

## Hires and Separations During the COVID-19 Crisis by Firm Size

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The COVID-19 crisis has had large negative consequences for the labor market, but the magnitudes of these consequences have been disproportionate across different types of households and workers. In previous articles, we analyzed the effects of the crisis across the income distribution:

- [Which Earnings Groups Have Been Most Affected by the COVID-19 Crisis?](#)
- [COVID-19's Effects on Dual-Earner Households](#)
- [How Job Separations Differed between the Great Recession and COVID-19 Recession](#)
- [Job Switching Rates during a Recession](#)

We also analyzed them [across occupations and industries](#).

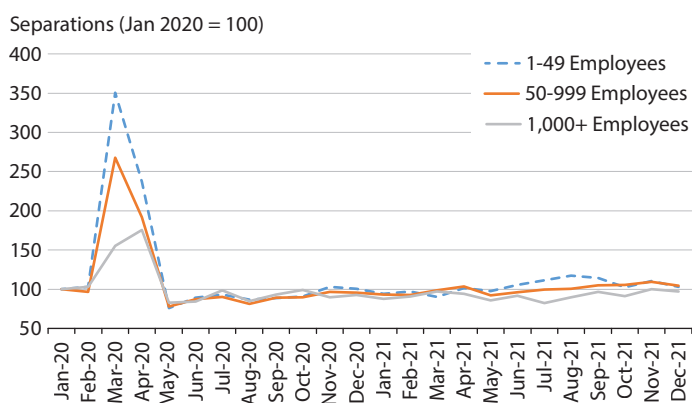
In this essay, we extend our work by studying these effects from the perspective of employers. Specifically, we study how the number of separations and hires has evolved over the COVID-19 crisis for firms of varying size (defined by the number of employees).

The negative effects of the COVID-19 crisis were larger for firms with under 50 employees, even with loans from the Paycheck Protection Program.

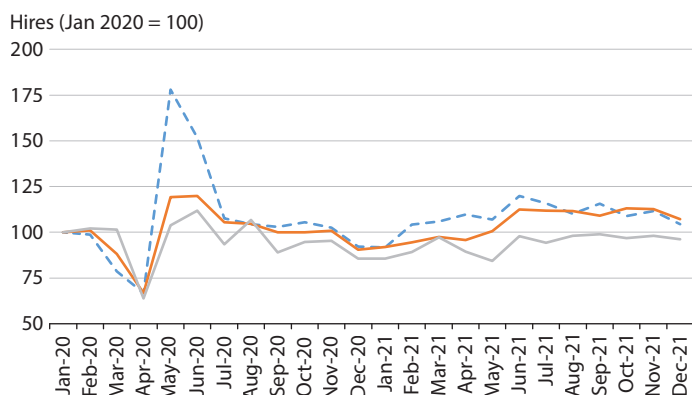
Understanding the labor market from this lens is relevant for several reasons. First, eligibility for Paycheck Protection Program (PPP) loans during the peak of the pandemic relied on firm size. Firms with more than 500 employees were ineligible for PPP loans, so to understand the employment effects of this program, it is important to analyze the changes in employment across firms that were and were not eligible. Second, unlike the Great Recession, the COVID-19 crisis hit small firms harder—especially those in the service sector affected by containment measures at the onset of the pandemic—since they typically have a smaller financial cushion. Thus, negative effects associated with this period were typically larger for small firms. Finally, previous research has shown that workers

Figure 1  
**Separations and Hires by Firm Size**

### A. Separations



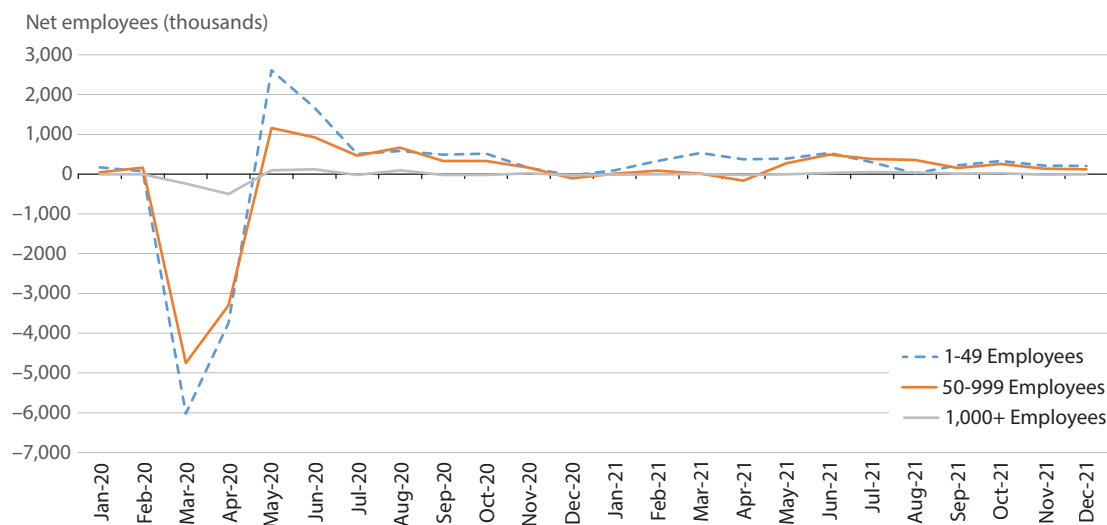
### B. Hires



NOTE: Data are seasonally adjusted and normalized to January 2020 levels.  
SOURCE: JOLTS data and authors' calculations.

in larger firms usually earn substantially higher wages than those in smaller firms, even after controlling for the quality of a worker.<sup>1</sup> This finding suggests that, during the recovery associated with the COVID-19 Recession (i.e., the period following April 2020), if the employment share of large firms increased (i.e., more workers transitioned from small firms to large firms than vice versa), then average earnings of the employed may have risen.

Figure 2  
Net Employment Change by Firm Size



NOTE: We obtain the net change in employment by subtracting the total number of separations from the total number of hires. Data are seasonally adjusted.  
SOURCE: JOLTS data and authors' calculations.

To address these hypotheses, we work with Job Opening and Labor Turnover Survey (JOLTS) data from January 2020 through December 2021. Panel A of Figure 1 plots the total number of monthly separations (normalized to the value in January 2020) for firms with 1-49, 50-999, and 1,000+ employees. JOLTS defines separations as all employees separated from the payroll during the month (e.g., laid off or quit). Despite small firms' eligibility for PPP loans, which incentivized them to maintain employment and compensation levels,<sup>2</sup> these firms still saw the greatest increase in separations in the initial months of the COVID-19 crisis—most notably in March 2020, when separations for firms with 1-49 employees more than tripled relative to the prior month. On the other hand, firms with 1,000+ employees only experienced a 50% increase in separations over the same period. This result may be due to relatively larger firms being less prone to complications from containment measures because their workers are more likely to be able to work from home.

Panel B of Figure 1 plots the total number of monthly hires (normalized to the value in January 2020) for firms with 1-49, 50-999, and 1,000+ employees. Strikingly, the number of hires declined by a similar rate for all of these groups at the onset of the pandemic: By April 2020 the number of hires was down 33% for the two smallest firm groups and 36% for the largest firm group relative to three months earlier. However, the ensuing rebound in hires was larger for small firms: In May 2020 the smallest firm group

hired around 75% more workers compared with January 2020, whereas the largest firm group had almost the same level of hires as in January 2020. Furthermore, since February 2021 the number of hires in the smallest firm group has remained above pre-pandemic levels, whereas the number of hires in the largest firm group has consistently remained below pre-pandemic levels over the same period. The larger and more persistent rebound in small firms' hiring likely reflects these firms replacing a larger number of workers due to having more separations at the onset of the pandemic.<sup>3</sup>

Figure 2 plots the monthly net change in employment across the same three firm sizes.<sup>4</sup> Given our findings in Figure 1, it is unsurprising that the smallest firms faced a larger initial decrease and subsequent rebound to employment than the larger firms. Relative to firms with 1-49 employees, those with 1,000+ employees display significantly stabler changes in employment. In fact, the largest decrease and increase to net employment for the smallest firm group were approximately -6 million and 2.6 million employees, respectively, whereas these numbers were only -500,000 and 120,000 for the largest firm group.

Overall, we document that the negative effects of the COVID-19 crisis were larger for small firms, even under the presence of PPP loans provided to them. However, the recovery of employment to pre-pandemic levels is nearly complete given the strong and persistent recovery throughout 2021. ■

## Notes

<sup>1</sup> For more details, see the following: Bloom, Nicholas; Guvenen, Fatih; Smith, Benjamin S.; Song, Jae and von Wachter, Till. "Is the Large Firm Wage Premium Dead or Merely Resting?" *AEA Papers and Proceedings*, 2018, 108, pp. 317-22; <https://www.semanticscholar.org/paper/IS-THE-LARGE-FIRM-WAGE-PREMIUM-DEAD-OR-MERELY-Bloom-Guvenen/1fa104513a4848064d476fdb46889de15b064c7>.

<sup>2</sup> For more information, see the following: U.S. Small Business Administration. "PPP Loan Forgiveness." N.d.; <https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/ppp-loan-forgiveness>.

<sup>3</sup> Reported results in this essay are obtained with seasonally adjusted JOLTS data. In unreported results, we also calculate the same non-seasonally adjusted values. Overall, our main takeaways are largely the same.

<sup>4</sup> We calculate the net change in employment by subtracting the total number of separations from the total number of hires.