Who Receives Unemployment Insurance?

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Abstract

This paper uses Unemployment Insurance (UI) administrative data combined with Current Population Survey data in 2003 to examine socioeconomic patterns in UI receipt for new job losers. We find that key socioeconomic groups – women, nonwhites, youth, and workers with no high school diploma – were much less likely than average to start collecting UI benefits once they lost their jobs. These differences are partly attributable to differences in part-time employment and unionization; workers in groups with low part-time employment and high unionization rates had higher than average UI receipt rates. We also find that certain groups of job losers – women, youth, workers with no college education, and blue collar workers – collected much lower benefits once they entered the program. These differences are mainly attributed to variation in benefit entitlements and other factors. Our findings enhance our understanding of the effectiveness of the UI program to serve the diverse population of new job losers in the modern US economy.

Keywords: Unemployment Insurance; unemployment; gender; race; industry; education; occupation.

1. Introduction

The proportion of unemployed workers in the US that receive Unemployment Insurance (UI) benefits has been low historically, raising questions about the effectiveness of the program to serve the unemployed population. Numerous studies have tackled the issue of low UI receipt, focusing on the factors explaining the historical and recent trends in UI participation among unemployed workers. Such studies have attributed low UI receipt to a number of factors, including strict eligibility requirements in some states, low UI application rates, and changes in the industrial and occupational structure of the economy.

Perhaps surprisingly, there is limited research examining recent UI receipt patterns in the US and how these differ across key socioeconomic groups. Existing research has relied mostly on secondary data sources to examine UI receipt rates by gender and race or by industry and occupation in a single state or at the national level. To our knowledge, there is no research that examines UI receipt rates for a wide range of socioeconomic characteristics (gender, race, education, age, industry, and occupation) and no research that examines socioeconomic differences in UI receipt rates *and* benefits amounts collected. Understanding UI receipt patterns of key socioeconomic groups, as well as the key underlying factors that may explain those patterns, during periods of moderate unemployment is crucial in assessing and identifying ways to improve the effectiveness of the UI program to serve the diverse unemployed population.

This paper helps to fill this research gap by examining differences in UI receipt for new job losers by gender, race, education, age, industry, and occupation. For our analyses, we combine UI administrative data from Minnesota, Oregon, Pennsylvania, and Wisconsin with Current Population Survey (CPS) data in 2003, a year in which the US unemployment rate (6.0 percent) was about equal to the average US unemployment rate in the last 20 years. Using these data, we construct three state-level measures of UI receipt for new job losers, overall and by socioeconomic characteristic: 1) *UI receipt rate*, which estimates the proportion of new job losers who start a new UI claim; 2) *benefits per recipient*, which is the population mean of benefit amounts collected per new UI recipient; and 3) *benefits per new job loser*, which estimates the average benefit amounts collected per new job loser. Using these measures, we examine UI receipt patterns across the four states and across socioeconomic groups within each state. In particular, we examine which groups of new job losers are likely to start a new UI claim once they lose their jobs and which groups are likely to collect high UI benefit amounts once they enter the UI program. In addition, we examine whether observed patterns may be related to differences in union attachment, part-time employment, and other characteristics.

The remainder of this paper is organized as follows. Section 1 provides an overview of the literature on the UI program and explains how this paper contributes to existing work. Section 2 describes the two data sources and how these are used to produce measures of UI receipt. Section 3 presents differences in UI receipt measures between Minnesota, Oregon, Pennsylvania, and Wisconsin and examines the extent to which UI receipt patterns in these four states reflect patterns for a large number of states across the US. Section 4 examines

within-state differences in UI receipt by gender, race, education, age, industry, and occupation. Section 5 provides a summary of our findings.

2. Background

The US UI system was established in 1935 with passage of the Social Security Act, largely as a response to the Great Depression. The main objective of the program is to provide short-term financial relief to unemployed workers through partial replacement of their lost earnings. In doing so, the program assists unemployed workers sustain their quality of life through periods of joblessness and provides substantial countercyclical stimulus to the economy (Gruber, 1997; Gruber, 1998, Nicholson and Needels, 2006). To demonstrate the importance of the UI system in the US economy, consider that between 2001 and 2010, unemployed workers collected an annual average of more than $42 billion in UI benefits.(Note 1) Total UI payments were considerably higher in the trough of the most recent recession (2008-2009), when unemployed workers collected an annual average of $63 billion.

Despite the substantial UI benefit amounts collected, a majority of unemployed workers do not collect benefits. Since the mid-1980s, only about a third of unemployed workers collected UI benefits (Corson and Nicholson, 1988; Vroman, 2002). The low overall UI receipt is a major policy concern, as it shows that the program is not reaching a significant proportion of the unemployed population. Of course, this is partly explained by the fact that UI only covers workers who lost their jobs through no fault of their own. Job quitters, workers who lost their jobs for cause, and new entrants to the labor force are not eligible to collect UI benefits.

Many studies have explored the historical and recent trends in the participation of unemployed workers in the UI program (e.g., McMurrer and Chasanov, 1995; Anderson and Meyer, 1997; Vroman, 1998; Wittenburg et al., 1999; Cleary et al., 2009). One of the explanations offered for the low UI receipt rate is that strict eligibility requirements in some states lead to the rejection of many claims, particularly those filed by low-wage workers (Emsellem et al., 1999; Holzer, 2000; Vroman, 2002). There is also increasing evidence that some unemployed workers who qualify for UI benefits do not file a claim, mostly because they have limited information on the program or they erroneously think they are ineligible (Rosenfeld, 1977; Vroman, 1991; Wandner and Stettner, 2000; Vroman, 2009). Previous research also suggests that low UI receipt rates over the past three decades may be partly due to changes in the structure of the US economy, particularly the decline of manufacturing, an industry with historically high UI participation (Anderson and Meyer, 1997; Vroman, 1998). The relative increase in the total number of unemployed workers in the South, the region with the lowest UI receipt rate also contributed to the low national UI receipt rates (Blank and Card, 1991).

Although there is substantial research on UI participation patterns, few papers examine UI participation for key socioeconomic groups. Emsellem et al. (1999) use Survey of Income and Program Participation data from 1988 to 1994 to examine UI participation in Texas by race and ethnicity. The authors find that unemployed nonwhite and Hispanic workers were

less likely than others to participate in the UI program. Anderson and Meyer (1997) examine national UI participation rates by industry and conclude that workers in manufacturing were more likely than workers in other sectors, such as services, to file a UI claim. Budd and McCall (1997) use the National Longitudinal Survey of Youth from 1979 to 1991 and find that blue collar workers in the US were more likely than white collar workers to collect UI benefits after losing their jobs. Michaelides and Mueser (2009) used Current Population Survey data to show that, in recent years, nonwhites have been more likely than whites to apply for UI benefits, controlling for industry and occupation; modest or no differences were found by gender and Hispanic ethnicity.

One key limitation of existing research, including the papers cited above, is that they do not examine UI receipt for a wide range of characteristics, such as gender, race, education, age, industry, and occupation. Also, due mainly to data limitations, existing research does not examine socioeconomic differences in actual UI benefit amounts collected. In fact, to our knowledge, there are no studies that examine recent socioeconomic differences in UI participation and benefits amounts collected among new job losers. Such research is essential in understanding the effectiveness of the UI program in the modern US economy, particularly in supporting low-income or disadvantaged workers – such as minorities, young workers, and workers with low educational attainment. In the absence of such research, it is difficult for policymakers to assess the program's reach and implement strategies for improving it.

This paper combines UI administrative data from Minnesota, Oregon, Pennsylvania, and Wisconsin, with Current Population Survey (CPS) data in 2003 to produce measures of UI receipt for new job losers in each state, overall and by socioeconomic characteristic. These measures are used to address a number of research questions about UI receipt patterns of new job losers. Which new job losers are likely to start a new UI claim once they lose their jobs? What are the average benefit amounts collected by new job losers in key socioeconomic groups? Which socioeconomic groups are likely to start a new UI claim once they lose their jobs *and* collect high benefit amounts? What are some of the underlying factors that explain socioeconomic differences in UI receipt among new job losers?

This paper contributes to the literature in a variety of ways. To our knowledge, this is the first paper that examines differences in UI receipt across several key socioeconomic characteristics, including gender, race, education, age, industry, and occupation. In addition, this is the first paper that combines state UI administrative data with CPS data to examine both UI participation and actual benefit amounts collected by key socioeconomic groups. Furthermore, the fact that this paper relies on state UI administrative data (which includes the population of new UI recipients in the state) and on CPS data (which includes large representative samples of unemployed workers) provides confidence that the UI receipt measures used are accurate and can be used to obtain an unbiased assessment of UI receipt patterns.

3. Measures of UI Receipt and Data Overview

Measures of UI receipt are produced by combining two data sources: 1) state UI administrative data, which provide information on the population of unemployed workers who start collecting UI benefits in the state and 2) monthly Current Population Survey (CPS) data, which provide monthly information on the total number of new job losers in each state. Below, we describe the three measures of UI receipt in this paper and the data used to construct those measures.

3.1 Measures of UI Receipt

The first measure used in this paper is the *UI receipt rate*, which estimates the proportion of new job losers that started collecting UI benefits once they lost their jobs in a given year. The UI receipt rate in a given year for state *k*, socioeconomic group *g* is constructed as follows:

$$\text{UI Receipt Rate}_{k,g} = \frac{R_{k,g}}{UN_{k,g}} = \frac{\text{New UI Recipients in 2003 } (state\ k, group\ g)}{\text{NewJob Losers in 2003 } (state\ k, group\ g)}$$

The numerator is the population count of workers who started a new UI claim during the year in state *k*, socioeconomic group *g*, which is calculated using state UI administrative data. The denominator is the population estimate of the total number of new job losers during the same year in state *k*, socioeconomic group *g*, which is calculated using the CPS data. By construction, the UI receipt rate provides a reliable estimate of the probability that new job losers in state *k*, socioeconomic group *g* start a new UI claim once they lose their jobs.

We use this measure to examine differences in UI participation for new job losers by key socioeconomic groups (gender, race, education, age, industry, and occupation). We should note that this measure differs from those reported in previous research (e.g., Blank and Card, 1991; McMurrer and Chasanov, 1995; Anderson and Meyer, 1997; Emsellem et al., 1999; Vroman, 2001) in that our measure estimates the proportion of new job losers who start a new UI claim and not the proportion of all unemployed workers receiving UI benefits.(Note 2) In addition, the UI receipt rate in this paper is based on newly unemployed workers who may be eligible for UI, a departure from previous work that mostly relied on measures that were constructed using the entire population of unemployed workers, including those who are not eligible for UI.

The second measure is the *benefits per recipient*, which measures the average amount of UI benefits collected per new UI recipient in a given year. This is calculated as follows:

$$\text{Benefits per Recipient}_{k,g} = \frac{BEN_{k,g}}{R_{k,g}} = \frac{\text{UI Benefit Amounts Collected on Claim } (state\ k, group\ g)}{\text{New UI Recipients } (state\ k, group\ g)}$$

The numerator is the total amount of UI benefits collected on claims started during the year by new UI recipients in state *k*, socioeconomic group *g*, while the denominator is the total number of new UI recipients in state *k*, group *g*. Both the numerator and denominator are produced using UI administrative data and represent population counts; thus, this measure is the population mean of benefit amounts collected. This measure is used to examine the

average amount of benefits collected by new UI recipients in each state and examine differences across states and by socioeconomic group within each state.

The third measure is the *benefits per new job loser*, which estimates the average benefit amounts collected per new job loser. This measure is produced by multiplying the UI receipt rate with the benefits per recipient measure; thus, benefits per new job loser in state k, socioeconomic group g in a given year is:

$$\text{Benefits per New Job Loser}_{k,g} = \frac{\text{BEN}_{k,g}}{\text{UN}_{k,g}}$$

$$= \frac{\text{UI Benefit Amounts Collected on 2003 Claims (state } k, \text{group } g)}{\text{New job losers in 2003 (state } k, \text{group } g)}$$

This measure differs from the benefits per recipient measure, in that it measures benefits collected by taking into account the proportion of new job losers who start a new UI claim. By construction, benefits per new job loser can be used to examine which groups of new job losers are likely to start a new UI claim *and* collect high benefit amounts on that claim. Using this measure, we are able to assess which groups of new job losers are the most "expensive" users of the UI system.

3.2 UI Administrative Data

To produce the above measures, we need access to state UI administrative data, which provide information on the population of unemployed workers who started collecting UI benefits, including: date the claim started, socioeconomic characteristics of UI recipients (gender, race, age, education, industry, and occupation), and total benefit amounts collected on the claim. To select which states would be included in this study, we used two criteria: (1) states had to be large enough to allow for sufficient sample sizes in both the UI and the CPS data to construct the UI receipt measures by socioeconomic group; and (2) states had to be willing to share their UI administrative data for use in this study.(Note 3)

For the purposes of this study, we asked states with a population of at least 3 million people as of 2008, to provide their UI administrative data for the period 2002-2005. By the end of this process, we were successful in obtaining 2003 UI administrative data from four states – Minnesota, Oregon, Pennsylvania, and Wisconsin. These data provide information on the population of unemployed workers who started collecting UI benefits in 2003 in those states, including the benefit amounts collected on the entire claim and their socioeconomic characteristics. These data allow us to produce the UI receipt measures discussed above for 2003, a year in which the US unemployment rate was 6.0 percent, which was about equal to the average unemployment rate from 1992 through 2012 (6.1 percent), but much lower than the unemployment rate in the 2009-2012 period which includes the recent recession (9.0 percent). (Note 4)

Using these data, we produced population counts of the total number of unemployed workers who started receiving UI benefits in 2003 and the amounts of UI benefits they collected on their claim in each state, overall and by socioeconomic group. Table 1 presents the total

number of new UI recipients in 2003 and their characteristics in each study state. For comparison, the far right column of Table 1 presents the characteristics of new UI recipients in 2003 for the entire US.(Note 5) Nearly 10 million unemployed workers in the US started a new UI claim in 2003, of which nearly 1.2 million (12 percent) were in Minnesota, Pennsylvania, Wisconsin, and Oregon. The majority of recipients in these four states and in the entire US were men, with Minnesota having the highest proportion of male recipients. In Minnesota, Pennsylvania, and Wisconsin, at least 83 percent of new UI recipients were white, which much exceeded the US average (60 percent). Race information was not available in the Oregon UI administrative data. There were no notable differences in the age distribution of new UI recipients across the four states and relative to the US average. In addition, more than half of new UI recipients in each state did not have more than a high school education. For example, in Minnesota, 10 percent had no school diploma and 47 percent had no more than a high school diploma.

Table 1. Characteristics of new UI Recipients in 2003

	Minnesota	Oregon	Pennsylvania	Wisconsin	US
Total	173,250	163,747	542,860	304,693	9,948,871
Men	68%	60%	60%	64%	58%
Women	32%	40%	40%	36%	42%
White	86%	--	83%	86%	60%
Nonwhite	14%	--	17%	14%	40%
Age Group					
16-24 Years	11%	12%	10%	12%	10%
25-34 Years	25%	25%	24%	24%	24%
35-44 Years	27%	26%	27%	27%	28%
45+ Years	37%	37%	39%	37%	38%
Education					
No High School Diploma	10%	14%	12%	13%	--
High School Diploma	47%	52%	60%	50%	--
Some College	29%	23%	16%	26%	--
College Degree	14%	11%	12%	11%	--
Industry					
Services	28%	40%	29%	--	28%
Non-Services	72%	60%	71%	--	72%
Occupation					
White Collar	39%	48%	--	24%	--
Blue Collar	61%	52%	--	76%	--

Note: Reported are proportions of all new UI recipients in 2003. State figures are produced using the 2003 CPS monthly data; US figures are produced using US Department of Labor's Unemployment Insurance Chartbook and Benefit Accuracy Measures.

Industry information was collected in three of the four states (Minnesota, Oregon, and

Pennsylvania). To make the industry information consistent across states, we divide industries into two categories: services and non-services sectors.(Note 6) As shown in Table 1, the majority of new UI recipients were in non-services sectors. While the Minnesota and Pennsylvania industry distributions were similar to the US distribution, Oregon had a higher proportion of UI recipients in services (40 percent) relative to the US proportion (28 percent). Occupation information was collected in three of the four study states; for consistency, we define two occupational categories – white collar and blue collar. (Note 7) As shown in Table 1, there were important differences in the occupational distribution of new UI recipients across the three states where this information as available: in Wisconsin, only 34 percent were white collar workers relative to 39 percent in Minnesota and 48 percent in Oregon.

3.3 Current Population Survey Data

The CPS is a nationally representative survey of more than 50,000 households conducted monthly by the US Census Bureau. CPS reports detailed information on the respondents' labor force characteristics, including: labor force status, employment status, unemployment reason (job loser, job leaver, reentrant, or new entrant in the labor force), and unemployment duration. In addition to the state of residence, CPS also reports demographics, education attainment, and industry and occupation affiliation. In fact, due to the rich information available in the data, the monthly CPS data and its supplements have been widely used by researchers to examine a number of issues related to the UI program (e.g., Blank and Card, 1991; Wandner and Stettner, 2000; Budd and McCall, 2004; Murphy, 2007; Vroman, 2009).

We use the monthly CPS data for 2003 to produce population estimates of the total number of *new job losers* in 2003, that is, workers who lost their jobs within five weeks prior to the survey. (Note 8) Table 2 presents the CPS population estimates of new job losers in 2003 for each of the four states and for the entire US; these are the workers who would be eligible to apply for and, if deemed eligible, start collecting UI benefits in 2003. (Note 9) As the first row of Table 2 shows, there were nearly 29 million new job losers in the US in 2003; of these, a combined total of 2.8 million (or 9.7 percent) were in Minnesota, Oregon, Pennsylvania, and Wisconsin. The socioeconomic composition of new job losers was similar across states. For example, 56 to 62 percent of new job losers were men and 81 to 87 percent were white. The age and education distributions were similar across states and corresponded closely to the US figures. We also find that new job losers were about equally split between services and non-services, while the majority of job losers were in blue collar occupations.

A comparison of Tables 1 and 2 reveals some interesting patterns. For example, workers ages 16-24 years accounted for about 35 percent of all new job losers in the US (Table 2) but only for about 10 percent of new UI recipients (Table 1). This suggests that younger job losers were less likely than other job losers to participate in the UI program. In addition, the services sector accounted for 51 percent of new job losers but only for about 28 percent of UI recipients, indicating that new job losers in the services sector were less likely than those in non-services sectors to participate in the UI program once they lost their jobs. Below, we use the three measures of UI receipt to help explore these patterns.

Table 2. Characteristics of New Job Losers in 2003

	Minnesota	Oregon	Pennsylvania	Wisconsin	U.S.
Total	602,388	541,596	1,092,947	565,744	28,962,951
Men	62%	60%	56%	59%	56%
Women	38%	40%	44%	41%	44%
White	86%	88%	81%	87%	77%
Nonwhite	14%	12%	19%	13%	23%
Age Group					
16-24 Years	42%	33%	34%	36%	35%
25-34 Years	24%	22%	20%	20%	24%
35-44 Years	13%	17%	21%	19%	19%
45+ Years	21%	27%	25%	25%	22%
Education					
No High School Diploma	23%	24%	20%	25%	27%
High School Diploma	30%	27%	42%	39%	33%
Some College	32%	33%	25%	24%	26%
College Degree	15%	16%	13%	12%	13%
Industry					
Services	50%	52%	52%	45%	51%
Non-Services	50%	48%	48%	55%	49%
Occupation					
White Collar	46%	36%	42%	36%	43%
Blue Collar	54%	64%	58%	64%	57%

Note: Reported are proportions of all new job losers (source: 2003 CPS monthly data).

4. State-Level UI Receipt Patterns

Using the three UI receipt measures, we examine differences in UI participation and benefit amounts collected for new job losers in Minnesota, Oregon, Pennsylvania, and Wisconsin. We begin our analyses by studying state-level UI receipt patterns for the four study states and examine if these reflect patterns in other states across the US. This discussion is useful to assess the extent to which the four study states are representative and thus can be generalized to a large number of states.

Table 3 presents the three UI receipt measures for each of the four study states and for the entire US.(Note 10) The first row shows that the UI receipt rate for new job losers in 2003 varied considerably across states. In Minnesota and Oregon, 29 and 30 percent of new job losers, respectively, started a new UI claim. These were just below the US rate (34 percent) which shows that new job losers in these two states were slightly less likely than average to collect UI once they lost their jobs. In contrast, the UI receipt rates in Pennsylvania (50 percent) and Wisconsin (54 percent) were substantially higher than the average national rate.

Differences in the UI receipt rates across these four states could be attributed to a number of factors, including for example, that new job losers in Pennsylvania and Wisconsin were more likely to apply for UI benefits once they lost their jobs than new job losers in the other two states. It is also possible that, contingent on applying for UI benefits, new job losers in Pennsylvania and Wisconsin were more likely than those in Minnesota and Oregon to be eligible to collect benefits based on state eligibility requirements.(Note 11)

Table 3. State Differences in Unemployment Insurance Receipt

	Minnesota	Oregon	Pennsylvania	Wisconsin	US
UI Receipt Rate	29%	30%	50%	54%	34%
Benefits per Recipient	$5,252	$3,078	$4,804	$2,970	$4,152
Benefits per New Job loser	$1,510	$931	$2,386	$1,600	$1,426

Note: State figures are produced by combining state UI administrative and CPS monthly data; US figures are produced by combining US Department of Labor Unemployment Insurance Chartbook and 2003 CPS monthly data.

Table 3 also shows there were important differences across the four states in the average benefit amounts collected. Recipients in Minnesota and Pennsylvania collected an average of $5,252 and $4,804 in benefits, respectively, which much exceeded the amounts collected in Wisconsin and Oregon. In fact, Minnesota and Pennsylvania were well above the national average, while Wisconsin and Oregon were much below it. These disparities are likely attributed to the fact that the average annual earnings of workers in Minnesota ($35,098) and Pennsylvania ($33,251) exceeded those of workers in Oregon ($30,381) and Wisconsin ($30,766), and thus were likely to have higher UI benefit entitlements.(Note 12) In fact, using the UI claims data in the four states, we confirm that new UI recipients in Minnesota and Pennsylvania had much higher maximum benefit entitlements ($7,585 and $7,689, respectively) than new UI recipients in Wisconsin ($5,903) and Oregon ($6,273).

These figures show substantial differences in the UI participation of new job losers across the four states. Pennsylvania new job losers were more likely to start a new UI claim than those in Minnesota, Oregon, and the entire US. Also, Pennsylvania new UI recipients collected higher than average benefit amounts, which suggests that new job losers in Pennsylvania were more likely to start a new UI claim *and* collected higher benefit amounts than average. In Wisconsin, a relatively high proportion of new job losers started a new UI claim, but those who did enter the UI program collected much lower than average benefit amounts. In Minnesota, new job losers were less likely than average to start a new UI claim but, those who did start a new UI claim, collected much higher than average benefit amounts. In contrast, although Oregon had a similar UI receipt rate to Minnesota, new UI recipients in Oregon collected much lower benefit amounts.

These patterns are summarized by the average benefit amounts collected per new job loser. In Pennsylvania, the combination of a high UI receipt rate and high benefits amounts collected led to the highest average benefit amount per new job loser of the four states ($2,386). New job losers in Wisconsin, which had a high UI receipt rate and low benefits per recipient,

collected a similar amount of benefits as new job losers in Minnesota, which had a low UI receipt rate but high benefits per recipient. Finally, Oregon, which had a low UI receipt rate and low benefits per recipient, had the lowest benefits collected per new job loser.

For comparison, Figures 1 and 2 present the UI receipt rate and benefits received per recipient, respectively, for all states in the continental US in 2003, using data from the US Department of Labor's UI Chartbook. Figure 1 shows that 12 states (including Wisconsin, Michigan, and Indiana in the Midwest; and Pennsylvania, New York and Massachusetts in the Northeast) had a UI receipt rate above 40 percent, which exceeded the US average of 34 percent. Most states in the West, including Oregon and California, had UI receipt rates within 5 percentage points of the US average. In the South, most states had UI receipt rates that were 30 percent or lower. Figure 2 shows that the 10 states with benefits per recipient of at least $4,500, two were in the Midwest (Minnesota and Illinois) and six were in the Northeast (including Pennsylvania, Massachusetts, and New York). More than 20 states, including Wisconsin and Oregon, had benefits per recipient below $3,500, which is much lower than the US average.

These comparisons show that Pennsylvania was similar in terms of aggregate UI receipt patterns to a number of states in the Northeast, particularly New Jersey, New York, Connecticut, Rhode Island, and Massachusetts. Oregon had similar UI receipt rates to many states in the West, including California, Nevada, and Washington, but had lower benefit amounts collected than a number of states in that region. Finally, Wisconsin and Minnesota represent the whole spectrum of UI receipt rate and benefit amounts collected in the Midwest. The only region that is not well represented by the four states in overall receipt patterns is the South, where most states had lower than average UI receipt rates and/or benefit amounts collected.
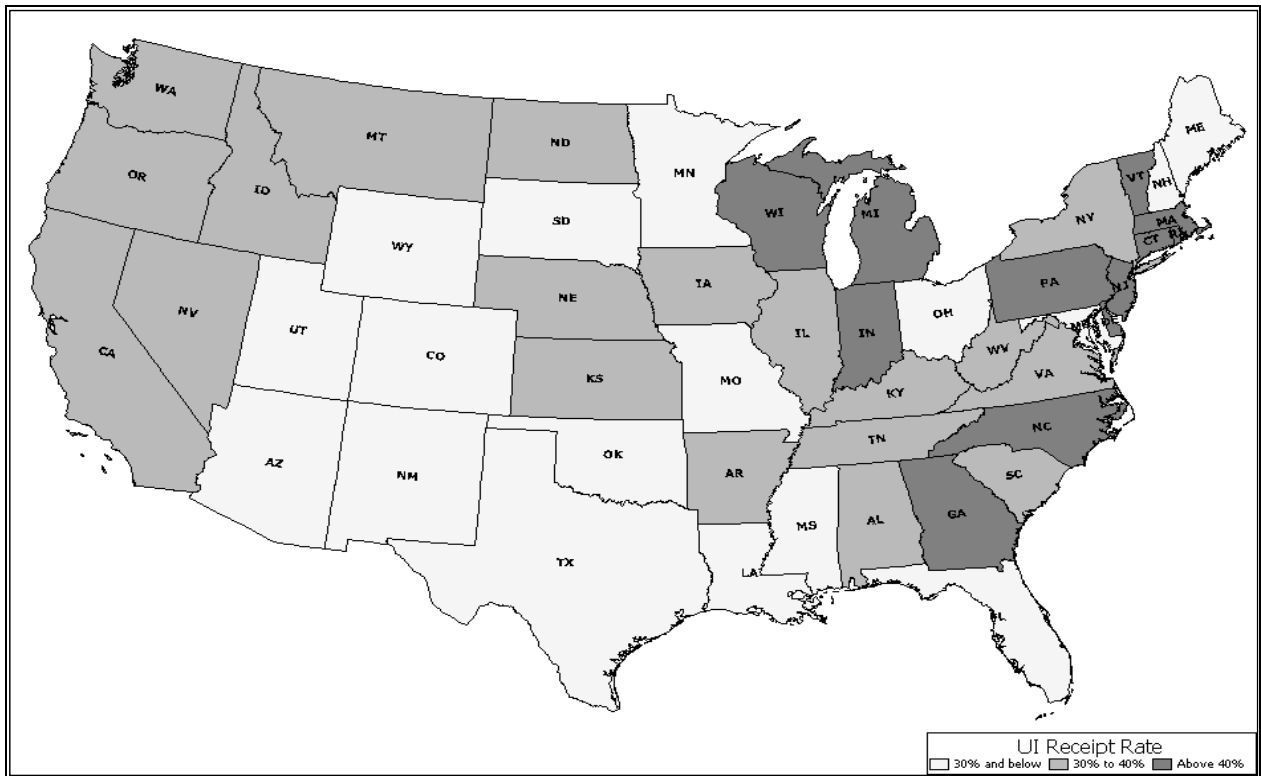
Source: US Department of Labor, Unemployment Insurance Chartbook and 2003 CPS monthly data.

Figure 1. Unemployment Insurance Receipt Rate by State in 2003
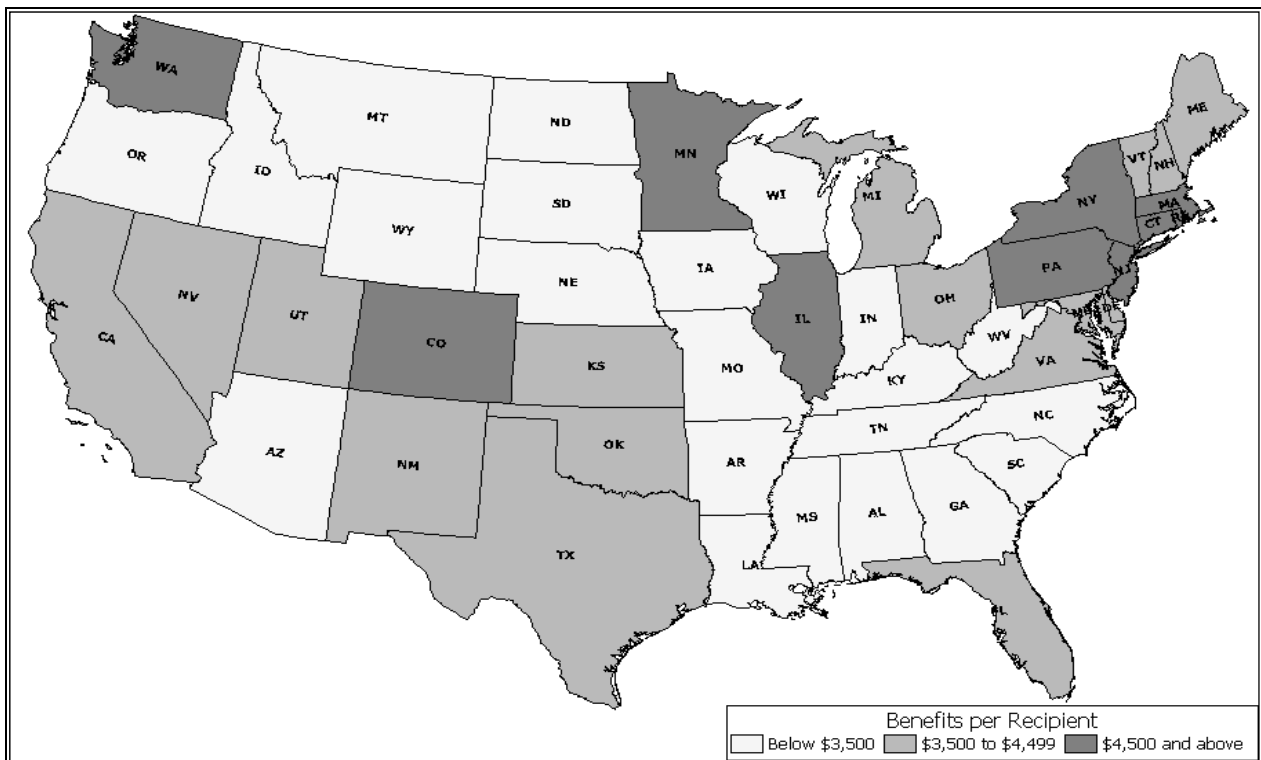
Source: US Department of Labor, Unemployment Insurance Chartbook.

Figure 2. Benefits Received per Recipient by State in 2003

5. UI Receipt Patterns by Socioeconomic Group

In this section, we examine within-state socioeconomic differences in the UI receipt rate, benefits per recipient, and benefits per new job loser, and assess the degree to which such differences may be related to underlying disparities in unionization, part-time employment, and other factors.

5.1 UI Receipt Rate

Table 4 presents the 2003 UI receipt rate by socioeconomic group in the four states examined. As shown, men had a higher UI receipt rate than women in Minnesota, Pennsylvania, and Wisconsin, indicating that male job losers in those states were more likely than female job losers to start collecting UI benefits once they lost their jobs. In Oregon, however, there were no gender differences in the UI receipt rate. White new job losers in Pennsylvania and Wisconsin were significantly more likely than nonwhite new job losers to start collecting benefits; the white-nonwhite UI receipt rate differential was 17 percentage points in Pennsylvania and 11 percentage points in Wisconsin. Interestingly, whites and nonwhites had similar UI receipt rates in Minnesota. Race was not reported in the Oregon UI administrative data, so UI receipt rates by race are not available for this state.

With respect to age, the UI receipt rate for young job losers (16-24 years) was much lower than the rate for older job losers in all four states. In Minnesota and Oregon, only 8 and 10 percent of young job losers started a new UI claim, which are respectively much lower than the state average. UI receipt rates for young job losers were much higher in Pennsylvania and Wisconsin, but much lower than the average rate in each state. On the other hand, new job losers in the two oldest age groups (35-44 years and 45+ years) had higher UI receipt rates than their prime-age counterparts (25-34 years) in all four states.

UI receipt rates also varied substantially across education categories. In Minnesota, 45 percent of new job losers with no more than a high school diploma started a new UI claim, a rate that much exceeds the rates of new job losers with no high school diploma (12 percent), with some college education (26 percent), and a college degree (27 percent). Similar results are obtained for the other three states. Notably, in Pennsylvania and Wisconsin, about 70 percent of new job losers with a high school diploma collected UI benefits, which exceeded the respective UI receipt rates for new job losers with no high school diploma by 40 percentage points.

Comparisons of UI receipt rates by industry shows that new job losers in services were much less likely than new job losers in non-services (includes construction and manufacturing) to start a new UI claim. Pennsylvania had the highest services-non-services UI receipt rate gap (45 percentage points), followed by Minnesota (20 percentage points) and Oregon (14 percentage points). We also find that new job losers in blue collar occupations were more likely than their white collar peers to start collecting UI benefits in Minnesota, Oregon, and Wisconsin. The blue collar-white collar gap was 7 percentage points in Minnesota, 17 percentage points in Oregon, and 28 percentage points in Wisconsin.

Table 4. Unemployment Insurance Receipt Rate by Socioeconomic Group

	Minnesota	Oregon	Pennsylvania	Wisconsin
All	29%	30%	50%	53%
Men	32%	30%	53%	59%
Women	24%	30%	45%	47%
White	29%	--	51%	55%
Nonwhite	30%	--	34%	44%
Age Group				
16-24 Years	8%	10%	15%	18%
25-34 Years	30%	34%	57%	65%
35-44 Years	60%	46%	63%	78%
45+ Years	49%	42%	80%	79%
Education				
Less than High School	12%	13%	30%	29%
High School	45%	41%	70%	69%
Some College	26%	15%	32%	57%
College Degree	27%	15%	45%	48%
Industry				
Services	19%	24%	33%	--
Non-Services	39%	38%	68%	--
Occupation				
White Collar	25%	24%	--	36%
Blue Collar	32%	41%	--	64%

Note: Reported is the UI receipt rate by state, overall and by socioeconomic group.

UI receipt rate differences across socioeconomic groups may be attributed to a number of factors. Previous studies show that part-time workers are much less likely than workers in full-time jobs to meet state UI eligibility requirements once they lose their jobs. There is also evidence that part-time workers are less likely to apply for UI benefits, because they do not know they may be eligible for UI benefits. For a review of this literature, see Vroman (1998, 2001). Women and younger workers have been historically more likely than men and older workers, respectively, to be employed in part-time jobs; thus, gender and age differences in UI participation may be partly explained by differences in part-time employment rates. Our tabulations of the 2003 CPS data confirm that in all four states, the part-time employment rate for women were at least two times higher than the rates for men in all four states (see Appendix Table A). The same tabulations show that workers in the 16-24 years age group, workers with no high school diploma, and workers in services had much higher part-time employment rates than their peers.

Another potential factor of UI receipt rate differences is union attachment. Previous work shows that union members are more likely to be employed in UI-covered jobs and have more access to information on the UI program than non-union members, thus may be more likely

to apply for and collect UI benefits once they lose their jobs (e.g., Anderson and Meyer, 1997; Budd and McCall, 1997; Budd and McCall, 2004). For example, workers in non-services sectors (particularly manufacturing and construction) and in blue collar jobs have been historically more likely to be union members than workers in services sectors and in white collar jobs, respectively. It is, therefore, possible that industrial and occupational differences in UI participation are partly attributed to differences in the levels of unionization. Tabulations of the 2003 CPS show (see Appendix Table B), in fact, that older workers (ages 35-44 years or 45+ years), workers with a high school diploma, non-services workers, and blue collar workers were more likely to be union members than their counterparts in all four states.

To examine the role of part-time employment in UI receipt rate differences, we compare the UI receipt rate with the average part-time employment rate (proportion of workers who are employed part time) for each socioeconomic group. Figure 3 includes four scatter-plots, one for each state, presenting the relationship between the UI receipt rate (vertical axis) and the part-time employment rate (horizontal axis). Each plot includes a regression line that estimates the correlation between UI receipt and part-time employment.(Note 13) Marked in grey are the points for groups with the highest part-time employment rates in the four states (services, women, no high school diploma, and ages 16-25 years).

As the regression line in each plot in Figure 3 shows, there is a negative correlation between UI receipt and part-time employment rates in all four states. The estimated correlation parameters were minus .8 percentage points in Minnesota, minus .9 points in Oregon, minus 1.3 points in Pennsylvania, and minus 1.2 points and Wisconsin; they were all statistically significant at the 1 percent level. These results show that new job losers in socioeconomic groups with relatively high part-time employment rates are less likely to start a new UI claim once they lose their jobs. With a closer look at the plots, we see that the four groups of new job losers with the highest part-time rates (women, no high school diploma, 16-24 years of age, and services) were among the groups with the lowest UI receipt rates. In fact, in all four states, new job losers in the 16-24 years age category and those with no high school diploma had the highest part-time employment rates and the lowest UI receipt rates than any other socioeconomic group in the state. In Minnesota, for example, new job losers ages 16-24 years and those with no high school diploma had the highest part-time rates at 44 and 53 percent, as well as the lowest UI receipt rates at 8 and 12 percent, respectively. Following these two groups were women and service workers, which had higher part-time rates than most groups in each state and had relatively low UI receipt rates. Generally, in all four states, most socioeconomic groups with a part-time rate of no more than 20 percent had higher UI receipt rates than those with a part-time rate of 25 percent or higher. Based on these results, socioeconomic differences in UI receipt rates – particularly by gender, age, education, and industry – are partly attributed to underlying differences in part-time employment rates.
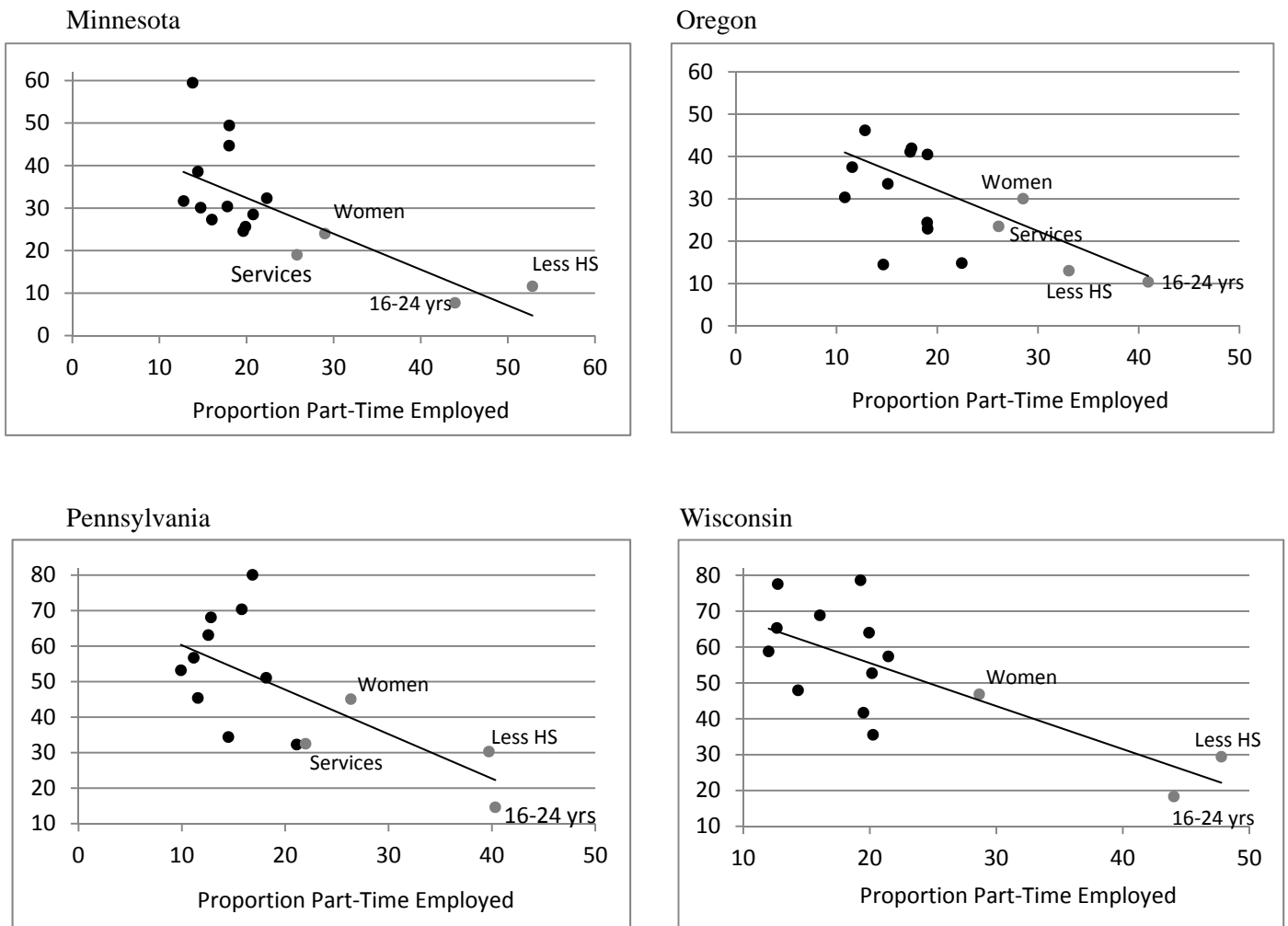
Minnesota

Oregon

Pennsylvania

Wisconsin

Figure 3. UI Receipt Rate and Part-Time Employment in 2003, by Socioeconomic Group
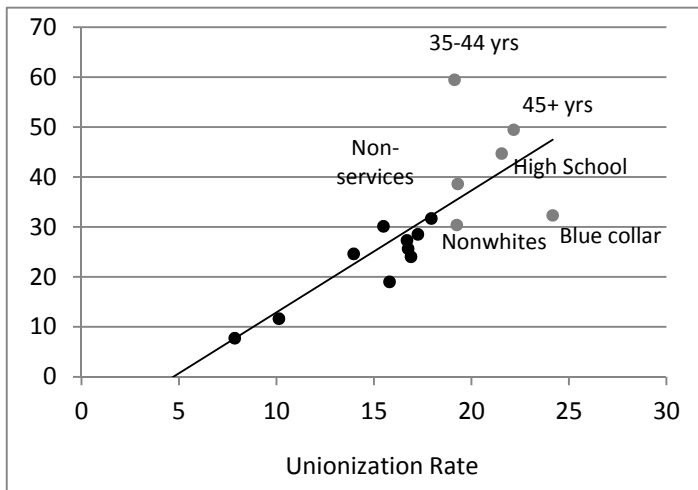
Note: The vertical axis reports the UI receipt rate; the horizontal axis reports the part-time employment rate (source: 2003 CPS).

We use similar analyses to examine the relationship between UI receipt and unionization.(Note 14) Figure 4 presents a scatter-plot for each state, comparing the UI receipt rate with the unionization rate, by socioeconomic group. Each plot includes a regression line estimating the correlation between the UI receipt rate and the unionization rate. Marked in gray are data points for groups with relatively high unionization rates. It is evident that there is a positive correlation between UI receipt and unionization, that is, new job losers in groups in which a high proportion of workers were union members had higher UI receipt rates than those in groups with low unionization. The estimated correlations between unionization and UI receipt were 2.4 percentage points in Minnesota, 1.8 percentage points in Oregon, and 3.0 percentage points in Pennsylvania and Wisconsin; they were all statistically significant at the 1 percent level.

A closer examination of the four plots shows that certain groups of job losers (35-44 years of age, 45+ years of age, no more than a high school diploma, non-services, and blue collar) had higher than average unionization rates *and* higher than average UI receipt rates within their

states. In Pennsylvania and Wisconsin, new job losers ages 35-44 and 45+ years and those with no more than a high school diploma had unionization rates of at least 17 percent and UI receipt rates of at least 63 percent, which were much higher than the average rates in each state. Non-service workers in Pennsylvania and blue collar workers in Wisconsin also belonged in the high-unionization, high-UI receipt category. In Minnesota and Oregon, older new job losers, those in non-service and blue collar jobs, and those with no more than a high school diploma had unionization rates of at least 15 percent and UI receipt rates of at least 30 percent. These results show that new job losers in socioeconomic groups with high unionization rates have higher-than-average UI receipt rates; thus, socioeconomic differences in UI receipt – particularly by age, education, industry, and occupation – are partly explained by differences in union attachment.
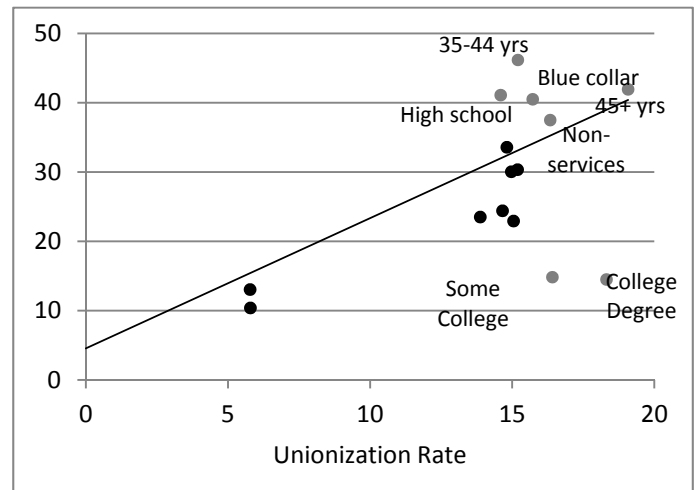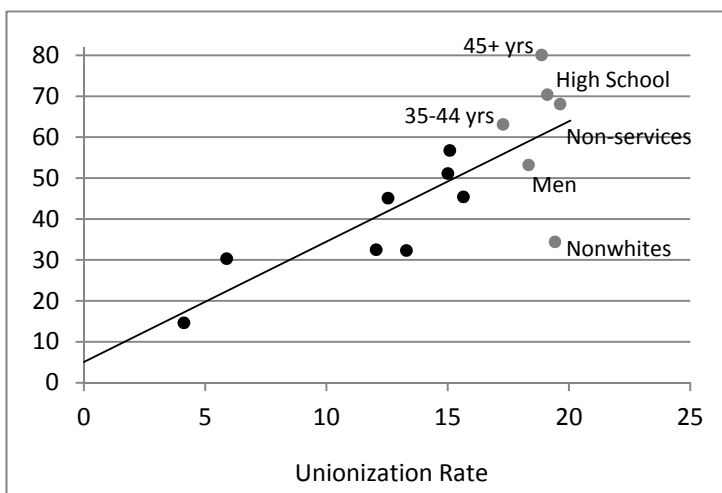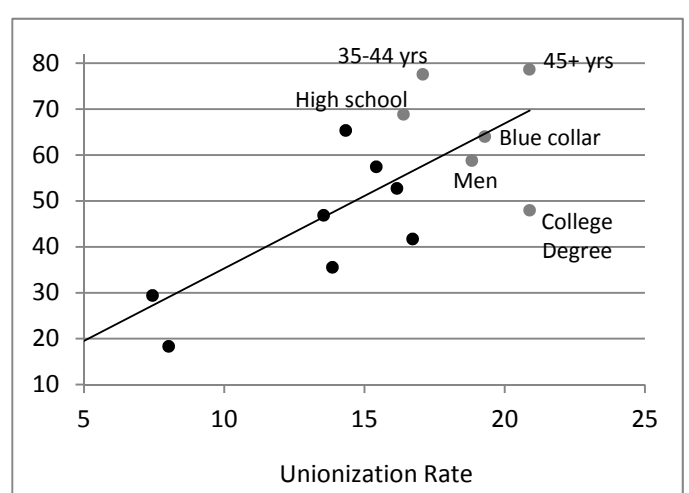

Figure 4. UI Receipt Rate and Unionization in 2003, by Socioeconomic Group

Note: The vertical axis reports the UI receipt rate; the horizontal axis reports the unionization rate (source: 2003 CPS).

5.2 UI Benefits per Recipient

Table 5 presents the average UI benefit amounts collected per UI recipient in each state, overall and by socioeconomic characteristic. In all four states, male recipients collected higher benefit amounts than female recipients. For example, male recipients in Minnesota collected an average of $5,457, which was $645 higher than the average benefits collected by female recipients. Gender differentials were $525 in Oregon, $964 in Pennsylvania, and $350 in Wisconsin; separate t-tests comparisons show that these differences are statistically significant at the 1 percent level. Modest race differences appear in the average amount of UI benefits collected; in fact, only in Minnesota the white-nonwhite difference in benefit amounts collected ($248) is statistically significant.

There was a positive relationship between average benefit amounts collected and age in each state. Older recipients (45+ years of age) typically collected lower benefit amounts than their peers, especially those in the two lower age categories (16-24 years and 25-34 years). Benefit amounts collected also had a positive relationship with education attainment. Recipients with a college degree collected higher benefit amounts than recipients in the other three education categories, and recipients with some college education collected higher benefit amounts than recipients with no college education. At the same time, the only statistically significant difference is observed in Wisconsin, where recipients in non-services sectors collected $120 more than recipients in services. In contrast, there were important differences by occupation. White collar recipients in Minnesota, Oregon, and Wisconsin collected $991, $507, and $718 higher benefit amounts than their blue collar peers; these differences are statistically significant at the 1 percent level.

These figures show that there were important socioeconomic differences in the total benefit amounts collected by new UI recipients. In all four states, men, older workers, those with high educational attainment, and those in white collar jobs collected much higher benefit amounts than average. Also, white and non-services workers collected slightly higher amounts than nonwhite and services recipients, respectively. These patterns may be attributed to several factors, including underlying differences in UI eligibility; holding all else constant, recipients with higher weekly benefit amount (WBA) or longer UI eligibility could potentially collect higher benefit amounts than their peers. In addition to these mechanical effects, socioeconomic differences in benefit amounts collected could be attributed to differences in the proportion of recipients that were on temporary layoff and in partial employment. Recipients on temporary layoff typically face shorter UI spells than displaced recipients, thus may collect lower benefit amounts. Recipients who are partly employed while collecting benefits are eligible to receive a portion of their WBA each week and thus may collect lower benefit amounts, holding all else constant.(Note 15)

Table 5. Benefit Amounts Collected per UI Recipient

	Minnesota	Oregon	Pennsylvania	Wisconsin
Total	$5,252 (4,160)	$3,078 (3,566)	$4,804 (3,700)	$2,970 (2,662)
Men	$5,457 (4,195)	$3,287 (3,651)	$5,186 (3,810)	$3,096 (2,687)
Women	$4,812 (4,047)	$2,762 (3,409)	$4,222 (3,446)	$2,746 (2,600)
White	$5,288 (4,174)	--	$4,813 (3,754)	$2,973 (2,684)
Nonwhite	$5,040 (4,067)	--	$4,758 (3,453)	$2,935 (2,541)
Age Group				
16-24 Years	$3,394 (2,732)	$2,036 (2,414)	$3,244 (2,727)	$2,317 (2,114)
25-34 Years	$4,899 (3,832)	$3,019 (3,417)	$4,703 (3,485)	$2,918 (2,561)
35-44 Years	$5,571 (4,390)	$3,230 (3,663)	$4,986 (3,739)	$3,012 (2,700)
45+ Years	$5,819 (4,369)	$3,327 (3,825)	$5,128 (3,900)	$3,208 (2,822)
Education				
No High School Diploma	$4,282 (3,204)	$2,319 (2,559)	$3,858 (3,118)	$2,740 (2,399)
High School Diploma	$4,837 (3,643)	$2,844 (3,216)	$4,483 (3,552)	$2,780 (2,571)
Some College	$5,571 (4,557)	$3,271 (3,732)	$5,322 (3,809)	$3,152 (2,767)
College Degree	$6,700 (5,023)	$3,843 (4,126)	$6,585 (4,114)	$3,763 (2,950)
Industry				
Services	$5,187 (4,164)	$3,059 (3,598)	$4,723 (3,572)	--
Non-Services	$5,283 (4,157)	$3,098 (3,544)	$4,843 (3,764)	--
Occupation				
White Collar	$5,847 (4,550)	$3,346 (3,871)	--	$3,522 (2,819)
Blue Collar	$4,856 (3,834)	$2,839 (3,235)	--	$2,804 (2,588)

Note: Reported is the average amount of UI benefits received per UI recipient in 2003 with standard deviations in parenthesis.

To better assess the relationship of recipient socioeconomic characteristics with benefit amounts collected, we estimate a linear regression model in each state, where the dependent variable is the total benefit amounts collected and controls include the WBA, number of UI weeks allowed, temporary layoff status, partial employment status, union hiring hall status (i.e., if the recipient is conducting the job search exclusively through a union hiring hall), all available socioeconomic characteristics, and fixed effects for the month in which the claim was filed. This model enables us to assess whether the observed socioeconomic disparities in benefit amounts collected remain once we control for other factors and socioeconomic characteristics.

Table 6 presents the regression results. As shown, WBA had a strong positive relationship to benefit amounts collected. In Minnesota, for example, the coefficient of WBA was 18, indicating that for every dollar of WBA eligibility the recipient collected $180 in benefits. This means that, holding all else constant, a recipient with a $300 WBA collected $1,800 higher benefit amounts than a recipient with a $200 WBA. Similar results were produced for the remaining states. We also find that recipients with longer UI eligibility period collected

significantly higher benefit amounts. In particular, each additional week of eligibility resulted to higher benefits collected of \$78 in Minnesota, \$11 in Oregon, and \$57 in Wisconsin. In Pennsylvania, recipients eligible for 26 weeks collected \$723 higher total benefits than those eligible for 16 weeks (an average of \$72 per additional week). These results confirm that recipients with higher WBA or longer UI eligibility collected higher benefit amounts than their peers.

Table 6. Regression Results, UI Benefit Amounts Received

	Minnesota	Oregon	Pennsylvania	Wisconsin
WBA	18 (0)***	12 (0)***	15 (0)***	12 (0)***
Weeks Allowed†	78 (2)***	11 (2)***	723 (37)***	57 (1)***
Temporary Layoff	--	--	-1,495 (9)***	-2,590 (9)***
Partly Employed	--	-676 (25)***	-243 (22)***	-718 (13)***
Union Hiring Hall	--	545 (38)***	842 (16)***	469 (17)***
Men	-149 (22)***	-75 (18)	-192 (9)***	20 (9)***
White	-541 (26)***	--	-388 (12)***	-178 (12)***
Age: 16-24 Years	-524 (3)***	-157 (27)***	-347 (15)***	-264 (14)***
Age: 25-34 Years	-52 (23)***	-66 (2)***	-246 (2)***	-256 (2)***
Age: 35-44 Years	-254 (22)***	-4 (2)	-23 (2)***	-232 (1)***
No High School Diploma	-103 (39)***	-109 (30)***	-614 (17)***	-36 (17)**
High School Diploma	-140 (28)***	-130 (19)***	-632 (13)***	-90 (14)***
Some College	-1 (28)	-125 (24)***	-257 (16)***	-88 (15)***
Services	208 (2)***	186 (17)***	367 (9)***	--
White Collar	649 (21)***	508 (18)***	--	223 (2)***
R-squared	.291	.221	.353	.329

Note: Reported are estimated parameters with standard errors in parenthesis. Omitted categories: displaced workers, not employed, not in union hiring hall, women, nonwhite, age: 45+ years, college degree, non-services, and blue-collar. Also included but not reported are fixed effects for the month the claim was filed. † = Weeks allowed (Minnesota, Oregon, Wisconsin); =1 if eligible for 26 weeks, 0 else (Pennsylvania). Statistical significance: *, **, *** = at the 10%, 5%, 1% level.

In Pennsylvania and Wisconsin, recipients on temporary layoff collected \$1,495 and \$2,590 lower benefit amounts than other recipients, respectively. This is due to that temporary layoff recipients returned to their prior employers and thus faced shorter unemployment spells than displaced workers. In addition, partly employed recipients collected lower benefit amounts – particularly in Pennsylvania and Wisconsin – while workers conducting their job search exclusively through a union hiring hall collected higher benefits in Oregon, Pennsylvania, and Wisconsin, which provides additional evidence that unions are associated with high UI use.

The men parameter was statistically insignificant in Oregon, positive but small in Wisconsin, and statistically negative in Minnesota and Pennsylvania. These results suggest that the large positive men-women differences in UI benefits amounts collected in these states (see Table 5)

are entirely explained by differences in UI eligibility, temporary layoff, partial employment, union participation, and other socioeconomic characteristics. Separate analyses show that male recipients had much higher WBAs than female recipients in all four states and that these disparities explain most of the observed gender differences in total benefit amounts collected.

Table 6 results also show that white recipients collected lower benefit amounts than nonwhite recipients in Minnesota, Pennsylvania, and Wisconsin. Separate analyses show that white recipients had much higher WBAs and were much less likely to be on temporary layoff than nonwhite recipients. These differences were, in fact, responsible for the observed positive white-nonwhite gap in benefit amounts collected (see Table 5).

We also find that the observed age differences in benefit amounts collected mostly persist in all four states even when we control for socioeconomic and other factors. Recipients in the 45+ years group (the omitted category) collected significantly higher benefit amounts than recipients in the other categories. It is also true that, with the exception of Wisconsin, recipients in age group 35-44 years collected higher benefit amounts than recipients in age groups 16-24 years and 25-34 years. These results confirm that older recipients collected higher benefit amounts than younger recipients.

Our results indicate that, in general, there was a positive relationship between education and benefit amounts collected. In Pennsylvania, recipients with a college degree (the omitted category) collected $247 higher amounts than recipients with some college and more than $600 higher amounts than recipients with no more than a high school education. Differences in benefit amounts collected between recipients with a college degree and those with no college degree were less acute in the other three states. These results suggest that the large education disparities in benefit amounts collected, as reported in Table 5, are explained to a great extent by underlying differences in other factors. In fact, separate analyses show that college-educated recipients had much higher WBAs, were much less likely to be on temporary layoff, and less likely to be partly employed than recipients with no college education. These disparities are responsible for a large portion of the observed education differences in benefits collected.

We also find that, controlling for other factors, recipients in services collected significantly higher benefit amounts than recipients in non-services in Minnesota, Oregon, and Pennsylvania. These results are different from those presented in Table 5, which show that non-services recipients collected slightly higher benefit amounts than services recipients. This suggests that the marginal industrial differences in benefit amounts collected mask underlying differences in other factors that make services recipients collect lower benefit amounts than non-services recipients. In separate analyses, we find that recipients in services had much lower WBA and were much less likely to be union members than recipients in non-services, two factors that are associated with lower benefit amounts collected. Finally, as shown in Table 6, holding all else equal, we find that white collar recipients in Minnesota, Oregon, and Wisconsin collected higher benefit amounts than blue collar recipients.

5.3 Average UI Benefits Collected, New Job Losers

We now examine which groups of new job losers were likely to start a new UI claim *and* collect high benefit amounts on that claim. Table 7 reports the average benefit amount collected per new job loser in 2003. Male new job losers collected higher benefit amounts than female new job losers in all four states. In Minnesota, for example, the average male new job loser collected $1,728 which is $572 (49 percent) higher than the amounts collected by the average female new job loser ($1,156). The men-women differential was $168 (20 percent) in Oregon, $855 (45 percent) in Pennsylvania, and $533 (41 percent) in Wisconsin. These differences result from two facts: (1) male new job losers were more likely than female new job losers to start collecting UI benefits once they lost their jobs and (2) men collected higher benefit amounts than women once they entered the UI program.

In Pennsylvania and Wisconsin, white job losers collected, on average, $753 (44 percent) and $360 (28 percent) higher benefit amounts than nonwhite job losers. These differences are due to the fact that, in these two states, white job losers were much more likely to start collecting UI benefits once they lost their jobs. In Minnesota, however, where the UI receipt rate was similar for the two race groups, there were marginal race differences in benefit amounts collected per new job loser.

Table 7 shows that, on average, older workers (35-44 years and 45+ years) collected higher UI benefit amounts than younger workers (16-24 years and 25-34 years) once they lost their jobs in all four states. This is partly due to the fact that older workers were more likely than younger workers to enter the UI program once they lost their jobs. In addition, once they entered the UI program, older workers collected higher benefit amounts than their peers in all four states, due mostly to the fact that they were entitled to higher benefit amounts.

Comparisons of average UI benefits collected per new job loser across education categories reveal some interesting patterns. New job losers with no more than a high school diploma collected much higher benefit amounts than those with no high school diploma in all four states. This is primarily driven by the fact that new job losers with a high school diploma were much more likely to enter the UI program once they lost their jobs. We also find that new job losers with no more than a high school diploma collected higher benefit amounts than new job losers with at least some college education. These differences ranged across the four states. In Oregon, job losers with a high school diploma collected more than twice the benefit amounts collected by recipients with at least some college education. In Minnesota and Pennsylvania, job losers with a high school diploma collected much higher benefits than job losers with some college education and marginally higher benefits than job losers with a college degree. In Wisconsin, these differences were marginal. Education disparities are entirely attributed to differences in UI receipt rates. In all four states, new job losers with no more than a high school diploma were more likely to enter the UI program than new job losers with at least some college education (Table 4). The effect of the large UI receipt rate differences by education is moderated by the fact that new job losers with at least some college education were eligible for higher WBAs and thus collected higher benefit amounts once they entered the program (Table 5).

Table 7. Average UI Benefits Collected per New Job Loser in 2003

	Minnesota	Oregon	Pennsylvania	Wisconsin
Total	$1,510	$931	$2,386	$1,600
Men	$1,728	$998	$2,759	$1,820
Women	$1,156	$830	$1,904	$1,287
White	$1,507	--	$2,460	$1,644
Nonwhite	$1,531	--	$1,707	$1,284
Age Group				
16-24 Years	$262	$212	$475	$425
25-34 Years	$1,475	$1,014	$2,669	$1,906
35-44 Years	$3,313	$1,491	$3,147	$2,337
45+ Years	$2,878	$1,395	$4,107	$2,523
Education				
No High School Diploma	$498	$302	$1,170	$806
High School Diploma	$2,162	$1,169	$3,156	$1,914
Some College	$1,428	$485	$1,719	$1,809
College Degree	$1,830	$557	$2,991	$1,805
Industry				
Services	$986	$719	$1,536	--
Non-Services	$2,041	$1,161	$3,300	--
Occupation				
White Collar	$1,439	$816	--	$1,252
Blue Collar	$1,569	$1,150	--	$1,795

Note: Reported is the average amount of UI benefits received per new job loser in 2003.

Table 7 also shows there were substantial differences in the benefit amounts collected per new job loser between services and non-services. In particular, new job losers in non-services collected $1,055 (107 percent) higher benefits in Minnesota, $442 (54 percent) higher benefits in Oregon, and $1,764 (115 percent) higher benefits in Pennsylvania. These large disparities are mostly attributed to the fact that new job losers in non-services sectors had much higher UI receipt rates than new job losers in services sectors (Table 4). Finally, blue collar job losers collected higher benefit amounts than white collar new job losers in Minnesota, Oregon, and Wisconsin. In all three states, as discussed, blue collar job losers were more likely than their white collar counterparts to collect UI benefits (Table 4) but collected lower average benefit amounts once they entered the program (Table 5). The underlying reason for the higher benefit amounts collected per new job loser for blue collar workers in those two states, therefore, was the higher receipt rate.

5. Discussion

Although there is substantial work studying historic UI receipt patterns, there is limited research examining socioeconomic differences in UI receipt among new job losers. This paper attempts to fill this research gap by combining state UI administrative data from four states – Minnesota, Oregon, Pennsylvania, and Wisconsin – with CPS data in 2003. These four states are quite diverse in terms of their UI receipt patterns among new job losers and represent a range of state programs within their respective regions.

Using these data, we find that only about a third of new job losers in Minnesota and Oregon and a little more than half the new job losers in Pennsylvania and Wisconsin started collecting UI benefits once they lost their jobs. Since there were no important differences in the eligibility requirements between the four states, the differences in UI receipt suggest that new job losers in Pennsylvania and Wisconsin were more likely to apply for UI once they lost their jobs than new job losers in Minnesota and Oregon. We also find that the average benefit amounts collected by UI recipients in Minnesota and Pennsylvania was much higher than the national average, while the average amounts collected by recipients in Wisconsin and Oregon was much lower than the national average. These differences are largely attributed to the fact that new UI recipients in Minnesota and Pennsylvania had much higher earnings prior to entering UI and thus much higher benefit entitlements than recipients in Wisconsin and Oregon. As a result of differences in UI receipt rates and benefit entitlements, the average new job loser in Pennsylvania (high UI receipt, high entitlements) collected much higher benefit amounts than the average new job loser in Wisconsin (high UI receipt, low entitlements) and Minnesota (low UI receipt, high entitlements). The average new job loser in Oregon (low UI receipt, low entitlements) had collected lower benefit amounts than the average new job loser in the other three states.

Our analyses reveal important socioeconomic differences in UI receipt within each state. Men were more likely than women to start collecting UI benefits once they lost their jobs in all states except Oregon. Gender differences in UI receipt are partly attributed to the fact that women were much more likely than men to be employed in part-time jobs in all four states, and thus less likely to qualify for UI benefits once they lost their jobs. Gender differences in UI receipt in Pennsylvania and Wisconsin are also partly attributed to the fact that higher proportions of men were union members, which suggests that men were more likely to be employed in UI-covered jobs and to apply for benefits once they lost their jobs. Analyses of benefit amounts collected show that, once they entered the UI program, men collected higher benefit amounts than women, which is largely attributed to large men-women disparities in benefit entitlements. As a result of differences in UI receipt rates and benefit amounts collected, male job losers collected much higher benefit amounts than female job losers in all four states.

Our results also reveal interesting patterns by race. White new job losers in Pennsylvania and Wisconsin were much more likely than nonwhite job losers to enter the UI program, but there were no race differences in UI receipt in Minnesota. Interestingly, these patterns cannot be attributed to race differences in part-time employment and unionization. Although white and

nonwhite recipients collected similar benefit amounts in each state, once we control for differences in UI eligibility and the likelihood of being on temporary layoff, we find that in fact, nonwhites collected higher benefit amounts than whites. This shows that the race equality in benefit amounts collected masks underlying race differences in UI eligibility levels and employment history; nonwhites qualified for much lower benefit amounts and were much more likely to be on temporary layoff than whites.

There is a clear relationship between UI receipt and age. Workers in the 35-44 years and in the 45+ years age categories had much higher UI receipt rates than younger workers in the 16-24 years and in the 25-34 years age categories. Differences are largely attributed to the fact that younger job losers had among the highest part-time employment rates in each state and were much less likely to be union members than their older counterparts. Analyses of benefit amounts show that older job losers collected much higher benefit amounts once they entered the UI program. More detailed analyses show that, even when we control for UI eligibility, temporary layoff status, and other factors, age differences in UI benefit amounts collected mostly persist. As a result of higher UI receipt rates and benefit amounts collected, older new job losers were much more costly to the UI program than younger new job losers.

Our results show that education is important when discussing UI receipt patterns. New job losers with a high school diploma had much higher UI receipt rates than those with no high school diploma and those with at least some college education. High unionization rates among workers with a high school diploma and high part-time employment rates among workers with no high school diploma are two potential factors contributing to these differences. We also find that, once in the UI program, workers with at least some college education collected higher benefit amounts than those with no more than a high school education. This is partly because recipients with at least some college education had higher generous benefit entitlements, were much less likely to be on temporary layoff, and less likely to be partly employed while collecting benefits than recipients with no college education.

We find that there were important industrial and occupational disparities in UI receipt. New job losers in services had much higher UI receipt rates than new job losers in non-services; this is partly because services workers were much more likely to be employed in part-time jobs. There were marginal differences in benefits amounts collected by industry which, combined with the disparities in the UI receipt rate, led to new job losers in non-services collecting much higher benefit amounts than those in services. Finally, among new job losers, blue collar workers were more likely to collect UI benefits than white collar workers, which is attributable to the fact that blue collar workers were more likely to be attached to a union. White collar workers collected higher benefit amounts than blue collar workers once they entered the UI program; however, due to the large occupation gap in UI receipt rates, blue collar new job losers collected much higher benefit amounts.

In conclusion, this paper shows that there are substantial socioeconomic differences in UI receipt among new job losers. Workers in key groups – including women, nonwhites, youth, and workers with no high school diploma – are much less likely than average to start

collecting UI benefits once they lose their jobs. This suggests that these groups are less likely than average to apply for UI benefits and/or are more likely than average to not qualify for benefits once they lose their jobs, either because of lack of information about the UI program or because they are employed in part-time jobs or jobs not covered by UI. There are also certain groups of new job losers – including women, youth, workers with no college education, and blue collar workers – that have lower entitlements and collect lower benefit amounts once they enter UI. This suggests that many workers in these groups are employed in jobs that pay relatively low wages or provide fewer hours of employment, which leads to lower UI entitlements. These findings raise concerns about the reach of the UI program and the adequacy of UI benefits in helping certain groups of new job losers to sustain an acceptable living standard during periods of joblessness.

Overall, the findings of this paper contribute significantly in our understanding of the effectiveness of the UI program to serve the diverse US workforce. Based on our findings, we conclude that strategies that raise awareness about the UI program and modifications to the state eligibility rules to improve the coverage of workers employed in part-time jobs would help increase the participation of key groups of new job losers in the program. Finally, our findings do not necessarily apply to periods of high unemployment, so additional research on the socioeconomic UI receipt patterns during such periods is essential to understand the effectiveness of the UI program when demand for benefits is high.

Acknowledgement

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Notes

Note 1. Source: Unemployment Insurance Data Summary, US Department of Labor.

Note 2. A UI claim is valid for one year. If a worker starts a new UI claim, finds a new job before he/she exhausts benefits, and then loses that job before the expiration of the UI claim, the worker will continue to receive benefits on the same claim. This means that a proportion of new job losers may start receiving UI benefits once they lose their jobs even if they do not start a new UI claim.   The UI claims data used in this paper only enable us to identify which new job losers start a new UI claim but not those that start receiving UI benefits on an existing claim.

Note 3. Obtaining access to UI administrative data is typically a complicated task, since states are very reluctant to share such data with researchers because of confidentiality issues and other concerns.

Note 4. Ideally, we would like to have access to a wider range of states and for additional years. Nevertheless, the data from these four states allow us to examine UI receipt patterns during a "typical" year from four states that are not be representative of the entire US, but are representative of a number of states within their respective regions. It would be equally interesting to examine UI receipt patterns during periods of very high unemployment (e.g., the 2001 or 2007-2009 recessions), but that falls outside the scope of this paper; thus, our results show the UI receipt patterns for a "typical" year and do not necessarily represent

patterns in periods of high unemployment.

Note 5. The US figures are produced using US Department of Labor's Unemployment Insurance Chartbook data (number of new UI recipients) and Benefit Accuracy Measures (distribution of new UI recipients by gender, race, age, and industry).

Note 6. Services include: utilities; transportation and warehousing; information; finance and insurance; real estate rental and leasing; professional, scientific, and technical services; management of companies and enterprises; administrative and support services; educational services, health care and social assistance; accommodation and food services; and other services. Non-services include: agriculture, forestry, and fishing; mining; construction; manufacturing; wholesale and retail trade; arts, entertainment, and recreation; and public administration.

Note 7. White collar occupations include the following occupations: management; business and financial operations; computer and mathematical; architecture and engineering; life, physical, and social science; community and social services; legal; education, training, and library; arts, design, entertainment, sports, and media; healthcare, sales; and office and administrative support. Blue collar occupations include the following occupations: protective service; food preparation and serving; building and grounds cleaning and maintenance; personal care and service; farming, fishing, and forestry; construction and extraction; installation, maintenance, and repair; production; transportation and material moving; and military.

Note 8. Job quitters, new labor force entrants, and labor force reentrants are not eligible for benefits and are, thus, excluded from the analyses.

Note 9. To calculate the total number of new job losers in 2003, we added the population estimates of new job losers from each monthly CPS survey in 2003.

Note 10. The US figures are produced by combining information from the US Department of Labor's Unemployment Insurance Chartbook (number of new UI recipients; benefit amounts collected) and the CPS monthly data (number of new job losers).

Note 11. Interestingly, a review of the UI eligibility requirements in the four states (see: Comparison of State Unemployment Laws 2003, US Department of Labor) indicates that the four states had similar UI eligibility requirements, so disparities in UI receipt cannot be attributed to stricter eligibility requirements in Minnesota and Oregon.

Note 12. Source: Authors' tabulations of the 2002 American Community Survey data.

Note 13. The regression line in each plot represents the predicted values from a linear regression where the dependent variable is the UI receipt rate and controls are the part-time employment rate and a constant term.

Note 14. The unionization rate was constructed using 2003 CPS data and is equal to the total number of workers who were union members divided by the total number of employed workers.

Note 15. Individuals who are part-time employed are eligible to receive a portion of their UI entitlement. For example, a recipient who works 20 hours per week is eligible to receive half the WBA until he/she finds a full-time job or he/she exhausts benefits.

Appendix

Table A: Part-Time Employment Rates

	Minnesota	Oregon	Pennsylvania	Wisconsin
Total	20.5	19.0	17.8	20.1
Men	12.7	10.8	9.9	12.0
Women	29.0	28.5	26.3	28.7
White	20.7	19.0	18.1	20.2
Nonwhite	17.8	18.6	14.5	19.5
Age Group				
16-24 Years	43.9	40.9	40.3	44.0
25-34 Years	14.7	15.1	11.1	12.6
35-44 Years	13.8	12.8	12.6	12.7
45+ Years	18.0	17.4	16.8	19.3
Education				
No High School Diploma	52.8	33.1	39.7	47.8
High School Diploma	18.0	17.3	15.8	16.1
Some College	19.9	22.4	21.1	21.5
College Degree	16.0	14.6	11.5	14.3
Industry				
Services	25.8	26.1	22.0	26.7
Non-Services	14.4	11.5	12.8	13.9
Occupation				
White Collar	19.6	19.0	17.0	20.3
Blue Collar	22.3	19.0	19.3	19.9

Note: The part-time employment rate is produced using 2003 CPS data and is equal to the total number of employed workers working fewer than 35 hours per week divided by the total number of employed workers.

Table B: Unionization Rates

	Minnesota	Pennsylvania	Wisconsin	Oregon
Total	17.4	15.7	16.3	15.1
Men	17.9	18.3	18.8	15.2
Women	16.9	12.5	13.5	15.0
White	17.2	15.0	16.2	15.0
Nonwhite	19.2	19.4	16.7	15.4
Age Group				
16-24 Years	7.9	4.1	8.0	5.8
25-34 Years	15.5	15.1	14.3	14.8
35-44 Years	19.1	17.3	17.1	15.2
45+ Years	22.2	18.9	20.9	19.1
Education				
No High School Diploma	10.1	5.9	7.4	5.8
High School Diploma	21.6	19.1	16.4	14.6
Some College	16.7	13.3	15.4	16.4
College Degree	16.7	15.6	20.9	18.3
Industry				
Services	15.8	12.0	14.6	13.9
Non-Services	19.3	19.6	17.8	16.3
Occupation				
White Collar	14.0	12.8	13.9	14.7
Blue Collar	24.2	20.1	19.3	15.7

Note: The unionization rate is produced using 2003 CPS data and is equal to the total number of employed workers who are union members divided by the total number of employed workers.

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