

# What a Difference Social Insurance Makes:



The Case for Expanding Unemployment Benefits during the COVID-19 Pandemic

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# Research Questions and Hypotheses

- > How does receiving **unemployment benefits** affect the **short-term savings** of the unemployed?
  - > *Hypothesis 1A:* Receiving unemployment benefits is associated with an increase in liquid account balances relative to not receiving it.
  - > *Hypothesis 1B:* Receiving unemployment benefits is associated with an increase in liquid account outflows relative to not receiving it.
- > How does receiving **unemployment benefits** affect **credit card spending and debt**?
  - > *Hypothesis 2A:* Receiving unemployment benefits is associated with a decrease in credit card balances relative to not receiving it.
  - > *Hypothesis 2B:* Receiving unemployment benefits is associated with a decrease in credit card spending relative to not receiving it.
  - > *Hypothesis 2C:* Receiving unemployment benefits is associated with an increase in credit card payments relative to not receiving it.

# Methodology

- > A fixed effects model with time-variant interaction for  $N$  observations and  $T$  biweekly periods:

$$y_{it} = U_{it}\beta_1 + UI_{it}\beta_2 + U_{it}UI_{it}\beta_3 + \mathbf{D}\boldsymbol{\delta} + \alpha_i + u_{it}$$

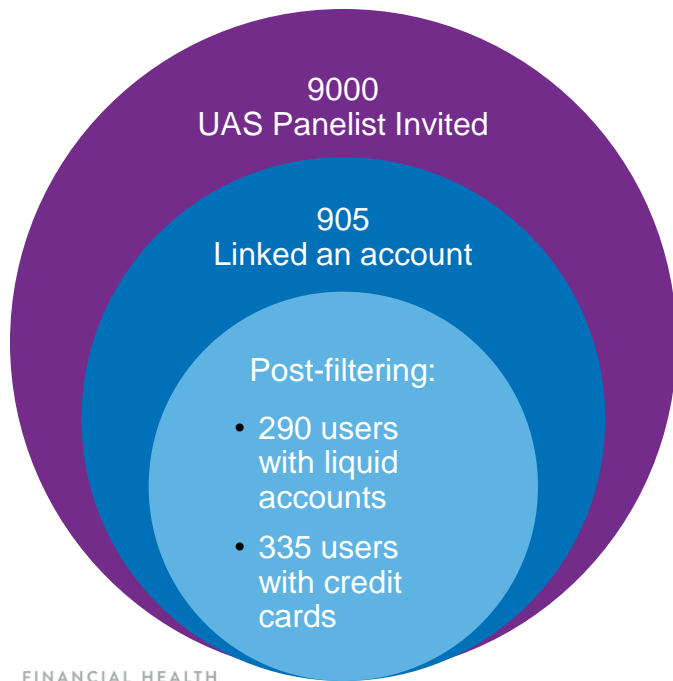
for  $i = 1, \dots, N$  and  $t = 1, \dots, T$

$\mathbf{D} = D_2, \dots, D_T$  (time effects)

$$y = \begin{cases} \text{Total balance} \\ \text{Total outflows} \\ \text{Total inflows} \end{cases} \quad U = \begin{cases} 0 \text{ for Employed} \\ 1 \text{ for Unemployed} \end{cases}$$

$$UI = \begin{cases} 0 \text{ for Not Receiving Benefits} \\ 1 \text{ for Receiving Benefits} \end{cases}$$

# Data: UASFin & UAS Covid Surveys



- > Study period: March 11 – Dec. 08, 2020
  - > Biweekly periods aligned with USC Covid Survey waves 1-19
- > Filtering criteria:
  - > An account was active on March 11 and Dec. 8, 2020
  - > A checking account had at least one transaction per month
- > Liquid accounts include at least one checking account plus:
  - > Savings, prepaid, money market, and cash management accounts.

# Sample Composition

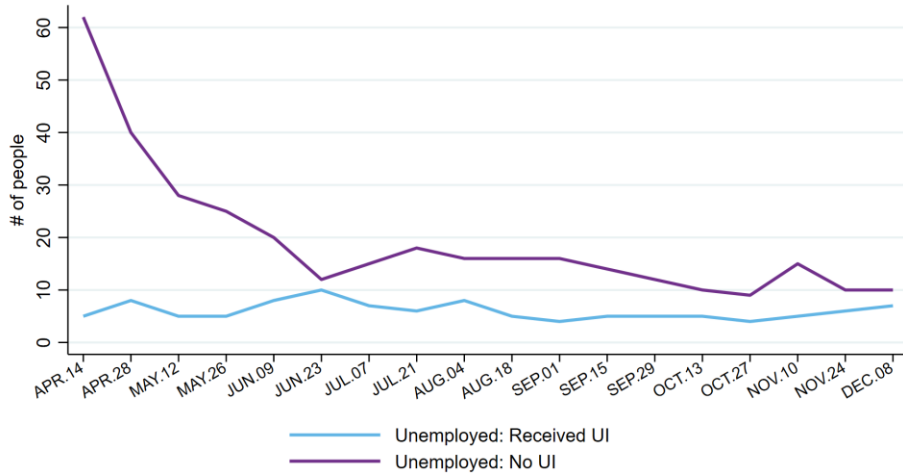
Table 1. Demographic Composition of Samples

	Liquid Accounts Sample	Credit Card Sample	National Benchmark
<b>Age</b>			
18-25	11%	9%	6%
26-35	24%	26%	20%
36-49	30%	32%	27%
50-64	21%	22%	25%
65+	12%	11%	21%
NA	1%	1%	0%
<b>Household Income</b>			
<30K	13%	8%	27%
30-59K	26%	18%	25%
60-99K	25%	32%	24%
100K+	35%	42%	24%
NA	1%	1%	0%

	Liquid Accounts Sample	Credit Card Sample	National Benchmark
<b>Race &amp; Ethnicity</b>			
Asian, not Latinx	8%	9%	4%
Black, not Latinx	6%	2%	12%
Latinx	18%	14%	17%
Other/Mixed	4%	5%	1%
White, not Latinx	63%	69%	63%
NA	1%	1%	0%
<b>Gender</b>			
Male	40%	50%	48%
Female	59%	50%	52%
NA	1%	1%	0%
<b>UASFin</b>	290	335	

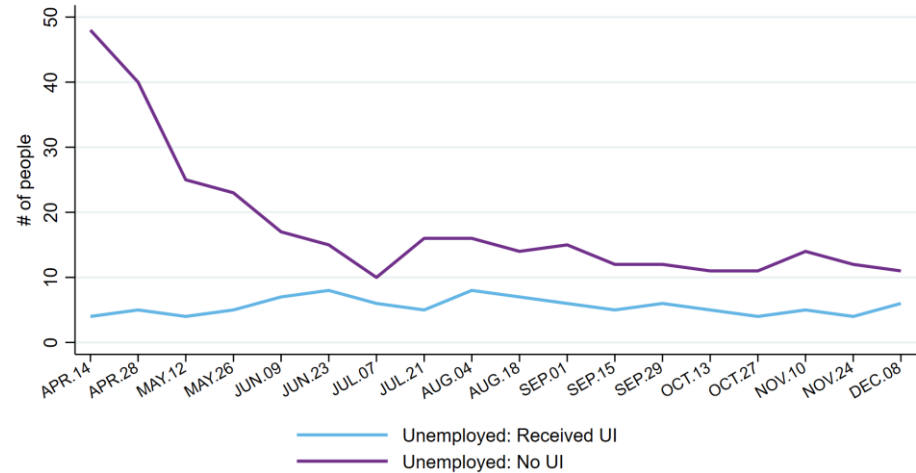
# Number of Unemployed, by UI Status

> Liquid Accounts Sample



N=290

> Credit Cards Sample



N=335

# Time-variation

**Table 2. Variation in Unemployment and UI Benefits in Liquid Accounts Sample**

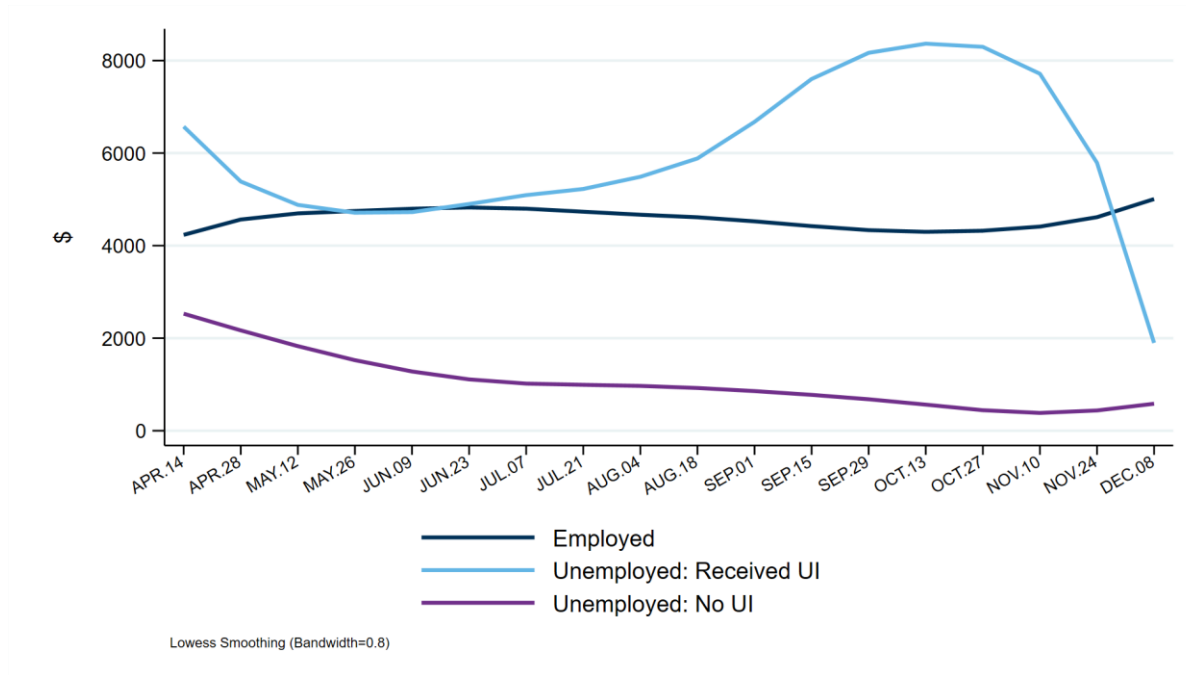
	Overall		Between		Within
<b>Unemployment</b>	Freq.	Percent	Freq.	Percent	Percent
Employed	3056	87%	221	79%	94%
Unemployed	456	13%	97	35%	73%
Total	3512	100%	318	114%	88%
<b>UI Benefit</b>					
No benefit	4241	93%	285	99%	93%
Received benefit	323	7%	49	17%	44%
Total	4564	100%	334	116%	86%

**Table 3. Variation in Unemployment and UI Benefits in Credit Card Sample**

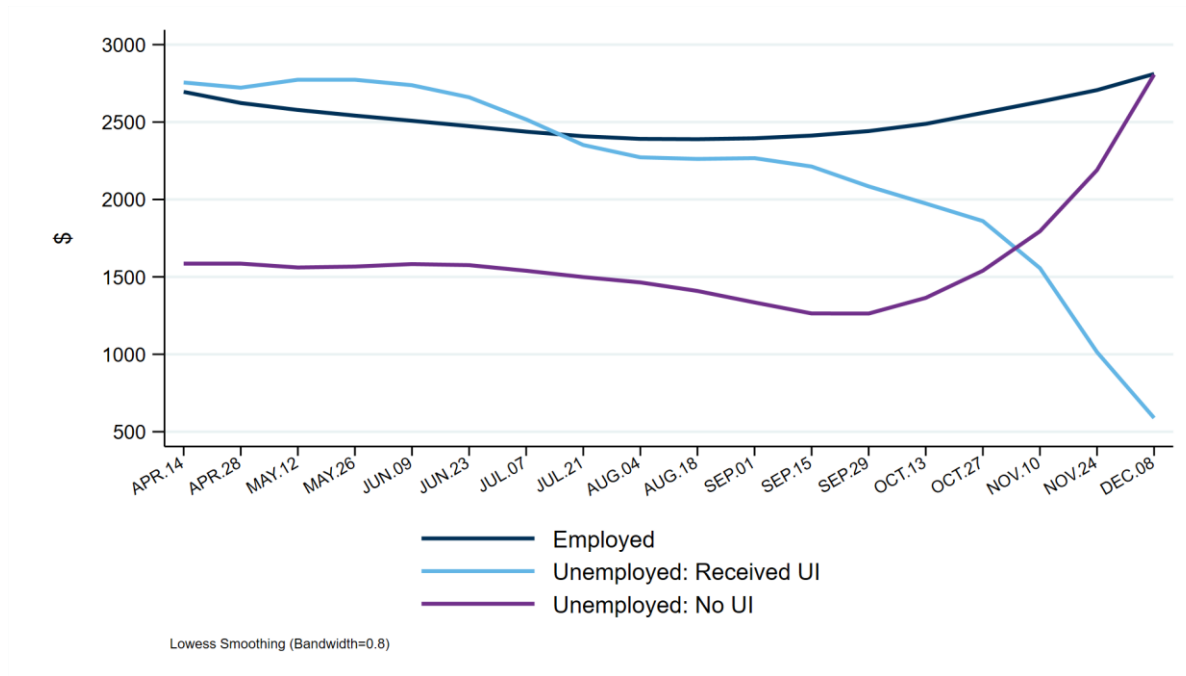
	Overall		Between		Within
<b>Unemployment</b>	Freq.	Percent	Freq.	Percent	Percent
Employed	3981	90%	273	84%	96%
Unemployed	422	10%	85	26%	75%
Total	4403	100%	358	110%	91%
<b>UI Benefit</b>					
No benefit	5100	95%	333	100%	95%
Received benefit	279	5%	46	14%	39%
Total	5379	100%	379	114%	88%



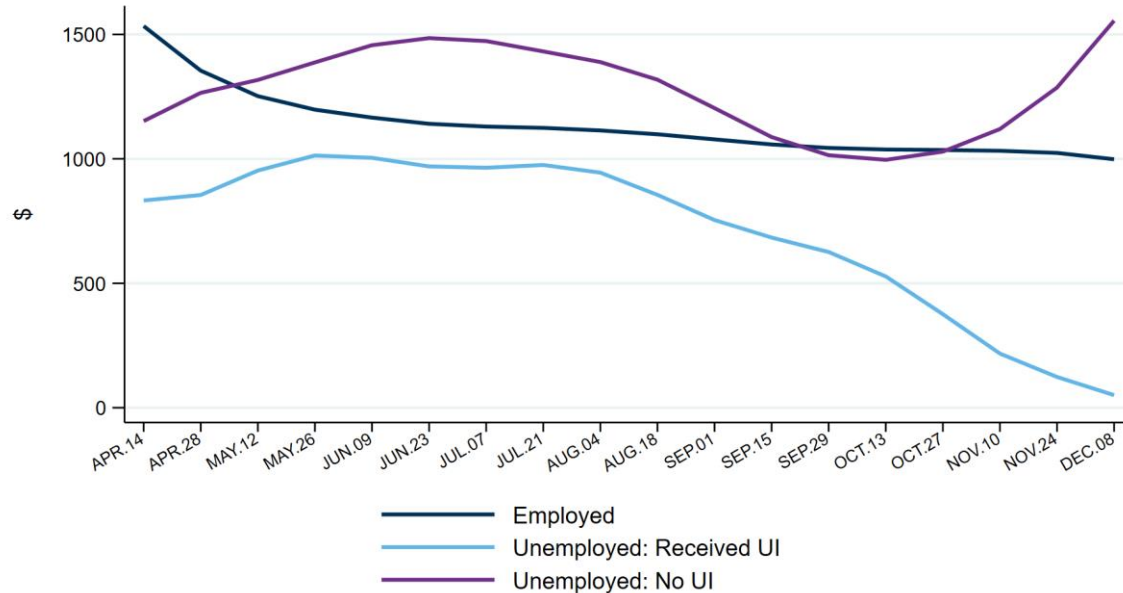
# Trends in Liquid Accounts: Balance



# Trends in Liquid Accounts: Outflow

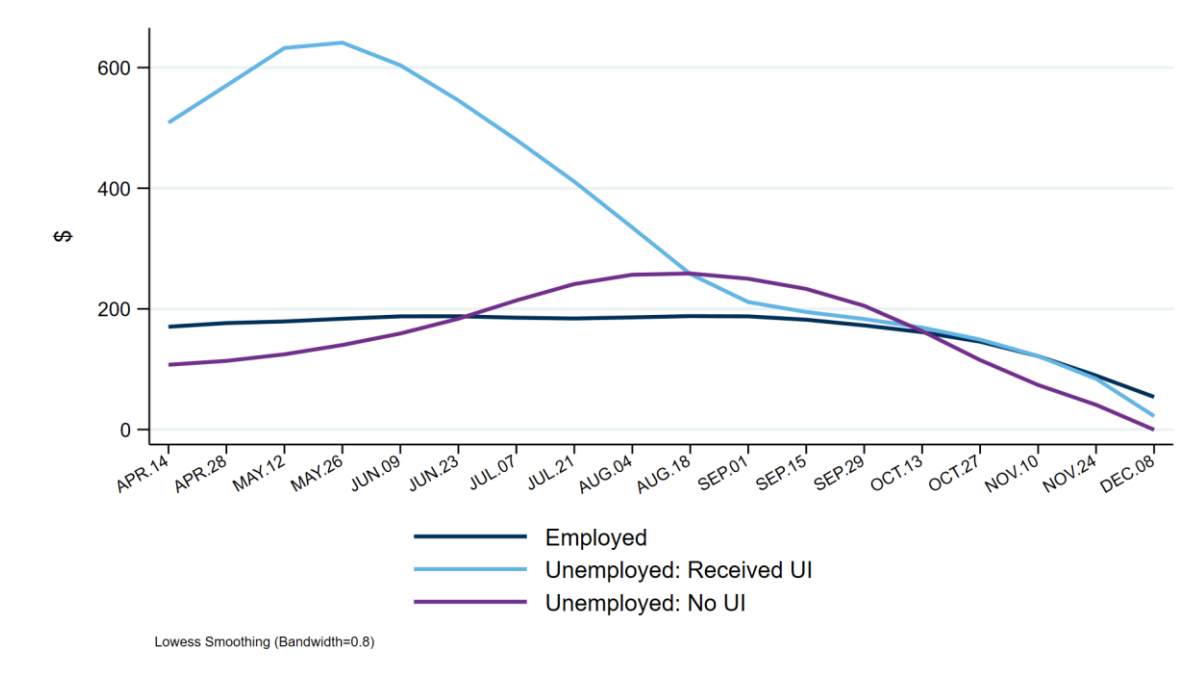


# Trends in Credit Cards: Balance

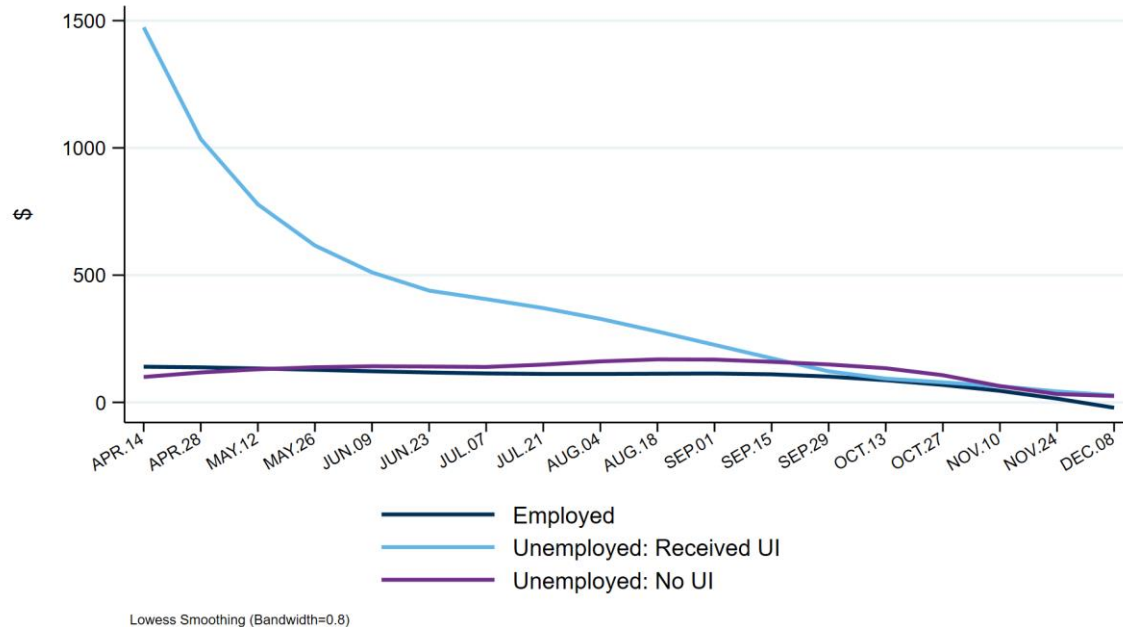


Lowess Smoothing (Bandwidth=0.8)

# Trends in Credit Cards: Spending

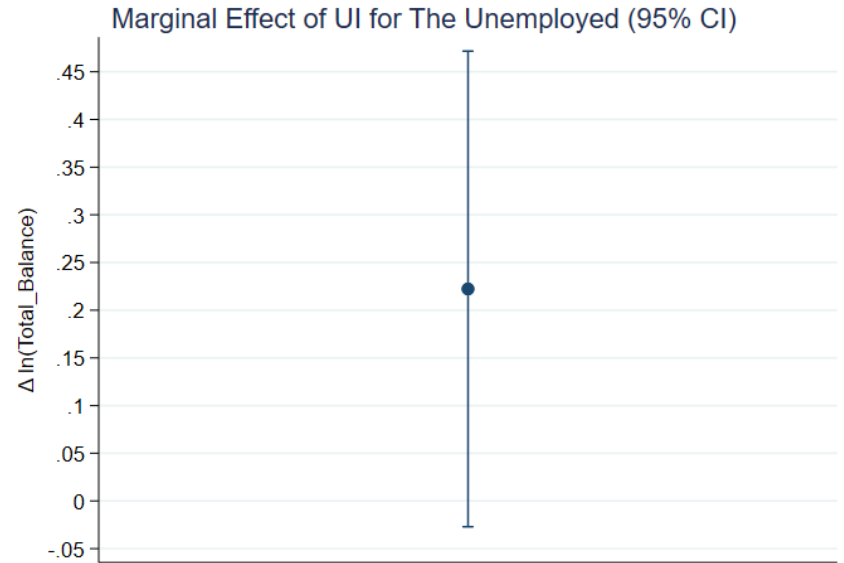


# Trends in Credit Cards: Payments



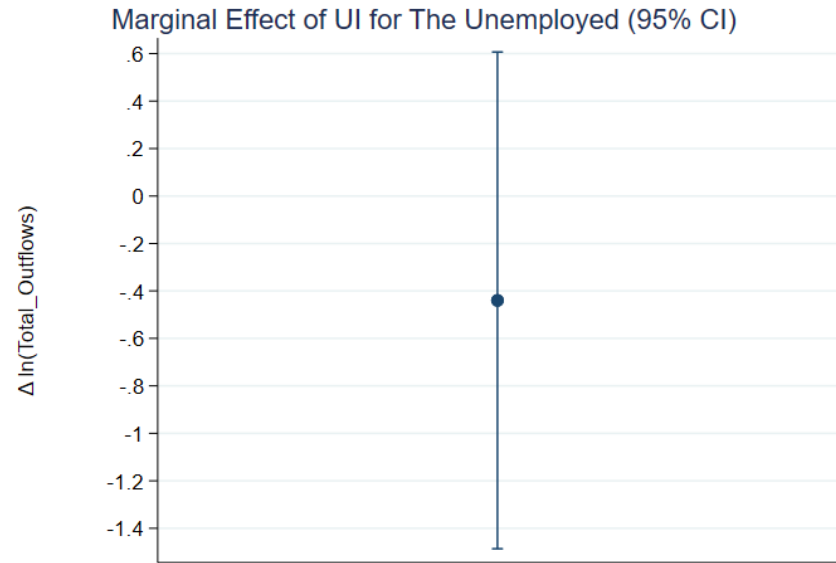
# Hypothesis 1A: Weakly supported

- > Receiving unemployment benefits is weakly associated with an increase in liquid account balances relative to not receiving it.
- > Liquid account balances for unemployed people were ~22% (\$3329) higher when they received benefits vs. when they did not ( $p=0.085$ ).



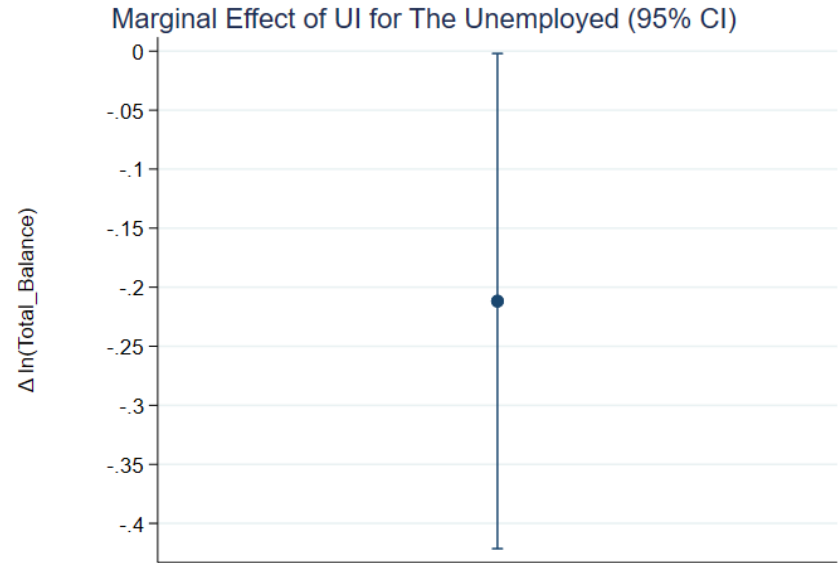
# Hypothesis 1B: Not supported

- > Receiving benefit is not significantly associated with a change in outflows for the unemployed ( $p=0.410$ ).



# Hypothesis 2A: Supported

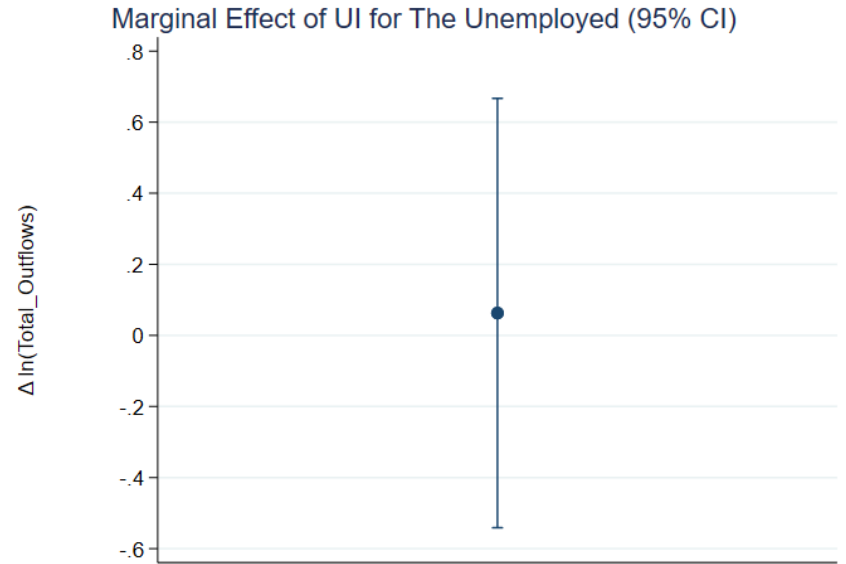
- > Receiving unemployment benefits is associated with a decrease in credit card balances relative to not receiving it.
- > Credit card balances for unemployed people were ~21% (\$591) lower when they received unemployment benefits vs. when they did not ( $p=0.037$ ).





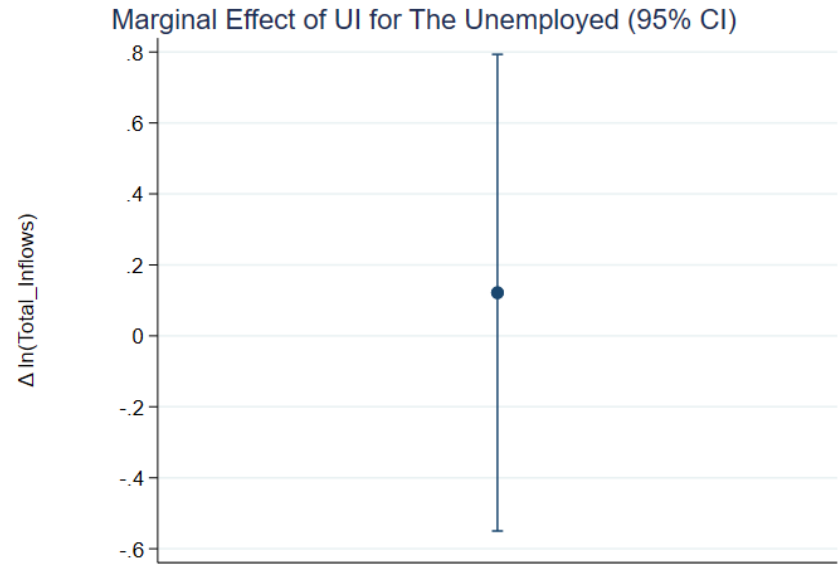
# Hypothesis 2B: Not supported

- > Receiving unemployment benefits is not significantly associated with a decrease in credit card spending ( $p=0.838$ ).



# Hypothesis 2C: Not supported

- > Receiving unemployment benefits is not significantly associated with an increase in credit card payments ( $p=0.722$ ).



# Conclusion

- > We find evidence suggesting that unemployment benefits made a significant difference in the liquidity and credit card debt for people who lost their jobs.
- > Receiving benefits during spells of unemployment allowed people to grow liquid account balances and reduce outstanding credit card debt.
- > However, we did not find evidence to suggest that receiving benefits allowed people to spend more from their liquid accounts or less from their credit cards.
- > Neither could we conclude that reduction in credit card balances due to receiving unemployment benefits was a result of higher inflows (payments) into credit card accounts.

# Next steps

- > Does the effect of unemployment insurance benefit on liquid account and credit card balances differ across different groups?
  - > Race/ethnicity
  - > Gender
- > Other time-variant factors
  - > Exposure to Covid
  - > Hours worked
  - > Amount of UI benefit
- > Different outcomes
  - > Frequency of credit card use
  - > Interest charges on credit card debt
  - > Late payment on credit card
  - > Overdraft/NSF in checking accounts

# Q&A

**Pulse Survey Data:** [finhealthnetwork.org/pulse/data](https://finhealthnetwork.org/pulse/data)

**Pulse Transactional Data:** Coming soon...

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