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POLICY BRIEF: UNEMPLOYMENT INSURANCE AND WORKER MOBILITY

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Unemployment insurance (UI) helps workers smooth their consumption after employment loss, but may also diminish their incentive to quickly find new jobs, thereby lengthening spells of unemployment and raising the aggregate unemployment rate. Less appreciated is the effect that UI has on geographic mobility and the quality of matches formed by workers and firms. UI may reduce match quality by delaying job search and prolonging the period over which work skills atrophy, but it could also improve match quality by discouraging easy-to-find low-quality matches and financing more difficult job searches. In the latter case, these searches could generate matches in other states that result in better-paying jobs. Understanding this match quality effect, as well as implications for migration, is important for policymakers who must decide how generous to make UI and how to structure its rules (e.g., some extended UI benefits are currently not portable across states, which may have undesirable effects). In addition to mattering for individual workers' wages and employment, match quality effects matter for UI finances and overall U.S. labor market flexibility, both topics of considerable policy interest in recent years.

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e explore the consequences of changes in UI generosity for recipients' interstate migration, helping to shed light on this question. Specifically, we use information returns filed with the IRS by state unemployment agencies to identify UI recipients, and match these individuals to their W-2s and tax returns to track them over time. These administrative data are particularly well-suited to study interstate migration, both because we can directly measure UI reciprocity (rather than relying on worker reports) and because the universal coverage of the data allows us to look at very small subsets of workers (e.g., UI recipients who move from West Virginia to Arizona in a particular year) who would otherwise show up in worker panel surveys in insufficient numbers. Our data provide measures of year-to-

year interstate migration—as well as the earnings and UI income of UI recipients over time—during the recovery from the Great Recession

In addition to descriptive analysis that helps illuminate the circumstances of movers and stayers, we examine the causal impact of changes in the maximum duration of UI benefits. To identify any mobility effects, we exploit two sources of variation. First, the availability of extended benefits during our time period depends discontinuously on a known function of state unemployment rates. At a given moment in time, worker eligibility for benefits therefore varies across states that feature similar labor market conditions.

Second, we use differences in the rules governing the portability of different types of extended UI benefits. Standard UI and EUC benefits are tied only to a worker's initial state of employment: she can move to another state in search of employment and continue to receive the UI benefits to which she was originally eligible. In contrast, an individual's EB eligibility is tied to the EB status of both her origin and destination states. If an individual receiving EB moves to another state with EB status, then her benefits would remain the same. If, however, that individual instead moves to a state without EB status, then these benefits cease after two weeks.

We find that more generous UI does appear to raise worker mobility. Moreover, the lack of portability associated with EB benefits attenuates the positive mobility impact of that component of UI. Though we regard this evidence as preliminary, it suggests that further investigation of UI and worker mobility using the administrative tax records is merited. Moreover, it provides insights into the social benefits conferred by portable UI.

BACKGROUND

Unemployment insurance was first introduced in the United States over the 1932 to 1937 period. Financed by taxes on employers, UI benefits replace a specified fraction of an eligible worker's previous earnings—up to a cap—for a specified number of weeks (or until the worker finds employment, whichever comes first). Eligibility is essentially restricted to workers who have been fired without cause, and who seek new employment during the term of UI receipt. In recent years, most states allow for up to 26 weeks of benefits.

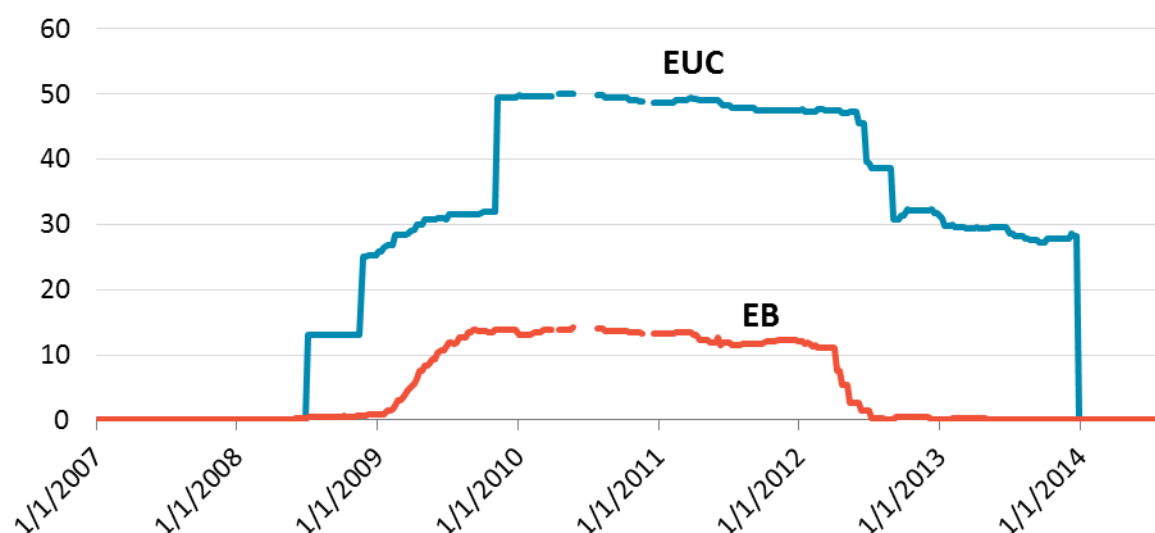
However, it has historically been the case that the maximum available weeks of UI duration varies with the business cycle. Part of this cyclical variation is built into current law, through the so-called Extended Benefits (EB) program. As labor market conditions worsen in a particular state, EB provides additional weeks of coverage after standard UI eligibility has been exhausted. Separately, Congress has generally appropriated funds for an additional program, called Emergency Unemployment Compensation (EUC), which provides another set of weeks in addition to the standard and EB programs. As with EB, state labor market conditions determine availability of the additional weeks of benefits, but according to a different formula and with somewhat different rules for individual workers. One specific notable difference between EB and EUC is that EB benefits are not always portable across states, while EUC always is. That is, a worker who is entitled to EB in her state of origin will see reductions in her available EB if she moves to a state where EB is not “triggered” on (i.e., a state that has not recently experienced growing or high unemployment rates).

The Great Recession and its aftermath featured very large swings in the availability of UI, both across states and across time. Congress provided sizable extensions to UI benefits through EUC—implemented as a step function of state unemployment rates—and then let the program expire in January 2014. Before expiration, improving labor market conditions had already reduced available EUC and EB benefits at various times in different states, depending on the pace of recovery. The figure below gives a sense of how EUC and EB varied over the relevant time period.

FIGURE 1

Mean Weeks of Additional Benefits

2007-14



Source: Department of Labor and Andrew Figura; authors' calculations.

Related Literature

The experience of varying UI policy during and after the Great Recession presents an opportunity to learn more the effects of UI on different outcomes, including aggregate unemployment but also wages, migration, and match quality between workers and firms. Most research has focused on unemployment effects.

This research on the impacts of UI generosity has tended to uncover small positive effects. In individual-level analysis, Meyer (1990), Krueger and Meyer (2002), and Schmieder et al. (2012b) generally find that more generous UI extends unemployment spells.

Data limitations have sometimes precluded investigation of other UI effects. But a number of papers have investigated tenure and wages in jobs that immediately follow spells of UI receipt. Estimates have ranged widely, from positive effects of UI generosity on match quality Acemoglu and Shimer (2000), Centeno (2004), van Ours and Vodopivec (2008), and Nekoei and Weber (2015) to zero or negative Card et al. (2007) and Schmieder et al. (2012a).

One important omission from this segment of the literature is analysis of the migration effects of UI. This analysis would have two major benefits: first, it would contribute to understanding of the match quality impact of UI, and consequently on the optimal design of the program. If UI leads to better matches between workers and firms, then this must be factored into the calculus of the appropriate benefit generosity.

Second, it would shed light on a broader set of questions related to worker mobility, questions that have recently become more pressing as labor market dynamism declines. Davis and Haltiwanger (2014) and Molloy et al. (2016) and others have documented the long-run decline in the rates at which workers switch jobs and locations. This work has led many to ask how relevant institutions, and particularly labor market institutions, can be structured to support mobility.

EMPIRICAL APPROACH

This paper presents information regarding UI income, worker earnings, UI recipient migration, and how all of these changed over the course of the Great Recession. Through exploratory descriptive analysis that makes use of the advantages of the administrative tax records, insight is generated into how earnings and UI income changes for movers and stayers (whether UI recipients or not).

We also test whether changes in UI generosity—as determined by a changing national schedule of maximum UI duration—have an effect on UI recipient interstate migration. The effect is theoretically ambiguous, but potentially important to the optimal design of the UI system. A secondary hypothesis is that workers in states triggered on to Extended Benefits will be less likely to move to states that are triggered off EB when origin state benefits have a higher maximum duration. This expectation proceeds from the UI rule that provides for individual benefits to be discontinued after a move to a state that does not provide EB.

The analysis in this paper is conducted using data from population-based, administrative tax records. We first identify all UI recipients based on information returns filed by state unemployment agencies with the IRS, the Form 1099-G. We then link these unemployed individuals to their state of residence during and after their unemployment spell based on the state listed on their tax returns or their W-2s.

As demonstrated by Kawano and LaLumia (forthcoming), UI reported on a Form 1099-G capture roughly 95% of total UI payments. In contrast, Meyer et al. (2009) find that only about 70% of UI payments are captured in survey data. Moreover, survey data typically does not provide the sample sizes required for fine-grained analyses of UI recipient migration between particular states. For example, in the Survey of Income and Program Participation, there were only two UI recipients who moved from Missouri to Illinois in 2010-11, while there were 988 such individuals in our data.

Our approach to identifying the impact of UI generosity on interstate migration is akin to a regression discontinuity design, in that we rely on discontinuities in a nationally-imposed schedule of maximum UI benefits that depends exclusively on state unemployment rates. Operationally, this entails a specification with state-pair fixed effects.

$$\ln(M_t^{O \rightarrow D}) = TotalUI_t^O \cdot \beta_1 + EB_t^O \cdot \mathbf{1}(EB_t^D = 0) \cdot \beta_2 + \mathbf{1}(EB_t^D = 0) \cdot \beta_3 + f(u_t^O, u_t^D) + \alpha^{O \rightarrow D} + \gamma_t + \epsilon_t^{O \rightarrow D},$$

where $M_t^{O \rightarrow D}$ is the gross migration rate between an origin state (O) and a destination state (D), $\alpha^{O \rightarrow D}$ are state-pair fixed effects, γ_t are year fixed effects, $f(\cdot)$ is alternatively a linear function of origin and destination unemployment rates, or a quadratic in those rates, i.e.,

$f(u_O, u_D) = v_1 u_O + v_2 u_D + v_3 u_O^2 + v_4 u_D^2$, and ϵ_t is a white noise disturbance.

RESULTS

We begin by providing summary statistics regarding the migration of UI recipients during our sample. Perhaps surprisingly, migration rates are actually lowest between origin states with the minimum EB durations (indicating stronger local labor markets) and destination states that with EB durations above the minimum. Conversely, the migration rate is highest for the opposite pairing. These unconditional statistics underscore the need for a more careful analysis that controls for time-varying labor market conditions and time-invariant state-pair characteristics.

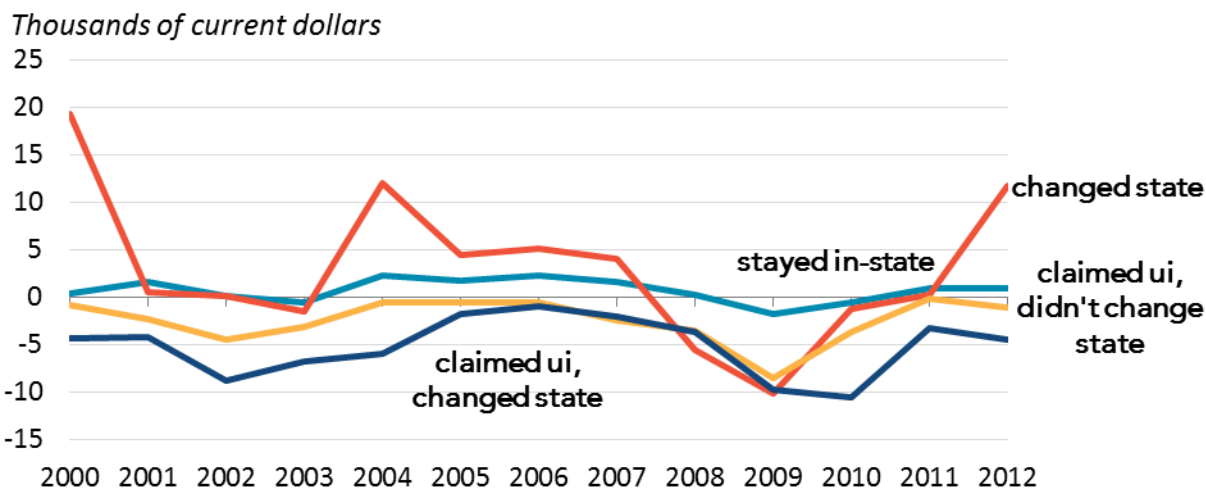
Next, we show the evolution of total UI reciprocity and mobility of recipients. As expected, the average number of UI recipients in a state increased during the Great Recession. However, the average mobility rate is fairly stable over the course of the recession and its aftermath. Across the states, the median number of UI recipients was about 150,000 in 2007, rising quickly to 280,000 in 2010. The state outmigration rate was relatively stable, falling from 3.2% to 3.0% over the same time period.

We now explore the earnings and UI income information available for various combinations of UI recipients and non-recipients who stay or move across state lines, looking within individual workers' histories. UI claimants experienced lower earnings growth than did non-recipients. More surprisingly, the earnings growth experienced by non-recipients who changed states was substantially more procyclical than that of non-recipient stayers. In other words, movers benefited from earnings gains during economic recoveries but experienced large losses during downturns; by contrast, stayers experienced steady, relatively low earnings growth interrupted only by the worst year of the Great Recession.

Of particular interest to the current analysis is the comparison between UI recipients who moved and recipients who did not. The former group experienced larger losses in earnings throughout the period. We believe that this analysis is suggestive of differences in the composition of the groups; it may be that those UI recipients who cross state lines are disproportionately likely to be long-term unemployed or are disadvantaged in some other manner. The following figure depicts these trends over the 2000-12 period.

FIGURE 2

Earnings Growth by UI Reciprocity and Interstate Migration Status



Source: Continuous Work History Sample of the Statistics of Income; authors' calculations.

Note: series show average annual earnings changes within person from year t-1 to year t.

The final portion of our descriptive analysis provides analogous results for annual changes in UI income. We examine the average year-to-year change in total UI dollars received by an individual, conditioning on whether or not that individual moved across states over the course of the year. For example, among taxpayers who did not move from 2001–2002, average UI income rose by about \$225; among taxpayers who did move that year, average UI income rose by about \$725.

Turning to the effects of UI generosity on worker mobility, we find that a one-week increase in origin state UI raises the probability of moving to another state by 0.24 percent. The cumulative migration effect of 52 weeks of UI is therefore a 12.3 percent increase in the probability of movement to another state. Put another way, in terms of a standard deviation of UI duration—22 weeks in our sample—the effect is a 5.2 percent increase in the probability of migration. The sign of this estimate is what one would expect if higher UI duration generosity facilitates a more ambitious job search, with a higher likelihood of interstate moves. Notably, the mobility effect of UI is lower—roughly zero—when recipients are facing a loss of EB weeks.

POLICY IMPLICATIONS

Unemployment insurance has been the subject of a number of reform discussions in recent years, making it especially important to fully understand the effects of the program. The Obama Administration had proposed to reconfigure all of federal UI into a mandatory, automatic program that would be triggered by increases in state unemployment rates and would not require Congress to pass special legislation immediately after a recession begins. If this reform were to be implemented, it would be desirable to ensure that worker benefits are fully portable across states (i.e., to use the structure of EUC rather than EB).

More importantly, a robust debate is in progress regarding the benefits and costs of unemployment insurance, with implications for the optimal generosity and duration of benefits. Understanding the match quality and migration effects of UI duration is an important piece of the puzzle, both for optimal UI design and for the design of the overall system of countercyclical fiscal policy. As policymakers seek to address declining labor market dynamism, it is important that U.S. labor market institutions promote rather than discourage worker mobility.

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