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## Impacts of the COVID-19 Pandemic and the CARES Act on Earnings and Inequality

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would increase by 19 percent if the federal credit were made refundable. If low-income parents, who often have low work participation rates, were to enter the labor force to receive benefits, refundability of the credit could even further expand eligibility.

Moreover, substantial earnings responses to increases in CDCC generosity among married mothers, who tend to have incomes high enough to qualify for the existing (nonrefundable) credit, suggest that expanding CDCC generosity could have high returns even for those with higher incomes. Effects of CDCC benefits on earnings may be even larger amid the COVID-19 pandemic, which has led to school closures and increased child care costs for many families. By tying benefits to work, the CDCC may help keep parents in the workforce and reduce need for currently overburdened safety net programs.

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# Impacts of the COVID-19 Pandemic and the CARES Act on Earnings and Inequality

*Guido Matias Cortes and Eliza C. Forsythe*

The COVID-19 pandemic has had dramatic effects on the U.S. labor market, with millions of workers losing their jobs, and millions more experiencing changes in their working conditions. In this article we analyze the labor income losses induced by the pandemic, with a focus on how impacts have varied throughout the earnings distribution. We also assess the extent to which the Coronavirus Aid, Relief, and Economic Security (CARES) Act was able to mitigate these patterns.

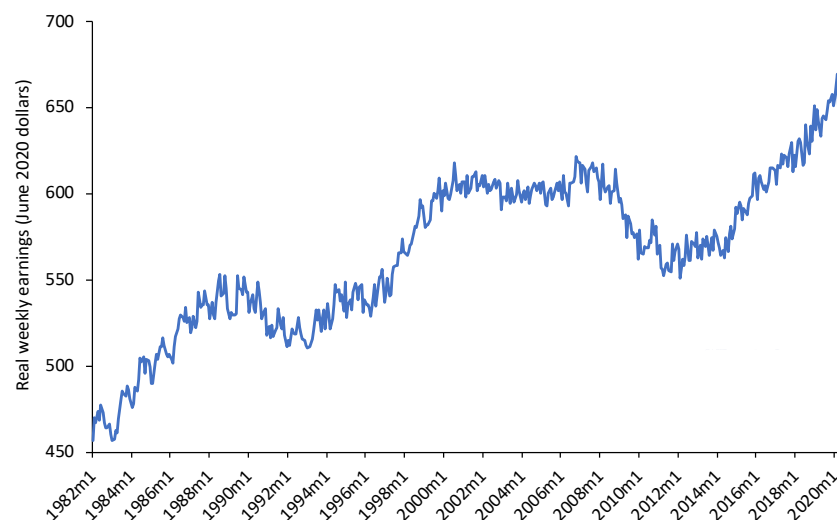
We show that the pandemic led to a loss of aggregate real labor earnings of more than \$250 billion between March and July 2020. This decline was entirely driven by job losses, which were substantially higher among low

earners, leading to a dramatic increase in labor income inequality. However, we estimate that unemployment insurance benefits from traditional programs and the CARES Act exceeded total earnings losses by \$9 billion. Workers who were previously in the bottom third of the earnings distribution received 49 percent of these benefits, reversing the increase in labor income inequality.

#### How Did the Pandemic Impact Labor Earnings?

Using data from the Current Population Survey (CPS), the official source of labor market statistics in the United States, and implementing a

**Figure 1 Evolution of Real Weekly Earnings per Adult**



NOTE: Based on CPS data on usual earnings in the current job, converted to June 2020 dollars. SOURCE: Authors' calculations using CPS data.

regression approach in order to isolate the impact of the pandemic from seasonal and annual patterns, we find that weekly labor earnings per adult fell by nearly \$100 between February and April, with only a partial recovery thereafter. This essentially erased all of the increase in per capita earnings that had been experienced over the previous eight years. We estimate that this corresponds to \$254 billion in lost aggregate earnings.

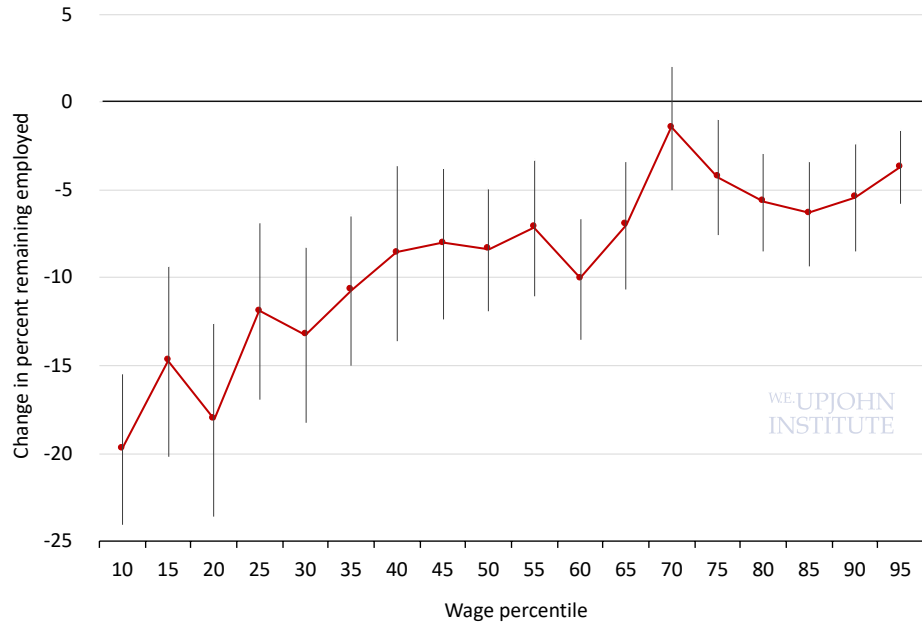
The CPS survey allows us to follow workers over time, making it possible to determine whether earnings losses were experienced by workers who remained employed, or whether they were solely driven by individuals who lost their jobs. Interestingly, we find that workers who remain employed did not experience any atypical labor earnings changes during the pandemic. This implies that the earnings losses associated with the pandemic are concentrated among individuals who lost their jobs—and hence all their labor incomes—while others who kept their jobs do not appear to have had their earnings affected.

Importantly, these job losses were not evenly distributed throughout the earnings distribution. Job loss probabilities were more than four times as large for individuals who were in the bottom decile of the earnings distribution before the pandemic, compared to individuals in the top decile. This means that the average worker from the bottom decile of the distribution lost nearly 40 percent of their earnings during the pandemic. Even within this low-earnings group, we find that those who were able to remain employed did not experience any atypical earnings changes; the earnings losses were entirely concentrated among individuals who lost their complete labor incomes due to job loss.

**What Role Did Public Policy Play?**

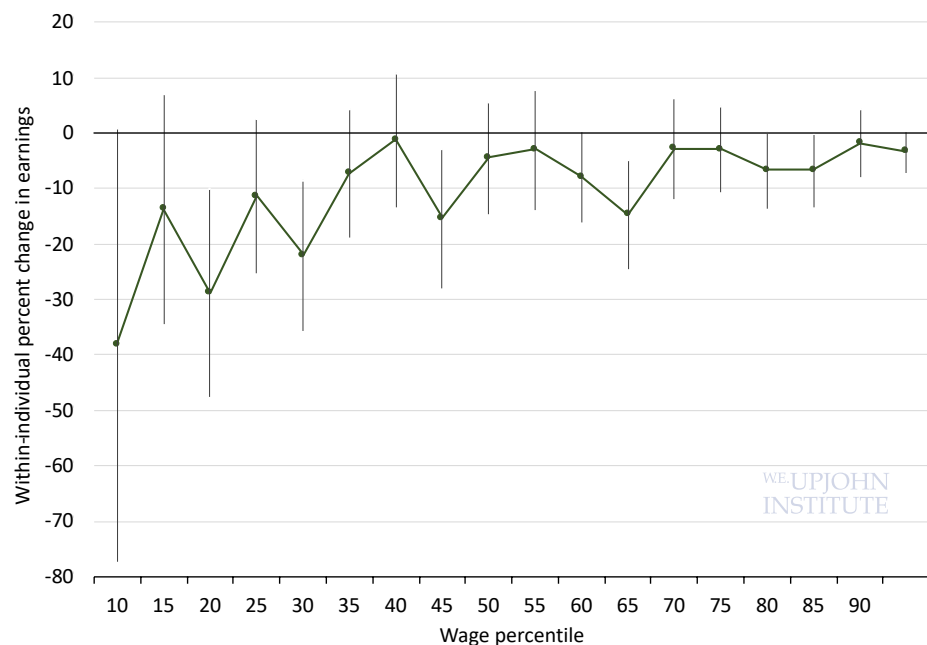
The fact that the pandemic had such devastating effects on the employment

**Figure 2 Impact of the Pandemic on Probability of Remaining Employed, by Wage Percentile**



NOTE: The figure plots the estimated coefficients and 95% confidence intervals for the impact of the pandemic on the probability of being employed throughout the earnings distribution, using individual-level data on year-on-year changes from January 2015 to July 2020. SOURCE: Authors' calculations using CPS data.

**Figure 3 Impact of the Pandemic on Labor Earnings (% change)**



NOTE: The figure plots the estimated coefficients and 95% confidence intervals for the impact of the pandemic on the percent change in year-over-year real weekly labor earnings throughout the earnings distribution, using individual-level data on year-on-year changes from January 2015 to July 2020. SOURCE: Authors' calculations using CPS data.

**Impacts of the COVID-19 Pandemic and the CARES Act on Earnings and Inequality**

outcomes of low earners is of great concern, given that these individuals were unlikely to be able to support themselves through savings after experiencing job loss. The role of public policy through the provision

**The pandemic led to a loss of aggregate real labor earnings of more than \$250 billion between March and July 2020.**

of unemployment benefits therefore proved crucial during the pandemic. In addition to standard unemployment insurance (UI) policies, the CARES Act, which was signed into law on March 27, 2020, expanded UI access to millions of Americans who are typically ineligible to receive benefits—including those with insufficient earnings to qualify and those who are self-employed—while also providing all UI beneficiaries an additional \$600 per week for a limited period of time.

Although the CPS data do not provide direct information on whether an individual is claiming UI, we can use individuals’ employment histories to infer their likely eligibility status. We also benchmark our estimates to Department of Labor data on the total number of paid claims in order to adjust our estimates for underclaiming and/or delays in payments.

We find that although the expansion of UI benefits in the CARES Act was roughly intended to replace 100 percent of workers’ predisplacement earnings, in practice it gave a majority of displaced workers more in benefits than they would have earned from work. The additional amount of \$600 was chosen to replace 60 percent of the weekly earnings of the median worker—roughly \$1,000. This supplementary payment would thus bring the total earnings replacement from standard UI (about \$400) to 100 percent of the worker’s previous earnings. However, because job losses were greater among lower-wage

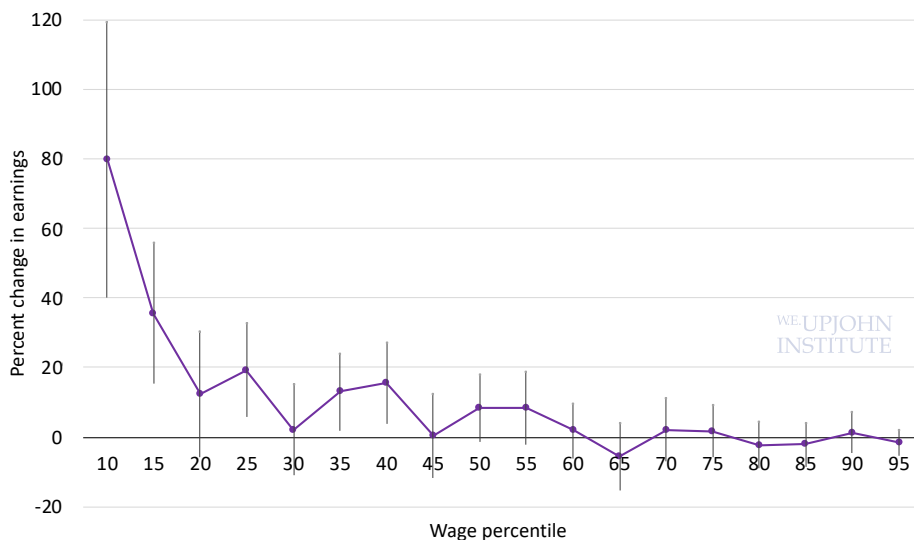
workers, the median weekly earnings of the displaced were only \$519. This meant that the \$600 replaced well over 60 percent of wages for most UI recipients; in fact, total UI benefits exceeded previous earnings for 80 percent of displaced workers.

The combination of the inequality in job loss and the flat \$600 benefit made the CARES Act an extremely progressive program. Without standard UI or the CARES Act provisions, workers initially in the bottom one-third of the income distribution—as a whole, regardless of whether they lost their jobs—would have experienced an average decline in their weekly earnings growth rate of more than 15 percentage points. Instead, the greater benefits increased earnings growth for these individuals by 20 percentage points or more. This is illustrated in Figure 4.

Although this estimated percentage point increase in earnings growth is large, because of the low predisplacement earnings of this group, it translates into an average increase of less than \$100 per week. Previous research has also found that low-income individuals and those who had lost work were the groups most likely to spend their \$1,200 stimulus checks (Baker et al. 2020), and the same likely applies to additional UI benefits. These additional CARES Act payments thus were very likely to have been spent and helped stimulate the economy. Overall, we calculate that total benefits paid exceeded total lost wage earnings by around \$9 billion, with workers in the bottom one-third of the earnings distribution receiving 49 percent of total UI payments (standard plus CARES Act enhancements). Therefore, the program was effective at targeting transfers to individuals who needed it most, while also providing extra stimulus to the economy.

While the expanded UI benefits under the CARES Act were successful in replacing income and increasing consumption for recipients, we nonetheless estimate that around

**Figure 4 Changes in Combined Earnings and Unemployment Insurance Payments during the Pandemic Period**



NOTE: The figure plots the estimated coefficients and 95% confidence intervals for the impact of the pandemic on the percent change in the total of earnings and estimated UI payments throughout the earnings distribution, using individual-level data on year-on-year percentage changes from January 2015 to July 2020.

SOURCE: Authors’ calculations using CPS data.

5 percent of individuals eligible to receive benefits did not actually receive them. Furthermore, about 30 percent of individuals who lost employment during the pandemic do not meet our screen for UI eligibility—generally because they did not report sufficient predisplacement earnings. These workers are much more likely to be low-earning, and hence most in need for stimulus payments.

### Policy Implications

The enhanced unemployment benefits authorized by the CARES Act ended on July 31, even though employment remains far below its prepandemic level. Workers who remain unemployed have experienced a significant reduction in benefits. Given that these individuals disproportionately worked in low-paying jobs before the onset of the pandemic, few are likely to have access to savings or other sources of income to weather a period of sustained lower

earnings. Although there have been concerns that the enhanced benefits provided by the CARES Act may have discouraged recipients from seeking work, so far there has been little evidence (see Bartik et al. [2020] and Dube [2020]). Reinstating enhanced benefits along the lines of those provided by the CARES Act would not only be beneficial in terms of mitigating the asymmetric effects of the pandemic and the associated increase in inequality and potential impacts on poverty, it would also add stimulus that would promote aggregate demand and help speed the recovery.

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