

Understanding Disparities in Unemployment Insurance Takeup and Financial Behaviors of the Unemployed

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Introduction

Scarring impacts from periods of unemployment and job displacement are well documented (Arulampalam et al., 2001). After an involuntary job separation, workers often struggle to find comparable employment opportunities. This results in lost wages that can take as long as a decade to recover to their pre-unemployment trend. Research has found that unemployment scarring effects tend to be worse for minority workers, younger workers, and workers in lower-wage jobs.

The main social protection for unemployed workers in the United States is federal and state unemployment insurance programs. These programs, administered by each state with some funding from the federal government, provide workers who meet certain work or income thresholds with temporary assistance while unemployed to help them smooth their consumption as they search for a new job. This assistance can be critical to give workers the liquidity they require to conduct thorough job searches and find a job that is comparable or better to their prior employment (Ganong et al., 2023).

Takeup and receipt of unemployment insurance are not equal in ways similar to the overall scarring effects of unemployment. Black workers are much less likely to receive unemployment compensation (UC) benefits when laid off and eligible for it than white workers and receive lower benefit amounts on average if they do receive UC (Kuka and Stewart, 2021). Lower income workers are also less likely to receive UC than their higher income counterparts (Anderson and Meyer, 1997).

These inequalities are likely to have a strong impact on how lower income and minority workers are able to respond to job losses, with downstream consequences for wealth and income inequality. This project aims to examine the shorter-term mechanisms through which unequal access to UC benefits may contribute to inequality. In short, it will examine the relationship between UC receipt for the unemployed and costly financial behaviors (use of alternative financial services, borrowing against retirement accounts, carrying high-cost debt, defaulting on loans, etc.) and how these behaviors vary for white and non-white unemployed workers. Ultimately, future work related to this analysis will seek to ‘cost’ the inequality in UC for the system, predict retraining costs for affected workers, and provide policy ideas to increase UI takeup.

Data and Methods

Data for this analysis comes from three main sources. The first is public microdata available through the 2022 version of the Census’ Survey of Income and Program Participation (SIPP). The survey tracks behavior related social program participation, finances, and other factors monthly for four-year panels. The 2022 SIPP contains information on three separate panels for 2021 and has monthly data for 41,070 persons, but I restrict the sample to look just for the main respondents who answer questions about household resources ($n = 17144$).

For the purposes of this analysis, I cleaned the data to examine yearly trends. I created variables for each respondent that indicated if they had been unemployed at any point in the year and if they had received

unemployment compensation and the amount received. Doing so allows me to describe the amount of individuals who were unemployed in 2021 by race, which proportion of those workers received UC benefits, and the impact that receiving UC benefits has on debt outcomes and the likelihood of struggling with housing and utility payments. This is done through basic proportions and descriptive statistics as well as with logistic regression models where I control for demographic factors, education, income, state fixed-effects to remove the impact of policy variation and other covariates that are correlated both with race and UC receipt as well as with the other financial outcomes examined.

While the SIPP provides very detailed information on unemployment insurance use and outcomes, it does not provide as much detail on the specific financial behaviors leading to those outcomes. Through it, I can examine the relationship between UC receipt and debt, but not as much on the types of debt, costs associated with it, and other methods people might use to try to get by while suffering from a job shock that would not show up in those figures. To complement the SIPP analysis and better understand how financial behaviors vary for different types of workers, I used the FINRA foundation's National Financial Capability Study (NFCS). This survey is representative at the state level and includes data on high cost financial activity (overdrawing accounts, borrowing from retirement, carrying credit card debt), use of alternative financial services (payday and auto-title loans), and coping strategies such as taking up gigwork.

The NFCS has been run every three years since 2009. I combined data from the 2012, 2015, 2018, and 2021 where nearly uniform questions are asked on the topics described above. I produce descriptive statistics to examine how the likelihood of engaging in each of the activities above differs for white and non-white unemployed workers. Again, I used logistic regression models with demographic, education, income, and state-level fixed effects to see which differences hold after controlling for other differences that exist between the groups.

Finally, I constructed a rough database for state-level rules for qualifying for UC benefits in 2021 and 2022. This was merged on to the SIPP data to construct a rough estimate for eligibility for UC benefits among just the subsample who were confirmed to be laid off. It also tells its own story about where the policy barriers may be the highest to obtaining UC benefits given differences in construction of the base periods and high quarter and overall base period minimum wage requirements.

These analyses are descriptive in nature. There is no variation in any of the policy instruments that may influence an individual's decision to apply for UC. Future work should attempt to look at policy variation in the type of workers covered, acceptance or early termination of federal UC expansion, and other policies for how they disproportionately impact different types of workers' likelihood to apply for and receive UC.

Results

Minority Workers More Likely to Be Unemployed, Less Likely to Receive Assistance

After cleaning the SIPP data, we found that nearly half of the overall sample had a jobless period at any point in the year, but that a much smaller percentage reported that was due to a layoff. Nonetheless layoff rates were more than twice as high for Black individuals (3.3%) and Hispanic individuals (3.2%) than they were for white individuals (1.5%). These high figures of unemployed workers and low rate of layoffs are likely the impact of the Covid-19 policy environment where firms were incentivized to furlough workers rather than fire them. In the future, this work will attempt to replicate this analysis for other years where the policy environment should be more static. Nonetheless, when looking at just these laidoff workers, we find evidence in support of past research. Black households are about 14 percentage points less likely to receive UC benefits and only receive about half as much as white households on average.

```
## # A tibble: 5 x 3
##   race                                percent_receive_uc mean_uc_amount
##   <chr>                                <dbl>          <dbl>
## 1 Asian, non-Hispanic                0.341          2539.
## 2 Black, non-Hispanic                0.370          2085.
```

## 3 Hispanic	0.516	2704.
## 4 Other / More Than One Race	0.577	1597.
## 5 White, non-Hispanic	0.512	4075.

I also estimate the probability of receiving UC benefits and their amount with general linear models to test the significance of the relationships that we see here looking at all unemployed workers who we expect to be eligible for UC benefits in their state. We do not find significant differences by race in the receipt or amount of UC benefits after controlling for income, sex, education, age, marital status, and state. However, there are substantial limitations with the size of the dataset and clarity over why individuals were out of work that would help make these analysis more powerful going forward. Similarly, we do not find substantial evidence in our sample that receiving UC benefits reduced debt amounts relative to other workers who were away from work. Counterintuitively, I found that those receiving UC benefits were more likely to be unable to make a mortgage or utility period over the year.

##	model1	model2
## Dependent Var.:	totaldebt	ccdebt
##		
## ec_received	8,337.9 (11,357.2)	526.2 (458.2)
## raceBlack,non-Hispanic	4,484.8 (5,598.9)	703.1. (358.6)
## raceHispanic	-9,698.2 (10,480.9)	579.5. (308.6)
## raceOther/MoreThanOneRace	-11,451.9 (13,167.0)	485.9 (549.1)
## raceWhite,non-Hispanic	9,696.5. (5,642.7)	473.4. (238.2)
## log(income)	22,307.0*** (5,567.9)	212.3** (64.20)
## female	-681.5 (3,644.4)	63.09 (109.5)
## educHighschoolDegree	-24,775.9*** (6,203.6)	-75.52 (170.1)
## educLessThanHighschool	-25,456.2*** (6,162.9)	-579.5** (169.6)
## educSomeCollege	-17,348.7* (6,747.6)	445.2* (218.7)
## tage	-607.0*** (101.0)	-12.53* (5.136)
## married	1,375.1 (3,250.3)	46.36 (93.13)
## Fixed-Effects:	-----	-----
## state	Yes	Yes
##		
## Family	gaussian("identity")	gaussian("identity")
## S.E.: Clustered	by: state	by: state
## Observations	6,817	6,817
## Squared Cor.	0.02923	0.01656
## Pseudo R2	0.00129	0.00100
## BIC	186,462.1	134,760.8
##		
##	model3	model4
## Dependent Var.:	unsecureddebt	mortgage
##		
## ec_received	-3,055.5. (1,806.5)	0.8449** (0.3015)
## raceBlack,non-Hispanic	2,642.2* (1,259.9)	1.384* (0.6097)
## raceHispanic	-704.5 (1,314.4)	0.7947 (0.5571)
## raceOther/MoreThanOneRace	2,804.5 (2,887.7)	1.042. (0.5914)
## raceWhite,non-Hispanic	4,215.6** (1,291.1)	0.3841 (0.5525)
## log(income)	682.5 (774.7)	-0.4300*** (0.0774)
## female	225.8 (1,104.3)	0.4126* (0.2090)
## educHighschoolDegree	-919.1 (1,555.6)	0.1080 (0.2940)
## educLessThanHighschool	-1,069.7 (2,676.0)	0.3891 (0.2703)
## educSomeCollege	-684.2 (1,883.2)	0.1683 (0.2991)
## tage	-228.0*** (50.44)	-0.0299*** (0.0047)
## married	1,900.5 (1,675.2)	0.0867 (0.1793)

```

## Fixed-Effects:      -----
## state                      Yes                      Yes
## -----
## Family              gaussian("identity")          Logit
## S.E.: Clustered      by: state                    by: state
## Observations          6,817                      6,614
## Squared Cor.          0.01284                    0.04616
## Pseudo R2             0.00073                    0.12590
## BIC                   164,267.2                  12,622,154.5
##
##                      model5
## Dependent Var.:      utility
##
## ec_received           0.7069** (0.2521)
## raceBlack,non-Hispanic 1.365*** (0.2662)
## raceHispanic           0.7901* (0.3172)
## raceOther/MoreThanOneRace 1.291** (0.4294)
## raceWhite,non-Hispanic 0.3257 (0.2935)
## log(income)            -0.4159*** (0.0716)
## female                 0.4902** (0.1493)
## educHighschoolDegree   0.1904 (0.2253)
## educLessThanHighschool 0.7430*** (0.1841)
## educSomeCollege        0.4748* (0.2069)
## tage                   -0.0321*** (0.0039)
## married                -0.0218 (0.1464)
## Fixed-Effects:      -----
## state                      Yes
## -----
## Family              Logit
## S.E.: Clustered      by: state
## Observations          6,727
## Squared Cor.          0.07044
## Pseudo R2             0.14275
## BIC                   17,617,334.2
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

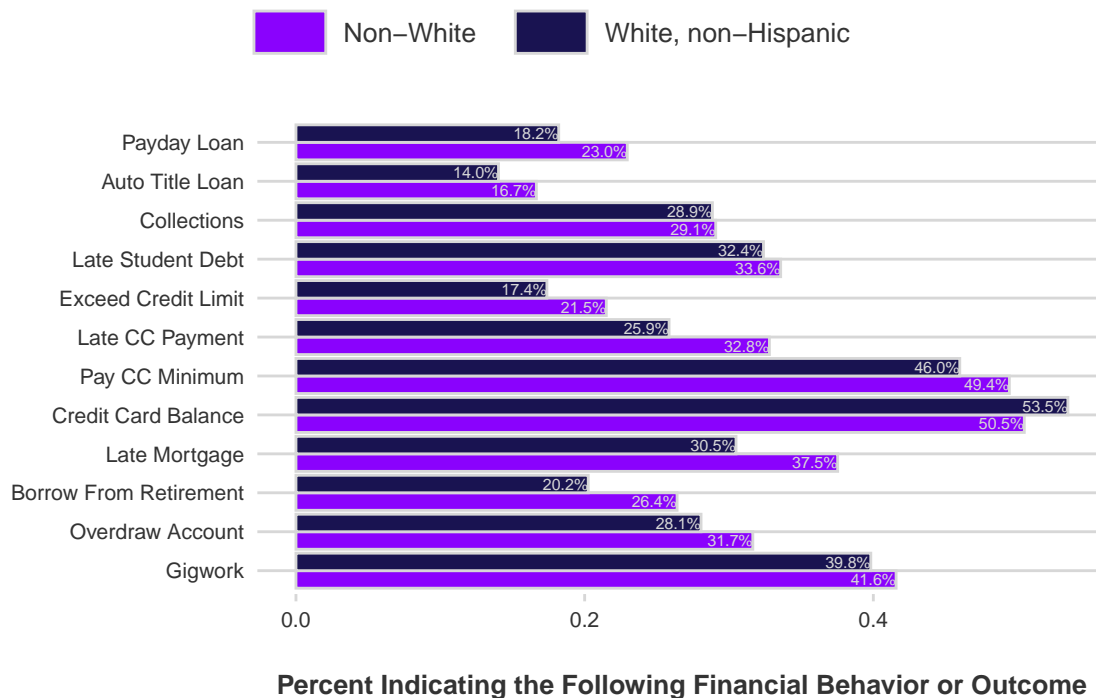
```

Non-White Unemployed Workers Are More Likely to Use Alternative Financial Services

In addition to takeup of UC benefits, I am also interested in examining how unemployed workers attempt to smooth their consumption and conduct a job search while unemployed. If disproportionately reliant on high-cost means of making ends meet while unemployed, these workers will struggle more to conduct a thorough job search and rebuild their financial security and overall wealth after they find a job. Analysis of the four waves of the NFCS survey found substantial differences in financial behaviors exhibited by white and non-white unemployed workers (see Figure below). In particular, non-white workers are much more likely to use alternative financial services like payday and auto title loans, make late credit card payments and only pay their minimum, make a late mortgage payment, and borrow from their retirement account. Other behaviors, like carrying any credit card balance, believing they have too much debt, being contacted by collections, and making late student debt payments do not appear to vary substantially by race.

Non-White Unemployed More Likely to Use Alternative Financial Services

Unemployed Percent Engaging in the Following Financial Behaviors



Source: 2012–2021 National Financial Capability Study, FINRA

The regression analysis here found that most of the differences could be explained by differences in education, income, or other covariates correlated with both race and financial insecurity. However, there were significant differences between white and non-white respondents for their likelihood of using alternative financial services, overdrawing a bank account, and making a late credit card payment. This highlights substantial liquidity constraints for minority workers when unemployed, pushing them toward very costly financing services from industries that have historically targeted lower-income and minority communities.

After also controlling for state fixed effects (see Table below), the only differences by race that are still statistically significant are those for taking a payday loan and making a late credit card payment. These results indicate that white unemployed workers are only 77% as likely to to use a payday loan provider's services and 83% as likely to be late on a credit card payment as non-white workers after controlling for income, education, age, and state and year effects. Policies that vary across states like UC benefit rules may therefore explain some of the difference in financial behaviors for the unemployed, but do not explain all of it.

##	est1	est2
## Dependent Var.:	payday	auto_title
##		
## raceWhite,non-Hispanic	-0.2570*** (0.0633)	-0.0794 (0.0558)
## income\$50,000to\$100,000	-0.2154* (0.1030)	0.0498 (0.0973)
## incomeLessthan\$25,000	-0.2835*** (0.0612)	-0.2975*** (0.0832)
## incomemorethan\$100,000	0.3568*** (0.0872)	0.6117*** (0.0867)
## sexMale	0.1272* (0.0602)	0.1584* (0.0662)
## educHSGrad	0.0070 (0.1061)	-0.2142* (0.0893)
## educLessThanHS	-0.1757 (0.1575)	-0.4088* (0.1710)
## educSomeCollege	0.0557 (0.0879)	-0.1764* (0.0732)
## agegroup25-34	0.2600* (0.1111)	0.0109 (0.0899)

```

## agegroup35-44          0.3078** (0.1012)   -0.0336 (0.0853)
## agegroup45-54          -0.3806** (0.1269) -0.7653*** (0.1138)
## agegroup55-64         -0.9873*** (0.1507) -1.311*** (0.1761)
## agegroup65+           -1.367*** (0.2474) -1.764*** (0.1912)
## Fixed-Effects: -----
## state                  Yes                Yes
## year                   Yes                Yes
## -----
## S.E.: Clustered      by: state          by: state
## Observations          13,104            13,104
## Squared Cor.          0.09167           0.10105
## Pseudo R2             0.11975           0.14804
## BIC                   13,048.9          10,780.8
##
##                      est3              est4
## Dependent Var.:      overdraw          card_late
##
## raceWhite,non-Hispanic -0.0526 (0.0828) -0.1897** (0.0683)
## income$50,000to$100,000 -0.2204* (0.0890) -0.2115* (0.0864)
## incomeLessthan$25,000 -0.1374. (0.0749) -0.0552 (0.0878)
## incomemorethan$100,000 0.1133 (0.1045) -0.0383 (0.1142)
## sexMale                0.0597 (0.0559) -0.0200 (0.0710)
## educHSGrad             -0.1191. (0.0699) 0.2045* (0.0805)
## educLessThanHS         0.0277 (0.1327) 0.1072 (0.1981)
## educSomeCollege        0.0121 (0.0940) 0.2374** (0.0839)
## agegroup25-34          0.2560*** (0.0696) 0.0666 (0.1328)
## agegroup35-44          0.1518 (0.0934) 0.1563 (0.0978)
## agegroup45-54          -0.2395* (0.0955) -0.3356** (0.1097)
## agegroup55-64         -0.8393*** (0.1194) -0.8392*** (0.1156)
## agegroup65+           -1.237*** (0.1629) -1.501*** (0.1915)
## Fixed-Effects: -----
## state                  Yes                Yes
## year                   Yes                Yes
## -----
## S.E.: Clustered      by: state          by: state
## Observations          10,674            8,070
## Squared Cor.          0.06223           0.06465
## Pseudo R2             0.10602           0.10860
## BIC                   12,784.9          9,576.1
##
##                      est5              est6
## Dependent Var.:      card_limit         card_min
##
## raceWhite,non-Hispanic -0.0525 (0.0970) -0.0213 (0.0501)
## income$50,000to$100,000 -0.1577 (0.1225) -0.3674*** (0.0795)
## incomeLessthan$25,000 0.0129 (0.0916) -0.1285* (0.0630)
## incomemorethan$100,000 0.2359* (0.1060) -0.6357*** (0.0848)
## sexMale                0.1763* (0.0885) -0.1468** (0.0532)
## educHSGrad             0.1731. (0.0962) 0.2621** (0.0973)
## educLessThanHS         0.0363 (0.2055) 0.1251 (0.1934)
## educSomeCollege        0.0074 (0.1131) 0.4489*** (0.0818)
## agegroup25-34          0.1396 (0.1048) 0.3468*** (0.0945)
## agegroup35-44          0.0463 (0.0849) 0.4801*** (0.0912)
## agegroup45-54         -0.4947*** (0.1189) 0.1171 (0.0875)

```

```

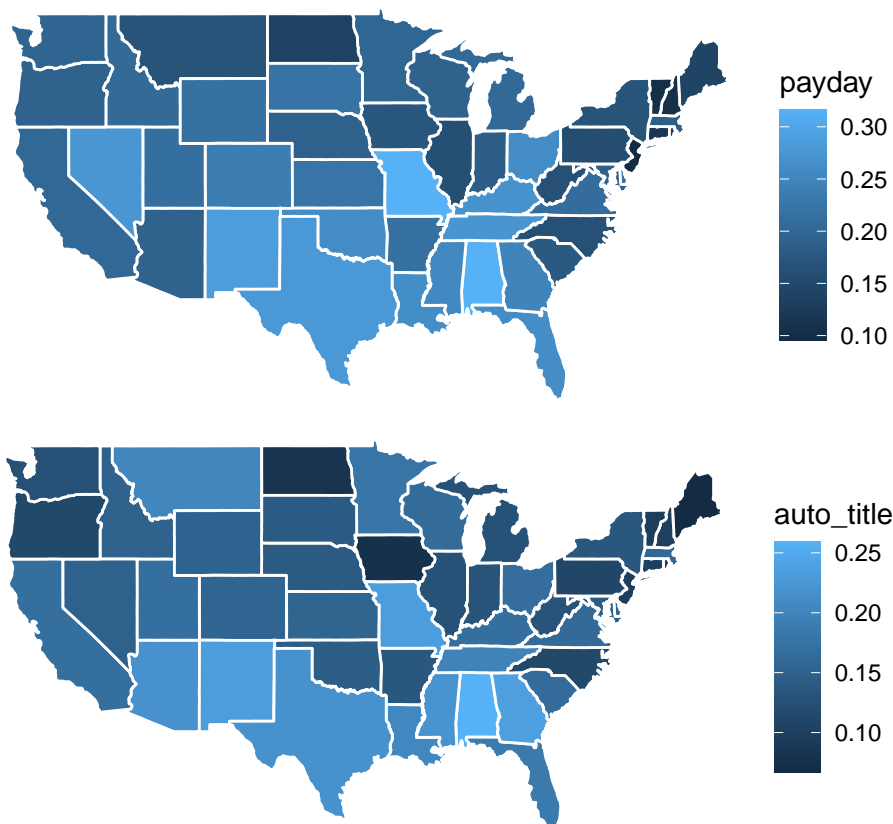
## agegroup55-64          -1.355*** (0.1780)  -0.3600** (0.1273)
## agegroup65+           -1.964*** (0.2591)  -1.074*** (0.1406)
## Fixed-Effects:         -----
## state                  Yes                  Yes
## year                   Yes                  Yes
## -----
## S.E.: Clustered        by: state          by: state
## Observations           8,070              8,070
## Squared Cor.           0.08457            0.07008
## Pseudo R2              0.12547            0.10937
## BIC                    7,761.5            10,926.9
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Use of Alternative Financial Services Among Unemployed Workers is Concentrated in States Where Takeup is Lower and Disparities Are Greater

Research on disparities in takeup of UC benefits has highlighted a regional difference in the South that drives the bulk the differences between Black and white workers observed in the literature. There are generally low UC takeup rates in these states. While they do not have particularly high income requirements relative to other states overall, incomes tend to be lower in these states and lower benefits and burdensome processes and work training requirements tend to discourage applications.

To explore descriptively how there may be regional or state-level differences in the consequences of poor UC benefit access, I mapped rates of alternative financial services use by state in the figure below. The greatest use of these services among unemployed workers is concentrated primarily in the South. This is likely driven at least in part by different regulations across state, but is also likely in part due to weaker social protections for displaced workers in these states and lower use and receipt of UC benefits.



Conclusion

This analysis lends further evidence to research that has demonstrated that racial disparities exist in UC takeup and receipt. Additionally, it shows that the lost income has substantial costs for workers who carry more debt on average and are more likely to turn to high-cost options for liquidity when unemployed such as carrying credit card balances and using alternative financial services.

While differences in the financial behaviors of white and non-white unemployed workers can be explained in part by differences in financial circumstances, education, and other factors, some disparities still remained. Even after controlling for state fixed-effects that should account for most unemployment-related policies over the period of the analysis, non-white unemployed workers were still much more likely to make late credit card payments and secure loans from payday lenders. This suggests that greater efforts are needed to understand what may be driving those trends and what policies may help to reduce reliance of unemployed workers on costly debt solutions that hinder their ability to build wealth in the future. Additional research should explore the ability of more widespread UC benefits to help accomplish this goal.

Sources

- Arulampalam, W., Gregg, P., & Gregory, M. 2001. Introduction: Unemployment Scarring. *The Economic Journal*, 111(475), F577–F584. <http://www.jstor.org/stable/798306>
- Anderson, Patricia, and Bruce Meyer. 1997. “Unemployment Insurance Takeup Rates and the After-Tax Value of Benefits.” *The Quarterly Journal of Economics*, 112:2 913-937.
- Ganong, Peter, Damon Jones, Pascal Noel, Fiona Greig, Diana Farrell, and Chris Wheat. 2023. “Wealth, Race, and Consumption Smoothing of Typical Income Shocks.” NBER Working Paper #27552.

Kuka, Elira, and Bryan Stuart. 2021. “Racial Inequality in Unemployment Insurance Receipt and Take-Up.” NBER Working Paper #29595.