

YTS Quarterly Data Series – Pandemic and Recovery

2nd Quarter, 2021

A summary of the employment impacts on the Wisconsin economy from the onset of the COVID-19 pandemic through the second quarter of 2021.

The Business Dynamics Research Consortium (BDRC),
a part of the Institute for Business & Entrepreneurship
at the University of Wisconsin System



Authored by:

Gary Kunkle PhD; BDRC Senior Research Fellow

Gregg Cole; BDRC Data Research and Innovation Leader

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Foreword

The Business Dynamics Research Consortium (BDRC) presents this quarterly report evaluating employment and establishments changes within Wisconsin from the beginning of the pandemic through the second quarter of 2021¹. It is the first quarterly update to our YTS Quarterly Data Series – Pandemic and Recovery study issued in August 2021.

The YTS is the only private sector tool with full national coverage that tracks economic change at each of the nation's 16 million establishments². It includes more than a million businesses not reported in government statistics such as self-employed (sole proprietors and partnerships) and the agricultural sector.

Findings

These are highlights from this report:

- In the second quarter of 2021 (Q2.21) the Wisconsin economy expanded for the first quarter since the beginning of the pandemic-induced downturn. The number of jobs in Wisconsin rose by 0.6% and the number of establishments grew by 2.3%, with both figures beating the US national growth of 0.4% in jobs and 1.7% in establishments.
- Job growth was primarily fueled by improvements in new establishment births and the reduction of establishment deaths. Job growth from net births (new jobs from births minus jobs lost from closures) improved from -67,889 in Q1.21 to +7,883 in Q2.21. Jobs from net expansions (new jobs from expansions minus jobs lost from contractions) rose modestly and remained positive every quarter since the beginning of the pandemic.
- Job growth was heavily concentrated among small establishments (< 20 jobs) largely due to the rise in establishment births. Middle-market companies (20 to 999 employees) suffered aggregate employment losses, with the greatest employment damage among those with 50 to 250 employees. This distribution of job growth and loss caused the average size of Wisconsin establishments to fall for the second quarter in a row.
- Employment growth continues to diverge across industries. For example, Healthcare and Agriculture continued to shed jobs during Q2.21 while employment grew in Construction, Manufacturing, Retail, and Accommodations. All industries under study experienced growth in the number of establishments.
- All but one of Wisconsin's regions added new jobs over the quarter, as Centergy was the only region that suffered job losses. Nevertheless, there is relatively little divergence in employment recovery across the regions. For example, employment levels at Momentum West (best overall performance) had recovered to 93.2% of its employment peak in Q2.20 while Vision Northwest (weakest recovery) was at 89.7%.

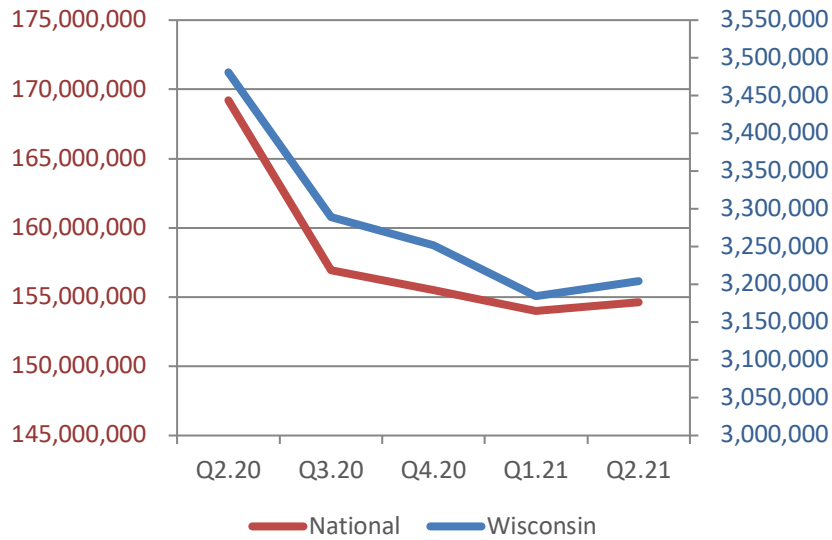
¹ Establishments are individual places of business, including sole proprietors and partnerships.

² For more information regarding the YTS Quarterly Data Series, please see the Methodology section at the end of this report.

Employment and Establishments

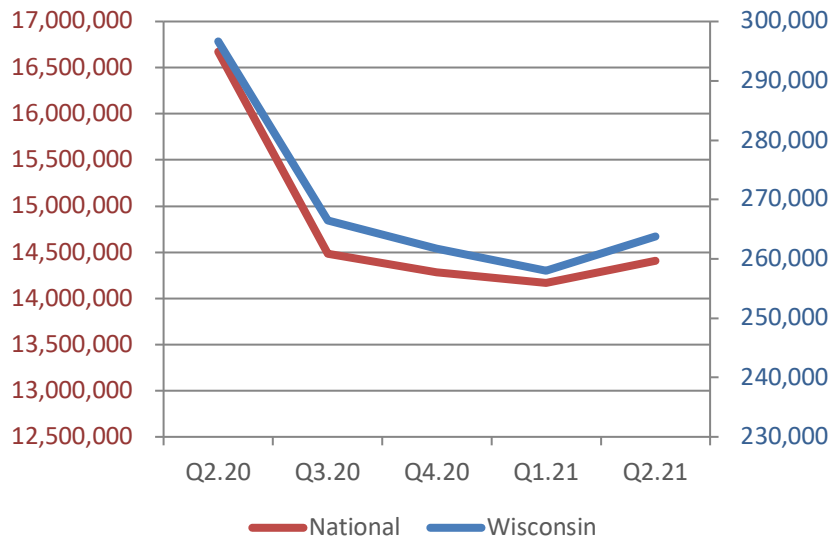
Both the US and Wisconsin economies expanded employment in the second quarter of 2021 (Q2.21) for the first quarter since the beginning of the pandemic. Wisconsin enjoyed slightly faster growth than at the national level with employment rising by 19,963 jobs (+0.6% from Q1.21) while US employment was up 623,959 jobs (+0.4%).

Chart 1. Employment
National and Wisconsin (Q2.20-Q2.21)



Both the US and Wisconsin also added new establishments during Q2.21 with Wisconsin's net new establishment growth slightly faster than at the national level. The US economy added 236,714 net new establishments (+1.7% from Q1.21) compared to Wisconsin's 5,822 (+2.3%).

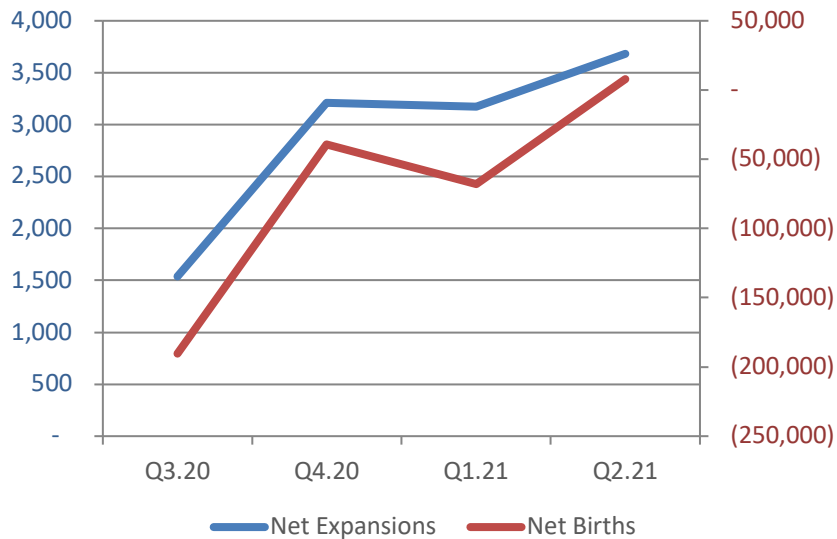
C2. Establishments
National and Wisconsin (Q2.20-Q2.21)



Most of Wisconsin’s job gains were the result of a substantial improvement in the number of net establishment births³. The rate of quarterly employment growth attributable to net births rose by 75,772 jobs (from -67,889 in Q1.21 to 7,883 in Q2.21) as the number of jobs created by new establishments finally exceeded the jobs lost by establishment deaths. Growth in jobs from net expansions was more modest, increasing in rate by 507 jobs from the prior quarter (from 3,175 gained in Q1.21 to 3,682 in Q2.21)⁴.

Thus, Q2.21 represents the first quarter since the beginning of the crisis that employment gains from both establishment net births and from net expansions have been positive.

**C3. Employment due to Net Expansions and Net Births
Wisconsin (Q2.20-Q2.21)**



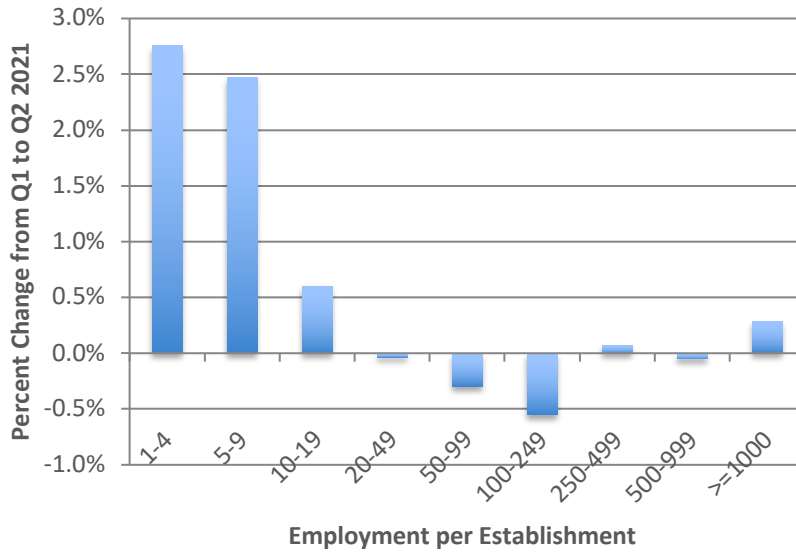
Establishment Sizes

Employment growth was limited to small establishments under 20 workers and to enterprises of 1,000 workers or more. The dominance of small establishments in this distribution, particularly those under 10 employees, is largely due to the sharp rise in establishment births during the quarter as discussed above. In aggregate, establishments between 21 and 999 employees lost employment with the most severe losses concentrated middle-market establishments with 50 to 249 employees.

³ Jobs from net births are jobs gained from the formation of new establishments after subtracting jobs lost from closures of previously existing establishments. Jobs from net expansions are jobs gained from the expansion of existing establishments after subtracting jobs lost from contractions at existing establishments.

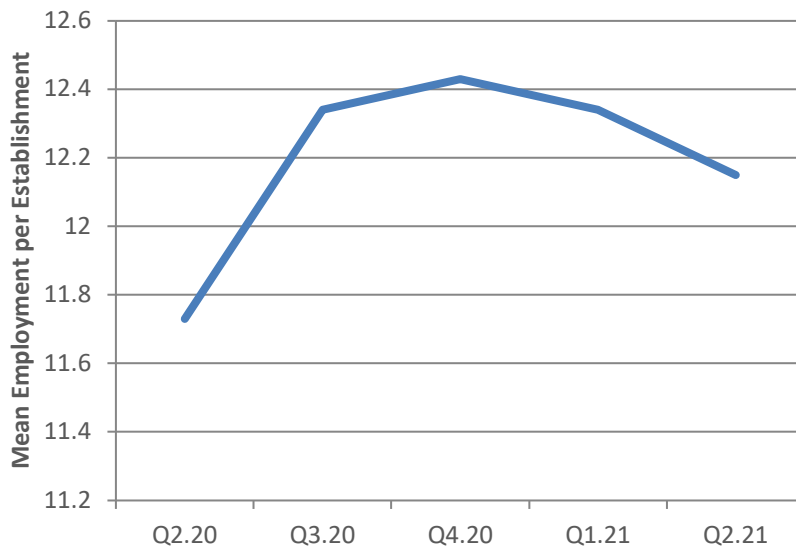
⁴ Please take note of the large difference in measurement scale between the axes of Y1 (Net Expansion) and Y2 (Net Births).

**C4. Quarterly Employment Change by Establishment Size
Wisconsin (Q1.21-Q2.21)**



The combination of new establishment births and employment growth among small establishments, along with the decline of employment in middle-market establishments, accelerated the drop in average establishment size.

**C5. Mean Employment Per Establishment
Wisconsin (Q2.21-Q2.21)**

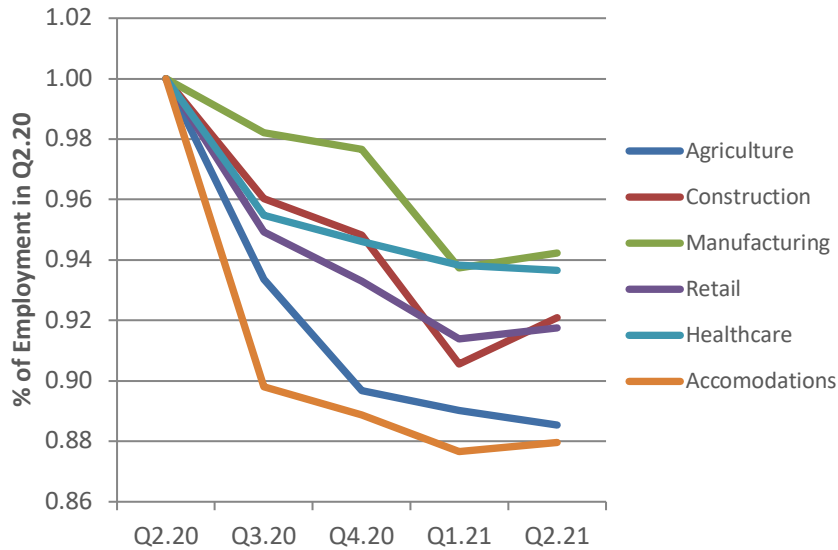


Industries

The pandemic-induced downturn has had differing impacts across six important and diverse industries in Wisconsin. For example, during Q2.21 employment in Construction rose by 1.7% from the previous quarter, while Agricultural employment fell by 0.5%. Only Healthcare and Agriculture continued to lose employment and are now the only industries with losses every

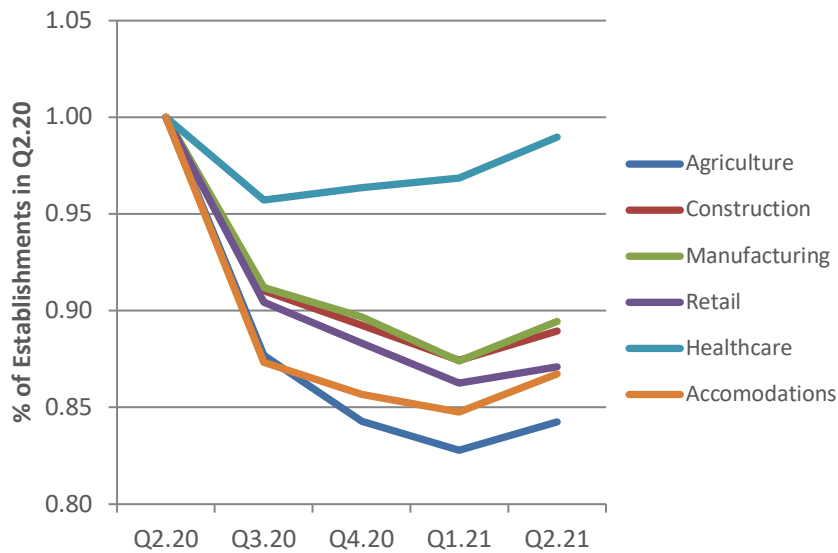
quarter since the beginning of the pandemic. However, Accommodations has been the hardest hit overall, with employment at just 88% of what it was at the beginning of Q2.20.

C6. Employment Change by Selected Industries
Wisconsin (Q2.20-Q2.21) with Baseline of Q2.20=1.00



All the selected industries added establishments over the quarter due to the rise in births. Although overall employment in Healthcare declined, the number of establishments have increased due to births⁵.

C7. Establishment Change by Selected Industries
Wisconsin (Q2.20-Q2.21) with Baseline of Q2.20=1.00

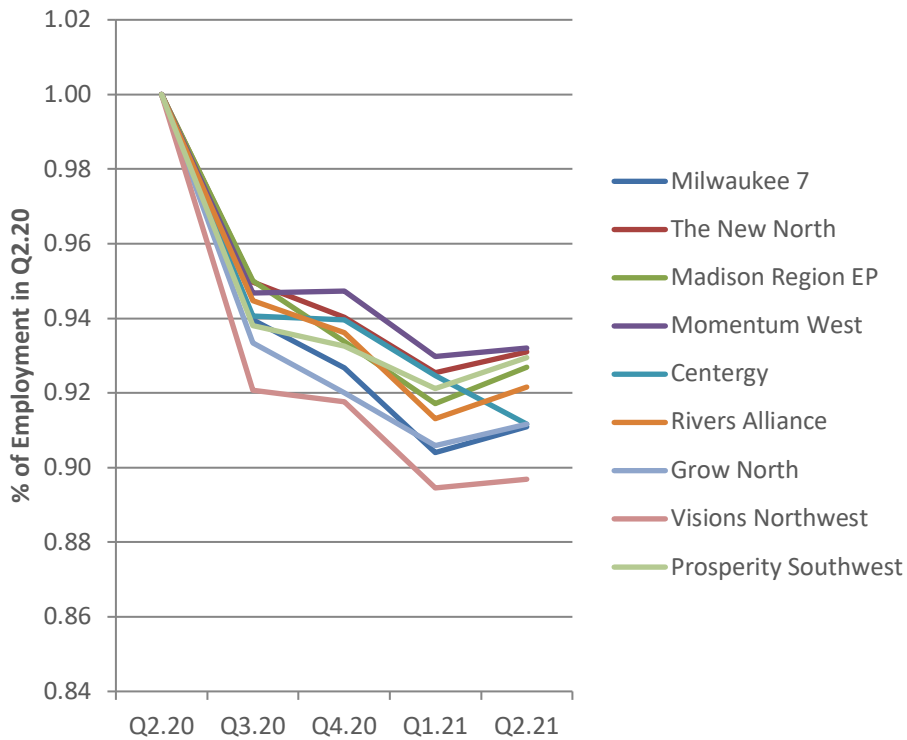


⁵ This may be explained by job losses at fewer but larger establishments (from closures and contractions) exceeding the number of jobs gained at more numerous smaller establishments (from births and expansions).

Regions

There is considerably less difference between the performance of regions within Wisconsin than is evident across industries or establishment sizes as shown above. For example, the least impacted region (Momentum West) is now at 93.2% of its employment peak in Q2.20 while the most impacted region (Vision Northwest) is at 89.7%; a spread of just 3.5%. Centergy was the only region that suffered further declines in Q2.21, while all other regions showed some, rather modest, improvements. The Madison Region recovered most over the period, rising 1.0%.

C8. Employment Change by Region
Wisconsin (Q2.20-Q2.21) with Baseline of Q2.20=1.00



Methodology

Data Axle (formerly Infogroup) has granted exclusive use of its historical dataset on a quarterly basis to BDRC in support of this project. Data Axle's dataset contains interview and survey data from more than 71 million establishments dating back to 1997, including the approximately 16 million verified establishments currently active or intent on conducting commercial activity in the economy. Each quarter Data Axle verifies and updates approximately 6 million of these records. BDRC has developed sophisticated algorithms to translate this 'sample' of 6 million records into estimations of the activities and employment changes of the approximately 10 million establishments not contacted by Data Axle during the quarter. BDRC then consolidates all quarterly and annual records from each establishment in the economy to create the master dataset that powers the dashboard and enables tailored research services.

The BDRC's YTS Quarterly Data Series provides superior insights when compared to other sources, both federal and academic. For example, BLS does not cover the Agricultural sector, nor does it report on self-employed workers (sole proprietors and partnerships). In contrast, because YTS Quarterly Data Series tracks all establishments rather than just employers (considered as two or more employees including owner), BDRC includes data on both sectors due to their importance to the Wisconsin and national economies. Harvard University's 'Opportunity Insights Economic Tracker', the only comparable private sector data source, provides only highly aggregated categories such as only four industry segments and two establishment size categories ('small businesses' and 'others'), while it misses coverage of ownership demographics such as minority- and women-owned businesses, which BDRC's dataset does cover.