

# COVID-19's Effect on States' Economies

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Due to COVID-19, the economy has suffered from health protocols. The U.S. needs to know which states were most affected by COVID-19 to distribute aid effectively in case another pandemic occurs. We hypothesized that states reliant on tourism would have struggled the most from COVID-19. By looking at factors such as GDP, unemployment rate, personal income, industry GDP, etc., we can find the states that struggled the most. Comparing these rates before and during COVID shows how each state's economy was affected by the pandemic. Furthermore, by analyzing these rates from during the pandemic to after states had recovered, the recovery of these economies can be seen. For the analysis, states were categorized as tourism or non-tourism, manufacturing or non-manufacturing, agriculture or non-agriculture, etc. After the analysis, it was seen that the median GDP change from quarter 1 2020 to quarter 2 2020 of the tourism and non-tourism states was found to be -32.75% and -31.00%, respectively. Additionally, the median unemployment rate change from August 2019 to April 2020 for tourism and non-tourism states was 10.8% and 9.3%, respectively. Furthermore, the median personal income change from quarter 1 2020 to quarter 2 2020 for tourism and non-tourism states is 46.5% and 36.8%, respectively. Performing a two-sample T-test gives the significance of these results. From the analysis, it was seen COVID-19 impacted tourism states greater than non-tourism states, but tourism states had a greater recovery. From these results, it can be concluded that tourism states would need more federal aid at the beginning of a pandemic, but non-tourism states would need greater aid during the recovery.