



Unemployment Insurance and Labor Market Transitions

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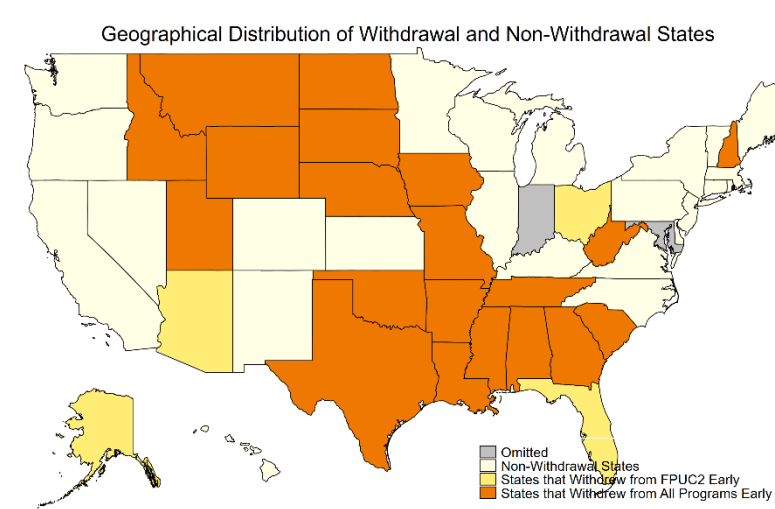
INTRODUCTION & BACKGROUND

The Federal Government extended the unemployment insurance (UI) programs during the pandemic in response to the recession. The American Rescue Plan Act in March 2021 extended these benefits until September 2021.

- Pandemic Emergency Unemployment Compensation (PEUC): 53 extra weeks of potential benefit duration
- Federal Pandemic Unemployment Compensation (FPUC): \$300 more benefits per week
- Pandemic Unemployment Assistance (PUA) expanded eligibility to self-employed and gig-economy workers



Around half of the states withdrew from pandemic UI benefits early, citing reasons including strengthening labor markets and business concerns about “worker shortages”. Eighteen states opted out of PUA, PEUC, and FPUC in June; Two opted out in July. Four opted out of only FPUC and continued participating in PUA and PEUC. Indiana and Maryland filed to withdraw early but were required by court order to continue paying benefits for both programs. Twenty-four states remained in all three programs until the designated expiration date.

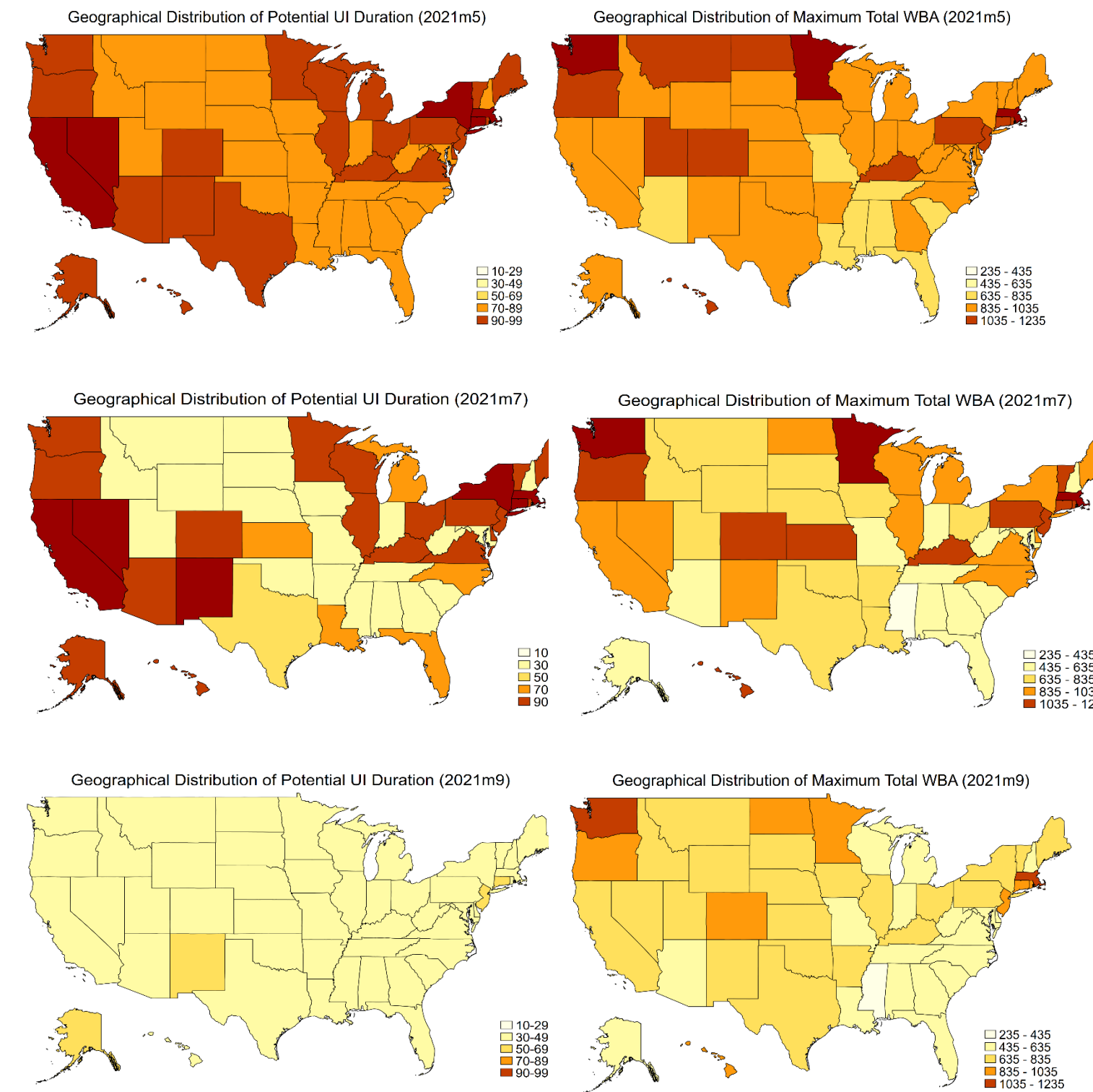


RESEARCH QUESTION & CONTRIBUTIONS

Did the termination of each temporary UI program in 2021 incentivize people to become re-employed? If so, how large was its magnitude?

- The goal of the thesis is to extend the currently limited literature on pandemic UI benefits.
- I decompose the effects of the termination of different policies on the unemployment-to-employment (U-E) transition probabilities.
- This paper presents the first attempt to that I know of to estimate the effect of the scheduled expiration of benefits in September 2021 and the impact of reinstating the job search requirement.

UI GENEROSITY IN 2021



THEORETICAL MODEL

I propose a simple job search model that models how an unemployed individual’s job search behaviors respond to changes in UI eligibility, the job search requirement, benefit amount, and potential benefit duration. The model is motivated by the McCall Model (McCall 1970) and inspired by several other research surveyed in Rogerson, Shimer, and Wright (2005).

$$\frac{\partial(\phi(s, A, d))}{\partial(s)} (u(w) - u(\gamma\tau b + w^h)) = c'(s); s \geq s_0$$

Above is the FOC of an individual choosing their optimal job search intensity. A simple interpretation is that the marginal cost of searching for a job equals the marginal benefits. The model predicts that:

1. PEUC would have a sizable disincentive effect.
2. FPUC would discourage re-employment, but the magnitude is unknown.
3. The disincentive effect of PUA depends on UI generosity.
4. The effect of the reinstatement of the job search requirement is ambiguous.

DATA

The primary data source of this research is the Current Population Survey (CPS), a panel dataset of monthly labor force statistics sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics. The sample period is Feb - Dec 2021, depending on the empirical specification. Only prime-working-age individuals unemployed in the previous month are in the estimation sample. Another important data source is the UI Tracker developed by Dr. Klara Peter and Katie Baker.

Empirical Strategy

This paper exploits the early termination of federal UI assistance programs in June 2021 as a “natural experiment” and estimates several difference-in-difference specifications. I define $D_{i,t}$, a time-invariant multi-level treatment group variable:

$$D_{i,t} = \begin{cases} 0 & \text{No Early Withdrawal} \\ 1 & \text{Withdrawn from FPUC Early} \\ 2 & \text{Withdrawn from All Programs Early} \end{cases}$$

For my main specification, I estimate:

$$\begin{aligned} Pr(y_{i,s,t} = 1) &= \sum_{d=1}^2 \sigma_d \mathbb{1}\{D_s = d\} + \beta post_t \\ &+ \sum_{d=1}^2 \theta_d \mathbb{1}\{D_s = d\} * post_t + \alpha X_{i,s,t} + \epsilon_{i,s,t} \end{aligned}$$

, where $y_{i,s,t} = 1$ if individual i was employed in month t and state s , $post_t = 1$ if $t = 2021m7$ or $2021m8$, and $X_{i,s,t}$ is a vector of covariates. I also estimated an analogous event study specification to verify the parallel trend assumption.

Next, I extend the analysis beyond September 2021 and estimate the effects of the scheduled expiration of federal UI assistance.

$$\begin{aligned} Pr(y_{i,s,t} = 1) &= \sum_{i=1}^2 \sigma_i \mathbb{1}\{D_s = i\} + \sum_{j=1}^2 \beta_j \mathbb{1}\{T_t = j\} \\ &+ \sum_{i=1}^2 \sum_{j=1}^2 \theta_{i,j} (\mathbb{1}\{D_s = i\} * \mathbb{1}\{T_t = j\}) + \alpha X_{i,s,t} + \epsilon_{i,s,t} \end{aligned}$$

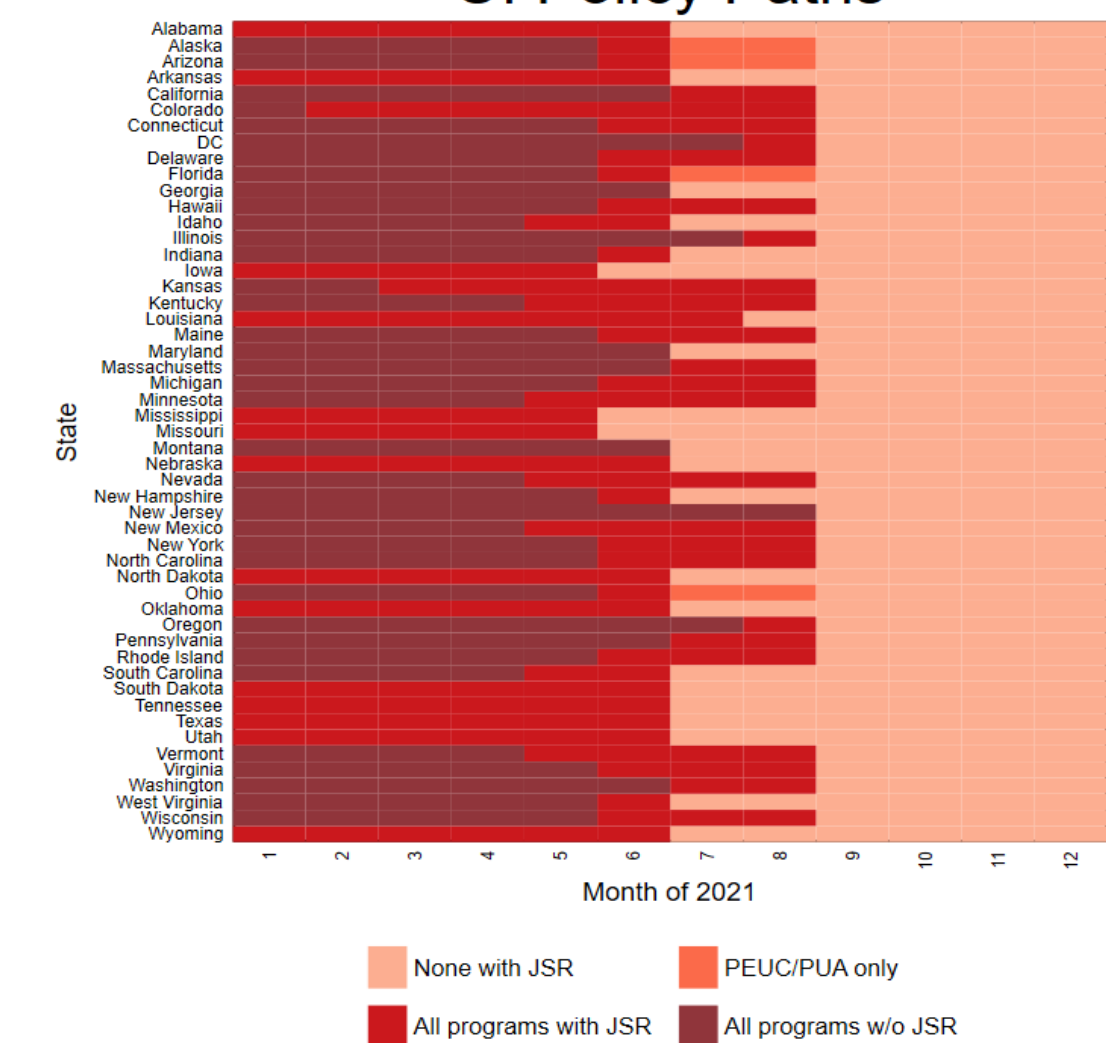
FINDINGS

I document four new facts.

1. The early termination of all programs in June resulted in a 6-7 percentage point increase in the Unemployment-to-Employment transition rates. The early termination of FPUC alone had negligible effects.
2. Under strong assumptions, terminating PEUC and PUA in advance (in addition to FPUC2) caused a roughly 5 percentage point increase in U-E transition rates.
3. The employment effects of the early termination were short-termed and diminished by the end of 2021.
4. The scheduled termination of these programs did not increase the U-E flow.

Overall, the results infer that UI’s expanded eligibility and longer potential duration, not the high benefit amount, reduced re-employment in 2021. While the total UI benefit reduced due to the terminations of FPUC and PEUC were similar, diminishing marginal utilities explain why the ending of PEUC had a significant re-employment effect, whereas that of FPUC did not.

UI Policy Paths



REFERENCES

Please refer to the reference section of the thesis.

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