The effects of COVID-19 on Wisconsin’s workers and firms

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March 24, 2020 (updated April 30, 2020)

This note highlights two high-frequency data series that show some of the effects of COVID-19 on Wisconsin workers and firms. This report is part of a larger effort at CROWE to document and analyze the economic fallout of the COVID-19 pandemic. Updated figures and analysis are available at https://crowe.wisc.edu/impact-of-covid19. Updated versions of this data brief are available at https://crowe.wisc.edu/data-briefs.

Initial unemployment claims

The “social distancing” required as part of the response to COVID-19 has created a sharp increase in Wisconsin workers seeking unemployment insurance. We focus on initial unemployment claims, which measure applications for benefits from workers who were not currently receiving benefits.

In figure 1, we plot initial claims by week. Historically, unemployment claims data are released on a weekly basis. Up through the week ending March 7, initial claims in 2020 were below their levels

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1 Data briefs are short, timely reports that use data to highlight economic issues of importance to policy makers, business leaders, and the public. This brief, and the data and code that underlie it, are available at crowe.wisc.edu. The views expressed herein are those of the authors and not necessarily those of the Center for Research on the Wisconsin Economy, the Department of Economics, or the University of Wisconsin.
in 2019. The week ending March 14 saw a small uptick in claims, and in the week ending March 21, initial claims exploded. In that week, 69,342 people filed for benefits who were previously not receiving them. In the first 11 weeks of 2020 a total of 61,249 initial claims were made: The week ending March 21 saw more claims than the entire year to date.

Update: The 69,342 measurement is calculated by cumulating the daily counts released by the Wisconsin Department of Workforce Development (DWD). The official advanced weekly count released by the Department of Labor (DOL) on March 26 is only 51,023: a 36 percent difference. A discrepancy this large is abnormal: In the first week of March the two measures differed by two percent. In the second week of March the two measures differed by 10 percent. The DWD has not addressed this discrepancy. For the week ending March 28, things seem to have corrected, and the two measures differ by four percent.

The Department of Workforce Development recently began releasing daily initial unemployment claims data going back to March 1, 2020. We plot these data in figure 2. Claims begin to accelerate on March 16. Initial claims drop during the weekend, which is a pattern evident in the data before the pandemic and to be expected. It remains to be seen how claims will evolve with layoffs spreading to manufacturing industries.

To put these numbers into perspective, we can construct a simple “back-of-the-envelope” unemployment rate implied by the initial unemployment claims. The latest data available on Wisconsin’s labor force statistics from the Bureau of Labor Statistics are from February 2020. We need to make two assumptions. 1) The civilian labor force is constant. 2) The unemployed do not enter employment. The estimated unemployment rate is plotted in figure 3. By this estimate, the unemployment rate has roughly doubled in one week. The figure also reports the peak unemployment rate in Wisconsin during the last recession, 9.3 percent.
This measure serves as a lower bound to what will be reported when the survey-based data are released from the Bureau of Labor Statistics in April. The increase in the unemployment rate reported in figure 3 includes only those who have filed for unemployment insurance. Anyone who is currently unemployed but has not filed for insurance will not be included in this measure but will be in the official statistics.¹

Figure 3: Estimated Wisconsin unemployment rate, daily

Update: The national employment situation report, released on April 3, reports a national unemployment rate of 4.4 percent for March. The survey that underlies this measure was taken during the week of March 8–14. This number is similar to the 3.8 percent rate we have computed in Wisconsin for this period (figure 3). It is clear from the figure that current situation is likely much worse than the national survey suggests.

The value of Wisconsin firms

Lacking high-frequency data on all Wisconsin firms, we turn to its publicly traded firms, whose share prices are readily available. Many of these firms operate at the national or international scale, so their outlook depends on broader aspects of the economy. In figure 4, we plot the market capitalization of Wisconsin’s publicly-traded firms. There are about 60 publicly-traded firms headquartered in Wisconsin. We were able to compute market capitalization for 56 of them. The firms included in the index are listed in the appendix. Market capitalization was about 290 billion dollars on February 21. By March 20, these Wisconsin businesses had lost over 100 billion dollars of value.

¹There will be some people who leave unemployment for employment, counter to assumption two, but these flows are likely to be small in comparison to the flow of people moving from employment to unemployment.
The magnitude of loss in Wisconsin firms is similar to that in the broader market. In figure 5, we plot the market capitalization of Wisconsin's public firms, but normalized so that it is equal to 100 on February 21. For comparison, we plot the S&P 500 ETF price, normalized in a similar way. The two series move very closely until most recently, when the Wisconsin index has declined more than the national index.

In the appendix, we report the year-to-date share price changes for each company in the index. The hardest hit include those in the retail sector (Kohl's, Lands' End) and the entertainment sector (Marcus). Sonic Foundry, a maker of online meeting software, has seen a substantial increase in its share price.
Figure 5: Market capitalization of Wisconsin public firms
Appendix

Table 1: Year-to-date change in share price (04/29/2020)

<table>
<thead>
<tr>
<th>Firm</th>
<th>Percent change</th>
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<tbody>
<tr>
<td>Sonic Foundry Inc</td>
<td>242.3</td>
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<td>Orion Energy Systems Inc</td>
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