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**Economic Outlook 2019:
Summer Update**

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The rebound in oil and natural gas prices from their lows in early 2016 spurred growth in the energy sector and the Oklahoma economy more broadly. After falling below 60 in 2016, the number of drilling rigs in Oklahoma as reported by Baker Hughes rose to 148 in November of 2018. The declines in oil and gas prices since 2018 though has led the number of drilling rigs in the state to decline to 98 by the middle of this month. The U.S. rig count likewise has dropped to 958 after peaking at 1,283 during the same period.

As shown in Figure 1, IHS Markit in its July national forecast release predicts both natural gas and oil prices to decline in 2020, with natural gas prices ticking slightly upwards at the end of the year. By comparison (not shown), in the July 9th, 2019 report of the U.S. Energy Information Administration (EIA), the price of West Texas Intermediate Crude is forecast to rebound to \$63 during the final quarter of 2019 and stay at that level all of 2020. EIA forecasts the Henry Hub price of natural gas to slightly average somewhat higher in 2020 compared to 2019.

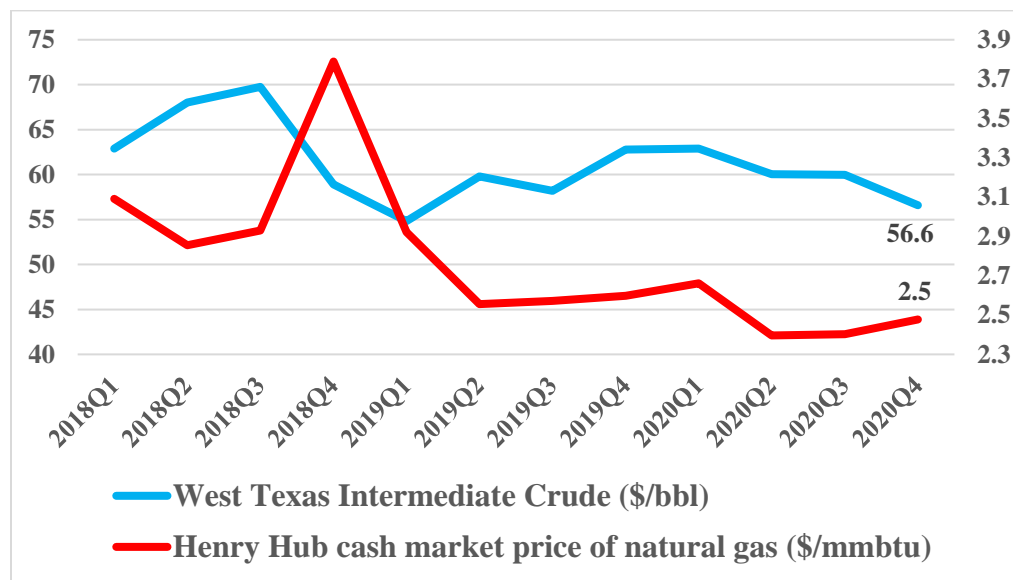


Figure 1. IHS Markit Oil and Natural Gas Prices (forecast begins 2019Q3)

Mining employment both nationally and in Oklahoma follows the cycle in energy prices (Figure 2). Both declined during 2015 and 2016 with the drop in oil and natural gas prices and both rebounded in 2017 with the rise in energy prices. Following the decline in energy prices from their levels in 2018, Oklahoma mining employment once again has declined in 2019. National mining employment historically is more stable than Oklahoma's, but both are forecast to slightly grow in 2020 at approximately the same rate.

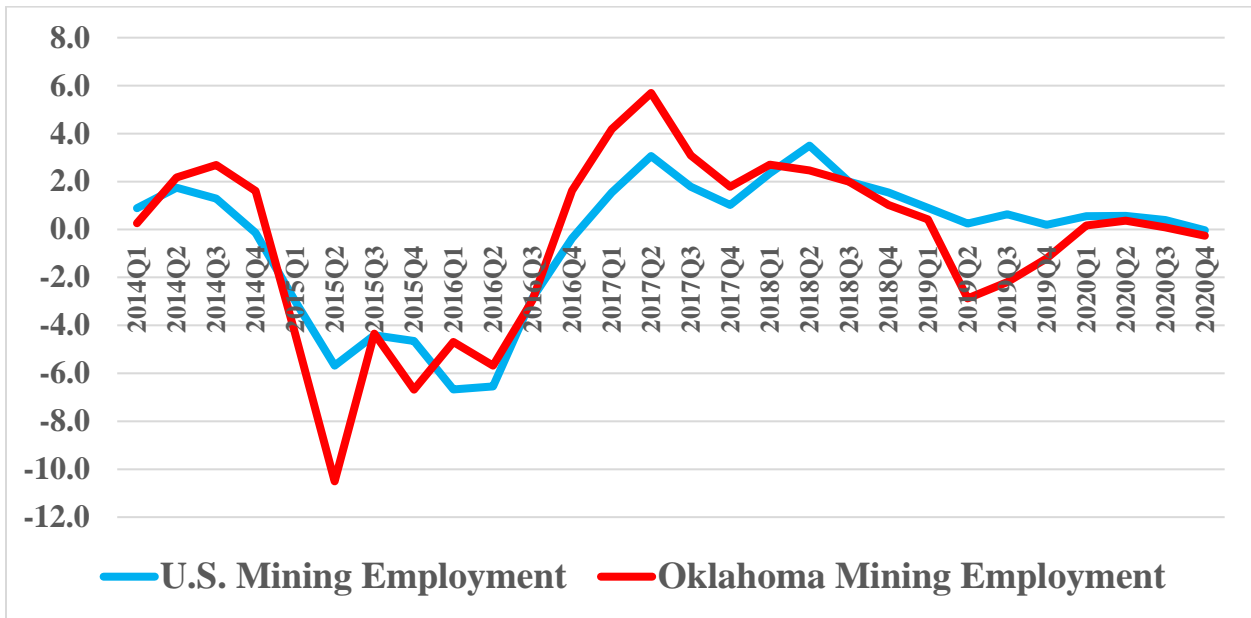


Figure 2. Mining Employment Growth (%): History 2014Q1-2019Q2

The rebound in energy sector employment helped turn the overall Oklahoma economy around from the employment (and output) declines during 2015-2016 (Figure 3). For the first time in several years Oklahoma’s total nonfarm employment grew as fast or faster than that of the nation at times during 2017-2018. Benefits of the past rise in energy prices have played out though and the subsequent declines in the mining sector have slowed the state economy in 2019.

Beginning with 2013, Oklahoma total nonfarm growth on an annual basis has fallen below that of the nation (Figure 4). Continued weakness in the energy sector will contribute to slow growth in Oklahoma through 2020. A slowing national economy will further contribute to weak

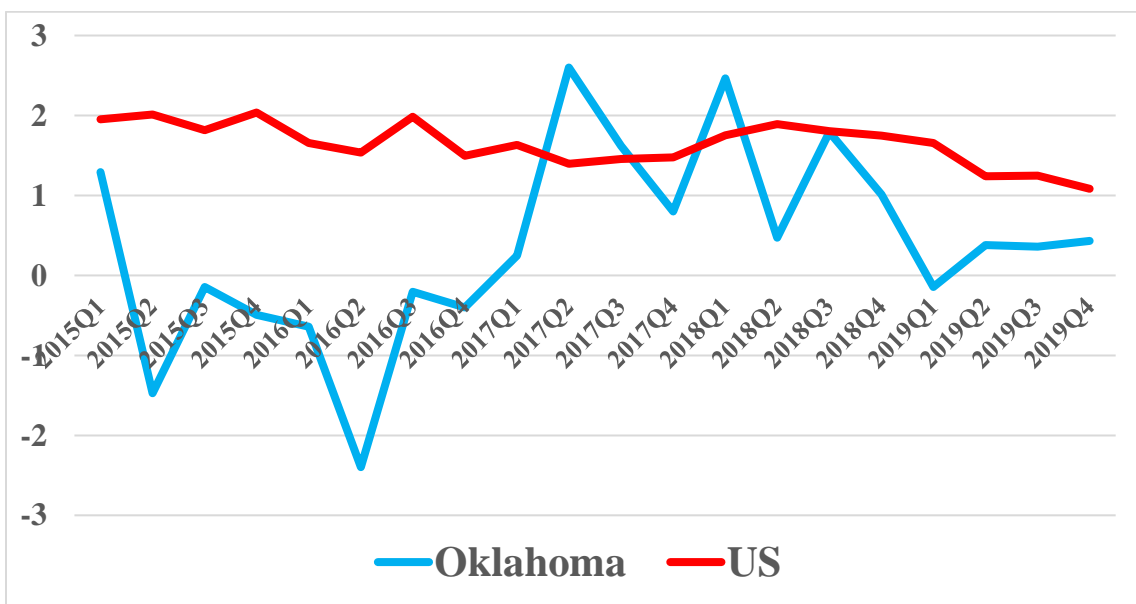


Figure 3. Quarterly Nonfarm Wage and Salary Employment Growth Rates (Annualized %): History 2014Q1-2019Q2

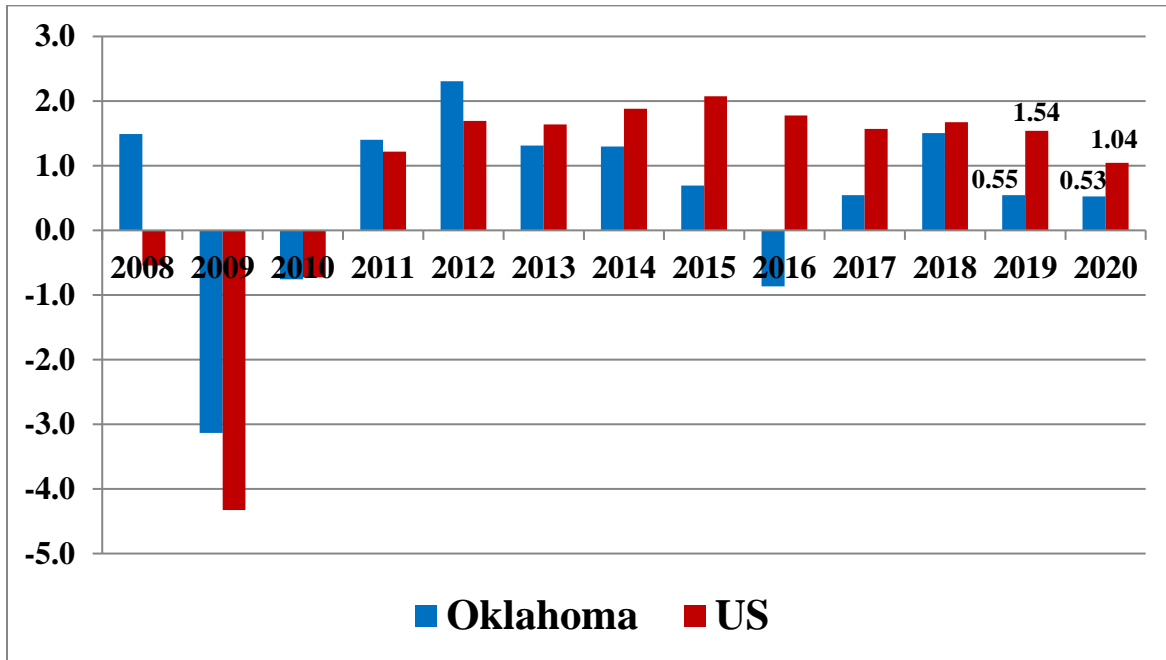


Figure 4. Annual Growth of National and State Nonfarm Employment (%)

growth in Oklahoma total nonfarm employment through the rest of 2019 and 2020. Total nonfarm employment growth will slow from approximately one and one-half percent to one percent for the nation and hold steady around one-half of one percent for the state.

Slowing national growth derives from both the demand and supply sides of the economy. On the demand side are increased international trade frictions and the waning effects of the tax cuts. On the supply side are the limits imposed by the U.S. economy reaching full employment, aging of the labor force and weak productivity growth.

Assumptions of the U.S. national forecast by IHS Markit include the FED having an interest rate target of 2-2.25 percent and shrinking its balance sheet through the fall as the 2% inflation and real GDP growth targets are maintained. The IHS Markit national forecast also includes an assumption of continued tariffs on solar panels and metals, a 25% tariff on roughly 50% of goods imported from China, and China’s retaliatory tariffs on roughly \$100 billion of annual US exports to China; along with other international sources this will contribute to a slowing of international export growth.

Table 1 presents the annual statistics for key national and state economic indicators. The U.S. unemployment rate averaged 3.9 percent in 2018 and is forecast to average 3.6 percent in 2019 before inching up slightly to 3.7 percent in 2020. The nation had not experienced unemployment rates below four percent since the year 2000, just prior to the 2001 recession. Besides the strong national economy, the lower rates reflect the aging of the labor force and a higher share of young adults attending college. Oklahoma’s unemployment rate likewise is estimated to have finished with an average of 3.4 percent for 2018 and is forecasted to drop to 3.3 percent in 2019, before inching back up to 3.4 percent in 2020.

Table 1. Oklahoma and National Employment Growth and Unemployment

	2016	2017	2018	2019	2020
Oklahoma Nonfarm Emp. Growth	-0.9%	0.5%	1.5%	0.6%	0.5%
U.S. Nonfarm Emp. Growth	1.8%	1.6%	1.7%	1.5%	1.0%
Oklahoma Unemployment Rate	4.8%	4.2%	3.4%	3.3%	3.4%
U.S. Unemployment Rate	4.9%	4.4%	3.9%	3.6%	3.7%
Oklahoma Real GDP Growth ^a	-5.1%	2.8%	3.1%	1.7%	1.8%
U.S. Real GDP Growth	1.6%	2.4%	2.9%	2.6%	1.8%
Oklahoma Nominal Personal Income	-4.4%	5.7%	4.3%	2.8%	2.7%
U.S. Nominal Personal Income Growth	2.6%	4.4%	4.4%	4.1%	4.7%
U.S. Inflation Rate	1.3%	2.1%	2.4%	1.9%	2.2%

^aGrowth from the fourth quarter of one year to the next.

U.S. Real GDP growth is forecast to slow to 1.8 percent in 2020. Two percent growth is considered the potential of the national economy based on labor force and productivity growth. The FED is unlikely to dramatically alter its course so long as real GDP growth comes in around potential and the rate of inflation does not deviate greatly from its target of two percent. After declining in 2016 by over five percent, corresponding to the rebound in employment growth Oklahoma real gross domestic product is estimated to have increased 2.8 percent from the fourth quarter of 2016 to the fourth quarter of 2017. This is followed by 3.1 percent real GDP growth from the end of 2017 to the end of 2018. Consistent with the expected slowdown in employment growth, forecasts for year-over-year fourth quarter real GDP growth are 1.7% and 1.8% for 2019 and 2020.

After the decline in 2016, Oklahoma personal income rebounded strongly in 2017 and 2018, rising above the national rate of growth in 2017. The slowing of the energy economy though reduces personal income growth in 2019 and 2020, implying real personal income gains of less than one percent in the state based on the predicted inflation rate. U.S. personal income is forecast to continue growth above four percent per year, producing real gains of over two percent per year.

Risks to the forecast for Oklahoma include unanticipated changes in oil prices. Unexpected increases in oil prices from tensions with Iran pose downside risk to the national economy, though this could be a boon to Oklahoma's energy sector. Considerable uncertainty surrounds the form Brexit will take and the associated economic consequences. Additional increases in U.S. trade frictions with China could further slow growth in both countries. Downward pressure on federal government spending from increased budget deficits appears to have been put off until after the 2020 election.