



Research

Unemployment Insurance (UI) System Primer

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PRIMER: UNEMPLOYMENT INSURANCE

The Unemployment Insurance system (UI), which was born out of the severity of the Great Depression, has grown to become a staple of the American social welfare system, with over 4.5 million people currently enrolled. Comprised of three main programs, Regular UI, the Unemployment Compensation Program (EUC) and the Extended Benefits Program (EB), the UI system grew dramatically in the recent recession, as the unemployment rate rose to almost 10 percent and millions of people were added to the program. Congress also expanded the program by increasing the maximum duration of unemployment benefits up to 99 weeks and passing the American Reinvestment and Recovery Act (ARRA), which increased the maximum level of benefits. The economic recession and the programmatic expansion of the UI system caused spending on unemployment insurance to more than double during the recession, peaking at over \$8 billion a month. The recovering economy and the expiration of benefit extensions have lowered monthly spending for the UI program, but spending levels remain above pre-recession levels.

The academic literature suggests consensus that unemployment benefits increase the average duration of unemployment spells, as well as the unemployment rate. However there is considerable disagreement over the magnitude and significance of these effects, with authors debating the effect of both an increase in benefit levels as well as the effect of an increase in the potential duration of UI benefits. Other authors have also examined the spike in exits from unemployment right before benefits are exhausted or discussed the impact of the UI system on layoffs.

THE UNEMPLOYMENT INSURANCE SYSTEM

Under current law, the Unemployment Insurance system is comprised of multiple stages of unemployment assistance. According to the latest data, 4,519,501 Americans claimed benefits from one of these stages of assistance.[1] The three largest unemployment insurance programs by participation are the regular Unemployment Insurance (UI) program, the federal Emergency Unemployment Compensation program (EUC08, or just EUC), and the Federal-State Extended Benefits (EB).

Figure 1: UI Claimants by Major Program



Regular Unemployment Insurance (UI) program

The regular UI program is a state-federal partnership. Federal law sets major guidelines for program requirements; however, individual states design and administer their individual programs. According to the Department of Labor, most states currently pay beneficiaries for a maximum of 26 weeks, although Massachusetts and under certain conditions Washington (WA) pay 30 weeks. This program also includes compensation for individuals recently separated from the Armed Services and other federal positions. Benefit payments are financed by state levies, principally on employers. According to the latest data, 2,805,062 individuals (62 percent of current claimants) were receiving benefits through this system.

Unemployment Compensation program (EUC08, or EUC)

The Emergency Unemployment Compensation program (EUC08) was created on June 30, 2008, when then-President Bush signed the Supplemental Appropriations Act of 2008 (P.L. 110-252) into law. This law created what is the eighth federal temporary program that extended unemployment compensation during economic distress, according to the Congressional Research Service. The program has subsequently been extended several times, most recently on January 2, 2013.[2]

At present, the EUC08 program provides up to 14 weeks of benefits in every state, and up to 33 additional weeks in states with “high unemployment” (for a maximum of 47 weeks) through 4 tiers of eligibility. Tiers II, III, and IV are available to individuals in states with progressively higher total unemployment rates (TUR) of 6, 7 and 9 percent; providing compensation for 14, 9, and 10 additional weeks (33 total), respectively.[3] The program is

financed entirely by the federal government.^[4] According to the Department of Labor: “benefits are available for weeks of unemployment ending on or before January 1, 2014. This means that the last payable week of EUC benefits in most states will be the week ending December 28, 2013.” Accordingly, even if a recipient would otherwise be eligible for remaining benefits in a tier, their benefits will cease at the end of the year. This is a similar “cliff” as was observed at the end of 2012. According to the latest data, 1,636,731 individuals (36 percent of claimants) were receiving benefits through this system.

Extended Benefits (EB)

The federal-state extended benefits program by the Federal-State Extended Unemployment Compensation Act of 1970 (EUCA). Under the Act, when the insured unemployment rate in a state reaches a certain threshold, states must provide additional state UI benefits. Typically, the EB program is jointly financed. Under current law, the federal government will pay 100 percent of most EB benefit costs for weeks of unemployment beginning after February 17, 2009, through December 31, 2013. As of July 24th, only 433 claimed benefits under this program.

Additional Programs

Additional programs are also available for certain eligible populations. These programs include additional state programs, alternative and work-sharing programs, as well as trade and disaster-related unemployment compensation. Collectively, 77,708 (2 percent of claimants) individuals received benefits under these programs.

BUDGETARY IMPLICATIONS OF THE UNEMPLOYMENT INSURANCE SYSTEM

Federal expenditures on unemployment compensation exceeded \$90 billion in 2012, while down from the 2010 all-time high of \$157 billion, unemployment compensation expenditures remain a sizeable share of the the federal budget.^[5] This is attributable to economic factors, as well as benefit size and duration expansion.

Table 1: Historical Unemployment Compensation, \$ billions

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
54.4	42.4	32.3	31.0	32.5	42.7	119.1	157.0	117.2	90.7

Assuming “emergency” program expansions expire, federal expenditures on unemployment compensation are projected to decline as a share of the federal budget (and in absolute terms compared to 2012), under current law over the coming decade.[6]

LITERATURE REVIEW

Previous literature on the effect of Unemployment Insurance (UI) on unemployment (UE) has generally followed two tracks. The most popular approaches examine how either the duration or the level of UI benefits affects the length of the average unemployment spell and the likelihood of finding a job in a given week. Another well-known approach examines how UI affects employer incentives to layoff workers, temporarily or otherwise. This literature review focuses on the most cited and relevant research from both approaches.

Ehrenberg and Oaxaca (1976) - Unemployment Insurance, Duration of Unemployment, and Subsequent Wage Gain

Ehrenberg and Oaxaca begin by stating that Unemployment Insurance increases unemployment, mostly by increasing the reservation wage (the minimum wage at which a worker will accept employment) and by decreasing the cost of unemployment. The authors find that increasing the replacement ratio (the proportion of previous income covered by benefits) had different effects for different groups, but that overall the effects were small. For older males, increasing the replacement ratio from .4 to .5 increased the expected duration of an unemployment spell by about 1.5 weeks. For young men, the effect of this change was to increase the duration of UE by about .2 weeks. For older and younger women, the effect of raising the replacement ratio from .4 to .5 increases the duration of UE by .3 and .5 weeks respectively. The authors also examined the effect of the increase on post-unemployment wages (as compared to the previous year). The study suggested that older workers received higher post-unemployment wages than younger workers.

Feldstein (1978) - Effect of Unemployment Insurance on Temporary Layoff Unemployment

Feldstein takes a different approach to linking UI and UE by looking at the effect unemployment insurance has on temporary layoffs, arguing that temporary layoffs are responsible for as much as 50 percent of general unemployment, and as high as 75 percent for some sectors like manufacturing. According to Feldstein the basic interaction between UI and temporary unemployment is as follows; UI allows firms to temporarily layoff

employees without worrying about creating ill will or losing them to another company. When the time comes to hire back the worker, firms have better luck rehiring workers who have spent the last couple months receiving unemployment benefits, rather than looking for work to pay the bills. Feldstein finds that raising the replacement ratio from .4 to .6 raises the temporary layoff unemployment rate by about .5 percentage points, raising the overall unemployment rate in the process. He concludes by saying that UI not only raises UE, but also imposes a significant efficiency loss by causing firms to layoff workers when demand is low, instead of lowering prices or increasing inventories.

Topel (1983) - On Layoffs and Unemployment Insurance

Topel looks at many of the same issues as Feldstein, choosing to focus on how UI subsidies to companies affect temporary unemployment. Most companies are experience rated when it comes to UI, meaning that companies that fire more workers are supposed to contribute more to the UI program. However at the time of the study many companies were not fully experience rated, and thus had their UI costs effectively subsidized. Topel argues that these subsidies allow companies to avoid paying the full cost of laying off workers and that this incentivizes companies to layoff more workers than they otherwise would, increasing overall unemployment. Topel finds that at the time the study was written, the mean level of subsidy for UI raised layoff unemployment spells by 1.3 weeks, and that eliminating the subsidy altogether would lower the layoff unemployment rate (that is the rate of unemployment caused by layoffs) by 30 percent. Topel argues that in general the level of benefits does not matter much for temporary unemployment; while he finds that reducing benefits by 10 percent would eliminate about 8.8 percent of all layoff spells, when controlling for cross-state differences this number falls to 0.1 percent.

Meyer (1990) - Unemployment Insurance and Unemployment Spells

Several authors have examined how UI affects the timing of exit from the UI program. The most cited study examining the relationship between UI and UE was conducted by Meyer, who found that UI had a negative effect on the probability of leaving the unemployment system. For a given 10 percent increase in benefits, there is a corresponding 8.8 percent decrease in leaving the unemployment system in a given week (called the *hazard*). Meyer also found that the hazard rises dramatically just before benefits lapse. In the time between 6 and 2 weeks until benefit exhaustion, the hazard rises 109 percent, and between 2 weeks and 1 week until benefit exhaustion, hazard rises another 95 percent. Cumulatively the probability of exiting unemployment in any given week more than quadruples between 6 weeks and 1 week before benefit exhaustion.

Meyer also examines the effect of an increase in benefits on the mean length of unemployment, finding that a 10 percent increase in benefits raises the average unemployment spell by 1 to 1.5 weeks.

Card, Chetty, and Weber (2007) - The Spike at Benefit Exhaustion

Card, Chetty, and Weber also look at the spike in exits from unemployment right before the benefit exhaustion point (BEP). While the authors accept Meyer's findings that workers tend to leave UI right before benefits are exhausted, they argue that this is not mostly workers finding jobs again but rather is due more to workers leaving registered unemployment having not found a job. The authors find that the probability of leaving registered unemployment is about 2.4 times higher the week before the BEP than in the first 8 weeks of unemployment, but that the probability of finding a job is 1.15 times larger in the week before the BEP as compared to the first 8 weeks. Looking only at people who find a job, the authors find that the spike right before the BEP is considerably smaller. It is important to note that this study was conducted in Austria, though the authors argue that their results are transferable to the American UI system.

Meyer and Katz (1990) - The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment

While most of the above literature focuses on how the level of UI benefits affects the duration of unemployment, several studies also look at how the duration of UI benefits affect how long people remain unemployed. In his previous study, Meyer examined the effect of the level of UI benefits on the duration of unemployment and found the two to be positively correlated. In this second study Meyer and Katz examine the effect that the potential length of UI benefits has on the length of unemployment. The authors find that a one-week increase in potential benefit duration leads to a .16-.20 week increase in the mean spell of unemployment. The authors use this statistic to estimate that an extension in UI benefits from 26 to 39 weeks increases the mean spell of unemployment by 2.1 weeks. In addition to these findings on the effect of UI on the mean length of unemployment, the authors find more evidence for the spike in unemployment exits near the time of benefit exhaustion.

Card and Levine (2000) - Extended Benefits and Duration of UI

Spells

Card and Levine take a look at the 1996 extension of unemployment benefits in New Jersey by 13 weeks and how this extension affected the length of unemployment in the state. The authors found that the extension increased the percentage of people who exhausted regular benefits (that is the number of people who would have exhausted benefits without the extension) by 1 to 3 percentage points. However, because many of the workers in the study were enrolled in UI before the extension was passed, the authors argued that this figure underestimated the effect of the extension. The authors argued that had this policy been drawn out into the long term, the number of people exhausting regular benefits would have jumped 7 percentage points and the average time spent collecting UI would have increased by about a week. Overall the extension lowered the probability of leaving unemployment in a given week by 17 percent.

Rothstein (2011) - Unemployment Insurance and the Job Search in the Great Recession

A recent study by Rothstein took a similar approach as Card and Levine, but examined the extension of UI benefits to 99 weeks that was passed in the most recent recession. Rothstein found that the benefit extension raised the UE rate in this period by about .1 to .5 percentage points, or the total amount of unemployed by about 5,000 to 759,000 workers. While .5 of a percentage point represents the worst-case scenario, Rothstein says that less conservative estimates predicted that UI extensions raised UE by .2 of a percentage point. Rothstein argues that about half of the effect of UI can be attributed to workers using extended UI benefits to continue looking for a job rather than exiting the labor force. Rothstein notes that if this assertion is true, then not only was the effect of the UI extension on UE small, but additionally the extensions may have raised overall employment by allowing more people to look for jobs for longer. The effect of the UI extensions on long-term unemployment was larger, with the extensions accounting for between .3 and 2.8 percentage points of the long-term unemployment rate. However, long-term unemployed remain a small part of total unemployed workers, so their effect on total unemployment was small.

Valetta and Farber (2013) - Do Extended Unemployment Benefits Lengthen Unemployment Spells?

Valetta and Farber support many of Rothstein's findings, suggesting as well that extending UI during a recession increases the unemployment rate not through decreasing the job finding rate, but by incentivizing workers to continue to look for jobs rather than exit the

workforce. The authors find that extending UI in 2010 increased the overall unemployment rate by 0.4 percentage points of the 9 percent unemployment rate. The authors also looked at the extension of benefits in the 2001 recession, finding that extensions of UI then raised the unemployment rate by about .12 percentage points. Like Rothstein, Valetta and Farber find that long-term unemployment was more heavily affected by UI extensions, accounting for almost a quarter of long-term unemployment in 2010, but note that long-term unemployment is a small fraction of total unemployment.

Mulligan (2011) - The Expanding Social Safety Net

In his paper on the expansion of means-tested programs during the recession, Mulligan examines the effect of extending UI benefits to 99 weeks during that period. Mulligan points out that the absolute number of unemployed people not participating in UI fell after the extension, suggesting that the extension of UI benefits encourages increased participation in the program. This increased participation in turn increases the proportion of wages replaced by UI benefits, which in turn should increase the duration and rate of unemployment. Mulligan argues that this extension, combined with an increase in benefit levels enacted by the American Reinvestment and Recovery Act, led to a majority of the increase in UI spending during the recession.

Table 2: Summary of Research Relating Unemployment Insurance (UI) and Unemployment (UE)

Authors (Year)	Title	Factors Studied	Findings
Ehrenberg and Oaxaca (1976)	UI, Duration of Unemployment, and Subsequent Wage Gain	Effect of UI benefit level (replacement ratio) on the length of unemployment and wages	Raising the replacement ratio from .4 to .5 increased the expected duration of unemployment by 1.5 weeks in older men, .3 weeks for older women, .2 weeks for younger men, and .5 weeks for younger women

Authors (Year)	Title	Factors Studied	Findings
Feldstein (1978)	Effect of UI on Temporary Layoff Unemployment	Effect of UI benefit level (replacement ratio) on temporary unemployment	Raising the replacement ratio from .4 to .6 increases the temporary layoff unemployment rate by .5 percentage points, raising the overall unemployment rate
Topel (1983)	On Layoffs and Unemployment Insurance	Effect of UI subsidies on the length of temporary unemployment	The mean level of subsidy increases the average temporary unemployment spell by 1.3 weeks, and raises the total temporary unemployment by 30 percent
Meyer (1990)	UI and Unemployment Spells	Effect of UI benefit level on the probability of leaving UE and duration of UE	A 10 percent increase in UI benefits lowers the probability of leaving unemployment in a given week by 8.8 percent. Exits from UE rise right before benefit exhaustion. Raising benefit levels by 10 percent increases mean UE spell by 1 to 1.5 weeks.

Authors (Year)	Title	Factors Studied	Findings
Card, Chetty, and Weber (2007)	The Spike at Benefit Exhaustion	Spike in unemployment exits before benefit exhaustion point (BEP)	Spike in unemployment exits before BEP is caused more by workers leaving registered unemployment without finding a job, rather than workers finding jobs and leaving the unemployment system.
Meyer and Katz (1990)	The Impact of the Potential Duration of UE Benefits on the Duration of UE	Effect of UI benefit duration on length of unemployment	A one-week increase in the potential duration of UI benefits leads to a .16 to .20 increase in the mean duration of unemployment. Exits from unemployment tend to spike right before the point of benefit exhaustion.
Card and Levine (2000)	Extended Benefits and Duration of UI Spells	Effect on length of unemployment caused by 1996 extension of UI benefits in New Jersey	Extending UI benefits by 13 weeks raised the number of workers going past the previous exhaustion point by 1 to 3 percentage points. In the long run, this number would rise to 7 percentage points

Authors (Year)	Title	Factors Studied	Findings
Rothstein (2011)	Unemployment Insurance and the Job Search in the Great Recession	Effect on length of unemployment caused by federal extension of UI during recent recession	Extension of UI benefits during recent recession raised the unemployment rate by .1 to .5 percentage points. About half of this effect was due to workers continuing to look for work rather than exiting the labor force
Valetta and Farber (2013)	Do Extended Unemployment Benefits Lengthen UE Spells?	Effect on length of unemployment caused by extensions during 2001 and 2008 recessions	Extending UI benefits in the 2001 and 2008 recession increased the unemployment rate by .12 and .4 percentage points respectively. The effect of UI extension was greater for long-term unemployment.
Mulligan (2011)	The Expanding Social Safety Net	Effect on length of unemployment caused by federal extension of UI during recent recession	Extending unemployment benefits to 99 weeks in the recent recession increased participation rates in the UI program, causing an increase in the duration and rate of unemployment.

CONCLUSION

The review above provides a summary of the UI system as a whole, while highlighting budgetary trends and current participation data. The literature review reveals that although there is broad-based consensus on the positive correlation between the level and duration of

UI benefits and the unemployment rate, there is considerable disagreement over the magnitude of this effect, as well as its implications. The debate over the UI system goes far beyond what has been discussed in the articles above; other authors have looked at the effect of UI on post-unemployment wages, job matching, and overall economic growth. While it is clear that the UI system is a critical safety net during times of recession, the significant growth in the UI program has contributed significantly to the nation's debt, while at times potentially undermining the public policy goal of reemployment.

[1] <http://ows.doleta.gov/press/2013/062013.asp>