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## COVID-19's Impacts on the Labor Market in 2020

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# EMPLOYMENT RESEARCH

## COVID-19's Impacts on the Labor Market in 2020

*Brad J. Hershbein and Harry J. Holzer*

### ARTICLE HIGHLIGHTS

■ *COVID-19 decimated the U.S. labor market in the spring of 2020; a partial recovery in the summer and early fall left historically marginalized and economically disadvantaged groups largely behind, more than in any previous recession.*

■ *Blacks and Hispanics have had slower employment recoveries than whites, even accounting for differences in education and occupation.*

■ *States hit harder by COVID earlier on continue to lag behind in their employment recovery.*

It is no secret that in the spring of 2020 the COVID-19 pandemic disrupted U.S. labor markets more severely and more quickly than at any point in living memory. A blizzard of research papers, newspaper stories, and calls for economic relief have documented the severe crash in employment in the spring of 2020, and the disproportionate burden borne by workers in leisure and accommodation, workers of color, and workers unable to do their jobs remotely. Far less is known, however, about how employment trajectories have played out for different groups over the rest of 2020, as a nascent recovery first gathered steam and then stalled, and how these patterns varied across states that differed in the timing and severity of their outbreaks and economic restrictions.

In a [recent working paper](#), we draw on publicly available data on detailed employment measures, COVID case rates and mortality, and state restriction policies to shed light on how labor markets have evolved since the pandemic began, capturing trends through the end of 2020. We find that the overall jobs recovery flatlined in October, as caseloads and mortality rose sharply, but that this aggregate pause obscured a continuation of slow gains among higher-paid workers and a second, if much milder, drop among lower-paid workers. We also confirm that Blacks and Hispanics not only had larger initial employment losses in the spring, but that their employment recoveries lagged over the summer and early fall. Even when we control for differences in education and type of occupation, these racial gaps persist, although by year's end there was convergence for Blacks even as the gap for Hispanics began to grow again. Permanent job loss has also been higher among these groups.

In addition to these disparities by race, we also find large and persistent disparities in employment

trends across states. Grouping states into three categories based on when their caseloads first peaked, we document that employment recoveries have lagged among states that had the earliest outbreaks, and that the share of their populations with permanent job loss has increased the most. Delving into the reasons for this dispersion, we show that while economic restrictions hurt

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**Compared to prepandemic, about 10 million more people were jobless by December 2020, and another 2 million had their work hours reduced.**

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employment when they are in place, their negative impact quickly fades once they are relaxed. Rather, elevated mortality rates depress employment not only contemporaneously but for months afterward, most likely because a greater number of deaths is a highly visible and persistent signal for the dangers of engaging in economic activity that drives both jobs and the risk of infection. Unfortunately, the rise in mortality rates that occurred at the end of 2020 will likely create headwinds for continued employment recovery in 2021.

To offset these headwinds and increase the chances that the recovery is broad and inclusive, we propose a series of policies to provide financial assistance to the workers hit hardest by the pandemic and to help reskill workers whose jobs are unlikely to return. However, any robust recovery will require efforts to control the spread of the virus in the immediate future, including accelerated vaccination, more widespread and inexpensive testing, and increased incentives for mask wearing and physical distancing.

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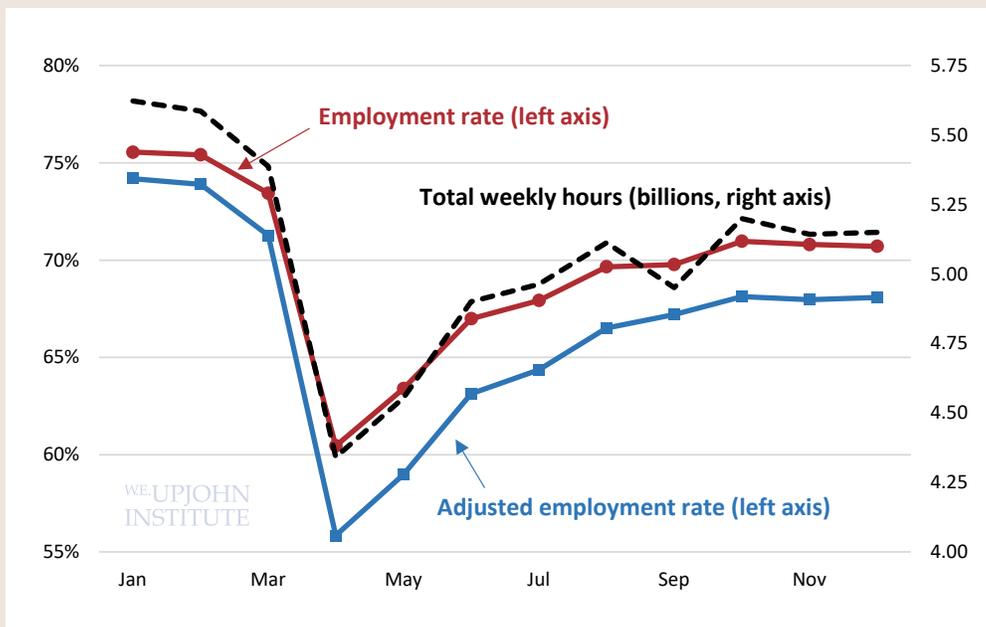
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## COVID-19's Impacts on the Labor Market in 2020

Figure 1 Labor Market Indicators over 2020



NOTE: The employment rate is the share of non-institutionalized civilians aged 18–64 who report being employed, except for those who report being absent from work for unspecified reasons (many of whom are believed by the U.S. Bureau of Labor Statistics to have been misclassified and are actually unemployed). The modified employment rate excludes individuals who report being employed part-time involuntarily. Total weekly hours is the sum of all hours worked by people during the reference week of the survey.

SOURCE: Current Population Survey; authors' calculations.

## 2020 Labor Market Trends

Figure 1 presents three indicators of aggregate employment over the course of 2020. The red line with circles shows the employment rate of people aged 18–64—the share of these people with jobs—although we have adjusted this number slightly to exclude individuals who reported being absent from work for unspecified reasons. (The U.S. Bureau of Labor Statistics believes many of this latter group should have been classified as unemployed instead.) Starting above 75 percent prior to the pandemic, the employment rate dips in March before plummeting over 13 percentage points in April, gradually recovering to 71 percent by October and budging little over the next two months. Nearly 10 million fewer Americans had a job in December than in February 2020.

However, this doesn't capture the full scope of the employment loss, as

many workers have kept their jobs but had their hours reduced involuntarily. Thus, the blue line with squares presents a modified employment rate that excludes individuals who are involuntarily part time. The gap between this measure of employment and the first one is 1.5 percentage points in January and February, but it widens substantially by April to 4.7 percentage points, and even in December is still 2.6 percentage points. This means that, in addition to the approximately 10 million fewer people without a job, another 2 million are employed but working fewer hours than before the pandemic. Finally, the dashed black line shows the total number of hours worked per week across all Americans. This metric has fallen from 5.6 billion in early 2020 to 5.15 billion as of December, a decline of 8.4 percent, about the same percentage decline as the modified

employment rate, suggesting that this employment rate is a good proxy for the strength of the labor market.

## The Rising Inequality Gap

This overall recovery, anemic as it is, has not been felt equally by all workers. The two panels in Figure 2 break out trends by occupational wage quartile. Each quartile represents a fourth of workers based on the average hourly wage in their occupation, with 1 being the lowest and 4 being the highest. Panel A shows the modified employment rate, as in Figure 1. Although lower wage quartiles have always had lower employment rates, the gap surged after the pandemic began. The modified employment rate of the first wage quartile plummeted by an astonishing 35 percentage points between February and April, before rebounding about two-thirds of the way back by October. Workers in higher wage quartiles suffered much smaller losses, with those in the top quartile down only 2 percentage points from the beginning of 2020 by year's end, and those in the third quartile down 6 percentage points. While modified employment rates continued to rise slightly between November and December for the top two wage quartiles, they reversed course and fell slightly for the bottom two quartiles. These losses occurred simultaneously with rising COVID caseloads and mortality and renewed economic restrictions, particularly in the hospitality and leisure sector, which has many low-paying occupations.

Panel B in Figure 2 examines the share of the population who report suffering permanent job loss (that is, they lost a job and do not consider themselves on temporary layoff). Research has found that such long-term job separation predicts lower earnings and higher health risks even decades later (Ruhm 1991; Eliason and Storrie 2006; Sullivan and Von Wachter 2009). In winter 2020, these shares clustered around half a percent for all

wage quartiles. They rose sharply and diverged, particularly over the summer and fall, with the share peaking at 3.2 percent in October for the bottom quartile. The slight dips seen in December are not necessarily good news—because modified employment rates also fell for the bottom quartiles (panel A), it's likely that workers in the bottom quartile were leaving the labor force entirely rather than finding a new job.

**Recovery Lags for Black and Hispanic Workers**

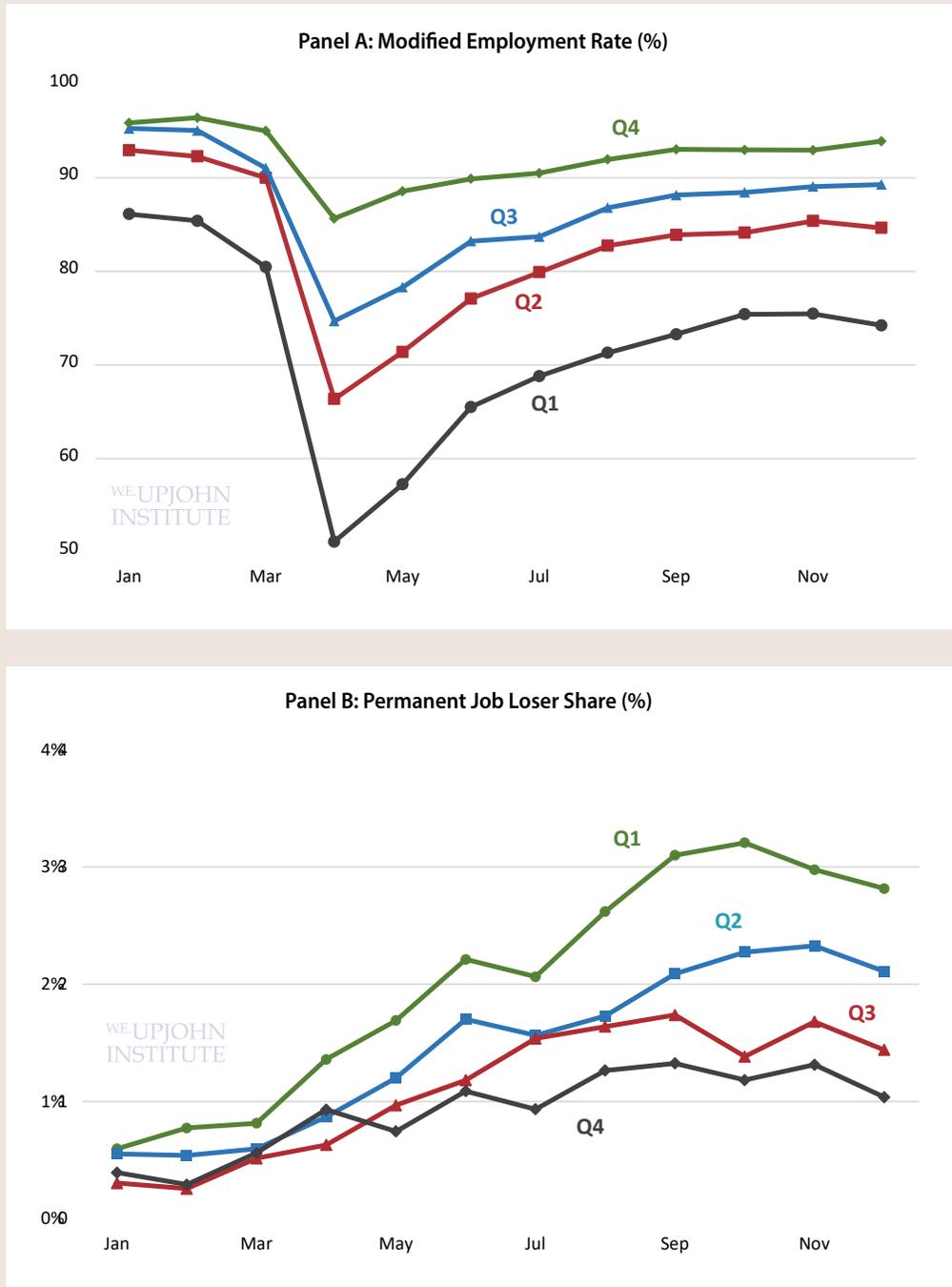
The recovery in the modified employment rate has also varied considerably by race and ethnicity. The solid red and blue lines in Figure 3 show the *change* in the employment rate, in percentage points, for Blacks and Hispanics since January 2020. Hispanics initially fare the worst, but Blacks also suffer greater initial losses than other racial groups (solid gray line). Hispanics have also had a faster recovery, at least into the fall. By December, racial gaps had narrowed, especially for Blacks, although there was some slippage for Hispanics.

Some of these racial gaps may be due to education and occupational differences. Thus, in the dashed lines, we statistically control for these differences. This reduces the gap substantially between Blacks and everyone else in the spring and early summer, but plays a somewhat smaller role afterward. These adjustments make less of a difference for the gap with Hispanics. Thus, not only have Blacks and Hispanics had larger employment losses and slower recoveries, the bulk of these disparities—especially for Hispanics—cannot be explained by educational and occupational differences.

**The Role of COVID Mortality and Economic Restrictions**

Employment rate losses and recoveries also differ across states. We find, for example, that states that had

**Figure 2 The Bottom Wage Quartile Has Had a Much Weaker Recovery Than the Top Quartile**

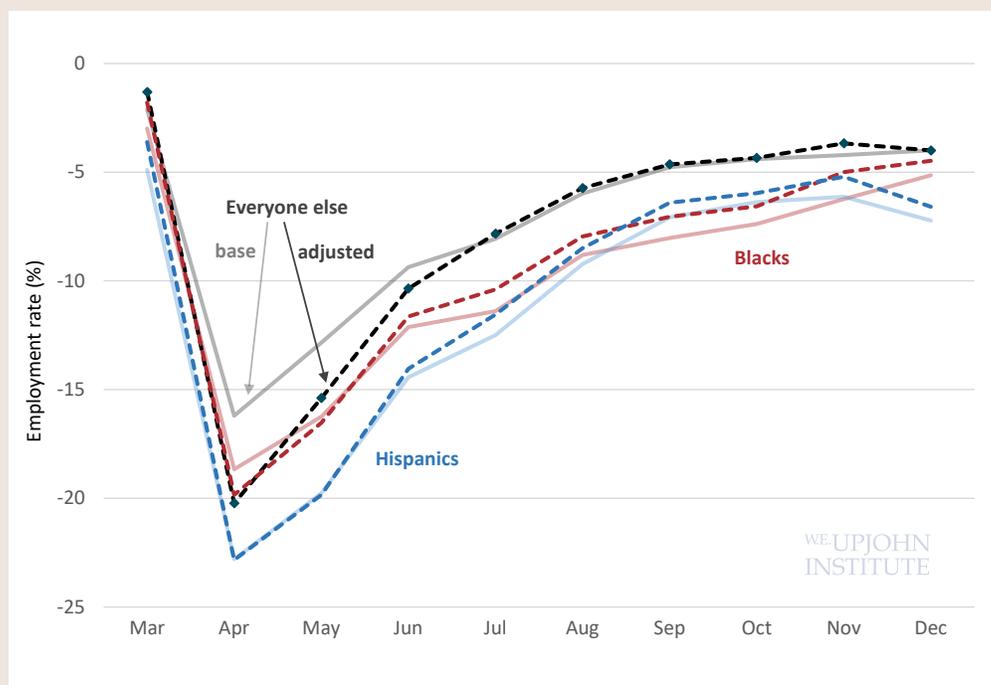


NOTE: See note to Figure 1 for the definition of the modified employment rate. The permanent job loser share is the share of the population (not just the unemployed) who report having lost a job and do not expect to be recalled. The (hourly) wage quartiles are based on detailed occupation from Occupational Employment Statistics and are population weighted; Q1 thus represents the bottom quarter of workers in terms of hourly pay, while Q4 represents the top quarter.

SOURCE: Current Population Survey; Occupational Employment Statistics; authors' calculations.

## COVID-19's Impacts on the Labor Market in 2020

**Figure 3 Blacks and Hispanics Have Experienced Slower Employment Rate Recoveries, Even after Adjusting for Education and Occupation**



NOTE: See note to Figure 1 for the definition of the modified employment rate. Light, solid lines show the change, in percentage points, of the modified employment rate since January 2020 for each racial group. The darker, dashed lines control for worker education and occupational wage quartile.

SOURCE: Current Population Survey; Occupational Employment Statistics; authors' calculations.

initial COVID-19 caseload peaks in the spring of 2020—the well-known New York and New Jersey, but also Minnesota, Virginia, and Colorado—had deeper declines and less robust recoveries than states that reached their first caseload peak only in the fall, such as New Hampshire, Wisconsin, and Oregon. A key question is how COVID caseload and mortality rates, as well as state restrictions on economic activity—including stay-at-home orders and bans on indoor dining, among others—have affected employment. Using regression analysis, we find that current case rates are positively associated with employment, while current mortality rates and the severity of current economic restrictions reduce employment rates. This likely reflects the short-run trade-off between heightened economic activity and greater virus transmission

when there are fewer restrictions.

However, we also find that there are no lingering effects of economic restrictions; once these are relaxed, the employment rate bounces back. On the other hand, we do find an accumulating impact of COVID mortality (but not caseloads) on employment rates. By December, a state with 100 more total deaths per 100,000 people—about the difference between the 90th percentile (Rhode Island; 131.8 deaths per 100,000 people) and the 10th percentile (Utah; 28.6 deaths per 100,000)—would be expected to have an employment rate 3 percentage points lower, everything else equal. The surge in mortality rates that occurred nationwide in November 2020 through January 2021 thus could pose a looming threat to continued economic recovery in 2021.

## Conclusion

The labor market recovery from the COVID-19 recession was brief and uneven in 2020, leaving behind workers disadvantaged by race, ethnicity, and economic status. As cases ebb and flow around the country, states that have suffered—or will suffer—numerous COVID deaths may experience a slower recovery through 2021. An equitable and broad economic recovery will need a rapid and comprehensive vaccine rollout, but we argue in [the paper](#) for several additional policies to spur employment. These should include fiscal relief for state and local governments to stave off further cuts, wage insurance programs for those who struggle to find new jobs, and enhanced funding for sectoral training and community college education for industries and occupations that will continue to grow, such as construction, health care, and IT.

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For additional details, see the working paper at <https://research.upjohn.org/externalpapers/94/>.

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