

Center for Applied Economic Research

Economic Outlook 2021: Update

by

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A number of recent developments have led to the update of our forecast released last December. First, the feared holiday surge in COVID-19 infections occurred, leading to increased containment restrictions on the national economy and reduced consumption expenditures. Second, an additional \$900 billion stimulus package was passed, which includes extension of emergency unemployment insurance programs, replenishing the Payroll Protection Program, and several additional items. IHS Global Insight estimates that in the absence of additional fiscal stimulus, national GDP would contract the first quarter of 2021. Third, the forecast includes updated population assumptions, partly based on preliminary census estimates. On balance, the national forecast is weaker in the first half of 2021 and stronger in the second half.

The state and national economies continue to recover from the losses associated with the COVID-19 pandemic. By the fourth quarter of the year, total nonfarm wage and salary employment in the nation was 6.1 percent lower than that of the first quarter. During the second quarter, national employment had dropped 12 percent. Oklahoma's total nonfarm wage and salary employment in the fourth quarter was 4.4 percent lower than that of the first quarter. Although this compares favorably to the nation, Oklahoma's employment dropped by a smaller amount at 6.1 percent during the second quarter. The recent holiday surge of COVID-19 cases and continued weakness in the energy sector impeded Oklahoma's recovery in the last quarter of 2020.

According to Opportunity Insights Tracker, U.S. consumer spending fell 2.5 percent in 2020, while there was no difference in consumer spending in Oklahoma at the end of the year compared to the beginning. For Oklahoma, there was a slight increase in consumer spending for middle income households over the year, a slight decrease for high-income households, and no change for low-income households. Oklahoma consumer spending fell for entertainment and recreation services, health care services, restaurants and hotels, and transportation services, while rising in groceries and retail. Small business revenue in Oklahoma fell nearly 35 percent during year, while the number of small businesses declined by approximately 30 percent.

National high-frequency indicators provided by IHS Markit reveal seated diners at restaurants about 55-60 percent lower than one year earlier. Revenue per available hotel room is over 50 percent lower than the same time the prior year. Following the surge in travelers during the holidays, the daily number of passengers passing through airports as reported by TSA has returned to approximately 60 percent below the levels one year ago.

As shown in Figure 1, the U.S. Energy Information Administration forecasts the West Texas Intermediate oil price to average above 50 dollars per barrel for the first two quarters of 2021, before decreasing to 48 dollars per barrel in the second half of 2021, and only inching up to 50 dollars per barrel during 2022. The Henry Hub price of natural gas is forecast to moderately increase over 2021 and 2022, finishing at 3.33 \$/mbtu. The number of rigs actively drilling for oil or gas in Oklahoma dropped from over 140 during the fourth quarter of 2018 to nine in June of 2020, with seventeen rigs most recently reported by Baker Hughes, Inc. to be in operation. The rebound in energy prices is forecast to begin modestly boosting employment in the energy sector in the second quarter.

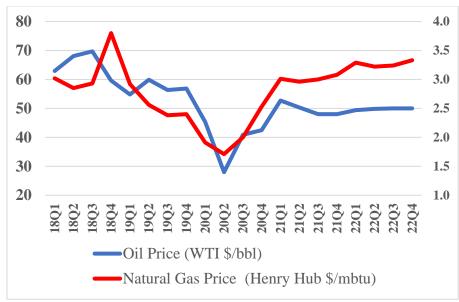


Figure 1. Oil Price Forecasts (U.S. Energy Information Administration-EIA) (Left axis-WTI oil price \$/bbl; Right Axis-Henry Hub natural gas price \$/MMBtu)

As shown in Figure 2, Oklahoma employment growth stalled in the fourth quarter of 2020 with the resurgence of the virus and unwinding of federal fiscal stimulus. The recently passed federal stimulus is jumpstarting the economy in the current quarter and will help propel further growth along with containment of the COVID-19 virus from widespread vaccinations. Continued growth in the state though depends critically on sustained growth in the national economy and continued recovery in the energy sector.

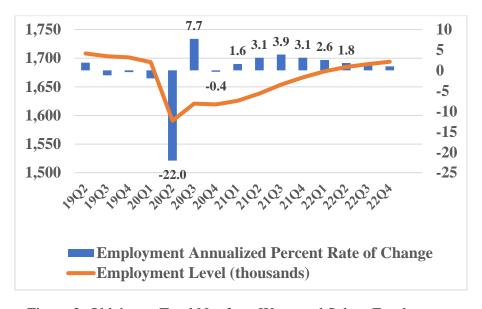


Figure 2. Oklahoma Total Nonfarm Wage and Salary Employment

As shown in Figure 3, Oklahoma employment sectors (as defined by the U.S. Bureau of Labor Statistics) most negatively affected (in excess of ten percent) during 2020Q1 to 2020Q4 include: Arts, Entertainment, and Recreation Services; Transportation Equipment Manufacturing (except Aerospace Manufacturing); Mining and Logging; Educational Services; Other Durable Goods Manufacturing; and Publishing Industries. Sectors that experienced increased employment over the period include: General Merchandise Stores; Financial Activities; Food and Beverage Stores; Construction of Buildings; Food Manufacturing; Federal Government (because of the population census); Utilities; and Aerospace Manufacturing.

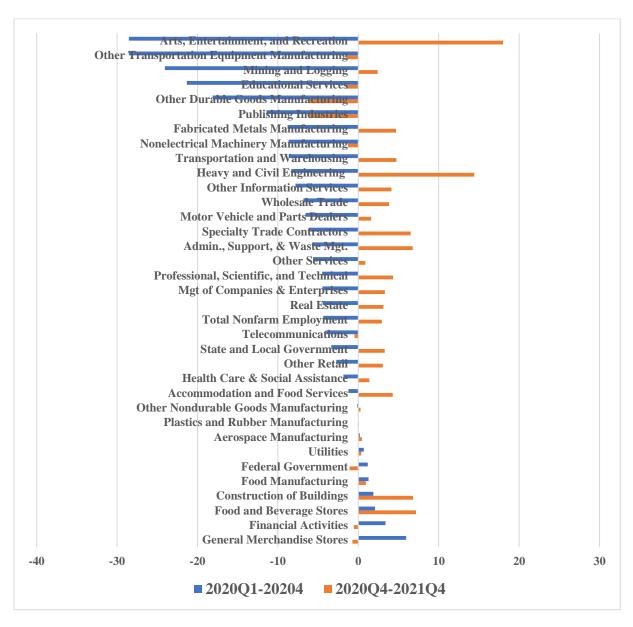


Figure 3. Oklahoma Sector Employment Growth Rates (%): 2020Q1-2020Q4 and 2020Q4-2021Q4

Many of the sectors that declined the most from 2020Q1-2020Q4 are forecast to increase the most from 2020Q4-2021Q4. The largest rates of increase (all over five percent) are forecast for Arts, Entertainment, and Recreation Services; Heavy and Civil Engineering Construction; Food and Beverage Stores; Construction of Buildings; Administrative and Support and Waste Management Remediation Services; and Specialty Trade Contractors. Despite experiencing among the largest declines during 2020Q1-2020Q4, several sectors are forecast to continue to decline: Other Durable Goods Manufacturing; Transportation Equipment Manufacturing (except Aerospace Manufacturing); Educational Services; Publishing Industries; and Machinery Manufacturing.

Table 1 contains the quarterly growth rates for several indicators of the state and national economies from 2020Q2 through 2021Q2 (the end of fiscal year 2021). The forecasts reflect responses to past fiscal and monetary stimulus, including the most recently passed fiscal stimulus. The baseline assumption though is for no additional fiscal stimulus because of its uncertainty at the time of the national forecast in early January. The baseline forecast is based on assumptions of a widely distributed and adopted COVID-19 vaccine by the spring and summer of 2021 and no additional widespread lockdowns of businesses.

Following the dramatic declines during the second quarter that occurred during the beginning of the COVID-19 pandemic, the nation saw sharp bounce backs in real gross domestic product (GDP), nonfarm wage and salary employment, and nominal wages and salaries during the third quarter. The Oklahoma economy generally suffered smaller declines during the second quarter, but also smaller rebounds in the third quarter than the national economy. Both the smaller economic decline in the second quarter and continued pullbacks in the energy sector limited Oklahoma's bounce back in the third quarter.

Table 1. Annualized Quarterly Growth in Key U.S. and Oklahoma Economic Indicators (%): 2020Q2-2021Q2 (Last History Period: 2020Q4 for employment and unemployment; 2020Q3 for income and GDP)

| | 20Q2 | 20Q3 | 20Q4 | 21Q1 | 21Q2 |
|--------------------------|-------|-------|-------|------|-------|
| Oklahoma Real GDP | -31.7 | 17.4 | -5.4 | 3.9 | 2.8 |
| U.S. Real GDP | -31.4 | 33.4 | 3.0 | 2.4 | 3.5 |
| Oklahoma Nonfarm Emp. | -22.1 | 7.7 | -0.4 | 1.6 | 3.1 |
| U.S. Nonfarm Emp. | -40.0 | 23.0 | 5.1 | 3.7 | 4.5 |
| Oklahoma Personal Income | 53.2 | -27.4 | -11.9 | 22.4 | -19.3 |
| U.S. Personal Income | 35.8 | -10.2 | -7.2 | 22.9 | -13.9 |
| Oklahoma Wage and Salary | -15.0 | 15.3 | 2.4 | 4.0 | 4.9 |
| U.S. Wage and Salary | -23.5 | 24.5 | 8.9 | 5.2 | 5.4 |
| Oklahoma Unemp. Rate | 10.7 | 6.2 | 6.4 | 5.2 | 5.0 |
| U.S. Unemployment Rate | 13.0 | 8.8 | 6.8 | 6.0 | 5.6 |

Expiration of the federal fiscal stimulus and a surge in COVID-19 cases stalled the recovery in the fourth quarter of 2020. Oklahoma's energy sector will bottom out and begin modestly growing in the second quarter of 2021 in response to rising oil prices from growth in world energy demand as the virus becomes more contained. The recently passed federal fiscal stimulus of \$900 billion turns a forecast of decline for the first quarter of 2021 to an increase, which accelerates in the second quarter.

Table 2 shows the quarterly forecasts during 2021Q3-2022Q2 (Fiscal Year 2022). Oklahoma's economic recovery picks up steam with modest growth in the energy sector and resumption of some pre-pandemic economic activities with widespread distribution of COVID-19 vaccines. Accompanying the expected growth in the energy sector is expected growth in manufacturing of equipment for the energy sector, along with growth in other energy-dependent sectors in the state.

Table 2. Annualized Quarterly Growth in Key U.S. and Oklahoma Economic Indicators (%): 2021Q3-2022Q2

| | 21Q3 | 21Q4 | 22Q1 | 22Q2 |
|--------------------------|------|------|------|------|
| Oklahoma Real GDP | 5.1 | 3.9 | 4.1 | 4.3 |
| U.S. Real GDP | 5.5 | 4.8 | 4.2 | 3.4 |
| Oklahoma Nonfarm Emp. | 3.9 | 3.1 | 2.6 | 1.8 |
| U.S. Nonfarm Employment | 5.9 | 4.6 | 3.4 | 2.2 |
| Oklahoma Personal Income | 3.5 | 2.7 | 4.5 | 3.4 |
| U.S. Personal Income | 0.2 | 1.5 | 4.8 | 4.0 |
| Oklahoma Wage and Salary | 6.1 | 5.3 | 5.0 | 5.0 |
| U.S. Wage and Salary | 6.9 | 5.7 | 5.0 | 4.0 |
| Oklahoma Unemp. Rate | 4.3 | 4.1 | 3.8 | 3.7 |
| U.S. Unemployment Rate | 4.9 | 4.3 | 4.0 | 3.8 |

Figure 4 shows the declines and forecast paths of recovery for the state and national economies out through 2025. National employment is forecast to return to its 2019Q4 level between the third and fourth quarters of 2022. Because of the lag in the recovery of the energy sector, Oklahoma's employment is forecast not to return to its 2019Q4 level until between the second and third quarters of 2023. Figure 4 also shows the growth of national employment prior to the pandemic and the peaking of Oklahoma's employment in 2019Q2 because the decline in the energy sector had begun the prior quarter.

There are both upside and downside risks to the forecasts. On the upside, the baseline forecast does not include additional federal fiscal stimulus that is currently under discussion. Correctly targeted fiscal stimulus would significantly boost personal income and tax collections in the state. On the downside, if the recent ebbing of COVID-19 cases ends and surges once again with the spread of new variants of the virus and vaccine distribution is not sufficiently accelerated,

economic growth could stall again as restrictions on businesses remain in parts of the nation and there continues to be reluctance of people to frequent businesses involving face-to-face contact.

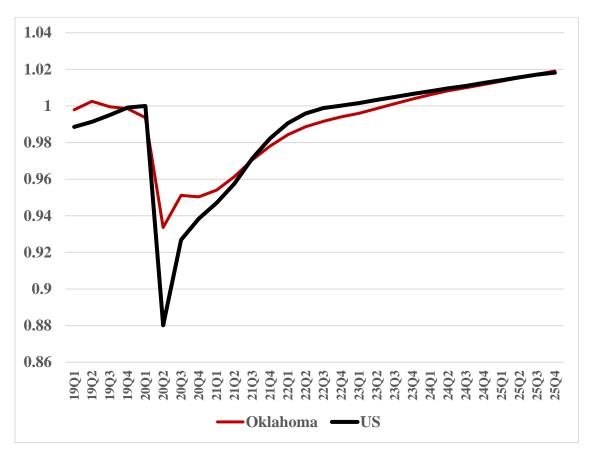


Figure 4. Total Nonfarm Wage and Salary Employment (2019q4=1)

Reference

Opportunity Insights Economic Tracker data are available at tracker.opportunityinsights.org.