emp. Growth	1.30%	0.73%	-0.10%	0.95%
U.S. Nonfarm Emp. Growth	1.88%	2.08%	1.67%	1.26%
Oklahoma Unemployment Rate	4.49%	4.25%	4.34%	4.0%
U.S. Unemployment Rate	6.17%	5.28%	4.81%	4.70%

Risks to the forecast include robust energy supply responses to the recent increases in energy prices, which could keep prices below their forecasted levels. The number of drilling rigs in North America already has begun to increase with the rebound in oil prices. Slowing growth in world demand also could dampen energy price increases. U.S. GDP growth has been weak for the last three quarters, raising concerns about the continued strength of the U.S. economy. Uncertainty surrounding the effects of Brexit has led the International Monetary Fund to slightly reduce its forecast for worldwide economic growth for 2016-2017. China has appeared to stabilize its economy, though it also could be adversely affected if growth of the European economy slows following Brexit.