Does Unemployment Insurance Matter More for Workers with Disabilities?

Disability and the 2020 CARES Expansion of Unemployment Insurance

Shailee Manandhar **Roisin O'Neill** **Doug Kruse**

Rutgers University

May 2025

Introduction

- During the pandemic, the CARES Act expanded UI payments
- UI and the CARES Act more important for people with disabilities:
  - higher rates of job loss (Mitra and Kruse 2016)
  - lower earnings and household income and higher poverty rates (Kruse et al. 2018; Statista 2024)
  - greater obstacles in finding jobs (Ameri et al. 2018; Baert 2018; Lippens et al. 2023)

Motivation

- Workers with disabilities face large disparities in the labor market (Mitra and Kruse 2016; Schur and Kruse 2021; Kruse et al. 2018; US BLS 2024):
  - lower employment rate
  - higher unemployment rate
  - lower job security
  - higher rates of layoff
  - more likely to be in insecure work arrangements
- Extra UI may help these workers in improving job match quality

Research questions

What was the impact of the 2020 CARES expansion of UI on:

- the personal and family incomes
- the likelihood of finding a job

for people with disabilities as compared to those without?

Literature

- UI and poverty
  - reduces poverty rates, inequality, and financial strain (Gabe and Whittaker 2012; O'Campo et al. 2015; Renahy er al. 2018; Rothstein and Valetta 2017)
- UI and health
  - reduces food insecurity (Raifman et al. 2020; Fu et al. 2023; Carey et al. 2021)
  - maintain health insurance and preventive measures (Renahy et al. 2018; Kuka 2020; Carey et al. 2021)

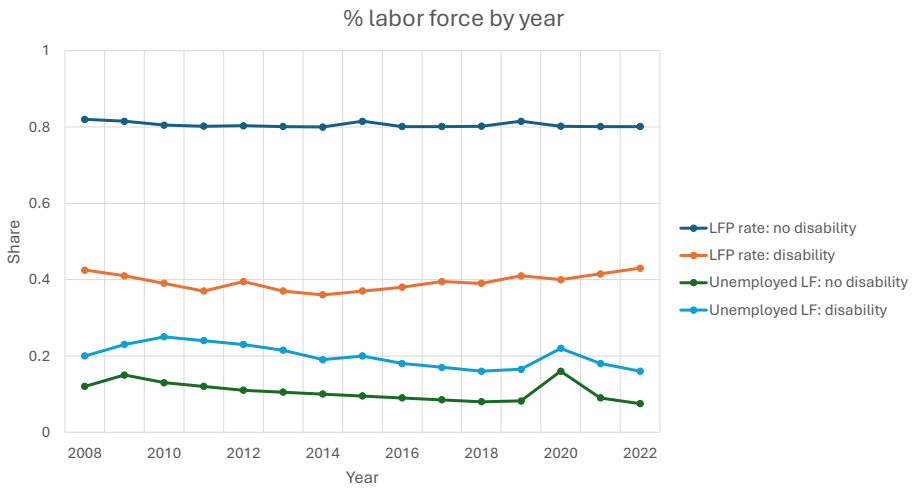
Literature (cont)

- UI, unemployment duration, and match quality
  - decreases intensity of job search and extends unemployment spells (Krueger and Mueller 2010; Baker and Fradkin 2017; Lechthaler and Ring 2021)
  - improved job match quality esp for women, minorities, and less education (Nekoei and Weber 2017; Farooq et al. 2020)
- Employment of people with disabilities and how UI may interact
  - higher unemployment and layoff rates (Mitra and Kruse 2016)
  - help in labor market readiness (Rothstein and Valetta 2017)
  - help with the extra difficulties in finding a job

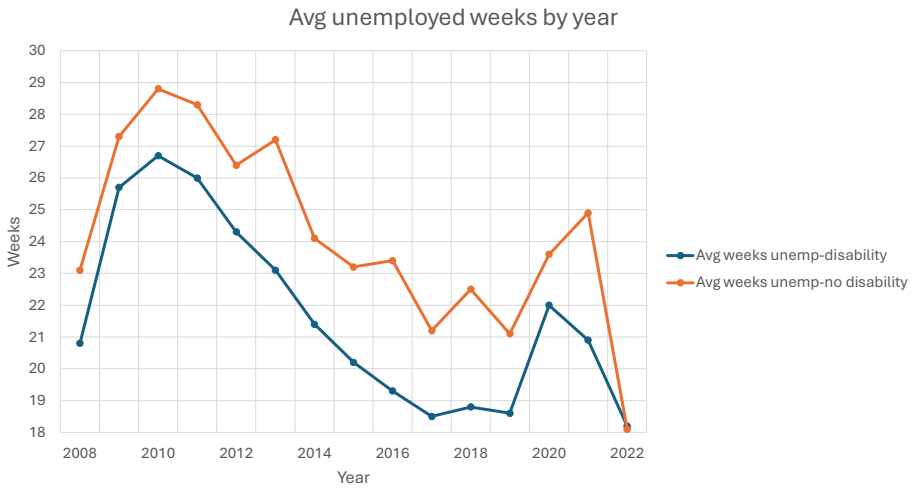
Data

- March Annual Social and Economic Supplement of the Current Population Survey (CPS)
- Time period in consideration: 2008-2022
- Sample: individuals ages 18-64 with any labor force participation
- Six-question set for disability status

Labor force outcomes and disability

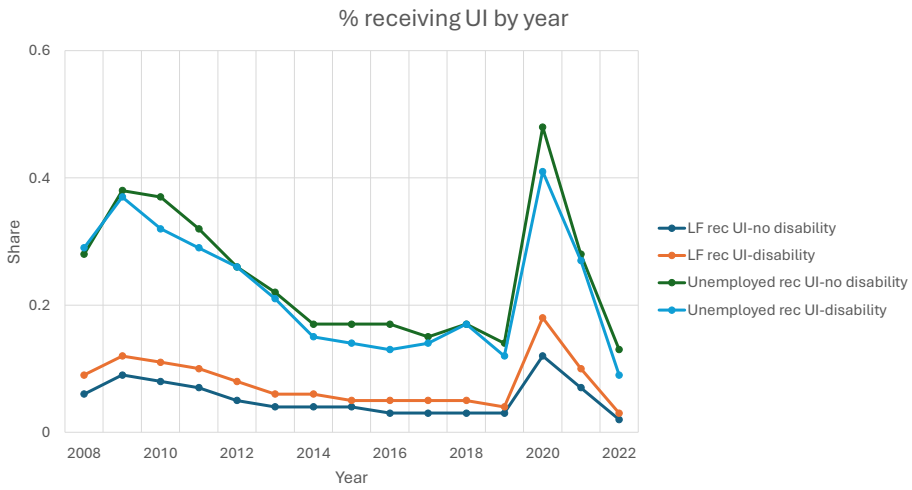


Average weeks unemployed



9

UI incidence % receiving UI by Year



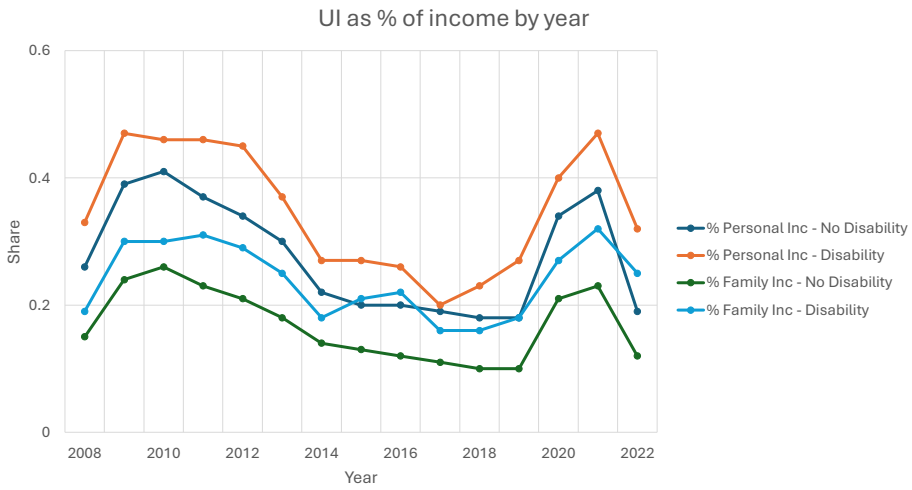
10

Methodology: UI and income

$$Y_{ist} = a_s + B_1 Disab_{ist} + B_2 Year2020 + B_3 YearsUI + B_4 Disab_{ist} * Year2020 + B_5 Disab_{ist} * YearsUI + B_6 X_{ist} + \epsilon_{ist}$$

- Y_{idt} = UI as a percent of income
- $Disab_{ist}$ = disability dummy
- *Year*2020: year 2020 dummy
- *YearsUI:* dummy for prior years with extended UI (2008-2012)
- X_{ist} = gender, age, education, race/ethnicity, living alone

UI incidence as % Income by Year



UI incidence

	All in labor force		All who received UI	
Variables	UI/personal inc	UI/fam inc	UI/personal inc	UI/fam inc
Disability	0.003***	0.002***	0.029***	0.031***
	(0.001)	(0.001)	(0.010)	(0.009)
Year 2020	0.036***	0.022***	0.098***	0.063***
	(0.001)	(0.001)	(0.004)	(0.003)
Prior years with extended UI	0.012***	0.007***	0.109***	0.067***
	(0.0002)	(0.0001)	(0.003)	(0.003)
Disability*Year2020	0.016***	0.012***	0.012	0.003
	(0.004)	(0.003)	(0.019)	(0.015)
Disability*Prior years with extended UI	0.010***	0.007***	0.015	0.004
	(0.001)	(0.001)	(0.014)	(0.012
Observations	1,282,562	1,294,117	58,292	58,377

Note: All regressions include state fixed effects and controls. Robust standard error in parentheses.

Methodology: UI and job finding

$$Y_{ist} = a_s + B_1 Disab_{ist} + B_2 Year_t + B_3 UI_{ist} + B_4 Disab_{ist} * Year_t + B_5 Disab_{ist} * UI_{ist} + B_6 Year_t * UI_{ist} + B_7 Disab_{ist} * Year_t * UI_{ist} + B_8 X_{ist} + B_9 Weeks_{ist} + \epsilon_{ist}$$

- Y_{idt}: employment in following March/weeks spent unemployed
- $Disab_{ist}$: disability dummy
- $Year_t$: year 2020 dummy
- UI_{ist}: receipt of UI dummy/UI replacement rate (UI benefits/wage)
- X_{ist}: controls for gender, race/ethnicity, education, marital status
- $Weeks_{ist}$: weeks unemployed (for employment outcome variable)

Additionally, replace UI_{ist} with UI replacement rate for 2019-2020 reg

Effect of UI on job finding

	Predicting end of unemp spell (hazard ratios from survival models)	Predicting being employed following March (linear probability coefficients)
Main effects		
Disability	0.921***	-0.16***
	(0.02)	(0.05)
UI receipt	0.83***	-0.02***
	(0.01)	(0.00)
Year 2020	1.013	0.07***
	(0.02)	(0.00)
Two-way interactions		
Disability x UI receipt	0.921*	0.06***
	(0.04)	(0.01)
Disability x 2020	1.016	-0.02
	(0.07	(0.03)
UI receipt x 2020	1.026	-0.01
	(0.02)	(0.01)
Three-way interaction		
Disability x UI receipt x 2020	1.164	0.10**
	(0.12)	(0.05)
N	144,827	144,827

Note: All regressions include state fixed effects and controls. All samples limited to unemployed across 2020-2022.

Effect of UI on job finding (cont.)

	Predicting end of unemp spell (hazard ratios from survival models)	Predicting being employed following March (linear probability coefficients)
Main effects		
Disability	0.812***	-0.10***
	(0.06)	(0.03)
Replacement rate	2.062***	0.06
	(0.34)	(0.05)
Year 2020	0.902***	0.06***
	(0.02)	(0.01)
Two-way interactions		
Disability x Replacement rate	2.023*	-0.05
	(0.78)	(0.27)
Disability x 2020	1.14	-0.03
	(0.10)	(0.04)
Replacement rate x 2020	0.481*	-0.06
	(0.08)	(0.05)
Three-way interaction		
Disability x Replacement rate x 2020	0.499	0.07
	(0.19)	(0.27)
N	15,547	15,547

Note: All regressions include state fixed effects and controls. All samples limited to unemployed across 2020-2022.

UI replacement rate: CARES and non CARES

	Predicting end of unemp spell (hazard ratios from survival models)	Predicting being employed following March (linear probability coefficients)
Disability measure	Current disability	Current disability
Main effects		
Disability	0.845***	-0.105***
	(0.062)	(0.032)
Replacement rate without CARES	2.074***	0.069
	(0.355)	(0.046)
CARES addition to replacement rate	0.931**	-0.007**
	(0.028)	(0.003)
Year 2020	0.823***	0.039***
	(0.022)	(0.011)
Two-way interactions		
Disability x Replacement rate without CARES	2.124**	-0.051
	(0.809)	(0.266)
Disabiiity x CARES addition to replacement rate	1.066**	0.014***
	(0.033)	(0.005)
Disability x 2020	1.115	-0.052
	(0.103)	(0.042)
Replacement rate x 2020	1.579**	0.109**
	(0.287)	(0.053)
Three-way interaction		
Disability x Replacement rate x 2020	0.521	0.296
	(0.222)	(0.293)
N	15,547	15,547

Note: All regressions include state fixed effects and controls. All samples limited to unemployed across 2019-2020. Replacement rate broken down into standard replacement rate that would have existed without CARES, and the extra value due to CARES.

Conclusion

For workers with disabilities:

- UI and income
  - UI is a larger portion of personal and family incomes
  - In the pandemic, UI as a percent of personal and family incomes increased
- UI and job finding
  - Receiving UI associated with higher likelihood of being employed
  - Higher UI replacement rate linked with lower unemployment duration
  - CARES component related with reduced unemployment and higher likelihood of being employed

Thank you!

Reach out:

- **Shailee Manandhar:** shailee.manandhar@rutgers.edu
- **Roisin O'Neill:** roisin.oneill@rutgers.edu
- **Doug Kruse:** kruse@smlr.rutgers.edu