

# *Is Scarring from Unemployment Worse for Black Workers?*

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ASSA Annual Conference  
New Orleans, LA  
January 8, 2023

# Disclaimer

- This project was supported by the generous assistance of the U.S. Social Security Administration.
- The views in this paper do not necessarily represent the views of the Social Security Administration or Boston College.
- All errors and omissions are our own.

# The scarring effect of unemployment is well-known.

- A long literature estimates how unemployment depresses future earnings (e.g., Ruhm 1991; Jacobson et al. 1993; Davis and von Wachter 2011; Lachowska et al. 2020).
- Some estimate that those who experience unemployment stay below pre-unemployment earnings trends for decades.
- The cause may be some combination of human-capital depreciation, loss of firm-specific human capital, and a negative signal to prospective employers.

# Unemployment might impact Black workers differently.

- Black workers could suffer more because they are more likely to be laid off.
- They also face more discrimination in hiring.
- However, Blacks may suffer less scarring if they do not have career-ladder jobs with significant firm-specific human capital (Altonji and Pierret 2001); or
- because laid off Black workers may be more productive than their White counterparts, due to discrimination.

# We study unemployment scarring using two complementary datasets.

- The CWHS is a 1 percent sample of SSA data, with administrative earnings and no sample attrition, but with limited information on respondents.
- The PSID has detailed information on respondents, but has a small sample size, suffers from sample attrition, and includes only self-reported earnings.
- Combining the two provides a robust look at the issue.

# Methodologically, we follow the recent literature.

- Specifically, we consider workers ages 25-45 who were stably employed prior to layoff.
- To minimize selection of poor-performing workers being laid off, we focus on recessions: 1990, 2000, and 2007.

# The design is a DD, with layoff as the event.

- We define a control group of workers who are steadily employed in the five years before the recession and throughout the recession.
- The treatment group is also steadily employed before the recession but is laid off during the recession.
- The precise definition of layoff varies by dataset based on available information.

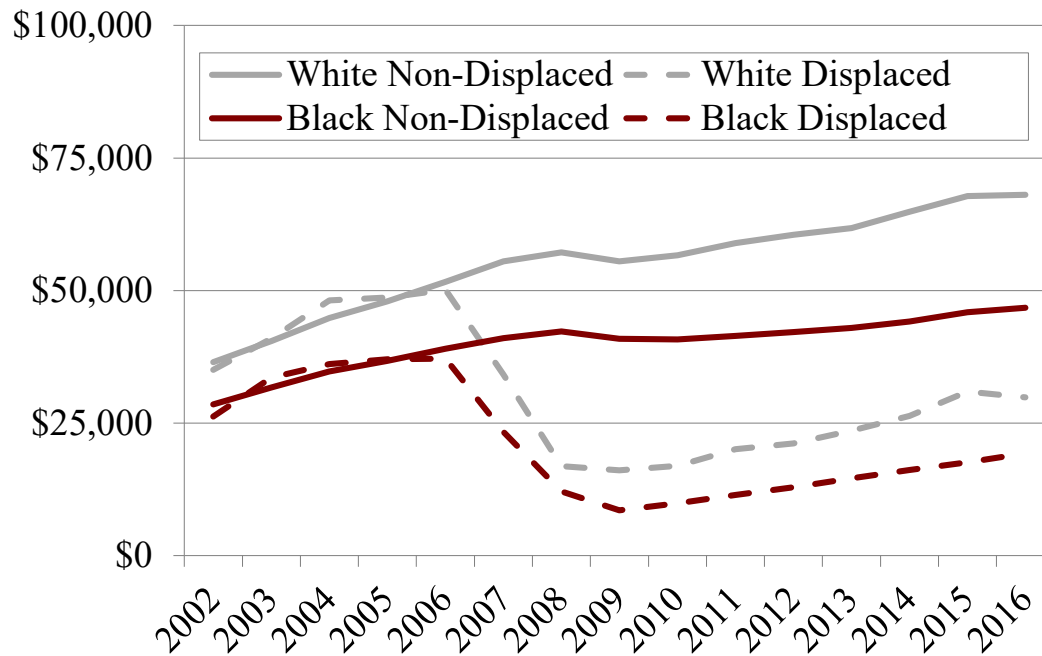
We analyze pre-trends and treatment effects with the following equation:

- $$Y_{i,t} = \beta_1 \gamma_t + \beta_{2,k} D_{i,t,k} + \beta_{3,k} (B_i * D_{i,t,k}) + \beta_4 (W_{i,t} * \gamma_t) + \beta_5 (B_i * W_{i,t} * \gamma_t) + \beta_6 X_{i,t} + \varepsilon_{i,t}$$
- $\gamma_t$  is a vector of year FEs, while  $D_{i,t,k}$  is a vector indicating if  $i$  was displaced  $k$  years prior (or in the future).
- $B_i$  is an indicator for Black workers.
- To account for differences between control and treatment,  $W_{i,t}$  is  $i$ 's five-year average pre-recession earnings.



# The results show all displaced workers suffer large and long-lasting declines in earnings, but racial differences are complex.

Impact of a Job Displacement on Earnings in the CWSHS for the 2007 Recession, by Race



Source: Authors' calculations from the Continuous Work History Sample (1985-2016).

The decline in earnings on impact appears smaller for Black displaced workers but requires explanation.

- Laid off Black workers matched on observables with White ones are likely *unobservably more productive*.
- This may contribute to the relatively small estimated job-loss effects in the short term for Black displaced workers.
- We also find evidence of lower Black reservation wages, leading to faster reemployment, albeit at a lower wage.
- This, too, could lead to short-term earnings effects being smaller for Black workers.

The smaller earnings drop coupled with slower recovery for Black workers is consistent across samples and recessions.

- The same pattern emerges in 1990 and 2000 recessions.
- And in both the CWHS and the PSID samples.

# Next steps

- To disentangle the different reservation wages, future earnings analysis will consider only re-employed workers.
- We will also consider log-earnings to assess if the absolute smaller decline in Black earnings holds in relative terms.
- Racial differences may reflect differences in how likely women are to work (particularly in the early recession); we will separately consider women and men to explore this.

# Preliminary conclusions

- All displaced workers suffer scarring from job loss.
- Black workers lose less in absolute earnings levels,
  - because of unobservable productivity differences;
  - less career-ladder jobs and firm-specific human capital; or
  - willingness to accept lower wages.
- Black displaced workers recover lost earnings more slowly, as all Black workers have slower earnings growth.

# Thank you!



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# In the CWHS we only observe earnings, not employment.

- We restrict attention to individuals with positive earnings with the same employer for five years pre-recession.
- The control group has the same employer for the five years preceding the recession and the recession year.
- The treated group changes employer and experiences a concurrent large drop in earnings during the recession.

A “large drop” is defined as being below the 25<sup>th</sup> percentile of earnings changes in the year of separation.

Distribution of Annual Earnings Growth in the CWHS, by Recession, Nominal Dollars

	25th percentile	Median	75th percentile
1990-1991 Recession	-48%	-3%	23%
2001 Recession	-32	10	36
2007-2009 Recession	-46	3	32

*Source:* Authors’ calculations from the Continuous Work History Sample (1985-2016).



# In the PSID, unemployment is observed, but the data have other limitations.

- Unemployment is recorded only at the time of the survey;
- we observe employment, but not who the employer is; and
- the survey was only conducted every other year from 1997.
- Thus, here the control group consists of those employed *when surveyed* in the years prior to and of the recessions.
- The treatment group is employed in survey years prior to the recession but unemployed in the recession year.

# Pre-displacement, earnings of those who will be displaced are lower as are Black earnings.

Mean Characteristics of Workers in the CWHS Sample, 2007 Recession, Nominal Dollars

	2007-2009 Recession		
	Non-displaced	Displaced	Total
Observations	99,864	4,137	104,001
Pre-recession earnings	\$42,895	\$34,936	\$42,578
Pre-recession earnings of Black workers	33,758	28,091	33,524
Pre-recession earnings of White workers	44,375	36,094	44,048
Share Black	14%	14%	14%
Share female	48	56	48
Age in 2006	35.1	35	35.1

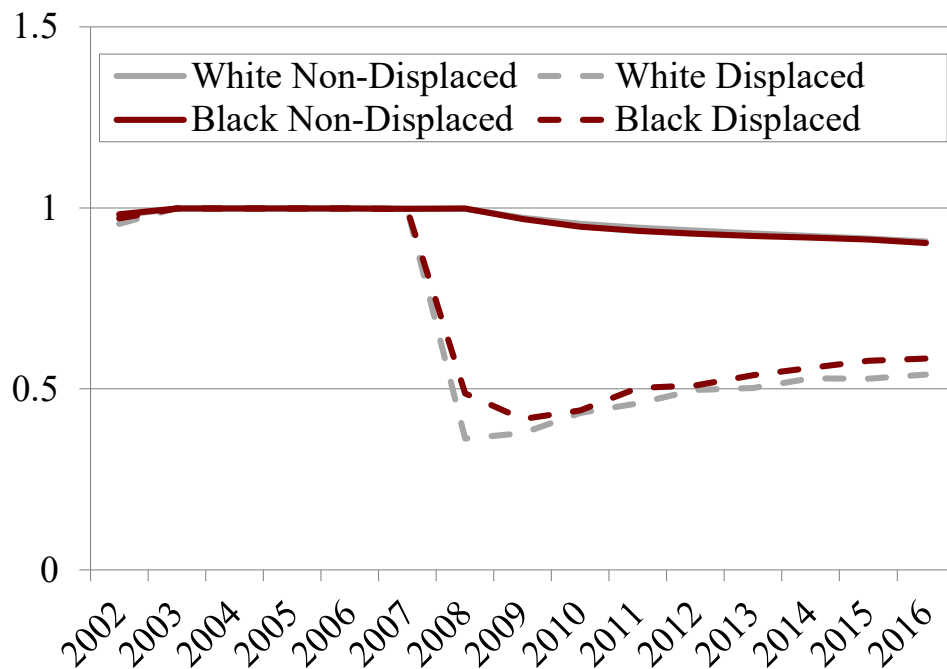
*Source:* Authors' calculations from the Continuous Work History Sample (1985-2016).

In the PSID we observe other pre-displacement differences between treated and control groups.

- The future displaced are more likely to have a work-limiting health condition;
- they are less likely to have a college degree; and
- they are less likely to have a retirement plan at their initial job.
- These differences are expected, but underscore the need to examine parallel *trends* in earnings prior to displacement.

# Because we only observe annual earnings, short-term earnings losses also reflect reemployment differences by race.

Impact of a Job Displacement on the Probability of Having Positive Earnings in the CWHS, 2007 Recession, by Race



Source: Authors' calculations from the Continuous Work History Sample (1985-2016).