



## Wisconsin's labor market and COVID-19<sup>†</sup>

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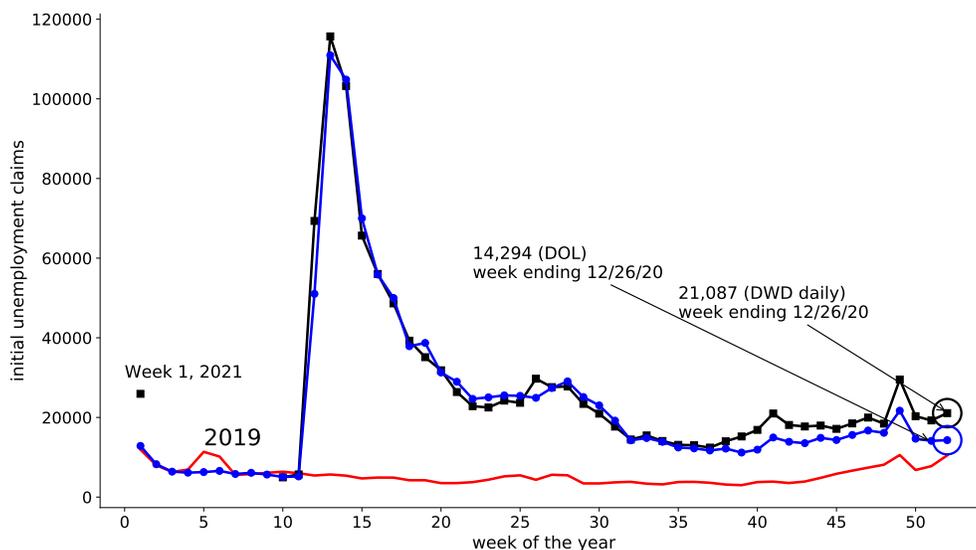
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This brief reports labor-market indicators for Wisconsin to demonstrate the effects of COVID-19 on labor supply and demand. This report is part of a larger effort at CROWE to document and analyze the economic fallout of the COVID-19 pandemic. Updated 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

In figure 1, we plot Wisconsin's initial unemployment claims by week. *Initial unemployment claims* are applications for benefits from workers who were not currently receiving benefits. 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 in 2019. The week ending March 14 saw a small uptick in claims, and in the week ending March 21, initial claims exploded.

Figure 1: Weekly initial unemployment claims in Wisconsin



In figure 1, we plot the official Department of Labor (DOL) measure of initial claims and the Wisconsin Department of Workforce Development's (DWD) measure that is released daily. The two

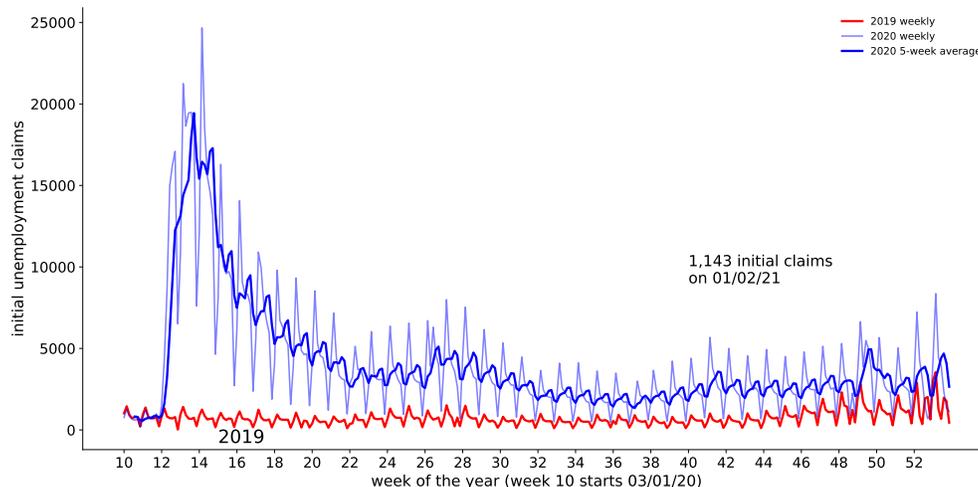
<sup>†</sup> Data briefs are short, timely reports that use data to highlight economic issues of importance to policy makers, business leaders, and the public. This brief, and the data and code that underlie it, are available at [crowe.wisc.edu](https://crowe.wisc.edu). The views expressed herein are 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.

are very close, which makes the daily numbers a useful high-frequency measure of flows into unemployment.

The Department of Workforce Development has released daily initial unemployment claims data going back to March 1, 2020. We plot these data in figure 2, including the five-week moving average of initial claims for 2020. Claims begin to accelerate on March 16, just prior to the closure of bars and restaurants. Initial claims peak shortly after the “safer at home” order is implemented (March 25) and level out at the end of May at about 3,600 initial claims per day. Initial claims have remained relatively constant, but elevated relative to their 2019 counterparts. There is a small increase in initial claims beginning in November 2020, but there was also an increase in 2019 during this period.

As of January 3, 2021, the DWD has stopped publishing daily claims data (perhaps because the daily variation is not as important as it was in March and April), so this will be our last update of this data series.

Figure 2: Daily initial unemployment claims in Wisconsin



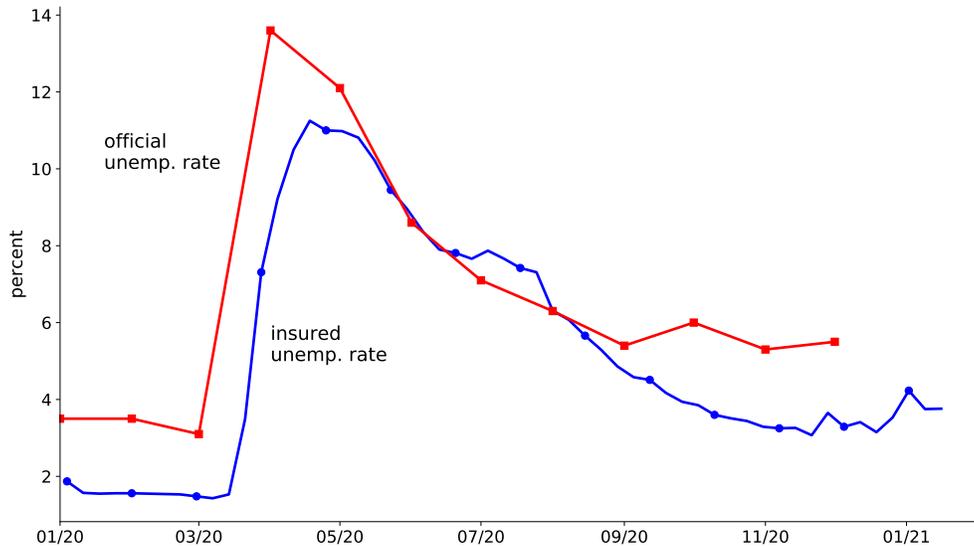
## Unemployment rates

The initial claims data allow us to see the number of people applying for benefits. They are less informative about the number of people who are currently unemployed. The well-known unemployment rate calculated by the Bureau of Labor Statistics is derived from the Current Population Survey (CPS). In this survey, a person is counted as unemployed if they did not work for pay during the survey reference week, were available for work, and actively searched for a job in the previous four weeks. Note that this definition of unemployment is not contingent on applying for benefits. A person is counted as employed if they worked for pay during the reference week. The unemployment rate is the number of unemployed persons divided by the sum of the number of employed and unemployed persons.

We plot the official unemployment rate for Wisconsin in figure 3. It tops out in April at 13.6 percent. During the last recession, the unemployment rate topped out at 10.4 percent in February 2010. The official unemployment rate is released monthly. The insured unemployment rate, however, is available weekly, making it a useful higher-frequency indicator of unemployment. The *insured*

*unemployment rate* is the number of people receiving unemployment benefits divided by the number of people eligible for unemployment benefits. Most employees are eligible for unemployment benefits (should they lose their job) and most self-employed people are not.

Figure 3: Unemployment rates in Wisconsin



We plot the insured unemployment rate in figure 3. For the first three months of 2020, the official rate was about twice the insured rate. This pattern holds for earlier years as well. The pattern breaks down in April. The surge in the insured unemployment rate is matched almost one-for-one in the official rate. By May, the two measures are roughly equal. This suggests that more people who are unemployed in the official rate are collecting benefits, but it is also suggestive of an undercount of unemployment in the official survey. It is well-known that the CPS becomes more noisy at the state-level because there are relatively few data points. This same issue also arose during the recovery from the last recession.<sup>1</sup>

Beginning in October, the two series begin to diverge again, and the gap between the official rate and the uninsured rate nears its pre-pandemic level. From January to March 2020, the official rate, on average, was 1.8 times larger than the insured rate. From May to September, the official rate was only 1.1 times larger than the insured rate, on average. From October to December 2020, the average ratio rose to 1.7. While the rates remain elevated relative to the beginning of 2020, the relationship between these two variables is reverting to its previous status.

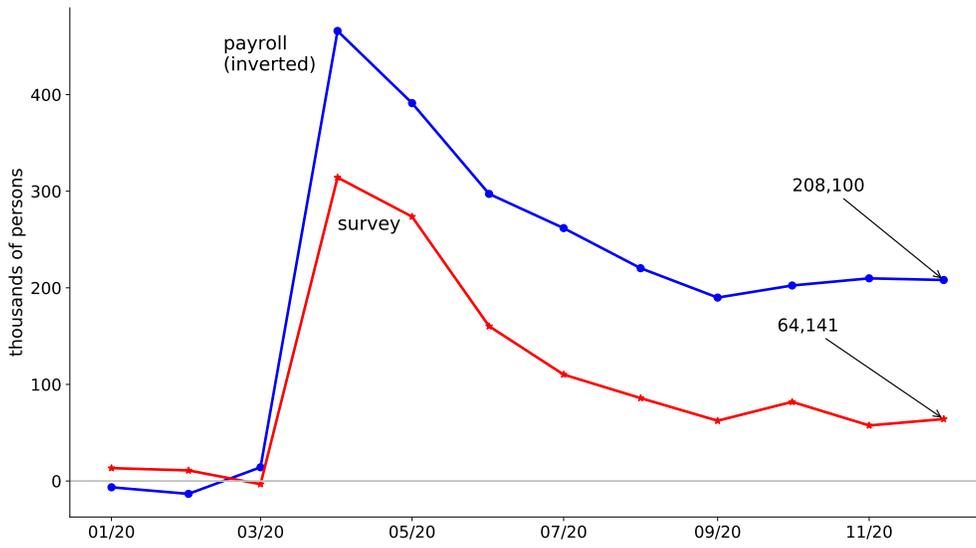
A related labor-market indicator is the change in the number of people on nonfarm payrolls. These data are collected from a different survey than the one used for the unemployment rate. This survey is designed for industry and geographic detail, whereas the CPS is designed for demographic detail. The definition of employment in the payroll measure is stricter than in the CPS. In the payroll data, a person had to be paid in the reference week, while in the CPS someone on leave without pay would still be counted as employed. The payroll number also counts jobs rather than people, so it will overcount multiple-job holders.<sup>2</sup>

In figure 4, we plot the year-over-year change in the number of unemployed people from the CPS and the negative of the year-over-year change in payroll employment. Prior to April 2020, the two

<sup>1</sup><https://nyti.ms/2X9vXdR>

<sup>2</sup>For more on the difference between the CPS and the payroll survey, see <https://bit.ly/3hyYCAu>.

Figure 4: Measures of job loss



measures are close, but they begin to diverge in April. In December 2020, Wisconsin's payroll employment fell by 208,100 people compared to December 2019. Over this same period, the number of unemployed in the CPS rose by 64,141. While neither measure is perfect, the decline in payroll that is not reflected in an increase in unemployment suggests that there may be more slack in the labor market than evident in the unemployment rate.