DEPARTMENT OF
ECONOMICS
Spears School of Business

Center for Applied Economic Research

COVID-19 and the Collapse of Oil Prices: Oklahoma Faces the Perfect Storm

by

Dan Rickman

and

Hongbo Wang

Center for Applied Economic Research

Spears School of Business

Oklahoma State University

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272F College of Business, Stillwater, OK 74078

Oklahoma faces economic fallout from both the COVID-19 pandemic and the collapse of oil prices. Social distancing and shutdown orders used to battle the pandemic have nearly halted services such as entertainment, restaurants, non-necessity retail and travel. Automobile manufacturing and construction activity also have been severely diminished. Along with the collapse in oil demand from diminished world economic activity, Saudi Arabia flooded the oil market in its battle for market share.

IHS Markit forecasts an annualized rate of U.S. real gross domestic product (GDP) decline during the current quarter of 26.5 percent, which is in line with the consensus of national business economists. An expected 32.3 percent drop in personal consumption expenditures drives the GDP decline. The disruption to the economy most resembles that which occurs during a natural disaster. Supply in key sectors is taken out of the economy and the accompanying loss of income causes negative ripple effects on final demand throughout the economy.

Similar efforts to battle the pandemic in Oklahoma and declining national economic activity will have dramatic effects on the Oklahoma economy. A contracting energy sector compounds these effects for Oklahoma. The U.S. Energy Information Administration forecasts the price of West Texas Intermediate Oil to average 20 dollars per barrel during the current quarter.

As shown in Figure 1 and given in Table 1, the Oklahoma State University Center for Applied Economics (CAER) forecasts approximately a twenty-one percent decline in Oklahoma real GDP during the current quarter. The forecast decline for Oklahoma is somewhat less than that for the nation. Oklahoma has not been as adversely affected by the pandemic as have major economic centers of the nation and has lower shares of industries hit hard by the social distancing and shutdowns. CAER also forecasts percentage declines in the most-affected service sectors for the current quarter that are less than those forecast for the nation.

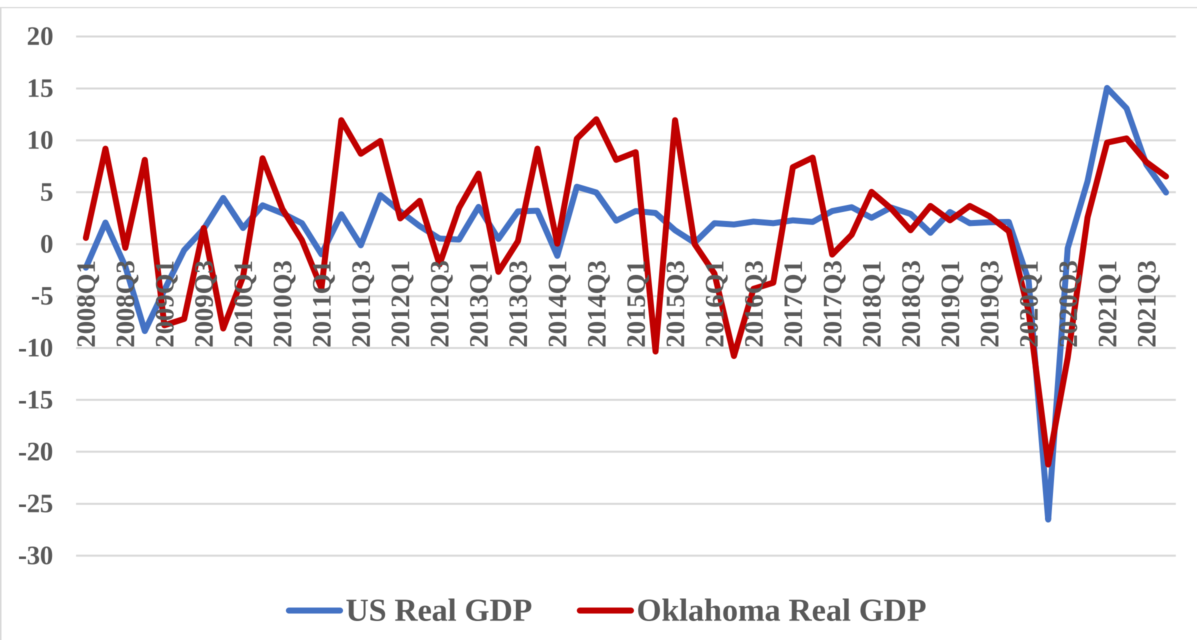

Figure 1. Quarterly Real GDP Growth Rates (Annualized %)

Table 1. Quarterly Growth in Key U.S. and Oklahoma Economic Indicators (Annualized %)

	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2
Oklahoma Real GDP Growth	-21.22	-10.95	2.58	9.78	10.18
U.S. Real GDP Growth	-26.52	-0.40	6.05	15.05	13.07
Oklahoma Nonfarm Emp. Growth	-14.17	-8.69	-7.35	-0.69	3.28
U.S. Nonfarm Emp. Growth	-18.38	-12.65	-4.49	1.72	6.16
Oklahoma Personal Income Growth	-5.50	-4.46	-10.73	3.94	5.72
U.S. Personal Income Growth	-1.95	1.09	-5.34	6.32	7.70
Oklahoma Wage and Salary Growth	-15.24	-10.12	-4.34	2.04	6.80
U.S. Wage and Salary Growth	-21.08	-8.71	0.66	7.49	11.80

The expected contractions in real GDP far exceed what occurred during any one quarter during the Great Recession of 2008-2009. The outcomes for the rest of 2020 depend on how well the nation manages the pandemic. IHS Markit does not currently forecast a quick return of all economic activity. It forecasts real GDP in the nation to only begin to rebound in the fourth quarter of the year as social distancing gradually and partially eases and disrupted supply chains start to become reestablished. The forecasts fully anticipate the effects of the first two rounds of fiscal stimulus and past monetary policy actions.

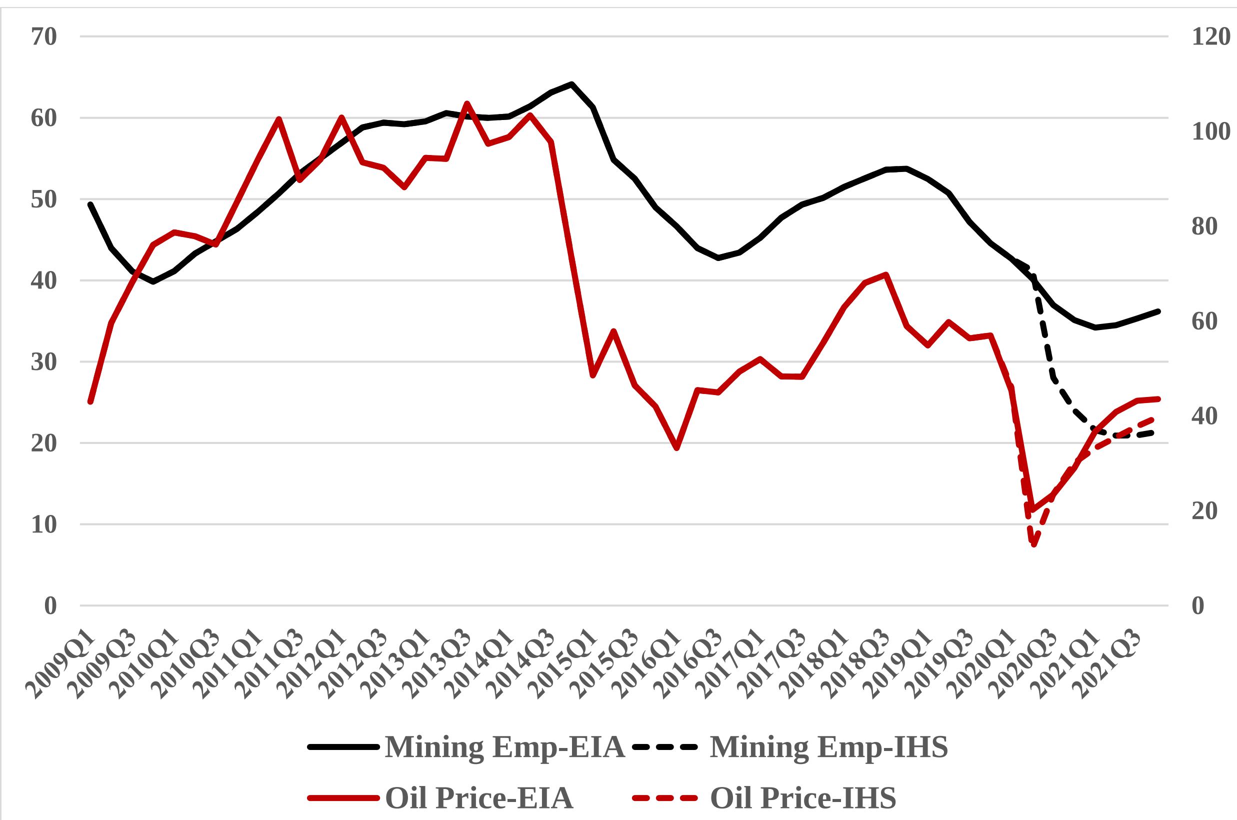

Figure 2. IHS Markit vs U.S. EIA Oil Price Scenarios (Left axis-mining sector employment in thousands; Right Axis-West Texas Intermediate oil price in $ per barrel)

Oklahoma faces the added economic fallout from the energy sector decline. The baseline energy sector forecasts rely on the energy price forecasts of the U.S. Energy Information Administration (EIA). In its Short-term Energy Outlook released last week, EIA forecasts the price of WTI oil to average $20 per barrel during the current quarter and remain below $30 barrel until the fourth quarter of the year (Figure 2). IHS Markit forecasts a collapse in oil prices to $12 per barrel during the current quarter and a rise to $30 per barrel by the fourth quarter of the year. The IHS Markit forecast was based on information prior to the announcement of the recent OPEC meeting to address the oil supply glut. We consider this as a less likely outcome and present it as a more pessimistic alternative forecast.

Under both oil price scenarios mining sector employment is forecast to decline the most during the third quarter of 2020, bottoming out at 34 thousand in the first quarter of 2021 under the EIA oil price scenario and falling to a level of 21 thousand throughout 2021 under the IHS Markit oil price scenario (Figure 2). Under either oil price scenario, as activity begins to be restored in the national economy, Oklahoma faces the economic fallout of the energy sector.

Figure 3 shows the corresponding employment forecasts for the baseline scenario (also given in Table 1). Oklahoma's rate of decline is forecast to be less than the national decline during each of the second and third quarters but exceeds the decline during the fourth quarter as the energy sector collapse spreads throughout the state economy. Growth in total employment in Oklahoma lags behind that of the nation throughout 2021. The smaller employment shares in the service sectors adversely affected by the pandemic and absence of motor vehicle production initially relatively buffer Oklahoma's economy but the fallout from the energy sector subsequently causes the Oklahoma economy to lag behind the recovery in the national economy.

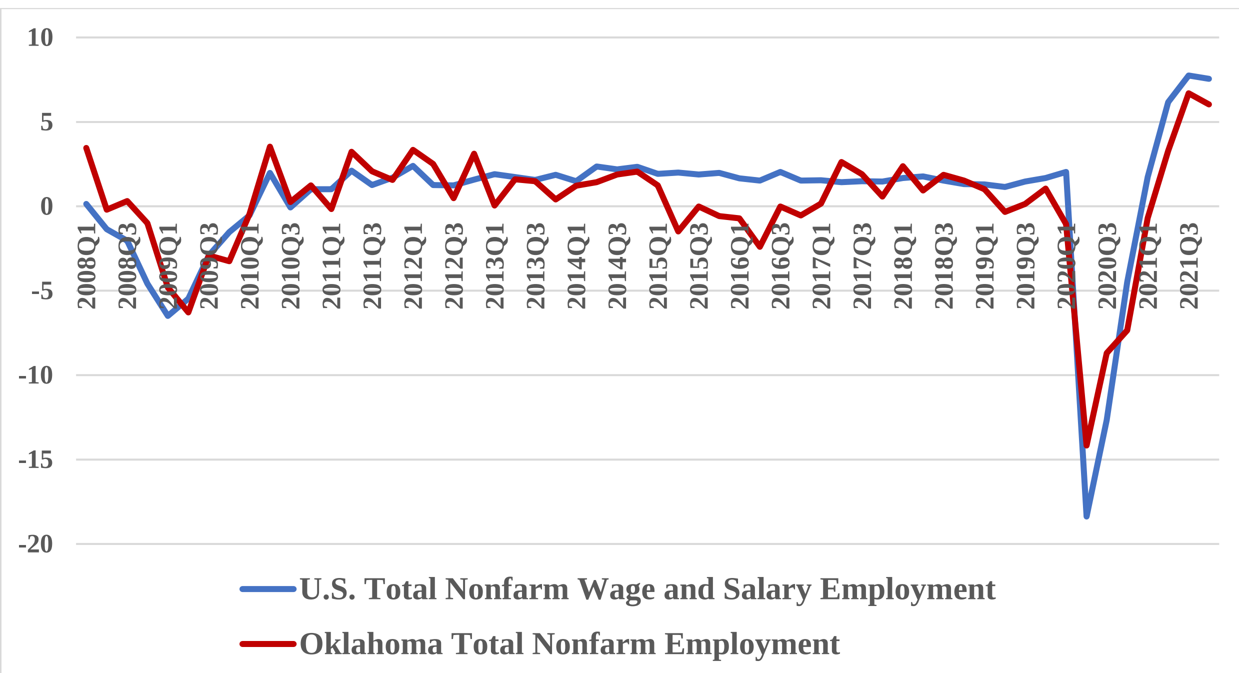

Figure 3. Quarterly Total Nonfarm Wage and Salary Employment Growth Rates (Annualized %)

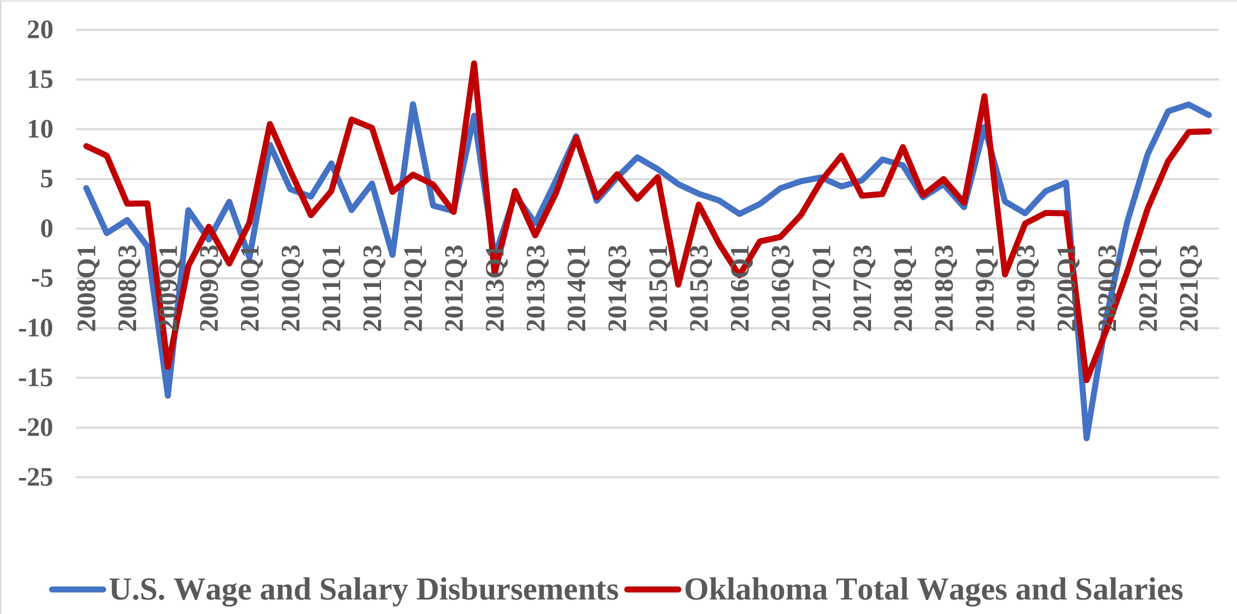

Figure 4. Quarterly Growth Rates of Total Wages and Salaries

Figure 4 shows a similar pattern for total wage and salary growth. Initially, wage and salary growth is not as adversely affected as the nation's but the energy sector decline subsequently causes relatively lower Oklahoma wage and salary growth. Forecasts of personal income growth for both the nation and Oklahoma given in Table 1 are stronger than corresponding wage and salary growth during the second and third quarters because of the existing unemployment compensation program and the 2.2 trillion dollar stimulus package enacted into law. But this reverses when stimulus payments wane in the fourth quarter of 2020. IHS Markit currently does not forecast declines in dividend payments to the extent they occurred during the Great Recession with the financial market collapse.

Table 2 contains the annual growth rate statistics for key economic variables for both Oklahoma and the nation. We do not include the unemployment rate because simply not enough is known now. Reports of those losing their jobs not able to file unemployment claims are routine, suggesting that the actual unemployment rates are significantly higher than the official rates. We include 2009 statistics from the Great Recession period for comparison. For most statistics the declines forecast for 2020 exceed the declines during 2009. The declines during the Great Recession period occurred over a longer period of time. Economic activity declined during the period because of a housing market crash that rippled throughout the economy, which the financial market crash then amplified. The Great Recession experience showed how fiscal and monetary policy can be used to avert a depression outcome such as what occurred during the 1930s. We expect the same will be true during the current crisis.

Table 2. Annual Growth of Oklahoma and U.S. Economic Indicators (%)

	2009	2018	2019	2020	2021
Oklahoma Real GDP Growth	-1.79	2.84	2.75	-6.37	3.04
U.S. Real GDP Growth	-2.54	2.93	2.33	-5.38	6.33
Oklahoma Nonfarm Emp. Growth	-3.13	1.60	0.85	-4.41	-1.93
U.S. Nonfarm Emp. Growth	-4.33	1.57	1.37	-4.54	-0.93
Oklahoma Personal Income Growth	-7.16	6.24	4.08	-1.61	0.02
U.S. Personal Income Growth	-3.08	5.57	4.39	1.67	3.07
Oklahoma Wage and Salary Growth	-3.37	4.97	3.77	-4.13	0.26
U.S. Wage and Salary Growth	-4.37	5.04	4.60	-3.24	3.61

There are greater than usual unknowns and risks to the forecasts. How fast and how fully we restart the broader economy depends on how well we manage the pandemic. The nation currently lacks both a comprehensive plan and medical resources such as sufficient COVID-19 tests to bring the economy fully back online. The process of restarting parts of the economy may be by trial and error. IHS Markit closely monitors progress in battling the pandemic and will adjust economic forecasts accordingly. Housing prices are at levels above those suggested by fundamentals in many large markets that could translate into financial market distress such as was experienced during the Great Recession. The Federal Reserve would once again need to act to stabilize the mortgage market. On the upside, the recent OPEC meeting helped prevent oil prices from declining further and produced higher futures prices for the summer than were forecast by EIA. But the futures prices for WTI oil remain below $40 per barrel throughout 2021, lower than the EIA baseline forecast. Whether the futures prices actually occur depends on the extent the agreed upon supply cuts materialize. If the IHS forecast of a further near-term decline in oil prices and collapse in the energy sector occurs our employment growth forecasts decrease to -5.0 percent and -3.6 percent for 2020 and 2021.