Racial and ethnic disparities in who receives unemployment benefits during COVID-19

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Abstract

The impact of COVID-19 on job displacement in the United States has been unevenly experienced by race, ethnicity, and the socioeconomically disadvantaged. Although unemployment benefits may mitigate the effects of job displacement, this social safety net is also unevenly distributed across workers. We examine racial/ethnic differences in receiving unemployment benefits among workers displaced by the pandemic. We use data from the US Census Household Pulse Survey (HPS), which is specifically designed to capture the real time effects of the pandemic across a wide spectrum of social issues. (US Census, 2020) Unlike the Current Population Survey (CPS) data used in the monthly unemployment rate calculations, the HPS data allow us to identify workers directly displaced from their jobs by the pandemic. We analyze over 1.3 million HPS interviews from the first stage of the pandemic when the disruptions to the labor market were the most severe, covering the period from June 11, 2020 to December 22, 2020. We contribute to the literature on the labor market effects of the pandemic in two ways. One, the HPS data allow us to identify workers who directly experienced job loss as a result of the disruptions created by COVID-19 and to determine who did not receive unemployment insurance. Two, we present both bivariate and multivariate analyses to examine racial/ethnic disparities for five groups: non-Hispanic whites, Blacks, Hispanic, Asian, and non-Hispanic Other workers. We find that Black and Hispanic workers are more likely to be unemployed without Unemployment Insurance (UI). Black workers are 12.0% of the employed but 17.5% of displaced workers without UI. Hispanic workers are even more affected. Hispanic workers are 15.6% of the employed, but are 23.4% of all displaced workers without UI. Although there are limitations to using the HPS data—the survey was administered online in only English and Spanish and occupational and industry data are not available for displaced workers, the results still provide valuable insights informing the current policy debate about the effects of expanding UI.

Keywords COVID-19 · Unemployment · Racial disparities · Unemployment benefits

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Introduction

The COVID-19 pandemic has had devastating health and economic impacts on the US population. As of June 17, 2022, the Center for Disease Control reported nearly 85 million cases and over a million deaths (CDC 2022). According to the US Bureau of Economic Activity (US BEA 2020), GDP declined at an annualized rate of 32.9% for the second quarter of 2020. Moreover, the morbidity, mortality, social, and employment effects of the pandemic have not been evenly distributed across racial and ethnic groups. Although the augmentation of Unemployment Insurance (UI)[1] benefits is an important policy tool to mitigate the pandemic's effects, UI benefits have also been unevenly distributed across to the population during the course of the pandemic. We utilize the US Census Bureau's Household Pulse Survey (HPS) to analyze racial and ethnic disparities in who receives UI benefits during the initial stage of the pandemic (US Census 2020a). The HPS is a unique, experimental survey to specifically measure the effects of the pandemic across many aspects of society including employment and social welfare. The HPS data allow us to analyze racial/ethnic differences in the ability to collect UI directly caused by COVID-19 job losses. Previous studies of COVID unemployment using the Current Population Survey (CPS) unemployment data do not allow a distinction between non-COVID and COVID related unemployment.

We begin with a brief overview of prior studies of racial and ethnic differences in unemployment during recessions, the impact of COVID on minority and disadvantaged populations, and differences in UI recipients by race and ethnicity. We then present a discussion of the data, methodology, simple share analyses, and finally the multivariate analyses of disparities by race/ethnicity in receiving UI during 2020.

Race/ethnicity, unemployment, and unemployment benefits under the pandemic

Economists have a long history of studying the effects of recessions on minority and disadvantaged populations. Smith et al. (1974) used CPS data from 1967 through 1973 to analyze employment, unemployment, and labor force participation over the course of the business cycle. They found that Black, women, and younger workers were likely to experience more unemployment than other groups during recessions. Couch and Fairlie (2010) linked monthly CPS data to create panel data from 1989 to 2004 to analyze men's labor market transitions during the business cycle. They found that Black men are not only more likely to lose their jobs during a downturn, but also to be more likely to leave the labor force when unemployed. Couch

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[1] In the United States, unemployment insurance is a federal program administered by state agencies. Employers fund the program with an unemployment insurance tax. Cash payments are normally made to eligible recipients for up to 26 weeks. Eligibility and level of benefits are normally based on earnings during a period before job loss. Eligibility is also based on a job loss due to an involuntary separation. During the pandemic, the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act expanded both eligibility, duration, and benefits.

et al. (2016) later use a similar methodology to expand the study to include men and women and Hispanic workers. Black and Hispanic workers are found to be more likely to be unemployed during recessions. In addition to Black workers, Hispanic workers were also more likely to leave the labor force after being unemployed during the Great Recession. More recently, Cajner et al. (2017) also used linked CPS data from 1976 to 2016 to examine the differential effects of recessions on racial groups. Like Couch et al., they also found that Blacks and Hispanics experience higher than average job loss rates. Black men and Latinas were again found to be more likely to leave the labor force after being unemployed.

A number of researchers have recently documented the general labor market impact of the current pandemic. For instance, Coibion et al. (2020) used household level Neilsen Homescan data to estimate that 20 million jobs were lost by early April 2020. They estimated that job losses were greater than the 16.5 million unemployment insurance claims by April 4, 2020. Forsythe et al. (2020) found that labor demand fell by over 40% by late April using job vacancy data from Burning Glass Technologies. Industry sector analysis by Cajner et al. (2020) used administrative data from a private human resources company (ADP) to analyze job losses from late April to late June of 2020. They found that in late April that employment in the Leisure and Hospitality industries fell by more than 45%; employment in Retail fell by almost 30%; and employment in "Other Services" fell by 25%. Furthermore, Cajner et al. showed that these employment declines disproportionately fell on low wage workers, women, and workers at smaller firms.

Economists have also found ethnic and racial disparities in COVID-19's labor market impact. Montenovo et al. (2020) used CPS data to show greater employment losses and increases in unemployment for Hispanic workers, younger workers, and workers with less than college degrees for April 2020. In the subsequent months, re-employment of Black workers was slower than for other groups. They concluded that occupational segregation explains a substantial part of these differences. Fairlie et al. (2020) provided an extensive analysis of racial and ethnic differences in unemployment using data from the CPS. They measured the impact of the pandemic on racial and ethnic unemployment rates using two methodologies. The first method measured unemployment using the standard Bureau of Labor Statistics (BLS) reporting methodology. Black and particularly Hispanic unemployment rates were higher than white unemployment rates for April 2020 using the BLS methodology. Their second method measured unemployment by counting workers who were absent from jobs and wanted jobs in an effort to adjust for BLS misclassification of workers. This second method found the April 2020 national rate to be 26.5% as opposed to the official BLS' estimate of 14.7%. Furthermore, the Black and Hispanic unemployment rates were considerably higher at 31.8% and 31.4%, respectively, using the second method. Using an Oaxaca type decomposition method to control for differences in industry, occupation, education, and potential experience they found Hispanic workers to be the most impacted group of workers by ethnicity. Gezici and Ozay (2020) also used CPS data to examine racial and ethnic differences in pandemic unemployment with an additional focus on gender effects. After controlling for differences in individual characteristics, occupations and industry, they found that women and particularly

non-white women were more likely to be unemployed in the early part of the pandemic. Anyamele et al. (2021) used the HPS data to examine racial, ethnic, and gender differences on the impact of COVID on household incomes. They also utilized an Oaxaca–Blinder type analysis and found that Hispanics, "Other" ethnics, and Blacks experienced much greater income losses compared to whites.

While Hispanics and Blacks are consistently found to suffer higher unemployment and greater income losses during recessions and during the pandemic, they are also less likely get relief from unemployment and income loss. Nichols and Simms (2012) used data from the Survey of Income and Program Participation (SIPP) to find that during the Great Recession, Black and Hispanic workers were less likely to receive UI benefits compared to whites after controlling for individual characteristics. Kuka and Stuart (2021) used a larger sample of SIPP data from 1986 to 2014 to analyze Black–white differences in the receipt of UI benefits. After controlling for individual characteristics including region, education, pre-unemployment earnings, industry, and gender, they found a large Black–white difference in UI receipt. Differences in the receipt of UI benefits have also been noted during the current pandemic. Grooms et al. (2020) found that among workers unemployed in March 2020, only 29% of Black unemployed workers had received unemployment benefits by mid to late March compared to 35% of white unemployed workers using the National Panel Study of COVID-19 data. Acks and Karpman (2020) used the Urban Institute's Coronavirus Tracking survey to show that low income families, particularly low income Hispanic families, suffered greater job and income losses during the early stage of the pandemic induced recession. Acks and Karpman also found that only 36% of unemployed workers said they received UI benefits within 30 days of job loss. A recent Department of Labor (2021) report using CPS data also noted that Black and Hispanic workers were less likely to receive UI benefits during the pandemic.

In addition to providing a source of income and means of consumption during a recession, unemployment benefits have been shown to provide other social benefits. Kuka (2020) used SIPP data to find that workers receiving UI benefits reported better self-reported health as well as higher rates of health insurance and use of health services. Raifman et al. (2021), using a national health survey of COVID's effects, found that households receiving UI benefits experienced a large and significant reduction in food insecurity. Confining their study to households earning less than $75,000 in 2020, their study found that having UI is associated with a 35% decline in the percentage of households reporting food insecurity. Berkowitz and Basu (2021) used HPS data from June and July 2020 to show that respondents receiving unemployment benefits were less likely to experience food insecurity, miss housing payments, and delay health and mental health care.

Clearly, receiving UI benefits helps mitigate the effects of the pandemic. However, minority and disadvantaged workers are also less likely to receive these benefits. The current literature has documented the pandemic's effects on earnings, employment, and unemployment, but to our knowledge, there has not been an analysis of the racial/ethnic differences on receipt of unemployment benefits as a direct result of COVID job displacement. Our use of the HPS data also allows us to directly link COVID job displacement to who receives UI benefits and also to

expand the literature to include Asians and non-Hispanic Other workers—workers who do not identify as White, Black, Hispanic, or Asian.

Data and methodology

We analyze data from HPS interviews conducted by the U.S. Census from June 11, 2020 to December 22, 2020 to examine differences in UI recipiency during the first stage of the pandemic. The data are publicly available from the US Census Bureau, https://www.census.gov/data/experimental-data-products/household-pulse-survey.html. Each period's survey is commonly referred to as a "week" with consecutive numbering, even though there can be varying time gaps between surveys and surveys have slightly differing lengths of survey time. We pool data from "weeks" 7 through 21, resulting in over 1.3 million observations. We do not use the first 6 weeks as the survey did not contain questions regarding receipt of UI.

There are some limitations to the HPS data. One, the survey was administered online. As a result, the unweighted responses were more likely to be women, affluent, better educated, and from smaller sized households compared to the nation as a whole. Two, the questionnaire is available only in English and Spanish. This limitation means that limited-English-language Asians and other non-Hispanic immigrants are likely underrepresented in the sample. To overcome some of these limitations, responses were weighted by the Census to make the results representative of the nation. The Census bureau weighted responses by applying adjustments for nonresponse, estimates of occupied housing, and other demographic adjustments based on the 2018 American Community survey. (Fields et al. 2020; US Census 2021) We used the Census bureau's HPS developed weights to analyze the data. A third data limitation is that questions regarding industry of employment and occupation of respondents are asked only of employed workers, so no industry and occupational data are available for unemployed workers.

Our analyses focus on workers who were specifically unemployed by COVID-19 and whether they received unemployment benefits. We conservatively counted as displaced by the pandemic only respondents who answered "No" to the question, "In the last 7 days, did you do ANY work for either pay or profit?" and gave the following survey responses (US Census 2020b) for not working:

- "I did not have work due to coronavirus pandemic related reduction in business (including furlough)."
- "I am/was laid off due to coronavirus pandemic."
- "My employment closed temporarily due to the coronavirus pandemic."
- "My employment went out of business due to the coronavirus pandemic."

This method allows us to separate unemployment due directly to COVID from non-pandemic related unemployment, which is not possible with CPS data. Using this definition, COVID only unemployed—defined as a percentage of COVID unemployed and employed workers—is 15.3%. This figure is higher than the official BLS unemployment estimates which ranged from 14.8% in April 2020 to 6.7% by

December 2020. These two statistics, however, are not directly comparable because of differences in HPS and CPS unemployment questions. However, the higher displacement numbers are more in keeping with the higher rates of unemployment found by Fairlie, Couch, and Xu (ibid).

In our analyses, we create three categories of workers: employed, displaced and receiving UI, and displaced but not receiving UI. We first use a percentage share analysis of each of the three categories by race/ethnicity. We then use logit regressions to further analyze the determinants of displaced workers with and without unemployment insurance to control for individual characteristics and state of residence.

We define employed workers as respondents who answered "Yes" to the question, "Now we are going to ask about your employment. In the last 7 days, did you do ANY work for either pay or profit?" In addition, we also added non-working respondents who answered "No" to the employment question in the last 7 days, but answered "Yes" when asked "Are you receiving pay for the time you are not working?".

We use two methods to determine if respondents were receiving UI payments. The first method uses the question, "Thinking about your experience in the last 7 days, which of the following did you use to meet your spending needs?" Respondents who said "Yes" to using UI benefits as part of their spending were counted as receiving UI payments. The use of UI payments for spending was asked of respondents for weeks 7 through 21.

The second method uses the question, "Since March 13, 2020, did you receive Unemployment Insurance (UI) benefits?" This question was added to the survey for weeks 13 through 21.

We construct mutually exclusive racial and ethnic categories: non-Hispanic whites, Blacks, Asians, and Hispanics, and non-Hispanic Other (self-identified in the survey). The fifth category, non-Hispanic Other, are non-Hispanics who did not self-identify as exclusively non-Hispanic white, Black, Asian, or Hispanic. We use this approach to both clearly define ethnic and racial groups and to specifically distinguish Hispanic workers from white workers.

To validate the results, we compare the final weighted frequency counts for the employed and unemployed receiving UI with the CPS estimates for comparable weeks. Weighted employment and workers with UI estimates from the HPS compared closely to the CPS employment and workers with continued UI claims numbers for the reference week in June 2020. The employment count from the HPS data for the week of 6/18/20 thru 6/23/20 was 146.8 million compared to the CPS estimate for the same June reference week of 142.8 million. The HPS count of 13.7 million workers receiving unemployment benefits for the same reference week also compared closely to the BLS continued UI claims of 16.3 million.

We use both simple share analyses and logit analyses to examine disparities by race/ethnicity. The share analyses compare the five ethnic/racial groups' shares across three categories—employed, unemployed with UI, unemployed without UI using both methods. To further analyze the racial and ethnic disparities in the displacement of workers, we use logit regressions to control for the independent effects of individual worker characteristics and place of residence. Place of

residence has a significant impact on COVID related unemployment due to differences in shelter-in-place policies, UI programs, and industry mix differences. We also include survey week dummies to account for differences across time. We estimate the following logit models using both methods to determine UI recipients:

(1) COVIDUNwUI = f(AGE AGE_SQUARED, WOMEN, CHILDRENLT18, WOMEN_CHILDREN, HSGRAD, AADEGREE, BADEGREE, GRADD-EGREE, MARRIED, HISPANIC, BLACK, ASIAN, NHISPANICOTHER, WEEK_DUMMIES, STATE_DUMMIES)
(2) COVIDUNnoUI = f(AGE AGE_SQUARED, WOMEN, CHILDRENLT18, WOMEN_CHILDREN, HSGRAD, AADEGREE, BADEGREE, GRADD-EGREE, MARRIED, HISPANIC, BLACK, ASIAN, NHISPANICOTHER, WEEK_DUMMIES, STATE_DUMMIES)
(3) COVIDUNwUI2 = f(AGE AGE_SQUARED, WOMEN, CHILDRENLT18, WOMEN_CHILDREN, HSGRAD, AADEGREE, BADEGREE, GRADD-EGREE, MARRIED, HISPANIC, BLACK, ASIAN, NHISPANICOTHER, WEEK_DUMMIES, STATE_DUMMIES)
(4) COVIDUNnoUI2 = f(AGE AGE_SQUARED, WOMEN, CHILDRENLT18, WOMEN_CHILDREN, HSGRAD, AADEGREE, BADEGREE, GRADD-EGREE, MARRIED, HISPANIC, BLACK, ASIAN, NHISPANICOTHER, WEEK_DUMMIES, STATE_DUMMIES)

where the variables are defined as follows:

- COVIDUNwUI equals 1 if unemployed due to COVID and spending unemployment benefits; equals 0 if employed.
- COVIDUNnoUI equals 1 if unemployed due to COVID and not spending unemployment benefits;

        equals 0 if employed.

- COVIDUNwUI2 equals 1 if unemployed due to COVID and receiving unemployment benefits; equals 0 if employed.
- COVIDUNnoUI2 equals 1 if unemployed due to COVID and not receiving unemployment benefits; equals 0 if employed.
- AGE is the respondent age calculated by subtracting year of birth from 2020.
- AGE_SQUARED is the square of age.
- WOMEN is a dummy variable equal to 1 for women respondents.
- CHILDRENLT18 is a dummy variable equal to 1 if the respondent lives in a household with children under 18 years of age.
- WOMEN_CHILDREN is and interaction term equal to 1 if the respondent is a woman and lives in a household with children under 18 years of age; otherwise, equal to 0.
- HSGRAD is a dummy variable for high school graduates.
- AADEGREE is a dummy variable for workers with associate degrees.

- BADEGREE is a dummy variable for workers with BA or BS degrees.
- GRADDEGREE is a dummy variable for workers with a graduate degree.
- MARRIED is a dummy variable equal to 1 for married respondents.
- HISPANIC is a dummy variable for Hispanic workers.
- BLACK is a dummy variable for Black workers.
- ASIAN is a dummy variable for Asian workers.
- NHISPANICOTHER is a dummy variable for workers who do not self-identify as white, Hispanic, Black or Asian.
- WEEK_DUMMIES are dummy variables for the HPS survey week.
- STATE_DUMMIES are dummy variables for the state of residence.

For weeks 7 thru 21 the excluded week is week 7 in the logits using the unemployment benefit spending definition and for weeks 13 thru 21 using the receiving UI benefits definition, week 13 is excluded. The excluded educational category is less than a high school education. The excluded racial/ethnic category is non-Hispanic whites.

The model differences are summarized in Table 1. Models 1 and 2 allow us to analyze the effects of the pandemic closer to the onset of COVID's labor market impact, although the measure of determining who is receiving UI benefits is indirect. Model 1 uses the UI spending question to determine receipt of UI based on a sample of employed workers and unemployed workers reporting spending UI benefits for HPS weeks 7–21. Model 2 also uses the UI spending question but includes only employed workers and unemployed workers who do not report spending UI benefits for the same weeks. Models 3 and 4 allow us to directly determine who is receiving UI benefits and to validate the first method of determining UI receipt. Model 3 uses the receipt of UI question and a sample of employed workers and unemployed workers receiving UI for HPS weeks 13–21. Finally, model 4 also uses the receipt of UI question and a sample of employed workers and unemployed worker not receiving UI benefits for HPS weeks 13–21.

Results: employment, COVID job loss, and unemployment insurance benefits by race/ethnicity

There are significant racial and ethnic differences in who receives UI due to COVID-19 related job losses. Table 2 shows the percentage shares of the three labor force categories by race/ethnicity using both methods. Both methods show Blacks and Hispanics as having a larger share of workers unemployed with and without UI compared to whites. Using the first method, Black workers make up 12.4% of the employed worker category but 16.0% of the COVID unemployed workers with UI and 17.9% of COVID unemployed workers without UI. Hispanic workers are 15.6% of the employed worker category, but are 17.2% of COVID unemployed workers with UI and an even larger 23.4% of all COVID unemployed workers without UI. The Asian American employment share is 6.0% while the COVID unemployment share with UI is 6.5% and their share of the COVID unemployed without UI group

Table 1 Sample frames for unemployment benefit recipients using HPS data

	Model 1	Model 2	Model 3	Model 4
Definition of UI recipient	Spending UI benefits: Method 1		Receiving UI benefits: Method 2	
HPS weeks	7–21 (6/11–12/22/2020)		13–21 (8/19–12/22/2020)	
Definition of unemployed due to COVID	Furloughed; laid off, temporary closure, permanent closure due to COVID		Furloughed; laid off, temporary closure, permanent closure due to COVID	
In the analysis sample	Employed & unemployed spending UI benefits	Employed & unemployed not spending UI benefits	Employed & unemployed receiving UI benefits	Employed & unemployed not receiving UI benefits

Table 2 Employed and COVID displaced by race/ethnicity, household pulse data, 2020

	Non-Hispanic whites (%)	Blacks (%)	Asians (%)	Hispanics (%)	Non-Hispanic Others (%)
Employed: method 1	62.1	12.4	6.0	15.6	3.9
COVID displaced with UI: method 1	56.0	16.0	6.5	17.2	4.3
COVID displaced no UI: method 1	48.0	17.9	5.7	23.4	4.9
Employed: method 2	62.0	12.3	6.1	15.7	3.8
COVID displaced with UI: method 2	53.8	17.1	6.5	18.2	4.4
COVID displaced no UI: method 2	46.5	17.5	5.6	24.9	5.6

is 5.7%. Non-Hispanic Other workers are 3.9% of employed workers but are 4.3% and 4.9% of COVID unemployed with and without UI, respectively.

The second method shows similar results. Black workers are 12.0% of the employed worker category but 17.0% of the COVID unemployed workers with UI and 17.5% of COVID unemployed workers without UI.

Method 2 finds Hispanic workers composing 15.7% of employed workers, but 18.2% of COVID unemployed workers with UI, and 24.9% of the COVID unemployed workers without UI. Using the second method, Asian Americans are 6.5% of the employed workers, 6.5% of COVID unemployed with UI workers, and 5.6% of the COVID unemployed without UI. Non-Hispanic Other workers are 3.8% of employed workers using the second method and 4.4% of workers unemployed with UI and 5.6% of COVID unemployed without UI. These results show that, unadjusted for individual characteristics, Black, Hispanic, and non-Hispanic Other workers are more likely to have been unemployed by COVID without receiving UI when compared with their share of employment.

Table 3 shows the means and standard deviations of the variables used in the logit analyses. Using the spending question to determine receipt of UI, COVID displaced workers are equally split between receiving UI and not receiving UI with each group accounting for 6.9% of each sample. Using the receiving UI question method, COVID displaced workers are more likely to be receiving UI (6.8%) compared to workers not receiving UI (4.8%). The two percentage point difference of COVID unemployed workers not receiving UI using the second method may reflect the expansion of UI programs through the Coronavirus Aid and Economic Security (CARES) Act that authorized a $600/week supplement to state UI benefits, as well as expanding UI eligibility and duration toward the latter half of 2020. Finally, a comparison of the general demographic characteristics shows little differences across the samples in each analysis.

Table 4 shows the logit results using both methods of determining receipt of unemployment benefits. We omit reporting of the week and state dummies for convenience and clarity. The results for individual characteristics are in keeping with expectations. The age coefficients are significant in both models. Younger workers are more likely to be unemployed without UI. Workers with lower levels of education have greater probability of being unemployed with and without UI. All the race

Table 3 Descriptive statistics of logit variables

Dependent variable	Model 1 COVIDUNwUI		Model 2 COVIDUNnoUI	
Variable	Mean	Std. dev.	Mean	Std. dev.
Method 1 (HPS weeks 7–21)				
COVIDUNwUI	0.069	0.254		
COVIDUNnoUI			0.069	0.254
AGE	44.147	14.845	44.08	14.918
AGE_SQUARED	2169.33	1385.37	265.84	1390.33
WOMEN	0.486	0.500	0.484	0.500
CHILDRENLT18	0.429	0.495	0.432	0.495
WOMEN_CHILDREN	0.215	0.410	0.215	0.411
HSGRAD	0.496	0.500	0.487	0.500
AADEGREE	0.096	0.294	0.096	0.295
BADEGREE	0.188	0.391	0.191	0.393
GRADDEGREE	0.146	0.353	0.152	0.360
MARRIED	0.549	0.498	0.558	0.497
HISPANIC	0.178	0.383	0.177	0.382
BLACK	0.129	0.336	0.128	0.339
ASIAN	0.061	0.239	0.060	0.237
NHISPANICOTHER	0.039	0.194	0.040	0.195
Dependent variable	Model 3 COVIDUNwUI2		Model 4 COVIDUNnoUI2	
Variable	Mean	Std. dev.	Mean	Std. dev.
Method 2 (HPS weeks 13–21)				
COVIDUNwUI2	0.068	0.251		
COVIDUNnoUI2			0.048	0.213
AGE	44.122	14.757	44.076	14.871
AGE_SQUARED	2165.53	1372.52	2163.87	1385.33
WOMEN	0.486	0.500	0.485	0.500
CHILDRENLT18	0.434	0.496	0.436	0.496
WOMEN_CHILDREN	0.217	0.412	0.218	0.413
HSGRAD	0.489	0.500	0.485	0.500
AADEGREE	0.098	0.298	0.097	0.296
BADEGREE	0.196	0.397	0.195	0.396
GRADDEGREE	0.150	0.357	0.152	0.359
MARRIED	0.562	0.496	0.562	0.496
HISPANIC	0.174	0.379	0.177	0.382
BLACK	0.126	0.332	0.126	0.332
ASIAN	0.062	0.240	0.061	0.239
NHISPANICOTHER	0.038	0.192	0.039	0.193

Table 4 Logit results on COVID displaced with UI and without UI—selected variables

Dependent variable	METHOD 1 for determining UI benefits		METHOD 2 for determining UI benefits	
	Model 1 COVIDUNwUI	Model 2 COVIDUNnoUI	Model 3 COVIDUNwUI2	Model 4 COVIDUNnoUI2
Independent variable	Coefficient	Coefficient	Coefficient	Coefficient
AGE	0.0414***	−0.0618***	0.0367***	−0.0623***
	(0.0049)	(0.0055)	(0.0055)	(0.0075)
AGE_SQUARED	−0.0004***	0.0007***	−0.0004***	0.0007***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
WOMEN	0.0107	−0.0545	−0.0694*	−0.1762***
	(0.0294)	(0.0334)	(0.0328)	(0.0472)
CHILDRENLT18	−0.1153**	−0.0484	−0.1704***	−0.0543
	(0.0390)	(0.0422)	(0.0450)	(0.0645)
WOMEN_CHILDREN	0.0439	0.0649	0.1080	0.0964
	(0.0491)	(0.0533)	(0.0562)	(0.0759)
HSGRAD	0.1011	−0.3960***	0.0384	−0.5358***
	(0.0684)	(0.0543)	(0.0735)	(0.0794)
AADEGREE	−0.0322	−0.6649***	−0.1559*	−0.8395***
	(0.0716)	(0.0589)	(0.0770)	(0.0874)
BADEGREE	−0.2836***	−0.9282***	−0.4307***	−1.1250***
	(0.0695)	(0.0566)	(0.0749)	(0.0816)
GRADDEGREE	−1.0346***	−1.1832***	−1.1531***	−1.3342***
	(0.0727)	(0.0598)	(0.0774)	(0.0821)
MARRIED	−0.3902***	−0.3348***	−0.3934***	−0.3944***
	(0.0255)	(0.0292)	(0.0292)	(0.0427)
HISPANIC	−0.1154**	0.3418***	−0.0654	0.3919***
	(0.0390)	(0.0366)	(0.0427)	(0.0525)
BLACK	−0.0984**	0.4094***	0.2808***	0.3889***
	(0.0379)	(0.0369)	(0.0419)	(0.0528)
ASIAN	0.1763***	0.1656**	0.0676	0.1750*
	(0.0355)	(0.0567)	(0.0584)	(0.0842)
NHISPANICOTHER	0.0563	0.3541***	0.0949	0.5206***
	(0.0557)	(0.0599)	(0.0647)	(0.0890)
Number of observations	876,455	871,055	520,466	509,223
Log likelihood	−210,353.37	−208,467.76	−123,473.81	−92,407.99
Pseudo R squared	0.0464	0.0452	0.0405	0.0509

*** denotes $p < .001$; ** denotes $p < .01$; * denotes $p < .001$; robust standard errors in parentheses; week and state variables omitted in table

and ethnicity coefficients, including Asians, are positive and significant in models in determining who is COVID unemployed without UI using both methods of determining unemployment without UI. Moreover, the magnitude of the racial/ethnic coefficients are very similar between models 2 and 4 for the COVID unemployed without UI. This indicates that the two methods are consistent in determining who is not receiving UI benefits. In addition, the differences in the signs and significance of the racial/ethnic coefficients between models 1 and 3 may indicate some change in

Table 5 Logit simulations—COVID unemployed without UI

	Sample estimated COVID Unemployed no UI—method 1 (%)	Simulated COVID Unemployed no UI—method 1 (%)	Sample estimated COVID Unemployed no UI—method 2 (%)	Simulated COVID Unemployed no UI—method 2 (%)
NON-HISPANIC WHITE	5.4	6.2	3.6	4.8
HISPANIC	10.0	8.8	7.3	6.3
BLACK	9.7	7.7	6.6	5.4
ASIAN	6.7	6.4	4.3	4.2
NON HIS-PANIC OTHER	8.7	7.3	6.9	5.2

who receives UI benefits over the time. Overall, the logit results show that minority workers were significantly less likely to receive UI benefits during the pandemic.

As a robustness test of these results, we also estimate logits for each educational category to examine the effects of education on receiving UI benefits. The results are similar to the pooled samples across the educational categories. The only notable exceptions are the race/ethnicity parameter estimates for workers with less than a high school education using both methods were not significant but did remain positive in models 2 and 4.

We also simulate how the labor market treats workers controlling for these same differences in individual characteristics, survey weeks, and states of residence to determine the robustness of the racial effects. We first estimate logit models 2 and 4 for COVID unemployed without UI using both methods, but without the race/ethnicity variables. We then use the estimated models to simulate the COVID unemployed percentage without UI using the individual characteristics, survey weeks, and states of residence for the five racial/ethnic groups—non-Hispanic whites, Hispanic, Black, Asian, and non-Hispanic others. This method is similar to the Oaxaca–Blinder method using the estimated coefficients of all groups combined as the average benchmark coefficients as opposed to using different racial/ethnic group coefficients. We then compare the sample COVID unemployed without UI percentages to the simulated percentages. These results are shown in Table 5.

The simulations show that if the labor market affected workers equally, controlling for measurable individual characteristics and state of residence, the percentages of COVID unemployed workers without UI for Hispanic, Black, and Non-Hispanic Other workers would improve, decreasing by 1% to 2%, while the percentages of non-Hispanic white COVID unemployed workers without UI would increase by approximately 1% using both methods. The Hispanic percentages unemployed without UI decreases from the sample percentage of 10% to the simulated 8.8% using the logit coefficients from method 1 and from the sample percentage of 7.3% to a simulated 6.3% using the logit coefficients from method 2. This still leaves a 1.5% to 1.6% difference between Hispanic workers and non-Hispanic whites when comparing the simulated results for both groups and a 2.7% to 3.4% difference when

comparing the simulated Hispanic percentage to the non-Hispanic white sample percentages. Black workers also have a persistent difference in COVID unemployment without UI. The simulated Black unemployment without UI percentage of 7.7% using method 1 is 2.3% above the unadjusted non-Hispanic white sample percentage and 1.5% greater when compared to the non-Hispanic white simulated percentage. Using method 2, the simulated Black COVID unemployment percentage of 5.4% is 1.8% above the unadjusted non-Hispanic sample white percentage and 0.6% greater when compared to the non-Hispanic white simulated percentage. The simulated non-Hispanic Other COVID unemployment percentage of 7.3% using method 1 is 1.9% above the unadjusted non-Hispanic white sample percentage and 1.1% greater when compared to the non-Hispanic white simulated percentage. Using method 2, the simulated non-Hispanic Other unemployment percentage of 5.2% is 1.6% above the unadjusted non-Hispanic white sample percentage and 0.4% greater when compared to the non-Hispanic white simulated percentage. The Asian simulated percentages of COVID unemployed without UI do not vary much from the sample percentages. Individual and state characteristics do matter and explain some of the racial and ethnic differences, but racial/ethnic differences still persist even when controlling for these differences.

Conclusion and policy

There are significant racial and ethnic differences in who collects unemployment relief during the first stage of the pandemic. Both Black, Hispanic, and non-Hispanic Other workers are more likely to be unemployed than whites without UI. Black workers are 12.0% of the employed but 17.5% of displaced workers without UI. Non-Hispanic Other workers are 3.9% of employed workers but are 4.9% of COVID unemployed without UI. Hispanic workers are even more affected. Hispanic workers are 15.6% of the employed, but are 23.4% of all displaced workers without UI. The logit simulations, controlling for individual characteristics and state of residence, show that Hispanics, Blacks, and non-Hispanic Others are less likely to receive unemployment insurance by one to two percentage points of the labor force. Unemployment benefits provide not just a source of income and consumption for recipients, but also have effects on housing security, food security, and health. These differences in who receives UI benefits by race are part of the increasing racial dimension of economic inequality in the US. The HPS data allow us to contribute to the growing literature on the labor market effects of the pandemic by identifying workers directly displaced by COVID and linking these workers to whether they received UI benefits. We are also able to expand this literature with the inclusion of Asians and non-Hispanic Other workers who do not self-identify with a single race or ethnicity.

These results have an impact on public policy. Although the CARES Act did increase benefits, eligibility, and the duration of UI benefits, this expansion still did not remove racial and ethnic disparities. In addition to augmenting UI benefits, policies should include better community outreach to minority and low income communities as well as language and assistance programs to better

explain UI eligibility and enrollment. Past studies have shown that younger workers, Black workers, and Hispanic workers are more likely to leave the labor force when unemployed during a recession. UI policies to keep these workers in the labor force would help to mitigate economic inequities in incomes and employment by race and ethnicity in the aftermath of the pandemic. In the short-run, policies include extended benefit duration, increased family assistance payments, and job search assistance. Over the longer run, programs could be developed to preserve jobs and small businesses, provide job skill development, and expand social services for lower-income and minority workers who have been heavily impacted but underserved by traditional social welfare programs. Although there is currently a debate over the labor market effects of expanded UI benefits during the pandemic (Altonji et al. 2020; Coombs et al. 2022), these studies show that racial economic inequalities have been exacerbated by the pandemic.

This study contributes to the knowledge of how the pandemic has had a differential impact on the labor market by specifically examining the direct effects of COVID job displacement and who received unemployment benefits. Along with previous studies, we find that Blacks, Hispanics and non-Hispanics Other workers in particular face a greater labor market impact as a result of the pandemic. Use of the HPS data allows us to identify workers directly unemployed by COVID and to control for individual characteristic. Using the HPS data does have some limitations. We are unable to analyze the effects of industry and occupation as the HPS data does not include this information for unemployed workers. Industries employing a large percentage of Black and Hispanic workers—hospitality and leisure, personal services, and retail industries—were hard hit by the pandemic. It is likely that omitting the industry and occupational effects would lower the magnitude of the racial and ethnic effects on unemployed workers without UI. However, studies of the pandemic labor market effects on unemployment and earnings still find significant racial and ethnic effects even with industry and occupation controls. On the other hand, the online survey collection method has likely under-represented disadvantaged households in the data which may increase the magnitude of racial/ethnic disparities. Finally, the HPS data also do not allow analysis of the critical question of why workers do not receive UI. Reasons include difficulty in accessing UI applications, knowledge of the UI program, linguistical problems, immigration status, differences in local administration of UI, and discrimination. To develop appropriate policies as the pandemic continues, future research is necessary to determine specific reasons different ethnic/racial groups have accessing UI.

Declarations

influenced by the article's content.

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