

---

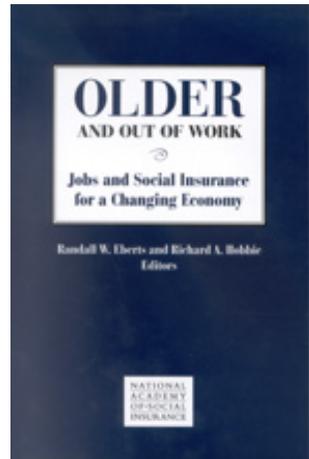
Upjohn Institute Press

---

## Reemployment and Earnings Recovery among Older Unemployment Insurance Claimants

Christopher J. O'Leary  
*W.E. Upjohn Institute*

Randall W. Eberts  
*W.E. Upjohn Institute*



Chapter 4 (pp. 59-84) in:

**Older and Out of Work: Jobs and Social Insurance for a Changing Economy**

Randall W. Eberts and Richard A. Hobbie, eds.

Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 2008

DOI: 10.17848/9781435667419.ch4

# 4

## **Reemployment and Earnings Recovery among Older Unemployment Insurance Claimants**

Christopher J. O’Leary  
Randall W. Eberts

*W.E. Upjohn Institute for Employment Research*

In recent years, a growing proportion of older workers have suffered involuntary job loss. Previous research shows that older workers have more difficulty getting back to work than younger workers. They also suffer larger earnings loss once reemployed than younger workers. For all workers, the Unemployment Insurance (UI) System provides temporary wage replacement for those who have lost their jobs through no fault of their own. An unanswered question, and one that we address in this chapter, is “How do workers at different points in their working life use and benefit from UI?”

### **FACTORS IN OLDER WORKERS’ DIFFERING EMPLOYMENT PATTERNS**

There are several reasons why younger and older workers may have differing degrees of access to UI benefits, and why their employment patterns after receiving UI benefits may differ. With respect to access and eligibility, workers must have sufficient employment and earnings history prior to being laid off in order to qualify for UI benefits. Employment patterns and earnings levels may differ by age and other characteristics, leading to differences in access and eligibility between younger and older workers. After a layoff, finding reemployment and regaining prior earnings levels depend upon the aspirations of workers to remain

attached to the labor market and to qualify for job openings. Here too, age may be a factor in looking for and qualifying for work. Older workers, particularly those approaching retirement age, may be interested in transitioning to retirement through a series of “bridge jobs,” which may not provide the same earnings levels and job stability offered by longer-term career jobs. Furthermore, employers may be reluctant to hire older workers, whose pay levels may not match their perceived productivity. UI is an important source of income security for older workers and a potential influence on work and retirement decisions.

Older workers shoulder a relatively small share of the nation's unemployment burden, while enjoying a higher-than-average chance of receiving UI compensation when jobless and seeking work. As the workforce ages, understanding the unemployment patterns of older workers and the role of UI in bridging the earnings gap of displaced workers will help inform policymakers and program administrators as to the demand placed on UI and the gaps that may exist in providing the level of benefits intended.

This chapter examines the labor market adjustment of older workers versus younger workers after they file a claim for UI benefits. Unlike previous studies, which are based on survey data, our study relies on a census of UI claimants constructed from records maintained for program administration. Using data on UI claimants in a large, industrialized midwestern state, we examine patterns of reemployment, earnings, and employment stability following job loss. We compare the employment and earnings experience following a claim for UI benefits of older workers (those 50 years of age and older) with that of younger, prime-aged workers (those between the ages of 30 and 49).

We focus on a sample of UI claimants eligible for benefit payments and examine contrasting patterns of reemployment, earnings, and employment stability. The sample includes all UI claimants within the state during 2001, the first year of an economic downturn. To track employment patterns for each worker, our analysis relies on quarterly UI claimant earnings records for the first 11 quarters after the worker files a claim for benefits.

The chapter proceeds in the next section by reviewing previous related research and stating our expected results based on theoretical considerations. In the third section, we describe our sample of UI claimants, define older and younger workers, and compare the characteristics

of older and younger age groups within each sample. Next, in the fourth section, we provide a brief overview of our methodology for analyzing reemployment, earnings, and employment stability. In the fifth section, we examine contrasting patterns of reemployment between the two age groups. This is followed by (six) analysis of earnings recovery, and then (seven) employment stability as measured by the observable employment rate and job tenure with a post-UI-claim employer. We then, in the eighth section, examine the question of whether claimants who return to work more quickly have better future labor-market success. The ninth and final section offers a summary and conclusion.

## **BACKGROUND**

The share of older workers among the labor force, the total unemployed, and the insured unemployed for the United States in 2002 are reported in Table 4.1. The figures are based on monthly averages for the year and indicate that those aged 45 years and over make up one-third of the labor force, constitute only one-fifth of those experiencing unemployment, but include one-third of all UI beneficiaries. These national numbers suggest that, relative to their numbers in the labor force, older workers make up a proportionately small share of the unemployed but have a higher-than-average chance of receiving UI compensation while jobless and seeking work.

Previous studies of the job loss and recovery experience of older workers refine the perspective offered by the national averages. In recent years, an increasing proportion of older workers have suffered involuntary job loss (Farber, Haltiwanger, and Abraham 1997, p. 59), although younger workers still experience a disproportionately large share of job layoffs. However, after being laid off, older workers have relatively more difficulty gaining reemployment and recovering to prior earnings levels (Chan and Stevens 2001, p. 484). A recent study finds that a younger worker (49 years of age or less) is 40 percent more likely to be called back for an interview than an older worker (Lahey 2005). Consequently, it takes older workers longer to find a job than younger workers (Diamond and Hausman 1984; Lahey 2005). The greater earnings decline among older job losers has been attributed to their longer

**Table 4.1 Labor Force, Unemployment, and UI Receipt by Age for United States, 2002**

	Total	≤24	25–34	35–44	45–54	55–64	≥65
Labor force <sup>a</sup> (000s)	144,863	22,366	32,196	36,926	32,597	16,309	4,469
% of labor force		15.4	22.2	25.5	22.5	11.3	3.1
Total unemployed <sup>b</sup> (000s)	8,378	2,683	1,890	1,691	1,315	635	163
% total unemployed		32.0	22.6	20.2	15.7	7.6	1.9
% insured unemployed <sup>c</sup>		9.7	23.6	26.6	24.0	12.6	2.9

<sup>a</sup>Data from the *Handbook of U.S. Labor Statistics*, 7th ed., Table 1-7 (Jacobs and Ryan 2004).

<sup>b</sup>Data from the *Handbook of U.S. Labor Statistics*, 7th ed., Table 1-28 (Jacobs and Ryan 2004).

<sup>c</sup>Age information not available for 4.0 percent of beneficiaries. Data from the U.S. Department of Labor, UI Service (USDOL 2008).

SOURCE: Jacobs and Ryan (2004).

job tenure and higher pre-separation earnings (Kuhn and Sweetman 1999, pp. 671–672). Although they experience greater earnings declines, older workers are more likely to qualify for UI and to draw more benefits during jobless periods (O'Leary and Wandner 2001, p. 87).

Earnings impacts of involuntary job loss for the general workforce have been estimated to be on the order of one-quarter of prior earnings levels (Jacobson, LaLonde, and Sullivan 1993). As workers age, the work-leisure decision increasingly includes the option of retirement. When approaching retirement age, it is common to work reduced hours on the career job, or to migrate to a “bridge” job as a step in the transition toward full retirement out of the labor market (Quinn 2000).

If involuntary job separation means the career job is no longer available, the shift to another job involves the loss of firm-specific human capital and most likely means lower earnings potential. The shift to another job can also involve a change in occupation and further loss in value of accumulated occupation-specific human capital. For members of industrial unions, reemployment in new industries may mean the loss of union rents from earnings.

As people approach the end of their working years, they also tend to be reaching lifetime peak levels of asset accumulation. Furthermore, as

people reach the age of 60, they have the option of making withdrawals from their 401k retirement accounts without penalty. As they advance in age to their late 60s, they are eligible for full Social Security benefits. By 70, they must begin to withdraw from pretax retirement savings accounts. All of these events make it easier for older workers to transition into bridge jobs or full retirement.

Receipt of UI benefits tends to increase the duration of jobless spells (Decker 1997, pp. 285–298). The maximum entitled duration of regular UI benefits in nearly all states is 26 weeks, and typically about one-third of beneficiaries exhaust their benefit entitlement. For older workers, UI benefits could act as additional severance income, easing the transition to a bridge job or to full retirement. In this chapter we contrast differences in rates of reemployment, reemployment earnings, and employment stability between older and prime-aged UI claimants.

Given the greater range of post-job separation options for older workers and the possibility for employer bias against hiring older workers, we expect reemployment rates to be somewhat lower for older workers, and UI benefit eligibility to reinforce the lower reemployment rates for older workers. In addition, with the higher levels of pre-UI claim earnings for older workers, we expect that older workers will suffer larger relative earnings declines upon reemployment following an involuntary job separation.

Among those who do gain reemployment following a UI claim, theory does not guide us as to whether older or younger claimants will experience greater job stability in new jobs. It may be the case that older workers, having accumulated more general human capital, could more easily adapt to new working situations. If this is true, older workers may be more stable in new jobs, but this is an empirical question.

## **SAMPLES FOR ANALYSIS**

The samples of younger and older workers are derived from UI claims in a major industrial midwestern state during the labor market contraction in 2001. From administrative records of all UI claimants within that state, we selected a sample of claimants aged 30 and over who had experienced a job separation. This sample was then divided

**Table 4.2 Sample Size of UI Claimants and Rates of Eligibility and Benefit Exhaustion, 2001**

	Overall	Older	Younger
(1) UI Claimants	329,935	92,811	237,124
(2) UI-Eligible	275,943	82,288	193,655
(3) UI-Ineligible	53,992	10,523	43,469
(4) UI Exhaustees	81,539	24,523	57,016
UI Eligibility and Benefit Exhaustion Rates			
UI Eligibility Rate (2)/(1)	0.836	0.887	0.817
UI Benefit Exhaustion Rate (4)/(2)	0.295	0.298	0.294

NOTE: Older claimants are defined as those aged 50 years and over; younger, those aged 30 to 49 years.

SOURCE: Authors' tabulation of state UI agency data for claimants aged 30 and over.

into a sample of older workers (defined as aged 50 years and over) and prime-aged or younger workers (defined as between the ages of 30 and 49). Our full sample includes 329,935 UI claimants aged 30 and over, of whom 28.1 percent are older workers.

Table 4.2 summarizes the composition of our sample in terms of UI eligibility and exhaustion of UI entitlement for benefit years started in calendar year 2001. Overall, 83.6 percent of claimants were UI-eligible, and 29.5 percent of eligible claimants had exhausted their initial entitlement of regular UI benefits. Older claimants had an appreciably higher rate of UI benefit eligibility (88.7 percent compared to 81.7 percent for younger claimants), but among UI-eligible claimants older workers exhausted benefit entitlements at about the same rate as younger, prime-aged claimants (29.8 percent, compared to 29.4 percent for younger claimants).

The means of outcome variables and claimant characteristics for our samples are summarized in Table 4.3. The first three rows in the table are common UI outcomes measured over the benefit year: weeks of UI benefits drawn, the fraction of UI entitlement used, and the proportion of claimants drawing their full monetary entitlement (i.e., the UI benefit exhaustion rate). Among those eligible for UI, there are no appreciable differences between older and younger UI claimants in terms of UI weeks drawn or the rate of exhausting UI benefit entitlements. Neither are there significant differences for the two age groups from the overall means of 14.9 weeks of UI drawn in the benefit year and 58.2 percent

**Table 4.3 Means of Outcomes and Characteristics of UI-Eligible Claimants**

	UI-Eligible		
	Overall	Older	Younger
Full-time equivalent weeks of UI	14.9	14.8	15.0
Fraction of entitlement/benefits used	0.582	0.574	0.585
Exhausted regular UI	0.295	0.298	0.294
Employed one quarter after BYB	0.676	0.675	0.676
Age as of BYB	43.3	54.7	38.5
Gender, female	0.329	0.323	0.332
Race			
White	0.834	0.856	0.824
African American	0.124	0.105	0.132
Hispanic	0.020	0.015	0.022
Education			
Less than high school	0.198	0.223	0.187
High school grad/GED	0.510	0.489	0.519
Some college	0.195	0.189	0.198
Bachelor's degree or higher	0.097	0.098	0.096
Base period earnings (\$)	32,224	37,121	30,144
Entitlement length (weeks)	25.8	25.8	25.8
Weekly benefit amount (\$)	274	277	272
WBA at maximum	0.219	0.196	0.228
Work search exempt	0.345	0.386	0.327
Sample size	275,943	82,288	193,655

NOTE: Older claimants are defined as those aged 50 years and over; younger, those aged 30 to 49 years.

SOURCE: Authors' tabulation of state UI agency data for claimants aged 30 and over.

of entitled benefits drawn. (Again, the maximum duration of regular UI benefits is 26 weeks.)

As defined by the new U.S. Department of Labor (USDOL) performance indicator for reemployment, among those eligible for UI benefits, there is virtually no difference in reemployment between older and younger claimants. The USDOL indicator defines employment after BYB as the presence of earnings in quarterly UI wage records in the quarter after the benefit year begin date (BYB). In our sample, 67.5

percent of older claimants and 67.6 percent of younger claimants were employed after BYB.

The similarities in outcomes between older and younger UI-eligible claimants occur despite significant differences between the two groups in terms of some measurable characteristics correlated with employment and earnings. Older eligible claimants are more likely to be white and to have a lower level of educational attainment than younger claimants. Older workers also have significantly higher levels of prior earnings, with income in the 12-month UI base period being nearly \$7,000 higher.<sup>1</sup>

In terms of UI program entitlements among eligible claimants, the mean entitled duration was 25.8 weeks for both older and younger groups, the average weekly benefit amount (WBA) was \$5 higher for older claimants at \$277, the percentage at the state WBA maximum was 3.2 percentage points higher for younger claimants, and the percentage exempt from job search was 5.9 percent higher for older claimants.<sup>2</sup>

## **EMPIRICAL RESULTS**

With a full year of UI claims inflow for a major midwestern industrial state, we have more than sufficient data to view trends in employment, earnings, and employment stability. Our data include quarterly earnings records for each UI claimant, provided by employers to the state employment security agency. The data include at least six quarters preceding the quarter of UI claim and at least 11 quarters after the claim for all claimants in our analysis sample. We examine the earnings data directly and use earnings data as evidence of employment in a quarter.<sup>3</sup>

We examine reemployment rates, earnings, and subsequent employment stability in sequence, using similar empirical strategies for each. We begin by tabulating the rate of first-time reemployment observed in each quarter after the calendar quarter within which the individual filed a UI benefit claim. We then perform unadjusted tests for differences in mean values of outcomes across the subgroups of interest.<sup>4</sup>

Since older and younger UI claimants differ significantly in terms of observable characteristics, it would not be surprising to observe different labor market outcomes across the groups. That is, observed out-

comes may differ by age because of characteristics associated with age, rather than because of the difference in age alone. To remove the influence of factors correlated with age when comparing outcomes for the two different age groups, we estimate the differences between older and younger UI claimants, controlling for observable characteristics. Our list of control variables includes factors that can affect the decision of older workers to return to work, such as the presence of income from private pensions, severance pay, vacation pay, Social Security, or other sources of income affecting UI benefit entitlement.<sup>5</sup>

## REEMPLOYMENT RATES

How quickly do older and younger workers regain employment after a job loss? To examine this question, we calculate the quarterly time pattern of reemployment after a UI claim. Reemployment is computed as the ratio of those who gain reemployment for the first time in a quarter after BYB relative to the UI claimants yet to return to work. This concept is called a conditional hazard rate to reemployment, or the exit rate from joblessness.<sup>6</sup>

Table 4.4 presents hazard rate computations for older and younger UI claimants who are eligible for UI benefits. The rows in the table present results for 11 quarters after the quarter of the BYB date, which falls in the quarter of the UI claim. The columns headed “Reemployment rate” list hazard rates of exit to reemployment for each quarter after the quarter of claim for younger and older claimants. After the first quarter, the exit rate for older eligible UI claimants is consistently below that for younger eligible claimants. Differences range from 1.4 to 6.5 percentage points. This can be seen graphically in Figure 4.1: the hazard rate curve for older claimants is strictly below the curve for younger claimants. Tests of statistical significance indicate that, except for the first quarter, differences in exit rates between the two groups are statistically significant at a high degree of confidence.

Because older and younger claimants differ in characteristics that affect reemployment, it is important to control for these characteristics when estimating the difference, by age, in rates of returning to work. Reemployment rates are adjusted for such factors using two estima-

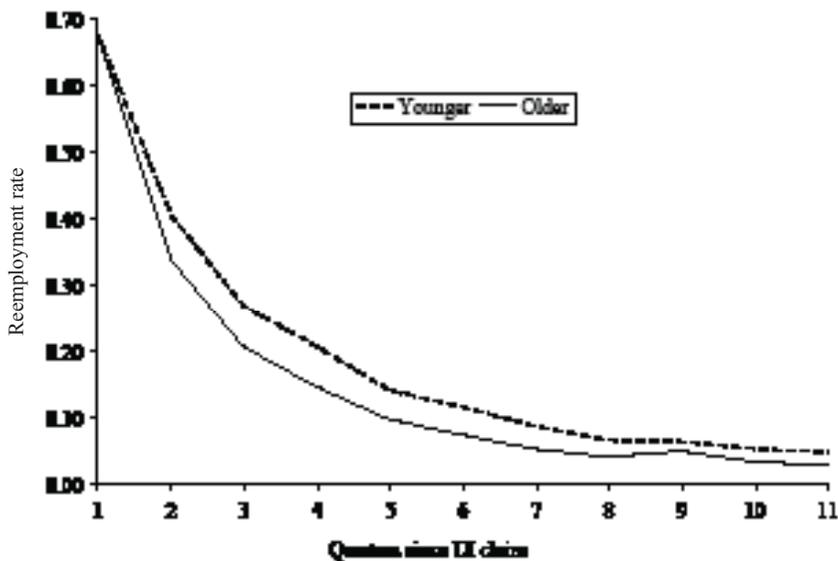
**Table 4.4 Comparison of Reemployment Rates between Older and Younger UI Claimants**

Quarters after BYB	UI-eligible									
	Sample size		Reemployment rate		Simple difference		OLS difference		Logit difference	
	Younger	Older	Younger	Older	Difference	<i>t</i> -stat	Difference	<i>t</i> -stat	Difference	<i>t</i> -stat
1	193,655	82,288	0.676	0.675	0.000	-0.23	-0.028	-14.59	-0.019	-13.86
2	62,794	26,720	0.405	0.340	-0.065	-18.34	-0.049	-13.59	-0.032	-13.38
3	37,340	17,628	0.267	0.207	-0.061	-15.48	-0.055	-13.37	-0.032	-13.29
4	27,352	13,987	0.206	0.147	-0.060	-14.79	-0.058	-13.69	-0.032	-13.55
5	21,706	11,935	0.140	0.097	-0.043	-11.51	-0.046	-11.54	-0.024	-11.51
6	18,660	10,777	0.115	0.074	-0.042	-11.54	-0.045	-11.65	-0.022	-11.63
7	16,507	9,984	0.086	0.052	-0.034	-10.33	-0.035	-9.82	-0.016	-9.68
8	15,081	9,462	0.065	0.040	-0.025	-8.32	-0.029	-8.91	-0.013	-8.95
9	14,095	9,080	0.063	0.049	-0.014	-4.46	-0.023	-6.86	-0.011	-7.05
10	13,202	8,632	0.052	0.033	-0.019	-6.67	-0.022	-7.30	-0.010	-7.30
11	12,511	8,345	0.048	0.027	-0.020	-7.32	-0.021	-6.97	-0.009	-6.91
Weighted average										
Quarters 1–11										
Quarters 2–11										
					-0.026		-0.037		-0.022	
					-0.047		-0.044		-0.024	

NOTE: Blank = not applicable.

SOURCE: Authors' estimates based on state UI agency data for claimants aged 30 and over.

**Figure 4.1 Comparison of Reemployment Rates between Older and Younger UI Claimants**



tion techniques. The first technique is ordinary least squares. Using the adjusted reemployment rates obtained by this technique, the range of estimated effects narrows slightly compared with the range of simple or unadjusted differences. The range of adjusted differences is between 2.1 and 5.8 percentage points.

Using ordinary least squares to estimate equations with a dependent variable taking on values between 0 and 1 can lead to biased estimates, since values of the predicted dependent variable may lie outside the 0–1 range. An alternative is logit analysis, which constrains predicted dependent values, forcing them to be within the 0–1 range. Adjusting reemployment rates using the logit methodology yields smaller differences in a narrower range. The range of logit estimates is 0.9 to 3.2 percentage points over older UI claimants.<sup>7</sup> Another way to compare the three estimates is to compute the weighted average of the differences over the 11 quarters, using the sample sizes as the weighting factors. The logit technique yields the most conservative estimates, or the least difference between older and younger workers.

Among those eligible for UI, the rate of returning to work by younger workers exceeds that for older workers by the greatest mar-

gin in quarters 2 through 5 after the claim for benefits. These quarters include the period in which beneficiaries may exhaust their 26 weeks of UI benefits. Assuming that they maintain continuing UI benefit eligibility by remaining able, available, and actively seeking work, and by not refusing any offers of suitable work, beneficiaries may draw out available benefits during a 52-week period starting from their benefit year begin (BYB) date. That period is called the UI benefit year. Since the maximum benefit entitlement is 26 weeks at the full weekly benefit amount (WBA), entitlements may be exhausted during quarters 2 through 4 after the calendar quarter of the BYB. Thus, it appears that younger workers return to work with greater frequency than older workers around the period in which they may exhaust benefits.

## EARNINGS RECOVERY

To what extent do older and younger displaced workers regain the earnings levels they achieved before losing their jobs? As previously mentioned, involuntary job loss has been estimated to significantly depress subsequent earnings. Furthermore, earnings loss is believed to be greater among older workers. In this section, we compare quarterly earnings of older and younger workers before and after they make a UI claim.

We define earnings recovery as the ratio of average quarterly earnings after the claim to average quarterly earnings before the claim. We call this the post- to pre-UI-claim earnings ratio. The value of the ratio for any quarter is computed on the sample of older and younger workers first reemployed in that quarter.<sup>8</sup> After the claim, we average earnings across all quarters in which earnings are greater than zero. Before the claim, we average earnings across quarters 3 through 6 prior to BYB. Excluding the two quarters immediately before BYB approximates permanent earnings levels since the earnings of displaced workers commonly decline near the time of job loss—an earnings pattern often referred to as the Ashenfelter dip in earnings (Ashenfelter 1978).

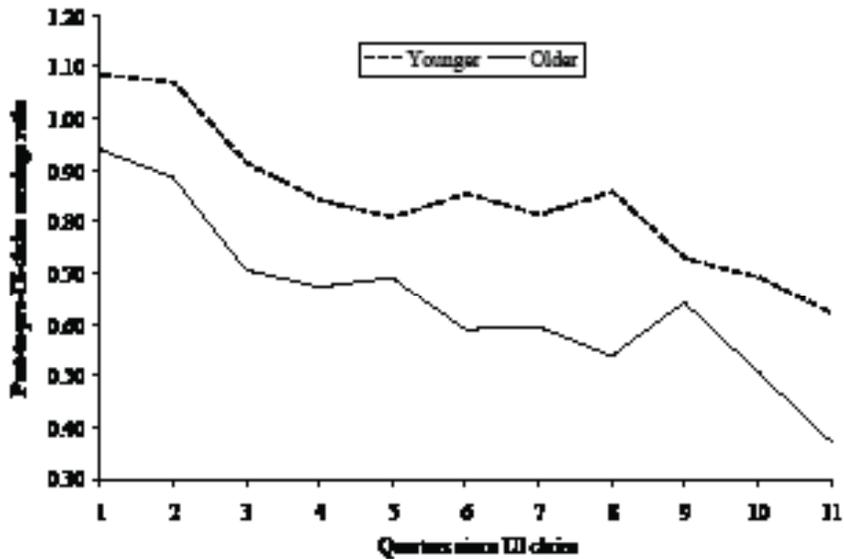
Among UI-eligible claimants who found reemployment in the first or second quarter after claiming benefits, younger workers have higher average quarterly earnings relative to prior earnings than do older work-

**Table 4.5 Comparison of Post- to Pre-UI-Claim Earnings Ratios between Older and Younger Claimants**

Quarters after BYB	UI-eligible							
	Sample size		Post-to-pre ratio		Simple difference		OLS difference	
	Younger	Older	Younger	Older	Difference	<i>t</i> -stat	Difference	<i>t</i> -stat
1	129,650	55,287	1.085	0.940	-0.146	-23.47	-0.009	-1.39
2	25,041	8,982	1.071	0.886	-0.185	-10.09	-0.042	-2.24
3	9,807	3,615	0.912	0.706	-0.206	-7.07	-0.058	-1.94
4	5,574	2,031	0.841	0.674	-0.168	-6.01	-0.043	-1.56
5	2,989	1,149	0.809	0.691	-0.118	-2.32	0.007	0.14
6	2,116	778	0.854	0.590	-0.264	-4.77	-0.096	-1.69
7	1,391	519	0.814	0.595	-0.219	-3.25	-0.034	-0.50
8	966	373	0.858	0.538	-0.320	-3.09	-0.193	-1.74
9	870	441	0.729	0.642	-0.087	-0.72	0.136	1.01
10	676	283	0.692	0.508	-0.184	-2.50	0.079	0.98
11	584	226	0.621	0.373	-0.247	-3.34	-0.165	-1.97

SOURCE: Authors' estimates based on state UI agency data for claimants aged 30 and over.

**Figure 4.2 Comparison of Post- to Pre-UI-Claim Earnings Ratios between Older and Younger Claimants**



ers. This can be seen in Table 4.5 and in Figure 4.2. The post-to-pre-UI-claim earnings ratio is higher for younger workers than for older workers for all quarters listed in the table. Also, younger workers who find reemployment in the first two quarters after BYB actually earn more after the UI claim than before. Based on the unadjusted differences shown in Table 4.5, older workers earn less after their claim than before, for all quarters, recovering about 20 percent less of prior earnings than do younger claimants. However, after controlling for differences in worker characteristics, the advantage held by younger claimants diminishes in all quarters and disappears in some quarters. The results also reveal that finding a job as soon as possible after the BYB is associated with higher post-UI-claim earnings. This tendency is evidenced by the fact that the ratio falls faster for older workers than for younger workers during the first eight quarters. By the eighth quarter, the ratio for older workers is only 57 percent of the ratio in the first quarter, whereas the ratio for younger workers is 80 percent of the ratio in the first quarter.

## **EMPLOYMENT STABILITY**

How stable are jobs after reemployment for older and younger workers? Two different measures of employment stability are examined. The first measure captures the proportion of the time a person holds a job and is referred to as the employment rate; the second measure tracks tenure with a worker's main employer after he or she returns to work and is called job tenure. For the first measure, we record the proportion of quarters a UI claimant is employed once that claimant finds a job.<sup>9</sup> This measure captures the stability or sustainability of employment after a worker becomes reemployed. For this measure, the individual could change employers each quarter (or more frequently) and still be considered employed. For the second measure, we check to see how long the claimant stays working for the main employer in his or her reemployment quarter. This measure records the attachment to one specific employer.

### **Employment Rates**

As reported in Table 4.6, the proportion of quarters a person is working ranges from 73 to 92 percent. The employment rates follow a U-shaped pattern, as shown in Figure 4.3. The highest rates are recorded in the last quarters, but this may only reflect the shorter time period in which to observe employment behavior. Younger workers have an advantage over older workers, particularly in the first four quarters after BYB. The difference ranges from 4.2 percentage points in the first quarter to 2.5 percentage points in the fourth quarter. Younger workers' advantage over older workers increases slightly for the first four periods after controlling for differences in worker characteristics.

### **Job Tenure**

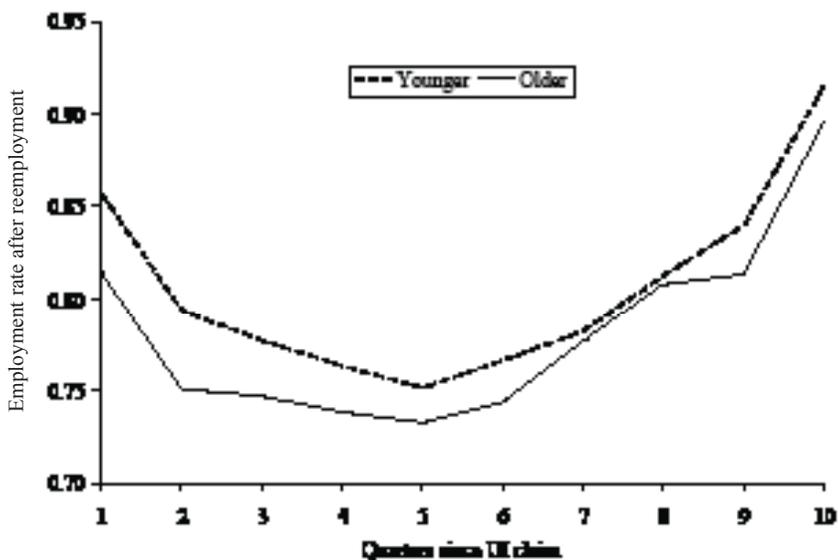
This measure records tenure with one employer by counting the number of quarters the worker is with the major employer he or she first started with immediately after reemployment. Since quarterly UI wage records for a particular claimant often contain earnings from more than one employer in a given quarter, we define the major employer for

**Table 4.6 Comparison of Employment Rates after Reemployment between Older and Younger UI Claimants**

Quarters after BYB	UI-eligible							
	Sample size		Reemployment rate		Simple difference		OLS difference	
	Younger	Older	Younger	Older	Difference	<i>t</i> -stat	Difference	<i>t</i> -stat
1	130,861	55,568	0.856	0.814	-0.042	-33.72	-0.056	-43.87
2	25,454	9,092	0.793	0.751	-0.042	-13.49	-0.041	-12.86
3	9,988	3,641	0.777	0.747	-0.030	-5.41	-0.040	-7.14
4	5,646	2,052	0.763	0.738	-0.025	-3.21	-0.032	-4.06
5	3,046	1,158	0.751	0.733	-0.019	-1.76	-0.016	-1.54
6	2,153	793	0.766	0.744	-0.023	-1.87	-0.050	-4.02
7	1,426	522	0.782	0.777	-0.006	-0.38	-0.020	-1.28
8	986	382	0.813	0.808	-0.005	-0.32	-0.020	-1.14
9	893	448	0.840	0.813	-0.027	-1.97	-0.003	-0.18
10	691	287	0.915	0.895	-0.020	-1.47	-0.025	-1.63

SOURCE: Authors' estimates based on state UI agency data for claimants aged 30 and over.

**Figure 4.3 Comparison of Employment Rates after Reemployment between Older and Younger UI Claimants**



a claimant in a quarter as being the employer paying the most wages to the claimant in that quarter.

Table 4.7 summarizes job tenure for those finding jobs in the various quarters after BYB. Older workers have a clear advantage over younger workers for at least the first six quarters. Older workers remain employed with their initial employer at a significantly higher rate than younger workers, with the advantage ranging from 4.0 to 11.3 percentage points. Controlling for observable worker characteristics reduces the advantage of older workers for all of the first six quarters.<sup>10</sup> These results can be viewed graphically in Figure 4.4, which shows that older claimants maintain longer job tenure among the reemployed. The advantage diminishes somewhat each quarter, but tenure is higher for older claimants among each reemployment quarter cohort.

Regarding overall stability of employment after a UI claim, younger, prime-aged UI claimants return to more steady regular participation in the labor force, but older workers establish stronger employment bonds with their first employer after a UI claim.

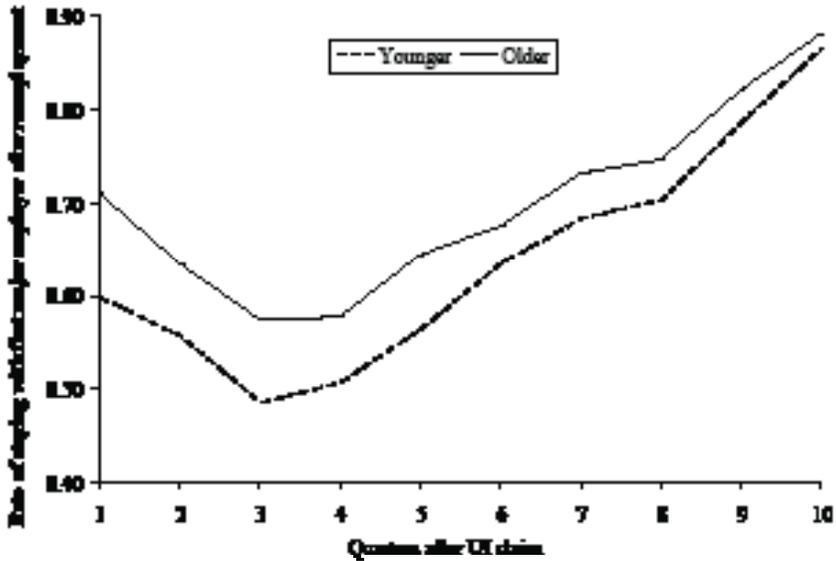
**Table 4.7 Comparison of the Rate of Staying with the First Major Employer after Reemployment between Older and Younger UI Claimants**

Quarters after BYB	UI-eligible							
	Sample size		Same employer rate		Simple difference		OLS difference	
	Younger	Older	Younger	Older	Difference	<i>t</i> -stat	Difference	<i>t</i> -stat
1	126,973	53,224	0.598	0.711	0.113	52.48	0.050	24.06
2	24,435	8,510	0.557	0.635	0.078	14.85	0.060	11.39
3	9,406	3,347	0.486	0.574	0.089	10.42	0.065	7.39
4	5,189	1,798	0.507	0.577	0.070	5.97	0.047	3.88
5	2,687	984	0.564	0.644	0.080	5.09	0.052	3.16
6	1,931	684	0.635	0.675	0.040	2.20	0.026	1.32
7	1,250	452	0.684	0.732	0.048	2.15	0.038	1.57
8	857	340	0.703	0.746	0.043	1.66	0.026	0.90
9	765	391	0.786	0.821	0.034	1.49	0.022	0.83
10	564	225	0.866	0.881	0.015	0.58	0.018	0.58
11	—	—	—	—	—	—	—	—

NOTE: — = not available.

SOURCE: Authors' estimates based on state UI agency data for claimants aged 30 and over.

Figure 4.4 Comparison of Rates of Staying with the First Major Employer after Reemployment between Older and Younger UI Claimants



### EARLY RETURN TO WORK

When we examine the employment outcomes of UI claimants returning to work at various times after being displaced, a general trend emerges. Those who find employment sooner after a claim have better subsequent labor market success. Not only is this result observed in a comparison of unadjusted means, it also seems to hold up when controlling for observable personal characteristics, UI eligibility parameters, and regional labor market conditions. To test this observation more precisely, we created subsamples of claimants reemployed in either the first or second quarter after their UI claim. We then estimated regression models for the three key outcomes after reemployment: earnings recovery, employment rate, and job tenure.

Estimating OLS regression models on a sample of UI-eligible claimants reemployed in either the first or second quarter after their UI claim permits us to contrast whether getting employed in the first quarter as opposed to the second quarter after the UI claim leads to better

labor market success in the near term. By confining our analysis to this simple question, we avoid issues of small sample sizes and misleading values for the dependent variable based on reemployment late in the observable period.

Our models include an indicator (dummy) variable for being employed in the first quarter after the UI claim, dummy variables for older claimants aged 50 to 65 years, and an interaction between these two variables. Table 4.8 presents the key parameter estimates from these models, which also include the full set of control variables listed above for claimant characteristics, program entitlements, and labor market conditions.

**Table 4.8 Impact of Early Reemployment on Earnings Recovery, Employment, and Job Tenure, as Estimated on UI-Eligible Claimants Reemployed in the First or Second Quarter after Their UI Claim**

	Earnings recovery <sup>a</sup>	Employment rate <sup>b</sup>	Job tenure <sup>c</sup>
Impact for younger, prime-aged UI claimants	-0.022** (-2.53)	0.028** (14.60)	-0.029** (10.54)
Difference for older UI claimants from younger	0.063** (3.83)	-0.019** (-5.24)	0.004 (0.77)
Impact for older UI claimants	0.041** (2.84)	0.009** (2.90)	-0.025** (5.54)

NOTE: \*\*Statistically significant at the 95 percent confidence level in a two-tailed test. *t*-statistics in parentheses.

Parameters estimated in OLS regression models controlling for a full set of individual characteristics and UI program entitlement parameters as listed in endnote 5.

<sup>a</sup> Earnings recovery = the ratio of post-to-pre-UI-claim quarterly earnings. Preclaim earnings are mean earnings in Quarters 3, 4, 5, and 6 preceding the claim, and post-claim earnings are mean earnings in quarters after the claim with earnings.

<sup>b</sup> Employment rate = the proportion of quarters with earnings as evidence of employment, starting with the quarter of reemployment after the UI claim.

<sup>c</sup> Job tenure = the proportion of quarters where the major employer is the same as the one in the first quarter of reemployment after the UI claim. The major employer is the employer in the quarter from whom the greatest earnings were received.

SOURCE: Based on state UI agency data for claimants aged 30 to 65 years.

## **Earnings Recovery**

In terms of earnings recovery, results from estimation of this model suggest there are benefits for older UI claimants in returning to work quickly, but not for their younger counterparts. Older UI claimants who go back to work in the quarter immediately following the claim have a mean post-to-pre-UI-claim earnings ratio 4.1 percentage points higher than those who return to work in the second quarter after the claim. However, the comparable estimate for younger UI claimants is a net loss of 2.2 percentage points. The difference in the first-quarter impact estimates between older and younger workers is 6.3 percentage points. So in terms of earnings recovery, when we control for other factors, returning to work quickly is particularly advantageous for older UI claimants.

## **Employment Rates**

Compared to UI-eligible claimants who return to work in the second quarter after the claim, those going back to work in the first quarter have better success at maintaining employment in the near term. The employment rate improvement is greater for younger claimants than for older workers. The mean increase in employment rate for younger UI claimants is a 2.8-percentage-point increase during the remaining 10 quarters. The boost for older claimants is a modest but statistically significant 0.9 percentage points.

## **Job Tenure**

Job tenure on the first job after reemployment is the one outcome measure where older claimants consistently do better than younger claimants. However, early return to work does not provide a boost to job tenure on the reemployment job for either age group, and the impact of early return is not statistically different across the two groups. The mean impacts are -2.9 percentage points for younger UI claimants and -2.5 percentage points for older claimants.<sup>11</sup>

## SUMMARY AND CONCLUSION

This chapter examines the employment outcomes of older workers versus younger workers after both groups have filed a claim for Unemployment Insurance. Using UI administrative records of a major midwestern state, we find that older workers, relative to their younger counterparts, return to work at lower rates, are less successful at returning to the earnings levels achieved before they lost their jobs, and are less likely to have sustained employment after returning to work. These results are consistent with the findings of previous studies of older workers based on general survey data of dislocated workers.

One finding not reported in the earlier literature is that older workers who do gain reemployment after an involuntary job separation maintain a closer attachment to their new employers than do their younger counterparts.<sup>12</sup> The longer employer attachments observed for older workers should be an appealing quality for prospective employers, if this longevity reflects greater loyalty and human capital possessed by older workers.

We also find that those who return to work in the very first quarter after a UI claim have higher near-term employment rates than those returning to work only one quarter later. Controlling for observable factors, the employment rate advantage for younger workers may be as large as 2.8 percentage points in the near-term employment rate, whereas the advantage for older workers is much less—a 0.9-percentage-point gain. Returning to work quickly was also found to benefit older UI claimants by boosting the mean post-to-pre earnings ratio by 4.1 percentage points.

Several important lessons emerge from this research. First, since older UI claimants are at a disadvantage in seeking reemployment relative to their younger counterparts, more attention should be paid to identifying the reasons for this deficit. If employer initiatives are a primary factor, including perhaps age discrimination, then measures need to be taken to ensure that older workers are given the same opportunities for reemployment as similarly qualified younger workers. Second, the public workforce system may need to give closer attention to the needs of older workers. Typically, older workers, because of their long history of workforce attachment, are not considered a vulnerable group

and therefore services are not tailored to their needs. It may be the case, however, that because of their long job tenure they have not had much experience in searching for a job, and so such services as resume writing and interviewing techniques may be particularly useful skills for older workers to learn. Third, employers seeking to fill their staffing needs should be made aware of the reliability of older UI claimants. Finally, although this is a tentative result, workers of all ages appear to benefit from returning to work as soon as possible. The public labor exchange system, in combination with the UI system, has recognized the need to direct individuals to services as soon as possible after they lose their jobs, through the Worker Profiling and Reemployment Services program. However, this program identifies only those who are likely to exhaust UI benefits as candidates for early intervention. More attention should be paid to the specific needs of older workers in receiving early assistance. Doing so may improve the labor market success of older workers.

### Notes

Opinions expressed are our own and do not necessarily reflect the position of the W.E. Upjohn Institute for Employment Research. We thank Ken Kline for excellent research assistance and contributions, and Claire Black for help in production and presentation. Any errors or omissions are our responsibility. This chapter derives from a paper originally prepared for the National Academy of Social Insurance conference “Older and Out of Work: Jobs and Social Insurance for a Changing Economy,” held January 19–20, 2006, at the National Press Club, Washington, D.C. It relies on results presented in an earlier, related report submitted to the U.S. Department of Labor as part of the Administrative Data Research and Evaluation (ADARE) Project (O’Leary 2006b).

1. The UI program base period for earnings is the first four of the five completed calendar quarters immediately preceding the quarter of the UI claim for benefits. The level of base period earnings is a measure of the degree of labor force attachment and a prime factor in determining eligibility for UI benefits.
2. Most UI claimants must register for active job search with the state employment service to maintain continuing eligibility for UI. Exemptions from registration include claimants designated by their employer as being on a fixed-term layoff awaiting recall to their prior job, union members who get job referrals from union hiring halls, and participants in job training approved by the state employment commissioner (O’Leary 2006a).
3. Any positive level of earnings reported for the quarter is taken as evidence of employment in that quarter. Our results were virtually unchanged when we tried

an alternative threshold of \$100 in earnings for the quarter—the Social Security definition of insured employment.

4. For technical details of our research methodologies see O'Leary (2006b).
5. Our models include control variables for individual claimant characteristics, program entitlement parameters, and local labor market conditions. These are as follows: county unemployment rate in the quarter of UI claim, the change in the county unemployment rate (rate in the UI claim quarter minus the rate in the previous quarter), indicator for older claimant (aged 50–65), indicator for sex (male = 1), race indicators (six categories), education indicators (four categories), UI base period earnings (earnings in the first four of the five calendar quarters preceding the quarter of the UI claim), the number of employers in the UI earnings base period, the UI weekly benefit amount (WBA), an indicator for the WBA being at the state-allowed maximum of \$289, entitled weeks of UI compensation (maximum 26 weeks), job search—exempt (principally on standby awaiting employer recall or a member of a union hiring hall), indicators for benefit year begin (BYB) date in each of four calendar quarters, indicator variable for “has dependents,” indicator for “has a handicap,” indicator for deductions made from UI for severance pay, indicator for deductions made for vacation pay, indicator for deductions made for company pension income, indicator for deductions made for Social Security benefit income, indicator for deductions made for other reasons, indicators for prior industry of employment (21 NAICS groups), indicators for county of residence, and a set of indicator variables for residence in neighboring states.
6. Technical details are explained in O'Leary (2006b).
7. Since the main dependent variable of interest—proportion returning to work—is a fraction between zero and one, the regression model predicts the probability of reemployment. The OLS estimation is a linear probability model, which may yield biased estimates. OLS estimates may be biased since the range of variation in the dependent variable is constrained to the zero-one interval. Maddala (1983, pp. 1–11) suggests using the logit. Our tables of results present logit estimates, which tend to be smaller differences between the two age groups.
8. Sample sizes in Table 4.5 can be compared to those in Table 4.4 by quarter. The differences are due to the fact that claimants with average prior quarterly earnings of less than \$100 were excluded to eliminate outliers. Regressions to estimate adjusted differences in earnings between younger and older claimants also include a variable for the number of postunemployment quarters with earnings, because the reemployment quarter is most likely a quarter with less-than-full-time quarterly hours of work.
9. The denominator used in calculating the employment rate depends upon when the claimant finds a job. To measure the employment rate for a claimant employed the first quarter after the claim, the denominator of the employment rate would be 11, and the numerator would be the number of quarters with earnings over that period. For a claimant who first gains reemployment in the fifth quarter after the claim, the employment rate would be based on the seven observable quarters, including the quarter of reemployment. While comparisons between older and younger reemployed workers in a given period are valid, comparisons between those reem-

- ployed in different quarters after the BYB are not valid, due to differences in the number of quarters observed after reemployment.
10. In addition to the control variables listed above, the job tenure regressions include a variable for the number of postreemployment quarters with earnings. This factor adjusts for the fact that the job tenure rate tends to be higher for those with fewer observable quarters remaining after reemployment.
  11. There is one caveat in interpreting these results. While we have tried to control for as many factors as possible that could affect these employment outcomes, there may be other, unobserved factors that are also at play. These factors may be more than just a person's motivation and perseverance in looking for a job. It is possible that those who find a job in the first quarter have attributes that are attractive to employers and that give them an advantage over others in qualifying for a job. Therefore, without disentangling these effects even further, we are reluctant to attach a causal interpretation to these results that would lead to a policy recommendation, such as that workers should find a job as soon as possible in order to improve their employment outcomes. There is no doubt that finding a suitable job as soon as possible is desirable, but that alone may not ensure better outcomes.
  12. UI-eligible claimants must have been involuntarily separated from their previous employers, and some of the UI-ineligible claimants may also have been involuntarily separated, although they failed to qualify for UI benefits because of inadequate levels of prior earnings to be insured against joblessness.

## References

- Ashenfelter, Orley. 1978. "Estimating the Effect of Training Programs on Earnings." *Review of Economics and Statistics* 60(1): 47–57.
- Chan, Sewin, and Ann Huff Stevens. 2001. "Job Loss and Employment Patterns of Older Workers." *Journal of Labor Economics* 19(2): 484–521.
- Decker, Paul T. 1997. "Work Incentives and Disincentives." In *Unemployment Insurance in the United States: Analysis of Policy Issues*, Christopher J. O'Leary and Stephen A. Wandner, eds. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 285–320.
- Diamond, Peter A., and Jerry A. Hausman. 1984. "The Retirement and Unemployment Behavior of Older Men." In *Retirement and Economic Behavior*, Henry J. Aaron and Gary Burtless, eds. Studies in Social Economics Series. Washington, DC: Brookings Institution, pp. 97–132.
- Farber, Henry, John Haltiwanger, and Katherine Abraham. 1997. "The Changing Face of Job Loss in the United States, 1981–1995." *Brookings Papers on Economic Activity: Microeconomics* 1997(1): 55–128.
- Jacobs, Eva E., and Mary Meghan Ryan, eds. 2004. *Handbook of U.S. Labor Statistics: Employment, Earnings, Prices, Productivity, and Other Labor Data*. 7th ed. Lanham, MD: Bernan Press.

- Jacobson, Louis S., Robert J. LaLonde, and Daniel G. Sullivan. 1993. "Earnings Losses of Displaced Workers." *American Economic Review* 83(4): 685–709.
- Kuhn, Peter, and Arthur Sweetman. 1999. "Vulnerable Seniors: Unions, Tenure, and Wages Following Permanent Job Loss." *Journal of Labor Economics* 17(4): 671–693.
- Lahey, Joanna Nicole. 2005. *Aging and the Labor Market*. PhD diss., Massachusetts Institute of Technology.
- Maddala, Gangadharrao Soundalyarao. 1983. *Limited-Dependent and Qualitative Variables in Econometrics*. London: Cambridge University Press.
- O'Leary, Christopher J. 2006a. "State UI Job Search Rules and Reemployment Services." *Monthly Labor Review* 129(6): 27–37.
- . 2006b. "Unemployment Insurance and Reemployment among Older Workers." Prepared for the Division of Research and Demonstration, Office of Policy Development Evaluation and Reporting, Employment and Training Administration, under the Administrative Data Research and Evaluation (ADARE) Project. Washington, DC: U.S. Department of Labor.
- O'Leary, Christopher J., and Stephen A. Wandner. 2001. "Unemployment Compensation and Older Workers." In *Ensuring Health and Income Security for an Aging Workforce*, Peter P. Budetti, Richard V. Burkhauser, Janice M. Gregory, and H. Allan Hunt, eds. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 85–133.
- Quinn, Joseph F. 2000. "New Paths to Retirement." In *Forecasting Retirement Needs and Retirement Wealth*, Olivia S. Mitchell, P. Brett Hammond, and Anna M. Rappaport, eds. Philadelphia: University of Pennsylvania Press, pp. 13–32.
- U.S. Department of Labor (USDOL). 2008. *Characteristics of the Insured Unemployed*. Washington, DC: USDOL, Employment and Training Administration. <http://workforcesecurity.doleta.gov/unemploy/chariu.asp> (accessed June 20, 2008).

# **Older and Out of Work**

## **Jobs and Social Insurance for a Changing Economy**

Randall W. Eberts  
Richard A. Hobbie  
*Editors*

2008

W.E. Upjohn Institute for Employment Research  
Kalamazoo, Michigan

© 2008  
National Academy of Social Insurance  
1776 Massachusetts Ave. N.W.  
Washington, D.C. 20036

*Older and Out of Work: Jobs and Social Insurance for a Changing Economy*

may be ordered from

W.E. Upjohn Institute for Employment Research  
300 S. Westnedge Avenue  
Kalamazoo, Michigan 49007-4686

### **Library of Congress Cataloging-in-Publication Data**

Older and out of work : jobs and social insurance for a changing economy / Randall W. Eberts, Richard A. Hobbie, editors.

p. cm.

Includes bibliographical references and index.

ISBN-13: 978-0-88099-329-6 (pbk. : alk. paper)

ISBN-10: 0-88099-329-4 (pbk. : alk. paper)

ISBN-13: 978-0-88099-330-2 (hardcover : alk. paper)

ISBN-10: 0-88099-330-8 (hardcover : alk. paper)

1. Older people—Employment—United States. 2. Age and employment—United States. I. Eberts, Randall W. II. Hobbie, Richard.

HD6280.O533 2008

331.3'980973—dc22

2008027941

The facts presented in this study and the observations and viewpoints expressed are the sole responsibility of the authors. They do not necessarily represent positions of the W.E. Upjohn Institute for Employment Research or the National Academy of Social Insurance.

Cover design by Alcorn Publication Design.

Index prepared by Diane Worden.

Printed in the United States of America.

Printed on recycled paper.