



Center for Applied Economic Research

Economic Outlook 2020 Summer Update: The Virus Rules

by

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Oklahoma has experienced dramatic economic fallout from both the business shutdowns associated with the COVID-19 pandemic and the collapse of the energy sector. Although the Oklahoma economy and other state economies opened up sooner than anticipated and began to robustly recover, the resurgence of the COVID-19 virus has begun to take an economic toll. Oil prices have rebounded from negative territory in May but in part this occurred because of significant reductions in supply, including in the U.S. shale patch.

Oklahoma nonfarm wage and salary employment dropped at an annualized rate of nearly 24 percent during the last three months (second quarter). By comparison U.S. nonfarm wage and salary employment fell by an annualized rate of 40 percent. But in response to the opening of the economy, Oklahoma's unemployment rate declined from 12.6 to 6.6 percent from May to June, while the nation's unemployment rate inched downwards from 13.3 to 11.1 percent. An alternative measure of labor market health (U6) is obtained by adding those who are not working but want to work, and those working part-time who prefer to work full-time, to the number of unemployed. For the nation, this alternative measure equaled 18 percent in June, below the rate of 21.2 percent reported in May.

Tracking high-frequency indicators of economic activity across the nation, IHS Markit, Inc. estimates U.S. real gross domestic product (GDP) will have declined at an annualized rate of 35.5 percent during the second quarter. The decline has left many economic activities far below those of one year ago. Recent revenue per available room at U.S. hotels lies 55 percent below the year-ago level. Approximately 75 percent fewer passengers travel by air each day in the nation. Seated-diner counts at restaurants have been running 62 percent below those of one year ago.

IHS Markit forecasts a rebound in U.S. real GDP growth of nearly 18 percent during the current (third) quarter (Figure 1). The resurgence of the COVID-19 virus though is expected to slow growth to five percent in the last quarter of this year, a pace which is forecast to continue throughout 2021. Higher frequency data already are showing signs of a weakening recovery. The University of Michigan Consumer Sentiment Index fell 4.9 points to 73.2 in the preliminary



Figure 1. U.S. Real GDP (\$2012) (Right axis-levels in billions). (Left Axis-annualized percent growth rate)

July reading, returning nearly to its April low of 71.8, quickly shifting in response to the surge in the COVID-19 virus. Recent gains in seated-dining, air travel, and U.S. hotel revenues likewise have flattened. Both the number of open small businesses and hourly employment in small businesses have turned downwards after increasing early during the re-opening of the economy.

As shown in Figure 2, the U.S. Energy Information Administration (EIA) forecasts the price of West Texas Intermediate (WTI) oil to continue rising from its low in the second quarter of 2020, reaching a price of \$48.5 per barrel by the fourth quarter of 2021. EIA similarly forecasts the (Henry Hub) price of natural gas to increase throughout the period.

An alternative set of energy price forecasts are provided by IHS Markit in their pessimistic macroeconomic scenario. The pessimistic scenario is based on concerns of further economic damage by a resurging COVID-19 virus, which IHS Markit assigns a risk probability of 30 percent. In the pessimistic scenario, the price of oil only rises to \$42.7 by the end of 2021. IHS Markit is more optimistic than EIA about natural gas prices in all macroeconomic scenarios.



Figure 2. Oil Price Forecasts (U.S. Energy Information Administration-EIA; IHS Markit, Inc.-IHS) (Left axis-WTI oil price \$/bbl). Right Axis-Henry Hub natural gas price \$/MMBtu)

The collapse in energy prices leads to projected declines in employment in the mining sector from the recent peaks to the end of 2021 of approximately 40 percent for both Oklahoma and the nation (Figure 3). Oklahoma's mining employment began declining sooner than the nation's and

is forecast to reach a trough the first quarter of 2021. Forecasted U.S. mining employment reaches a trough the second quarter of 2021. The trough in Oklahoma mining employment occurs at approximately 30.6 thousand, representing a loss of over twenty thousand jobs from the peak in the fourth quarter of 2018. The number of rigs actively drilling for oil or gas in Oklahoma dropped from over 140 during the fourth quarter of 2018 to ten in the most recent report by Baker Hughes, Inc. In a recent survey by the Federal Reserve Bank of Kansas City of energy firms in the Tenth Federal Reserve District, one-third of them responded that they could not survive another year at current revenue levels. A number of energy firms have filed for bankruptcy nationally, including Oklahoma City-based Chesapeake Energy.



Figure 3. Oklahoma and U.S. Mining Employment Forecasts (2018Q4=1)

As shown in Figure 4, total nonfarm wage and salary employment is forecast to increase in the third quarter of this year and onwards in both the state and nation. Oklahoma experienced a smaller decline during the second quarter in part because of a smaller initial outbreak in the COVID-19 virus and never completely shutting down the state economy. The state also was relatively spared because of smaller employment shares in the service sectors most adversely affected by the pandemic and the absence of motor vehicle production which was shuttered nationally.

The larger downturn in the nation is projected to be associated with a larger rebound as economic activity in many sectors resumes. Oklahoma's economic growth will be limited because the region has become a hotspot for new COVID-19 cases. The Oklahoma economy also will be hampered by the continued fallout in the energy sector.





Besides the energy sector, Oklahoma sectors particularly affected by the recession include: Administrative, Support and Waste Management and Remediation Services, Construction, Durable Goods Manufacturing (except Aerospace Manufacturing), Educational Services, Hospitality Services, Motor Vehicle and Parts Dealers, Other Retail, Other Services, Real Estate Services, State and Local Government, Transportation Services and Warehousing, and Wholesale Trade. Sectors little affected or that have grown during the second quarter include: Federal Government, Financial Activity Services, Food and Beverage Stores, Nondurable Manufacturing, General Merchandise Stores, and Utilities.

Table 1 contains the forecasts for several economic indicators of the state and nation. The forecasts reflect reactions to past fiscal and monetary stimulus but do not include any additional fiscal stimulus because of its lack of predictability at the time of the forecast. IHS Markit, Inc. assigns a 50 percent probability to its baseline forecast, which assumes a slowing recovery because of the resurgence of COVID-19 infections.

	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2
Oklahoma Real GDP Growth	-13.9	-9.1	-0.9	3.2	4.8
U.S. Real GDP Growth	-35.5	17.7	5.1	8.0	5.2
Oklahoma Nonfarm Emp. Growth	-23.7	7.9	2.2	4.2	3.1
U.S. Nonfarm Emp. Growth	-40.0	26.3	8.6	8.0	4.8
Oklahoma Personal Income Growth	33.2	-34.6	-10.4	2.3	2.5
U.S. Personal Income Growth	26.7	-19.5	-6.0	6.9	4.8
Oklahoma Wage and Salary Growth	-12.1	-1.6	3.1	6.0	4.9
U.S. Wage and Salary Growth	-26.8	19.4	8.3	11.6	7.3
Oklahoma Unemployment Rate	11.4	6.3	5.8	5.1	4.7
U.S. Unemployment Rate	13.0	9.3	8.3	6.9	6.3

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

According to all economic indicators, the Oklahoma economy has fared better than the national economy during the second quarter of the year. Continued fallout from the energy sector though will contribute to declining Oklahoma income and GDP in the third and fourth quarters. Despite dramatic losses in wages and salaries in both the state and nation during the second quarter, personal income exploded because of the massive fiscal stimulus by the federal government. With the boost to unemployment benefits set to end this month, personal income growth is projected to completely reverse course in the third quarter, with further losses projected in the fourth quarter. Oklahoma's unemployment rate dropped much more than the nation's in June, which contributes to its greater forecasted decline in the unemployment rate from the second to third quarter. But the gap in the unemployment rate between Oklahoma and the nation should gradually narrow in subsequent quarters.

The unknowns and risks to the forecasts are more difficult to quantify than usual. How fast and how fully the broader economy recovers depends in large part on how well federal, state, and local governments respond to the resurgence of the virus. The recovery also depends on the collective actions of individuals to socially distance and wear masks. So far, the U.S. has failed in its response to the virus in comparison to other advanced nations. Attempts to ignore the virus and re-open the economy without social distancing and mask wearing are failing.

Rather than a binary choice of opening versus shutting the economy down, the choice is shortterm vs long-term strategies to recover the economy. Strategies of opening the economy without containing the virus in attempts to avoid short-term economic pain are failing. Other advanced economies around the world were willing act collectively and to endure the short-term sacrifices necessary to provide the basis for a sustainable recovery.

Reliance on a vaccine as the sole solution is risky. IHS Markit, Inc. closely monitors progress in the development of vaccines and adjusts economic forecasts accordingly. Current expectations are for an effective and widely available vaccine by the summer of 2021. Uncertainty will remain regarding how effective the vaccine would be in providing immunity for people of all ages, how long immunity would last, and the proportion of the population willing to be vaccinated. Herd immunity without a vaccine currently appears highly unlikely as initial studies suggest a limited period of immunity. Even with a vaccine, continued additional measures may be required to extinguish the virus in the nation.

In the pessimistic scenario in which the virus continues to surge (with an assigned probability of 30 percent), IHS Markit projects the national economic recovery to stall and only resume in early 2021. For Oklahoma, greater weakness in the energy economy would occur because of a slower pace of resumption of energy demand and slower growth in other sectors dependent on national demand. For now, the virus rules the economy.