

Center for Applied Economic Research

Oklahoma Economic Forecast Brief 2017

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Energy prices have rebounded significantly from their recent lows with the rebalancing of demand and supply. The recent rise in energy prices will cause employment in the Oklahoma energy sector to increase in 2017 and early 2018. Increased supply responses by oil producers to further price increases though will likely constrain oil prices within a narrow band during the upcoming eighteen months. World oil production is unlikely to be cut back significantly despite the recent planned cuts announced by OPEC and non-OPEC countries. Members of OPEC have often exceeded agreed upon quotas in the past and U.S. producers will increase supply in response to any price increases.

The January release of the Short-Term Energy Outlook by the U.S. Energy Information Administration (EIA) forecasts increases in both the West Texas Intermediate crude oil price and the Henry Hub cash market natural gas price in the short term (Figure 1). After reaching their lows during the first quarter of 2016, energy prices are expected to be significantly higher by the end of 2017 and middle of 2018.

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, likely in part because of national mining employment activity outside of oil and gas (e.g., coal mining). Oklahoma's mining employment decline off the peak level reached at the end of 2014 exceeds that of the nation. Because mining sector employment responds with a time lag to changes in energy prices, employment in the sector has not yet increased but is forecast to begin increasing the first quarter of 2017. The forecasted increase during 2017 would leave mining employment in the state at the end of the year almost 30 percent below the 2014 peak level, and slightly below the level posted at the end of 2010. As evidence of the expected increase in mining employment, after falling to a low of 54 near the end of June of last year, the number of drilling rigs in Oklahoma reported by Baker Hughes, Inc. has climbed to 96 by the last week of this month. Without further significant increases in energy prices though, mining employment will flatten out the first half of 2018.

The declines in energy-related sectors have caused seasonally-adjusted Oklahoma total nonfarm employment to fall most of 2016. The end of the slide in the energy sector, however, will allow

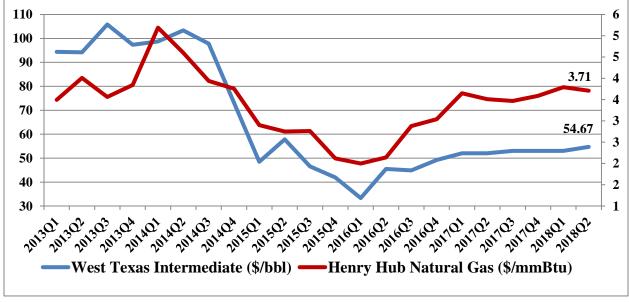


Figure 1: Oil and Natural Gas Prices (forecast begins 2017O1)

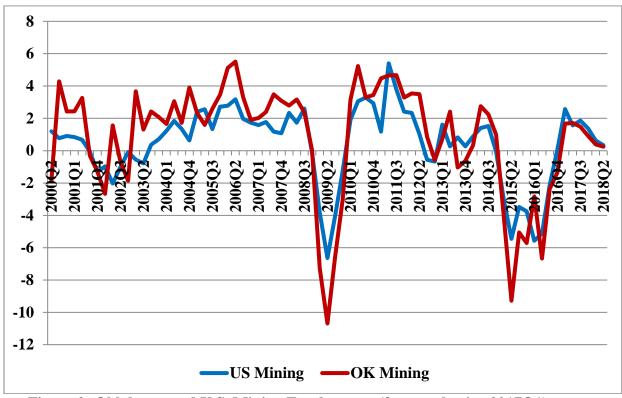


Figure 2: Oklahoma and U.S. Mining Employment (forecast begins 2017Q1)

the Oklahoma economy to turnaround and begin growing the first quarter of 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 though as Oklahoma's mining employment flattened out (Figure 2), well before the decline in energy prices. Oklahoma's quarterly total nonfarm employment growth rates are forecast to mostly match those of the nation beginning in the second quarter of 2017.

Average annual Oklahoma total nonfarm employment then is forecast to rebound from a decline of 0.41 percent in 2016 to a gain of 0.3 percent in 2017 (Table 1). This falls below the corresponding forecasted U.S. growth rates of 1.75 and 1.3 percent. The low annual growth rate of average Oklahoma employment in 2017 is in large part attributable to the declines in 2016 that put early 2017 levels below early 2016 levels. To be sure, the projected growth rate of total nonfarm employment from fourth quarter 2016-2017 is approximately one percent. Strongest growth in the state is forecast for construction, educational services, and leisure and hospitality services. Continued employment losses are forecast for the durable goods manufacturing sectors. The level of Oklahoma total nonfarm employment the first six months of 2018 is forecast to average 1.12 percent higher than the average the first six months of 2017.

The U.S. unemployment rate is forecast to decline to approximately 4.6 percent in 2017 and 4.4 percent during the first half of 2018. Rather than decline, Oklahoma unemployment rose in response to reduced employment brought about by the decline in the energy sector during 2016. But with the rebound in total nonfarm employment and slowing of labor force growth Oklahoma's unemployment rate should decline in 2017 to 4 percent and remain there the first six months of 2018.

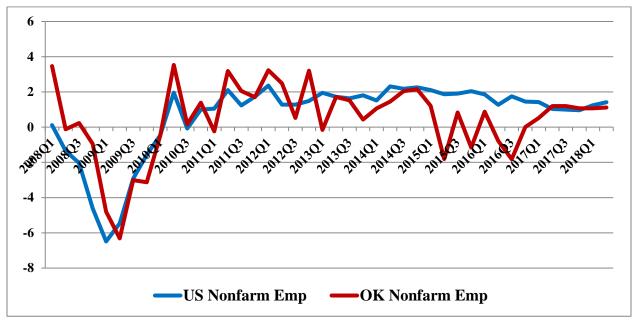


Figure 3: Annualized Quarterly Nonfarm Employment Growth Rates (%) (forecast begins 2017Q1)

Although fiscal policy is projected to be expansionary, monetary policy is projected to be contractionary given increased labor market tightness and the reemergence of inflation risk. IHS Global Insight, Inc. projects an upper bound of the federal funds interest rate at 1.5 percent by the end of 2017. The combination of expansionary fiscal policy and contractionary monetary policy is expected to push the U.S. exchange rate up by about three percent in 2017 according to IHS.

Risks to the forecast include unforeseen robust energy supply responses to the recent increases in energy prices, which could keep prices below their forecasted levels. Slowing growth in world demand also could dampen energy price increases. More energy efficient cars and appliances developed and put in place during the period of high energy prices will dampen demand growth.

There also is considerable uncertainty surrounding future fiscal and trade policies with the new administration and monetary policy has entered a tightening phase as the U.S. economy nears full employment. There likewise is considerable uncertainty regarding the effects of Brexit and the future of the European Union. China has appeared to stabilize its economy within the target growth rate range of 6.5-7 percent, though high debt levels are a concern and the Chinese economy also could be adversely affected by a slowing European economy and trade frictions with the United States.

Table 1. Oklahoma and National Employment Growth and Unemployment

	2014	2015	2016	2017	2018*
Oklahoma Nonfarm Emp. Growth	1.30%	0.73%	-0.39%	0.29%	1.12%
U.S. Nonfarm Emp. Growth	1.88%	2.08%	1.75%	1.30%	1.10%
Oklahoma Unemployment Rate	4.49%	4.25%	4.81%	4.0%	4.0%
U.S. Unemployment Rate	6.17%	5.28%	4.86%	4.61%	4.38%

^{*}The averages for 2018 are based on the first six months of the calendar year.