



---

# AN INTERSECTIONAL ANALYSIS OF COVID-19 UNEMPLOYMENT

OZGE OZAY, FITCHBURG STATE UNIVERSITY

FITCHBURG STATE DEVELOPMENT DAY,  
SPRING 2021



## An Intersectional Analysis of COVID-19 Unemployment

Armagan Gezici<sup>1</sup> · Ozge Ozay<sup>2</sup>

Received: 3 August 2020 / Revised: 17 October 2020 / Accepted: 16 November 2020 / Published online: 15 December 2020  
© The Author(s), under exclusive licence to Springer Nature Switzerland AG part of Springer Nature 2020

### Abstract

Using the April 2020 Current Population Survey (CPS) micro dataset, we explore the racialized and gendered effects of the COVID-19 pandemic on the probability of being unemployed. The distribution of the pandemic-induced job losses for women and men or for different racial/ethnic categories has been studied in the recent literature. We contribute to this literature by providing an intersectional analysis of unemployment under COVID-19, where we examine the differences in the likelihood of unemployment across groups of White men, White women, Black men, Black women, Hispanic men, and Hispanic women. As a case of study of the COVID-19 recession, our work engages with the broader empirical literature testing the discrimination theories based on the unexplained gap after accounting for observable characteristics of women, men, and different races/ethnicities and their labor market positions. Controlling for individual characteristics such as education and age, as well as industry and occupation effects, we show that women of all three racial/ethnic categories are more likely to be unemployed compared to men, yet there are substantial differences across these groups based on different unemployment measures. Hispanic women have the highest likelihood of being unemployed, followed by Black women, who are still more likely to be unemployed than White women. We also examine if the ability to work from home has benefited any particular group in terms of lowering their likelihood of unemployment during the pandemic. We find that in industries with a high degree of teleworkable jobs, White women, Black men, and Hispanic men are no longer more likely to be unemployed relative to White men. However, Black women and Hispanic Women still experience a significantly higher probability of job loss compared to White men even if they are employed in industries with highly teleworkable jobs. As we control for both individual and aggregate factors, our results suggest that these differences are not simply the result of overrepresentation of women of color in certain industries and occupations; rather, unobservable factors such as discrimination could be at work.

**Keywords** Unemployment · Race · Gender · COVID-19 · Telework · Intersectionality · Discrimination

### Introduction

Race and gender disparities in labor market outcomes have been a persistent feature of the US labor markets. The labor market experiences of women and men of different races and ethnicities are reflected in the differences in labor force participation rates, median wages, the occupations, and industries they work in. The intersection of gender and race shapes these experiences heavily to the disadvantage of women and non-White race and ethnicities.<sup>1</sup> Specifically, Latina and Black women have been found to be paid lower wages (Browne

✉ Armagan Gezici  
gezici@keene.edu

Ozge Ozay  
ozay@fitchburgstate.edu

<sup>1</sup> Department of Economics & Political Science, Keene State College, Keene, NH, USA

<sup>2</sup> Department of Economics, History, & Political Science, Fitchburg State University, Fitchburg, MA, USA

<sup>†</sup> Throughout this paper, we will use BLS categories of Whites, African Americans, and Hispanics. African Americans and Blacks, and Hispanics and Latinx will be used interchangeably.

# I. MOTIVATION

- Race and gender disparities: LFPR, median wages, differences in occupations/ industries
- Emphasis on intersectionality (Weber 2001, Bell and Nkomo 2001)
- COVID 19 unemployment: either by race (Montenovo et al 2020, Fairlie et al 2020, Cowan 2020) or gender (Alon et al 2020, Adams-Prassl et al 2020)
- Aim: analysis of the pandemic-induced unemployment differences by race and gender, as observed in April 2020 CPS data
- The degree of teleworkable jobs in an industry (Dingel and Neiman 2020)
- Essential industries

|                 | <b>White Overall</b> | <b>White Men</b> | <b>White Women</b> | <b>Black Men</b> | <b>Black Women</b> | <b>Hispanic Men</b> | <b>Hispanic Women</b> |
|-----------------|----------------------|------------------|--------------------|------------------|--------------------|---------------------|-----------------------|
| <b>Mar-2020</b> | 4.4                  | 3.7              | 3.6                | 7                | 5.2                | 5.1                 | 6                     |
| <b>Apr-2020</b> | 14.7                 | 12.4             | 15                 | 16.1             | 16.4               | 16.7                | 20.2                  |
| <b>May-2020</b> | 13.3                 | 10.7             | 13.1               | 15.5             | 16.5               | 15.1                | 19                    |

---

# II. THEORETICAL FRAMEWORK

Why would recessions cause/ expand racial or gendered unemployment differential?

2 strands of literature (Altonji and Blank 1999)

1) Individual preferences across members of different groups

2) Discrimination as the main mechanism through which gender and race disparities emerge

1) Gender: distribution among work, home production, leisure → occupational and industrial segregation →

Recessions affecting industries differently (Rosen 1986)

Becker (comparative advantage), human capital theories

Emphasis on occupational and industrial segregation

**Criticism:** no role for socialization, gender



## II. THEORETICAL FRAMEWORK

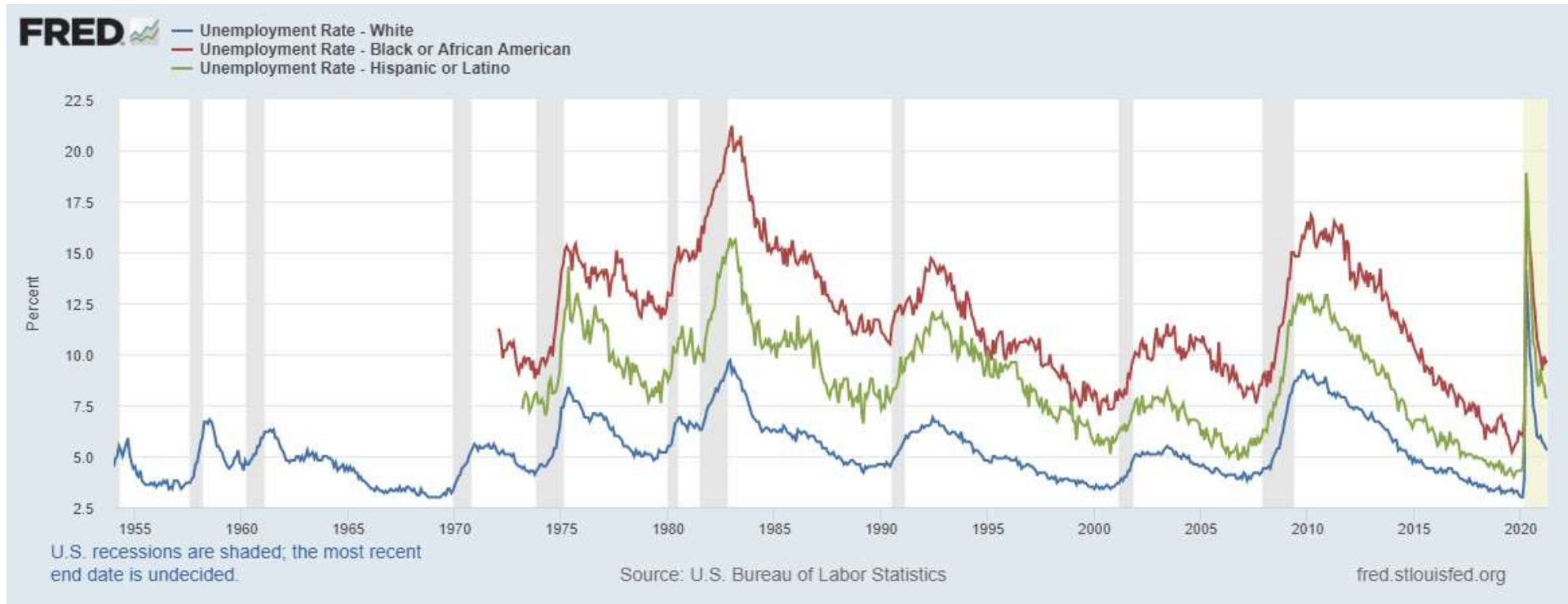
2) Discrimination: Control variables (labor supply characteristics), any cross-group differences unexplained

Over the business cycle: downturns: less pressure on employers who have a “taste for discrimination” to lay off equally qualified Blacks: “last hired first fired” hypothesis (Bradbury 2000, Couch and Fairlie 2010, Cajner et al. 2017)

**Race and gender: separately**

Intersectional theory

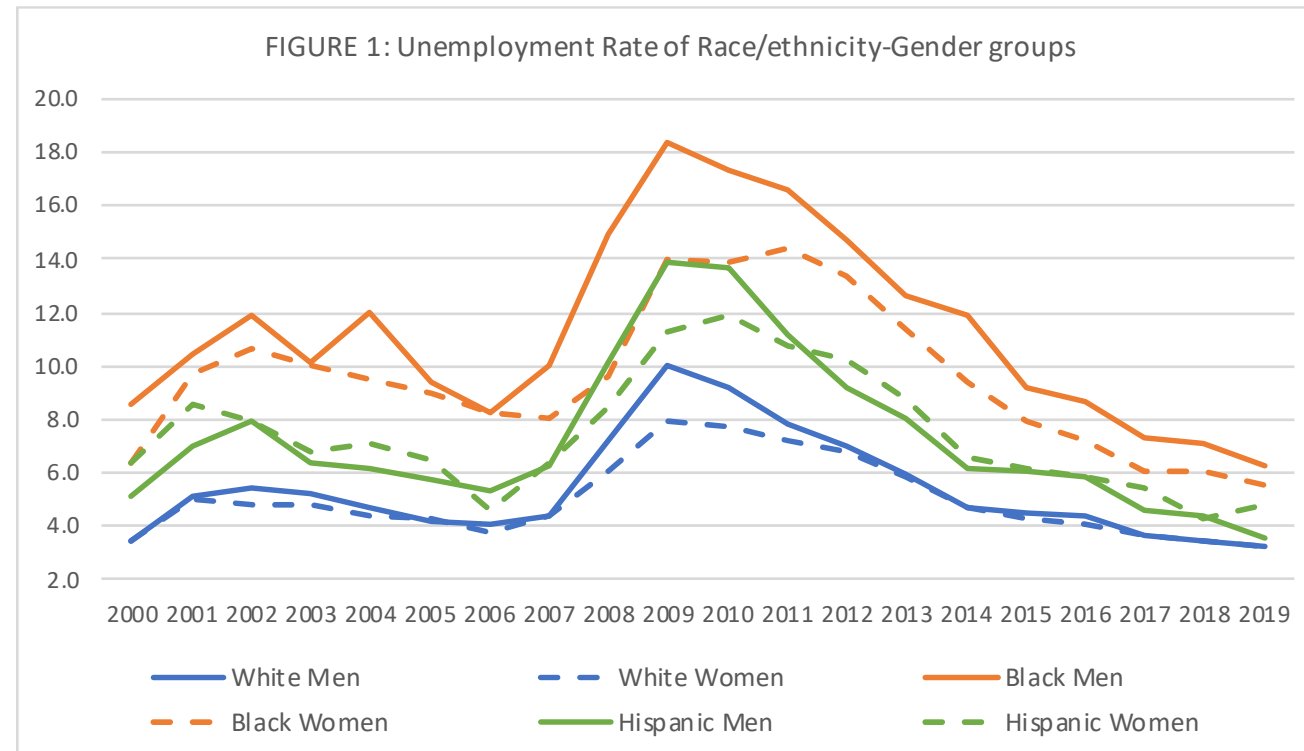
# RACIAL UNEMPLOYMENT GAP



# GENDERED UNEMPLOYMENT GAP



## II. THEORETICAL FRAMEWORK





# III. METHOD AND RESULTS

- April 2020 CPS
- $Prob(Unemployment_i = 1|X) = \Phi(\beta'X + \epsilon_f)$ , where
- $unemp_i = \begin{cases} 1 & \text{if the individual is unemployed due to COVID 19} \\ 0 & \text{otherwise} \end{cases}$
- **Narrow COVID-19 unemployment:** Individuals, identified as “job losers on layoff” whose unemployment duration is up to and including 4 weeks.
- **Upper-bound COVID-19 unemployed:** narrow unemployed + “other job losers” + those with ending temporary jobs + those who were “employed-but-absent (misclassified workers)”

|  |                  | Unemployment           |
|--|------------------|------------------------|
| <b>Race/gender</b><br><br>(Reference category: White Men)                          | White Women      | 0.028***<br>(0.005)    |
|  | Black Men        | 0.034***<br>(0.01)     |
|  | Black Women      | 0.044***<br>(0.01)     |
|  | Hispanic Men     | 0.023***<br>(0.007)    |
|  | Hispanic Women   | 0.053***<br>(0.009)    |
| <b>Education</b><br><br>(Reference category: Less than high school or high school) | Associate Degree | -0.004<br>(0.007)      |
|  | College          | -0.035***<br>(0.006)   |
|  | Advanced Degree  | -0.071***<br>(0.007)   |
| <b>Teleworkability</b>   |                  | -0.0006***<br>(0.0001) |
| <b>Essential industries</b>  |                  | -0.10***<br>(0.006)    |
| <b>Other Control Variables</b>   |                  |                        |
| <b>Age</b>   |                  | Yes                    |
| <b>Region</b>  |                  | Yes                    |
| <b>Occupation</b>  |                  | Yes                    |
| <b>Industry</b>  |                  | Yes                    |

Controlling for all factors:

- All women were more likely to lose their jobs compared to coethnic men
- Hispanic women were 5.3%, and Black women 4.4% more likely to lose their jobs compared to White men; the same probability was 2.8% for White women.
- Whether the industry was deemed essential or not seems more important than whether the industry is one with high degree of teleworkable jobs.

NOTES: THE DEPENDENT VARIABLE IS THE UPPER BOUND UNEMPLOYMENT (0,1). COEFFICIENTS REPORTED ARE MARGINAL PROBABILITY EFFECTS DERIVED FROM PROBIT REGRESSION. STANDARD ERRORS ARE IN PARANTHESES.

\*  $P < 0.1$ ; \*\*  $P < 0.05$ ; \*\*\*  $P < 0.01$

| Probit Regression Marginal Effects<br>when Teleworkability is high     |                | Unemployment       |
|--|----------------|--------------------|
| Race/ ethnicity<br>and gender<br>(Reference<br>category: White<br>Men) | White Women    | -0.006<br>(0.01)   |
|  | Black Men      | 0.039<br>(0.03)    |
|  | Black Women    | 0.06***<br>(0.023) |
|  | Hispanic Men   | 0.044*<br>(0.022)  |
|  | Hispanic Women | 0.07***<br>(0.021) |
| <b>Control variables</b>   |                |                    |
| Age  |                | Yes                |
| Education  |                | Yes                |
| Occupation   |                | Yes                |
| Industry   |                | Yes                |
| Region   |                | Yes                |
| Essential  |                | Yes                |

Being employed in an industry with more teleworkable jobs can lead to a lower probability of being unemployed.

Did it work that way for all race/ethnicity-gender categories?

Even with high degree of teleworkable jobs in an industry:

- the unemployment probability for Black women 6% and for Hispanic women 7% higher than that of White men.
- the higher likelihood of unemployment that White women and Black men were previously shown to have seems to disappear

NOTES: THE DEPENDENT VARIABLE IS THE UPPER BOUND UNEMPLOYMENT (0,1). COEFFICIENTS REPORTED ARE MARGINAL PROBABILITY EFFECTS DERIVED FROM PROBIT REGRESSION. STANDARD ERRORS ARE IN PARANTHESES.

\*  $P < 0.1$ ; \*\*  $P < 0.05$ ; \*\*\*  $P < 0.01$

# CONCLUDING REMARKS

Controlling for labor supply characteristics, regions, occupations, industries, essential/nonessential classification, and the degree of teleworkability of industries, women of color have been disproportionately affected by COVID-19 in terms of job losses

These differences suggest the role of unobservable factors, including discrimination.

- due to discrimination, women of color, who are typically “last-hired” tend to be “first-fired” during recessions.
- discrimination also leads to lower probability of on-the-job-training, rendering these groups more expandable during layoffs
- difficulty in securing in PPP loans experienced by minority businesses

## **Future Direction:**

Surveys from July 2020 show that one in five adults state the reason they were not working was because COVID-19 disrupted their childcare arrangements.

Of those not working, women are three times as likely as men to not be working due to childcare demands.

We are interested in whether this strain has been disproportional for women of color, causing them to leave labor force.



■ **THANK YOU!**