UNEMPLOYMENT INSURANCE OVER THE BUSINESS CYCLE: DOES IT MEET THE NEEDS OF LESS-SKILLED WORKERS?

Phillip B. Levine, Department of Economics, Wellesley College
UNEMPLOYMENT INSURANCE OVER THE BUSINESS CYCLE: DOES IT MEET THE NEEDS OF LESS-SKILLED WORKERS?

Phillip B. Levine
Department of Economics
Wellesley College
plevine@wellesley.edu

August 2005

I would like to thank Becky Blank, Sheldon Danziger, and Bob Schoeni for their comments, along with those from other participants attending the fall pre-conference.
I. INTRODUCTION

The unemployment insurance (UI) system is one of the primary ways that the government seeks to alleviate the hardship associated with an economic downturn. It was first introduced in the United States at the national level as part of the 1935 Social Security Act to provide financial support for the millions of workers that lost their jobs during the Great Depression.

The system is still designed to provide greater relief at times of economic hardship. Workers are more likely to receive benefits in a recession as benefits are paid only to those who lose their jobs through no fault of their own and these circumstances are much more common at such times. But the system of UI financing also helps offset the hardship associated with a downturn. Firms pay a tax to fund benefits that is at least partially “experience-rated” in that those firms who lay off more workers often have to pay a higher tax. This higher tax provides them with an incentive to lay off fewer workers. Since layoffs are more common during a recession, experience rating has the ability to reduce layoffs the most during those periods.

On the other hand, the insurance aspect of unemployment insurance serves to lessen the ability of the system to help out during hard times. Benefits are not paid out according to need, but according to the loss incurred. In fact, eligibility rules make it more difficult for those with the greatest need to qualify for benefits. To satisfy those rules, workers cannot have left a job voluntarily, although this serves as less of a constraint during a recession. But more importantly, they must have had a sufficient work history prior to the job loss, typically measured as minimum earnings requirements, to qualify for benefits. Lower-wage workers and those who have difficulty maintaining steady employment because of lack of skills may have a tougher time satisfying these requirements, particularly during periods in which jobs are scarce.
The insurance aspect of the system also contributes to the way in which it is financed, which may limit its benefits during a recession. The taxes paid in can be thought of as an insurance premium that cover the costs of benefits paid out. In this way, the system is self-financing. But that means that benefits have to be limited in duration to prevent an excessive drain on fund reserves, even when it is difficult for a worker to find a job. Moreover, if the system’s reserves become too low during a recession, taxes may need to rise to cover the greater benefit payments. This raises the cost of labor at precisely the time when firms may be struggling and may result in additional layoffs.

These conflicting provisions of the system make it unclear to what extent UI helps out during a recession. The purpose of this paper is to explore this issue, with particular emphasis on UI’s impact on less-skilled workers over the course of the business cycle and how this effect has changed over the last quarter century. I will also briefly explore whether this impact differs by race/ethnicity and gender. Throughout the paper, I will separately examine both the benefit and tax sides of the program since both may affect workers’ outcomes. I partly rely on a review of past empirical work and partly provide original data analysis to draw conclusions. I will also provide policy recommendations directed at improving the system’s ability to help out less-skilled workers without sacrificing the insurance nature of the UI system.

II. INSTITUTIONAL DETAILS

The UI system is administered at the state level, although the federal government establishes certain minimum guidelines. Each state system has different rules, but the general organization of the programs is similar. In this section, I describe the benefit and tax sides of the system separately.

A. UI Eligibility and Benefits
Before an unemployed worker can collect UI benefits, s/he must first satisfy two different sets of eligibility requirements. The first is labelled “non-monetary eligibility” and involves the circumstances under which the individual is unemployed. To qualify for UI benefits, an individual generally has to lose a job through no fault of his/her own. Workers who satisfy this requirement must also demonstrate that they are actively looking for work and willing to accept suitable employment. This is typically done through an automated phone-in system (or, more recently, by internet) in which UI recipients provide weekly reports that they have been actively looking for work, but did not accept a new job. Workers are required to appear in person if a question arises regarding their activities (potentially including the weeks of benefits received).

Workers who lost their jobs through no fault of their own must also prove that they had a sufficient work history prior to job loss to qualify for benefits. This provision is called “monetary eligibility.” Each state has a different definition of a sufficient work history, but in virtually all, the definition is based on earnings received in the worker’s “base period.” The base period is defined to be the first four of the last five calendar quarters prior to job loss. For example, if a worker loses his/her job in May 2005, then the relevant base period would be January through December 2004. The reason for the delay is historical in nature and is based on the time necessary for employers’ wage reports to be processed with the UI agency so that monetary eligibility could be assessed.

Technological advances allow this process to occur in a much timelier manner now. Recently, some states have adopted an “alternative base period,” typically based on earnings in the past four calendar quarters. I discuss the impact of using an alternative base period below.

Although specific monetary eligibility rules are complex, they can be simplified for the purposes of presentation into the “annual” (i.e. base period) earnings required to satisfy them. I
have done so for the 2004 calendar year, and reported this in Table 1. First, notice the extent of variability across the states in the level of earnings prior to job loss required to be eligible to collect UI. In Nevada and Connecticut, annual earnings of $600 prior to job loss are sufficient to qualify (and only $130 in Hawaii), North Carolina, requires $3,749. The simple average across the states is $1,879. To provide some perspective on the difficulty of becoming monetarily eligible for a less-skilled worker, suppose that a worker earns the federal minimum wage of $5.15 per hour and works 30 hours per week. This worker would qualify for UI benefits based on the national average earnings requirement if s/he worked 12 weeks during the calendar year.

The benefit available to those satisfying the eligibility requirements also differs dramatically as the states have different benefit formulas. As a broad characterization, individuals typically receive an amount equal to roughly half of their pre-unemployment weekly wage, subject to a minimum and maximum benefit. In virtually all states, the minimum benefit is a small amount and is rarely relevant in the benefit computation. Therefore, the major source of state variability in the generosity of UI benefits is the maximum weekly benefit. These values are reported for each state in Table 1 as well. Some states’ benefits are considerably more generous than others. For instance, the maximum in Mississippi and Alabama are the lowest available at $210 per week whereas Massachusetts offers up to $580. Based on a 50 percent replacement rate, workers in the lowest benefit states hit the maximum at a weekly earnings rate of $420, which means that the maximum benefit is binding for a large proportion of earners.\(^\text{iv}\)

Weekly benefits are available for a limited duration, typically 26 weeks. During a recession, however, this maximum benefit duration is often extended to a longer time period. In theory, a federal extended benefits program exists that triggers the extension in a state whenever local labor market conditions deteriorate significantly. In practice, however, this system has
structural limitations which mean that the built-in trigger is rarely fired. When a recession occurs, a formal act of Congress is usually required to extend benefits; this has happened in every recession since 1957.

Although these Congressional acts provide some relief to unemployed workers having difficulty finding jobs when few are available, this ad hoc procedure has some limitations. In particular, the timing of the extensions is not well coordinated with the period of greatest economic need. Figure 1 presents the national unemployment rate and the periods in which extended benefits have been available. When legislation is enacted, it usually provides additional benefits for future UI beneficiaries as well as those who may have already exhausted their benefits. This feature is called “reach back.” In Figure 1, the dark gray shaded regions reflect the prospective extended benefit period following enactment and the light gray shaded regions reflect reach back. As Figure 1 illustrates, the extensions always occur around the peak of the recession. Reach back sometimes occurs earlier during the recession, but not always.

Furthermore, the reach back provisions do not provide the same level of protection from income loss. First, some workers have hit their maximum benefit duration and experienced some income loss prior to reach back. Second, unnecessary anxiety may be associated with the expectation of hitting the limit for those currently receiving UI at the time of the reach back. Providing better automated triggers that kick in extended benefits at the beginning of a recession would be preferable. Although this problem is not limited to less-skilled workers, to the extent that they are in a more precarious financial position, they would benefit the most from this.

*B. UI Financing and Taxes*
Different states have different tax provisions that must satisfy federal guidelines. Most states use the reserve ratio system. Although the provisions of the other systems are somewhat different, similar basic principles are present in all of them.

The UI system is financed by a payroll tax typically levied just on firms. Firms in reserve ratio states have separate accounts to which their tax payments are credited. Benefits paid out to workers laid off by that firm are charged against that account. The account balance depends upon the firm’s entire history of taxes paid in and benefits paid out. A firm’s tax rate is assigned according to its “reserve ratio,” which reflects the ratio of the trust fund balance to the size of its taxable payroll. Firms are rewarded for having a higher reserve ratio by being charged a lower tax rate. Firms with lower reserve ratios, and especially those with negative ratios (reflecting taxes paid less than benefits paid out), are charged a higher rate. This system of charging tax rates according to a firm’s layoff history is called “experience rating.” The tax is experience rated in much the same way that insurance companies charge premiums linked to the risk of coverage; since high layoff firms run a higher risk of incurring a “loss” (layoff), they pay higher premiums (higher taxes).

However, experience rating is not complete in the sense that the cost of an additional layoff in the form of UI benefits paid is not entirely borne by the firm that instigated the layoff. The main reason for this is that states cap the tax at both ends with minimum and maximum rates. Thus, once a firm has laid off enough workers and has hit the maximum rate, laying off additional workers can not raise its tax rate. Similarly, firms who lay off very infrequently and have high reserve ratios cannot save any more on taxes by continuing that behavior.

Once a tax rate is assigned to a firm, it is levied on the wages of each worker, but taxable wages are typically capped at a level much below what the worker actually makes. This “taxable
wage base” is set by the federal government to be no less than $7,000 per year per worker. Most states, particularly larger ones, set their taxable wage base to be at or slightly higher than the federal level; in 30 states (including the District of Columbia) it is $10,000 or under. Only in 10 states (mostly smaller ones) is the base above $20,000. As I discuss later, this has implications for less-skilled workers.

The financial well-being of the entire state and federal UI systems are also tracked by a measure labeled the reserve ratio. This ratio reflects the balance in the accumulated accounts of every firm in the state/nation and is determined by dividing this figure by the total taxable payroll of all firms. Figure 2 presents the trend in the national reserve ratio between 1973 and 2003. It shows a strong cyclical pattern: the trust fund shrinks during recessions and grows during expansions. In the mid-1970s, national reserves were nearly exhausted and in the early 1980s actually went into deficit.

When its trust fund becomes insolvent, a state must borrow from the federal government to help pay its continuing benefit obligations. Up until the early 1980s, these loans were provided interest free, which may explain the willingness of states to allow their funds to become insolvent. Since then, however, market rates of interest are charged on the loans and, coupled with the economic expansions of the rest of the 1980s and much of the 1990s, this incentive has led states to place their systems on more solid financial footing. Nevertheless, at present the trust fund is at its lowest level since the early 1980s, the ratio was 0.64 in 2003, despite the two long expansions with only two relatively short and mild recessions. The implications of the risk of insolvency on the financing system and on the well-being of workers, particularly those with lower levels of skill, will be explored later in the paper.

III. UI RECIPIENCY AND THE BUSINESS CYCLE
How well does the UI system respond to the increased need that workers face during a recession? How does that response differ by workers’ skill level? Has this responsiveness changed over time? This section of the paper will answer these questions, focusing separately on the components that affect the receipt of benefits, including monetary and non-monetary eligibility, the take-up of benefits among eligible workers along with an indicator of UI receipt. I will also address the generosity of benefits among individual UI recipients.

A. Previous Research

I will begin by reviewing relevant previous research. The first strand of this literature addresses a dramatic decline in UI receipt that took place in the early 1980s. At that time, the fraction of unemployed workers who were collecting UI benefits (a statistic known as the “standard recipiency rate”) fell dramatically, from about 0.44 in 1980 to 0.29 percent in 1984. A number of analysts explored the reasons behind the decline (cf. Corson and Nicholson, 1988; Blank and Card, 1991; Vroman, 1991; and Anderson and Meyer, 1997) and found that a number of factors were relevant, including the decline in unionization and manufacturing employment, the shifting of the population from traditional high recipiency rate states to low recipiency rate states, policy changes that tightened eligibility standards, and the introduction of taxation of UI benefits, phased in between 1978 and 1986.

None of this research, however, distinguishes workers by skill level. One related strand of the literature that does address UI recipiency for less-skilled workers is the impact of welfare reform on UI receipt. At the time it was enacted, analysts conjectured that potential welfare recipients would respond to the strong labor supply incentives incorporated into the law, but might have unstable work patterns. If so, the UI system could potentially help fill in part of the safety net taken away by welfare reform, particularly during recessions. Early studies on this
topic, which relied on pre-welfare reform data in their estimation, suggested that UI receipt among potential welfare recipients would be very low (on the order of 10 percent) based on the fact that these workers would be unlikely to satisfy UI eligibility requirements (cf. Kaye 1997; Vroman, 1998; and Decker and Levine, 2001). More recent studies that have taken advantage of data in a post-welfare reform environment have provided more optimistic findings; potential welfare recipients are more likely to be eligible and to receive UI (perhaps 20 to 30 percent) than would have been expected based on the experiences of similar workers prior to welfare reform (cf. Holzer, 2000; Kaye, 2001; and Isaacs, 2005). Nevertheless, most workers in this group still do not receive UI when they are unemployed. Because welfare recipients represent just a small slice of all less-skilled workers, this research does not fully inform the questions I address.

The importance of UI receipt for unemployed workers has also been documented. UI helps families smooth income during spells of unemployment (cf. Gruber, 1997; and the Congressional Budget Office, 2004). Although this research does not distinguish between workers with different levels of skill, presumably the income smoothing component of UI is more important for less-skilled workers who command fewer resources in the first place. This emphasizes the need for evidence regarding UI receipt and its determinants by skill level; next I turn my attention to providing such evidence.

B. Data Used to Estimate UI Eligibility and Receipt

The data requirements necessary to estimate whether or not unemployed workers are eligible for and receive UI are daunting. Information is required on an individual’s current labor force status, the components of his/her income, his/her work history going back up to one and a half years (the definition of the base period), the reasons surrounding his/her exit from employment, and search activities in the period that follows. Beyond that, information is
required on an individual’s state of residence since there is so much variation in program rules across the states. One also needs a large sample to generate precise estimates.

Administrative data could be used, but their main limitation for this analysis is that they do not identify a worker’s skill level. Therefore, I am restricted to using survey data and must make some simplifying assumptions. I now describe the data used along with its limitations.\textsuperscript{viii}

I relied primarily on data from the March Current Population Surveys (CPS) from 1979 to 2004, focusing on workers between the ages of 18 and 54. To measure UI recipiency, I took advantage of retrospective information on household income in the preceding calendar year, which includes receipt of UI.\textsuperscript{ix} I do not know at what point in the year benefits were received, however, or for how many weeks. The CPS provides information regarding labor market activity in the preceding calendar year, including whether the worker experienced any unemployment. I combine this information to estimate a UI recipiency rate, which is defined as the fraction of workers who experienced some unemployment in the past calendar year who also reported some UI receipt during that year.

To estimate both UI monetary and non-monetary eligibility from the CPS requires a number of compromises. In terms of non-monetary eligibility, I would require the exact cause of a worker’s job separation, including whether or not a quit was warranted, along with the job search efforts of that worker. To simplify, I rely on those workers determined to be unemployed by the official CPS definition (used to construct the national unemployment rate) on the date of the survey. Workers thus classified meet the CPS standard of job search so I assume those workers also satisfy UI requirements. I also base a non-monetary eligibility determination on the reason the worker gave for the start of his/her unemployment spell. If the worker reported that the spell began because s/he lost a job or was laid off, then I determine her/him to be non-
monetarily eligible. This misses those who quit for cause or who quit voluntarily but satisfied some other lengthy waiting period established for quitters.

Estimating monetary eligibility requires the use of a simulation program that runs an individual’s work history through the different state-specific eligibility rules. To that end, I use those workers unemployed on the survey date; they provide retrospective information for the past calendar year regarding labor market activity and earnings that can be used in the simulation. I restrict the sample to those who have been unemployed for at least one week and no more than 26 weeks for two reasons. First, other unemployed workers would be ineligible for UI either because they have not satisfied a one-week waiting period required before one can collect benefits or because they may have exhausted their benefits. Second, it is unfair to determine their monetary eligibility with so little of their prior work experience available (for those unemployed longer than 26 weeks); their current unemployment spell would have occupied much of the preceding year. Monetary eligibility calculations are conducted for the sample of workers who meet non-monetary eligibility requirements since having a sufficient work history is irrelevant for workers who are new entrants to the labor force or who quit their jobs.

This method of computing monetary eligibility is far from perfect. Among other things, labor market information provided in the past calendar year for a worker unemployed in March does not represent their actual base period. If that worker just lost a job in March, his/her base period would end in the preceding September and extend backwards to the September before that. For workers unemployed for longer periods (up to the 26 week limit I have imposed), the past calendar year represents even a poorer approximation of the base period. Nevertheless, this is the only work experience information available and hopefully provides a sufficient representation of the work record the individual established during his/her actual base period.
The one determinant of UI receipt that I cannot adequately capture in the CPS data is take-up. Some unemployed workers who are eligible for UI do not claim their benefits. Since I cannot determine UI eligibility and UI receipt for the same group of workers, I cannot compare them to see which ones have taken up their benefits. Because I want to make comparisons by skill level (defined by educational attainment), I have to rely on microdata to estimate take-up rates rather than infer it from aggregated statistics, as Blank and Card (1991) do.

To provide some information in this regard, I have also conducted a similar analysis using panel data from the 1979 National Longitudinal Survey of Youth (NLSY79). These data track the lives of over 12,000 individuals who were between the ages of 14 and 21 in 1979, when the panel commenced; they continue to be followed today. Virtually complete labor market histories and income receipt are available for these individuals, so all dimensions of UI eligibility and receipt can be determined for each job separation that occurs. Because eligibility and receipt can be directly compared in these data, take-up can also be measured. The obvious weakness of the NLSY data is that these individuals are very young early in the survey and have aged to become prime age workers now. All changes over time in their outcomes will represent a mixture of aging effects and changes in the environment. Therefore, I will present the NLSY analysis in a regression context that partially controls for aging effects.

C. Estimated UI Eligibility and Receipt by Skill Level

Figures 3 through 6 provide a descriptive analysis of UI recipiency and its components (including benefit generosity), for workers who differ according to their level of skill. I have examined differences in outcomes for skill levels defined by four educational attainment groups, including high school dropouts, high school graduates, workers who attended some college, and college graduates. In terms of UI recipiency and eligibility, high school dropouts looked a lot
different than the other three groups, but those with higher educational attainment levels all looked similar. Therefore, in Figures 3 through 5 I only distinguish high school dropouts from workers with more education.

Figure 3 displays the overall UI recipiency rate estimated from the CPS. The primary pattern that one observes in the figure is the countercyclical nature of UI receipt. Regardless of skill level, UI receipt peaks in the early 1980s, the early 1990s, and the early part of this decade, each of which represents periods of economic downturn. For example, for high school dropouts, the rate was 30.4 percent in 1982, 28.9 percent in 1992 and 23.5 percent in 2002. This pattern is well-established and has recently been noted by Vroman (2002); as we shall see subsequently it is largely driven by the fact that unemployed workers are much more likely to have lost their jobs rather than to have quit during a recession.

Beyond the cyclical pattern, the next noticeable feature in this figure is the growing divergence between the rates of UI recipiency observed among less-skilled and other unemployed workers over time. Over the 1979 through 1981 period, roughly 30 percent of both groups of unemployed workers collected benefits, according to this CPS-based measure. But over the next two decades or so, a gap between them emerged and has grown considerably. By 2003, only about 21 percent of unemployed high school dropouts collected UI compared to almost 35 percent of unemployed workers with more education. Although this growing gap appears to be independent of the business cycle, the need for benefits may be greatest during recessions and less-skilled workers appear increasingly likely to be left behind by the UI system at those times compared to others.

Figures 4 and 5 present trends in non-monetary eligibility among the unemployed and monetary eligibility among job losers, respectively, by skill level. The results suggest that the
growing gap in recipiency between the two skill groups can be distinguished by two separate periods. Through the 1980s, little difference exists between the groups in the fraction of unemployment attributable to job loss, but in the early 1990s that changed. For example, in 1992, 57.1 percent of unemployed high school dropouts and 58.6 percent of other unemployed workers were job losers. Over the past decade or so less-skilled unemployed workers appear to be less likely to have entered that state through a job loss. In 2002, 51.8 percent of unemployed dropouts, but 60.2 percent of other unemployed workers were job losers. No obvious explanation is available for this pattern. In the 1980s, the emergence of the gap in UI receipt between the groups appears to be attributable to changes in monetary eligibility. That pattern may be attributable to the stricter eligibility rules that were enacted in the early 1980s in response to the financial troubles many state trust funds experienced at that time. Note that the overall trends across both groups over the business cycle suggest that the cyclical pattern in UI receipt is dictated by non-monetary eligibility (i.e. quit behavior), not monetary eligibility.

One final indicator of the ability of UI to help out in tough times is the value of the benefits paid out. Figure 6 displays the rate at which UI benefits “replace” pre-unemployment wages over time by skill level. Less-skilled workers are not the interesting group when it comes to benefit generosity. Since the patterns in replacement rates are comparable across all workers with less than a college degree, I have aggregated these groups. Among these workers, average replacement rates have hovered in the vicinity just below 40 percent, with perhaps a slight upward trend over time. But for those with a college degree, the value of UI benefits has slowly eroded, with the replacement rate falling to about 32 percent by end of the period despite starting out at levels comparable to the other groups (about 40 percent in 1979). The likely explanation for this is that this group is the most likely to constrained by the maximum weekly benefit
amount that each state sets. These constraints are generally fixed in nominal dollars and are increased in an ad hoc manner, but have typically not kept up with inflation over time. In this dimension, more skilled workers appear to be increasingly disadvantaged over time.

To summarize the differences in cyclical responsiveness of UI eligibility and receipt, I have estimated regression models that relate each of these outcomes at the individual level to the unemployment rate in their state of residence along with a standard array of personal characteristics (race/ethnicity, gender, age, marital status, and number of children) and state and year fixed effects. I estimated these models separately by level of education, continuing to focus on the difference between high school dropouts and workers with higher levels of education.

The results of this analysis using the CPS data are presented in the top panel of Table 2. As displayed in the figures, the cyclical responsiveness of UI receipt does not appear to differ dramatically across skill levels. Regardless of skill, UI receipt increases by about the same amount during a recession. For each group, a one percentage point increase in the unemployment rate increases the number of unemployed individuals who receive UI by about one percentage point. The growing gap in UI receipt between more- and less-skilled workers appears to be related to a secular trend rather than a cyclical one.

These results also indicate that the cyclicality of UI receipt for each group must be attributable to trends in the UI take-up rate rather than eligibility. Non-monetary eligibility tends to rise as the unemployment rate rises (particularly for more-skilled workers), as the composition of the unemployed who either lost their job or were laid off rises. But monetary eligibility tends to fall as the difficulty workers face in finding work is reflected in the weaker labor force histories of newly unemployed workers. On net, these two effects roughly balance each other.
out and leave UI eligibility largely insensitive to labor market conditions. If so, then take up rates must be responsible for driving the overall cyclical sensitivity in UI receipt.

To address the issue of take-up further, I have also estimated comparable models using data from the NLSY79. In these data, I have identified every job separation that took place for each individual at age 18 or over in the sample between 1982 and 2001. For each separation, I have calculated UI receipt and eligibility along with UI take-up. Using these data, I have estimated regression models for each outcome as a function of the local unemployment rate, an array of personal characteristics (same as in the CPS along with AFQT score, which represents the results of an aptitude/achievement test), and a complete array of individual age dummy variables to control for underlying aging patterns in each outcome that will be correlated with time in these data. The chief benefit of using these data is that I can observe UI take-up and draw conclusions based on the data for this outcome rather than by inference.

The results of this analysis of the NLSY79 data are presented in the lower panel of Table 2. Most of the findings reported here are quite consistent with those obtained using the CPS. UI receipt is countercyclical, and roughly equally so for more and less-skilled workers. In these data, a one percentage point rise in the unemployment rate increases the likelihood that a worker separated from his/her job will receive UI by just under one percentage point. Non-monetary eligibility rises when the unemployment rate rises (by about one percentage point for high school graduates and beyond and by almost twice that for high school dropouts in response to a one percentage point increase in the unemployment rate), but monetary eligibility tends to fall (by about 0.7 percentage points for both groups in response to a one percentage point increase in the unemployment rate).
In these data, however, overall eligibility tends to increase when labor market conditions deteriorate, and perhaps more so for less-skilled workers. For the less-skilled a one percentage point increase in the unemployment rate increases the rate of UI eligibility by about three-quarters of a percentage point; the effect for more-skilled workers is about half a percentage point. As suspected, take-up rates are also found to increase with the unemployment rate, rising by over a full percentage point in response to a one percentage point increase in the unemployment rate. Despite the general similarity in cyclical responsiveness of UI receipt across skill groups in these data, results in the NLSY also confirm the findings in the CPS indicating a secular trend towards less UI receipt among high school dropouts relative to more educated workers. This conclusion is based upon patterns in the year fixed effects in these regressions across skill groups, which are not reported here.

D. Estimated UI Eligibility and Receipt by Race/Ethnicity and Gender

The analysis reported so far provides the contribution that workers have been distinguished by their skill level, but within each level all workers are grouped together. Yet there may be important differences by race/ethnicity and gender within skill groups that are relevant as well. For instance, the Hispanic population is more likely to be comprised of immigrants, and these workers may have more difficulty in the labor market than other workers over the business cycle.\textsuperscript{xiv}

To examine this issue, I have replicated the analysis reported earlier, but separating the sample into women versus men, and into non-Hispanic whites, non-Hispanic non-whites (African-American and other races), and Hispanics. The main findings suggest that the cyclical sensitivity of UI eligibility and receipt is similar across gender and racial/ethnic groups. The level of these outcomes, however, often differs considerably. For instance, women are about 10
percent less likely to receive UI than men, largely because they are about 25 percent less likely to satisfy non-monetary eligibility requirements. Those who are non-Hispanic non-whites are about 7 percent less likely to receive UI than whites; they are roughly 10 percent less likely to satisfy monetary eligibility requirements and 5 percent less to meet the non-monetary guidelines. Although Hispanics are slightly less likely (about 3 percent) to satisfy monetary eligibility requirements than whites, they are also slightly more likely (about 5 percent) to have lost their job or to have been laid off. Although they are roughly equally likely to be eligible for UI benefits compared to whites, they still are slightly less likely (about 3 percent) to collect benefits, suggesting that their take-up rates are a little lower. These differences by demographic status are independent of skill-level.

IV. UI FINANCING AND THE LESS-SKILLED

Although the relationship between UI receipt and well-being is more direct, the system of financing UI payments also affects the well-being of unemployed workers. This is partly attributable to the stress that a recession places on the UI financing system and the policy responses that result. But the broader impact of the tax structure on a firm’s willingness to hire and fire workers is also an important component. In this section, I review the evidence on the system of financing UI benefits and its impact on layoffs. I then turn to an empirical analysis of the policy responses that states are likely to make when trust funds run low.

A. Experience Rating and Layoffs

The UI system is financed by a tax that is experience rated in the sense that a firm that lays off more workers will face a higher UI tax rate in subsequent periods. In essence, the firm has to pay for the UI benefits paid out to the workers that it lays off in the form of higher future taxes. This system of experience rating is not perfect, however, because many firms either lay
off so infrequently or so often that they face a minimum or a maximum tax rate, respectively. For firms facing constant tax rates, there is no cost associated with laying off additional workers.

Researchers have recognized the incentives created by this imperfectly experience rated system relative to one in which experience rating is perfect. The early literature described an implicit contract model in which firms and workers establish agreements that allow for layoffs since a surplus is created when workers receive benefits that are not paid for by the firm (cf. Feldstein, 1978; and Topel, 1983). Recent work has incorporated a different theoretical framework which treats the UI tax as an adjustment cost. By making it cheaper to fire a worker when times are bad, imperfect experience rating also makes it easier to hire a worker when times are good (Anderson, 1993; Card and Levine, 1994). Regardless of the models employed, past work has found that a greater degree of experience rating reduces layoffs (see Anderson and Meyer, 1994). In addition, the impact of imperfect experience rating on layoffs is greatest when labor market conditions are weakest (Card and Levine, 1994), since firms are more likely to want to layoff workers at those times and any financial incentive then may be more valuable.

This discussion has not made the distinction between workers with different levels of skill in determining the layoff impact of imperfect experience rating. Nevertheless, it seems likely that this is an issue that is more likely to target less-skilled workers. First, the likelihood of layoff is much greater for less-skilled workers in the first place, so it would not be surprising if incentives to layoff hit this group the hardest. Second, construction is the industry where the most firms face the maximum tax rate and, hence, no experience rating. To the extent that workers in these industries are more likely to be less educated, the incentive to layoff is greatest for them. Thus, the system of financing UI benefits probably encourages firms to layoff more workers during recessions than they would if taxes were perfectly experience rated and this
effect is likely to be larger for less-skilled workers. One way that the UI system could better meet workers’ needs during a recession is to introduce more (or even perfect) experience rating.

B. Policy Responses to Financial Stress

The taxes firms pay go into their own separate UI accounts and determine their own tax rates. Then all the accounts are accumulated into state and federal level aggregates to determine the financial well-being of the system. Figure 2 showed that the ratio of fund reserves to taxable payroll (called the reserve ratio) was quite low between the mid 1970s and the mid 1980s. But even in the most recent period, trust fund levels are relatively low despite two decades in which economic expansion was largely the norm.

If another recession occurs in the near future, a number of state funds would likely become insolvent. Estimates provided in Levine (1999) indicate that a relatively mild recession like that in the early 1990s would lower a state’s reserve ratio by 0.75. This is more than the current fund levels in 24 states (as of the fourth quarter of 2004), including many large states like New York (currently insolvent), Illinois (0.08), Massachusetts (0.09), California (0.13), and Texas (0.27). If the economy suddenly slips, each of these states could easily run out of funds.

This raises the question of how financial instability affects the UI system. How does a state respond when the funds it has available to pay UI benefits are low? There are several potential responses, and each has different implications for workers more generally and for less-skilled workers, in particular. On the one hand, states could reduce benefit payments in one of two ways. First, states could leave eligibility rules unchanged and simply reduce the level of benefits. In general, states pay workers a weekly benefit that is around 50 percent of their pre-unemployment earnings subject to a minimum and maximum value. The minimum value is very low in virtually every state and is rarely binding. The maximum benefit, however, does
represent a constraint for many workers. The typical policy change that is implemented when a
state wants to alter benefit generosity is to change the maximum weekly benefit. The
replacement rate for workers below the minimum is rarely changed and the minimum benefit is
binding on too few workers to matter (and is less frequently changed anyway). But changes in
the maximum weekly benefit generally do not affect the well-being of less-skilled workers since
they are less likely to earn enough to qualify for that maximum. The workers whose benefits
would be affected are more likely to be middle-income workers.

The second potential policy response is to reduce benefits by restricting UI eligibility. In
this dimension, altering the monetary eligibility rules is easier to do since it involves a simple
formula change. When monetary eligibility rules are tightened, workers must have earned more
in their base period to qualify for UI. But, monetary eligibility requirements are not that high.
The types of workers who are more likely to be constrained by changes in monetary eligibility
requirements would be less-skilled workers who make a lower wage (since more weeks of work
are required at a lower wage to surpass the threshold).

A state can also circumvent UI financial problems by generating more revenue via
several options. The first is to raise tax rates. But the way that it institutes the higher rates will
determine which workers are affected. One way to raise revenue is to shift the entire tax
schedule upward. This would mean a higher tax rate for all firms, but firms who face no
experience rating (i.e. those at the maximum tax rate) would continue to be able to layoff
additional workers without paying any additional cost. A policy shift like this amounts to
something like a lump sum tax that would affect all workers equally. To the extent that firms
respond to higher labor costs (including the tax) by reducing employment, workers at any point
in the distribution may be affected.
Alternatively, states could extend the sloped portion of the tax schedule by increasing the maximum tax rate only. This would generate more revenue from firms who otherwise would face no experience rating. To the extent that it provides these firms with less of an incentive to layoff workers, such a policy could actually improve the well-being of less-skilled workers, assuming these workers are more likely to work in firms like this (I am basing this assumption on the likelihood that construction firms are at the maximum tax rate). On the other hand, if the reason these firms have laid off so many workers in the past is because they are struggling, then the imposition of greater UI taxes may put them over the edge and lead them to shut down, which would lead to more layoffs for these workers.

The final way that states could raise additional revenue does not require changing tax rates, but increasing the taxable wage base. Recall that the federal taxable wage base is set at $7,000 per employee per year, although it is somewhat higher than that in a number of states. An increase in the wage base would generate additional revenue even if tax rates are held constant. Since firms would face a greater tax liability for workers between the old level of the base and the new level of the base, the cost of employing less-skilled workers is likely to rise. If, for example, the base was increased from $7,000 to $10,000, then all workers with annual earnings over $7,000 would be affected, but the percentage increase that would be felt by firms employing workers earning not much more than $7,000 would be greater. To the extent that firms respond to the increase in labor costs by reducing labor demand, more less-skilled workers may find themselves without jobs.

Since there are multiple ways that states may respond when their trust fund balances fall, each with its own implications for less-skilled workers, I have conducted an empirical exercise to determine what actually does happen. I collected data on maximum weekly UI benefits, the
annual earnings required to satisfy monetary eligibility requirements, minimum and maximum tax rates, and the taxable wage base in each state (including the District of Columbia) for the years 1979 through 2004. I estimated regression models that relate each of these outcomes to the level of trust fund reserves in each state/year in specifications that include a full vector of state and year fixed effects. This process is complicated by the fact that each of these outcomes is jointly determined with the UI provisions since, for instance, a state that raises its maximum tax rate will have higher trust fund reserves. To circumvent this problem, I implemented an instrumental variables approach where I use three lagged values of the state/year unemployment rate to instrument for the reserve ratio. This procedure provides variation in the reserve ratio that is attributable to lagged labor market characteristics not concurrent changes in UI policy.

The results, presented in Table 3, indicate that states tend to respond to financial shortfalls by changing tax provisions, not benefit generosity. Neither the maximum weekly benefit amount of the minimum earnings necessary to satisfy monetary eligibility requirements are statistically significantly different from zero. On the other hand, firms’ tax liabilities increase when reserve ratios fall. Both the minimum and maximum tax rates shift up by roughly comparable amounts, roughly half a percent for every one point reduction in the reserve ratio. This suggests that the entire tax schedule increases, rather than extending the degree of experience rating, so this could be thought of as an increase in a lump sum tax. It has no differential impact on workers who vary by skill level. States also appear to increase their taxable wage base when their trust fund balance gets low, raising it by nearly $1,000 for every one point reduction in the reserve ratio. This may have more of an impact on the labor demand of those workers who have earnings just above the existing wage base, which is likely to be the less-skilled.
V. POLICY IMPLICATIONS

Based on the above discussion, how can the UI system better meet the needs of less-skilled workers, particularly during periods of economic downturn? The issues I will discuss are not new ones; they were raised by the Advisory Council on Unemployment Compensation (ACUC), which made its final recommendations in 1996. For proposals that fit within the scope of this paper, I will discuss their potential impact on the well-being of less-skilled workers.\textsuperscript{xvii}

1) Extended Benefits Reform

The system by which the maximum benefit duration is extended during recessions is broken--emergency legislation has been required in every recession since the 1950s to provide the extension. This is troubling because federal legislation was enacted in 1970 which was designed to trigger those benefits automatically as labor market conditions deteriorate. That trigger is clearly broken. The ad hoc system that currently exists is poorly timed to the period in which unemployed workers are most at risk of exhausting their regular UI benefits, posing a risk to their well-being precisely when their need may be greatest.

Research suggests that benefit exhaustion is not a phenomenon that is more likely to occur among the less-skilled (Corson and Dynarski, 1990). Nevertheless, these workers may be more likely to live in lower-income households where the lack of benefits may have a greater impact on well-being. Fixing the trigger that automatically starts a benefit extension when a recession is beginning (by pegging the benefit extension to the overall unemployment rate, for instance) will help less-skilled workers better weather a downturn.

2) Relax Monetary Eligibility Requirements

The threshold that workers must satisfy to become monetarily eligible for UI benefits is typically set in dollar amounts, so less-skilled workers face a higher hurdle since they need to...
work more hours to surpass it. On the basis of equity, one could easily argue that this should be changed if the goal is to increase UI receipt among less-skilled workers, particularly in light of welfare reform legislation that strongly encourages a subgroup of them to enter the labor force. This could also help reverse the differential in monetary eligibility that emerged in the mid 1980s between more- and less-skilled workers, which I documented earlier.

Although such a change would benefit less-skilled workers somewhat, I believe reasonable arguments could be made to the contrary. First, a very high percentage of workers satisfy monetary eligibility requirements already, even among the less-skilled. As Figure 5 highlights roughly three-quarters of less-skilled job losers already satisfy monetary eligibility requirements; marginal reductions in these requirements are likely to help some, but probably not a lot, of them qualify for benefits. In addition, the gap in monetary eligibility between more and less-skilled workers that grew starting in the mid 1980s appears to be closing more recently, which is likely attributable to eligibility thresholds which are often set in nominal dollars and have not kept pace with inflation.

Non-monetary requirements that generally indicate that unemployed workers need to have lost their jobs to get benefits turns out to be the more common obstacle. As it currently stands, a minimum wage worker only needs to have work about 12 weeks in their one year base period in an average state to be monetarily eligible. Reducing that limit much below that may threaten the delicate balance between insurance and welfare that has largely maintained the political support for UI; the welfare system has not been so fortunate.

3) Introduce an Alternative Base Period

Basing monetary eligibility rules on lagged earnings histories is a vestige of a system in which earnings reports were recorded with a significant lag. There is no reason for this to occur
today—eligibility should be determined by a worker’s earnings record in the past year. Although such a move makes sense, it will probably only marginally increase the likelihood that a less-skilled worker will satisfy monetary eligibility requirements. Decker and Levine (2001) simulate the impact of moving to an alternative base period on UI eligibility for more- and less-skilled workers separately. They find that considerably more individuals who leave their jobs would satisfy monetary eligibility requirements with an alternative base period, but when non-monetary eligibility requirements are also imposed on those job separators, the increased likelihood of qualifying for UI is relatively small. They report that the alternative base period may provide benefits to an additional 10 percent of workers deemed ineligible by the traditional method. This figure is slightly higher for less-skilled workers. Introducing an alternative base period makes sense, but is unlikely to have a large impact.

4) Benefits to Seasonal Workers and Those Seeking Part-Time Work

The ACUC identified two groups of workers for whom policy changes could increase their ability to collect UI benefits. Currently, 25 states have rules in place that deem those seeking part-time work ineligible for benefits because they do not satisfy non-monetary eligibility requirements despite meeting those for monetary eligibility (National Employment Law Project, 2004). Seasonal workers face similar constraints in collecting benefits in 16 states (U.S. Department of Labor, 2005). Presumably these workers are more likely to be less-skilled workers, so changes to these provisions would provide greater benefits to them. The rationale for and against this proposal is somewhat philosophical in nature. For instance, insurance principles suggest that seasonal workers should not receive benefits since they are not suffering a loss—the job was supposed to end anyway. On the other hand, if those workers took seasonal jobs because they could not find regular employment, then they may find themselves in need of
those benefits. Unfortunately, I cannot say much about the merits of proposals of this type based on my research; a complete analysis of this issue is beyond the scope of this paper.

5) Increase Benefit Generosity

The ACUC proposed a system in which all states would replace at least 50 percent of lost earnings with a maximum weekly benefit amount equal to two-thirds of the state’s average weekly wage. The proposal is based on the adequacy of benefits and the ability of UI to smooth consumption during difficult financial times. Such a proposal provides little additional benefit to less-skilled workers. For the most part, state benefit formulas satisfy the 50 percent replacement rate component for most less-skilled workers.

6) Promote the Forward Funding of the UI System

The remainder of the proposals involve the system of financing UI benefits. In this regard, the ACUC advocated proposals that provide incentives to states to accumulate greater reserves during economic expansions (called “forward funding”). As we saw in Figure 2, trust fund reserve levels are not very high considering the strong economic conditions that have existed for most of the last two decades. Particularly during the boom of the 1990s, states adopted policies that led to very little growth in the UI trust fund. Many state systems do not now have sufficient reserves to weather even a moderate recession.

As I described earlier, the implications for less-skilled workers depend upon the policy responses that states implement when their reserves run low. According to my results, they do not appear to reduce maximum weekly benefits amounts, which would hurt more-skilled workers or to increase monetary eligibility requirements, which would hurt less-skilled workers. States generally respond on the tax side by shifting their tax schedules upwards for all firms, regardless of their layoff history. This acts something like a lump sum tax which is unlikely to have much
of a differential impact on less-skilled workers. On the other hand, they also appear to be more likely to increase the taxable wage base. I will address the implications of this next.

7) *Increase the Taxable Wage Base*

The ACUC also recommended increasing the federal taxable wage base to $9,000. The impact on workers of such a change depends upon firms’ responses to changes in the cost of employment for workers at various points in the earnings distribution. For very low wage workers (or those who only work part-time or part-year) whose earnings are below the current taxable wage base, there would be no change in the cost of their compensation. Firms would pay higher taxes on all workers above that level. However, the percentage increase in the level of compensation (including the tax) is greatest for those workers with earnings in the range just above the current taxable wage base. Less-skilled workers, who are more likely to earn just above the taxable earnings threshold, are more likely to be negatively affected to the extent that a firm’s labor demand falls when these cost increases. Unfortunately, the magnitude of this response is unknown.\textsuperscript{xix} As a policy alternative, the impact on less-skilled workers would be minimized if the taxable wage base was raised to a much higher level (or even eliminated), reducing the targeted impact on those with lower earnings. Interestingly, the UI taxable wage base was initially set at the same level as the Social Security taxable wage base, at $3,000 in 1940, which was equal to average annual earnings at that time. Average annual earnings have since increased to about $37,000 in 2003. Moreover, the Social Security taxable wage base stands at $90,000 in 2005. On that basis, I would view the ACUC proposal to be modest.\textsuperscript{xx}

8) *Increase the Degree of Experience Rating*

Past research shows that imperfect experience rating leads firms to lay off more workers than they otherwise would if experience rating were perfect. The impact on layoffs is greatest
during a recession, when firms’ desires to layoff are greatest. Although I have no direct
evidence, it appears that workers in firms likely to face no experience rating, like those in the
construction industry, are more likely to be less-skilled workers and, therefore, are at greatest
risk. As a result, increasing the degree of experience rating would differentially assist less-
skilled workers maintain employment over the course of the business cycle. The easiest way to
accomplish this would be to raise or eliminate the maximum tax rate (and perhaps lower the
minimum rate) without altering the remainder of the tax schedule.

VI. CONCLUSIONS

To summarize, two policy reforms may provide the greatest benefit to less-skilled
workers during a recession without compromising the insurance nature of the UI system—(1)
fixing the extended benefits system to help trigger on at the beginning of a recession rather than
relying on poorly timed ad-hoc legislation and (2) improving experience rating to reduce the
incidence of job loss in the first place, particularly during a recession. I would also encourage
the adoption of an alternative base period in all states. Although it is not clear that many workers
will benefit from this change, it will replace the currently anachronistic system of determining
monetary eligibility. Although other proposals may be meritorious from a broader perspective
(like greater incentives for forward funding), it is less clear that they will provide targeted
benefits on the less-skilled.
REFERENCE LIST


Table 1: Annual Earnings Required for UI Eligibility and Maximum Weekly Benefits, 2004

<table>
<thead>
<tr>
<th>State</th>
<th>Annual Earnings Required for Eligibility</th>
<th>Maximum Benefit</th>
<th>State</th>
<th>Annual Earnings Required for Eligibility</th>
<th>Maximum Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>2,136</td>
<td>210</td>
<td>Montana</td>
<td>1,773</td>
<td>323</td>
</tr>
<tr>
<td>Alaska</td>
<td>1,000</td>
<td>248</td>
<td>Nebraska</td>
<td>1,600</td>
<td>280</td>
</tr>
<tr>
<td>Arizona</td>
<td>1,500</td>
<td>240</td>
<td>Nevada</td>
<td>600</td>
<td>317</td>
</tr>
<tr>
<td>Arkansas</td>
<td>1,701</td>
<td>345</td>
<td>New Hampshire</td>
<td>2,800*</td>
<td>372</td>
</tr>
<tr>
<td>California</td>
<td>1,125</td>
<td>410</td>
<td>New Jersey</td>
<td>2,060*</td>
<td>490</td>
</tr>
<tr>
<td>Colorado</td>
<td>2,500</td>
<td>398</td>
<td>New Mexico</td>
<td>1,799*</td>
<td>290</td>
</tr>
<tr>
<td>Connecticut</td>
<td>600*</td>
<td>429</td>
<td>New York</td>
<td>2,400*</td>
<td>405</td>
</tr>
<tr>
<td>Delaware</td>
<td>720</td>
<td>330</td>
<td>North Carolina</td>
<td>3,749*</td>
<td>416</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>1,950</td>
<td>309</td>
<td>North Dakota</td>
<td>2,795</td>
<td>312</td>
</tr>
<tr>
<td>Florida</td>
<td>3,400</td>
<td>275</td>
<td>Ohio</td>
<td>3,520*</td>
<td>323</td>
</tr>
<tr>
<td>Georgia</td>
<td>1,600*</td>
<td>300</td>
<td>Oklahoma</td>
<td>1,500</td>
<td>275</td>
</tr>
<tr>
<td>Hawaii</td>
<td>130*</td>
<td>417</td>
<td>Oregon</td>
<td>1,000</td>
<td>410</td>
</tr>
<tr>
<td>Idaho</td>
<td>1,657</td>
<td>320</td>
<td>Pennsylvania</td>
<td>1,320</td>
<td>461</td>
</tr>
<tr>
<td>Illinois</td>
<td>1,600</td>
<td>326</td>
<td>Rhode Island</td>
<td>2,700*</td>
<td>441</td>
</tr>
<tr>
<td>Indiana</td>
<td>2,750</td>
<td>348</td>
<td>South Carolina</td>
<td>900</td>
<td>285</td>
</tr>
<tr>
<td>Iowa</td>
<td>1,500</td>
<td>300</td>
<td>South Dakota</td>
<td>1,288</td>
<td>248</td>
</tr>
<tr>
<td>Kansas</td>
<td>2,610</td>
<td>351</td>
<td>Tennessee</td>
<td>1,560</td>
<td>275</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1,500</td>
<td>365</td>
<td>Texas</td>
<td>1,961</td>
<td>330</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1,200</td>
<td>258</td>
<td>Utah</td>
<td>2,500</td>
<td>362</td>
</tr>
<tr>
<td>Maine</td>
<td>3,376*</td>
<td>292</td>
<td>Vermont</td>
<td>2,390*</td>
<td>359</td>
</tr>
<tr>
<td>Maryland</td>
<td>864</td>
<td>310</td>
<td>Virginia</td>
<td>2,500*</td>
<td>326</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>3,000*</td>
<td>508</td>
<td>Washington</td>
<td>680 hours*</td>
<td>496</td>
</tr>
<tr>
<td>Michigan</td>
<td>2,997*</td>
<td>362</td>
<td>West Virginia</td>
<td>2,200</td>
<td>358</td>
</tr>
<tr>
<td>Minnesota</td>
<td>1,250</td>
<td>478</td>
<td>Wisconsin</td>
<td>1,470*</td>
<td>329</td>
</tr>
<tr>
<td>Mississippi</td>
<td>1,200</td>
<td>210</td>
<td>Wyoming</td>
<td>2,200</td>
<td>306</td>
</tr>
<tr>
<td>Missouri</td>
<td>1,500</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Annual earnings reflect those in the worker’s “base period,” which represents the first 4 of the last 5 calendar quarters. Entries denoted with an * reflect those states in which an alternative base period is available, which typically represents the last 4 completed calendar quarters.

Sources: Highlights of State Unemployment Compensation Laws (various issues), Comparison of State Unemployment Insurance Laws, (various issues), and Significant Provisions of State Unemployment Insurance Laws (various issues).
Table 2: Cyclical Responsiveness of UI Eligibility and Receipt, by Skill Level

<table>
<thead>
<tr>
<th></th>
<th>Received UI</th>
<th>Non-Monetary Eligibility</th>
<th>Monetary Eligibility</th>
<th>Overall Eligibility</th>
<th>Take-Up Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPS DATA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Workers</td>
<td>1.115</td>
<td>0.816</td>
<td>-1.390</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.154)</td>
<td>(0.284)</td>
<td>(0.281)</td>
<td>(0.344)</td>
<td></td>
</tr>
<tr>
<td>High School Dropouts</td>
<td>0.941</td>
<td>-0.035</td>
<td>-1.391</td>
<td>-0.589</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.237)</td>
<td>(0.401)</td>
<td>(0.431)</td>
<td>(0.410)</td>
<td></td>
</tr>
<tr>
<td>High School Graduates and Beyond</td>
<td>1.204</td>
<td>1.222</td>
<td>-1.590</td>
<td>0.303</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.153)</td>
<td>(0.267)</td>
<td>(0.319)</td>
<td>(0.359)</td>
<td></td>
</tr>
<tr>
<td><strong>NLSY DATA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Workers</td>
<td>0.818</td>
<td>1.125</td>
<td>-0.728</td>
<td>0.573</td>
<td>1.253</td>
</tr>
<tr>
<td></td>
<td>(0.104)</td>
<td>(0.108)</td>
<td>(0.126)</td>
<td>(0.124)</td>
<td>(0.288)</td>
</tr>
<tr>
<td>High School Dropouts</td>
<td>0.902</td>
<td>1.848</td>
<td>-0.649</td>
<td>0.758</td>
<td>1.163</td>
</tr>
<tr>
<td></td>
<td>(0.225)</td>
<td>(0.196)</td>
<td>(0.246)</td>
<td>(0.257)</td>
<td>(0.452)</td>
</tr>
<tr>
<td>High School Graduates And Beyond</td>
<td>0.783</td>
<td>0.955</td>
<td>-0.787</td>
<td>0.511</td>
<td>1.206</td>
</tr>
<tr>
<td></td>
<td>(0.122)</td>
<td>(0.131)</td>
<td>(0.113)</td>
<td>(0.131)</td>
<td>(0.291)</td>
</tr>
</tbody>
</table>

CPS Notes: A unit of observation in the eligibility regressions reflects workers unemployed on the survey date for 26 weeks or less and in the UI receipt regression reflects all workers unemployed in the preceding calendar year. Estimates reflect the coefficient on the local area unemployment rate in a regression that includes controls for race/ethnicity, gender, age, marital status, number of children, and state and year fixed effects. Monetary eligibility regressions are estimated on the sample of individuals who meet non-monetary eligibility requirements. Reported standard errors correct for heteroskedasticity and for arbitrary forms of covariance between residuals over time within states.

NLSY Notes: A unit of observation reflects a job separation that led to at least one week of unemployment. Estimates reflect the coefficient on the local area unemployment rate in a regression that includes controls for race/ethnicity, gender, age, marital status, number of children, AFQT score, and state and year fixed effects. Reported standard errors correct for heteroskedasticity and for arbitrary forms of covariance between residuals over time within states.
<table>
<thead>
<tr>
<th>Reserve Ratio</th>
<th>Maximum Weekly Benefit</th>
<th>Required Annual Earnings</th>
<th>Minimum Tax Rate</th>
<th>Maximum Tax Rate</th>
<th>Taxable Wage Base</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2.91</td>
<td>-133.01</td>
<td>-0.668</td>
<td>-0.423</td>
<td>-929.08</td>
</tr>
<tr>
<td></td>
<td>(5.48)</td>
<td>(120.74)</td>
<td>(0.190)</td>
<td>(0.077)</td>
<td>(400.16)</td>
</tr>
</tbody>
</table>

Notes: Estimates reflect the coefficient on the reserve ratio in a two-stage least squares regression where the instruments represent three lagged values of the state-specific annual unemployment rate. Each specification also includes a full set of state and year fixed effects. All dollar values have been indexed to inflation and represent 2004$. Reported standard errors are correct for heteroskedasticity and for arbitrary forms of covariance between residuals over time within states.
Figure 1: The Timing of Benefits Extensions

Notes: Light gray areas reflect periods in which extended benefits were enacted retrospectively and dark gray areas reflect periods in which extended benefits were available prospectively. Source: http://workforcesecurity.doleta.gov/unemploy/pdf/spec_ext_ben_table.pdf, accessed March 7, 2005.
Figure 2: Trust Fund Balances Over Time
Figure 3: UI Recipiency Rate, by Educational Attainment

Source: Author's calculations from March Current Population Surveys.
Figure 4: Rate of "Nonmonetary Eligibility" among Unemployed

Source: Author's calculations from March Current Population Surveys.
Figure 5: Rate of "Monetary Eligibility" among Job Losers

Source: Author's calculations from March Current Population Surveys.
Figure 6: Benefit Replacement Rate among UI Eligible
ENDNOTES

i For a detailed discussion regarding non-monetary eligibility and related issues, see Fishman, et al. (2003).

ii Of course, the implementation of these criteria is more complicated. For instance, if a worker quits a job for “good cause” (like sexual harassment), s/he worker would still be eligible for benefits. In some states, those who quit a job without good cause can eventually receive UI benefits after a lengthy waiting period.

iii The State of Washington establishes monetary eligibility on the basis of hours worked in the base period.

iv Median weekly earnings in Alabama and Mississippi were $588 and $517, respectively, in 2003.

v See Corson, et al. (1999) for a brief history of emergency extended benefits legislation and a detailed discussion of the early 1990s experience. Currently, 10 states have instituted alternative triggers which commence extended benefits if the state’s unemployment rate rises above 6.5 percent.

vi A more complete description of UI financing and relevant related issues can be found in Levine (1997).


viii The procedures I have undertaken are similar, but not identical, to those implemented by Blank and Card (1991), who also use the CPS to measure UI receipt and eligibility. The differences are partly attributable to the different focus of the papers; their analysis is specifically targeted at explaining the diverging rates of total unemployment and insured unemployment that occurred in the early 1980s and this is less of a concern for me.

ix Roemer (2000) reports that the CPS captured about 82 percent of actual UI receipt based on administrative records over the 1990-1996 period.

x To make the calculations of non-monetary eligibility comparable, I impose the same restrictions on unemployment spell length there as well.

xi Note that the data I have used to estimate UI recipiency (retrospective data) is different than that used to estimate eligibility (contemporaneous data), so direct comparisons of the results are not appropriate.

xii Although I do not have evidence to support any of these hypotheses, possible explanations include: (1) policy changes designed to encourage labor market activity among potential welfare recipients has led many individuals to be reclassified from out of the labor force to unemployed. These individuals are unemployed, but not job losers; (2) these same policy changes increased employment levels for less-skilled workers, but the match quality of these jobs may not be very high, resulting in a high quit rate; and (3) the growth in the temporary employment industry may have led to more individuals whose jobs ended, so there are more people in this category rather than job losers. Other explanations certainly may exist, but further research would be necessary to determine the extent any of them actually explain the observed phenomenon.

xiii Including these individual age dummy variables will completely correct for the deficiencies of the nature of this sample so long as age effects are constant over time.
Immigrant status is not separately identified in the Current Population Survey until 1994, so I cannot distinguish this group directly for the analysis I conduct.

These results are obtained from the coefficients on race/ethnicity and gender dummy variables in the same regressions used to generate Table 2. I have also estimated these regressions separately by race/ethnicity and gender to determine that the unemployment rate coefficients in models of that form are roughly similar across groups.

It is relevant to note, however, that similar regressions using data from the 1980s finds a significant negative relationship between the reserve ratio and required annual earnings. This is because many states strengthened their monetary eligibility requirements in the early 1980s in response to the funding crises that they were experiencing at that time. The introduction of interest charged on loans from the federal government made them take more drastic actions to get their finances in order. Since then, however, no such relationship is apparent so that the effect over the entire 25 year period turns out not to be statistically significant.

The Council made several additional recommendations beyond those that I discuss here. Those recommendations include things like rules for non-profit employers and agricultural workers, obscure provisions of the Internal Revenue Code, data reporting requirements, administrative federal-state interactions, and the like. Without disputing the importance of topics like these, none of the analysis provided in this paper sheds light on any of them.

Vroman’s (1995) analysis yields similar conclusions.

Cook, et al. (1995) simulate the impact of increasing or eliminating the taxable wage base and report small employment effects, although their analysis does not distinguish workers by their level of skill.

If we do increase the wage base substantially, tax rates could be significantly reduced to maintain revenue neutrality, if such an outcome were desired.