

# Unemployment Insurance and Worker Mobility

Laura Kawano, Office of Tax Analysis, U. S. Department of Treasury  
Ryan Nunn, Office of Economic Policy, U.S. Department of Treasury

## Abstract

After an involuntary job loss, unemployed individuals suffer large and persistent negative impacts on their earnings (e.g., Jacobson, LaLonde and Sullivan 1993, Couch and Placzek 2010). The unemployment insurance (UI) program compensates for a significant proportion of income losses and helps to facilitate consumption smoothing after these negative shocks (Dynarsky and Gruber 1997, Stephens 2001).<sup>1</sup> However, because UI is only paid to the unemployed, moral hazard is an important policy concern. In particular, UI may discourage the eligible unemployed from searching for a job or accepting job offers. Indeed, a large literature has established that more generous UI systems are associated with prolonged unemployment spells.<sup>2</sup>

In this paper, we focus on another, more subtle, form of moral hazard that has not yet been examined: the effect of UI on recipients' geographic mobility. The theoretical relationship between UI generosity and geographic mobility is ambiguous. On the one hand, because job-finding can involve interstate moves, UI may reduce the probability of interstate moves through a general reduction in job search. On the other hand, UI may encourage unemployed individuals to hold out for higher-quality employment which may be disproportionately far from the worker's initial location. In addition, UI may help finance interstate moves that would otherwise be infeasible. Thus, the impact of UI on geographic mobility is an empirical question.

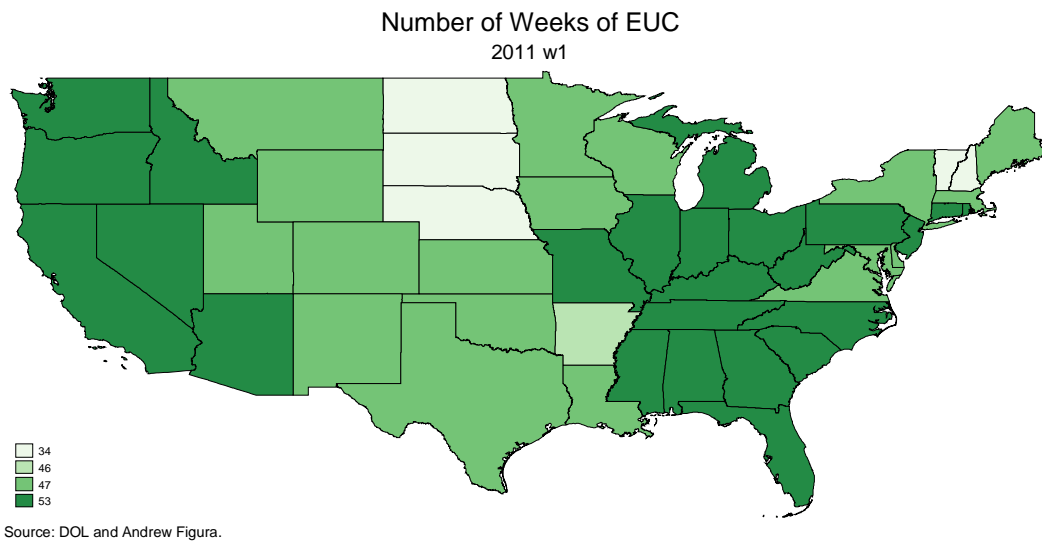
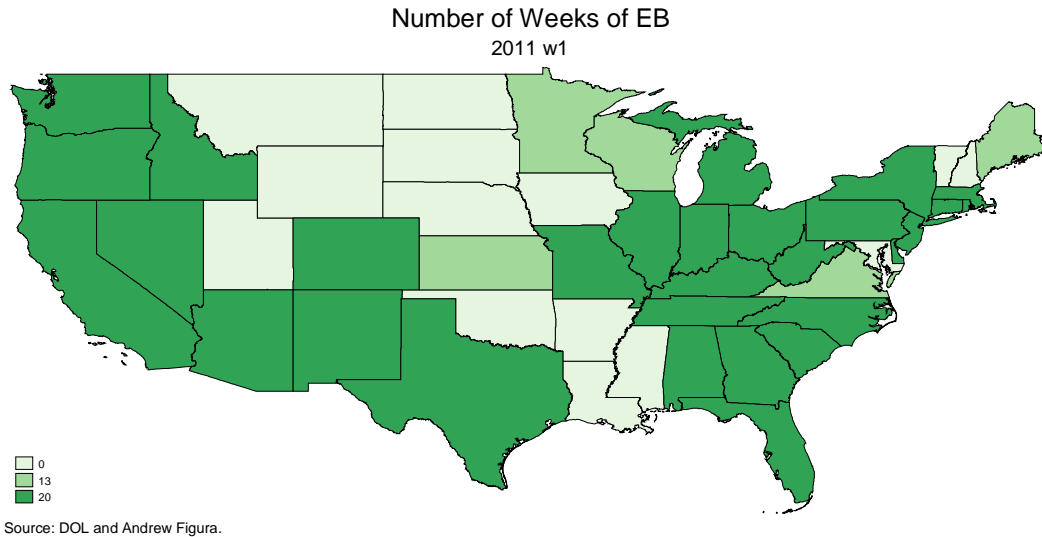
To identify the mobility effects of UI, we exploit differences in the rules governing the portability of different types of UI. Under standard UI, each state sets its own eligibility rules and benefit amounts, within federal guidelines. In addition to standard UI, a state can "trigger" two different programs during periods with weak labor markets: (1) Emergency Unemployment Compensation (EUC), a temporary provision enacted in response to the Great Recession; and (2) the Extended Benefits (EB) program, a permanent fixture of the UI system. Both of these

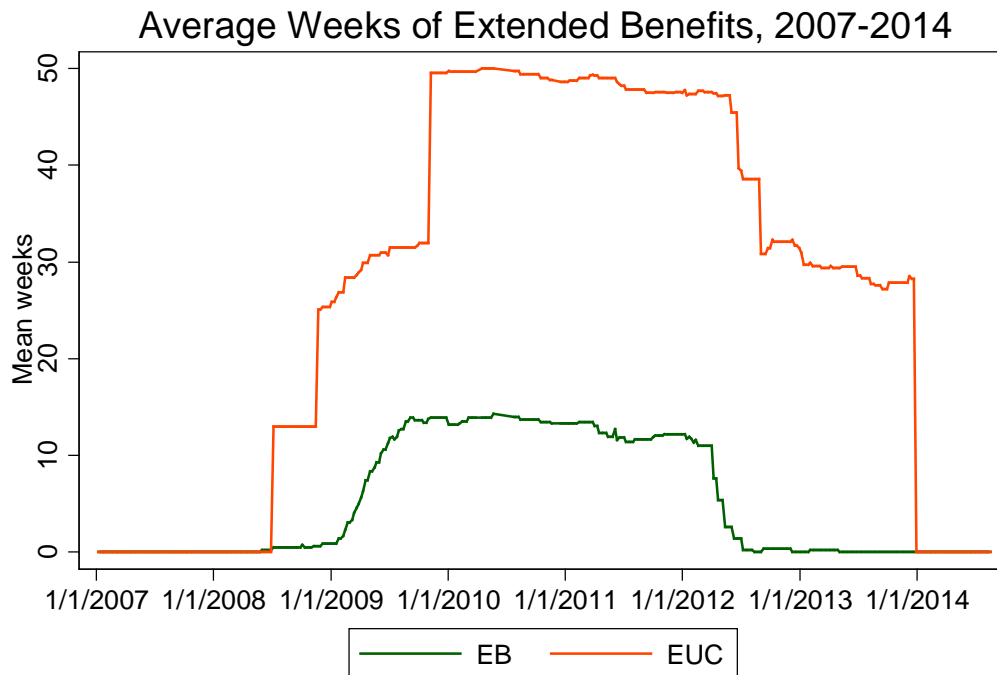
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<sup>1</sup> For example, Kawano and LaLumia (2014) find that between 1999 and 2012, UI compensates for approximately half of the annual wage income losses during unemployment.

<sup>2</sup> See Atkinson (1987) and Krueger and Meyer (2002) for reviews of the empirical work on the relationship between the generosity of UI programs and unemployment durations.

programs are based on some function of state unemployment rates, and provide unemployed individuals additional weeks of benefits after exhausting their standard UI. Standard UI and EUC benefits are tied only to a worker's initial state of employment: he can move to another state in search of employment and continue to receive the UI benefits to which he was originally eligible. In contrast, an individual's EB eligibility is tied to the EB status of *both* the origin and destination states. If an individual moves from a state with EB status to a state without EB status, then these benefits cease after two weeks. Crucially, EUC and EB provide benefits that are similar, but differ in their treatment of interstate migrants. To get a sense of the state variation in the policies, consider the following maps of maximum EB and EUC benefit weeks available at the start of 2011:





Source: DOL and Andrew Figura. Figure omits weeks in which EUC was only temporarily cancelled.

We will use data from the Internal Revenue Service’s Compliance Data Warehouse (CDW), which houses population-based tax returns and third-party information returns beginning in 1996. We will identify all UI recipients based on information returns filed by state unemployment agencies with the IRS.<sup>3</sup> We will link these unemployed individuals to their state of residence before and after their unemployment spell based on the addresses listed on their tax returns or their W-2s. Based on these data, we will then construct annual state-pair observations on gross migration for years 2007 through 2013 (the last year of data currently available).

In the ideal experiment, EB and EUC status would be randomly assigned to states and we could estimate the impact of UI on gross migration by comparing the change in gross migration across treated and untreated states. Of course, EB and EUC statuses are not randomly assigned, but instead are triggered by changes in a state’s unemployment rate.<sup>4</sup> Thus, the simple comparison of changes in gross migration patterns will be biased by differential trends across treated and untreated states. To estimate the effect of UI policy on mobility, we implicitly assume that gross migration between states in the absence of EB and EUC is a time-invariant,

<sup>3</sup> Kawano and LaLumia (2014) show that these information returns capture roughly 95% of UI payments. In contrast, Meyer, Mok and Sullivan (2009) show that only about 70% of UI payments are captured in survey data.

<sup>4</sup> EB depends on past and current unemployment rates, whereas EUC depends only on the current unemployment rate.

smooth function of both origin and destination states' unemployment rates. EUC benefit duration, by contrast, depends discontinuously on the origin state unemployment rate only. EB benefit duration, though somewhat more complicated, is also a discontinuous function of unemployment rates in the origin state. Crucially, both EUC and EB benefits are not chosen by states but are set according to a federal schedule.

We will estimate regressions of the following form:

$$M_t^{O \rightarrow D} = \beta_1(Addl\_Ben_t^O) + \beta_2[EB_t^O \times I(EB_t^D = 0)] + f(u_t^O, u_t^D) + \alpha^{O \rightarrow D} + \gamma_t + \varepsilon_t^{O \rightarrow D}$$

where  $M_t^{O \rightarrow D}$  is gross migration between an origin state ( $O$ ) and a destination state ( $D$ ),  $Addl\_Ben_t^O$  measures the extended benefits available in the origin state (i.e., the sum of EB and EUC),  $EB_t^O$  and  $EB_t^D$  are EB available in the origin and destination states, respectively,  $\alpha^{O \rightarrow D}$  are state-pair fixed effects,  $\gamma_t$  are year fixed effects, and  $f(u_t^O, u_t^D)$  is an Nth-order polynomial of origin and destination state unemployment rates.  $f(u_t^O, u_t^D)$  can be thought of as a running variable for this specification, in that it captures the background labor market conditions that affect migration in the absence of EUC or EB. The parameter  $\beta_1$  measures the impact of any extended benefits on gross mobility. If extended unemployment benefits serve as further disincentives for job search, then we would expect that  $\beta_1 < 0$ . Alternatively,  $\beta_1$  could be positive if the income from UI helps to finance interstate moves. The parameter  $\beta_2$  estimates the additional disincentive to move from EB to non-EB states because of the non-portability of benefits across state lines. Of course, this particular feature of the EB system or the allocation of EB states may not be salient to unemployed individuals. If this is the case, then  $\beta_2$  provides a weighted average of the disincentive effects, where the weights reflect the heterogeneity of understanding in the population.

This study will speak generally to the impacts of the UI system on worker mobility. Recently, researchers have been concerned that US worker mobility has been declining as labor markets become less flexible (e.g., Davis and Haltiwanger 2014). This mobility decline can have large negative consequences for job match quality and wages. Consequently, it is important to understand whether UI is a contributing or mitigating factor in this development.

The extent to which the particular features of the EB program disincentivize interstate moves is also an important question, and one that matters directly to the design of the UI system. In times of high national unemployment when EB is active, states are especially likely to vary in the strength of their labor markets. Migration from high- to low-unemployment states can hasten

labor market recoveries. As policymakers contemplate an overhaul of the UI system, understanding the limitations of this EB feature could lead to removing an unnecessary impediment to geographic mobility.

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