

Impact Of COVID-19 On Wisconsin Forest Products Industry

The COVID-19 public health emergency has impacted almost all sectors of the U.S. economy. COVID-19 has brought about significant changes to the economy, including changes in employment levels, wages rates, household expenditures and savings, stimulus checks, paycheck protection programs and unemployment benefits. In the early days of COVID-19, most states designated the forest products industry as an essential service. However, the industry still felt harmful effects.

2020-Q2 Impact Analysis for Planning (IMPLAN) data, annualized for the entire year 2020, was used to estimate the impact of the pandemic and compared with 2018 data. Between 2018 and 2020-Q2, the Wisconsin forest products industry lost about 4.8% of direct jobs, over 3,000 jobs.¹ The industry also saw lower value in all respective economic indicators, labor income decreased by 2.8%, industry output decreased by 9.6% and value-added decreased by 7.6% (Table 1). Likewise, the indirect and induced effect decreased substantially between 2018 and 2020-Q2. The induced effect from household spending had the hardest impact relative to direct and indirect effects between these two years (Table 2). The reason behind the higher decrease in induced effects were higher household saving and lower expenditure in 2020-Q2 due to stay-at-home orders and cities shutting down. In contrast, between 2018 and 2020-Q2, Wisconsin lost overall 11.17% of jobs (over 400,000) from all industries, suggesting the forest products industry was less impacted (4.8% job loss) as compared to overall economy. In terms of direct jobs, the forest products industry ranked 11th in 2018 and that jumped to 8th in 2020-Q2, suggesting the industry held strong during the COVID-19 public health emergency.

Table 1: Changes in the forest products industry contribution between 2018 and 2020 second quarter (2020 dollars)

| Impact | Employment | | | Labor Income \$Bn | | | Gross Output \$Bn | | | value-added \$Bn | | |
|----------|------------|---------|----------------|-------------------|------|----------------|-------------------|-------|----------------|------------------|-------|----------------|
| | 2018 | 2020 | percent change | 2018 | 2020 | percent change | 2018 | 2020 | percent change | 2018 | 2020 | percent change |
| Direct | 63,893 | 60,841 | -4.78 | 4.35 | 4.23 | -2.76 | 25.07 | 22.66 | -9.60 | 7.27 | 6.72 | -7.55 |
| Indirect | 37,939 | 34,957 | -7.86 | 2.51 | 2.40 | -4.52 | 7.81 | 7.31 | -6.45 | 3.99 | 3.65 | -8.72 |
| Induced | 40,688 | 31,696 | -22.10 | 1.95 | 1.67 | -14.45 | 6.06 | 5.11 | -15.74 | 3.46 | 2.81 | -18.63 |
| Total | 142,520 | 127,493 | -10.54 | 8.81 | 8.29 | -5.85 | 38.94 | 35.08 | -9.92 | 14.72 | 13.18 | -10.47 |

The magnitude of COVID-19 effects varied across sub-industries. Among the three major forest products industries, the sawmill and wood product sectors were the most severely impacted (Table 10). The industry lost 15.5% of direct gross output in 2020-Q2 compared to 2018, with a corresponding 9.1% job loss. In total, the industry lost 14% of jobs and 16% of gross output, including direct, indirect and induced effects. Similarly, the pulp and paper sector lost 1.7% of direct jobs and 7.8% of direct gross output. Including direct, indirect and induced effects, pulp and paper sectors lost 7.8% of jobs and 7.6% of gross output (Table 2).

¹IMPLAN does not provide information for specific industry/mill. Analysis is thus based on aggregated state level information provided by IMPLAN.



Table 2: Percent change between 2018 and 2020-Q2 in each forest products sector (2020 dollars)

| | Direct effect | Indirect effect | Induced effect | Total effect |
|---------------------------|---------------|-----------------|----------------|--------------|
| Employment | | | | |
| Forestry and logging | -0.02 | 6.39 | -21.14 | -4.15 |
| Sawmill and wood products | -9.09 | -12.21 | -26.28 | -13.95 |
| Pulp and paper | -1.65 | -3.09 | -19.71 | -7.82 |
| Output | | | | |
| Forestry and logging | -1.01 | 3.58 | -14.72 | -5.21 |
| Sawmill and wood products | -15.54 | -13.53 | -20.23 | -15.99 |
| Pulp and paper | -7.84 | -3.21 | -13.16 | -7.59 |

The top five industries most affected by the loss of forest products industry included restaurants business (both full and limited services) and all other food and drinking places (lost 2,792 jobs), employment services (lost 645 jobs), personal care services (lost 433 jobs), services to buildings (lost 417 jobs), and hospitals (lost 338 jobs). In total, these industries lost over 4,500 jobs between 2018-2020-Q2.

Conclusion

The COVID-19 public health emergency has brought major changes to the Wisconsin economy. The Wisconsin forest products industry lost about 4.8% of direct jobs (over 3,000) and 9.6% of direct industry output (\$2.4 billion) during 2018 and 2020-Q2. In total, Wisconsin lost over 10.5% of jobs (over 15,000) tied to the forest products industry. Overall, the state lost 11.2% of direct jobs (over 400,000 jobs) between 2018 and 2020-Q2.

