



Center for
Research
On the
Wisconsin
Economy

University of Wisconsin- Madison

Business Formation and Employment Dynamics During the COVID-19 Pandemic

Fifth Update

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Abstract

This update includes a summary of the most recent weeks of applications for Employer Identification Numbers (EINs) in Wisconsin and five additional Midwestern states. Two trends have emerged more clearly since our July 30, 2021 update: (1) Weekly business applications have been gradually declining since early April, not just in Wisconsin, but across the Midwest and the nation. (2) The flow of applications in the second semester of 2021 so far is significantly lower than in 2021. Together, these two trends suggest that the forces behind the surge in business applications during the COVID-19 pandemic may be losing some steam.

¹ Wentao Zhou provided valuable research assistance.

In this fifth follow-up to the original report published in late February of 2021 we review the latest data on business formation at the state level through week 34 (ending August, 2021). Two significant trends have emerged more clearly since we published our previous update in late July: (1) After reaching a peak early in the second quarter, business applications (total numbers and “high-propensity” applications) have been declining gradually and (2) the flow of applications in the second half of 2021 has so far been lower than the flow of applications in the second half of last year.

To a certain extent, this second fact is an artifact of the unprecedented surge in the number of applications in the second half of 2020. However, it also illustrates that the forces behind this sudden upswing in business dynamism may be losing some steam. To be clear, these driving forces aren’t well understood at this point but a number of potential explanations have been put forward in recent months.

After a review of the most recent data in section 1, we will briefly discuss two plausible explanations for the recent dynamism in business formation in section 2. This discussion is still rather preliminary but nonetheless useful since both explanations suggest that the surge will likely weaken over the coming weeks and months, barring another round of lockdowns prompted by public health concerns or further direct financial pandemic support to households.

1 Business Formation during and after the COVID-19 Pandemic

Figure 1a shows the number of weekly applications for Employer Identification Numbers or EINs – the standard proxy for business formation – for Wisconsin. The solid purple line for 2020 drops noticeably after the imposition of shelter-in-place orders in mid-March of 2020 followed by a recovery in the second half of the year. Although the weekly excess flow of applications shrinks toward the end of the calendar year, it never fully dissipates and business dynamism maintained its strength in the half of 2021. Since the end of June 2021, approximately, the weekly flow of applications is lagging behind the corresponding numbers for 2020. To a small extent, this reflects the seasonal trends from pre-pandemic years: weekly applications gradually drop over the course of the calendar year (see the lines for 2017, 2018, and 2019). In 2021, however, this gradual decline is much more pronounced and the current numbers of weekly applications are significantly below their peak in the first half of April (calendar weeks 14 and 15).

The subset of applications classified as “high propensity” by the Census Bureau in Figure 1b follows a similar trajectory. We see the same patterns in other Midwestern states (see Figures 3-7 in Appendix A) and at the national level (see the tables and plots in the current [BFS report](#)

and Figure 8 in Appendix A).

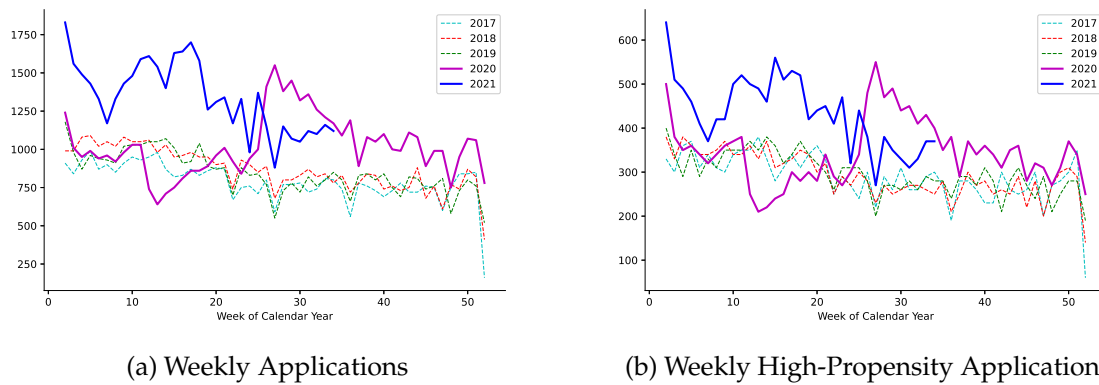


Figure 1: Wisconsin

Thanks to the strength in the number of applications in the first half of 2021, and the first quarter in particular, the cumulative year-to-date applications are still 40+ percent higher (across all Midwestern states) and the more promising high-propensity applications are 20+ percent higher compared to our reference year. The more recent slackness, however, can be seen by the slight downward trend in the last two to three months of data (see Figures 9-13).

2 The Rise and Fall of Business Dynamism

The sharp rise in the number of applications for Employer Identification Numbers (EINs) has attracted the attention of academic researchers, think tanks, and journalists alike. This discussion is still very preliminary but certain patterns in the data have given rise to a handful

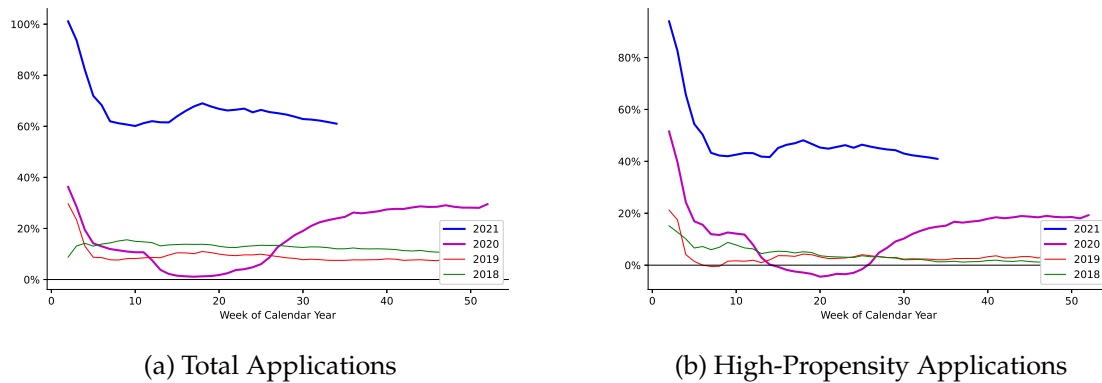


Figure 2: Cumulative Excess Applications in Wisconsin (% gap relative to 2017)

of potential explanations so far.

In its “[National Report on Early-Stage Entrepreneurship](#)” the Kauffman Foundation documents a sharp *drop* in the share of so-called “opportunity” entrepreneurs from 87 to 70 percent between 2019 and 2020. Put differently, the fraction of applications submitted by entrepreneurs who are currently *unemployed* jumped from 13 percent prior to the pandemic to 30 percent during the pandemic. This change in shares is qualitatively similar across different groups (by ethnicity, age, race, or immigration status, for instance). Entrepreneurship, it appears was an alternative pathway from unemployment back to employment (or self-employment).

The gradual decline in the unemployment rate and the (admittedly) timid rise in the labor force participation rate since the second quarter of 2020 suggest that – going forward – these excess applications by “necessity” entrepreneurs may be waning somewhat.

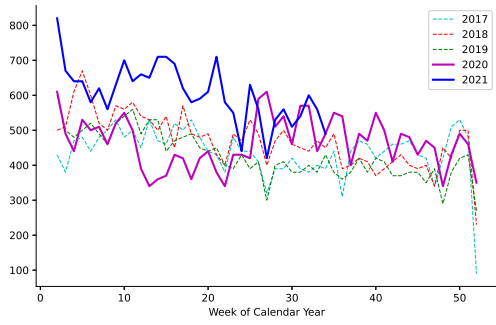
There is also some anecdotal evidence to suggest that the *Pandemic Unemployment Compensation* (PUC) program (Section 2104 of the CARES Act) provided a form of household income that could be used to cover start-up costs for early-stage entrepreneurs ¹ With the end of the federal PUC program scheduled for September 4, 2021, this source of start-up funding is about to dry up as well and this may contribute to a dampening of business dynamism in the coming weeks and months.²

References

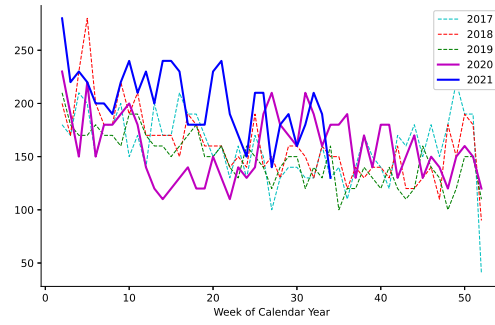
FAZIO, C. E., J. GUZMAN, Y. LIU, AND S. STERN (2021): “**How is COVID Changing the Geography of Entrepreneurship? Evidence from the Startup Cartography Project**,” *NBER Working Paper*, 1–59.

¹See, for instance, [Start-Up Boom in the Pandemic Is Growing Stronger](#) in the August 19, 2021 issue of the New York Times. [Fazio et al. \(2021\)](#) report more systematic evidence for the role of the CARES provisions in local business formation.

²Some states phased out the pandemic unemployment benefits before the September 4 deadline. It is too early to detect variations in business formation at the state level that is plausible related to the variation in timing of these benefits. This is an area for future research.

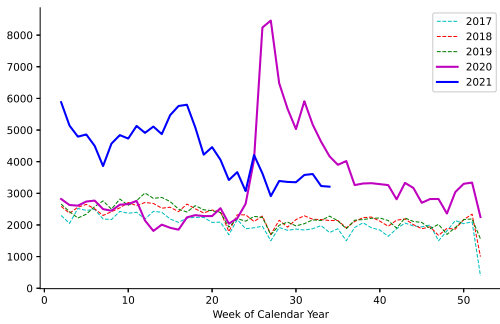


(a) Weekly Applications

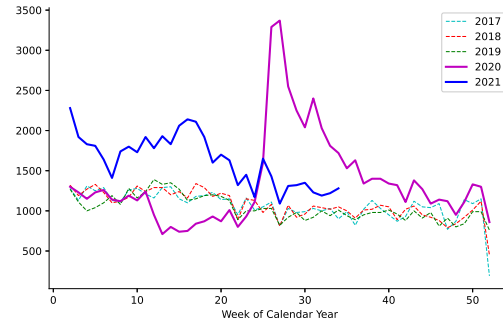


(b) Weekly High-Propensity Applications

Figure 3: Iowa



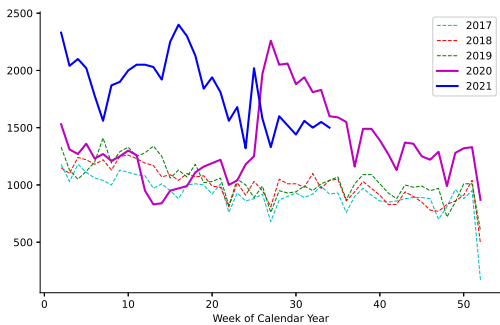
(a) Weekly Applications



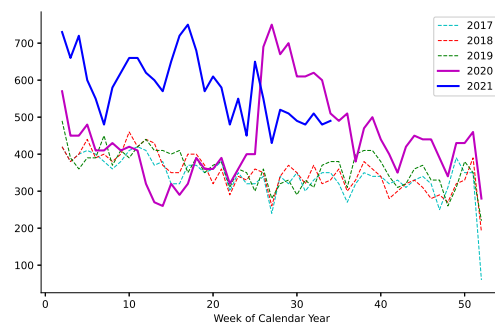
(b) Weekly High-Propensity Applications

Figure 4: Illinois

A Business Applications (BFS)

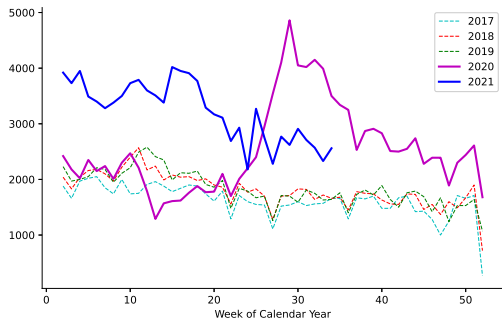


(a) Weekly Applications

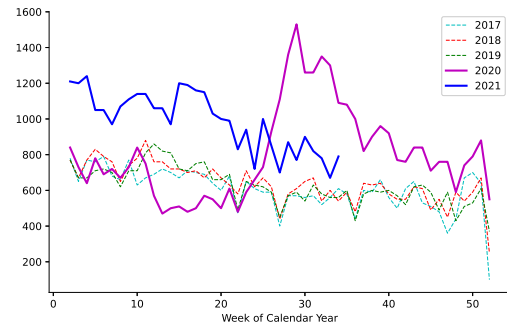


(b) Weekly High-Propensity Applications

Figure 5: Indiana

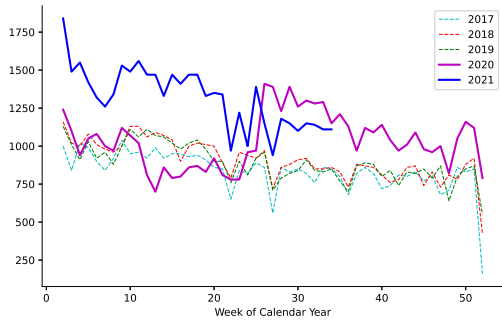


(a) Weekly Applications

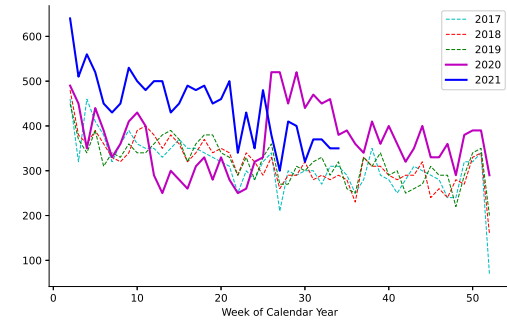


(b) Weekly High-Propensity Applications

Figure 6: Michigan

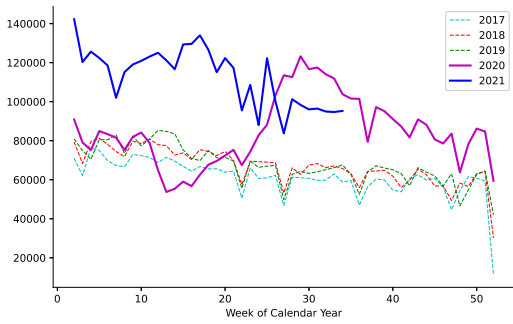


(a) Weekly Applications

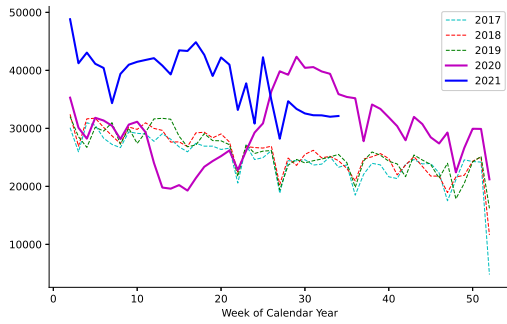


(b) Weekly High-Propensity Applications

Figure 7: Minnesota

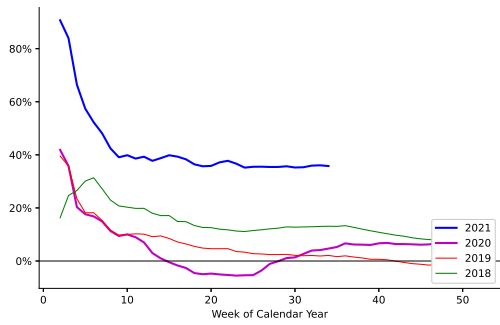


(a) Weekly Applications

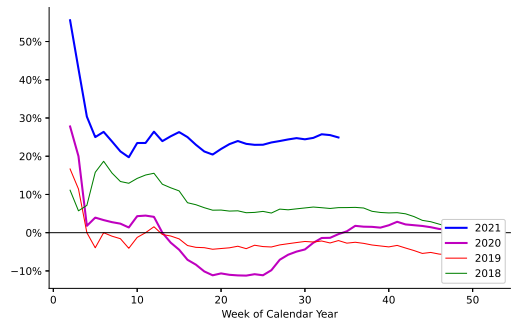


(b) Weekly High-Propensity Applications

Figure 8: United States

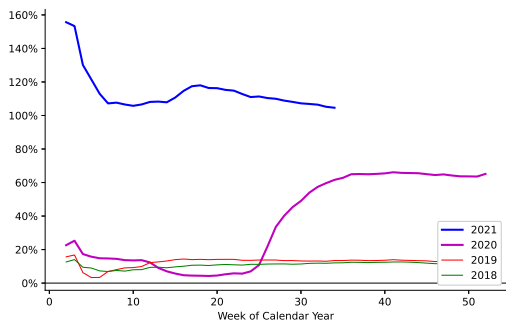


(a) Weekly Applications

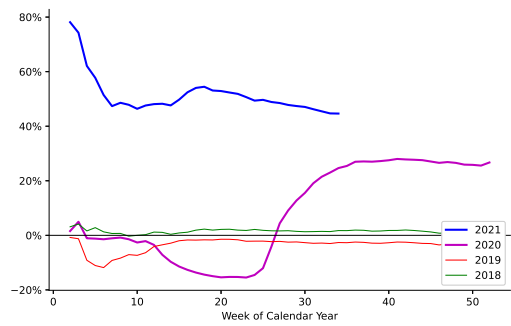


(b) Weekly High-Propensity Applications

Figure 9: Cumulative Excess Applications in Iowa (% gap relative to 2017)

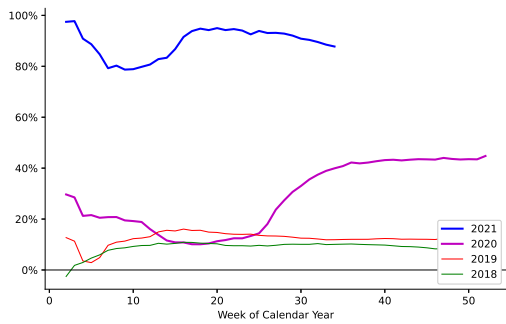


(a) Weekly Applications

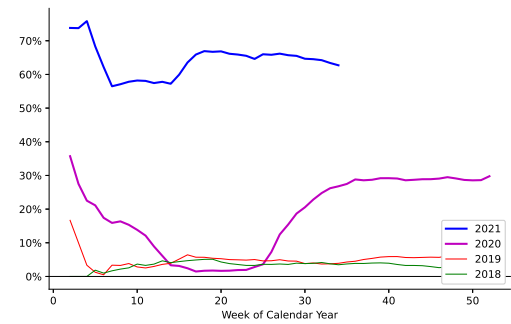


(b) Weekly High-Propensity Applications

Figure 10: Cumulative Excess Applications in Illinois (% gap relative to 2017)

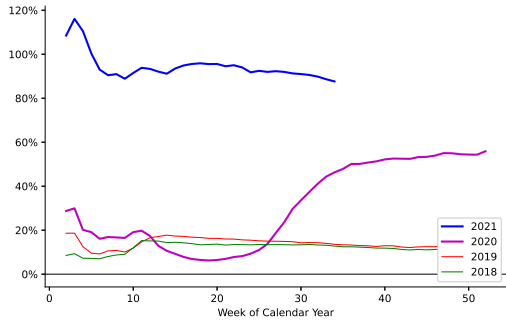


(a) Weekly Applications

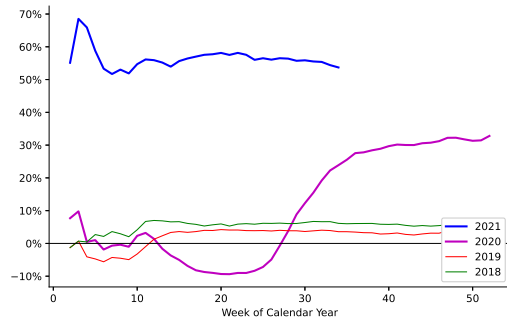


(b) Weekly High-Propensity Applications

Figure 11: Cumulative Excess Applications in Indiana (% gap relative to 2017)

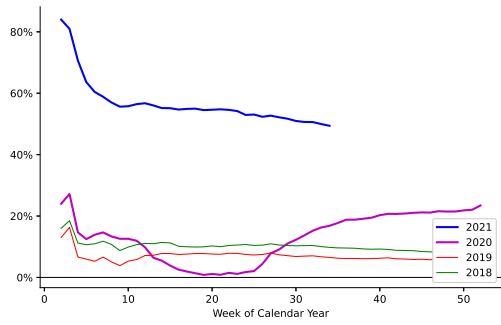


(a) Weekly Applications

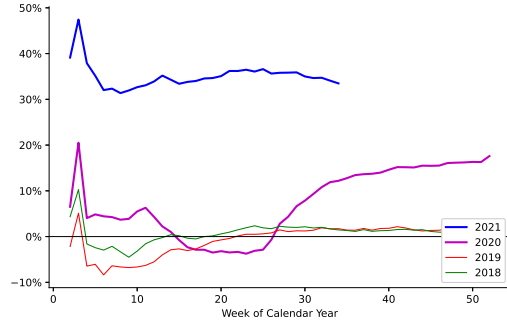


(b) Weekly High-Propensity Applications

Figure 12: Cumulative Excess Applications in Michigan (% gap relative to 2017)



(a) Weekly Applications



(b) Weekly High-Propensity Applications

Figure 13: Cumulative Excess Applications in Minnesota (% gap relative to 2017)