The EUC08 Program in Theoretical and Historical Perspective

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The recession that started in December 2007 placed significant strains on all sectors of the U.S. labor market. Perhaps the most significant indicator of those strains was the steep increase in unemployment durations. The median duration of unemployment spells rose from a relatively normal 8.5 weeks in 2007 to 23 weeks by mid-2010. Similarly, the percentage of the unemployed who experienced spells longer than 26 weeks rose from 18 percent to 46 percent.[1] Such a large increase in the incidence of long-term joblessness is unprecedented in the postwar period.

The policy response to the declining labor market was both timely and extensive. On June 30, 2008, the President signed Public Law 110-252 (henceforth referred to as the Emergency Unemployment Compensation Act of 2008 or EUC08), which provided up to 13 weeks of additional unemployment compensation (UC) benefits to workers who had exhausted their entitlements under regular state unemployment insurance (UI) programs. In late 2008, benefits available under this "first tier" of emergency benefits were extended to 20 weeks and this was ultimately followed by three more tiers of benefits enacted throughout 2009. By late 2009, individuals who had exhausted their entitlements to regular UI benefits could (in combination with the permanent standby Extended Benefits program [EB]) collect up to 73 weeks of extended benefits in addition to 26 from the regular UI program.

Although this major program in emergency benefits was the largest in U.S. history in terms of dollars of benefits paid to claimants, its details closely resembled programs adopted in many earlier recessions. The goal of this paper is to place the EUC08 program (together with its many additions and amendments) into a theoretical and historical context in order to highlight the similarities and differences among the various programs. Specifically, we show that despite its similarity to earlier programs, EUC08 differed in three important ways from its predecessors: (1) The program was implemented earlier in the recession than were most previous emergency programs; (2) The program

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[1] All labor force data are from the Bureau of Labor Statistics website (http://www.bls.gov/).

contained several provisions that made the EB program more attractive to states so that this program played a larger role in the current recessions than it has in the recent past; and (3) the program was accompanied by a number of other important UC-related provisions contained in the American Recovery and Reinvestment Act of 2009 (ARRA).[2] As we show, these features of EUC08 provide a general framework for thinking about how the program should be evaluated.

This paper is divided into five major sections. Section I provides a conceptual background for extended benefits programs by looking at the rapidly expanding literature on "optimal UI," focusing most extensively on the potential duration of benefits as a policy parameter. In Section II, we provide an overview of the major extended benefits programs that have been implemented since 1970, and we summarize the key components of EUC08 and its amendments. Section III takes a quantitative approach to comparing the extended benefits programs by summarizing some of their aggregate characteristics. Section IV provides a summary of the empirical studies of the impacts of these programs. Finally, Section V provides some concluding comments and summarizes the research questions that will guide the subsequent research on the most recent extended benefits package.

I. THE THEORY OF OPTIMAL UNEMPLOYMENT INSURANCE

The past 25 years have seen the development of a substantial body of literature that seeks to evaluate the efficiency properties of UC. The key insight of this research is to view UI as *insurance* (rather than, say, as an income transfer program) against the risk of wage losses arising from involuntary unemployment. A primary advantage of this approach is that it permits authors to draw on recent concepts in the theory of insurance and related issues, such as the study of moral hazard

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[2] Although initially enacted in 2008, the EUC08 program is often considered part of a broader set of the UC-related provisions of ARRA enacted in February 2009. This paper focuses primarily on the EUC08 program and not the other UC provisions of ARRA. However the other provisions will also be examined as part of the current study being conducted for the U.S. Department of Labor by Mathematica Policy Research and the Urban Institute.

or of optimal incentive contracts. In this section, we provide a review of this literature, with a focus on its relevance to extended benefits policy.

UI is superior to other ways of insuring against wage loss from unemployment (such as precautionary savings), because it compensates explicitly for the contingency of concern. In the absence of any adverse incentive effects, and with actuarially fair insurance premiums, full wage replacement insurance would be optimal.[3] As with any insurance contract, however, the possibility of moral hazard complicates matters. For example, if receipt of UI benefits provides an incentive for workers to remain unemployed longer, full insurance is no longer optimal—an efficient trade-off exists between the risk reduction benefits of insurance and the welfare costs of added unemployment.

Baily (1978) was one of the earliest to model this trade-off explicitly. His results suggested that the optimal wage replacement ratio might be approximately 0.65, unless the elasticity of a recipient's job search effort with respect to that ratio was quite high.[4] The author also noted that a one-time, fixed redundancy (lump-sum) payment instead of traditional UI benefits might be welfare enhancing. Fleming (1978) expanded on the optimality concept by stressing the importance of savings and possible capital market imperfections. He showed that optimal wage replacement ratios would be lower (perhaps as low as 0.20) with perfect capital markets than without them. A final contribution to the early theoretical development was the paper by Shavell and Weiss (1979), which considered possible departures from a fixed benefit schedule throughout the UI spell. The authors showed that, if initial wealth is zero, it is optimal to have benefits decline over time to induce active

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[3] Although UI taxes are "paid" by firms (or through general revenue), virtually all of the theoretical literature treats the taxes as being paid by workers—an approach consistent with the widely held view that workers bear the final incidence of the tax.

[4] Baily's formula for optimal replacement was extensively analyzed by Chetty (2006), who provided a more complete analysis of how three parameters (risk aversion, consumption smoothing effects of UI, and the elasticity of unemployment duration with respect to the UI benefit) interact.

job search early in the unemployment spell. No such simple conclusions are possible if the UI recipient already has some wealth—an initial period of low benefits may provide more efficient consumption patterns in a balanced-budget context.

The more recent literature on optimal UI has generalized these early results in several ways by including: (1) more thorough specifications of the incentive effects of UI and of whether UI-induced effects are necessarily "inefficient;" (2) explicit consideration of heterogeneity in employers and employees; and (3) a focus on the duration of benefits as a policy parameter, especially over the business cycle. Because the third of these has the greatest relevance to extended benefits policy, we will provide only a brief discussion of the first two. With regard to incentive effects, some authors have generalized possible effects of UI on the job search process to include the intensity of search effort (Hopenhayn and Nicolini 1997) or refusal of suitable employment (Hansen and Imrohoroglu 1992). In these models, such additions provide a more explicit consideration of how UI may affect reservation wages. A different set of generalizations focuses on how availability of UI may affect workers' performance on the pre-unemployment job. Specifically, it may make workers more willing to shirk on their pre-unemployment jobs (Wang and Williamson 1996; Coles and Masters 2006) or to quit their jobs voluntarily.[5] Other papers have looked at how calculations of optimal UI replacement rates may be affected by considerations of human capital accumulation. For example, Brown and Kaufold (1988) found that UI can increase incentives for workers to make investments in risky human capital. Alternatively, Golosov and Tsyvinski (2007) found that UI may crowd out private insurance, thereby implying a smaller optimal UI benefit if such arrangements are available.

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[5] Historically, most U.S. workers who voluntarily quit without good cause have been ineligible for UI benefits (Nicholson 1997). However, the distinction between voluntary and involuntary separations is sometimes difficult to make. Furthermore, one of the potential ways in which states have been encouraged through ARRA to modernize their UI systems is to expand eligibility for benefits to workers who quit their jobs for good cause.

The relationship between optimal UI and private savings has received perhaps the most detailed recent attention. Feldstein (2005), in his influential presidential address to the American Economic Association, stressed that theoretical calculations of optimal UI replacement rates can be misleading if they do not consider how UI may affect decisions to save. Wang and Williamson (2002) showed this to be the case by calculating rather complex optimal benefits schedules in which savings decisions are modeled explicitly. Lentz (2009) reached a similar conclusion by focusing on the relationship between savings and job search activity. Card, Chetty, and Weber (2007) and Chetty (2008) provided a novel insight on the savings question by differentiating between the "liquidity" and "moral hazard" effects of UI. They challenged the traditional view that the potential positive effects of UI on the duration of unemployment are necessarily welfare losses akin to the moral hazard effect of most insurance-type arrangements. The authors pointed out that, if households are liquidity constrained (that is, they cannot borrow to support consumption), the receipt of UI may mitigate the pressure to accept a job quickly in order to maintain consumption. This should more properly be regarded as a response to market failure in the credit market than to moral hazard *per se* and therefore may have smaller efficiency costs. Such a conclusion returns to a point made in the earliest empirical literature on UI (for example, Ehrenberg and Oaxaca 1976)—that the "disincentive" effects of UI may not be complete welfare losses if the longer duration of unemployment permits the worker to make a better job match. Chetty's (2008) empirical estimates suggested that such motivation may explain a significant portion of the purported greater welfare costs of higher UI benefits.

Heterogeneity in firms or workers has also been shown to have implications for UI policy. Most literature on this topic has focused on the experience rating system of assigning UI tax rates on

employers' payrolls.[6] Early papers by Feldstein (1978) and Topel (1984) suggested that the failure to adopt complete experience rating, in which employers are subsequently charged dollar-for-dollar for the UI benefits received by former employees, may result in the subsidization of firms and industries with above-average layoff experiences. Empirical estimates of the size of the effect due to imperfect experience rating tended to be large, sometimes amounting to an increase of 1 percentage point in the unemployment rate.[7] Recent papers have also stressed the importance of experience rating on employers' decision making and workers' welfare, though usually in a more theoretical context. For example, Blanchard and Tirole (2004) showed that full experience rating is required if firms are to internalize the costs imposed by their own layoff decisions and thereby make efficient choices about changes in labor input during a decline in demand. Similarly, Wang and Williamson (2002) showed that incomplete experience rating can negatively affect the welfare of low-unemployment workers, but they stressed that these losses represent mainly transfers; in their model, effects on total economic output are quite small.

Complications raised by worker heterogeneity (say, differences in skills or in preferences for leisure) have played a less central role in the development of the literature on optimal UI. Although it seems plausible that these differences exist and that they might create problems in the development of efficient extended benefits policy, formal modeling of this possibility has been minimal.   Wang and Williamson (2002) considered the welfare consequences of worker heterogeneity in job retention and showed that, without experience rating, optimal allocations result in large transfers from workers in long-tenure industries to workers in short-tenure ones. They also

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[6] The literature on experience rating has usually taken the types of jobs available in the economy as fixed. Acemoglu and Shimer (1999), however, illustrated how availability of UI benefits may alter the distribution of jobs by making high-risk jobs more attractive to risk-averse workers. In their model, this effect increases output in the economy.

[7] Card and Levine (1994) reached a similar conclusion in part because they showed that UI can increase the subsidization of seasonal industries.

showed that when workers from the long-tenure industries become unemployed, they have longer unemployment spells. However, the authors did not pursue the consequences of this finding for more general policy purposes.[8]

Although Davidson and Woodbury (1997) and Wang and Williamson (2002) dealt explicitly with the duration of UI benefits, neither paper focused on the central policy question of how optimal duration should change in the presence of changing unemployment risk—an issue of critical importance during cyclical downturns in the economy. A striking conclusion of Davidson and Woodbury is that potential duration of benefits should be infinite under an optimal program. The authors reached this conclusion by pointing out that an actuarially fair increase in benefit duration will always be welfare enhancing if there are no incentive effects, because such an increase provides added income in the post-exhaustion period when income is lowest. With an infinite duration, the authors concluded that a wage replacement ratio of approximately 0.50 is about right. However, if potential durations were limited (say, to 26 weeks), optimal replacement ratios could easily exceed 1.0.

It is difficult to know the extent to which these results are of relevance for UC policy. The authors pointed out that the purported optimality of infinite potential durations depends on two assumptions in their model: (1) the size of the effect of changes in potential duration on search effort, and (2) the exclusion of savings and borrowing from their model. The authors then claimed that relaxing either of these assumptions would not appreciably change their key result, and some of their simulations show that. But theirs is a very specific type of job-matching model, and it is not clear that such results would extend to other ways of specifying labor market equilibria. Still, by focusing on the welfare significance of the decline in income that accompanies exhaustion of

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[8] Karni (1999) also discussed worker heterogeneity in the context of devising incentive-compatible UI insurance schemes that target benefits to some categories of workers and exclude others.

benefits, the authors posed a challenge for those who argue for programs that limit the duration of benefits.

Duration of benefits is not a primary interest of Wang and Williamson (2002), but the authors presented interesting simulations on the topic. Their results supported those of Davidson and Woodbury in that they found welfare gains from increasing durations. However, these gains are small in percentage terms. These authors also got smaller optimal wage replacement rates. For example, with infinite durations, Wang and Williamson computed an optimal replacement rate of 0.24, only about half the size estimated by Davidson and Woodbury. An interesting sidelight to the authors' simulations is that their base case yields an unemployment rate of about 7.4 percent with a potential duration of 52 weeks and an optimal replacement ratio of 0.35. As we show in Section III, these numbers are approximately the values observed for the actual UI system during the recession of the mid-1970s. Unfortunately, however, the authors did not provide any simulations under alternative unemployment scenarios, in part because unemployment is endogenous in their model so the precise sources of different levels of unemployment would need to be specified.

An alternative approach to studying cyclical issues is to ask whether optimal UI benefits should be "more generous" during downturns.[9] Most authors who have addressed this question have concluded that such an increase is indeed warranted. For example, Kiley (2003) and Sanchez (2008) argued that UI benefits have smaller distortionary effects[10] during downturns, so higher wage replacement rates are warranted. Authors who take a general equilibrium approach have reached similar conclusions through a different chain of logic. Andersen and Svarer (2010) and Moyen and Stahler (2009) found that optimal UI is countercyclical in its generosity because governments can

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[9] Although literature about this issue has implicitly focused on the weekly benefit amount as the key measure of generosity, many of its conclusions seem equally relevant to a notion of generosity that includes both weekly benefit amounts and potential durations of benefits. For example, the entire dollar value of a UC recipient's entitlement might be thought of as the parameter that is made more generous during recessions.

[10] In Section IV, we examine whether the empirical evidence is consistent with this hypothesis.

use deficit financing for the program to promote consumption smoothing. Landais et al. (2010) developed yet another rationale for increased generosity during recessions. In their model, the government must balance its budget each period. However, they assumed that labor markets during recessions are characterized by job rationing. In such a situation, individual job search effort creates an externality by reducing the likelihood that other job-seekers can find a job. Increases in the generosity of UI benefits can help to offset this externality.

Although the literature on optimal UI reviewed here has not addressed explicitly the ways in which benefits have been extended during recessions in the United States, this review offers a few conclusions that are relevant to that topic:

1. Almost all models suggest that optimal replacement ratios are less than 1.0 in the presence of moral hazard;

2. Models that allow for personal savings lead to lower optimal replacement ratios than those that do not;

3. Time patterns of replacement rates that are not constant over the duration of the unemployment spell may be preferable to constant wage replacement rates, but the welfare gains from complex benefit schedules seem small;

4. The potential to exhaust UI benefits is important both because of its incentive effects in spurring a return to work and because of the sharp fall in income that exhaustion may entail;

5. Experience rating of benefits can have important behavioral effects on firms' layoff decisions and, potentially, on the distribution of wages across cyclically sensitive jobs; and

6. Worker heterogeneity may imply problems for the design of optimal UI systems. However, this last topic has not been studied in much detail.

II. EXTENDED BENEFITS POLICY—EUC08 IN HISTORICAL PERSPECTIVE

Extended benefits programs have been available during every recession in the United States since the late 1950s. In order to be eligible for such benefits, workers must exhaust their entitlements to regular (state) UI benefits. The sole permanent program of extensions is the standby Extended Benefits (EB) program, first enacted in 1970. The original concept of EB was that the program would provide an automatic extension of benefits whenever economic conditions

worsened. EB might then be followed by temporary programs in situations where unemployment was especially severe. Such temporary programs have indeed been enacted in every major recession since 1970. In contrast to the EB program, these temporary programs have been enacted for specific calendar periods and have had explicit expiration dates. They have usually been implemented in a series of tiers under which added benefits become available as the shape of the recession becomes clearer to policymakers. The emergency programs also often incorporate special provisions that focus benefits on specific states or on categories of workers who are experiencing severe difficulties. Often the emergency program tiers and accompanying special provisions interact with the permanent EB program in complex ways. In order to evaluate many of the policy questions that have arisen in connection with EUC08, it is important to understand this complex history. Here we will briefly review the key elements of each program before providing a more detailed examination of EUC08 itself.

A. Extended Benefits Program

Experience with two temporary extended benefits programs in the late 1950s and early 1960s suggested the need for a more systematic approach to extended benefits policy during recessions. With the passage of the Employment Security Amendments of 1970, the federal government established a permanent standby EB program under which up to 13 additional weeks[11] of benefits would be available to people who exhausted their regular UI entitlements. Under the legislation, the EB program—financed jointly by the federal government and the states on a 50-50 basis—was to be automatically "triggered" whenever the insured unemployment rate (IUR) reached certain critical

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[11] Throughout our discussion of extended benefits programs, we will usually refer to the maximum number of weeks of benefits available under the programs. In actuality, extended benefits programs typically specify the amount by which an individual's UI entitlement will be increased. For example, the EB program specifies that the entitlement will be increased by the smaller of 50 percent of the regular UI entitlement *or* 13 times the worker's weekly benefit amount. For a claimant eligible for 26 weeks of benefits, this would indeed result in 13 added weeks of benefits. But for a worker originally entitled to fewer than 26 weeks of benefits, EB would provide fewer added weeks.

levels.[12]   Initially, the program contained both a national trigger (4.5 percent) and state-specific triggers (4 percent), either one of which would lead to activation of the program when the trigger was met. Amendments to the program in 1981 eliminated the national trigger and raised the state triggers to a threshold at which a state's 13-week average IUR would equal or exceed 5 percent and 120 percent of the average IUR in the corresponding period in the previous two years.[13]   The 120 percent threshold would be waived if the IUR exceeded 6 percent.

These changes in the EB program had a substantial effect on EB caseloads. One simulation of the impact (Corson and Nicholson 1985) suggested that caseloads fell by 25 to 30 percent during the early 1980s. The simulations also suggested that caseloads would drop even more precipitously during periods of stronger labor market activity.

Perhaps an even more important reason for the decline in periods of EB availability may have been the secular decline in the IUR that occurred during the 1980s and persisted into the early 1990s (see, for example, Blank and Card 1991). Because of this changing relationship between the IUR and the overall strength of the labor market, EB triggers based on the IUR came to be regarded as too stringent. Therefore, in 1992, the program was modified to permit states to use a three-month moving average of the seasonally adjusted total unemployment rate (TUR) as estimated by the Bureau of Labor Statistics.[14]   The trigger rate for the TUR was set at 6.5 percent, together with the requirement that the rate exceed that for the previous two years by 10 percent.   The 1992

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[12] The IUR is computed from administrative data collected weekly by the UI system. It is defined as the number of insured unemployed persons divided by total (reimbursable) employment covered by the UI program. Technically, the number of insured unemployed persons is measured as the number of continued weeks claimed, which includes individuals with UI waiting weeks and may include some weeks claimed by disqualified individuals.

[13] The 1981 Amendments also eliminated EB claimants themselves from the computation of the IUR and imposed stronger job search and acceptance of suitable work requirements than exist under some states' regular UI programs. These more stringent search requirements also were included in some of the temporary programs, but were not included in EUC08. EB also requires that claimants have 20 weeks of work (or the equivalent) in their base period for eligibility. That requirement was carried over into most emergency benefits programs including EUC08.

[14] The TUR is derived from data collected in the monthly Current Population Survey. It is defined as the total number of unemployed workers (those who do not have a job and are actively seeking work, regardless of whether or not they are collecting UI benefits) divided by the total civilian labor force.

Amendments also provided up to 20 weeks of benefits in states with TURs above 8 percent (again with the 10 percent threshold). Corson and Rangarajan (1994) estimated that earlier adoption of this alternative triggering mechanism would have more than tripled the number of exhaustees of regular UI programs who would have been eligible for EB during the 1980s.

In the three decades prior to the current recession, however, the EB program continued to experience little activity. Three factors account for this pattern. First, the strong labor market throughout most of the later 1980s and 1990s meant that the EB trigger criteria were often not met. Second, in some cases, states were permitted to opt out of EB during a recession and instead adopt the emergency program that had been put in place. In the recession of the early 2000s, the Temporary Extended Unemployment Compensation (TEUC) program explicitly changed the sequencing of extended benefits programs so that TEUC benefits would be paid first, followed by EB benefits. That made EB payable only to claimants with the longest unemployment durations. As we show below, this procedure was generally followed in the current recession as well, although the very long unemployment durations that have been experienced recently mean that EB caseloads eventually became large.

B. Federal Supplemental Benefits (FSB) Program

During every major recession since the EB program's inception, the federal government has provided emergency benefit extensions for much longer durations than promised under the standby EB program. The first of these programs, the FSB program, was enacted in December 1974 and, during much of its existence, provided up to 26 weeks of benefits in addition to what claimants could receive under the UI and EB programs.[15] Hence, during the 1974–1975 recession, many

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[15] Initially, the FSB program was financed through the UI Trust Fund. In its later stages, however, it was financed from general revenues, which reflected an implicit recognition of the view that employers' liability for longer-term UI benefits should be limited. All later emergency extensions have contained similar provisions for general revenue financing.

claimants were eligible to receive 65 weeks of benefits—26 from regular UI, 13 from EB, and 26 from FSB. This program ended in December 1977.

Analyses of the FSB program (Katz and Ochs 1980; and Corson and Nicholson 1982) suggested that the program's potentially long benefit durations substantially reduced the overall benefit exhaustion rate from all UC programs below that experienced during typical non-recessionary periods. By this measure, then, the entire UC program was somewhat "more generous" than the regular UI program during non-recessionary times. In Section III, we look at a variety of quantitative measures of extended benefits programs and conclude that FSB was a larger program than all but EUC08.

C. Federal Supplemental Compensation (FSC) Program

The next temporary program (FSC) was enacted in response to the "double dip" recessions in 1980 and 1981–1982. The program initially provided a maximum of 6 to 10 additional weeks of benefits, in addition to the regular UI and EB benefits to which a claimant was entitled. Whether claimants received 6 or 10 weeks of FSC depended on the EB status of each state. Ultimately, however, the FSC program involved four separate phases, each with a different potential duration of benefits. In some cases, claimants who had exhausted benefits under one phase were eligible for further benefits under a later phase. In addition, the maximum potential duration within a state could change rapidly because of changes in the IUR. These complexities made it difficult to characterize precisely what benefit duration FSC actually provided. Corson et al. (1986) reported survey data that showed that the typical FSC recipient collected about 12 weeks of benefits under the program. Ultimately, FSC benefits were paid through March 1985—more than two years after the officially defined end of that recession.

Experience under the FSC program further confirmed some of the major difficulties associated with temporary extended benefits programs. Because the program was implemented late in the business cycle, its macroeconomic stabilization properties were considerably weaker than those of

earlier programs such as FSB (Corson et al. 1986). Similarly, the FSC triggering formulas, by requiring a minimum level of payments in all states, meant that benefits were not effectively targeted toward the labor markets and the time periods in which unemployment was most severe. The complex and frequently changing trigger requirements for FSC also led to administrative difficulties. Particularly problematic were issues relating both to the sequencing of EB and FSC (since many recipients were switched from one program to the other) and to the transitioning of claims between the four phases of FSC. Ultimately, the program provided extended benefits in amounts similar to those provided by emergency extended benefits programs in previous recessions.

D. Emergency Unemployment Compensation (EUC) Program

The EUC program was implemented in five phases over a nearly two-year period, starting in November 1991. Phase 1 (as amended) provided either 13 or 20 weeks of benefits, depending on a state's unemployment rate. To be eligible for 20 weeks of benefits, states were required to have an "adjusted" IUR, or AIUR, of 5 percent, or a six-month average TUR of 9 percent. The adjustment to the IUR used in the EUC triggering formula consisted of including exhaustees over the most recent three-month period in the numerator of the IUR. States that did not meet these trigger requirements were eligible for 13 weeks of benefits.

These initial EUC trigger requirements were novel for three reasons. First, they represented the first use of the TUR as a trigger device for temporary programs. On one hand, the use of the TUR reflected a perception that, because of the secular decline in the IUR over time, the TUR could be an appropriate alternative measure of a state's economic health. On the other hand, use of the TUR raised issues about the accuracy of this measure, especially for smaller states for which the TUR is measured less precisely. Second, the EUC trigger levels were set in a way that ensured that EUC would be implemented before standby EB in nearly all circumstances. This possibility was formalized by a provision that permitted states to elect to trigger off EB in favor of EUC even during periods for which they qualified for EB. Because EUC was financed solely from federal

sources, the state-federal cost-sharing that characterizes the EB program was consequently superseded during the 1990–1992 recession. Third, because the trigger rates specified in the EUC law were high relative to actual IURs and TURs, most states were able to offer their long-term unemployed claimants only the minimum 13 weeks allowed by law during the first phase of the program.

Subsequent phases of EUC modified the allowed durations on several occasions. Phase II of the program provided either 26 or 33 weeks of benefits depending on the value of either the adjusted IUR or a TUR trigger indicator. These durations were cut back under Phase III of the program to 20 or 26 weeks and then to 10 or 15 weeks under Phase IV. Finally, EUC Phase V paid benefits of either 7 or 15 weeks through February 1994. Each of these changes in duration brought about complex regulations governing how former and current recipients were to be treated.

The EUC program included two additional provisions that added to its administrative difficulties. First, as was the case for previous temporary extensions (FSB and FSC), EUC included "reach-back" provisions that permitted the payment of benefits to claimants who had exhausted the regular UI entitlements within a defined period before the enactment of the EUC legislation. Specifically, people who had exhausted benefits under claims with a benefit year that ended after February 28, 1991, were entitled to benefits if they remained unemployed, even though the program was not enacted until November 1991. Second, for a portion of the time in which EUC was in effect and under certain circumstances, claimants could choose between filing a claim for regular UI benefits or collecting (or continuing to collect) EUC benefits. Typically, claimants are eligible to collect emergency benefits only if they have exhausted all regular UI benefits to which they are entitled—that is, (1) they have collected all of the regular UI benefits to which they are entitled or their benefit year has expired and (2) they are not eligible to establish a new benefit year for additional regular UI benefits. However, the "EUC option" provision allowed claimants to choose between collecting regular UI and EUC benefits. This provision, which was in effect from July 1992

to November 1993, was intended to avoid forcing claimants who had employment after one benefit year from establishing a new benefit year with a lower weekly benefit amount based on the intervening employment (which might have led to lower base period earnings for the new benefit year compared to the base period earnings for the earlier benefit year). However, this option for claimants created a number of administrative problems for states, including the need to explain the choice and its implications to claimants. The provision also had its own reach-back element: states had to go back to claimants who filed before July 1992 and offer them a choice between the two programs if they were eligible for it.

Findings from an evaluation of the EUC program (Corson et al. 1999) suggested that the program performed an important countercyclical role during the recession of the early 1990s, in part because of the extended length of that recession. In general, it appeared that workers receiving benefits under the program found it very difficult to secure a job even after they had exhausted all of their potential benefits. As for the FSC program, the complexities introduced by the five program phases made EUC a difficult program for states to administer. In addition, the option that allowed some claimants to choose EUC instead of regular UI not only added to the administrative challenges but also directed a substantial portion of program funds (about 12 to 16 percent) to people who generally were not long-term unemployed. Because EUC was federally funded, these funds also represented a windfall for state UI trust funds.

E. Temporary Extended Unemployment Compensation Program

Before the current recession, the most recent program of emergency extensions was adopted in response to the recession of 2001. This program, the Temporary Extended Unemployment Compensation (TEUC), was signed into law on March 9, 2002. It provided up to 13 weeks of federally financed benefits in all states. It also provided an additional 13 weeks of benefits (TEUC-X) in states that were in an EB period or would be if they used a 4 percent IUR trigger for EB. Initially, benefits were paid to eligible people who first filed a claim for weeks during or after March

15, 2002, through the end of December 2002. Subsequent additions to the program extended benefits to claims initially filed by the end of December 2003, with a phase-out period through April 2004 for people with a remaining claim amount. Unlike the earlier EUC program of the 1990s, however, the added phases of TEUC are essentially identical to the first phase, which made implementation by the states fairly seamless.

As in earlier temporary programs, workers were eligible for TEUC benefits if they had exhausted regular UI benefits or had no benefit rights because of the expiration of a benefit year ending after March 15, 2001. The TEUC program, however, was different from the EUC program in that anyone who could establish a new regular UI benefits period could not choose to collect TEUC benefits in lieu of the UI benefits. Thus, the TEUC program avoided the choice-related problems inherent in the EUC program. Finally, as was the case with EUC, states could choose to pay TEUC and TEUC-X benefits instead of EB if they triggered on to EB; but, unlike EUC, states choosing TEUC did not have to opt out of the EB program. Instead, they could choose to pay TEUC benefits first and then pay claimants EB benefits if they were still in an EB period when the claimant exhausted TEUC.

In April 2003, Congress added a new provision to the TEUC program, under which displaced airline industry and related workers could collect additional weeks of benefits. Specifically, the program (TEUC-A) provided up to 39 weeks of benefits to workers who had exhausted a regular UI claim based in whole, or in part, on employment for an airline or related industry and who could show that their job loss resulted from (1) reductions in airline service because of the terrorist attack of September 11, 2001; (2) the closing of a U.S. airport because of terrorist actions or security measures; or (3) the war in Iraq.[16] Benefits under this provision could be extended by a further 13 weeks (for a total of 52 weeks of TEUC benefits) in states where TEUC-X triggering levels were

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[16] Weeks of TEUC already collected are deducted from this figure.

met. Claims under TEUC-A could be initiated for unemployment after April 16, 2003, and could be filed up until the end of 2003. All benefits were phased out by the first quarter of 2004.

F. Emergency Unemployment Compensation Act of 2008 (EUC08)

The EUC08 program was enacted on June 30, 2008. Initially the program provided up to 13 weeks of federally financed benefits to individuals who had exhausted their regular UI entitlements for a benefit year ending after May 1, 2007. If states met the trigger requirements for EB, they could elect to pay EUC08 prior to EB. In this case, EB would be deferred until after EUC08 benefits were exhausted. The work search and acceptance of suitable work provisions of EB do not apply to EUC08, thereby making the program easier for states to administer.

EUC08 benefits were extended in late 2008.[17] The "first tier" of EUC08 benefits was extended to 20 weeks in all states. In addition, a "second tier" of benefits of 13 weeks was included for states with high unemployment rates (an IUR of at least 4 percent or a TUR of at least 6 percent). This second tier of benefits was further changed in November 2009 to increase available benefits from 13 to 14 weeks and to make them available in all states regardless of unemployment rates.

The American Recovery and Reinvestment Act, passed in February of 2009, made significant changes to extended benefits programs. It extended the first and second tiers of EUC08 into mid-2010 and provided for general revenue financing of all such benefits. ARRA also made two changes to the permanent EB program that made it more appealing to states. First, the Act allowed the federal government to pay 100 percent of the costs of EB, whereas previously half of the costs of the program were paid by the states. Second, the Act permitted all states to use the TUR trigger in EB to determine eligibility, even if a state had not previously done so. As a result of these changes,

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[17] Appendix A provides dates for the various provisions under which EUC08 was enhanced and extended during the 2008–2010 period.

benefits paid under the EB program expanded significantly beginning in the second quarter of 2009 (see the discussion in Section III).

ARRA also contained a number of other provisions relating to the EB and regular UI programs. These included an overall increase of $25 per week (called Federal Additional Compensation) in weekly benefit amounts for all UC recipients, a reduction in the amount of UC benefits that were subject to federal income taxation for calendar year 2009, and incentives to the states to undertake a variety of modernization amendments to their basic UI laws. These changes included: (1) adoption of an acceptable alternative base period for calculation of monetary eligibility for UI; (2) relaxing UI nonmonetary eligibility standards for individuals seeking only part-time work; (3) relaxing UI nonmonetary eligibility standards for persons who quit a job due to family-related responsibilities; (4) increasing UC durations for persons enrolled in approved training programs; and (5) paying weekly dependent allowances of at least $15 per dependent up to a maximum of $50 per family. We will not examine these various provisions in this paper, which focuses only on extended benefits.[18] But the larger study of which this review is a part will examine all of these provisions.

The Worker, Homeownership, and Business Assistance Act of 2009 (enacted on November 6, 2009) also contained a number of provisions related to extended benefits programs. These included:

- Increasing EUC08 second-tier entitlement to 14 weeks in all states (discussed above)

- Creating a new third tier for EUC08 that provided up to 13 added weeks of benefits in states with an IUR of at least 4 percent or a TUR of at least 6 percent

- Creating a new fourth tier of EUC08 that provided up to 6 additional weeks of benefits in states with an IUR of at least 6 percent or a TUR of at least 8.5 percent

The effect of these changes was to increase the maximum number of weeks for which EUC08 could be paid to 53 in states with high unemployment rates—20 weeks from tier 1, 14 weeks from

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[18] However, one of the modernization options permitted states to pay 26 weeks of additional benefits to workers in approved training programs.

tier 2, 13 weeks from tier 3, and 6 weeks from tier 4. In combination with a regular UI entitlement of 26 weeks and a maximum EB entitlement of 20 weeks, such workers could in principle collect up to 99 weeks of benefits. Because workers' UI benefit accounts were generally incremented on a tier-by-tier basis (rather than for all EUC08 tiers at once), however, such long potential durations were not automatically available to individuals exhausting their UI entitlements; rather, benefits for the next tier only became available as a claimant exhausted the most recent earlier tier. This may have led to some uncertainty on the part of claimants about the number of weeks of benefits to which they were entitled and, in some cases, may have led to gaps in payment coverage. In some cases, such gaps were ameliorated by an "EB coordination rule" that allowed states to make EB payments prior to any EUC08 tier benefit to which the claimant would otherwise be entitled. Examining how this procedure worked in practice is one goal of the present project.

The termination date for EUC08 was extended several times by legislation throughout 2010 as labor markets continued to be very weak. On several occasions, gaps in coverage that arose after expiration of the program were averted through retroactive implementation of an extension of the program. In late 2010 the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act further extended EUC08 to provide for compensation of weeks of unemployment ending on or before January 3, 2012. Individuals who have established EUC08 entitlement by this date can collect the remainder of this entitlement through June 9, 2012.

The Tax Relief Act also made significant changes to the EB program. Specifically, the Act extended 100 percent federal funding of EB through January 4, 2012. It also amended the way in which states can compute their EB "on" indicators by changing from the two-year look-back period that applies to the 120 or 110 percent trigger thresholds to a three-year period. The motivation for this amendment to the EB program was that, because of the sustained period of high unemployment rates associated with the recent recession, states with persistent high unemployment rates would otherwise trigger off of EB. Allowing a three-year look-back period instead of a two-

year look-back period is likely to allow more states to be eligible for EB payments in 2011 and beyond.

III. A QUANTITATIVE ASSESSMENT OF EXTENDED BENEFITS PROGRAMS

Because extended benefits programs have had such a complex history in the United States, a quantitative summary can help identify certain commonalities and differences among them. Denoting the quarters of a year by using a decimal point and numeral after the year (for example, using "1975.1" to indicate the first quarter of 1975), Table 1 provides such a summary by identifying five specific historical periods of interest:

1. The Federal Supplemental Benefits (FSB) period: 1975.1 to 1977.4
2. The Federal Supplemental Compensation (FSC) period: 1982.3 to 1985.1
3. The Emergency Unemployment Compensation (EUC) period: 1991.4 to 1994.2
4. The Temporary Extended Unemployment Compensation (TEUC) period: 2002.2 to 2004.1
5. The Emergency Unemployment Compensation 2008 period (EUC08): 2008.3 to 2010.3. (Because the EUC08 program is still ongoing, we have included only data through 2010.3. Absent further modifications to the program, it is scheduled to end in June 2012.)

As part of the current study, the EUC08 data in the table will be updated after additional information becomes available. Of course, to some extent, the definitions of time periods for these emergency programs are arbitrary, because all the emergency programs had complex phase-in and phase-out provisions that do not fit neatly into a quarterly framework. However, the periods defined here contain practically all the activity under the emergency programs (except EUC08) and should be sufficiently precise to provide a broad overview of important features of the programs, including the size and timing of the programs relative to their respective recessions, other UC activity, labor market characteristics, and ability to reduce UC benefit exhaustion rates.

Table 1. Characteristics of Emergency Benefits Programs, the EB Programs, and the Regular UI Program During Emergency Benefits Program Periods Since 1970

Recessionary Time Period					
NBER Dates for the Recession	1973.4 to 1975.1	1981.3 to 1982.4	1990.3 to 1991.1	2001.1 to 2001.4	2007.4 to 2009.2
Quarter of Peak TUR	1975.2	1982.4	1992.3	2003.2	2009.4
Emergency Benefits Programs					
Dates of Operation	1975.1 to 1977.4	1982.3 to 1985.1	1991.4 to 1994.2	2002.2 to 2004.1	2008.3 to 2010.3[a]
Program Name	Federal Supplemental Benefits (FSB)	Federal Supplemental Compensation (FSC)	Emergency Unemployment Compensation (EUC)	Temporary Extended Unemployment Compensation (TEUC)	Emergency Unemployment Compensation of 2008 (EUC08)
Potential Durations Provided (Weeks)	13 to 26	8 to 12	7 to 27	13 to 20	34 to 53[a]
Total Benefits Paid ($Billions)	23.5	20.2	42.7	26.9	107.8[a]
First Payments (Millions)	6.1	7.6	9.2	7.5	13.6[a]
Average Benefits per First Payment ($)	3,840	2,670	4,630	3,590	7,930[a]
EB Program					
Total Benefits Paid ($Billions)	26.2	6.9	0.34	0.5	12.3
First Payments (Millions)	10.1	2.5	0.2	0.2	3.2
Average Benefits per First Payment ($)	2,600	2,760	1,660	2,700	3,844
Regular UI Program					
Total Benefits Paid ($Billions)	113.9	100.3	97.3	95.7	148.5
First Payments (Millions)	27.7	25.0	23.9	19.6	27.9
Average Benefits per First Payment ($)	4,100	4,010	4,070	4,880	5,320

Source: U.S. Unemployment Insurance Service Program Data accessed at http://workforcesecurity.doleta.gov/unemploy/finance.asp.

Note: All dollar amounts are in 2010 dollars.

[a]The EUC08 program is ongoing. Data in the table for EUC08, EB, and regular UI are through the third quarter of 2010 and will be regularly updated.

EB = Extended Benefits Program; NBER = National Bureau of Economic Research; TUR = Total Unemployment Rate; UI = Unemployment Insurance.

A.   Size and Timing of the Programs

An obvious first conclusion to be drawn from the data in Table 1 is that the EUC08 program is considerably larger than any of its predecessors. Even with the truncation imposed by data availability, EUC08 paid between 2.5 and 5 times the amount of real dollar benefits (2010 dollars) than any other emergency program.[19] Similarly, the number of first payments[20] for EUC08 was nearly twice as large as those under any of the other temporary programs.[21] By the time EUC08 expires, these differences will undoubtedly be much larger.

The relationship between our emergency program periods and National Bureau of Economic Research (NBER) reference cycle dating for recessionary periods is shown at the top of Table 1. Two facts about the timing of the temporary programs are apparent. First, activation of the emergency programs tended to occur late in the cyclical downturn. On average, initial benefits were not paid under the prior programs until about one quarter *after* the cyclical trough. Interestingly, that was not the case for EUC08. For that program, benefits were paid for almost one year before the cyclical trough in the second quarter of 2009. Hence EUC08 seems to have been implemented much earlier than was the case for the previous temporary programs.

A second fact illustrated by Table 1 is that the temporary programs have tended to pay benefits for a considerable period after each cyclical trough. Prior to the current recession, payments were made for an average of 10 quarters after each trough. Because EUC08 is currently scheduled to

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[19] Although the EUC program of the early 1990s appears to be the largest emergency program prior to EUC08, the figures in the table are a bit misleading because of a unique optional payments feature incorporated into the program. Under this feature, claimants for regular UI benefits could start collecting EUC benefits immediately if their benefit entitlements would be larger this way. An evaluation of the EUC program by Corson et al. (1999) suggests that about 17 percent of program activity derived from this option. Adjusting the figures in Table 1 for this fact would make the EUC statistics roughly similar to those for FSB and TEUC.

[20] The first payments figure used here refers to first payments under tier 1 of the EUC08 program, which is the entry point into the EUC08 program for all claimants, regardless of the number of tiers of benefits that a claimant becomes entitled to.

[21] The data in Table 1 also suggest that the typical EUC08 recipient received about twice as much in total benefits as did recipients of earlier emergency programs. This is undoubtedly explained, in part, by the longer durations of compensated unemployment being experienced under the program.

make payments through the second quarter of 2012 (about three years after the cyclical trough in the second quarter of 2009), the program appears relatively consistent with the other temporary programs in this regard.

Of course, pointing out these timing features does not imply that any of the temporary programs were poorly timed. Unemployment is clearly a lagging cyclical indicator. As Table 1 shows, for example, peak unemployment rates tend to occur several quarters after the NBER cyclical troughs. In addition, it will always take some time for workers laid off as a result of a cyclical downturn to exhaust their regular UI entitlements. Given these considerations, a lagged implementation of an emergency benefits program could be desirable. Similarly, terminating the emergency benefits programs also can pose difficult trade-offs in terms of covering workers whose labor market fortunes are still being affected by the recession while maintaining the concept that UI benefits should be payable for a relatively short period in strong labor markets. In addition, terminating the emergency programs may be politically unpopular, especially in states still experiencing high unemployment rates. Still, recognition of the actual timing of the emergency programs may shed light on some policy questions. For example, given the information in Table 1, it seems likely that prior emergency benefit programs played their most significant countercyclical role after the trough of a recession had been reached. For EUC08, however, that conclusion might not hold because substantial benefits were paid prior to the economy's (relatively weak) rebound. One goal of the current study is to examine in detail the countercyclical effects of EUC08.

B. Other UC Activity During the Emergency Periods

Table 1 shows several other patterns from other components of the UC program during the emergency program periods. Overall, it appears that activity under the regular UI program was about the same during each of the prior historical periods. Total regular UI benefits paid were between $96 and $114 billion in 2010 dollars, the number of first payments ranged from 20 to 28 million, and dollars paid per first payment were in the $4,000 to $4,900 range. During the EUC08

period, statistics from the regular UI program for the number of first payments and the total dollar amount in benefits exceeded most of these ranges, thereby indicating both the growth of the labor force and the severity of the 2008 recession.

In contrast to this general similarity for the regular UI program, the permanent EB program had highly uneven usage across the periods. As discussed in Section II, both EB first payments and total benefits paid were large during the recession of the mid-1970s, but the program contracted sharply for the recession of the early 1980s and disappeared almost completely after that. This contraction had three causes: (1) explicit legislative changes in the program's triggering mechanism that were implemented in 1981 (see Corson and Nicholson 1985), (2) a secular decline in the IUR that made it increasingly hard for states to meet the more stringent trigger requirements,[22] and (3) the fact that the normal sequencing of the EB program has changed over time. As the table shows, the EB program has made a comeback in the most recent recession, though (within our truncated data period) the program continues to be much smaller than it was in 1975–1977. Reasons for this return include the severity of the recession (many claimants continue to be unemployed long enough to reach EB even though it is usually sequenced after EUC08) and the move to 100 percent federal financing. In addition, the amendments made to the EB trigger formulas in December 2010 (after the end of the time period for the data in Table 1) are likely to contribute further to making EB an active program.

C. Comparison to Labor Market Variables

To gain further perspective on the emergency programs, Table 2 provides labor force and regular UI data for the emergency periods. These data highlight an important conclusion especially

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[22] See, for example, Blank and Card (1991). In 1992, EB was changed to permit states to use their TUR as an alternative trigger. Prior to ARRA, few states had adopted this option. In addition, the level set for such triggering, combined with the requirement that the change in the TUR must exceed certain thresholds based on the state's prior unemployment experience, continued to limit benefit availability.

relevant to evaluating the EUC08 program. Although the average TUR during the EUC08 period was comparable to the average TUR during the FSC period and only one to two percentage points higher than the TURs during the FSB and EUC periods, average unemployment durations were much higher during this most recent period. These longer unemployment durations are also reflected in the data from the regular UI program. Especially notable is the much higher exhaustion rate for regular UI benefits during the current period than for any of the earlier historical periods.

Table 2. Summary Labor Market Characteristics, by Emergency Benefits Program Period

	1975.1 to 1977.4	1982.3 to 1985.1	1991.4 to 1994.2	2002.2 to 2004.1	2008.3 to 2010.3[a]
General Economic Conditions					
TUR	7.7	8.7	7.0	5.9	8.8
Average Unemployment Duration (Weeks)	14.8	18.3	17.8	18.3	25.9
Regular UI Program					
Average Benefit Collection (Weeks)	14.7	16.1	16.0	16.1	17.5
Exhaustion Rate (Percentage)	36.2	37.2	38.3	42.1	51.7

Sources: UI Program Data: U.S. Unemployment Insurance Service Program Data accessed at http://workforcesecurity.doleta.gov/unemploy/finance.asp.

Unemployment Data: Bureau of Labor Statistics accessed at http://www.bls.gov/.

[a]The EUC08 program is ongoing. Data in the table for EUC08, EB, and regular UI are through the third quarter of 2010 and will be regularly updated.

EB = Extended Benefits Program; EUC08 = Emergency Unemployment Compensation of 2008; TUR = Total Unemployment Rate; UI = Unemployment Insurance.

D. Exhaustions as a Measure of the Effectiveness of UC-Provided Insurance

One measure of the insurance protection the UI system provides is the overall exhaustion rate for all benefits. About 30 to 35 percent of UI recipients exhaust their regular UI benefit entitlements during non-recessionary periods.[23] As Table 2 shows, exhaustion rates for regular UI exceeded 35 percent during all the emergency periods, reaching more than 42 percent during the TEUC period and nearly 52 percent during that portion of the EUC08 period for which data are available. Because the availability of extended benefits cushions the economic impact of rising unemployment durations on workers' incomes, a natural measure of the insurance protection being provided by these programs is how they affect the likelihood that a worker will run out of all benefits to which he or she is entitled. Unfortunately, calculating this "total" exhaustion rate is much easier during the prior periods than it is for the EUC08 period, both because EUC08 is ongoing and because of the changed role of the permanent EB program. Still, making rough calculations, which will be updated as part of the current study after more data are available, may provide some insights on the insurance protection that the extended benefits programs provide.

In Table 3, we calculate the total exhaustion rate for all UC programs in two ways. First, we simply compute the ratio of total final payments under the emergency programs[24] to total UI first payments during the respective time periods. For programs prior to EUC08, this calculation is a simple one because the programs terminated long ago. In general these computations show that total exhaustion rates exhibited a fairly wide range. During the FSB period only about 13 percent of

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[23] The non-recessionary exhaustion rate has been rising. In the post-2000 period, the non-recessionary rate averaged about 35 percent, up from about 33 percent in the 1990s and 31 percent in the 1980s (data on exhaustion rates are taken from the UI statistics website).

[24] In some cases, the actual final payment a claimant received may have been from the EB program, depending on how that program was sequenced. The calculations in the table base exhaustion rates on activities under the emergency programs only. For the case of EUC08, it is especially important to take the sequencing of EB into account when making calculations such as those in Table 3.

Table 3. Exhaustion Rates, by Emergency Benefits Program Period

	1975.1 to 1977.4	1982.3 to 1985.1	1991.4 to 1994.2	2002.2 to 2004.1	2008.3 to 2010.3[a]
Simple Total Exhaustion Rate	0.13	0.24	0.21	0.28	0.20
Regular UI Program					
Exhaustion Rate	0.36	0.37	0.38	0.42	0.51
EB Program					
Participation Rate	0.99	0.25	0.02	0.03	N/A
Exhaustion Rate	0.69	0.63	0.35	0.53	0.55
Emergency Benefits Program					
Participation Rate	0.86	0.82	0.80	0.86	0.94
Exhaustion Rate	0.60	0.79	0.54	0.72	0.41
Total Exhaustion Rate	**0.17**	**0.28**	**0.24**	**0.32**	**0.23**

Source: Calculated from UC Program data—U.S. Unemployment Insurance Service Program Data accessed at http://workforcesecurity.doleta.gov/unemploy/finance.asp.

Notes: The simple total exhaustion rate is emergency exhaustions divided by UI first payments over the period. See the text for a description of the calculation method used to derive the more complex rates. Except for during the TEUC period, the EB participation rate is calculated as EB first payments divided by exhaustions of the regular UI program. During the TEUC period, it is calculated by using TEUC exhaustions in the denominator because of the reversed ordering of the programs during that period. An EB participation rate is not calculated for the EUC08 period because the EUC08 program is ongoing. Except for during the TEUC and EUC08 periods, the emergency benefits program participation rate is calculated as the first payments in the emergency program divided by EB exhaustions. For the TEUC and EUC08 periods, it is calculated by using regular UI exhaustions in the denominator because of the reversed ordering of the programs during those periods.

[a]The EUC08 program is ongoing. Data in the table for EUC08, EB, and regular UI are through the third quarter of 2010 and will be regularly updated.

EB = Extended Benefits Program; EUC08 = Emergency Unemployment Compensation of 2008; TEUC = Temporary Extended Unemployment Compensation; UI = Unemployment Insurance.

all claimants exhausted their benefits, whereas during the TEUC period the figure was more than twice as high, at 28 percent. For EUC08, the calculations in Table 3 use exhaustions of tier 2 benefits as the measure of overall final payments. This approximation is subject to error as it suffers from several conflicting biases. Biasing the figure downward is the fact that many claimants did not have the chance to exhaust their tier 2 benefits during the time period available in the data. But

biasing the figure upward is the fact that many claimants who exhausted their tier 2 benefits were eligible for added tiers of EUC08 or for payments from the permanent EB program. (Out of the 50 states and the District of Columbia, 48 states have received at least some third-tier EUC08 benefits, 33 states have received at least some fourth-tier EUC08 benefits, and 40 states have received at least some EB benefits. However, it is unclear at this point what portion of claimants in these states who exhausted the second tier of EUC08 benefits received these extra types of benefits, given the timing of the implementation of the third and fourth tiers of EUC08.) How these biases net out will not be known until final data from the EUC08 program become available. Despite these data shortcomings, however, the figures in Table 3 suggest that, to date, the total exhaustion rate experiences with EUC08 were roughly similar to those from the prior emergency programs.

The simple calculations in the first row of Table 3 may obscure actual exhaustion experiences by not including people who exhaust one tier of benefits and do not continue to the next, even though they are in principle eligible for the additional benefits. If these people were also considered to be "exhaustees," our calculated exhaustion rates would be higher. To examine this question, we first estimate the probability of exhausting EB or emergency program benefits, given that someone obtains a first payment for that program by taking the ratio of exhaustions to first payments over the emergency benefit period. These calculations show that exhaustion rates both for EB and for the emergency programs have varied considerably over time—primarily in response to the durations provided under each program.[25]

The second component in our more complex calculation of total exhaustion rates is the "effective participation rate" for each of the various extended benefits programs, defined as the number of first payments under a program divided by the number of exhaustees from the prior

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[25] Estimates of the EB exhaustion rates in the EUC and TEUC periods are subject to greater variability because the small size of the program makes phase-in and phase-out phenomena relatively more important. However, because of the low participation rates for the programs, this variability has little impact on our calculation of total exhaustion rates.

program tier. For example, in the case of EB during the recession of the mid-1970s, effective participation was nearly universal—EB first payments were 99 percent of regular UI exhaustions during the period. The effective EB participation rates in the 1980s and 1990s were much lower, primarily because the program did not trigger on in many states during these periods.[26,27] Effective participation rates for the emergency programs are defined as first payments under the programs divided by exhaustions of either EB (when available) or regular UI (when EB is not available). These effective participation rates were between 80 and 86 percent for all the emergency programs.

The final step in our detailed calculation of total exhaustion rates is to compute weighted averages of the exhaustion rates in Table 3 using the program-specific effective participation rates. For the earliest period, for example, the calculation is:

$$
\begin{aligned}
r_{total} &= r_{UI}((1-p_{EB}) + p_{EB}(1-p_{EM})r_{EB} + p_{EB}p_{EM}r_{EB}r_{EM}) \\
&= 0.36 \cdot (0.01 + 0.99 \cdot 0.14 \cdot 0.69 + 0.99 \cdot 0.86 \cdot 0.69 \cdot 0.60) = 0.166
\end{aligned} \tag{1}
$$

where the *r*'s represent exhaustion rates and the *p*'s represent effective participation rates. Calculations for the other three periods are similar, though each must take into account the peculiarities of the specifics of the programs in effect. Overall, these more complex calculations also show that extended benefit programs reduce total exhaustion rates substantially—all the total exhaustion rates calculated in the table are considerably below the regular UI exhaustion rates that prevailed during their respective recessions (as shown in Table 2). The calculations also agree with the simpler calculations in the relative ranking of generosity of the emergency programs. For example, the most significant reduction in exhaustions occurred in the recession of the 1970s, when the EB/FSB policy combination reduced the estimated total exhaustion rate to a very low level

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[26] All estimates for the 1990s are adjusted for the optional claims feature of the EUC program, which allowed non-exhaustees of regular UI benefits to collect EUC benefits.

[27] Because of the reverse ordering of the programs, the effective EB participation rate for the recession of the early 2000s is defined as EB first payments divided by TEUC exhaustions.

(0.17). For the TEUC period, on the other hand, the more complex calculation suggests that the TEUC program succeeded only in reducing the total exhaustion rate approximately back to its pre-recession levels. Three factors may account for this: (1) regular UI exhaustion rates were relatively high during 2002 and 2003, (2) the TEUC program was slightly less generous than were the FSB and EUC programs in terms of potential duration, and (3) the EB program played a very small role during this period.

For EUC08, a complex calculation of the total exhaustion rate is challenging at the present time for several reasons. First, we are unable to compute a meaningful EB participation rate because individuals could enter EB at many different stages of the extended benefits process. Hence, although the EB exhaustion rate does resemble rates found in earlier periods, we have not included any EB activity in our more complex calculation. To measure participation in EUC08, we simply use the ratio of EUC tier 1 first payments to regular UI final payments. This calculation shows that the vast majority (94 percent) of UI claimants who exhausted their benefits proceeded onto EUC08 during this period. For EUC08 exhaustions, we again use final payments from tier 2 as our proxy. By this measure, about 41 percent of individuals who received an EUC08 first payment exhausted their benefits, although that figure will undoubtedly change as more data become available. Finally, if we now use a version of equation (1) to compute a total exhaustion rate for EUC08, we get 0.23— a figure that is rather close to the simple exhaustion rate reported in the first line of Table 3. Again, of course, the extremely tentative nature of this computation should be recognized, given that the EUC08 program is ongoing. Updating of these figures will occur regularly throughout the current project and final numbers may be quite different from those in the table.

Table 3 explicitly highlights the importance of the permanent EB program. If that program had played the same role in subsequent recessions that it did in the recession of the mid-1970s, total exhaustion rates would have been much lower than they actually were. A fully operational EB program during the time in which TEUC was in effect could have led to an overall exhaustion rate

of about half of the exhaustion rate for the regular UI program. Similar comments apply to the operations of the EB program during the EUC08 period, though in this case the sequencing of EB is very complex and the data in Table 3 are incomplete. Whether total exhaustion rates as low as the ones recorded during the recession of the mid-1970s are necessary for extended benefits programs to offer the kind of protection that regular UI provides during normal periods is, of course, open to debate.

IV. EMPIRICAL RESEARCH ON THE EXTENDED BENEFITS PROGRAMS

Although there has in recent years been extensive research on UI programs throughout the world, relatively little of this has been focused explicitly on extended benefits programs in the United States. In this section, we summarize this literature while drawing on some of the much larger literature on UI programs generally. We divide our discussion into three subsections: (A) changing characteristics of extended benefit recipients, (B) behavioral effects of extended benefits, and (C) income support and macroeconomic stabilization effects of extended benefits.

A. Changing Characteristics of Extended Benefit Recipients

Insights about the changing nature of the caseload in extended benefits programs are primarily provided by individual-level survey data. Although such data are not available for the most recently completed benefits program (TEUC), all of the other recent previous emergency programs did extensive surveying of recipients. Table 4 contains a brief summary of some of these data. The table also contains survey information from two studies that were conducted of regular UI exhaustees during non-recessionary periods, since these data can aid in understanding the changing nature of extended benefits caseloads.

Table 4. **Characteristics of Emergency Program Participants and UI Exhaustees**

	Emergency Programs			UI Exhaustees	
	FSB	FSC	EUC		
Year(s)	1975-1977	1982-1985	1991-1994	1988	1998
Percentage Female	47.4	36.7	43.8	41.1	44.4
Median Age	38.6	35.5	39.0	36.5	40.1
Percentage More than High School Education	20.7	23.2	33.4	24.0	28.5
Percentage in Manufacturing	44.1	39.6	32.6	39.5	32.5
Mean Years on Job	5.0	NA	6.5	5.6	6.3

Sources: The FSB data are from Corson and Nicholson (1982).   The FSC data are from Corson, Grossman, and Nicholson (1986). The EUC data are from Corson, Needels, and Nicholson (1999). The exhaustees data are from Needels, Corson, and Nicholson (2002).

EUC = Emergency Unemployment Compensation; FSB = Federal Supplemental Benefits; FSC = Federal Supplemental Compensation; UI = Unemployment Insurance.

NA = not available.

Several trends are readily apparent. First, the decline in manufacturing overall is clearly shown in the statistics. It appears that workers in the extended programs were increasingly less likely to be subject to the types of post-recession recalls that tend to characterize manufacturing employment. This reduction in temporary layoff unemployment has had the effect of both lengthening unemployment spells and increasing the relevance of individual workers' characteristics and decisions to their re-employment success.

A second important trend in the data is that the average age of participants in the emergency programs has been rising slightly, as has their overall educational attainment. These data suggest that, because of the changing nature of longer-term unemployment, the emergency programs may be focused increasingly on workers who tend to experience lower exit rates from unemployment. Such lower rates may arise both because employers may prefer to hire younger workers and because older workers may have accumulated significant amounts of job-specific human capital on their pre-unemployment jobs and are reluctant to accept the lower wages that accompany the loss of this

capital. The fact that tenure on the pre-unemployment job also appears to have increased over time also supports this conclusion, though more recent data might not show such an increase because of significant reductions in job tenure for older workers during the past 10 years (see USDOL 2009).

Of course the severity of the recent recession may have had a significant impact on all of these characteristics, so any definitive statement about EUC08 recipients must await the collection and analysis of survey data that will occur as part of the current study. A recent extensive analysis of labor market flows during the current recession (Elsby et al. 2010) concluded that the recession shares certain similarities with earlier recessions, in that most of the increase in unemployment seems to have been driven by a sharp increase in layoffs. But the authors also found that outflows from unemployment have been significantly slower to increase late in the current recession than was the case in most prior recessions. Among the causes the authors mentioned for this failure are the diminished role that temporary layoffs have played in the recession and a potential expansion in the mismatch between jobs and job-seekers both in terms of skills needed and geographic location.

B. Behavioral Responses to Extended Benefits

Although eligibility for extended benefits may affect recipients' behavior along a number of dimensions, research attention has focused almost exclusively on how such programs affect the duration of the unemployment spell. This literature is part of the much larger literature on the disincentive effects of UI generally and it is often difficult to disentangle the two strands of research. While there is general agreement that "UI generosity" affects the length of individuals' unemployment spells, the distinction between the effects of UI benefit levels (typically measured by wage replacement ratios, which indicate the ratio of weekly UI benefits to the pre-UI weekly

earnings) and the effects of differing potential durations of benefits is not always clear.[28] But, because extended benefit programs (at least those in the United States) usually have only affected potential durations without affecting weekly benefit amounts, some care must be taken to focus only on the effects of these specific policy changes.

Moffitt and Nicholson (1982) were among the first authors to make this distinction in their study of the impact of the FSB program of the mid-1970s. By modeling the budget constraints that laid-off workers faced during the period, they concluded that each extra week of potential benefit collection added about 0.1 week to the length of unemployment spells.[29] Later studies (such as Moffitt1985; Meyer 1990; or Katz and Meyer 1990) derived roughly similar effects of potential duration, although their estimates were primarily based on variations in potential duration and exhaustion rates[30] within the regular state UI program, not from extended benefits programs *per se*.[31]

The principal statistical problem with estimating the effects of potential duration on actual duration from data generated by extended benefits programs is that such effects may be confounded with effects of a weakening labor market (which prompts the implementation of such programs in the first place). For this reason, much recent literature on measuring the effects of UI on actual

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[28] One could define a generalized notion of the "replacement rate" that includes both benefit levels and potential duration, but this approach would raise complications because the denominator in such a calculation would depend on the length of the unemployment spell and would, therefore, be endogenously determined.

[29] They also found that each 10 percentage point increase in the wage-replacement ratio provided by UI added 0.5–1.0 week to the length of the unemployment spell. This figure is consistent with many other estimates that have been made of the wage replacement effect (see Decker 1997).

[30] Nicholson (1981) provided an early estimate of the effect of extended benefits on UI exhaustion rates using pooled aggregate data across state UI programs. His results suggest that exhaustion rates were 4 to 5 percentage points higher during periods when extended benefits were available. Many of the early estimates of the effect of UI on unemployment durations are reviewed in Decker (1997).

[31] Sometimes authors report their results in terms of elasticities rather than marginal effects. Because, by definition, the elasticity of actual duration with respect to changes in potential duration is given by $e_{D,P} = \frac{\partial D}{\partial P} \cdot \frac{P}{D}$, the relationship between the two figures will depend on the ratio P/D—that is, the ratio of potential to actual duration. If this ratio were, say, 2.0, the Moffitt and Nicholson estimate would imply an elasticity of 0.2. Also it should be noted that some estimates are based on the analysis of "hazard rates" of leaving UI, so they may be dependent on the specific form assumed for the distribution of unemployment spells.

unemployment experiences has sought to identify "natural experiments" in which the variation in, say, potential duration can be regarded as exogenous to recipients' job finding activities. Perhaps the most frequently cited such research is Card and Levine (2000). In that paper, the authors looked at a temporary 1996 program in New Jersey that provided up to 13 weeks of additional benefits to workers who had exhausted their regular UI entitlements. Because this extension came about through a complex political compromise and was largely unexpected, the authors believed that the change could be treated as exogenous. By looking at exit hazard rates from unemployment, they concluded that, if such an extension were implemented on a long-term basis, the fraction of claimants who exhaust their regular UI benefits would rise by about 7 percentage points and the average duration of regular UI claims would increase by about 1 week. The Card and Levine estimate is, therefore, broadly consistent with the earlier econometric estimates.

The search for natural experiments in UI durations has led several authors to examine the duration provisions of European UI systems. In most of these cases, benefit extensions do not arise from explicit counter-cyclical policy,[32] but rather from legislated differences in potential durations by age, seniority, or region. For example, Card, Chetty, and Weber (2007) looked at an Austrian program that provides both severance pay and extended unemployment benefits to workers with significant tenure on their prior jobs. They utilized a regression discontinuity design to show that both of these features decrease the rate of job finding during the first 20 weeks after layoff. Schmeider et al. (2010) used a similar approach to examine how sharp discontinuities in potential durations by age in Germany affect the lengths of periods of nonemployment.[33] They found that

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[32] In fact, relatively few nations increase potential UC durations during recessions. Although a complete review is beyond the scope of this paper, it appears that only France introduced major expansions in the duration of UI benefit eligibility during the most recent recession. Several nations did make modest expansions, and Canada, France, Germany, and Japan all enacted provisions that led to large increases in the duration of work-sharing arrangements.

[33] Consistent with much of the recent European literature, the authors use administrative data on wages to determine periods of nonemployment. They point out that such periods are not all periods of "unemployment," both because they have no evidence on whether workers are actively seeking work during the periods and because the

each month of benefit eligibility results in about 0.1 month of added nonemployment. This estimate is quite close to those from the earlier research in the United States.[34] Similar estimates were obtained by Lalive (2008) who looked at sharp differences in regional potential durations in Austria.[35] In perhaps the only research on an actual reduction in UI potential durations, van Ours and Vodopivec (2006) showed that a cut of almost 50 percent in the potential durations for experienced workers in Slovenia led to a large increase in exits from unemployment. Their implied estimated impact of an extra week of benefit eligibility was about twice as large as in the other European-based studies.

Whether the disincentive effects of extending UI durations differ during periods of strong or weak labor markets has been a subject of considerable dispute over many years. Theoretically, the effect could go either way. On the one hand, the decline in potential wages available during recessions (caused in part by workers' losses of job-specific human capital) may raise the effective wage replacement that UI provides, thereby increasing disincentives (Ljungqvist and Sargent 1998). Alternatively, many authors believe that low vacancy rates and the reduced rate of job offer arrivals reduce the effects of UI parameters on worker behavior (Krueger and Meyer 2002). Empirical research on the topic has been similarly ambiguous. Some of the early U.S. studies (Moffitt 1985 or Meyer 1990) did find modest negative effects of labor market conditions on their estimates of the

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administrative records do not cover certain types of employment—most significantly self-employment and civil service employment.

[34] Because the authors focused on an actual duration that is very close in magnitude to the base potential duration (15 months), the implied elasticity is about 0.1 also (see footnote 30). The authors also showed that their estimated impact of extended benefits does not vary significantly with the business cycle (see the discussion of this issue that follows).

[35] This paper provides a good illustration of the difference between marginal effect estimates and elasticity estimates. The author found that an expansion of potential duration by 170 weeks (from 39 to 209) increases average nonemployment spells for men by 15 weeks (13 to 28). The marginal effect is therefore approximately 0.09 weeks of nonemployment for each extra week of benefits (15/170). The elasticity estimate, however, is about 0.21 (a 115 percent increase in nonemployment weeks in response to a 535 percent increase in potential duration). Lalive (2008) also found much larger marginal effects for women (0.32 weeks of nonemployment for each week of potential benefits) than for men (0.09).

impact of larger potential durations on the lengths of unemployment spells. But Jurajda and Tannery (2003) found no evidence of differential responses in regions of Pennsylvania with strong and weak labor markets. Similarly, Schmeider et al. (2010) concluded that their "main estimates of the effect of UI durations on labor supply do not vary strongly with the business cycle [in Germany]." Hence, the issue seems largely unresolved.

Other than the question about durations of unemployment, the most researched question about benefit extensions is whether they lead to higher post-unemployment wages because workers are able to find better job matches. In the most influential early study of the UI program, Ehrenberg and Oaxaca (1976) found that more generous benefits (as measured by the wage-replacement ratio) led not only to longer unemployment spells, but also to higher post-unemployment wages. Subsequent research has generally failed to confirm this finding. For example, direct evidence from the FSB, FSC, and EUC programs (Corson and Nicholson 1982; Corson et al. 1986; and Corson et al. 1999) suggests that workers on short-term layoff do sometimes experience small wage gains from cost-of-living adjustments. But those workers who are permanently separated from their employers experience wage losses of about 10–15 percent and these losses are generally larger for those who collect more in extended benefits (although such calculations usually do not control for the endogeneity of unemployment durations). More recent evidence comes largely from the European studies. Lalive (2008), van Ours and Vodopivec (2006) and Schmeider et al. (2010) all found no impact of longer potential durations on subsequent wages.

Other potential impacts of extended UI durations are not hard to imagine. Some of the more likely such impacts are:

- Extensions may affect the labor force activity of other family members
- Extensions may affect acquisition of human capital because opportunity costs associated with education or training are lower
- Extensions may affect decisions related to retirement and pension receipt

There is little systematic research on any of these possibilities. But the EUC08 evaluation does offer opportunities to look at several of these other outcomes.

C. Benefit Extensions, Income Support, and Macroeconomic Stabilization

UI benefits play an important role in supporting incomes during economic downturns. Usually the size of this effect is modeled in a static framework in which family income is computed with and without UI benefits to judge the relative importance of the income provided. For example, according to a recent report from the Congressional Budget Office (CBO 2010), in 2009 the median contribution of UI benefits to families who participated in the program was about $6,000, representing 11 percent of family income for this group. The CBO report did not differentiate between regular UI and extended benefits payments, but it did show that families in which workers experienced longer periods of unemployment collected substantially more in benefits than those with fewer weeks of unemployment. For family members who experienced 27 or more weeks of unemployment, UI benefits constituted about 22 percent of family income.[36]

Previous studies of the relationship between extended benefits and poverty levels have found that such programs have only modest anti-poverty effects, primarily because most UI recipients are not poor (Corson et al. 1986; Corson et al. 1999). The recent CBO (2010) report reaches a similar conclusion. In 2009 only about 8 percent of total UI benefits paid went to families with incomes below the poverty threshold. Still, UI benefits are crucially important for some low income families. For example, the CBO report also showed that the national poverty rate would have been about one percentage point higher without UI benefits. It is likely that the anti-poverty effect of extended benefits provisions were even more significant because of the lower earnings experienced by families with longer-term unemployment.

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[36] Research on the 2001 recession showed that the extent to which UI replaces lost family income depends importantly on whether there are other earners in the family. For long-term UI recipients, UI benefits constituted about 19 percent of family income for families with other earners, but over 65 percent of the (much lower) family income of single earner families (Congressional Budget Office 2004).

The welfare consequences of these income simulations are somewhat ambiguous because they do not focus explicitly on consumption levels of families experiencing unemployment. It is possible that such families are able to maintain consumption standards by drawing on savings or by making other types of adjustments (say, added earnings from other family members) that cushion the decline in income from the UC recipient. Because consumption data were generally not available, the impact of extended benefits on consumption was not studied in the prior evaluations of extended benefits programs. However, an important study by Gruber (1997) rejected the notion that consumption can be easily maintained in the face of unemployment and suggested that the consumption-smoothing effects of UI benefits may be substantial. In this paper, the author used data on food consumption from the Panel Study of Income Dynamics (PSID) over the period 1968 to 1987 to study the decline in food consumption that unemployment causes. He showed that unemployment is associated with a decline of about 6.8 percent in such consumption. By simulating the wage replacement provided by UI eligibility of each unemployed person in his sample, Gruber was able to infer that this decline would have been much larger for workers ineligible for UI benefits. Specifically, he found that each 10 percentage point increase in the wage replacement rate reduces the decline in consumption associated with unemployment by 2.65 percent. With zero wage replacement (that is, ineligibility for UI benefits), the decline in consumption would have been over 22 percent. Despite this substa, Gruber alsntial effecto concluded that each dollar of UI receipt results in much less than a dollar of extra consumption spending because, to some extent, UI benefits crowd out other forms of insurance against unemployment.[37]

The analysis of the consumption-smoothing effects of UI is directly relevant to the macroeconomic stabilizing properties of the program. If the consumption-increasing effects of UI

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[37] Cullen and Gruber (2000) showed that UI eligibility has a significantly negative effect on spousal labor supply. Engen and Gruber (2001) reached a similar conclusion with regard to the effect of UI eligibility on precautionary savings.

benefits during downturns exceed the negative effects on consumption of the need to finance such benefits, UI can help stabilize the economy and, perhaps, even have a "multiplier effect" through subsequent rounds of added demand stemming from this initial increase. Previous studies of UI have found the program to have significant stabilization effects. A review of earlier research on the topic (Dunston et al. 1991) concluded that the program prevented about 15 percent of the decline in real GDP during the recessions of the 1970s and 1980s. A similar conclusion was reached by Chimerine et al. (1999) using the Wharton Economic Forecasting Associates quarterly model to look at major recessions between 1970 and 1991. Unlike earlier studies, in this study the authors differentiated among regular UI, EB, and emergency extensions, but they found that all three types of benefits had roughly the same stabilizing properties.

The most recent study of the macroeconomic stabilization properties of unemployment insurance is Vroman (2010). In this paper, the author used the Economy.com model to analyze the effects of both regular UI and the extended benefits programs[38] from the third quarter of 2008 through the second quarter of 2010. Because the econometric model used is a state-based model, the author examined differential stabilization effects of UI across the states in addition to being able to aggregate up to national totals. In general, the stabilizing effects of UI found in this study were somewhat larger than those found in earlier studies, primarily because of the larger scale of the programs during this period. Specifically, the author's simulations found that regular UI benefits reduced the real GDP shortfall caused by the recession by about 10.5 percentage points during the period examined. Extended benefits (both EB and EUC08) provided a further 8.5 percent reduction in the GDP shortfall. In all, then, UC programs were estimated to have reduced the

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[38] The benefit data in this study also included Federal Additional Compensation amounts of $25 per week once they became available in 2009.

decline in real GDP by 19 percent.[39] Analysis by state showed that the overall levels of UC programs across the states resulted in a somewhat smaller discrepancy in the stabilizing properties across these states than might have been expected, because the states with lower UC recipiency rates tended to have larger recession-induced increases in UC benefits than did states with high recipiency rates. Changes in UI taxes needed to finance regular UI benefits had little effect on these simulations, in part because tax increases will occur outside of the sample period. Effects of the deficit financing required to pay for extended benefit programs were not explicitly modeled in these simulations.

V. CONCLUSIONS

Extended benefits programs have played an important role in the government's response to recessions over the past 40 years. Although the most recent such program, EUC08, is considerably larger than any of its predecessors, it shares many features that have characterized the earlier initiatives. The program generally extends regular UI entitlements in specified increments, so cross-state disparities in eligibility criteria or benefit amounts are carried forward. As for the prior programs, implementation of EUC08 occurred in a number of phases, thereby complicating the administration of the program. Similar complexities arose in the ways in which EUC08 interacted with the permanent EB program. Settling on an ending date for EUC08 has also proven to be controversial as the decision poses difficult tradeoffs between providing needed help to workers and retaining the temporary, insurance-based character of the UI program.

EUC08 also exhibits unique characteristics that set it apart from the earlier emergency programs. The program was initiated earlier in the recession than were previous emergency programs, thereby providing it with a potentially greater stabilization role. Federal financing of EB

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[39] Comparing the reduction in the decline of real GDP to the induced increase in UC benefits led the author to conclude that the multiplier for UC benefits was approximately 2.0 during this period. The values of this multiplier were about the same in states with high UC recipiency rates and in states with low UC recipiency rates.

together with alterations in the EB trigger formulas guaranteed that this permanent program would play a larger role in the overall UC system than it had in recent recessions. And, several features of EUC08 will likely make the program more generous than were earlier programs. Such features include: (1) the longer potential durations included in the various EUC08 tiers; (2) Federal Additional Compensation of $25 per week for all UC recipients; and (3) tax exemption of the first $2,400 of UC benefits in 2009.

The UC modernization provisions incorporated in the American Recovery and Reinvestment Act of 2009 also may have an effect on how EUC08 performed. In general, these provisions relaxed UI eligibility requirements in states that adopted them. Although the factors leading states to adopt these provisions and the impacts of those provisions on caseloads for the regular UI program are of direct policy interest in their own right (and will be examined as part of the current evaluation), the primary relevance of these for the evaluation of the EUC08 program lies in the impacts the provisions may have had on the overall size of the program and on how eligibility for EUC08 may have affected the behavior of these newly eligible workers.

Our review of theoretical and historical perspectives on the EUC08 program therefore suggests the following four broad policy questions that will provide focus to our evaluation:

1. **What were states' experiences in implementing EUC08 and related programs?** The complex history of the implementation of the four tiers of EUC08 benefits together with the changing availability of benefits under the permanent EB program made it difficult for the states to coordinate their benefit payment activities. Understanding these problems is important both because it will increase our ability to model the EUC08 program accurately, and, more importantly, because it will help develop procedures for implementing such programs in the future.

2. **Who collected EUC08 benefits?** Detailed data on recipients of longer-term UC benefits have not been generally available since the late 1990s. The present evaluation therefore provides the opportunity to take a more recent look at the population of workers who collect benefits under such programs. Several questions about the nature of this population seem especially important for framing UC policy in the future:

   - How did the nature of the EUC08 caseload reflect the severity of the 2007–2009 recession? Were some segments of the workforce especially hard hit relative to prior recessions?

- How did the EUC08 caseload reflect secular changes in the nature of long-term unemployment in the United States? Did the program provide significant benefits to victims of the recession? Were any major groups experiencing increased unemployment during the recession missed?

- Who experienced the greatest earnings losses during the recession? How well did EUC08 compensate for such losses?

- How, if at all, did the various UI modernization initiatives affect the composition of the EUC08 caseload?

3. **How did eligibility for EUC08 affect UC recipients' behavior?** As shown in our review of the literature, the question of the degree to which extended unemployment benefits increase the lengths of unemployment spells has been a major topic of research in labor economics. Although the use of data from EUC08 to look at this question does pose some conceptual problems (most of which are created by the fact that availability of extended benefits is usually coupled with worsening labor markets), we certainly intend to examine the issue in detail in this evaluation. For example, the way in which EUC08 was implemented provides a number of potential "natural experiments" for examining the effects of the program. Many of these are outlined in our design report for the evaluation.

   Other outcomes that may be affected by EUC08 availability include: (1) post-unemployment earnings levels; (2) participation in education and training programs; (3) effects on labor supply by other family members; and (4) patterns of retirement and pension receipt. Our evaluation will examine all of these to the extent permitted by the data available and the need to adopt appropriate methodologies to ensure that causal estimates are accurate.

4. **How well did EUC08 and related programs help to stabilize the economy?** Our review of the macroeconomic literature on the stabilization properties of UC benefits shows that most research finds that such effects are quite significant. One common measure of such effectiveness is the "GDP multiplier"—the effect that $1 of spending on UC has on GDP. The studies reviewed earlier conclude that the value of this multiplier is about 2.0 and that this value does not differ between regular UI and extended benefits programs. Our goal in the present evaluation is to develop a variety of tests of the robustness of such estimates. In particular, standard econometric models of the economy and appropriate multivariable time series methods will be used to assess the aggregate impact of the large dollar amounts of benefits paid under EUC08.

REFERENCES

Acemoglu, Daron, and Robert Shimer. "Efficient Unemployment Insurance." *Journal of Political Economy,* October 1999, pp. 893–928.

Andersen, Torben, and Michael Svarer. "Business Cycle Dependent Unemployment Insurance." Discussion Paper 5196, Institute for the Study of Labor (IZA), 2010.

Baily, Martin N. "Some Aspects of Optimal Unemployment Insurance." *Journal of Public Economics,* December 1978, pp. 379–402.

Blanchard, Olivier, and Jean Tirole. "The Optimal Design of Unemployment Insurance and Employment Protection: A First Pass." NBER Working Paper No. 10443, April 2004.

Blank, Rebecca, and David Card. "Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?" *Quarterly Journal of Economics,* vol. 106, February 1991, pp. 1157–1189.

Card, David, Raj Chetty, and Andrea Weber. "Cash-on-Hand and Competing Models of Intertemporal Behavior: New Evidence from the Labor Market." *Quarterly Journal of Economics*, November 2007, pp. 1511-1560.

Card, David, and Phillip B. Levine. "Unemployment Insurance Taxes and the Cyclical and Seasonal Properties of Unemployment." *Journal of Public Economics,* January 1994, vol. 53, no. 1, pp. 1–29.

Card, David, and Phillip B. Levine. "Extended Benefits and the Duration of UI Spells: Evidence from the New Jersey Extended Benefits Program." *Journal of Public Economics,* vol. 78, 2000, pp. 107-138.

Chetty, Raj. "A General Formula for the Optimal Level of Social Insurance." *Journal of Public Economics*, vol. 90, 2006, pp. 1879-1901.

Chetty, Raj. "Moral Hazard versus Liquidity and Optimal Unemployment Insurance." *Journal of Political Economy*, vol. 116, no. 2, 2008, pp. 173-234.

Chimerine, Lawrence, Theodore Black, and Lester Coffey. "Unemployment Insurance as an Automatic Stabilizer: Evidence of Effectiveness Over Three Decades." Unemployment Insurance Occasional Paper 99-8. Washington, DC: U. S. Department of Labor, Employment and Training Administration, 1999.

Coles, Mervyn, and Adrian Masters. "Optimal Unemployment Insurance in Matching Equilibrium." *Journal of Labor Economics,* vol. 24, no. 1, 2006, pp. 109-138.

Congressional Budget Office. "Family Income of Unemployment Insurance Recipients." Washington, DC: CBO, March 2004.

Congressional Budget Office. "Unemployment Insurance Benefits and Family Income of the Unemployed." Washington, DC: CBO, November 2010.

Corson, Walter, Jean Grossman, and Walter Nicholson. "An Evaluation of the Federal Supplemental Compensation Program." Unemployment Insurance Occasional Paper No. 86-3. Washington, DC: U.S. Department of Labor, Employment and Training Administration, 1986.

Corson, Walter, Karen Needels, and Walter Nicholson. "Emergency Unemployment Compensation: The 1990's Experience Revised Edition." Unemployment Insurance Occasional Paper No. 99-4. Washington, DC: U.S. Department of Labor, Employment and Training Administration, 1999.

Corson, Walter, and Walter Nicholson. "An Analysis of the 1981-82 Changes in the Extended Benefits Program." Unemployment Insurance Occasional Paper No. 85-1. Washington, DC: U.S. Department of Labor, Employment and Training Administration, 1985.

Corson, Walter, and Walter Nicholson. *The Federal Supplemental Benefits Program: An Appraisal of Emergency Extended Unemployment Insurance Benefits.* Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1982.

Corson, Walter, and Anu Rangarajan. "Extended UI Benefit Triggers." Unemployment Insurance Occasional Paper No. 94-2. Washington, DC: U.S. Department of Labor, Employment and Training Administration, 1994.

Cullen, Julie, and Jonathan Gruber. "Does Unemployment Insurance Crowd Out Spousal Labor Supply?" *Journal of Labor Economics,* vol. 18, 2000, pp. 546-72.

Davidson, Carl, and Stephen A. Woodbury. "Optimal Unemployment Insurance." *Journal of Public Economics,* vol. 64, 1997, pp. 359–387.

Decker, Paul. "Work Incentives and Disincentives." In *Unemployment Insurance in the United States: Analysis of Policy Issues,* edited by Christopher J. O'Leary and Stephen A. Wandner. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1997.

Dunston, Bruce, Charles Maurice, and Gerald Dyer, Jr. "The Cyclical Effects of the Unemployment Insurance Program: Final Report." Unemployment Insurance Occasional Papers 91-3. Washington DC: U.S. Department of Labor, Employment and Training Administration, 1991.

Ehrenberg, Ronald, and Ronald Oaxaca. "Unemployment Insurance, Duration of Unemployment, and Subsequent Wage Gain." *American Economic Review,* vol. 66, no. 5, 1976, pp. 754-766.

Elsby, Michael, Bart Hobijn, and Aysegul Sahin. "The Labor Market in the Great Recession." *Brookings Papers on Economic Activity,* spring 2010, pp. 1-48.

Engen, Eric, and Jonathan Gruber. "Unemployment Insurance and Precautionary Savings." *Journal of Monetary Economics,* vol. 47, 2001, pp. 545-579.

Golosov, Michael, and Aleh Tsyvinski. "Optimal Taxation with Endogenous Insurance Markets." *Quarterly Journal of Economics,* vol. 122, no. 2, 2007, pp. 487-534.

Gruber, Jonathan. "The Consumption Smoothing Benefits of Unemployment Insurance." *American Economic Review,* March 1997, pp. 192-205.

Feldstein, Martin S. "The Effect of Unemployment Insurance on Temporary Layoff Unemployment." *American Economic Review,* December 1978, pp. 834–846.

Feldstein, Martin S. "Rethinking Social Insurance." *American Economic Review*, March 2005, pp. 1-24.

Fleming, John S. "Aspects of Optimal Unemployment Insurance: Search, Leisure, Savings and Capital Market Imperfections." *Journal of Public Economics,* December 1978, pp. 403–425.

Hansen, Gary D., and Ayse Imrohoroglu. "The Role of Unemployment Insurance in an Economy with Liquidity Constraints and Moral Hazard." *Journal of Political Economy,* February 1992, pp. 118–142.

Hopenhayn, Hugo A., and Juan Pablo Nicolini. "Optimal Unemployment Insurance." *Journal of Political Economy,* April 1997, pp. 412–438.

Jurajda, Stepan, and Frederick Tannery. "Unemployment Durations and Extended Unemployment Benefits in Local Labor Markets." *Industrial and Labor Relations Review,* vol. 56, no. 2, 2003, pp. 324-348.

Karni, Edi. "Optimal Unemployment Insurance: A Survey." *Southern Economic Journal,* vol. 66, no. 2, 1999, pp. 442–465.

Katz, Arnold, and J. Ochs. "Implications of Potential Duration Policies." In **Report of the National Commission on Unemployment Compensation,** vol. I. Washington, DC: NCUC, 1980.

Katz, Lawrence, and Bruce Meyer. "The Impact of Potential Duration of Unemployment Benefits on the Duration of Unemployment Outcomes." *Journal of Public Economics*, vol. 41, no. 1, 1990, pp. 45-72.

Kiley, Michael. "How Should Unemployment Benefits Respond to the Business Cycle?" *Topics in Economic Analysis and Policy*, vol. 3, no. 1, 2003, pp. 1-20.

Krueger, Alan, and Bruce Meyer. "Labor Supply Effects of Social Insurance." In *Handbook of Public Economics*, edition 1, volume 4, edited by A. J. Auerbach and M. Feldstein. Amsterdam: Elsevier, 2002.

Lalive, Rafael. "How Do Extended Benefits Affect Unemployment Duration? A Regression Discontinuity Approach." *Journal of Econometrics,* vol. 142, 2008, pp. 785-806.

Landais, Camille, Pascal Michaillat, and Emmanuel Saez. "Optimal Unemployment Insurance Over the Business Cycle." NBER Working Paper 16526. November 2010.

Lentz, Rasmus. "Optimal Unemployment Insurance in a Job Search Model with Savings." *Review of Economic Dynamics*, vol. 12, no. 1, 2009, pp. 37-57.

Ljungqvist, Alexander, and Thomas Sargent. "The European Unemployment Dilemma." *Journal of Political Economy*, vol. 106, 1998, pp. 514-550.

Meyer, Bruce. "Unemployment Insurance and Unemployment Spells." *Econometrica,* vol. 58, no. 4, 1990, pp. 757-782.

Moffitt, Robert. "Unemployment Insurance and the Distribution of Unemployment Spells." *Journal of Econometrics*, vol. 28, no. 1, 1985, pp. 85-101.

Moffitt, Robert, and Walter Nicholson. "The Effect of Unemployment Benefits on Unemployment: The Case of Federal Supplemental Benefits." *Review of Economics and Statistics,* February 1982, pp. 1-11.

Moyen, Stephane, and Nikolai Stahler. "Unemployment Insurance and the Business Cycle: Prolong Entitlement Benefits in Bad Times." Discussion Paper 30/2009. Deutsche Bundesbank, 2009.

Nicholson, Walter. "A Statistical Model of Exhaustion of Unemployment Benefits and Some Implications for Policy." *Journal of Human Resources*, winter 1981, pp. 117-128.

Nicholson, Walter. "Initial Eligibility for Unemployment Insurance." In *Unemployment Insurance in the United States: Analysis of Policy Issues,* edited by Christopher J. O'Leary and Stephen A. Wandner. Kalamazoo, MI: W. E. Upjohn Institute for Employment Research, 1997.

Sanchez, Juan. "Optimal State-Contingent Unemployment Insurance." *Economic Letters,* vol. 98, no. 3 2008, pp. 348-357.

Schmeider, Johannes, Till von Wachter, and Stefan Bender. "The Effect of Extended Unemployment Insurance Over the Business Cycle: Evidence from Regression Discontinuity Estimates Over Twenty Years." IZA Discussion Paper, October 2010.

Shavell, Steven, and Laurence Weiss. "The Optimal Payment of Unemployment Insurance Benefits over Time." *Journal of Political Economy,* December 1979, pp. 1347–1362.

Topel, Robert H. "Experience Rating of Unemployment Insurance Benefits and the Incidence of Unemployment." *Journal of Law and Economics,* April 1984, pp. 61–90.

Van Ours, Jan, and Milan Vodopivec. "How Shortening the Potential Duration of Unemployment Benefits Affects the Duration of Unemployment: Evidence from a Natural Experiment." *Journal of Labor Economics*, vol. 24, no. 2, 2006, pp. 351-78.

Vroman, Wayne. "The Role of Unemployment Insurance as an Automatic Stabilizer During a Recession." IMPAQ International, July 2010.

Wang, Cheng, and Stephen D. Williamson. "Moral Hazard, Optimal Unemployment Insurance and Experience Rating." *Journal of Monetary Economics,* vol. 49, 2002, pp. 1337–1371.

Wang, Cheng, and Stephen D. Williamson. "Unemployment Insurance with Moral Hazard in a Dynamic Economy." *Carnegie-Rochester Conference Series on Public Policy,* 44, 1996, pp. 1–41.

APPENDIX A

**LEGISLATIVE HISTORY FOR EUC08
AND RELATED PROGRAMS**

As described in the main chapters of this document, the Emergency Unemployment Compensation Act of 2008 (EUC08) program has been developed and modified through many separate legislative enactments. Furthermore, these pieces of legislation have enacted changes to the Extended Benefits (EB) program as well. In addition to providing a general understanding of the legislation, documenting the details of the legislation serves two important purposes for the Evaluation of the Unemployment Compensation Provisions of the American Recovery and Reinvestment Act of 2009 (ARRA). First, through the use of this information and other information about states' unemployment rates over time, we will be able to develop a precise time line for claimants' benefit eligibility. This will enable us to better understand claimants' experiences with unemployment benefits and the relationship between benefit eligibility and claimants' outcomes. Second, understanding the changes to the EB and EUC08 programs will help to inform the analysis of states' experiences implementing these programs. Additional information about the design of and plans for the evaluation will be included in an evaluation design report to be provided to the U.S. Department of Labor in February 2011.

In this appendix we describe important aspects of the different pieces of legislation related to the EB and EUC08 programs. The key dates for the legislation, including dates for when claimants could gain or lose eligibility for EUC08 benefits, are summarized in Table A.1.

A. Creation of the EUC08 Program

On June 30, 2008, President George W. Bush signed Public Law 110-252 (the Supplemental Appropriations Act, 2008). Title IV created the EUC08 program. The program provided up to 13 weeks of federally financed unemployment compensation (UC) to individuals who (1) exhausted rights to regular compensation for a benefit year that ended on or after May 1, 2007; (2) have no rights to regular unemployment insurance (UI) or EB (or any other federal program); (3) are not

Table A.1. Timing of EUC08 Changes in Entitlements

Public Law Number for the Legislation[a]	Date Signed into Law	Last Date of EUC08 Claim Start Date	Last Date of Any EUC08 Payment	Weeks Available Through:[b]				Notes
				First Tier	Second Tier	Third Tier	Fourth Tier	
110-252	6/30/2008	Cannot occur for a week of unemployment ending after 3/31/2009	No payment for a week beginning after 6/30/2009	13	n.a.	n.a.	n.a.	Effective for weeks beginning 7/6/2008 and ending 7/12/2008 (in most states) Claimants must have exhausted benefit year on or after 5/1/2007
110-449	11/21/2008	Cannot occur for a week that begins after 3/31/2009	Last week for benefit collection is the week including 8/27/2009	20	13, for high-unemployment states	n.a.	n.a.	Additional weeks of benefits cannot be collected for weeks before date legislation signed into law (11/21/2008); Second tier added for high unemployment states
111-5	2/17/2009	Cannot occur for a week beginning after 12/31/2009	No payment for a week beginning after 5/31/2010.	20	13, for high-unemployment states	n.a.	n.a.	No change to the first and second tiers
111-92	11/6/2009	Cannot occur for a week beginning after 12/31/2009	No payments could be made for weeks beginning after 5/31/2010	20	14	13, for high unemployment states	6, for very high unemployment states	Second tier increased, made available to all; third and fourth tiers added
111-118	12/19/2009	Cannot occur for a week beginning after 2/28/2010	No payments could be made for weeks beginning after 7/31/2010	20	14	13, for high unemployment states	6, for very high unemployment states	No change to the tiers
111-144	3/2/2010	Cannot occur for a week beginning after 4/5/2010	No payments could be made for weeks beginning after 9/4/2010	20	14	13, for high unemployment states	6, for very high unemployment states	No change to the tiers
111-157	4/15/2010	Cannot occur for a week beginning after 6/2/2010	No payments could be made for weeks beginning after 11/6/2010	20	14	13, for high unemployment states	6, for very high unemployment states	No change to the tiers
111-205	7/22/2010	Cannot occur for a week beginning after 11/30/2010	No payments could be made for weeks beginning after 4/30/2011	20	14	13, for high unemployment states	6, for very high unemployment states	No change to the tiers
111-312	12/17/2010	Cannot occur for a week beginning after 1/3/2012	No payments could be made for weeks beginning after 6/9/2012	20	14	13, for high unemployment states	6, for very high unemployment states	No change to the tiers; EB trigger look-back period increased from two years to three years

ᵃP.L. 110-252 =The Supplemental Appropriations Act, 2008, Title IV—Emergency Unemployment Compensation. P.L. 110-449 =The Unemployment Compensation Extension Act. P.L. 111-5 =The Assistance for Unemployed Workers and Struggling Families Act, of the American Recovery and Reinvestment Act of 2009 (ARRA), Section 2001 of Division B, Title II. P.L. 111-92 =The Worker, Homeownership, and Business Assistance Act of 2009 (Worker Assistance Act). P.L. 111-118 =Department of Defense Appropriations Act, 2010. P.L. 111-144 =Temporary Extension Act of 2010. P.L. 111-157 = Continuing Extension Act of 2010. P.L. 111-205 = Unemployment Compensation Extension Act of 2010. P.L. 111-312 = Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.

ᵇTechnically, the calculation of the EUC08 maximum benefit amount (MBA) is the lesser of (1) a certain percentage of regular compensation and (2) a certain number of weeks times the regular average weekly benefit amount (WBA). The calculations to determine EUC08 entitlements are conducted before disqualifications, wage reductions, and other penalties are imposed upon regular benefits. Dependents' allowances are included in the calculation, but additional compensation (compensation totally financed by a state and payable under a state law by reason of high unemployment or other special factors) is not. When the table indicates 13 weeks of benefits, the EUC08 MBA is the lesser of 50 percent of regular compensation and 13 weeks times the average of the regular WBAs. When the table indicates 6, 14, or 20 weeks of benefits, the EUC08 MBA is the lesser of (1) 24, 54, or 80 percent of regular compensation, respectively; and (2) 6, 14, or 20 weeks times the average of the regular WBAs, respectively. If the claimant's regular WBA varies over the course of the benefit collection period, it is possible that the claimant would get fewer than the full potential number of weeks, because the EUC08 WBA is set to the most recent regular WBA (which could be higher or lower than the average of the regular WBAs).

n.a. = not applicable.

receiving UC through Canadian law; and (4) are legally authorized to work in the United States. In most states, the first week for which EUC08 could be paid was the week ending July 12, 2008. The last week for an initial determination of EUC08 eligibility was established as needing to end on or before March 31, 2009. However, if a claimant had benefits remaining, EUC08 could be paid out for any week of unemployment beginning on or before June 30, 2009. Because claimants cease to be exhaustees when they can establish a valid benefit year, states needed to check at the change of each calendar quarter whether EUC08 claimants could meet the state's requirements for establishing a new benefit year. If a claimant could, then he or she was no longer entitled to EUC08 and the state had to notify the claimant that he or she could establish a regular UI claim with a new benefit year. If an individual had more than one benefit year that could lead to EUC08 eligibility, then the applicable benefit year was to be the most recent one; a claimant could not choose from which benefit year to establish an EUC08 claim.

Governors could elect to pay EUC08 before benefits payable under the permanent EB program. If a state chose to do so (as almost all did), benefits accruing under EB would be deferred, not reduced. Although EB and EUC08 programs and benefits are similar in some ways, the EB provisions related to work search and acceptance of suitable work, as well as those related to the requirement of employment to purge certain disqualifications, do not apply to EUC08. State-specific work search requirements apply to EUC08 claims. However, as is the case for EB, a claimant must have had at least 20 weeks of work during his or her base period before he or she could be entitled to EUC08 benefits.

B. Adding a Second Tier of Benefits to EUC08

Public Law 110-449, signed on November 21, 2008, expanded EUC08 to provide up to 20 weeks of benefits (instead of 13) and added a second tier of benefits of up to 13 weeks for high-unemployment states. This change was effective for weeks beginning November 21, 2008. The first 20 weeks are referred to as "first-tier" EUC08; the 13 weeks of additional benefits for high-

unemployment states are referred to as "second-tier" EUC08. The newly added first-tier benefits and the second-tier benefits were payable only for weeks of unemployment beginning on or after November 21, 2008; that is, individuals could not claim the additional benefits for weeks of unemployment before that date. States could get second-tier benefits if (1) an EB period was in effect, (2) there was a 13-week insured unemployment rate (IUR) of at least 4 percent, or (3) there was a three-month seasonally adjusted average total unemployment rate (TUR) of at least 6 percent. A state's eligibility for second-tier EUC08 benefits did not depend on whether the state used a TUR trigger for EB. Unlike the trigger for EB, there are no look-back requirements (when historical unemployment rates influence eligibility) for EUC08.

As is the case for EB, when a state triggers onto the second-tier benefits, it will be eligible for second-tier benefits for at least 13 weeks before it triggers off of second-tier benefits regardless of what happens to the state's IUR and TUR. Because Public Law 110-449 provided that its amendments are to be treated "as if included in the enactment of" the original EUC08 act, the state could be determined to have "begun" a second-tier period before the date that Public Law 110-449 became effective. Because a state could have been treated as triggered onto the second tier of benefits before the legislation enactment dates, but a claimant could not collect second-tier benefits before the enactment date, it is possible that claimants in a state might not get 13 weeks of second-tier benefits. The state's triggering off the second tier does not affect claimants' entitlements after they have been established, but claimants must exhaust first-tier benefits before their claims are augmented with second-tier benefits. If a claimant had established more than one EUC08 claim by the date on which Public Law 110-449 became effective, states were to augment benefits from the earlier EUC08 claim before doing so for the later claim.

C. The American Recovery and Reinvestment Act (ARRA)

Public Law 111-5, ARRA, signed on February 17, 2009, extended the phase-out period of EUC08. After enactment of this law, an individual could establish EUC08 eligibility for either first-

or second-tier EUC08 benefits for a week of unemployment ending on or before December 31, 2009. No first- or second-tier benefits were to be paid for any week beginning after May 31, 2010. This law also distinguished between benefits in their funding sources. Generally speaking, benefits paid as a result of Pubic Laws 110-252 and 110-449 (the laws established before ARRA) were to be paid for through Federal Unemployment Tax Act (FUTA) funds, whereas benefits paid as a result of Public Law 111-5 (ARRA) were funded from general revenues.

ARRA also had two components that were intended to make participation in the EB program more appealing to states. Historically, the costs of the EB program have historically been shared 50-50 between states and the federal government. However, ARRA allowed the federal government to pay 100 percent of EB. Second, the law allowed states to provide EB benefits if the state would qualify for EB through the TUR trigger, even if the state did not previously use the TUR trigger to determine EB eligibility. The 100 percent federal financing applied to states newly adopting the TUR trigger as well as states that already had it. The applicable time period for claimants to begin collecting federally financed EB was for weeks beginning after the date that ARRA was enacted and before January 1, 2010. After that date, the state could continue to pay EB and get the 100 percent federal financing for weeks of unemployment ending before June 6, 2010.

D. Adding Tier 3 and Tier 4 Benefits

The Worker, Homeownership, and Business Assistance Act of 2009 (Worker Assistance Act), Public Law 111-92 (enacted November 6, 2009) expanded the EUC08 program for weeks of unemployment beginning after enactment in the following ways:

- It increased the maximum EUC08 second-tier entitlement from 13 to 14 weeks of benefits in all states. This tier was no longer triggered on by a state reaching a specified rate of unemployment.

- It created an EUC08 third tier providing up to 13 additional weeks of benefits in states with a 13-week IUR of at least 4 percent or a three-month seasonally adjusted average TUR of at least 6 percent.

- It created an EUC08 fourth tier providing up to 6 additional weeks of benefits in states with a 13-week IUR of more than 6 percent or a three-month average TUR of more than 8.5 percent.

Thus, the Worker Assistance Act could lead to a maximum number of weeks of 20, 14, 13, and 6 for each of the four tiers of EUC08, for a total of 53 weeks in states with the highest rates of unemployment. As a result, some claimants could now obtain up to 99 weeks of benefits—26 weeks or regular UI benefits (the maximum number of available weeks in most states), 20 weeks of EB benefits (in states with high unemployment rates), and 53 weeks of EUC08 benefits. Generally speaking, a claimant's benefit account was to be augmented with potential additional benefits from a new tier of benefits only after benefits from lower tiers were exhausted. Thus, the claimant would not become entitled to 53 weeks of EUC08 benefits immediately upon the exhaustion of regular UI and/or EB benefits. Rather, he or she initially would become entitled to up to 20 weeks of first-tier benefits. Then, if the claimant exhausted the first-tier EUC08 benefits, he or she would become entitled to up to 14 weeks of second-tier benefits, and so on.

This legislation did not change either the last date for which claimants could begin collecting benefits (or move to a next tier of EUC08 benefits) or the last date for which claimants could collect any EUC08 benefits. Thus, a claimant could not begin collecting EUC08 benefits or a next tier of benefits after the end of 2009; no EUC08-related payments could be made for weeks of unemployment beginning after May 31, 2010. As was the case for prior modifications to the EUC08 program, states were responsible for notifying individuals who became potentially eligible for new benefits about the changes to the program.

An important issue in the coordination of EUC08 with EB pertains to the sequencing of benefits. States could use the "EB coordination rule," which would allow them to choose to pay EB before any EUC08 for which a claimant would otherwise be entitled. This means that if the claimant exhausted an EUC08 tier after receiving EB under the coordination rule, he or she could

qualify for the next tier of benefits even if this occurred after the end of 2009. Thus, the claimant would not lose out on EUC08 benefits based on a state's choice to pay EB before EUC08.

E. Extending the EUC08 Tiers

Additional extensions of the EUC08 program and the 100 percent federal financing of EB benefit costs were made after Public Law 111-92. Public Law 111-118 extended the date for when claimants could establish initial eligibility for EUC08 benefits or a new tier of benefits to February 28, 2010. It also extended end of the "phase-out period" of the program, the date after which no EUC08 benefits could be paid, to July 31, 2010. The 100 percent federal financing of EB benefits also was extended for claimants who became eligible for EB before February 28, 2010, with a phase-out period for weeks of unemployment ending before July 31, 2010.

Public Law 111-144 (the Temporary Extension Act of 2010) made similar extensions, with the date for when claimants could establish initial eligibility for EUC08 benefits or a new tier of benefits extended to April 5, 2010; the phase-out period of the program extended to September 4, 2010; and the 100 percent federal financing of EB benefits also extended to April 5, 2010, with a phase-out date to September 4, 2010. Although the Temporary Extension Act of 2010 was enacted on March 2, 2010, these provisions became effectives for weeks of unemployment beginning on or after February 28, 2010, so there would be no gap in coverage of the provisions of Public Laws 111-118 and 111-144.

Public Law 111-157 (the Continuing Extension Act of 2010, enacted April 15, 2010) extended the program to June 2, 2010, for entry into the first or subsequent tiers of EUC08, with the phase-out period ending November 6, 2010. The 100 percent federal financing of EB benefits also extended to June 2, 2010, with a phase-out date to November 6, 2010. In addition, this legislation was structured to close a gap between the expiration of previous legislation and the enactment of the new legislation, so benefits could be paid retroactively. Public Law 111-205 (Unemployment Compensation Extension Act of 2010) further extended the program, with the critical dates

becoming November 30, 2010, and April 30, 2011, to signal the phase-out period for EUC08 and similar dates for the 100 percent federal financing of EB. Another gap in the legislation was averted through retroactive implementation.[40]

F.   The 2010 Tax Relief Act and Phase-Out of EUC08

In late 2010 the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act (Public Law 111-312) (the Tax Relief Act) further extended EUC08 to provide for compensation of weeks of unemployment ending on or before January 3, 2012. Individuals who have established EUC08 entitlement by this date can collect the remainder of this entitlement through June 9, 2012. Again the act included reach-back provisions to prevent gaps in coverage.

The Tax Relief Act also made significant changes to the EB program. Specifically, it extended 100 percent federal funding of EB through January 4, 2012. It also amended the way in which states can compute their EB "on" indicators by changing from the two-year look-back period that applies to the 120 or 110 percent trigger thresholds to a three-year period. Before this legislation, states could trigger onto EB through having an IUR that either (1) is at least both 5 percent and 120 percent of the average IUR for the comparable time periods in the previous two years or (2) is at least 6 percent. States with a TUR trigger option could receive EB through having a TUR that is at least both 6.5 percent and 110 percent of the TUR for either one or both of the comparable time periods during the previous two years. States with the TUR trigger option in effect and a TUR that equals or exceed 8 percent, as well as a TUR that meets the 110 percent look-back threshold, could get 20 weeks of EB. The motivation for this amendment to the EB program, allowing a three-year look-back period, was that, because of the sustained period of high unemployment rates associated with the recent recession, states with persistent high unemployment rates would otherwise trigger

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[40] Interruptions in intake for EUC08 benefits have occurred for the weeks of April 4 through April 11, 2010; May 30 through July 18, 2010; and November 28 through December 12, 2010.

off of EB. Allowing a three-year look-back period instead of a two-year period is likely to allow more states to be eligible for EB payments in 2011 and beyond, especially in states that have the TUR trigger because EB benefits can be paid when the TUR equals or exceeds 110 percent of any of the three prior years (and not the average of the years, as is the case for the IUR trigger).