W.E. UPJOHN INSTITUTE
FOR EMPLOYMENT RESEARCH

Upjohn Institute Working Papers

2011

Benefit Payment Costs of Unemployment Insurance Modernization: Estimates Based on Kentucky Administrative Data

Christopher J. O'Leary
W.E. Upjohn Insitute

Upjohn Institute Working Paper No. 11-172

Benefit Payment Costs of Unemployment Insurance Modernization: Estimates Based on Kentucky Administrative Data

Upjohn Institute Working Paper 11-172

Christopher J. O'Leary
W.E. Upjohn Institute for Employment Research
e-mail: oleary@upjohn.org

January 2011

ABSTRACT

The American Recovery and Reinvestment Act (ARRA) of 2009 provided financial incentives for UI modernization. The financial incentive is the state share of $7 billion available nationwide. States can receive one-third of their allocation by having an alternate base period (ABP) for monetary determination of UI eligibility that includes the most recently completed calendar quarter. States can receive the remaining two-thirds of their allocation for having two of four additional program features: 1) UI eligibility while seeking only part-time work, 2) UI eligibility after job separations due to harassment or compelling family reasons, 3) continuation of UI benefits for at least 26 additional weeks after exhaustion of regular benefits while in approved training, and 4) dependents' allowances of at least $15 per dependent up to $50. This paper presents estimates of the UI benefit payment costs of these five program changes based on data from the Commonwealth of Kentucky. To date 39 states have received modernization payments for having an ABP, and 32 states have received the remaining two-thirds of funds available. The numbers of states adopting each of these additional features are as follows: 25 for seeking part-time, 18 for family reasons, 14 for exhaustee benefits while in training, and 7 for dependents' allowances. Estimates of the UI benefit payment costs for these features, based on Kentucky data, suggest a pattern of states choosing UI modernization features to minimize the expected benefit payment costs. However, for states broadening UI eligibility through modernization, UI benefit payment costs will be higher for any given level of unemployment. Liberalized eligibility rules must be balanced by structural financing enhancements to ensure long-term fiscal stability of the system.

JEL Classification Codes: J65, J68, H83

Key Words: unemployment insurance, UI, modernization, American Recovery and Reinvestment Act, benefit payments, Kentucky, administrative data, state expenditures

INTRODUCTION

The American Recovery and Reinvestment Act (ARRA) of 2009 provided financial incentives for states to adopt permanent changes to their unemployment insurance (UI) systems. This package of reforms has been called UI modernization. The financial incentive is the state's share of the $7 billion available nationwide, computed as the state's proportion of all federally taxable earnings in UI-covered employment.[1] The total allocation available to Kentucky under this initiative is $90.2 million.

States can receive one-third of their modernization allocation by having an alternate base period (ABP) for monetary determination of UI eligibility that includes the most recently completed calendar quarter. States can receive the remaining two-thirds of their allocation for having two of the following four additional program features: 1) UI eligibility while seeking only part-time work, 2) UI eligibility after job separations due to harassment or compelling family reasons, 3) continuation of UI benefits for at least 26 additional weeks after exhaustion of regular benefits while in approved training, and 4) dependents' allowances of at least $15 per dependent up to $50.

This paper presents estimates of the UI benefit payment costs of these five program changes based on data from the Commonwealth of Kentucky. To date, 39 states have received modernization payments for having an ABP, and 32 states have received the remaining two-thirds of funds available. The numbers of states adopting each of these additional features are as follows: 25 for seeking part-time, 18 for family reasons, 14 for exhaustee benefits while in training, and 7 for dependents' allowances. Estimates of the UI benefit payment costs for these

---

[1] Each state's share of the $7.0 billion is determined based on the state's proportionate share of Federal Unemployment Tax Act (FUTA) taxable wages in calendar year 2007. SOURCE: Section 903(d)(2)(A) of the Social Security Act (SSA), as added by the Temporary Extended Unemployment Compensation (TEUC) Act, and Section 903(a)(2), SSA.

features, based on Kentucky data, suggest a pattern of states choosing UI modernization features to minimize the expected benefit payment costs. However, for states broadening UI eligibility through modernization, UI benefit payment costs will be higher for any given level of unemployment. Liberalized eligibility rules must be balanced by structural financing enhancements to ensure the long-term fiscal stability of the system. Kentucky has not qualified for any UI modernization payments.

KENTUCKY DATA FOR ANALYSIS

Analysis of UI modernization was done with administrative data constituting a census in program administrative records. The sample included all applications for regular UI benefits with effective dates of claim from January 1, 2006, through June 30, 2009. There were 728,109 claims for regular UI benefits in Kentucky during these 14 calendar quarters (Table 1).[2]

From this total we deleted 120 records for persons who applied multiple times within the same calendar quarter. For each of these cases we retained only the first application in the quarter. We also deleted the second of back-to-back UI claims from exhaustees of their full UI benefit entitlement. These second claims were deleted because different monetary eligibility rules apply to the establishment of back-to-back claims following exhaustion of UI benefits. A total of 7,076 claims were deleted for such cases, yielding a sample of 720,913 for analysis. Beyond these administrative data, we also relied on case notes from 500 administrative hearings

---

[2] Data was extracted from Kentucky UI administrative systems in early August 2009. There are sufficient data to identify actual monetary eligibility for all applicants. Complete benefit-year payment data are available for more than 90 percent of the sample. Benefit-year UI payment information is censored for most claims in 2009 Q2 and some in 2009 Q1. We use the full sample for simulations both to maximize use of information and because our interest is in differences between SBP and ABP. With monetary eligibility rates distributed similarly across quarters, censoring of benefit payment data does not impact estimates of percentage changes in participants and costs.

involving appeals of UI eligibility. Additionally, we received staffing and turnover estimates from major federal military bases in Kentucky.

ALTERNATE BASE PERIOD

To qualify for an ABP modernization grant, states can choose one of two ABP options: 1) a base period that includes the most recently completed calendar quarter or 2) for applicants not eligible under a state's standard base period, monetary eligibility is determined using a base period including the most recently completed calendar quarter (PL 111-5, Section 2003). Under ARRA, $30.1 million would be paid to Kentucky for adopting an alternate base period (ABP) for monetary determination of UI eligibility. This section summarizes the complete ABP analysis for Kentucky presented in O'Leary (2009a).

Monetary Eligibility for UI in Kentucky

Monetary eligibility for UI in Kentucky requires four conditions to be met: 1) at least $750 earned in the high quarter of the base period, 2) total base period earnings of at least 1.5 times the earnings in the high quarter, 3) at least $750 in earnings outside the high quarter, and 4) earnings in the two most recent quarters of the base period of at least eight times the UI weekly benefit amount (WBA). The WBA is computed as 0.013078 multiplied by base period earnings rounded to the nearest whole dollar. The UI base period is the first four of the five most recently completed calendar quarters. For back-to-back benefit years, a UI applicant must have earnings for the last two quarters of the base period of the second claim of at least eight times the WBA. For 2009 the minimum WBA is $39 and the maximum $415.[3]

---

[3] Kentucky is one of six states using an annual wage formula for the WBA; the others are Arkansas, Montana, New Hampshire, Oregon, and West Virginia. The minimum WBA has been $39 since at least 2001. The maximum was $365 in 2006, $401 in 2007, and was raised to $415 in 2008.

Estimating Kentucky's ABP Costs

For the sample of 720,913 Kentucky UI applications there were 654,838 actual monetarily eligible claims for UI benefits, meaning a rate of 90.83 percent. To simulate the ABP options we first validate that our computation for monetary eligibility is correct. Applying the Standard Base Period (SBP) formula to the quarterly earnings records stored by Kentucky Office of Employment and Training (OET) yields 654,851 claims simulated as monetarily eligible under the SBP, for a rate of 90.84. The simulation wrongly classified only 13 UI applicants out of 720,913. This is an extremely high level of concordance between the simulation and the actual decisions. In some cases wages might be added or removed in the monetary determination process, with such changes not recorded in the quarterly wage records.

Validation of the simulation for the SBP is important for estimating the costs of ABP implementation since we compare the simulated SBP with the ABP. The simulations classify monetary eligibility and compute an estimate of the WBA. Both the SBP and the ABP simulations rely on the full-time equivalent weeks of UI benefit receipt (compensation received in the benefit year divided by WBA) and the actual beneficiary rates observed for UI applicants in the data.

Not everyone who is monetarily eligible draws UI benefits. Some might not satisfy nonmonetary eligibility rules regarding conditions of their job separation, such as those who quit their jobs or were justifiably discharged by their employers. In our analysis, the beneficiary rate is the fraction of monetarily eligible applicants who receive benefits. We separate the monetarily eligible sample into WBA groups and figure the beneficiary rate for each dollar increment of the WBA. We array the sample in WBA groups from $39 to $415 and list the mean beneficiary rate and mean observed duration of benefit receipt for each group. These means are based on the actual experience of monetarily eligible UI claimants at each WBA level. The UI benefit

payment estimate for each WBA group is the product of the number of monetarily eligible claims, the WBA, the beneficiary rate, and the mean observed duration of benefit receipt for each WBA group.

It is important to note the change over time in the volume of UI claims, listed in Table 1. The table shows that 176,522 UI applications were filed in 2007 from Quarter 1 through Quarter 4, which was a normal year for UI claims in Kentucky. For the 12-month recession period from 2008Q3 through 2009Q2, a total of 283,217 UI claims were filed—a 60 percent higher UI application rate.

Option A: The ABP is applied to all applications

The simulation of the SBP on the initial sample of 720,913 Kentucky UI applications yielded 654,851 claims that are monetarily eligible, for a rate of 90.84 percent. Option A for the ABP requires that monetary eligibility for all applicants be determined based on earnings in the four most recently completed calendar quarters. Results from the Option A simulation for the ABP are summarized in Table 2, which reports monetary eligibility for 660,718 of the 720,913 claims for UI benefits. That rate is 0.90 percent higher than under the SBP. However, not everyone who is monetarily eligible under the SBP is also monetarily eligible under the ABP. Applying the ABP alone, instead of after the SBP as in Option B, excludes 12,616 applicants that were monetarily eligible under the SBP. The ABP allows eligibility for 24,246 applicants that were not monetarily eligible under the SBP. Of these, 5,763 claims had already been paid under the SBP after reapplication at a later date. Thus, the actual number of new monetarily eligible claims under the ABP would be 18,483. In addition to the potential costs associated with the newly monetarily eligible group, the likely costs associated with those previously eligible under the SBP change under the ABP.

5

A total of 642,235 applicants in the sample are monetarily eligible under either the SBP or the ABP. Simulations suggest that among those who would be monetarily eligible under either the SBP or the ABP, the average WBAs, beneficiary rates, and duration of UI benefit receipt would change. A subgroup of 251,654, or 39 percent, would qualify for the same WBA under either the ABP or the SBP, so we simulate no change in the cost associated with payment of these claims (Table 3). These applicants have an average WBA of $398, a beneficiary rate of 88.4 percent (as a percentage of monetarily eligible applicants), and an average UI duration of 11.1 weeks. Another 237,030, or 37 percent, would have a higher WBA under the ABP than the SBP, resulting in an increased cost of $86.2 million in our sample. On average, for these UI claimants the average WBA increases from $241 to $269, their beneficiary rate increases from 76.7 to 79.0 percent, and their average UI duration increases from 12.3 to 12.5 weeks. The final subgroup of 153,551, or 24 percent, who qualify under both the SBP and the ABP would have a lower average WBA under the ABP than the SBP, resulting in a cost decrease of $31.6 million. Their average WBA falls from $282 to $259, their beneficiary rate falls from 79.3 to 78.2 percent, and their average UI duration falls from 13.1 to 12.6 weeks. The net cost of switching from the SBP to the ABP for the 642,235 monetarily eligible applicants under either regime is $31.6 million, resulting from an average WBA that increased from $312 to $317, a beneficiary rate that increased from 81.9 to 82.5 percent, and an average duration of receipt that was unchanged at 12.0 weeks.

Among all applicants, 660,718 would be monetarily eligible under the ABP, including 18,483 who would be monetarily eligible only under the ABP and not under the SBP. In our computations, the figure of 18,483 results from an additional 24,246 simulated to be monetarily eligible minus 5,763 who are already paid under the SBP because they reapply after initially

being denied. Their second claim is eligible under the SBP, and their first claim would have been eligible under the ABP. Our simulation on this sample suggests that the UI beneficiary rate for the whole group of 24,246 would be 67.6 percent, the average WBA would be $156, and the average duration of UI benefit receipt would be12.8 weeks. The cost of UI benefit payments to this group would be $35.3 million. From this amount we subtract $12.1 million, which is the cost already paid to the 5,763 who become monetarily eligible after reapplication. Thus, the 18,483 brought into monetary eligibility end up costing $23.2 million.

Compared to the SBP, the additional cost of the ABP under Option A is estimated to be $30.7 million. It is the sum of the increased cost of paying benefits to those already monetarily eligible under the SBP of $7.5 million, plus the increased cost of paying UI to those newly monetarily eligible under the ABP of $23.2 million. Recall that all these figures were computed over data covering three-and-one-half years, from 2006Q1 through 2009Q2. At the rate of simulated monetarily eligible UI benefit claims in calendar year 2007—chosen to represent normal economic times—payments for ABP under Option A would be $8.8 million in a normal year. At the rate of simulated monetarily eligible UI benefit claims in the four calendar quarters from 2008Q3 through 2009Q2—chosen to represent a recession year—payments for ABP under Option A would be $12.1 million.[4]

---

[4] The Kentucky data on all UI benefit claims between January 1, 2006 and June 30, 2009, include four calendar quarters of recession-level data (2008Q3 through 2009Q2) and 10 calendar quarters of data from times of more normal labor markets (2006Q1 through 2008Q2). Dividing total claims in these 14 calendar quarters by 3.5 yields a simple annual average claims rate. However, this average is a blend of claims rates in times of both normal and recessionary labor markets. That is, total claims, T, are composed of 2.5 years at the level of normal claims, N, plus 1 year at the level of recession claims, R, or $T = 2.5 * N + R$. The ratio of recession to normal UI claims is $r = R/N$. To partially represent the UI eligibility process, which can vary with labor market conditions, the ratio for our Kentucky data, based on simulated monetarily eligible UI claims, is $r = R/N = (260,261 / 159,509)$. Rearranging this, we have $N = R/r$. Therefore, substituting, we have $T = 2.5 * R/r + R$, and solving for R yields $R = T / ((2.5/r) + 1)$. Assuming that total costs, TC, change in proportion to total simulated monetarily eligible claims, from our ABP incremental cost estimates we can solve for annual recession UI benefit payment costs, RC, as $RC = TC / ((2.5/r)+1)$, and for normal annual UI benefit payment costs, NC, as $NC = RC/r$.

The ARRA would grant Kentucky $30.1 million for adopting ABP. Under Option A this would yield approximately 4.0 years of ABP-related UI payments in normal economic times and 2.5 years of such payments during times of severe-recession labor markets.

Option B: The ABP is applied only to those not monetarily eligible under the SBP

A simulation of monetary eligibility under the SBP on the initial sample of 720,913 Kentucky UI applicants yields 654,851 monetarily eligible claims, for a rate of 90.84 percent. We then consider the 9.16 percent of the sample not monetarily eligible under the SBP.

Among the 66,062 not monetarily eligible under the SBP, there are 24,245 that would be eligible under the ABP. This number is 3.36 percent of the initial sample of applicants. However, when considering the additional cost to the Kentucky UI system, we must recognize that some people filed more than one application for UI in this period. Indeed, it is the case that 5,763 claimants who were not monetarily eligible under the SBP reapplied a short time later and had their second claim accepted as being monetarily eligible because earnings in a more recent calendar quarter were considered at the later date. By their reapplication, these claimants essentially applied an ABP and were paid benefits. If an ABP is adopted in Kentucky, UI payments to such claimants do not result in additional costs to the system. Removing these claimants from the simulated number of additional monetarily eligible claimants under ABP yields a total of 18,483 new monetarily eligible claimants who are potential beneficiaries. That is, the ABP under Option B would increase the proportion of monetarily eligible UI applicants by 2.82 percent, to 673,334.

Those not eligible under the SBP who become eligible under the ABP tend to have lower average earnings, and therefore a lower average WBA, than those eligible under the SBP (Table 3). So while Option B increases the number of monetarily eligible UI claims by 2.82 percentage

8

points, the percentage increase in the cost of paying UI to this additional group is lower. In addition to having a lower average WBA, some of the applicants who qualify under an ABP fail to satisfy nonmonetary eligibility rules for job separations. That is, the beneficiary rate for those who qualify under the ABP is less than 100 percent.

For the incremental sample of persons found eligible under an ABP scenario, the WBA is calculated. Since we cannot know who would have ultimately become a beneficiary, nor the duration of UI benefits received, the actual, observed beneficiary rate and UI duration of persons in the comparison group who had comparably calculated weekly benefit amounts is used.[5]

To compute the cost of the increased monetary eligibility resulting from the ABP, we array the sample of 18,483 by WBA from $39 to $415 and multiply the mean observed beneficiary rates and benefit durations times the number of observations and the WBA amount. We total these results across all WBAs, yielding an estimate of the incremental cost of adding the ABP for those without sufficient earnings in the SBP.

The cost of Option B for implementing an ABP is estimated to be $23.2 million, or an increase of 1.17 percent in regular UI benefit payment costs above the cost for paying benefits under the SBP. Over the 14 calendar quarters from 2006Q1 through 2009Q2, the average annual cost is estimated to be $6.6 million per year. At the rate of UI benefit payments in calendar year 2007, representing normal economic times, payments for the ABP under Option B would be $5.6 million. Letting benefit payments in the four calendar quarters from 2008Q3 through 2009Q2

---

[5] Among the claimants eligible under the Kentucky SBP, 99.2 percent had calculated WBAs based on Kentucky UI law and the wage record data that matched the actual WBA used for paying benefits. Since wages may be added or removed in the monetary determination process without such changes being entered into the quarterly wage records, only a small fraction of persons show a difference between calculated and actual weekly benefit amounts. Because it is not possible to know such differences for persons simulated to be eligible under the ABP, the calculated WBA is used throughout the entire analysis. The exception to this is for the calculation of UI duration, which is defined as actual UI compensation received divided by actual WBA in the SBP-eligible sample.

represent annual benefit payments during periods of recessionary labor markets, payments for Option B's ABP would be $9.2 million.

The ARRA would grant Kentucky $30.1 million for adopting the ABP. Under Option B this would yield approximately 5.4 years of ABP-related UI payments in normal economic times and 3.3 years of such payments during times of severe-recession labor markets.

Prior Estimates of ABP Costs

Before ARRA, 20 states had ABP rules for UI (GAO 2007, p. 21). To date, 39 states have approved ABP rules to receive the first one-third allocation of UI modernization funds. Vroman (1995, p. 138) estimates the effects of ABP Option B using claimant-level administrative data from three of the six states with ABP rules in 1994 (Table 4). He analyzes data from Maine, Vermont, and Washington.[6] Vroman estimates that ABP Option B would increase beneficiaries by between 5.5 and 12.5 percent, and that total UI benefit payments would increase by between 3.8 and 9.6 percent. Planmatics (1997, p. 127) estimates that based on simulations of switching from the SBP (the first four of the previous five completed quarters) to ABP Option A (the most recent four completed quarters) in Massachusetts, New Jersey, Ohio, Vermont, and Washington would increase estimated benefit payment costs by between 4.2 and 5.8 percentage points. Using Survey of Income and Program Participation data, Stettner, Boushey, and Wenger (2005, p. 3) estimate that overall UI monetary eligibility would have increased by 7.2 percent in 2003 if all states had implemented the ABP's Option B. In states that have implemented the ABP, between 2.1 and 6.5 percent of all eligible claims used the ABP. ABP-eligible claims only represent 1.1 to 5.2 percent of all UI payouts in these states, because ABP claimants qualify for far less in UI benefits.

---

[6] Massachusetts, Ohio, and Rhode Island also had ABP provisions in 1994.

Summary of ABP

Among the 39 states that since the ARRA's passage have received the first 1/3 of funds from the modernization grant for having an ABP in their UI programs, all have systems that operate like Option B for their ABP. Of these, 19 states already had ABP statutes (USDOL, 2010). Adopting Option B for the ABP is estimated to increase Kentucky's UI benefit payment costs by 1.17 percent and to increase the rate of monetary eligibility among applicants by 2.82 percent. At the rate of UI benefit payments in normal economic times, additional UI payments for ABP under Option B would be $5.6 million per year. At recession rates, benefit payments for ABP Option B would be $9.2 million per year.[7] The $30.1 million ARRA grant for adopting the ABP under Option B would yield approximately 5.4 years of ABP-related UI payments in normal economic times and 3.3 years of such payments during times of recessionary labor markets. The Kentucky Office of Employment and Training (OET) estimates additional administrative costs of $259,000 annually for ABP Option B.

This cost estimate of 1.17 percent for Kentucky under ABP Option B is much smaller than previous estimates, which were in the range of 5.5 to 12.5 percent for other states. These differences can be partly explained by the differing time frames and samples used for the studies, but removing refiled claims is an important adjustment. One element of an ABP not simulated in this analysis is the possibility of an *entry effect* due to the availability of an ABP. The entry effect is the percentage increase in applications resulting from knowledge in the general population of all unemployed that UI eligibility is determined based on more recent earnings. An

---

[7] Analysis based on Kentucky UI claims from January 1, 2006, through June 30, 2009. Recession and normal years of UI benefit payments are imputed from the ratio of UI claims simulated to be monetarily eligible during four calendar quarters of the recession period (2008Q3 through 2009Q2) and during a prerecession year (2007Q1 to 2007Q4).

entry effect could increase UI benefit costs by about 0.61 percent.[8] An entry effect of this size

implies UI benefit payments would rise after implementing an ABP under Option A by 2.16

percent and under Option B by 1.78 percent.

ELIGIBILITY WHILE SEEKING ONLY PART-TIME WORK

Beyond the ABP, one of the four UI modernization features states may adopt to qualify

for an incentive payment is to permit eligibility while a UI applicant is seeking only part-time

work. This section summarizes the complete analysis for Kentucky of the UI benefit payment

costs for Kentucky of adopting such a program change, as presented in O'Leary and Kline

(2009). Regarding this program change, the ARRA specifies the following:

> An individual shall not be denied regular unemployment compensation under any State law provisions relating to availability for work, active search for work, or refusal to accept work, solely because such individual is seeking only part-time work (as defined by the Secretary of Labor), except that the State law provisions carrying out this subparagraph may exclude an individual if a majority of the weeks of work in such individual's base period do not include part-time work (as so defined).   (PL 111-5, 2003 [3][A])

For purposes of the incentive payment, the Labor Department defines "seeking only part-

time work" as meeting any one of the following situations (UI Program Letter 14-09, Small

2009, Attachment III, pp. 1–2):

- Situations where the individual is willing to work at least 20 hours per week.

- Situations where the individual is available for a number of hours per

---

[8] The entry effect can be assumed to most affect decisions by those with earnings close to the monetary eligibility threshold. In data on three-and-one-half years of UI applications, we found that 0.8 percent of applications involved claims by persons with insufficient earnings under the SBP who reapplied a short time later and gained eligibility based on more recent earnings. This rate may be considered a reasonable estimate of the entry effect. Furthermore, this potential entry group has lower average earnings and WBAs than those who qualify under the SBP, so the cost per monetarily eligible applicant would be lower for this group. Based on these assumptions, the annual cost of an entry effect could be about 0.61 percent of UI benefit costs, or approximately $2.9 million per year in normal economic times and $4.8 million per year in recession periods (O'Leary 2009a).

week that are comparable to the individual's part-time work experience in the base period. For example, if the individual worked 16 hours per week in the base period, the state may require the individual to seek jobs offering at least 16 hours of work. If the individual worked 32 hours per week, the state may require the individual to seek jobs offering at least 32 hours of work.

- Situations where the individual is available for hours that are comparable to the individual's work at the time of the most recent separation from employment. That is similar to the preceding definition except that it allows the state to take into account periods between the end of the base period and the filing of the first claim for UC.

The Department will approve a state's application if the state uses any one of the above definitions. The state may also use a combination of these definitions. For example, a state may define part-time work as having comparable hours to the individual's work in the base period, except that an individual must be available for at least 20 hours of work per week.

A state may also have a broader definition of part-time work. For example, the state may require the individual to be available for only 10 or more hours per week. Of course, the state may not allow the individual to limit his or her availability to the extent that it constitutes a withdrawal from the labor market. (*See* 20 CFR 604.5(A)(1).)

Research Plan for Part-Time Job Seeking

The plan for measuring the effects of permitting UI eligibility while seeking only part-time work relies on the quarterly wage records for UI applicants. These records include data on the quarterly earnings for every person working in the state and the employer identity numbers for the employers paying those earnings. For each employer, the North American Industry Coding System (NAICS) code is also given. We examine earnings in the standard base period for each UI claimant. To avoid biases due to periods of joblessness, we focus on the base period quarter with the highest total earnings.[9] Our research strategy is to infer the weekly earnings of each UI claimant and compare these to industry average weekly earnings to judge whether the

---

[9] For workers with multiple employers in a quarter, we select the industry of the employer paying the most wages in that quarter.

claimant usually works full-time or part-time. We estimate average earnings by industry using a method we call the "weekly wage method."[10]

The available data for Kentucky includes wage records on all UI-covered employment from the fourth quarter of 2003 through the fourth quarter of 2008. For each UI beneficiary, we start with earnings in the high quarter of the base period, then divide that total by 13 weeks, yielding estimated weekly earnings. If these earnings estimates are less than 55 percent of industry average weekly earnings as reported in the Quarterly Census of Employment and Wages (QCEW), we tag individuals as usually working part-time.[11]

Based on these results, we identify UI claims that may have been denied because of job seeking limited to part-time work, then we estimate the cost of paying UI to such denied applicants. This estimate will be the minimum cost to the system of broadening eligibility to part-time job seekers. Additional costs could result from a higher rate of UI applications stemming from an "entry effect" to UI application by unemployed persons who previously would not have applied since they believe they would not have been entitled to benefits.

Weekly Wage Method for Estimating Part-Time Job Seeking

The QCEW contains statewide and county-based quarterly data on the average weekly wage (AWW) by NAICS industry code for Kentucky.[12] For each employer reporting payments in the UI quarterly wage records, the employer county location is identified by a Federal

---

[10] O'Leary and Kline (2009) also report results for a method they call the "hourly wage method," which relies on occupational wage data within industry groups.

[11] O'Leary and Kline (2009) in their Table 6 report estimates based on part-time earnings as 50, 55, and 60 percent of the average weekly wage (AWW). Results presented in this paper are based on 55 percent of the AWW since they conform most closely with results from the hourly wage method.

[12] The Quarterly Census of Employment and Wages (QCEW) program publishes a quarterly count of employment and wages for employers covering 98 percent of U.S. jobs, available at the county, MSA, state, and national levels by industry (BLS 2009). Counties are identified by the five-digit Federal Information Processing Standard (FIPS) county code.

Information Processing Standard (FIPS) code and a NAICS industry code. However, because of data quality checks and data suppression to prevent identification of firms, the QCEW does not report average weekly wage estimates for all county and six-digit NAICS combinations. Some counties might include only one or two enterprises in a six-digit industry, thereby making confidentiality impossible if the estimates were to be released. The QCEW reports wage estimates for a higher proportion of county/industry groups at higher levels of NAICS code aggregation. Naturally, average weekly wage estimates are provided by the QCEW for an even higher fraction of industry groups at the statewide level.

At the finest level of detail, 51 percent of the QCEW average weekly wage records were successfully matched to six-digit NAICS codes in the quarterly wage records by county, year, and calendar quarter. The remaining records were successfully matched using different levels of aggregation in the remaining QCEW data. The following methods, in order of highest to lowest priority, were used to complete the matching process (the percentage of all records matched using that method is shown in parentheses): 1) AWW at the five-digit NAICS level by county, year, and calendar quarter (5.0 percent); 2) AWW at the six-digit level using statewide estimates for the year and quarter (29.9 percent); 3) AWW at the five-digit level of detail using statewide estimates for the year and quarter (3.1 percent); 4) AWW at the four-digit NAICS level for the county, year, and quarter (0.4 percent); and 5) AWW for the four-digit NAICS level using statewide estimates for the year and quarter (1.6 percent). The result of this process was an overall match success rate of 91.6 percent (38.7 million out of 42.2 million records).

With QCEW average weekly wage estimates having been matched with the quarterly wage records, the final step was to define part-time employment. The definition used was based on wages reported for an individual as a percentage of the QCEW average weekly wage. We

15

defined someone as being employed part-time if his or her total wages as reported for a quarter, divided by 13, were less than 55 percent of the average weekly wage for that worker's industry of employment.[13] Over the entire interval of available quarterly wage records, the weekly wage methodology suggests that 32.8 percent were employed on a part-time basis. Estimated average weekly earnings based on actual quarterly wage records were $190 for the part-time employed compared with $848 for those employed on a full-time basis.

Entry Effects for Part-time Job Seeking

In estimating the cost of a UI program change, we should consider the possible additional cost of paying UI benefits to unemployed job seekers who do not apply for benefits under current eligibility conditions, but might apply if rules are changed. Among all people eligible for UI benefits after involuntary job loss, only about two-thirds apply for and receive cash benefits (Blank and Card 1991). This proportion is called the program take-up rate. This rate tends to increase with the aggregate level of unemployment in the labor market, and it might be further increased by the availability of extended unemployment compensation.

As guidance for estimating increases in the UI take-up rate, we consider the estimates of possible "entry effects" associated with experimental evaluation of UI reemployment bonuses (Davidson and Woodbury 2001, pp. 191–195). Moffitt (1992, p. 250) argues that estimation of entry effects is best done with observational administrative data–contrasting situations, comparing places where a program feature operates against places where it does not. Based on evidence from the UI bonus field experiments, Meyer (1995, p. 109) estimates that the availability of a cash reemployment bonus about 3.5 times the average weekly benefit amount

---

[13] For individuals employed by multiple employers in a quarter across multiple industries, the overall QCEW average weekly wage, used to define part-time employment, is a weighted sum of the average weekly wages for the individual industries. Wages reported for the individual for an industry as a share of total wages reported serve as weights. The weights sum to 1.0.

would induce an additional 7 to 12 percent of UI-eligible unemployed job seekers to apply for benefits. Davidson and Woodbury (2001, p. 191) assert that "workers who claimed UI benefits in response to the bonus would generally be workers with short expected durations of unemployment for whom the advantages of claiming benefits were previously not enough to outweigh the costs."

Broadening eligibility to permit UI benefit payments to applicants willing to accept only part-time reemployment may draw in some additional applicants, but unemployment rates tend to be lower among regular part-time workers. During the recent recession, from September 2008 to September 2009, while the total unemployment rose from 6.2 to 9.8 percent, the unemployment rate among full-time workers rose from 6.3 to 10.7 percent, and the rate among part-time workers rose from 5.9 to 6.4 percent. Indeed, many who normally work full-time remained employed by reluctantly accepting part-time work during the recession (BLS 2008a, p. 1). A conservative estimate of increased UI benefit payment costs associated with an entry effect would be to double the added costs associated with paying part-time workers already applying for, but not receiving, UI benefits.

Costs of Paying UI to Part-time Job Seekers

The two key aspects of UI eligibility are 1) monetary—having sufficient prior earnings to demonstrate strong labor force attachment—and 2) nonmonetary—job separation was not the result of a voluntary quit or employer discharge for cause. Estimates of the effects of eligibility for part-time job-seeking on UI monetary, nonmonetary, and beneficiary rates among current UI applicants are summarized in Table 5 based on UI applicants from January 2006 through July 2009. The overall estimated initial UI eligibility rate is 46.5 percent. It is possible to qualify and receive UI benefits even if a claimant is not monetarily and nonmonetarily eligible. The

17

beneficiary rates are estimated to be 0.568. Among those simulated to satisfy both eligibility conditions, the nonbeneficiary percentage is 5.2 percent. This is the core estimate for computing the likely cost of liberalizing eligibility to permit part-time job-seeking.

For the group of likely part-time job seekers eligible for UI but not receiving benefits, Table 5 also summarizes the estimated percentage cost increase to Kentucky for paying benefits. The table presents estimates suggesting that the UI weekly benefit amount (WBA) for eligible UI applicants seeking part-time work is likely to be significantly lower than for other eligible UI applicants. Assuming the benefit duration for current beneficiaries who normally work part-time, we estimate that 9.1 percent of benefit payments are made to such workers and that liberalizing the job-seeking rule would increase UI benefit payment costs by about 0.6 percent. For example, based on parameter estimates, we multiply the number of part-time UI applicants (109,689) times the proportion of those eligible but not beneficiaries (0.052), times the average WBA for eligible nonbeneficiaries ($135), by the mean duration in weeks for part-timers who actually receive UI benefits (13.4). Dividing this result by total UI benefits paid yields the additional cost in percentage terms of paying UI to applicants who are part-time job seekers.[14]

Based on Kentucky UI benefit payouts in recent years, Table 6 presents the estimated annualized increase in UI benefit payments to part-time job seekers as $2.6 million in nonrecession years (such as 2006) and $5.1 million in a yearlong recession period (such as 2008Q2 through 2009Q1).[15] Allowing for an entry effect that doubles costs for part-timers, estimates for additional benefit payments are $5.2 million in years with normal labor markets and $10.2 million in years with recession labor markets.

---

[14] For this computation UI benefit payments total $1,893,839,913. This is based on UI claims from 2006Q1 to 2009Q2, with quarterly wage records successfully matched to an industry weekly wage rate by the method described above.

[15] While we have claims data for 2009Q2, the benefit year payment data for new applications in this quarter are incomplete. The data were extracted from administrative records in July 2009.

Summary of Part-Time

Of the 32 states qualifying for full UI modernization grants, 25 permit UI eligibility if job search is limited to only part-time work. These states are Arkansas, Colorado, Delaware, the District of Columbia, Georgia, Hawaii, Idaho, Iowa, Kansas, Maine, Maryland, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Oklahoma, South Carolina, South Dakota, Tennessee, and the Virgin Islands.[16] Among these, 4 states previously had permitted part-time job search by statute, 18 changed their laws, 1 changed regulations, and 2 changed administrative procedures (USDOL 2010).

For the group of likely part-time job seekers eligible for UI but not receiving benefits, liberalizing the job-seeking rule would increase UI benefit payment costs by about 0.6 percent. Based on Kentucky UI benefit payouts in recent years, the estimated increase in UI benefit payment costs to part-time job seekers is $2.6 million in nonrecession years (such as 2006) and $5.1 million in a yearlong recession period (such as 2008Q2 through 2009Q1). Allowing for the likelihood that some of the unemployed non-UI applicants who are seeking only part-time work will apply for UI if the law is changed—an entry effect—the cost estimates for additional benefit payments are $5.2 million in years with normal labor markets and $10.2 million in years with recession labor markets. These results suggest that one-third of the total UI modernization grant to Kentucky would finance about five years of benefits during times of normal labor markets and three years of benefits during recessions.

---

[16] For purposes of this study the District of Columbia and the Virgin Islands are counted as states.

COMPELLING FAMILY REASONS FOR JOB SEPARATION

One of the options for UI modernization offered to states under ARRA is permitting

eligibility for job separations resulting from compelling family reasons. This section summarizes

the complete analysis of eligibility for compelling family reasons done for Kentucky and

presented in O'Leary (2009c). Under current rules, such family reasons for a job quit or

employer discharge often result in denial of benefits. The particular issues identified by ARRA

relate to circumstances involving domestic violence, illness of an immediate family member, and

moving to stay with a spouse. To qualify for a UI modernization payment by this feature, the law

specifically states the following, in PL 111-5, 2003 (3)(B):

> An individual shall not be disqualified from regular unemployment compensation
> for separating from employment if that separation is for any compelling family
> reason. For purposes of this subparagraph, the term 'compelling family reason'
> means the following:
>
>> (i) Domestic violence, verified by such reasonable and confidential
>> documentation as the State law may require, which causes the
>> individual reasonably to believe that such individual's continued
>> employment would jeopardize the safety of the individual or of any
>> member of the individual's immediate family (as defined by the
>> Secretary of Labor).
>>
>> (ii) The illness or disability of a member of the individual's
>> immediate family (as those terms are defined by the Secretary of
>> Labor).
>>
>> (iii) The need for the individual to accompany such individual's
>> spouse—
>>
>> (I) to a place from which it is impractical for such individual to
>> commute; and
>>
>> (II) due to a change in location of the spouse's employment.

Research Plan for Compelling Family Reasons

Our analysis of extending definitions of good cause quits and wrongful employer discharges to include compelling family reasons defined in ARRA relied on a review of case notes from a sample of UI appeals decisions after employer protests of claims for benefits. The sample for analysis was drawn by stratified random sampling. Among several approaches to this question, the case notes provided the most reliable evidence on the rate of compelling family reasons among UI eligibility appeals.[17]

Review of Appeals Decision Case Records

Employers may protest UI claims resulting from job separations other than layoff (lack of work) or standby (awaiting employer recall). In particular employers can protest voluntary quits and claims following employer discharge. Justifiable discharges occur when the employer can document circumstances such as tardiness, absences, misconduct, or inadequate job performance. Just as employers can protest claims, claimants can appeal protests. Appeals are decided by an Office of Employment and Training (OET) hearing officer and case notes are retained. Reasons that are compelling family issues causing quits or discharges might be recorded in the case notes.

Together with the OET we undertook examination of case notes from 500 appeals after quits or discharges were protested by employers. The sample size of 500 balanced the considerations of time availability and statistical adequacy. This is only one of several UI modernization questions investigated, and 500 is the mean sample size chosen by the U.S. Department of Labor program of random audits for Benefits Accuracy Measurement (BAM). The range of BAM state samples is 400 to 600, varying directly with the state population.

---

[17] O'Leary (2009c) also reports evidence from administrative appeals data, permanent change of station figures for Kentucky military bases, and job loss among cases documented by the Kentucky Domestic Violence Association.

Sample selection process

The Kentucky OET provided the Upjohn Institute with a list of 51,176 UI claims having a date of quit or discharge determination between August 1, 2008, and July 31, 2009. This complete list suggests that about 18.1 percent of all claims for regular UI benefits are appealed by claimants. The list of appeals includes 4,504 interstate claims and 46,672 Kentucky UI claims (Table 7).

To analyze the impact of compelling family reasons, interstate claims are particularly important because of the higher-than-average expected rates of trailing spouses who might experience reemployment problems. To structure the sampling frame for selection, we removed interstate claims by regular commuters to Kentucky from across state lines. These areas include places like the Cincinnati, Ohio metro area north of Covington; and southern Indiana counties north of Louisville.[18] This process resulted in 1,546 interstate appeals, or 34.3 percent of the original interstate appeals sample. Of the 46,672 claims from Kentucky residents on the list of appeals, 44,677 were associated with a quit or discharge stop reason.[19]

The combined interstate (1,546) and Kentucky (44,677) claims provided a pool of 46,223 from which to draw a sample of 500 for reviewing appeals case notes. Given the interstate and Kentucky composition of the pool, a random sample of 500 would result in a sample that included 17 interstate claims and 483 Kentucky claims. Since trailing spouses are expected to be a relatively larger share of interstate claims than of Kentucky claims, we decided on a stratified random sampling plan with oversampling from the interstate list. The OET had already reviewed

---

[18] From the interstate claims in each of the neighboring states—Ohio, Indiana, Illinois, Tennessee, Virginia, and West Virginia—the number of claims by county was calculated and then sorted in descending order (highest-to-lowest frequency). Within each state, claims associated with the top 25 percent of counties were excluded as being areas from which regular commuting to Kentucky is possible. Any ties between two or more counties at the cutoff point were broken randomly.

[19] Excluding duplicate SSNs left 46,267 appeals. Two of these appeals were not in the applications data. Of the 46,265 claims remaining, 46,218 (99.9 percent) were associated with a Kentucky county and not an out-of-state FIPS code. Finally, 1,541 were excluded for not having a quit or discharge listed as the job separation reason.

notes on about 52 appeals. Of these, 45 were found in the list provided. The 45 included 11

interstate and 34 Kentucky claims. To minimize the burden of reviewing case notes, we accepted

the results of the 45 previously reviewed cases and focused on selecting a supplementary sample

to yield 500 cases in total.

The remaining sample to be chosen was 455. Since there are three categories of

compelling family issues (domestic violence, trailing spouse, and family member illness), with

the expectation of capturing at least half of the trailing spouse observations from the interstate

population, we decided that 75 cases should come from the interstate claims and 425 from the

Kentucky claims. There would be a little over 150 observations for each of the three issues, with

the interstate population oversampled since it was expected to yield more trailing spouse cases.

The random draw for the supplementary sample yielded 64 interstate claims and 391

claims from Kentucky residents. The 11 interstate claims already extracted by Kentucky would

bring the total to the desired number of 75, and the 34 Kentucky claims combined with 391

randomly drawn yielded a sample of 425.

Summary of case notes on appeals

Kentucky provided the Upjohn Institute with 500 sets of case notes. Of these, 45 were

selected by a nonrandom procedure to be appeals resulting in denied claims. To focus on

decisions about family issues, Upjohn excluded these 45 cases in subsequent analysis. The

random sample of 455 appeals case notes delivered to Upjohn included 159 (35 percent) appeals

granted UI benefit payments. The appeals sample of 455 was composed of 30 percent voluntary

quits and 70 percent employer discharges. Within this sample, 3 percent of quits and 32 percent

of discharges were granted UI benefit payments.

Results of reviewing the 455 sets of case notes delivered to Upjohn are summarized in Table 8 in terms of percentages. Among the 455 cases, a total of 20 (4.4 percent of 455) involved compelling family issues. Of these, 5 (1.1 percent) were allowed benefits and 15 (3.3 percent) were denied UI benefits under current Kentucky UI laws and regulations.

Of the three categories of compelling family issues that were approved for benefit payments: 1) trailing spouses had 7 appeals, all following job quits and interstate claims; 1 was approved for benefit payments and 6 denied; 2) illness of a family member caused 11 appeals; among 7 quits, 3 were interstate claims and 4 were Kentucky residents; among 4 discharges, all were Kentucky residents; and among the 11 appeals, 3 were approved for benefit payments (all 3 followed discharges of Kentucky residents) and 8 were denied; 3) domestic violence led to 2 appeals; 1 was an interstate claim following a quit and 1 was a Kentucky claim following an employer discharge; the 1 Kentucky discharge was approved for benefit payments, and the other was denied.

Considering the overall results as percentages of the sample of 455, we see that trailing spouses made up 1.5 percent of the sample, with denials for this reason equal to 1.3 percent. Family illness reasons constituted 2.4 percent of the sample, with denials for this reason equal to 1.8 percent of the sample. Domestic violence was noted as an issue in two cases, or 0.4 percent of the sample; one case was allowed benefits (an interstate claim after a job quit) and the other case was denied benefits (a Kentucky claim following employer discharge). Cumulatively family reasons accounted for 4.4 percent of the sample, and denials of these cases amounted to 3.3 percent of the sample (15 out of 455).

Summary of Compelling Family Reasons

Based on a random sample of claimant appeals of employer protests, the estimated percentage of all UI eligibility appeals denied benefits for compelling family reasons is about 3.3 percent. Over the period from August 2008 through July 2009, approximately 18.1 percent of regular UI applications reached the appeals process.[20] Therefore we estimate that 0.6 percent of all UI benefit applications were denied payments for compelling family reasons. Assuming these applicants would qualify for mean UI weekly benefit amounts and durations, we estimate that the impact on benefit payment cost of this program change would be 0.6 percent of regular UI benefits. The estimated cost of permitting job separations for compelling family reasons is about half the cost of implementing an alternate base period (ABP).

To date, 32 states have applied for and received their full UI modernization grants under ARRA.[21] Of the 32 states, a total of 18 have chosen to permit UI eligibility if job separations are caused by compelling family reasons. These states are Alaska, Arkansas, Colorado, Connecticut, Delaware, Hawaii, Illinois, Minnesota, Nevada, New Hampshire, New York, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, the Virgin Islands, and Wisconsin. Among these states, 17 changed their statutes, and one changed existing administrative procedures.

In terms of social insurance, the workings of UI have elements of both private insurance and social welfare. Unemployment insurance is an earned entitlement, paid to active labor force members during periods of involuntary unemployment. Benefits are paid, up to a level deemed socially adequate, in direct proportion to prior earnings. Measures like the ABP, for example, operate to broaden eligibility to claimants with adequate, but more recent, strong labor force

---

[20] Applications for benefits in the four calendar quarters from July 1, 2008, through June 30, 2009, totaled 283,217. From August 2008 through July 2009 there were 51,176 UI appeals in Kentucky, for an appeals rate of about 18.1 percent.

[21] Another 13 States have received only the first one-third UI modernization payment for having an ABP conforming to guidelines given in ARRA.

attachment as demonstrated by earnings. However, measures like the compelling family reasons provision, while socially important, link benefit payments to events outside the employment relationship.

Expanding UI program features to include compelling family reasons could be adopted if there is a social consensus, but the financing might properly be handled differently from regular UI benefits. Whereas regular UI benefits are financed through an experience-rated tax on employers, expansion of UI to include compelling family reasons should instead be financed through socialized taxes imposed uniformly across all employers, or all citizens, in the state. While the choice about layoffs is somewhat under an employer's control, the circumstances of employees outside the employer-employee relationship are not. Tax mechanisms for nonchargeable benefits are common in state UI tax systems to pay the cost of benefit charges, at maximum tax rates, against bankrupt employers and surviving negative-balance employers, both of whom are ineffectively charged for benefit payments. Such a mechanism, if adopted, could be used to pay the cost of compelling family reasons.

TRAINING ALLOWANCE FOR UI EXHAUSTEES

The provision for continued UI receipt during participation in job training for up 26 weeks after exhausting entitlement to regular UI essentially grants work search waivers for participants in something like "commissioner-approved training," which is currently available under all state plans during the initial period of regular UI benefit entitlement. This section summarizes the complete analysis of UI for exhaustees while in job training that was done for Kentucky and presented in O'Leary (2010). This section presents estimates of the ARRA modernization requirement, which adds up to 26 additional weeks of UI benefits, paid at the

claimants' usual beneficiary rate, while exhaustees participate in commissioner-approved training.

Training for All UI Exhaustees

The Kentucky sample of all applications for regular UI benefits with effective dates of claim from January 1, 2006, through December 31, 2008, excluding back-to-back claims, included a total of 581,081. Among these there were 100,169 exhaustees of regular UI benefits. The number of UI exhaustees constituted 17.2 percent of all applicants. These exhaustees received an average of $7,735 each in regular UI benefits, for a total of $775 million in the sample over three years (O'Leary 2010, Table 1). If all exhaustees received UI for an additional 26 weeks while engaged in job training, the average annual UI benefit payment costs could be around $225 million. This is an extreme estimate of benefit payments to exhaustees. It is worth noting that the actual entitled duration of regular UI for many exhaustees is less than 26 weeks, so this cost estimate could be higher. We estimated benefit payments under a variety of other assumptions.

Employment after UI Exhaustion

A first refinement in our estimates restricts analysis to a sample on which we can check return to work after benefit exhaustion. Presumably some UI exhaustees would return to work even if training stipends become available during an extra 26 weeks. We define return to work as the presence of earnings in the UI wage records in the calendar quarter immediately after exhaustion of UI benefits.[22] The exhaustion date is based on the full-time-equivalent weeks of UI duration. For most exhaustees the date is 26 weeks after the effective date of claim (EDC).

---

[22] This is the common measure for reemployment used in U.S. Department of Labor performance-monitoring systems.

Assuming that the availability of extended UI during training does not change the behavior of exhaustees regarding return to work, the UI exhaustees who return to work would neither participate in training after UI exhaustion nor draw additional UI during training. Among all monetarily eligible UI applicants, 73.9 percent return to employment as defined by the presence of earnings in the wage records in the quarter after the UI benefit year begin (BYB) date, and the rate of return to employment by UI beneficiaries is slightly higher at 75.7 percent. However, among UI benefit exhaustees, only 40.4 percent return to work within one quarter after exhaustion (O'Leary 2010, Table 3).

Over the 10 calendar quarters of our sample inflow from 2006Q1 through 2008Q2, the 59.6 percent of UI exhaustees who did not return to work in the quarter after UI benefit exhaustion received $307.7 million in UI benefits. That amount is 59.5 percent of UI payments to exhaustees and 26.2 percent of total UI payments over the 10-quarter period. However, this estimate is probably still too high (O'Leary 2010, Table 3).

Data for Analysis of Training and Reemployment Services

Analysis of participation in job training and reemployment services is based on the Employ Kentucky Operating System (EKOS) data merged with UI claims records. Service participation was counted from one year prior to the effective date of claim (EDC) for UI benefits through the benefit year ending (BYE) date. The EKOS data classifies participants in programs for the Workforce Investment Act (WIA), Trade Adjustment Assistance (TAA), or Wagner-Peyser employment services.[23] Counts for a variety of training referral and participation types were combined to yield unique counts whereby each exhaustee was counted at most once. Also associated with the training variables are the start and end dates of the activity. These dates

---

[23] EKOS registrations are coded as WIA = 1, Trade Act = 2, and Labor Exchange = 11. Not used in the present analysis is a code for "Stimulus Summer Youth = 13."

were used to determine participation between the start and end dates of UI benefit years and to define the duration of training.

Table 9 presents unique counts of training, intensive, and core service participation, restricted to at most one of each type for each exhaustee. This provides the most restricted basis for estimating the cost of UI as training stipends for up to 26 weeks after exhaustion of regular UI benefits. Because service counts are spotty in the data for 2008, we rely on the 2006 training participation rate of 5.5 percent to represent nonrecession or normal years and the 2007 rate of 4.1 percent of exhaustees to represent recession rates. These rates translate into UI payment cost increases of 2.2 percent and 2.1 percent in normal and recession times, respectively.

Duration of Training by Reemployment Status

UI payment costs during training would be lower if the average duration of training was shorter than 26 weeks. Among WIA registrants who get reemployed, 12.6 percent are in training, with an average duration of 35.4 weeks. Among WIA registrants who do not get reemployed, 16.3 percent are in training, with an average duration of 54.7 weeks. For both those who get reemployed and those who do not, the mean training duration far exceeds the 26-week duration of additional benefits under UI modernization. The mean durations are far longer than 26 weeks for participants in 2006, and above 26 weeks in 2007 (O'Leary 2010, Table 7).

Training duration means are also significantly longer than 26 weeks for participants referred through Trade Adjustment Assistance and Wagner-Peyser employment services. For conservative cost estimates we assume that all training participants receiving extended training UI benefits receive the full 26 weeks after exhaustion of their regular entitlement.

Alternative Sources of Funding Direct Training Costs

In Training and Employment Guidance Letter 2-09, USDOL Assistant Secretary for Employment and Training Jane Oates encourages states to broaden the rules for granting commissioner-approved training to UI beneficiaries (Oates 2009). She says that such actions should include the following eight changes: 1) liberalized approval during periods of high unemployment, 2) any WIA-funded training, 3) participation in remedial education when necessary, 4) participation in formal postsecondary education for occupations requiring postsecondary certificates or degrees, 5) relaxed time limits for completing training, 6) permitting participation in part-time training for UI beneficiaries working a reduced work week or for such training occurring during regular working hours, 7) permitting distance training in cases where required on-line participation may conflict with an occupation's regular working hours, and 8) relaxing disqualification provisions for temporary lapses while in training between class sessions, or for leaving a temporary job between such periods.

Oates (2009) also writes that states should streamline the training approval procedures by doing such things as delegating training approval to staff at Workforce Investment Act (WIA) one-stop career centers and allowing application assistance by UI staff who work for the UI agency issuing a determination. Furthermore, beneficiaries need not file continuing claims for UI during the period of participation in an approved training course of study. Additionally, Oates (2009) suggests that while agencies have procedures for developing lists of approved training providers located in their own states, for long-distance learning institutions agencies may rely on lists developed by the following three resources: 1) the U.S. Department of Education's National Center for Education Statistics' College Navigator, 2) the Department of Veterans Affairs's Web site list of approved institutions (including correspondence schools), and 3) the Council for Higher Education Accreditation's database of institutions and programs accredited by recognized

U.S. accrediting organizations. Finally, Oates (2009) says that UI benefits paid during approved training are not required to be charged back to prior employers as a condition of receiving the additional credit against the federal unemployment tax under Section 3303(a)(1) of the Federal Unemployment Tax Act. Instead, such amounts may be distributed among all employers.

Summary of Cost Estimates for Training Allowance to UI Exhaustees

Estimates of the cost for providing 26 weeks of UI to exhaustees in training depend on rates of training participation and the duration of training. Data from Kentucky suggest that exhaustees who enter training stay in job training on average much longer than 26 weeks. Therefore the key to estimating UI benefit payment costs is entry to training. Following is a review of the possibilities as summarized in Table 10.

All Exhaustees Participate in Training. For the nonrecession year of 2006, regular UI payments to exhaustees constituted 40.8 percent of all regular UI payments. In the recession year of 2008, UI benefits paid to exhaustees were 52.4 percent of the total. These first approximations suggest that one-third of the UI modernization money available to Kentucky, or about $30.1 million, would pay for only 2.1 months of training benefits in normal times or about 0.8 months in recession times.

Some Exhaustees Return to Work. During the six months when they might be drawing UI as a training stipend, the estimated rate of return to employment among exhaustees is 45.7 percent in normal years and 28.5 in recession years. Assuming training benefits at the level of exhaustee benefits, total UI payments would be 22.2 percent of benefits in normal labor markets and 37.5 percent of benefits in recession labor markets. These estimates imply the UI modernization grant for training stipends would pay for 3.8 months in normal times and 1.1 months in recession times.

31

Current Rates of Training. Based on unique counts of training participants, about 5.5 percent of exhaustees participate in training during nonrecession years, and 4.1 percent participate in recession periods. Assuming these training participants draw a proportionate share of total UI exhaustee benefits they would receive 2.2 percent in non-recession years and 2.1 percent in recession years, which means the one-third UI modernization grant for exhaustee training would provide about 37.4 months of benefits in normal labor markets and about 19.7 months of benefits in recession labor markets.

ARRA Rates of Training. Funding from ARRA increased money for training by 123 percent over planned levels for 2009 (O'Leary 2010). Assuming a proportionate increase in training participation, the rate would rise to 9.1 percent of UI exhaustees in a recession. A proportionate increase in UI benefits for exhaustee training participants would yield a total cost at 4.8 percent of total UI benefits. Given this level of training participation by UI exhaustees, the one-third UI modernization grant would pay for 8.9 months of benefits. In a nonrecession year, these funding levels for training suggest that 12.2 percent of exhaustees could participate in training, and the additional 26 weeks of UI benefits would amount to 5.0 percent of total benefit costs. The one-third modernization grant to Kentucky would pay for 16.8 months of benefits at this rate.

Training at Rates of ARRA Plus Added Sources. Program letters from U.S. DOL Assistant Secretary Jane Oates (2009) and Deputy Assistant Secretary Douglas Small (2009) encourage states to broaden the granting of UI work search waivers for training participants regardless of the source of funding to pay the direct costs of training. Training could be paid for with funds from ARRA, WIA, the Veterans Administration, Pell grants, student loan programs, or even personal and family assets. Furthermore, the list of what qualifies as approved training is

broadened when demand in labor markets is low. Assuming that such initiatives increased training opportunities by double the amount added under ARRA, the training participation rate in nonrecession years would rise to 19.0 percent of UI exhaustees, and, assuming a proportionate increase, UI benefit payments to exhaustee training participants would add 7.7 percent to total UI benefit payments. Given this level of training participation by UI exhaustees, the one-third UI modernization grant would pay for 10.9 months of benefits. In a recession year these funding levels for training suggest that 14.1 percent of exhaustees would participate in training, with the additional 26 weeks of UI benefits amounting to 7.4 percent of total benefit costs. The one-third modernization grant to Kentucky would pay for 5.7 months of benefits at this rate.

        Choices about Job Training Policy. The cost of retraining has two dimensions for jobless workers: 1) the direct costs of paying for instruction and 2) the indirect costs of maintaining subsistence for self and family during participation in retraining. A skilled workforce is the foundation for economic recovery, growth, and prosperity. Extended UI benefits during training for exhaustees of regular benefits could be a wise investment for citizens and employers, but among the UI modernization options in ARRA it is not the least expensive. In fact, depending on the ancillary supports available to defray the direct costs of training, it has the potential to raise UI benefit payments more than any of the other policy improvements suggested by the UI modernization provisions in ARRA. The final cost of benefit payments would depend to a large degree on state policy for approval of training while on extended benefits. Expansion of commissioner-approved training *before* UI exhaustion could be a more cost-effective policy for promoting skill development and return to work.

DEPENDENTS ALLOWANCE

One of the options for UI modernization offered to states in the ARRA is adding a dependents allowance. This section presents the implications for Kentucky of adopting a UI dependents allowance in conformity with the requirements set forth in the ARRA UI modernization guidelines. This section is based on analysis presented in O'Leary (2009b). In deciding whether to adopt a dependents allowance in conformity with ARRA, a state must choose a clear definition for dependents of UI claimants. The ARRA provides significant latitude for the state to define who is a dependent. The primary group is unmarried children. Other family members not working or unable to work may also be counted as dependents. The key variable in the definition affecting UI benefit payment costs regards whether or not the spouse of a beneficiary is a dependent. This paper presents cost simulation results under three alternative assumptions: 1) all spouses are dependents, 2) no spouses are dependents, and 3) working spouses are not dependents. The cost estimates presented in this section were computed under the assumption of a dependents allowance meeting the minimal requirements provided in ARRA. That is, an addition to the weekly benefit amount (WBA) of $15 per dependent up to a maximum of $50 per beneficiary family.

Definition of Dependents

The ARRA specifies that dependents be identified "as defined in State law" (PL 111-5, 2003, (3)(D)). In UI Program Letter 14-09, the U.S. Department of Labor (Small 2009) reiterates this primacy of state law. However, there is some latitude for states in setting this definition. Among states with dependents allowances, the main category of dependents is unmarried children up to a certain age, with a higher age limit for children who remain in school beyond

age 18.[24] All states include adopted children, all but Massachusetts include stepchildren, and all but New Mexico include older children physically or mentally unable to work. Nonworking spouses are included in Michigan, New Jersey, Pennsylvania, and Connecticut and with limits on the spouse's earnings or own UI eligibility in Illinois, Iowa, Maine, and Ohio. Iowa includes nonworking parents, and brothers and sisters who are dependents.[25]

Research Strategy

To estimate UI benefit payments, reliable counts of beneficiary dependents are needed. No consistent information on household composition of claimants is maintained in Kentucky UI or related administrative records. Our research strategy relies on combining claimant data from Kentucky UI administrative records with results from analysis of microdata on federal income tax returns filed by Kentucky residents. Dr. Michael Jones, senior economist in the Office of the Governor, Commonwealth of Kentucky, provided estimates of the distribution of the number of personal exemptions claimed by Kentucky residents on their 2005 tax returns for persons who reported receiving UI compensation on line 19 of IRS tax form 1040. The distribution of exemptions for each of the three filing statuses—1) single, 2) married filing separately, and 3) married filing jointly—are relevant. Very few married filers had only one exemption, while more than 60 percent of single filers only claim one exemption on their tax returns. Combining all tax returns reporting UI income shows a total of 398,339 Kentucky tax filers with UI income in 2005 (Table 11).

To facilitate estimation of UI dependent payments, the Kentucky Department of Revenue compiled 13 groups of 2005 federal tax filers reporting UI income defined by adjusted gross

---

[24] Children in school remain dependents until age 21 in Connecticut and 24 in Massachusetts.
[25] Michigan includes as dependents nonworking parents, and brothers and sisters under age 18 who are orphaned or whose living parents are dependents.

income (AGI) levels. The groups are set in $5,000 increments, with the first being zero to

$5,000, the second $5,000 to $10,000, and so forth. The final group includes all those with AGIs

of $60,000 or more. Each of these income ranges includes at least 14,000 tax filers, the largest

group is the $60,000-and-over AGI group, which has more than 84,000 tax filers. The range of

income variation in this distribution provides for rich simulations since all earners of more than

$60,000 in their base year would qualify for the maximum WBA for UI in Kentucky. By

applying these exemption distributions to similarly defined income groups using the base-period

earnings of UI beneficiaries, we estimate the cost of dependents allowances.

We know the tax filing status (single, married filing separately, and married filing jointly)

of UI beneficiaries in Kentucky during 2005. Using this and the options available to the state for

defining a dependent in state UI law, we compute the number of UI dependents in one of three

different ways. From the number of tax exemptions we deduct the following:

1) one for the UI claimant;

2) one for the UI claimant if single, two for the beneficiary and spouse if married; and

3) one for the beneficiary if single, two for the 60 percent of married beneficiaries who

have working spouses, and one for the 40 percent of beneficiaries who have nonworking

spouses. The assumption that 60 percent of married beneficiaries have working spouses is based

on patterns of employment among married couples over the past 40 years (BLS 2008b).[26]

Number of Dependents and Weekly Dependents Allowances

Three sets of simulations were performed, one for each of the alternative rules for

inferring dependents from exemptions. The first rule is the most inclusive, treating the spouse

---

[26] An alternate strategy for estimating the number of dependents for UI beneficiaries based on household composition data in the American Community Survey has been described to me by Wayne Vroman, who is working on a UI modernization report for the Ohio Department of Jobs and Family Services.

and all tax exemptions, except for the claimant, as dependents for UI purposes. The second is the least inclusive, removing all spouses from the potential pool of dependents. The third yields an estimate in between the first two and is the approach most similar to the rules adopted in other states that currently pay UI dependents allowances.

Under the first rule—that spouses are dependents—Table 11 presents estimates of the mean number of dependents for each income category, along with an estimated mean dependents allowance for each beneficiary in these groups. Estimates of the mean dependents allowance are computed in two ways. The methodology for computing the mean number of dependents and the dependents allowance for each income group is presented in Table 12 for the lowest income category ($0 to $5,000), under the assumption that all spouses are considered dependents. The mean number of exemptions for those with income in this range is simply the weighted sum of exemptions and claimants divided by the total number of claimants in the income group. The estimated number of dependents is the previous result minus one.

The mean beneficiary cost for claimants in the income group is the product of the frequency at each level of exemptions times the number of exemptions minus one times the dependents allowance for that number of exemptions—that is, $15 for each of the first three dependents and a total of $50 for four or more dependents. For the lowest income group ($0 to $5,000), the bottom two rows of Table 12 show the difference in estimated mean dependents allowance, depending on whether the mean number of dependents (2.46 – 1) is multiplied by the per-dependent allowance (1.46 * $15 = $21.88) or by the weighted mean of the frequency and dependents allowance at each number of exemptions ($19.49). The latter method more effectively accounts for the dependents allowance cap at $50 by taking into account the frequency distribution of exemptions among claimants in the income category.

The mean number of dependents is rather high for the lowest income category (1.46) because of single headed households. The mean number of dependents is lower for the next-highest income category (1.10) then steadily rises with income reaching an average of 2.03 for the group claimants who had an average income of more than $60,000 in 2005. Moving in step with this, the mean dependents allowance payment for the lowest income group is $19.49, falls to $15.41 for the next higher income group, then rises to $29.01 for the highest of the 13 income groups.

This process is repeated under the second rule (where the practice is that spouses are not considered dependents), a rule adopted in some states having UI dependent allowances.[27] Results of those simulations indicate that the mean number of dependents is 1.31 and that the mean dependents allowance paid would be $18.78. Under the third rule—that employed spouses are not counted as dependents—the estimated mean number of dependents is 1.38 and the mean dependents allowance is $19.78.

Impacts on UI Benefit Payment Costs

To estimate the cost impact of a dependents allowance on total UI benefit payments, we combine results from the above analysis with UI administrative payment data. The above analysis provides estimates of the mean number of dependents and the cost of the benefit allowances for each income group. Under the assumption that UI base period earnings are equivalent to the adjusted gross income reported on tax returns, we create the same 13 income groups for beneficiaries in our Kentucky data for new UI claims from January 1, 2006, to June 30, 2009. These data include earnings for 541,084 UI beneficiaries. This number is arrayed into the 13 base-period earnings groups as shown in Table 13. From this microdata we compute the

---

[27] These states are Arkansas, Maryland, Massachusetts, New Mexico, and Rhode Island.

mean of the actual WBA across all beneficiaries in each income group. The overall mean WBA is $315.

Also reported in Table 13 is the total UI compensation paid to claimants in each of the 13 income groups. The total across all groups over the 3.5-year period is just over $2.0 billion. The average duration of UI benefit payments for each income group is also reported in Table 13. The mean over the whole sample is 12.06 weeks. These figures reported on beneficiaries, WBA, total UI, and duration of benefits are repeated for the other dependents categories. The three assumptions regarding spouses dependency status are as follows: 1) spouses are dependents (Table 13), 2) spouses are not dependents, and 3) working spouses are not dependents.[28]

The estimated cost of dependents is computed as the sum of the average duration of benefits for each income group multiplied by the dependents allowance for that income group times the number of beneficiaries in the group, summed across all income groups. Under the assumption that spouses are dependents, the result in Table 13 for the lowest income group is the product of 11.47 weeks times a weekly dependents allowance of $19.49 (Table 11) times the number of beneficiaries in that group yielding $1,765,187. Summing these results across all income groups, we get a total of $126.1 million, which amounts to a 6.3 percent increase in UI benefit costs for claims over the 3.5-year period from January 1, 2006, to June 30, 2009 (Table 13). Assuming that spouses are not dependents results in a percentage cost increase of 5.5 percent, while assuming that working spouses are not dependents results in a cost increase of 5.8 percent (Table 14).

---

[28] See O'Leary (2009b) for the second and third sets of results.

Summary of Dependents Allowances

Before ARRA was enacted, 13 states already provided dependents allowances to UI beneficiaries.[29] Of the 32 states that have applied for and received their full UI modernization grants under ARRA, only seven successful grant applications cited dependents allowances in conformity with ARRA. These seven states are Alaska, Connecticut, Illinois, Massachusetts, New Jersey, Rhode Island, and Tennessee. Of these, Illinois, Rhode Island, and Tennessee did not have a UI dependents allowance before ARRA.

Based on analysis of three-and-one-half years of Kentucky UI claims data for the period January 1, 2006, to June 30, 2009, we estimate that total benefit payments will increase by 6.3 percent if all spouses are dependents, by 5.5 percent if spouses are not dependents, and by 5.8 percent if working spouses are not dependents. To further refine understanding of the last set of results, we computed separate estimates for each of the three full calendar years in the available data. Both 2006 and 2007 may be regarded as times of normal labor markets, while 2008 included the beginning of the current "Great Recession." The percentage increases for paying dependents allowances would have increased UI benefit costs by 6.1 percent in 2006, by 5.8 percent in 2007, and by 5.7 percent in 2008. Dependents allowance costs as a percentage of total benefit payments declined over these three years because the average duration of benefit receipt increased each year along with the average total UI compensation received by all beneficiaries in the state.

Based on the 5.8 percent cost estimate for the dependents allowances that exclude their working spouses, we estimate that the $30.1 million ARRA grant to Kentucky would be spent in about one year of normal labor markets, or in eight months during times of recession labor

---

[29] Before the enactment of ARRA, UI dependents allowances were paid by Alaska, Connecticut, Illinois, Iowa, Maine, Maryland, Massachusetts, Michigan, New Jersey, New Mexico, Ohio, Pennsylvania, and Rhode Island.

markets. As an option for UI modernization, the dependents allowance is approximately five times more costly than implementing an alternate base period (ABP).

In terms of social insurance principles, the ABP is also more appealing than the dependents allowance. As social insurance, the workings of UI has elements of both private insurance and social welfare. Unemployment insurance is an earned entitlement, paid to active labor force members during periods of involuntary unemployment. Benefits are paid, up to a level deemed socially adequate, in direct proportion to prior earnings. The ABP operates to broaden eligibility to claimants with adequate, but more recent, strong labor force attachment as demonstrated by earnings. The dependents allowance ties benefits to personal decisions made outside the employment relationship.

With a dependents allowance, two claimants with identical employment and earnings histories could be paid differing weekly UI amounts because of differences in the number of dependents. Such a program feature could be adopted if there is a social consensus, but the financing of dependents allowances might properly be handled differently than regular UI benefits. Whereas regular UI benefits are financed through an experience-rated tax on employers, dependents allowance payments should instead be financed through socialized taxes imposed uniformly across all employers in the state. While the choice about layoffs is somewhat under an employer's control, the number of a claimant's dependents is not. Tax mechanisms for nonchargeable benefits are common in state UI tax systems to pay the cost of benefit charges, at maximum tax rates, against bankrupt employers and surviving negative-balance employerswho are ineffectively charged for benefit payments. Such a mechanism could be used to pay the cost of dependents allowances if they are adopted.

SUMMARY AND COMMENTS

The American Recovery and Reinvestment Act (ARRA) of 2009 provided financial incentives for UI modernization. The incentives are state shares of the $7 billion available nationwide. Shares are determined by the state share of UI taxable wages paid nationwide. States were offered one-third of their allocation for having an alternate base period (ABP) for monetary determination of UI eligibility that includes the most recently completed calendar quarter. States were offered the remaining two-thirds for having two out of the following four additional program features: 1) UI eligibility while seeking only part-time work, 2) UI eligibility after job separations due to harassment or compelling family reasons, 3) continuation of UI benefits for at least 26 additional weeks after exhaustion of regular benefits while in approved training, and 4) dependents allowances of at least $15 per dependent up to $50.

This paper presents estimates of the UI benefit payment costs for these five program enhancements based on program administrative data for the Commonwealth of Kentucky. A summary of the cost estimates is given in Table 15, which presents them as percentages of regular Kentucky UI benefit payments in years of normal and recession labor markets. The ABP option B, which has been widely adopted by states, is estimated to be one of the least costly of the five UI modernization options, with the ARRA grant covering UI payments for 5.4 years of normal labor markets. The additional UI qualifiers under the ABP policy change have all earned the entitlement to UI.

Also on the list of least costly is broadening coverage to those who restrict their job search to only part-time work. It should be noted that part-time workers are often multiple job holders for whom UI taxes are payable on the full wage base for every job. Given this, it is

possible that tax contributions for these workers exceed those for full-time job holders with much higher wage and salary levels.

Compelling family reasons rank as the lowest estimated cost for likely benefit payments. As social insurance reform, this change emphasizes social considerations over the earnings insurance aspects of UI. Such a change could also have the effect of reducing appeals hearing workloads, thereby reducing administrative costs while providing income replacement to those who are without work through no fault of their own.

Providing up to 26 weeks of additional UI to exhaustees of regular benefits who are participating in training is the feature with the most uncertainty around the cost estimate. The indirect costs of maintaining household consumption can be the highest personal cost of retraining, but the availability of funding for the direct costs of paying for job training is the limiting factor on training slots. This can be a wise social investment, particularly during periods of high unemployment, but a more cost-effective UI program reform would be early targeting of training to those at high risk of benefit exhaustion before their regular UI entitlement is exhausted.

The dependents allowance required under ARRA UI modernization is estimated to be the most costly of the policy options listed. It is also the feature that stretches the social insurance principles of UI farthest from insurance toward social welfare. It results in identical workers, experiencing identical job loss, receiving differing compensation levels because of personal decisions made away from the workplace. It is defensible social policy, but if adopted, the financing should be shared evenly across all employers in the state rather than being paid solely by the separating employer through experience rating.

In making a policy choice, the federal emphasis on the ABP to broaden UI benefit access to low-wage earners should be noted. While UI modernization grants are tied to a total of five policy choices, the ABP is the first item presented by the ARRA requiring a decision. The emphasis on ABP in the ARRA suggests it could become a state UI conformity requirement at some future date. That would make ABP a contingency for release of 90 percent of Federal Unemployment Tax Act (FUTA) funding to states. Others program features among the UI modernization options could also become compulsory conformity requirements over time. The ARRA modernization grants are available to states for only a limited time.

To date, 39 states have received modernization payments for having an ABP, and 32 states have received the remaining two-thirds available. The numbers of states adopting each of these additional features are as follows: 25 for seeking part-time work, 18 for family reasons, 14 for exhaustee benefits while in training, and 7 for dependents allowances. A total of $3.4 billion of the $7.0 billion available has been disbursed to date. Some particularly large states, including California, Florida, and Texas, have not yet received any UI modernization money from ARRA. The deadline for disbursements is drawing near.

> Applications should only be made under provisions of state laws that are currently in effect as permanent law and not subject to discontinuation. Since all incentive payments must be made before October 1, 2011, and since the Department must have adequate time to review any application, all applications must be received by the Department no later than August 22, 2011 . . . If the state law provision takes effect within 12 months of the date of the Secretary of Labor's certification, then the provision will be considered to be in effect as of the date of the Secretary's certification to the Secretary of Treasury . . . As a result, the latest effective date of a provision must be on or before September 21, 2012. (Small 2009, pp. 2–3)

Estimates of the UI benefit payment costs for these features, based on Kentucky data, suggest a pattern of states choosing UI modernization features to minimize the expected benefit payment costs. However, for states broadening UI eligibility through modernization, UI benefit

payment costs will be higher for any given level of unemployment. The UI modernization grants provided by ARRA are one-time, finite amounts. Liberalized eligibility rules must be balanced by structural financing enhancements to ensure long-term fiscal stability of the system.

POSTSCRIPT

In Kentucky, the Governors' Task Force on Unemployment Insurance (2010) funded this investigation of UI modernization costs in the context of a severe structural deficit in financing regular UI benefits. On June 15, 2009, Governor Steven Beshear signed House Bill 5 updating Kentucky's unemployment tax and benefits structure, thereby codifying the Task Force recommendations. The compromise package of legislation increases the state UI taxable wage base from $8,000 to $12,000 over a 10-year period, implements a one-waiting week wait after eligible workers file a claim before they can begin to receive benefits, and reduces the statutory replacement rate used to calculate a claimant's weekly benefit amount from 68 percent to 62 percent. Cost estimates of UI modernization presented in this paper were considered by the task force, but with the emphasis on long-term fiscal balance in the system, expansions of UI benefit eligibility were not included in the task force recommendations.

This paper presents estimates of the additional annual regular benefit payments associated with five different expansions of UI eligibility or generosity. The ARRA offered financial incentives to encourage states to adopt these program features. The cost estimates associated with each feature focus on the likely increase in regular UI benefit payments. For each program expansion, we convert the incentive payment into the number of years of benefits that would be covered for the associated program change in years of normal or recession labor markets. It turns out that at least one state considered another incentive presented by the UI

modernization offer in the 2009 federal stimulus bill. By receiving a UI modernization incentive payment before the end of calendar year 2010, the state of Colorado avoided having a positive loan balance from the Federal Unemployment Account (FUA) at the start of 2011.[30] If there is a loan balance outstanding to the FUA on January 1 for two consecutive years and loans are not paid down to zero by November 10 of the second year, then the Federal Unemployment Tax Act (FUTA) tax rate is increased by 0.3 percentage points on federally taxable wages for that year. The 2010 ARRA incentive payment of $127.5 million to Colorado for UI modernization potentially saved Colorado employers as much as $45 million in added FUTA tax payments per year, with this additional tax potentially increasing by another 0.3 percentage points each subsequent year when loans are outstanding to the FUA on January 1.[31] This potentially increased the financial incentive to Colorado by one-third. Several states are facing FUA loan balances that dwarf the ARRA incentive payment, but some states should seriously consider this aspect of the incentive before the offer expires in September 2011.

---

[30] For this insight, I thank Wayne Peel, chief financial officer for the Colorado Department of Labor and Employment, who served as a discussant for our conference session at the 2011 LERA meetings of the ASSA.

[31] Wages paid by Colorado employers in 2009 totaled $82.6 billion. Some $21.2 billion of this amount was subject to the $10,000 Colorado UI taxable wage base. Since the FUTA taxable wage base is 70 percent of the Colorado base, if we assume a proportionate share of Colorado wages are subject to the FUTA tax, then about $14.8 billion of Colorado wages would be taxed an additional 0.3 percent.

Table 1 Kentucky Inflow of Regular UI Claims and Simulated Monetary Eligibility

Year and quarter of EDC	Total regular UI claims	Final monetary determinations		Wage record data in UI file	
		Actual monetarily eligible	Share	Simulated monetarily eligible	Share
2006Q1	41,360	37,026	0.8952	37,034	0.8954
2006Q2	31,411	28,078	0.8939	28,070	0.8936
2006Q3	48,915	45,062	0.9212	45,048	0.9209
2006Q4	56,357	50,529	0.8966	50,372	0.8938
2007Q1	40,041	36,161	0.9031	35,902	0.8966
2007Q2	32,130	28,930	0.9004	28,697	0.8932
2007Q3	44,867	40,973	0.9132	40,957	0.9129
2007Q4	59,484	53,834	0.9050	53,953	0.9070
2008Q1	44,968	40,383	0.8980	40,444	0.8994
2008Q2	38,163	34,055	0.8924	34,113	0.8939
2008Q3	46,668	42,705	0.9151	42,788	0.9169
2008Q4	92,392	85,269	0.9229	85,417	0.9245
2009Q1	85,181	78,310	0.9193	78,444	0.9209
2009Q2	58,976	53,523	0.9075	53,612	0.9090
Total	720,913	654,838	0.9083	654,851	0.9084

NOTE: This sample excludes the second of back-to-back claims where the first UI claim was exhausted. The monetary eligibility rules are different for such claims. Also, 120 records were deleted for persons who applied for UI multiple times in the same calendar quarter. For such claims, the first was included in the analysis sample.
SOURCE: Kentucky UI program administrative data.

Table 2 Summary of Changes for Options A and B of the Alternate Base Period

	Monetarily eligible	UI beneficiaries	Actual UI cost in SBP ($)	Simulated UI cost in ABP ($)	Change in cost
Monetarily eligible in SBP	654,851	534,127	1,974,830,300		
Percentage of applicants	90.84	74.68			
Eligible in SBP but not ABP	12,616	8,029	24,103,019	0	–24,103,019
Eligible in SBP and ABP					
Same WBA in ABP	251,654	222,448	975,147,577	975,147,577	0
Higher WBA in ABP[a]	237,030	187,187	533,218,523	619,399,367	86,180,844
Lower WBA in ABP[a]	153,551	120,118	442,361,154	387,791,082	–54,570,072
Total eligible in SBP and ABP	642,235	529,753	1,950,727,254	1,982,338,026	31,610,772
Paid in SBP cost to ABP ($)					7,507,753
Eligible in ABP but not SBP	24,246	16,385		35,259,767	
Eligible in ABP but paid in SBP[b]	5,763	4,579	12,082,916		
Net paid in ABP but not SBP	18,483	12,256			23,176,851
Option A	660,718	542,009		2,005,514,904	30,684,604
Percentage change from SBP	0.90	1.48			1.55
Average yearly cost ($)					8,767,030
Recession year costs ($)[b]					12,117,754
Normal year costs ($)[b]					7,426,740
Recession, ARRA grant[c] (years)					2.5
Normal, ARRA grant[c] (years)					4.0
Option B	673,334	546,383		1,998,007,151	23,176,851
Percentage change from SBP	2.82	2.29			1.17
Average yearly cost ($)					6,621,957
Recession year costs ($)[b]					9,152,843
Normal year costs ($)[b]					5,609,603
Recession, ARRA grant[c] (years)					3.3
Normal, ARRA grant[c] (years)					5.4

[a] The number of UI beneficiaries has been simulated.
[b] Recession year is 2008Q3 through 2009Q2. Normal year is based on data from 2006Q1 through 2008Q2.
[c] This is the number of years until Kentucky's allocation of the ARRA grant is exhausted using the recession or normal year annual cost.
SOURCE: Author's computations based on Kentucky UI program administrative data.

Table 3 Summary of Changes Underlying Differences between Standard and Alternate Bse
Periods

	Monetarily eligible	WBA for beneficiaries ($)		Beneficiary rate[a]		UI duration (wks.)	
		SBP	ABP	SBP	ABP	SBP	ABP
Monetarily eligible in SBP	654,851	315		0.816		12.0	
Not eligible using ABP	12,616	197		0.636		14.5	
Eligible in both SBP and ABP							
Same WBA in ABP as SBP	251,654	398	398	0.884	0.884	11.1	11.1
Higher WBA in ABP than SBP	237,030	241	269	0.767	0.790	12.3	12.5
Lower WBA in ABP than SBP	153,551	282	259	0.793	0.782	13.1	12.6
Summary	642,235	312	317	0.819	0.825	12.0	12.0
Only ABP-eligible, Option A	24,246		156		0.676		12.8
Paid under both SBP and ABP	5,763		177		0.795		14.2

NOTE: blank = not applicable.
[a] The beneficiary rate is computed as a percentage of monetarily eligible UI claimants.
SOURCE: Author's computations, based on Kentucky UI program administrative data.

Table 4 Comparison of Kentucky Estimates of Alternate Base Period Impacts on Rates of UI Monetary Eligibility and UI Benefit Payments with Previous Studies

Study	Sample and ABP type simulated	Monetary eligibility	Benefit payments
Vroman (1995)	3 States (ME, VT, WA) Like ARRA Option B	5.5 to 12.5% increase	3.8 to 9.6% increase
Planmatics (1997)	5 States (MA, NJ, OH, VT, WA) Like ARRA Option A		4.2 to 5.8% point increase
Stettner, Boushey, and Wenger (2005)	National sample Survey of Income and Program Participation (SIPP) Like ARRA Option B	7.2% increase	1.1 to 5.2% of benefit payments
O'Leary (2009)	Kentucky (2006Q1 to 2009Q2) ARRA Option A	0.90% increase	1.55% increase
O'Leary (2009)	Kentucky (2006Q1 to 2009Q2) ARRA Option B	2.82% increase	1.17% increase

Table 5 Among Kentucky UI Applicants, the Estimated Number Seeking Only Part-Time Work, Their Likely UI Eligibility and UI Benefit Payment Costs by Alternate Estimation Methods

	Weekly wage method
UI applicants (number)	654,635
Part-time (number)	109,689
Part-time among UI applicants (share)	0.168
Monetarily eligible	0.780
Nonmonetarily eligible	0.608
UI-eligible	0.465
Eligible but not a beneficiary	0.052
UI beneficiary	0.568
WBA for monetarily eligible ($)	184
WBA for UI beneficiaries ($)	196
WBA for eligible nonbeneficiaries ($)	135
UI duration, mean weeks	13.4
Percent of UI to part-timers	9.1
Cost of added part-timers (%)[a]	0.6%

[a] The UI benefit cost of added recipients among part-time workers who apply for UI is the number of part-time UI applicants times the proportion of those eligible but not beneficiaries, times the average WBA for eligible nonbeneficiaries, multiplied by the mean duration for part-timers who actually receive UI benefits. Dividing this result by total UI benefits paid yields the additional cost in percentage terms of paying UI to applicants who are part-time job seekers.

SOURCE: Based on computations by the author, using program administrative data from Kentucky for the period 2006Q1 to 2009Q2 and results from the Quarterly Census of Employment and Wages (QCEW) for time periods matching the administrative data.

Table 6 Estimated Kentucky UI Benefit Payment Costs of Permitting Eligibility during Job Seeking for Part-Time-Only Work

	Normal year	Recession year
Total UI benefit payments ($)	429,860,616	852,318,264
Costs for current applicants		
UI benefit payments (%)	0.6	0.6
UI benefit payments ($)	2,579,164	5,113,910
Costs for new applicants		
UI benefit payments (%)	0.6	0.6
UI Benefit Payments ($)	2,579,164	5,113,910
Total costs		
UI benefit payments (%)	1.2	1.2
UI benefit payments ($)	5,158,327	10,227,819

SOURCE: Based on computations by the author using program administrative data from Kentucky for the period 2006Q1 to 2009Q2 and results from surveys under U.S. Bureau of Labor Statistics programs called Occupational Employment Statistics (OES), American Time Use Survey (ATUS), National Compensation Survey (NCS), and Quarterly Census of Employment and Wages (QCEW) for time periods matching the administrative data. A normal year is assumed to be 2006Q1 to 2006Q4. A recession year is assumed to be 2008Q2 to 2009Q1.

Table 7 Kentucky Regular and Interstate UI Claims with Appeals of Employer Protests, August 1, 2008, to July 31, 2009, and Summary of Sample Selection for Case Notes Review

Interstate UI claims	Count	Share
SSNs sent to Upjohn by Kentucky	4,504	
Matched to out-of-state claims by SSN	4,304	0.956
Out-of-state w/ quit/discharge employer protest	4,120	0.915
After removing likely commuters	1,546	0.343
Kentucky resident UI claims		
SSNs sent to Upjohn by Kentucky	46,672	
Less duplicate SSNs in list	46,267	
Matched resident claim for SSN (share of 46,267)	46,265	1.000
Kentucky county of residence	46,218	0.999
Claim with quit/discharge employer protest	44,677	0.966
Combined interstate and resident claims for sampling	46,223	
Interstate share of combined sample	1,546	0.033
Desired sample size total	500	
Interstate observations in a random sample of 500	17	0.033
Resident observations in a random sample of 500	483	0.966
Interstate claims, desired sample size (share of sample)	75	0.015
Interstate claims already selected by KY	11	
Interstate claims, remainder to select	64	
Kentucky claims, desired sample size (share of sample)	425	0.085
Kentucky claims already selected by KY	34	
Kentucky claims, remainder to select	391	
Sample already selected	45	0.090
Sample remainder to be selected	455	0.910
Sample for reviewing appeals of employer protests	500	

Table 8 Summary of Compelling Family Reasons in Appeals of UI Denials after Quits and Discharges (Percentages of column sub-samples)

	Appeals after quit			Appeals after discharge			Total appeals sampled		
	Interstate	Kentucky	Total	Interstate	Kentucky	Total	Interstate	Kentucky	Total
Subsample sizes	32	103	135	32	288	320	64	391	455
Benefits allowed (%)									
Trailing spouse	3.1	0.0	0.7	0.0	0.0	0.0	1.6	0.0	0.2
Family illness	0.0	0.0	0.0	0.0	1.0	0.9	0.0	0.8	0.7
Domestic violence	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.2
Total allowed UI	3.1	0.0	0.7	0.0	1.4	1.3	1.6	1.0	1.1
Benefits denied (%)									
Trailing spouse	18.8	0.0	4.4	0.0	0.0	0.0	9.4	0.0	1.3
Family illness	9.4	3.9	5.2	0.0	0.3	0.3	4.7	1.3	1.8
Domestic violence	3.1	0.0	0.7	0.0	0.0	0.0	1.6	0.0	0.2
Total denied UI	31.3	3.9	10.4	0.0	0.3	0.3	15.6	1.3	3.3
Total sample (%)									
Trailing spouse[a]	21.9	0.0	5.2	0.0	0.0	0.0	10.9	0.0	1.5
Family illness	9.4	3.9	5.2	0.0	1.4	1.3	4.7	2.0	2.4
Domestic violence	3.1	0.0	0.7	0.0	0.3	0.3	1.6	0.3	0.4
Total sample	34.4	3.9	11.1	0.0	1.7	1.6	17.2	2.3	4.4

[a] We also tracked the number of persons who reported moving regardless of whether the move was due to spousal employment. For the interstate claims we sampled, there were sixteen (16) cases involving a move and zero (0) for regular Kentucky UI claims. Review of the documentation available suggest it is highly unlikely that references to a spouse's employment would be omitted from case notes on appeals. Therefore, we only report the number we determined to "trailing spouses."

SOURCE: Author's computations based on Kentucky UI program appeals records.

Table 9 Unique Count of Kentucky Training, Intensive, and Core Service Participants among
UI Exhaustees Regardless of Initial or Multiple Program Registration

Year	Total UI exhaustees	Training recipient		Intensive service recipient		Core service recipient	
		Number	Share of exhaustees	Number	Share of exhaustees	Number	Share of exhaustees
2006	23,819	1,317	0.055	1,966	0.083	—	—
2007	26,266	1,069	0.041	1,898	0.072	3,651	0.139
2008	17,687	375	0.021	535	0.030	10,361	0.586
Total	67,772	2,761	0.041	4,399	0.065	14,012	0.319

NOTE: This represents a unique count of training, intensive, and core service participation regardless of the program of registration (WIA, TAA, or Labor Exchange). Registration must have occurred from one year prior to the effective date of UI claim through the end of the UI benefit year. Training, intensive, or core service receipt must also have occurred prior to the end of the benefit year. Data for 2008 includes UI claims filed before the end of the second quarter (to observe complete benefit-year UI compensation). Means for core service recipients as a share of exhaustees exclude 2006. — = data not available.
SOURCE: Author's computations based on Kentucky UI program administrative data.

Table 10 Estimated Kentucky UI Benefit Payment Costs of Paying UI Exhaustees in Retraining

	Normal year	Recession year
Total UI benefit payments ($)	429,860,616	852,318,264
Total UI benefits to exhaustees ($)	175,383,131	446,614,770
Exhaustee benefits as a share of total UI payments	0.408	0.524
Months in UI modernization payment	2.1	0.8
UI exhaustee costs after return to work ($)	95,233,040	319,329,561
Return-to-work rates among UI exhaustees	0.457	0.285
Exhaustee benefits share after return to work	0.222	0.375
Months in UI modernization payment	3.8	1.1
UI costs at current training rates ($)	9,646,072	18,311,206
Current training rates for UI exhaustees	0.055	0.041
Exhaustee benefits share for current training rates	0.022	0.021
Months in UI modernization payment	37.4	19.7
UI costs at ARRA training rates ($)	21,443,219	40,705,810
ARRA training rates for UI exhaustees	0.122	0.091
Exhaustee benefits share for ARRA training rates	0.05	0.048
Months in UI modernization payment	16.8	8.9
UI costs at ARRA rates plus ($)	33,240,365	63,100,414
ARRA plus training rates for UI exhaustees	0.19	0.141
Exhaustee benefits share for ARRA plus training	0.077	0.074
Months in UI modernization payment	10.9	5.7

SOURCE: Author's computations based on Kentucky UI program administrative data.

Table 11 Tax Exemptions and Dependents for UI Beneficiaries by Income Group in Kentucky Assuming All Exemptions Except the Claimant are Dependents

Adjusted gross income range (2005 tax year)	Total tax returns	Exemptions[a]	Dependents[b]	Dependents allowance per week ($)	Dependents allowance per week adjusting for $50 cap ($)
$0–$5,000	23,481	2.46	1.46	21.88	19.49
$5,000–$10,000	30,224	2.10	1.10	16.51	15.41
$10,000–$15,000	39,227	2.15	1.15	17.19	16.23
$15,000–$20,000	39,385	2.18	1.18	17.67	16.76
$20,000–$25,000	35,293	2.19	1.19	17.85	16.95
$25,000–$30,000	30,713	2.24	1.24	18.67	17.67
$30,000–$35,000	26,111	2.35	1.35	20.25	19.24
$35,000–$40,000	22,294	2.47	1.47	22.02	20.90
$40,000–$45,000	19,740	2.58	1.58	23.64	22.50
$45,000–$50,000	17,598	2.70	1.70	25.50	24.22
$50,000–$55,000	15,813	2.77	1.77	26.56	25.39
$55,000–$60,000	14,022	2.87	1.87	28.01	26.75
$60,000+	84,438	3.03	2.03	30.47	29.01
Total	398,339	2.49	1.49	22.36	21.15

[a] Spouses are included in the exemptions for "married filing jointly."
[b] Dependents are computed as exemptions minus one for the claimant.

Table 12 Exemptions across All Filing Statuses by Federal AGI Group $0 to $5,000

Exemptions	Frequency number	Frequency percentage	Dependents cost for beneficiaries ($)
Single			
1	8,045	60.0	0.00
2	1,874	14.0	15.00
3	3,047	22.7	30.00
4	359	2.7	45.00
5	63	0.5	50.00
6	9	0.1	50.00
7	1	0.0	50.00
Married—filing separately			
1	0	0.0	0.00
2	1,037	37.8	15.00
3	364	13.3	30.00
4	767	27.9	45.00
5	163	5.9	50.00
6	379	13.8	50.00
7	29	1.1	50.00
8	6	0.2	50.00
Married—filing jointly			
1	215	2.9	0.00
2	2,989	40.7	15.00
3	730	9.9	30.00
4	1,699	23.2	45.00
5	186	2.5	50.00
6	1,392	19.0	50.00
7	88	1.2	50.00
8	27	0.4	50.00
9	8	0.1	50.00
10	4	0.1	50.00
Combined filing statuses			
1	8,260	35.2	0.00
2	5,900	25.1	15.00
3	4,141	17.6	30.00
4	2,825	12.0	45.00
5	412	1.8	50.00
6	1,780	7.6	50.00
7	118	0.5	50.00
8	33	0.1	50.00
9	8	0.0	50.00
10	4	0.0	50.00
Mean exemptions and cost	2.46		21.88
Beneficiaries and cap-djusted cost	23,481		19.49

Table 13 Estimated Cost of Kentucky UI Dependents Allowances, January 1, 2006, to June 30, 2009, Assuming All Exemptions Except the Claimant Are Dependents[a]

Adjusted gross income range (2005 tax year)	UI beneficiaries	Average WBA ($)	Total UI compensation received ($)	Duration of benefits (wks)	Estimated cost of dependents ($)	Cost increase percentage
$0–$5,000	7,898	$52	$4,729,442	11.47	$1,765,187	37.3
$5,000–$10,000	37,193	102	49,636,445	13.03	7,465,154	15.0
$10,000–$15,000	55,150	164	122,034,416	13.45	12,040,884	9.9
$15,000–$20,000	64,014	230	195,847,052	13.34	14,309,977	7.3
$20,000–$25,000	69,899	294	257,732,832	12.53	14,847,191	5.8
$25,000–$30,000	67,596	358	288,761,840	11.93	14,250,728	4.9
$30,000–$35,000	58,655	404	277,964,276	11.72	13,231,431	4.8
$35,000–$40,000	47,665	408	217,318,312	11.19	11,144,509	5.1
$40,000–$45,000	35,948	408	160,989,036	10.97	8,868,083	5.5
$45,000–$50,000	26,749	408	120,603,864	11.04	7,151,722	5.9
$50,000–$55,000	19,208	409	85,342,196	10.86	5,295,945	6.2
$55,000–$60,000	13,717	409	60,933,910	10.85	3,981,950	6.5
$60,000+	37,392	409	164,875,030	10.79	11,705,468	7.1
Totals	541,084		2,006,768,651		126,058,229	
Weighted means		315		12.06	19.58	6.3

[a] Claims with effective dates January 1, 2006 through June 30, 2009. Computations assume individual gross income is composed solely of earnings and does not include other sources like interest, dividends, or capital gains.

Table 14 Summary of Means for Dependents Allowances

Definition of a dependent	Data time frame	WBA ($)	Benefit Duration (wks)	Weekly Dependents Allowance ($)	Benefits Increase (%)
Spouse a dependent	2006Q1 to 2009Q2	315	12.06	19.58	6.3
Spouse not a dependent	2006Q1 to 2009Q2	315	12.06	17.21	5.5
Working spouse not a dependent	2006Q1 to 2009Q2	315	12.06	18.21	5.8
Working spouse not a dependent	2006Q1 to 2006Q4	300	11.46	17.99	6.1
Working spouse not a dependent	2007Q1 to 2007Q4	311	12.09	17.93	5.8
Working spouse not a dependent	2008Q1 to 2008Q4	320	14.05	18.22	5.7

SOURCE: Author's computations based on Kentucky UI program administrative data.

Table 15 ARRA UI Modernization Options: Cost Summary for Kentucky

	Percentage increase in UI costs	Years until ARRA money is exhausted		Number of adopting states
		"Normal" Years[a]	"Recession" Years[b]	
Alternate base period (ABP)				
ABP Option A	1.6	4.0	2.5	
ABP Option B	1.2	5.4	3.3	39
Seeking part-time work[d]	1.2	5.0	3.0	25
Compelling family reasons[c]	0.60	10.7	6.8	18
Trailing spouse	0.23			
Illness of a family member	0.33			
Domestic violence	0.04			
Training (26 weeks of additional UI)[e]	19.1	1.2	0.6	
Training at current rates	2.1	3.1	1.6	14
Training all exhaustees	40.8	0.2	0.1	
Dependents allowance				
Include spouse	6.3	1.2	0.7	
Exclude spouse	5.5	1.0	0.6	
Exclude working spouse	5.8	1.1	0.7	7
Kentucky UI payments ($)		471,786,834	741,379,310	

[a] Normal year based on data from 2006Q1 through 2008Q2.
[b] Recession year based on data from 2008Q3 through 2009Q2.
[c] Does not include an assumption concerning entry effect.
[d] Part-time effect estimate of 0.6 percent by both methods is doubled to allow for entry effects.
[e] Impact estimates reported here cover a wide variety of alternative scenarios and therefore are assumed to encompass an entry effect.

REFERENCES

Blank, Rebecca M., and David E. Card. 1991. "Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?" *Quarterly Journal of Economics* 106(4): 1157–1189.

Bureau of Labor Statistics (BLS). 2008a. *Involuntary Part-Time Work on the Rise*. Issues in Labor Statistics, Summary 08-08. Washington, DC: Bureau of Labor Statistics.

———. 2008b. *Women in the Labor Force: A Databook*. Report 1011, Table 23. Washington, DC: Bureau of Labor Statistics.

———. 2009. *Quarterly Census of Employment and Wages.* Washington, DC: Bureau of Labor Statistics. http://www.bls.gov/cew/ (accessed February 24, 2011).

Davidson, Carl, and Stephen A. Woodbury. 2001. "From Social Experiment to Program: The Reemployment Bonus." In *Reemployment Bonuses in the Unemployment Insurance System: Evidence from Three Field Experiments*, Phillip K. Robins and Robert G. Spiegelman, eds. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 175–222.

Employment and Training Administration (ETA). 2009. *Budget Summary*. Washington, DC: U.S. Department of Labor, Employment and Training Administration (ETA).

Government Accountability Office (GAO). 2007. *Unemployment Insurance: Low-Wage and Part-Time Workers Continue to Experience Low Rates of Receipt*. GAO-07-1147. Washington, DC: Government Accountability Office.

Governor's Task Force on Unemployment Insurance. 2010. *Ensuring Long-Term Stability of Kentucky's UI System*. Final Report of the Kentucky Unemployment Insurance Task Force Established by Governor Steven L. Beshear. Frankfort, KY: Governor's Task Force on Unemployment Insurance.

Meyer, Bruce D. 1995. "Lessons from the U.S. Unemployment Insurance Experiments." *Journal of Economic Literature* 33(1): 91–131.

Moffitt, Robert. 1992. "Evaluation Methods for Program Entry Effects." In *Evaluating Welfare and Training Programs*, Charles F. Manski and Irwin Garfinkel, eds. Cambridge, MA: Harvard University Press, pp. 231–252.

Oates, Jane. 2009. *Training and Employment Guidance Letter No. 2-09: Approved Training for the Unemployment Insurance Program Recommended Policies*. Washington, DC: U.S. Department of Labor, Employment and Training Administration.

O'Leary, Christopher J. 2009a. "Unemployment Insurance Modernization in Kentucky: The Alternative Base Period." Report for research project 35242. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

———. 2009b. "Unemployment Insurance Modernization in Kentucky: Dependents Allowance Simulations." Report for research project 35242. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

———. 2009c. "Unemployment Insurance Modernization in Kentucky: Compelling Family Reasons." Report for research project 35242. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

———. 2010. "Unemployment Insurance Modernization in Kentucky: Training Allowance." Report for research project 35242. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

O'Leary, Christopher J., and Kenneth J. Kline. 2009. "Unemployment Insurance Modernization in Kentucky: Eligibility while Seeking Part-Time Work." Report for research project 35242. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Planmatics. 1997. *Impact of the Alternative Base Period on the Trust Fund*. Employment and Training Administration Occasional Paper 1998-04. Washington, DC: U.S. Department of Labor, Employment and Training Administration

Small, Douglas F. 2009. *Unemployment Insurance Program Letter No. 14-09: Special Transfers for Unemployment Compensation Modernization and Administration and Relief from Interest on Advances*. Washington, DC: U.S. Department of Labor, Employment and Training Administration.

Stettner, Andrew, Heather Boushey, and Jeffrey Wenger. 2005. *Clearing the Path to Unemployment Insurance for Low-Wage Workers: An Analysis of Alternative Base Period Implementation*. New York: National Employment Law Project; Washington, DC: Center for Economic and Policy Research.

U.S. Department of Labor (USDOL). 2010. *UI Modernization Incentive Payments - Approved Applications)*. Washington, DC: U.S. Department of Labor, Employment and Training Administration. workforcesecurity.doleta.gov/unemploy/docs/app_form.doc (accessed February 24, 2011).

Vroman, Wayne. 1995. *The Alternative Base Period in Unemployment Insurance: Final Report.* Unemployment Insurance Occasional Paper 95-03. Washington, DC: U.S. Department of Labor.