

# Parents in a Pandemic Labor Market

Olivia Lofton,<sup>†</sup> Nicolas Petrosky-Nadeau,<sup>†</sup> Lily Seitelman<sup>‡</sup>

<sup>†</sup>Federal Reserve Bank of San Francisco, <sup>‡</sup>Boston University

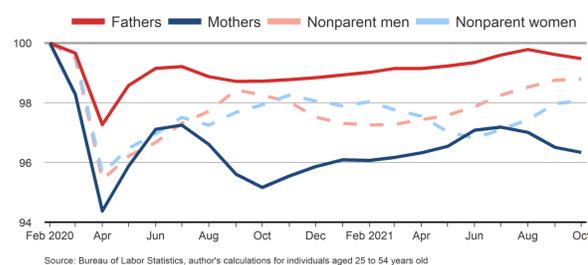
## Introduction

Gender gaps in labor market outcomes during the pandemic largely reflect differences in parents' experiences. Labor force participation fell much less for fathers compared with other men and all women at the onset of the pandemic. Meanwhile, participation among mothers has declined the most, in part due to the overrepresentation of mothers in part-time work. Evidence suggests flexibility in setting work schedules can offset some of the adverse impact on mothers' employment.

## Project Context and Motivations

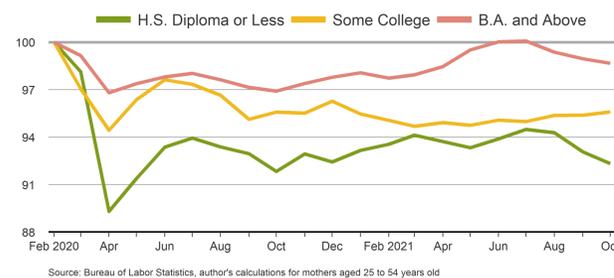
Using labor force data from the Current Population Survey (CPS) and restricting to the prime-age working population, we show that the more adverse effect of the pandemic recession on women in the labor market compared to men is driven by a disparity between mothers and fathers. This is most evident decomposing labor force participation among parental status.

Labor Force Participation Rate, by Gender and Parental Status (Feb. 2020 = 100)

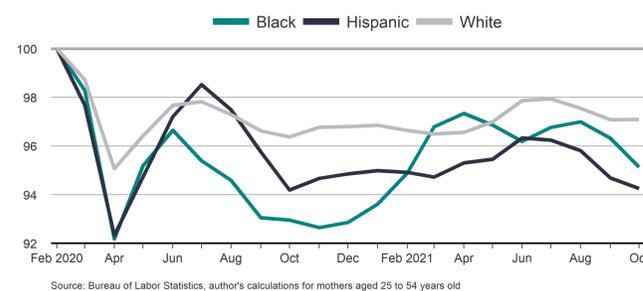


These disparities in labor market outcomes are exacerbated for certain demographic groups. Mothers with lower levels of education, for instance, experience larger declines in participation that have yet to reverse. The same is true of Black and Hispanic mothers.

Labor Force Participation Rate for Mothers, by Education Level (Feb. 2020 = 100)

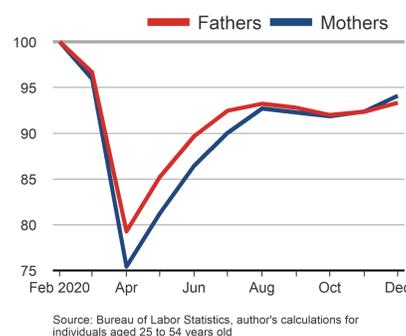


Labor Force Participation Rate for Mothers, by Race and Ethnicity (Feb. 2020 = 100)



In contrast with these trends, by restricting our sample to full-time workers we also show that the employment gap between mothers and fathers closed by the fall of 2020. This suggests that the prevalence and drop in part-time employment of mothers account for a large portion of the gender gap in employment.

Full-time Employment-to-population Ratio for Fathers and Mothers (Feb. 2020 = 100)



## Methods

Given the unique challenges that different groups of working mothers have faced during the pandemic, we employ a regression framework to investigate whether job flexibility relaxes constraints on mothers' ability to participate in the labor market.

We first ensure that the baseline trends we observe are robust to controlling for demographics by constructing a matched sample and specifying the following logistic model:

$$P(NILF_{i(t+12)}) = \frac{\exp(\beta Child_{it} Female_{it} + \gamma X_{it}) | Employed_{it}}{1 + \exp(\beta Child_{it} Female_{it} + \gamma X_{it}) | Employed_{it}}$$

where  $P(NILF_{i(t+12)})$  is the probability that individual  $i$  is not in the labor force 12 months from time  $t$ , conditional on the individual having been employed during time  $t$ .  $Child_{it}$  and  $Female_{it}$  are both indicator variables, the former equaling 1 if individual  $i$  had a child younger than 18 living in his or her home at time  $t$  and the latter indicating that the individual identified as a female during that same time. Finally,  $X_{it}$  is a vector which controls for age, race and ethnicity, educational attainment, marital status, and state of residence.

We then run alternative models of this regression to test whether job flexibility meaningfully impacts mothers' attachment to the labor force. Using data from the American Time Use Survey (ATUS) Leave Module, we compare labor force outcomes for mothers among two different dimensions of flexibility: ability to work from home and ability to schedule one's own time worked.

## Results

We predict how likely it is that an individual working during October 2019 became a labor force nonparticipant by October of the following year.

	Women	Men	Gender Difference
No Child	7.0***	5.1***	-1.8**
Child	10.0***	2.7***	-7.3***
Parental Difference	-3.3***	2.4***	

Note: Statistical significance at the 1, 5, and 10 percent levels indicated by (\*\*\*), (\*\*), (\*), respectively.

Our results confirm that after controlling for other factors, 10% of working mothers left and had not returned to the labor force by October 2020. These labor market transitions from employment to nonparticipation were 7.3 percentage points (p.p.) and 3.3 p.p. more likely to occur among mothers than fathers and nonparent women, respectively.

	Low	High
Scheduling Flexibility		
Nonparent Women	6.9***	3.0***
Mothers	10.7***	4.1***
Parental Difference	-3.8***	-1.1
Teleworkability		
Nonparent Women	7.5***	3.5***
Mothers	9.4***	4.5***
Parental Difference	-1.9	-1.1

Note: Statistical significance at the 1, 5, and 10 percent levels indicated by (\*\*\*), (\*\*), (\*), respectively.

For our primary analysis, we find that flexibility in scheduling especially benefits working mothers. Women able to set their working hours or telework were significantly more likely to remain in the workforce, regardless of parental status. That being said, mothers that determined their schedules benefited the most, being 6.6 p.p. more likely to have continued in the labor force in comparison to their low-flexibility counterparts. Furthermore, outcomes for mothers are disproportionately limited by the inability to maintain a flexible schedule; mothers with little scheduling flexibility were nearly 4 p.p. likelier to leave the labor force than comparable nonparent women.

## Conclusions

A pandemic recession separates working mothers from the rest of the workforce, with mothers in part-time employment hit especially hard. Declines in participation among mothers have been partially offset by job flexibility in setting work schedules and, to a lesser extent, the ability to work from home. The lack of flexibility laid bare by the pandemic may affect the labor supply decisions of future parents, with long-lasting implications for gender equality in labor force participation, employment, and earnings gaps.