

Age Differences in Job Loss, Job Search, and Reemployment

Richard W. Johnson and Corina Mommaerts

January 2011

The Program on Retirement Policy

Discussion Paper 11-01

Age Differences in Job Loss, Job Search, and Reemployment

Richard W. Johnson and Corina Mommaerts

January 2011

The Program on Retirement Policy

A crosscutting team of Urban Institute experts in Social Security, labor markets, savings behavior, tax and budget policy, and micro-simulation modeling ponder the aging of American society.

The aging of America raises many questions about what's in store for future and current retirees and whether society can sustain current systems that support the retired population. Who will prosper? Who won't? Many good things are happening too, like longer life and better health. Although much of the baby boom generation will be better off than those retiring today, many face uncertain prospects. Especially vulnerable are divorced women, single mothers, never-married men, high school dropouts, and Hispanics. Even Social Security—which tends to equalize the distribution of retirement income by paying low-income people more then they put in and wealthier contributors less—may not make them financially secure.

Uncertainty about whether workers today are saving enough for retirement further complicates the outlook. New trends in employment, employer-sponsored pensions, and health insurance influence retirement decisions and financial security at older ages. And the sheer number of reform proposals, such as personal retirement accounts to augment traditional Social Security or changes in the Medicare eligibility age, makes solid analyses imperative.

Urban Institute researchers assess how current retirement policies, demographic trends, and private sector practices influence older Americans' security and decisionmaking. Numerous studies and reports provide objective, nonpartisan guidance for policymakers.

The nonpartisan Urban Institute publishes studies, reports, and books on timely topics worthy of public consideration. The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, its funders, or other authors in the series.

The research reported herein was supported by the Center for Retirement Research at Boston College pursuant to a grant from the U.S. Social Security Administration funded as part of the Retirement Research Consortium. The opinions and conclusions are solely those of the authors and should not be construed as representing the opinions or policy of the Social Security Administration or any agency of the federal government; the Center for Retirement Research at Boston College; or the Urban Institute, its board, or its sponsors.

Publisher: The Urban Institute, 2100 M Street, N.W., Washington, D.C. 20037 Copyright © 2011. Permission is granted for reproduction of this document, with attribution to the Urban Institute.

Contents

Figures	iv
Tables	v
Abstract	vi
Executive Summary	vii
Introduction	1
Background	2
Effects of Job Displacement on Older Workers	6
Data and Methods	7
Job Loss	9
Reemployment	10
Job Comparisons	11
Job Search	12
Results	13
Job Displacement Results	13
Reemployment Results	18
Comparisons of Old and New Jobs	21
Job Search Activities	24
Conclusions	25
References	29

Figures

1. Cumulative Probability of Male Wage and Salary Workers Being Displaced from Their Jobs, by Age	34
2. Cumulative Probability of Female Wage and Salary Workers Being Displaced from Their Jobs, by Age	34
3. Cumulative Probability of Displaced Wage and Salary Workers Becoming Reemployed, by Age	35

Tables

1. (Characteristics of Job Displacement Sample	.36
	Estimated Marginal Effects on the Likelihood of Being Displaced from One's Job, Male Wage and Salary Workers Age 18 and Older	.37
	Estimated Marginal Effects on the Likelihood of Being Displaced from One's Job, Female Wage and Salary Workers Age 18 and Older	.39
4. (Characteristics of Reemployment Sample	41
5. N	Marginal Impact on the Likelihood of Becoming Reemployed, for Displaced Male Wage and Salary Workers Age 18 and Older	.42
6. N	Marginal Impact on the Likelihood of Becoming Reemployed, for Displaced Female Wage and Salary Workers Age 18 and Older	45
7. F	Percentage of Reemployed Displaced Wage and Salary Workers Who Change Occupation or Industry, by Age and Sex	.48
8. F	Percentage of Reemployed Displaced Wage and Salary Workers Who Are Self-Employed on the New Job, by Age and Sex	.48
9. N	Mean Weekly Hours on the New and Old Job for Reemployed Displaced Workers, by Age and Full-Time Status on the Old Job	.49
10.	Median Hourly Wage on the New and Old Job and Change in Hourly Wage for Displaced Wage and Salary Workers Who Become Reemployed	
	Median Monthly Earnings on the New and Old Job and Change in Monthly Earnings for Displaced Wage and Salary Workers Who Become Reemployed	.50
12.	OLS Regressions of Change in Hourly Earnings for Displaced Male Wage and Salary Workers Who Become Reemployed	.51
13.	OLS Regressions of Change in Hourly Earnings for Displaced Female Wage and Salary Workers Who Become Reemployed	. 54
	Job Search Activities in the Past Four Weeks by Unemployed Workers, March, April, May, and June 2010	.57

Age Differences in Job Loss, Job Search, and Reemployment

Abstract

Working longer is often hailed as the best way to increase retirement incomes, yet this strategy depends crucially on seniors' ability to find work and hold on to their jobs. This study examines how the incidence and consequences of job displacement vary by age. Results show that older workers are less likely than younger workers to lose their jobs, but only because they generally have spent more time with their employers. When older workers lose their jobs, they take longer than their younger counterparts to become reemployed, and when they do find work, they generally experience sharp wage declines.

Executive Summary

Job loss is an inevitable consequence of a dynamic economy. Employers must be able to shed jobs in response to changing market conditions, and their ability to do so at relatively low cost encourages them to hire more employees. Although job creation and destruction help distribute resources efficiently and promote economic growth, job loss can impose significant costs on displaced workers, who often forfeit wages for extended periods.

The consequences of job loss may be especially serious for older workers, who may encounter more difficulty finding jobs than their younger counterparts. As the population ages, the employability of older adults is becoming increasingly important. Adults age 50 and older made up 31 percent of the labor force in 2010, up from 20 percent in 1995. Working longer is often hailed as the best way to increase retirement incomes, yet this strategy depends crucially on seniors' ability to find work and hold on to their jobs. Being out of work is especially serious for older workers who are too young to qualify for Social Security retirement benefits, which provides an important lifeline for nonworking adults age 62 and older.

This study examines how the incidence and consequences of job loss vary by age. Data come primarily from the 1996, 2001, and 2004 panels of the Survey of Income and Program Participation, a nationally representative longitudinal household survey conducted by the U.S. Census Bureau. The panels follow respondents for up to 48 months, and our data span the years 1996 to 2007, covering the 2001 recession but not the 2007–2009 recession. Respondents are classified as displaced workers if they report separating from their employer because of layoff, slack work, or employer bankruptcy, or because the employer sold the business. Discrete-time hazard models estimate the likelihood that men and women lose their jobs and the likelihood that

displaced workers become reemployed. We also compare earnings and other job characteristics before and after job loss for displaced workers who become reemployed. Final tabulations compare job search activities by age, sex, and education for unemployed workers in the March, April, May, and June 2010 Current Population Surveys.

Key Results

Our results show that older workers are less likely than younger workers to lose their jobs, but only because they generally have spent more time with their employers.

- Between 1996 and 2007, men age 50 to 61 are 21 percent less likely than those age 25 to 34 to become displaced from their jobs each month, and men age 62 or older are 23 percent less likely.
- The story is similar for women: compared with those age 25 to 34, women age 50 to 61 are 30 percent less likely to lose their jobs, and those age 62 or older are 13 percent less likely.
- The protective effects of age, however, derive solely from older workers' seniority with their employers. When we hold job tenure and other characteristics constant, we find that older workers are just as likely as younger workers to lose their jobs. In fact, men age 50 to 61 are significantly more likely to become displaced from their jobs than men age 25 to 34 with the same length of service with the employer.
- As long-term employment relationships become less common at older ages, the existing layoff advantage for older workers may erode further.

When older workers lose their jobs, they appear to have more trouble than their younger counterparts finding work.

- Displaced men age 50 to 61 are 39 percent less likely to become reemployed each month than otherwise identical men age 25 to 34, and men age 62 or older are 51 percent less likely.
- Displaced women are 18 percent less likely to find a new job at age 50 to 61 than at age
 25 to 34 (when personal and job characteristics are held constant), and 50 percent less
 likely at age 62 or older.

When older displaced workers find jobs, they typically experience sharp wage declines.

- For displaced men who become reemployed, the median hourly wage on the new job falls 20 percent below the median wage on the old job at age 50 to 61. For those reemployed at age 62 or older, the new median wage falls 36 percent below the old median wage.
- By contrast, men's median wages fall only 4 percent at age 35 to 49 and 2 percent at age
 25 to 34.
- Older displaced women who become reemployed also suffer sizeable wage losses, but the differences between older and younger workers are not as dramatic as for men.

Implications

Although more research is needed to understand why older displaced workers are less likely to become reemployed than younger workers, these findings suggest that employers are reluctant to hire workers age 50 and older. Employers may fear that they will not have time to recoup hiring and training costs before older new hires retire, or they may worry that older workers are less

productive than younger workers. For example, surveys reveal that many employers believe that older workers lack creativity and are generally unwilling to learn new things. Many employers also express concern that older workers are more expensive than younger workers, because of rigid seniority wage structures or because health and pension benefits are more expensive at older ages.

The employment challenges facing older workers have important implications for retirement policy. For example, the debate over increasing Social Security's retirement age is intensifying. This policy option becomes less desirable when the employment prospects for older Americans are poor. As concern over retirement income security mounts, the option to delay retirement is increasingly viewed as the best way to increase retirement income. This strategy, of course, depends crucially on older adults' ability to find work. Although many employed seniors may be able to work longer on their existing jobs, our results highlight the difficulty that older Americans without jobs face finding work.

Introduction

As the population ages, the employability of older adults is becoming increasingly important. Adults age 50 and older made up 31 percent of the labor force in 2010, up from 20 percent in 1995. If labor force participation rates at older ages continue to grow at their 1999 to 2009 pace, by 2019 adults age 50 and older will account for 35 percent of the labor force. Working longer is often hailed as the best way to increase retirement incomes (Munnell and Sass 2008), yet the strategy depends crucially on seniors' ability to find work and hold on to their jobs. Being out of work is especially serious for older workers who are too young to qualify for Social Security retirement benefits, which provides an important lifeline for nonworking adults age 62 and older (Johnson and Mermin 2009). Questions about the employability of older adults are particularly relevant in the wake of the Great Recession of 2007–09, when the demand for labor remains weak and unemployment rates are near record highs.

Job loss is an inevitable consequence of a dynamic economy. Employers must be able to shed jobs in response to changing market conditions, and their ability to do so at relatively low cost encourages them to hire more employees. Workers in declining industries often lose their jobs, but growing sectors provide new employment opportunities. Although job creation and destruction help distribute resources efficiently and promote economic growth, this dynamic process can impose significant costs on individual workers. Displaced workers forfeit wages, sometimes for extended periods, and the stress of being out of work takes financial, physical and emotional tolls on the unemployed. The consequences of job loss may be especially serious for older workers, who may encounter more difficulty finding jobs than their younger counterparts.

¹ These estimates are based on the authors' calculations from Bureau of Labor Statistics (2010b).

² This calculation assumes that age- and sex-specific participation rates for workers age 16 to 49 continue at the average monthly rate that prevailed from January to October 2010.

This study uses recent longitudinal data from the Survey of Income and Program

Participation (SIPP) to examine how the incidence and consequences of job loss vary by age.

Models measure the likelihood that workers lose their jobs through no fault of their own and the likelihood that displaced workers become reemployed. We also compare earnings and other job characteristics before and after job loss for displaced workers who become reemployed. Final tabulations compare job search activities by age for unemployed workers. Results show that older workers are less likely than younger workers to lose their jobs, but only because they generally have spent more time with their employers. Older workers who become displaced spend more time unemployed than their younger counterparts and experience greater wage losses when they become reemployed. These findings suggest that some employers are reluctant to hire older workers, and raise questions about the employability of older adults.

Background

An extensive literature documents the patterns and consequences of job loss. Several recent studies use the Current Population Survey (CPS) to compare unemployment rates across different population groups (Acs and Alsalam 2010; Michealides and Mueser 2009; Elsby, Hobijn, and Sahin 2010; Shierholz 2010). Unemployment is more common among men than women, among the young than the old, among African Americans and Hispanic than non-Hispanic whites, and among workers with limited education than college graduates. These patterns have persisted for decades, although there is some evidence that the gender gap in unemployment has increased (Sahin, Song, and Hobijn 2010). Michaelides and Mueser (2009), however, find that unemployment is more prevalent among women than men (not less) after they control for gender differences in occupation and industry.

The unemployment rate measures the fraction of the labor force at a point in time that is not working and actively seeking work. A disadvantage of focusing on this measure is that it does not distinguish between the number of employed workers who become unemployed and the number of unemployed workers who become employed, both of which affect the number of workers who are unemployed. To disentangle these effects, several studies examine job loss among employed workers and reemployment rates among unemployed workers.

Much research on job loss and subsequent reemployment uses the Displaced Workers Survey (DWS), a supplement to the CPS that has been conducted every other year since 1984 (Farber 2005; Farber, Hall, and Pencavel 1993; Farber, Haltiwanger, and Abraham 1997; Gibbons and Katz 1991; Hu and Taber 2005; Munnell et al. 2006; Neal 1995; Podgursky and Swaim 1987; Rodriguez and Zavodny 2003). The DWS asks workers whether they have lost their jobs over the past three years. The survey captures only those worker terminations that result from employer business decisions that are unrelated to the worker's performance, such as job losses that result when a plant or company closes or moves, there is insufficient work, or a position or shift is abolished. Terminations for cause are not included.

Job loss patterns are similar to unemployment rate patterns. For example, job displacement increases during periods of high unemployment, and job loss rates are higher among workers with limited education than among their better-educated counterparts (Farber 2005; Munnell et al. 2006; Rodriguez and Zavodny 2003). However, the cyclical pattern of job loss is weaker for workers with more than a high school education, whose displacement rates do not increase as much during economic slowdowns as those for less-educated workers. Moreover, job loss has been increasing for well-educated workers, but not for those with no more than a high school diploma (Farber 2005; Munnell et al. 2006). Job loss is also more common among

working men than working women, those employed in manufacturing than services, and those with shorter job tenures (Munnell et al. 2006; Rodriguez and Zavodny 2003).

Education appears to increase the likelihood of becoming reemployed after a layoff (Farber 2005; Munnell et al. 2006). Post-displacement employment rates are also higher among men than women. The availability and generosity of unemployment benefits increases unemployment spells, although temporary benefit extensions have smaller effects (Card and Levine 2000; Katz and Meyer 1990; Lalive, van Ours, and Zweimuller 2006; Moffitt 1985; Mortensen 1977; Schwartz 2010).

Displaced workers who become reemployed generally earn less on the post-displacement job than the previous job, and the effects are often long-lasting. Using data from the DWS, Farber (2005) reports that average weekly earnings for full-time workers who lost their jobs between 2001 and 2003 and returned to full-time work were 14 percent lower on their postdisplacement job than their previous job. The average weekly earnings loss increases to 17 percent when the comparisons account for earnings growth that displaced workers would have experienced had they remained employed. Studies based on longitudinal household survey data show similar declines. Using Panel Survey of Income Dynamics (PSID) data, Stevens (1997) finds that earnings decline 25 percent in the first year after displacement and then recover somewhat, but earnings six years after the first observed job loss remain 9 percent lower for displaced workers than for otherwise identical workers who never lost their jobs. Ruhm (1991), who also examines PSID data, finds that earnings initially fall 16 percent and remain low indefinitely. Earnings losses tend to be larger among displaced workers with more job tenure and among those who change industries when they become reemployed (Carrington 1993; Farber 2005).

Several studies examine how job displacement affects future earnings by using administrative data, which often extend further than survey data and allow researchers to measure longer-term effects. For example, Jacobson, LaLonde, and Sullivan (1993) and Couch and Placzek (2010) use records on individual earnings and firm-level employment from state unemployment insurance systems to identify workers with employment breaks. They define displaced workers as those who separated from their employers during a "mass layoff," when the firm's employment level falls below 30 percent of the pre-layoff high. Most workers who separate when the firm experiences a mass layoff likely leave involuntarily, through no fault of their own. Results from these studies show large and persistent earnings losses associated with job displacement. Earnings losses among workers displaced in Pennsylvania in the early 1980s averaged 40 percent in the first year, and remained as high as 25 percent six years later (Jacobson, LaLonde, and Sullivan 1993). Job displacement reduced earnings less in Connecticut in the 1990s and early 2000s, when the economy was stronger than in the early 1980s, but the impact was still substantial. Initial earnings losses among displaced workers in Connecticut averaged about 30 percent, and were as much as 15 percent six years later (Couch and Placzek 2010). Other research based on California unemployment insurance records and national Social Security earnings records also finds that job loss substantially reduces subsequent earnings, and that the effects are long-lasting (von Wachter and Handwerker 2009; von Wachter, Song, and Manchester 2009).

In addition to having serious financial consequences, unemployment spells appear to complicate health problems and family relations. Job loss tends to disrupt marriages (Charles and Stephens 2004), increase smoking and drinking (Falba et al. 2005; Gallo et al. 2001), promote depression (Brand, Levy, and Gallo 2008), impair physical health, (Browning, Dano, and

Heinesen 2006; Gallo et al. 2006), and even increase mortality (Eliason and Storrie 2007; Sullivan and von Wachter 2009).³ These effects likely stem from the loss of income and health insurance coverage that often accompany unemployment, as well as the increased stress that usually results from job loss.

Effects of Job Displacement on Older Workers

By most measures, older adults fare well in the labor market. Workers age 50 and older generally earn more than younger workers, they are more likely to participate in retirement and health plans on the job, and they are less likely to find themselves unemployed. Several studies confirm that older workers are less likely to lose their jobs than younger workers, although there is some evidence that older workers' advantage may be eroding (Farber 2005; Munnell et al. 2006; Rodriguez and Zavodny 2003).

When older workers lose their jobs, however, it seems to take them longer to become reemployed than their younger counterparts. For example, unemployed adults age 55 to 64 averaged 29 weeks looking for work in 2009, compared with 23 weeks for those age 25 to 34 (Bureau of Labor Statistics 2010c). In March 2010, the John J. Heldrich Center for Workforce Development resurveyed a nationally representative sample of Americans who reported being unemployed in an August 2009 survey. Only 14 percent of those age 55 and older were

³ Salm (2009), however, concludes that job loss is associated with poor health outcomes because workers with health problems are more likely to lose their jobs than healthy workers, not because job loss causes health problems.

⁴ In 2009, median usual weekly earnings among full-time wage and salary workers was \$841 at age 55 to 64, compared with \$817 at age 35 to 44 and \$678 at age 25 to 34 (Bureau of Labor Statistics 2010a). Among full-time workers at 55 to 61, 61 percent participate in a retirement plan on the job (according to our estimates from 2009 SIPP data) and 83 percent receive employer-sponsored health insurance benefits (according to our estimates from 2008 American Community Survey data). Among full-workers age 25 to 34, by contrast, only 50 percent participate in a retirement plan and 70 percent receive employer-sponsored health insurance benefits. The October 2010 unemployment rate was 6.6 percent at age 55 to 64, compared with 7.9 percent at age 35 to 44 and 9.9 percent at age 25 to 34 (Bureau of Labor Statistics 2010b).

employed in March 2010, compared with 37 percent of those younger than 55 (Heidkamp, Corre, and Van Horn 2010). About a fifth (21 percent) of the older workers were still unemployed and had stopped looking for work, primarily because they had become discouraged by their poor job prospects. Earlier studies find that only 61 percent of displaced men and 55 percent of displaced women in their fifties are employed two years after a job loss (Chan and Stevens 2001), and that only about half of displaced workers in their early sixties become reemployed (Munnell et al. 2006). Another study reports that only about half of older job searchers find work (Maestas and Li 2006).

There is also evidence that older displaced workers suffer large earnings losses when they become reemployed. Using Health and Retirement Study data on displaced workers age 50 and older, Chan and Stevens (2001) report that job loss reduces earnings by 32 percent in the year following displacement, and that earnings remain between 23 and 29 percent lower six years later. Couch, Jolly, and Placzek (2009), using administrative earnings data from Connecticut unemployment insurance records, find that earnings losses following displacement increase with age. Their results show that in the first year after displacement, earnings losses average 20 percent at age 40, 26 percent at age 50, and 59 percent at age 62.

Data and Methods

This study builds on the displaced worker literature by using longitudinal household data from the 1996, 2001, and 2004 SIPP panels to compare job loss and reemployment for older and younger workers. The SIPP is a nationally representative longitudinal household survey conducted by the U.S. Census Bureau that collects data on employment, job characteristics, income, assets, program participation, health status, demographics, and other topics. Households

are surveyed every four months, but SIPP collects information from respondents on many topics, including employment and income, for each of the intervening three months as well as the survey month. The 1996 and 2004 panels consist of 12 waves (spanning four years), and the 2001 panel consists of nine waves spread over three years. We pool the 1996, 2001, and 2004 panels to maximize the number of respondents with job losses that we can observe. Our data, then, span the years 1996 to 2007, covering the 2001 recession but not the 2007-2009 recession. All financial amounts are expressed in constant 2009 dollars. We construct different samples for our job displacement analysis, reemployment analysis, and job comparisons before and after layoffs.

Although the SIPP has not been used in many previous studies of displaced workers, it provides a number of advantages over other commonly used data sources. Because it follows respondents over time and interviews them every four months, reported job loss in the SIPP is less subject to recall bias than in the DWS, which asks respondents to report job loss over the past three years and collects information on only one episode of job displacement during that period. Moreover, the DWS does not gather information on time-varying personal or job characteristics at the time respondents lose their jobs, making it difficult to measure the impact of variables such as health status on displacement. A drawback of administrative datasets is that job separations observed in those samples will include some voluntary quits, even during periods of mass layoffs, because unlike the SIPP administrative data do not generally include information about why workers left their employers. Also, administrative datasets do not usually include information of work hours, so observed earnings differences on pre- and post-displacement jobs will reflects changes in the hourly wage as well as changes in work hours. This may be

-

⁵ We do not use earlier panels because they lack reliable information on why respondents separate from their jobs.

⁶ Data for December 1995 was also collected for some 1996 panel respondents.

particularly problematic for older workers, many of whom substantially reduce their hours when they change jobs (Johnson, Kawachi, and Lewis 2009).

Job Loss

Our sample for examining job loss consists of person-month observations on wage and salary workers age 18 and older. Because an underlying motivation for our study is to understand better how employers treat older workers, we exclude self-employed workers. Respondents enter the sample when we first observe them employed and remain in the sample until they separate from their original employer, they drop out of the survey, or the survey ends. We include in the sample only the first observed job spell for each worker. We classify respondents as displaced workers if they report separating from their employer because of layoff, slack work, or employer bankruptcy, or because the employer sold the business. Observations on workers who remain with the original employer when last interviewed or who leave the employer for reasons other than displacement (such as voluntary quits) are treated as censored. The sample includes 72,155 male workers and 72,479 female workers.

We compare the cumulative probability of job displacement for employed men and women age 18 to 24, 25 to 34, 35 to 49, 50 to 61, and 62 or older, beginning when we first observe them at work. The age threshold for the oldest group is set to coincide with Social Security's early entitlement age.

We then estimate logit models of the log odds of job displacement. Because the data are arranged in person-wave format and respondents remain in the sample only when at risk of losing their jobs, the results can be interpreted as discrete-time hazard models of job displacement (Allison 1984). The advantage of these models is that they readily accommodate

time-varying predictors. We estimate separate models for men and women. The sample includes 1,743,700 person-month observations for men and 1,702,822 person-month observations for women.

The simplest specification controls only for age (indicators for age 18 to 24, 35 to 49, 50 to 61, and 62 or older, relative to workers 25 to 34) and year (indicators for 2001 to 2003 and 2004 to 2007, relative to 1996 to 2000). We then incrementally add demographic and job characteristics to the model to measure how these controls change the estimated impact of age on job loss hazards. Demographic controls include indicators for race and ethnicity, education, marital status, region of the U.S., and fair or poor health (relative to excellent, very good, or good health). Job characteristic measures include indicators for employer size (measured in broad categories as the number of workers employed at all of the employer's locations), part-time employment (measured as working fewer than 35 hours in a usual week), membership in a union or similar employee association, broad occupation, broad industry, and months of service with the current employer. The final specification adds interactions between age and year indicators, to measure whether the impact of age on job displacement changed over the 1996 to 2007 period.

Reemployment

The next stage of the study examines reemployment probabilities for displaced workers. Our sample consists of person-month observations on adults age 18 and older whom we observe becoming displaced from a wage and salary job. Respondents enter the sample when we first

⁷ Information on health status is collected in several topical SIPP modules, so it is not available every month. We use health status from the wave closest to the observation month.

observe them losing their job and remain in the sample until they become reemployed, they drop out of the labor force, they drop out of the survey, or the survey ends. The sample includes 3,567 displaced men and 3,042 displaced women.

We graph the cumulative probability of becoming reemployed for different age groups and then estimate logit models of the log odds of becoming reemployed. These hazard models, estimated separately for men and women, control for age, year, demographics, characteristics of the former job, economic status of the household, receipt of unemployment insurance benefits, and number of months unemployed. Demographic and economic controls include race and ethnicity, education, marital status, an indicator for being married to a spouse who is employed, region of the U.S., fair or poor health status, the natural log of monthly household income, and the natural log of monthly household wealth (including an indicator for negative household wealth). Characteristics of the previous job include the natural log of earnings in the last full month employed, employer size (measured as the number of employees at all locations), parttime employment, union membership, occupation, industry, and job tenure (in months) at the end of the last job. Our initial specification includes only age dummies. As with the job loss hazards, we then incrementally add controls to the equations to examine how they change the estimated impact of age. The sample includes 11,231 person-month observations for men and 9,517 person-month observations for women.

Job Comparisons

We examine several aspects of the pre-displacement job and post-displacement job for displaced workers who become reemployed, and compare changes by age. The sample includes 2,641 reemployed men and 2,093 reemployed women. We compute the percentage of reemployed men

and women who move into different occupations and industries on the new job, and the percentage who become self-employed. We also compare mean hours, the median hourly wage, and median monthly earnings on the new and old jobs.

We then estimate ordinary least squares (OLS) regressions of the difference in the hourly wage between the old and new jobs for reemployed men and women. Regressors include indicators for age, demographics (race and ethnicity, education, marital status, region of U.S.), employment of the spouse, the natural log of household wealth, union membership, self-employment, and year, all measured at the start of the new job. Additional specifications include measures of health status, employer size, part-time status, occupation, and industry at the end of the old job and the beginning of the new job.

Job Search

The final stage of our analysis examines job search activities by unemployed workers. Data come from the CPS, a nationally representative monthly household survey conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. The survey asks unemployed respondents whether they have engaged in any of a wide array of search activities over the past four weeks, including contacting employers, public employment agencies, private employment agencies, or friends and relatives. We compare responses by age, sex, and education. To maximize sample size, we pool observations from the March, April, May, and June 2010 surveys, a period of unusually high unemployment. The resulting sample includes observations on 17,750 unemployed workers.

Results

We first report our findings on the incidence of job displacement, show how it varies by age, and identify its correlates. We then turn to the consequences of job displacement, presenting reemployment rates for younger and older displaced workers, describing the factors related to reemployment, and comparing the new jobs obtained by reemployed displaced workers to their former positions. The final section shows how job search activities vary by age.

Job Displacement Results

For male wage and salary workers, the probability of becoming displaced from one's job generally declines with age. Over a twelve-month period, employed men age 18 to 24 are 49 percent more likely to lose their jobs through no fault of their own than those age 35 to 49 (5.8 vs. 3.9 percent) and 66 percent more likely than those age 50 to 61 (3.5 percent of whom become displaced) (figure 1). Age differences become less pronounced as the observation period lengthens, but are still substantial. After 36 months, for example, employed men age 18 to 24 are 31 percent more likely to become displaced from their jobs than their counterparts age 50 to 61.

Age differences in job displacement among men are less dramatic after age 25, although employment is somewhat more secure for men age 50 and older. Compared with men age 25 to 34, men age 50 to 61 are 15 percent less likely to lose their jobs over a 12-month period (4.1 vs. 3.5 percent) and 11 percent less likely over a 36-month period (7.5 vs. 6.7 percent).

Displacement rates are similar for men age 50 to 61 and those age 62 and older. Compared again with men age 25 to 34, those age 62 or older are 17 percent less likely to lose their jobs over a 12-month period (4.1 vs. 3.4 percent) and 16 percent less likely over a 36-month period (7.5 vs. 6.3 percent).

Age patterns in displacement rates are not as well defined for women. Overall, employed women are only about five-sixths as likely to lose their jobs as employed men. Between 1996 and 2007, only 6.4 percent of female wage and salary workers are displaced from their jobs over a 36-month period, compared with 7.5 percent of men. The likelihood that women become displaced in a 12-month period generally declines with age (but not dramatically) (figure 2). Employed women age 50 to 61 are 24 percent less likely than those age 25 to 34 to lose their jobs over 12 months (3.8 vs. 2.9 percent), and those age 62 or older are 21 percent less likely (3.8 vs. 3.0 percent). The age pattern becomes more complex when we consider longer follow-up periods, however. After 36 months, for example, workers age 35 to 49 and age 62 or older are about as likely to have lost their jobs (both 6.4 percent) as those age 18 to 24 (6.3 percent), and those age 25 to 34 are the most likely to have lost their jobs (6.7 percent). Displacement rates remain low throughout for female workers age 50 to 61, however. After 36 months, they are 13 percent less likely to lose their jobs than those age 25 to 34 (6.7 vs. 5.8 percent).

To understand better what drives these age patterns, we estimate discrete-time hazard models of job displacement. Table 1 describes the sample. Overall, we observe 16.7 percent of the wage and salary workers in the sample separating from their employers. Most of these separations are "voluntary"; only 26.9 percent result from job layoffs or slack work or follow the sale or bankruptcy of the employer's business. Displacements as a share of all separations ware highest at age 35 to 49 (when they peak at 36.5 percent) and are lowest at the ends of the age spectrum. As a share of all job separations, displacements fall to 16.1 percent for those age 18 to 24 (who exhibit high quit rates as they sample different jobs before settling into long-term employment) and 20.2 percent for those age 62 or older (many of whom choose to retire).

The most substantial difference between older and younger workers is average job tenure. At baseline, mean job tenure is 133.6 months (or 11.1 years) for workers age 50 to 61 and 128.5 months (10.7 years) for workers age 62 or older, compared with 37.1 months (3.1 years) for workers age 25 to 34 and 85.5 months (7.1 years) for workers age 35 to 49. Workers age 62 or older tend to be in worse health and have less education than younger workers. More than one-sixth of workers in the oldest age group, many of whom were born before 1934, did not complete high school. Workers age 50 to 61, however, are just as well educated as younger workers, although their health status is generally somewhat worse than that for younger workers. Additionally, workers older than 61 or younger than 25 are more likely than those of other ages to work for employers with fewer than 25 employees or to work part-time.

Table 2 reports results of our job displacement hazard models for male wage and salary workers. When controlling only for age and year (column 1), the model shows that displacement hazards fall sharply with age. Men age 50 to 61 are 21 percent less likely than those age 25 to 34 to be displaced from their jobs, and men age 62 or older are 23 percent less likely. Controlling for demographic and most job characteristics reduces the estimated job loss advantage somewhat for workers in their fifties and increases it somewhat for workers age 62 or older. When we add demographics, health status, monthly earnings, employer size, part-time employment, union membership, occupation, and industry to the specification (column 3), we find that workers age 50 to 61 are only 11 percent less likely than those age 25 to 34 to become displaced, whereas those age 62 or older are 30 percent less likely to lose their jobs.

Adding job tenure to the specification (column 4), however, transforms the estimated impact of age. Each additional year of service with the employer reduces the monthly job

⁸ These relative effects are derived by dividing the estimated marginal effect (0.049 in the case of workers age 50 to 61) by the mean of the dependent variable (0.231).

displacement hazard by about 5 percent. When we control for job tenure along with demographics and other job characteristics, we find that men age 50 to 61 are 24 percent *more* likely than those age 25 to 34 to lose their jobs. The turning point occurs at about 4.6 years of service. Our results indicate that a worker in his fifties with less than 4.6 years of job tenure is more likely to become displaced than an otherwise identical newly hired worker in his late twenties or early thirties; a 55-year-old worker with more than 4.6 years of job tenure is less likely to lose his job than the younger new hire. Controlling for length of service with the employer eliminates any significant job displacement differences between workers age 62 or older and those age 25 to 34.

Job displacements are significantly higher in 2001 to 2003, when the economy was in recession and then recovering, than in 1996 to 2000, when the economy was strong. When we interact age with year in our model (column 5), we find that being age 50 to 61 more strongly increases job displacement hazards in the 2001 to 2003 period than in 1996 to 2000. The interaction term of age 50 to 61 and year 2004 to 2007 is positive but not quite significant. It is unclear whether the effect in the early 2000s for older workers not yet eligible for Social Security marks the beginning of a longer-term trend of heightened labor market challenges for older workers, is related to the weak labor market that prevailed at that time, or is simply an anomaly. Other age-year interactions in the model are insignificant.

Many job and demographic characteristics besides age significantly influence job displacement. For example, the likelihood of job loss falls as educational attainment and monthly earnings increase. When we control only for demographic characteristics, college graduates are 43 percent less likely than those with only a high school diploma to be displaced from their job. When we control for service with the employer and other job characteristics, college graduates'

advantage falls to 18 percent (but remains highly statistically significant). African Americans are 10 percent more likely to lose their jobs than non-Hispanic whites when we control for job tenure and other characteristics. Married workers are generally less likely than others to become displaced, whereas those in fair or poor health are generally more likely to lose their jobs. Workers in the Northeast and West are significantly more likely to lose their jobs than those in the South and Midwest. Part-time work and employment with a small employer increase job displacement risks. Union members are less likely than others to lose their jobs, but the effect disappears when we control for job tenure.

Table 3 shows results for women from our job displacement hazard models. The findings are similar to those for men: older workers are significantly less likely than younger workers to lose their jobs, but the effect disappears when we account for length of service with the employer. Controlling for only age and year (column 1), the model shows that female wage and salary workers age 50 to 61 are 30 percent less likely to lose their jobs than those age 25 to 34, and workers age 62 or older are 13 percent less likely to lose their jobs. The difference between the two older age groups disappears when we control for demographic and job characteristics except tenure. In that specification (column 3), workers age 50 to 61 are 21 percent less likely to be displaced than those age 25 to 34, compared with 23 percent for workers age 62 or older. When we control for job tenure (column 4), there is no significant difference in job displacement among workers age 25 to 34, 35 to 49, 50 to 61, and 62 or older. (Workers age 18 to 24 are significantly less likely to lose their jobs than older workers when we control for demographics and job characteristics, including length of service with the employer.) As with men, women were more likely to lose their jobs in 2001 to 2003 than in 1996 to 2000, but the impact of age on job displacement does not vary significantly over time.

The impact of job and demographic factors other than age on women's job displacement is similar to what we find for men. Job loss is more common among African American women, women with limited education and earnings, and those in fair or poor health than other women. For example, women who did not complete high school are about 30 percent more likely to be displaced from their jobs than high school graduates. Among women, unlike men, Hispanics are significantly more likely to lose their jobs than non-Hispanic whites. Controlling for demographic and job characteristics including tenure, Hispanics are 10 percent more likely than non-Hispanic whites to lose their jobs, whereas African Americans are 25 percent more likely. Working part-time and working for a small employer also increase women's job loss risks. Female union members are less likely to lose their jobs than nonmembers, even after we control for job tenure.

Reemployment Results

Although displacement rates are lower for older workers than younger workers, older workers who lose their jobs spend more time unemployed than their younger counterparts. Figure 3 plots the reemployment hazard by age for men and women combined. (Because our sample of displaced workers is substantially smaller than our full sample of workers, we do not show reemployment rates separately for men and women.) Within six months of job loss, 76 percent of displaced workers age 18 to 24, 70 percent of those age 25 to 34, and 69 percent of those age 35 to 49 become reemployed. By contrast, only 58 percent of displaced workers age 50 to 61 and 48 percent of those age 62 or older find new jobs over the same period. The patterns are similar 12 months after job loss: 87 percent of displaced workers age 35 to 49 and 92 percent of those age

18 to 24 become reemployed, compared with only 79 percent of displaced workers age 50 to 61 and 63 percent of those age 62 or older.

Table 4 describes the sample we use to estimate our hazard models of reemployment. As we see in the sample of workers at risk of displacement, workers age 62 or older looking for reemployment tend to be less well educated and in worse health than younger job seekers. They are also less likely to have an employed spouse and more likely to have worked part-time on their previous job than their counterparts age 25 to 61. Mean monthly earnings at the end of the previous job are highest among those age 50 to 61. Workers age 50 and older hold much more household wealth than their younger counterparts. They have also spent much more time with their previous employer. About one-fifth of displaced workers age 25 to 61 receive unemployment insurance benefits in the first month after losing their job. Benefit receipt is less common among displaced workers older than 61 and especially among those younger than 25.

Table 5 shows results from our reemployment hazard models for displaced male wage and salary workers. Older displaced workers are much less likely to find new employment than their younger counterparts. When the specification controls only for age (column 1), we find that displaced male workers age 50 to 61 are 43 percent less likely each month to become reemployed than those age 25 to 34, and displaced male workers age 62 or older are 53 percent less likely. Adding other controls to the model does not affect these estimates much. When we hold other factors constant, such as other demographic characteristics, health status, economic factors, unemployment insurance receipt, time since job loss, and characteristics of the previous job (column 4), we find that men age 50 to 61 are 39 percent less likely to find new work than those age 25 to 34, and those age 62 or older are 51 percent less likely.

Recall that our sample excludes displaced workers once they stop looking for work and drop out of the labor force. The disadvantage experienced by older workers, especially those age 62 or older, in finding new employment appears much larger when we expand our sample to include labor force dropouts. (These results are available from the authors upon request.)

Other factors also significantly reduce displaced men's chances of finding new employment. Race, unemployment insurance benefit receipt, and health status appear to play large roles. African Americans are 32 percent less likely each month and Hispanics 25 percent less likely each month to find new work than non-Hispanic whites. Displaced workers receiving unemployment benefits are 38 percent less likely to become reemployed than otherwise identical workers who are not receiving benefits. Reemployment rates are 21 percent lower for those in fair or poor health than for their healthier counterparts. The long-term jobless face special difficulties in the labor market. Each month that displaced workers spend unemployed reduces their employment chances by 6 percent. Education, economic status, and the characteristics of the previous job do not appear to affect reemployment chances much.

Table 6 shows reemployment hazard model results for displaced female wage and salary workers. The findings are similar to those for men. When we do not control for any other factors (column 1), we find that displaced women age 50 to 61 are 23 percent less likely each month than those age 25 to 34 to find new employment, and displaced women age 62 or older are 59 percent less likely. The estimated effects diminish only slightly when we control for other factors (column 4), falling to 18 percent for workers age 50 to 61 and 50 percent for workers age 62 or older.

As we saw in the results for displaced men, African Americans, Hispanics, those with health problems, and those receiving unemployment insurance benefits are much less likely to become reemployed than other displaced workers. Monthly reemployment rates are 32 percent lower for African American women and 26 percent lower for Hispanic women than for non-Hispanic white women. Women receiving unemployment benefits are 43 percent less likely to become reemployed than nonrecipients. And reemployment rates diminish the longer women have been unemployed. Displaced female union members, unlike their male counterparts, are more likely to find new jobs than nonmembers, and unmarried women are more likely to become reemployed than married women. As with men, women's education and economic status do not have much impact on reemployment rates.

Comparisons of Old and New Jobs

We now compare selected characteristics of the old and new job for displaced workers who become reemployed. Overall about half of displaced workers in our sample (51 percent of men and 52 percent of women) move into new occupations, broadly defined, when they become reemployed. Similarly, 53 percent of reemployed men and 47 percent of reemployed women move into new industries, broadly defined. Occupational and industry mobility does not vary much by age among displaced men age 25 or older (table 7). Reemployed men age 18 to 24 are significantly more likely than older men to change occupation or industry, however. Among displaced women, those age 62 or older are significantly less likely than those age 25 to 34 to change occupation or industry after becoming reemployed, but there is not much difference in occupational or industry mobility between women age 50 to 61 and younger women.

Although many wage and salary workers transition into self-employment at older ages (Karoly and Zissimopoulos 2004), it is not very common following layoffs. Overall, 4.4 percent of men and 3.2 percent of women who find work after being displaced from a wage and salary

job move to self-employment. The share of displaced men transitioning into self-employment peaks at age 50 to 61, but the rate reaches only 6.0 percent (table 8). No displaced men age 62 or older in our small sample work for themselves when they became reemployed. Among reemployed displaced women, only 3.6 percent of those age 50 to 61 and 1.0 percent of those age 62 or older become self-employed.

When displaced workers become reemployed, the hours they work on their new jobs does not differ much from the hours they worked before being laid off. Hours fall slightly on the new job among those who worked full-time (35 or more hours) on the old job, and increase somewhat more among those who worked part-time on the old job (table 9). However, the differences are modest, even among older workers. Reemployed workers age 62 or older who were employed full-time on their old jobs average only 1.1 fewer hours per week on the post-displacement job than the pre-displacement job.

When older displaced workers find new jobs, they generally earn substantially less than they did on their former job. Median hourly wages for reemployed men are 20.1 percent lower on the new job than the old job for men age 50 to 61 and 35.6 percent lower on the new job for men age 62 or older (table 10). Younger displaced men fare much better when they find new employment. Compared to what they earned on the former job, median hourly earnings are only 4.2 percent lower for men age 35 to 49 and 1.5 percent lower for men age 25 to 34. Interestingly, the median hourly wage on the new job is lower for reemployed men age 50 to 61 than for those age 35 to 49. It also lower at age 62 or older than for any of our groups older than 24. Displaced men age 18 to 24 who become reemployed earn slightly more per hour on the new job than the old job.

Older displaced women also generally earn less on the new job when they become reemployed than they did on the old job, but wage losses after age 24 vary less by age for women than men. Median hourly earnings are 21.1 percent less on the new job than old job for women age 50 to 61 and 15.6 percent less for women age 62 or older. However, wage losses are also steep for younger women, with median wages falling 18.3 percent at age 25 to 34 and 10.2 percent at age 35 to 49. Median wages are 6.8 percent higher on the new job than old job for reemployed women age 18 to 24, however.

Table 11 compares median monthly earnings on the new and old jobs for displaced workers who become reemployed. As with hourly wages, monthly earnings losses are much more severe for older men than for their younger counterparts. Median monthly earnings are 20.6 percent lower on the new job than the old job for reemployed men age 50 to 61, and 30.0 percent lower for reemployed men age 62 or older. By contrast, median monthly earnings are only 8.0 percent lower on the new job than old job for men age 35 to 49 and only 3.0 percent lower for men age 25 to 34. For reemployed displaced women, median monthly earnings are substantially lower on the new job for all age groups older than 24, but women age 50 or older do not fare worse than women in their thirties and forties. Median monthly earnings are 17.2 percent lower on the new job for women age 50 to 61, compared with 15.8 percent lower for women age 35 to 49 and 27.1 percent lower for women age 25 to 34.

Table 12 reports OLS regressions of the change in hourly earnings for displaced male workers who become reemployed. Controlling for demographics, health status, job characteristics, and economic status, we find that hourly wage losses on the new job compared to the pre-displacement job are nearly four times as large for men age 50 to 61 as men age 25 to 34,

and six times as large for men age 62 or older. Wage losses increase with education and with length of service with the pre-displacement employer. Wage losses are also especially high among those who move from full-time to part-time employment.

Wage losses among displaced reemployed women do not vary significantly with age for women older than 24 (table 13). Displaced women age 18 to 24 who become reemployed experience much larger wage gains than older women. Women age 50 to 61 and those age 62 or older do not experience significantly larger losses than women in their thirties or forties, however.

Job Search Activities

Table 14 reports different job search activities pursued by unemployed workers over four-week periods in March, April, May, and June 2010. CPS data are available on nine different activities: (1) contacting employers directly, going for interviews, sending resumes, or completing job applications; (2) contacting public employment agencies; (3) contacting private employment agencies; (4) contacting school employment centers; (5) checking professional or union registers; (6) contacting family or friends about job openings; (7) placing or answering ads; (8) looking at ads; and (9) attending job training. When we include a catch-all "other" category, job searchers may engage in as many as 10 different activities. On average, however, job searchers pursued only 1.9 activities in any given month. About three-quarters of unemployed workers (77.1 percent) contacted employers directly or sent resumes or applications. The next most common activity was looking at ads (29.2 percent), followed by contacting friends and family (27.8 percent), contacting public employment agencies (19.6 percent) and placing or answering ads

^

⁹ The decline in hourly earned averaged \$0.86 for reemployed displaced male workers age 25 to 34, compared with \$3.24 (\$0.86+\$2.38) for those age 50 to 61 and \$5.40 (\$0.86+\$4.54) for those age 62 and older.

(16.3 percent). Few job searchers contacted private employment agencies, checked professional or union registers, or contacted school employment centers.

Job search activity does not vary much by age, except that unemployed workers age 62 or older tend to engage in fewer activities than their younger counterparts, averaging only 1.67 activities. Unemployed workers age 50 to 61 engage in more activities, averaging 2.02, than any other age group. The likelihood that job searchers contact employers falls steadily with age.

During a four-week period, 79 percent of unemployed workers age 25 to 34 contacted employers directly, compared with 72 percent of those age 50 to 61 and 62 percent of those age 62 or older. The oldest and youngest job searchers are less likely to contact public employment agencies than others, and those age 62 or older are much less likely to place or answer ads. Unemployed workers age 62 or older are just as likely as those age 50 to 61 or those age 35 to 49 to contact friends or relatives in their job search, and they are more likely than unemployed workers younger than 25 to do so.

Conclusions

The good news for older workers is that they are less likely to lose their jobs than younger workers. Between 1996 and 2007, men age 50 to 61 are 21 percent less likely than those age 25 to 34 to become displaced from their jobs each month, and men age 62 or older are 23 percent less likely. The story is similar for women: compared with those age 25 to 34, women age 50 to 61 are 30 percent less likely to lose their jobs and those age 62 or older are 13 percent less likely. The protective effects of age, however, derive solely from older workers' seniority with their employers. When we hold job tenure constant, we find that older workers are just as likely as younger workers to lose their jobs. In fact, men age 50 to 61 are significantly more likely to

become displaced from their jobs than men age 25 to 34 with the same length of service with the employer. As long-term employment relationships become less common even at older ages (Farber 2008), the existing layoff advantage for older workers may erode further.

When older workers lose their jobs they appear to have more trouble finding work than their younger counterparts. Displaced men age 50 to 61 are 39 percent less likely to become reemployed each month than those age 25 to 34, and men age 62 or older are 51 percent less likely. Displaced women are 18 percent less likely to find a new job at age 50 to 61 than at age 25 to 34, and 50 percent less likely at age 62 or older.

Although more research is needed to understand why older displaced workers are less likely to become reemployed than younger workers, there are several possible explanations. Employers may be reluctant to hire older workers because they fear they will not have time to recoup hiring and training costs before they retire. Surveys reveal that many employers believe older workers lack creativity and are generally unwilling to learn new things (Johnson 2009). Many also express concern that older workers are much more expensive than younger workers, perhaps because of rigid seniority wage structures or because pension and health benefits are more expensive at older ages (Scott, Berger, and Garen 1995). Our results, however, show that the median hourly wage for reemployed displaced workers is lower at age 50 to 61 than at age 35 to 49, suggesting that concern over the expense of hiring older workers may be overblown.

Another possible explanation for older workers' low reemployment probabilities is that older unemployed workers have higher reservation wages than their younger counterparts or engage in less intensive search activities. The older unemployed are wealthier than the younger unemployed, so they may be more willing to wait longer until the right job comes along, and perhaps put less effort into their job search. However, our evidence from the CPS does not

support the notion that older unemployed workers (at least up to age 61) are less diligent job searchers. Unemployed workers age 50 to 61 engage in just as many search activities as younger workers (although we are unable to measure the intensity of those activities). And even when we control for household wealth, we find that older displaced workers spend more time out of work than younger displaced workers.

Our reemployment findings are consistent with other evidence of employer reluctance to hire older workers. Several audit studies have found that employers are less likely to hire older workers than otherwise-identical younger workers (Lahey 2008; Rosen and Jerdee. 1977, 1995). In 2008, 15 percent of workers age 55 to 61 reported in the HRS that their employers give preference to younger workers over older workers in promotion decisions (Johnson 2010). Low skilled older men are especially likely to perceive this type of discrimination: 29 percent of men who did not complete high school and 20 percent of high school graduates claimed that their employers preferred younger workers, compared with only 13 percent of men who had attended college.

When older displaced workers find jobs, they typically experience sharp wage declines. For displaced men who become reemployed, the median hourly wage on the new job falls 20 percent below the median hourly wage on the old job at age 50 to 61. For those reemployed at age 62 or older, the new median wage falls 36 percent below the old median wage. By contrast, median wages fall only 4 percent at age 35 to 49 and 2 percent at age 25 to 34. Older displaced women who become reemployed also suffer sizeable wage losses, but the differences between older and younger workers are not as dramatic. Other studies have documented substantial wage losses for displaced older workers who become reemployed (Couch, Jolly, and Placzek 2009; von Wachter, Song, and Manchester 2009), but it is not yet clear what factors drive these losses.

Earnings may fall sharply for older workers because the human capital they developed on their old job was specific to that particular firm and not readily transferrable to other employers. Or the wage losses may reflect employer reluctance to hire older workers. Further research should be undertaken to understand what drives these substantial wage losses.

This study covers the period 1996 to 2007, when the economy was strong except for the mild recession of 2001. Age differences in layoff probabilities and the consequences of job loss could differ today, when the demand for labor is unusually weak. We find that the 2001 recession disproportionately increased layoffs for men age 50 to 61, relative to younger workers, and that pattern might be recurring today. Unemployment rates increased substantially for older workers in 2009, and rates for those age 65 and older increased much more rapidly during the Great Recession than in previous economic downturns (Johnson and Mommaerts 2010). More research will be necessary as data becomes available to uncover any new displacement patterns.

The employment challenges facing older workers have important implications for retirement policy. For example, the debate over increasing Social Security's retirement age is intensifying. This policy option becomes less desirable when the employment prospects for older Americans are poor. As concern over retirement income security mounts (Munnell, Webb, and Golub-Sass 2009), the option to delay retirement is increasingly viewed as the best way to increase retirement income (Butrica, Smith, and Steuerle 2006; Munnell and Sass 2008). This strategy, of course, depends crucially on older adult's ability to find work. Although many employed seniors may be able to work longer on their existing jobs, our results highlight the difficulty that older Americans without jobs face finding work.

References

- Acs, Gregory, and Nabeel Alsalam. 2010. "The Changing Profile of the Unemployed." Paper presented at the Thirty-Second Annual APPAM Research Conference, Boston.
- Allison, Paul D. 1984. Event History Analysis. Beverly Hills, CA: Sage.
- Brand, Jennie E., Becca R. Levy, and William T. Gallo. 2008. "Effects of Layoffs and Plant Closings on Depression Among Older Workers." *Research on Aging* 30(6): 701–21.
- Browning, Martin, Anne Moller Dano, and Eskil Heinesen. 2006. "Job Displacement and Stress-Related Health Outcomes." *Health Economics* 15(10): 1061–75.
- Bureau of Labor Statistics. 2010a. "Highlights of Women's Earnings in 2009." Washington, DC: U.S. Department of Labor.
- ——. 2010b. "Labor Force Statistics from the Current Population Survey." Washington, DC: U.S. Department of Labor. http://data.bls.gov:8080/PDQ/outside.jsp?survey=ln.
- ——. 2010c. "Unemployed persons by Age, Sex, Race, Hispanic or Latino Ethnicity, Marital Status, and Duration of Unemployment." Washington, DC: U.S. Department of Labor. ftp://ftp.bls.gov/pub/special.requests/lf/aat31.txt.
- Butrica, Barbara A., Karen E. Smith, and C. Eugene Steuerle. 2006. "Working for a Good Retirement." Washington, DC: The Urban Institute.
- Card, David, and Philip B. Levine. 2000. "Extended Benefits and the Duration of UI Spells: Evidence from the New Jersey Extended Benefit Program." *Journal of Public Economics* 78(1-2): 107–38.
- Carrington, William J. 1993. "Wage Losses for Displaced Workers: Is It Really the Firm That Matters?" *Journal of Human Resources* 28(3): 435-62.
- Chan, Sewin, and Ann Huff Stevens. 2001. "Job Loss and Employment Patterns of Older Workers." *Journal of Labor Economics* 19(2): 484–521.
- Charles, Kerwin Kofi, and Melvin Stephens Jr. 2004. "Job Displacement, Disability, and Divorce." *Journal of Labor Economics* 22(2): 489–522.
- Couch, Kenneth A., and Dana W. Placzek. 2010. "Earnings Losses of Displaced Workers Revisited." *American Economic Review* 100(1): 572–89.
- Couch, Kenneth A., Nicholas A. Jolly, and Dana W. Placzek. 2009. "Earnings Losses of Older Displaced Workers: A Detailed Analysis with Administrative Data." *Research on Aging* 31(1): 17–40.
- Eliason, Marcus, and Donald Storrie. 2007. "Does Job Loss Shorten Life?" Working Papers in Economics No. 153. Goteborg, Sweden: Goteborg University.

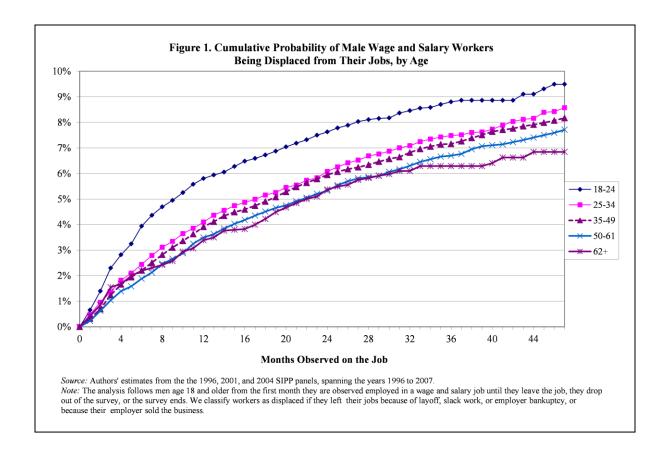
- Elsby, Michael W. L., Bart Hobijn, and Aysegul Sahin. 2010. "The Labor Market in the Great Recession." *Brookings Papers on Economic Activity* 2010 (Spring):1–48.
- Falba, Tracy, Hsun Mei Teng, Jody L. Sindelar, and William T. Gallo. 2005. "The effect of involuntary job loss on smoking intensity and relapse." *Addiction* 100(9): 1330–39.
- Farber, Henry S. 2005. "What Do We Know about Job Loss in the United States? Evidence from the Displaced Workers Survey, 1984-2004." Industrial Relations Section Working Paper No. 498. Princeton, NJ: Princeton University.
- ——. 2008. "Employment Insecurity: The Decline in Worker-Firm Attachment in the United States." Industrial Relations Section Working Paper No. 530. Princeton, NJ: Princeton University.
- Farber, Henry S., Robert Hall, and John Pencavel. 1993. "The Incidence and Costs of Job Loss: 1982-91." *Brookings Papers on Economic Activity: Microeconomics* 1993(1): 73–132.
- Farber, Henry S., John Haltiwanger, and Katherine G. Abraham. 1997. "The Changing Face of Job Loss in the United States, 1981-1995." *Brookings Papers on Economic Activity: Microeconomics* 1997: 55–142.
- Gallo, William T., Elizabeth H. Bradley, Michele Siegel, and Stanislav V. Kasl. 2001. "The Impact of Involuntary Job Loss on Subsequent Alcohol Consumption by Older Workers: Findings from the Health and Retirement Survey." *Journal of Gerontology: Social Sciences* 56(1): S3–9.
- Gallo, W. T., H. M. Teng, T. A. Falba, S. V. Kasl, H. M. Krumholz, and E. H. Bradley. 2006. "The Impact of Late Career Job Loss on Myocardial Infarction and Stroke: A 10-Year Follow Up Using the Health and Retirement Survey." *Occupational and Environmental Medicine* 63(10): 683–87.
- Gibbons, Robert, and Lawrence F. Katz. 1991. "Layoffs and Lemons." *Journal of Labor Economics* 9(4): 351–80.
- Heidkamp, Maria, Nicole Corre, and Carl E. Van Horn. 2010. "The 'New Unemployables:" Older Job Seekers Struggle to Find Work during the Great Recession." Issue Brief 25. Chestnut Hill, MA: Sloan Center on Aging and Work at Boston College.
- Hu, Luojia, and Christopher Taber. 2005. "Layoffs, Lemons, Race, and Gender." NBER Working Paper No. 11481. Cambridge, MA: National Bureau of Economic Research.
- Jacobson, Louis S., Robert J. LaLonde, and Daniel G. Sullivan. 1993. "Earnings Losses of Displaced Workers." *American Economic Review* 83(4): 685–709.
- Johnson, Richard W. 2009. "Managerial Attitudes Toward Older Workers: A Review of the Evidence." In *Aging and Work: Issues and Implications in a Changing Landscape*, edited by Sara J. Czaja and Joseph Sharit (185–208). Baltimore: Johns Hopkins University Press.

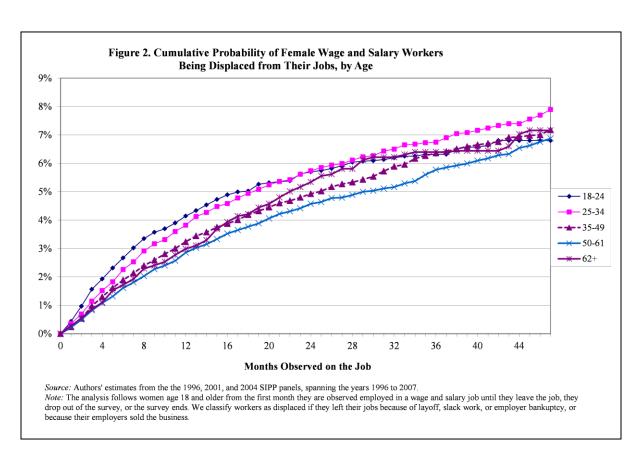
- ———. 2010. "Older Workers: Opportunities and Challenges." Washington, DC: The Urban Institute.
- Johnson, Richard W., and Gordon B. T. Mermin. 2009. "Financial Hardship Before and After Social Security's Early Eligibility Age." Washington, D.C.: The Urban Institute.
- Johnson, Richard W., and Corina Mommaerts. 2010. "How Did Older Workers Fare in 2009?" Washington, DC: The Urban Institute.
- Johnson, Richard W., Janette Kawachi, and Eric K. Lewis. 2009. "Older Workers on the Move: Recareering in Later Life." AARP Public Policy Report. Washington, DC: AARP.
- Karoly, Lynn A. and Julie Zissimopoulos. 2004. "Self-Employment Among Older U.S. Workers." *Monthly Labor Review* 127(7): 24–47.
- Katz, Lawrence F., and Bruce D. Meyer. 1990. "The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment." *Journal of Public Economics* 41(1): 45–72.
- Lahey, Joanna. 2008. "Age, Women, and Hiring: An Experimental Study." *Journal of Human Resources* 43(1): 30–56.
- Lalive, Rafael, Jan van Ours, and Josef Zweimuller. 2006. "How Changes in Financial Incentives Affect the Duration of Unemployment." *Review of Economic Studies* 73(4): 1009–38.
- Maestas, Nicole, and Xiaoyan Li. 2006. "Discouraged Workers? Job Search Outcomes of Older Workers." WP 2006-133. Ann Arbor, MI: Michigan Retirement Research Center.
- Michaelides, Marios, and Peter Mueser. 2009. "Recent Changes in the Characteristics of Unemployed Workers." http://economics.missouri.edu/working-papers/2009/WP0912_Mueser.pdf.
- Moffitt, Robert. 1985. "Unemployment Insurance and the Distribution of Unemployment Spells." *Journal of Econometrics* 28(1): 85–101.
- Mortensen, Dale T. 1977. "Unemployment Insurance and Job Search Decisions." *Industrial and Labor Relations Review* 30(4): 505–17.
- Munnell, Alicia H., and Steven A. Sass. 2008. Working Longer: The Solution to the Retirement Income Challenge. Washington, DC: Brookings Institution Press.
- Munnell, Alicia H., Anthony Webb, and Francesca Golub-Sass. 2009. "The National Retirement Risk Index: After the Crash." Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Munnell, Alicia H., Steven Sass, Mauricio Soto, and Natalia Zhivan. 2006. "Has the Displacement of Older Workers Increased?" CRR Working Paper No. 2006-17. Chestnut Hill, MA: Center for Retirement Research at Boston College.

- Neal, Derek. 1995. "Industry-Specific Human Capital: Evidence from Displaced Workers." *Journal of Labor Economics* 13(4): 653–77
- Podgursky, Michael, and Paul Swaim. 1987. "Job Displacement and Earnings Loss: Evidence from the Displaced Worker Survey." *Industrial and Labor Relations Review* 41(1): 17–29.
- Rodriguez, Daniel, and Madeline Zavodny. 2003. "Changes in the Age and Education Profile of Displaced Workers." *Industrial and Labor Relations Review* 56(3): 498–510.
- Rosen, Benson, and Thomas H. Jerdee. 1977. "Too Old or Not Too Old?" *Harvard Business Review* 55(6): 97–106.
- ——. 1995. "The Persistence of Age and Sex Stereotypes in the 1990s: The Influence of Age and Gender in Management Decisionmaking." Public Policy Institute Issue Brief No. 22. Washington, DC: AARP.
- Ruhm, Christopher J. 1991. "Are Workers Permanently Scarred by Job Displacements?" *American Economic Review* 81(1): 319–24.
- Sahin, Aysegul, Joseph Song, and Bart Hobijn. 2010. "The Unemployment Gender Gap during the 2007 Recession." *Current Issues in Economics and Finance* 16(2): 1–7.
- Salm, Martin. 2009. "Does Job Loss Cause III Health?" *Health Economics* 18(9): 1075–89.
- Schwartz, Jeremy. 2010. "Do Temporary Extensions to Unemployment Insurance Benefits Alter Search Behavior? The Effects of the Standby Extended Benefit Program in the United States." Baltimore: Loyola University Maryland.
- Scott, Frank A., Mark C. Berger, and John E. Garen. 1995. "Do Health Insurance and Pension Costs Reduce Job Opportunities of Older Workers?" *Industrial and Labor Relations Review* 48(4): 775-91.
- Shierholz, Heidi. 2010. "Job Growth Improves, but Pace Leaves Full Employment 20 years Away." Washington, DC: Economic Policy Institute.
- Stevens, Ann Huff. 1997. "Persistent Effects of Job Displacement: The Importance of Multiple Job Losses." *Journal of Labor Economics* 15(1): 165–88.
- Sullivan, Daniel, and Till M. von Wachter. 2009. "Job Displacement and Mortality: An Analysis Using Administrative Data." *Quarterly Journal of Economics* 124(3): 1265–1306.
- von Wachter, Till, and Elizabeth Weber Handwerker. 2009. "Variation in the Cost of Job Loss by Worker Skill: Evidence Using Matched Data from California, 1991-2000."

 Department of Economics Discussion Paper Series. New York: Columbia University.
- von Wachter, Till, Jae Song, and Joyce Manchester. 2009. "Long-Term Earnings Losses Due to Mass Layoffs during the 1982 Recession: An Analysis Using U.S. Administrative Data

from 1974 to 2004." Department of Economics Discussion Paper Series. New York: Columbia University.





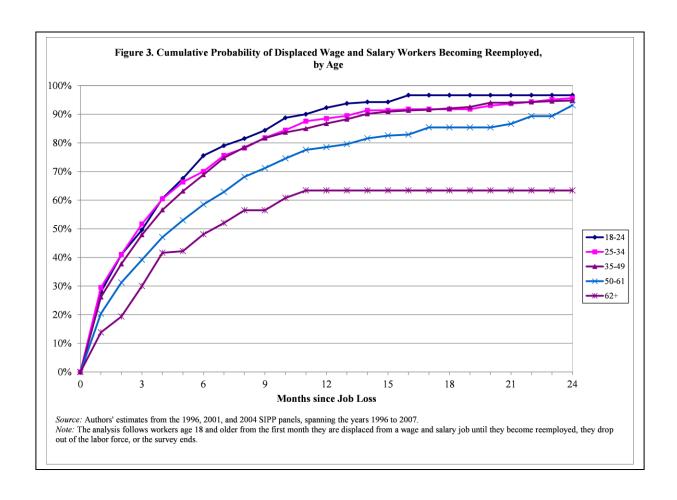


Table 1. Characteristics of Job Displacement Sample

						Age		
	All	Men	Women	18-24	25-34	35-49	50-61	62+
Pct. of workers whose jobs ended								
during the observation period	16.7	15.7	17.9	29.1	17.3	13.0	12.5	17.9
Pct. of workers displaced from their jobs during the observation period	4.5	4.9	4.1	4.7	4.6	4.8	4.0	3.6
	4.3	4.7	4.1	4.7	4.0	4.0	4.0	3.0
Pct. of job separators displaced from their jobs	26.9	31.1	23.1	16.1	26.7	36.5	32.2	20.2
Selected Characteristics of Initial Obse	ervation							
Age (%)								
18-24	21.9	22.0	21.8	100.0	0.0	0.0	0.0	0.0
25-34	23.8	24.5	23.0	0.0	100.0	0.0	0.0	0.0
35-49	34.3	33.7	34.9	0.0	0.0	100.0	0.0	0.0
50-61	15.7	15.4	15.9	0.0	0.0	0.0	100.0	0.0
61 and older	4.4	4.4	4.4	0.0	0.0	0.0	0.0	100.0
Race and ethnicity (%)								
African American	11.5	10.3	12.8	12.1	12.2	11.8	9.8	9.6
Hispanic	12.2	13.5	11.0	15.9	15.5	10.6	7.5	5.9
Non-Hispanic white	71.1	71.2	70.9	66.7	66.6	72.5	78.1	80.7
Other	5.2	5.1	5.3	5.3	5.8	5.1	4.5	3.8
Education (%)								
Did not complete high school	12.7	14.4	11.1	20.3	10.6	9.6	10.8	17.7
High school graduate	30.2	30.9	29.6	34.8	28.3	29.1	28.6	32.3
Some college	33.1	31.0	35.2	36.6	32.1	33.1	31.3	26.8
Four or more years of college	24.0	23.8	24.1	8.4	28.9	28.2	29.3	23.2
Marital status (%)								
Married	51.9	53.0	50.7	13.2	52.4	66.5	70.0	64.1
Widowed	2.0	0.8	3.2	0.1	0.2	1.2	4.6	18.4
Divorced or separated	13.2	11.0	15.4	2.1	11.0	18.9	19.4	13.5
Never married	33.0	35.2	30.6	84.7	36.5	13.5	6.0	4.0
Fair or poor health (%)	7.3	6.8	7.9	3.5	5.2	7.8	12.0	17.8
Mean monthly earnings (\$)	2,891	3,507	2,253	1,374	2,880	3,567	3,746	2,195
Employer size (no. of employees) (%)								
Less than 25	22.5	22.8	22.0	26.9	21.9	20.4	19.4	29.8
25 to 99	12.7	13.4	11.9	12.9	13.3	12.3	12.2	13.0
100 or more	64.9	63.7	66.1	60.2	64.7	67.3	68.4	57.2
Employed part-time (%)	24.7	16.8	32.8	46.2	16.9	16.1	17.2	52.2
Union member (%)	13.5	15.0	11.9	4.9	11.7	17.3	20.6	11.1
Mean job tenure (in months)	67.3	73.2	61.1	11.8	37.1	85.5	133.6	128.5
Number of workers	144,634	72,155	72,479	23,453	32,335	51,711	27,864	9,271

Source: Authors' estimates from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.

Note: The sample is restricted to workers age 18 and older employed in wage and salary jobs. Financial amounts are measured in constant 2009 dollars.

Table 2. Estimated Marginal Efrects on the Likelihood of Being Displaced from One's Job, Male Wage and Salary Workers Age 18 and Older

	(1)	(2)	(3)	(4)	(5)
Age					
18-24	0.121** (0.016)	0.062** (0.014)	0.036** (0.012)	0.013 (0.010)	0.011 (0.015)
[Reference: 25-34]					
35-49	-0.026** (0.009)	-0.016* (0.009)	-0.010 (0.008)	0.031** (0.007)	0.015 (0.012)
50-61	-0.049** (0.001)	-0.038** (0.010)	-0.025** (0.010)	0.055** (0.011)	0.022 (0.016)
62 and older	-0.052** (0.014)	-0.053** (0.014)	-0.069** (0.012)	0.005 (0.015)	-0.001 (0.023)
Race and ethnicity					
African American		0.009 (0.012)	0.032** (0.012)	0.022** (0.010)	0.021** (0.010)
Hispanic		0.012 (0.011)	0.008 (0.010)	-0.001 (0.008)	-0.001 (0.008)
[Reference: Non-Hispanic white]					
Other		0.010 (0.016)	0.014 (0.012)	-0.002 (0.012)	-0.002 (0.012)
Education					
Not high school graduate		0.067** (0.013)	0.028** (0.010)	0.020** (0.009)	0.021** (0.009)
[Ref: High school graduate]					
Some college		-0.035** (0.008)	-0.010 (0.008)	-0.012* (0.006)	-0.012* (0.006)
4 or more years of college		-0.099** (0.001)	-0.037** (0.010)	-0.042** (0.008)	-0.042** (0.008)
Marital status					
[Reference: Married]					
Widowed		0.073 (0.045)	0.060 (0.040)	0.060 (0.035)	0.035** (0.010)
Divorced or separated		0.084** (0.013)	0.065** (0.012)	0.040 (0.010)	0.022** (008)
Never married		0.053** (0.010)	0.033** (0.009)	0.021** (0.008)	0.022** (0.008)
Region					
Northeast		0.036** (0.011)	0.047** (0.011)	0.037** (0.009)	0.037** (0.009)
[Reference: Midwest]					
South		0.0008 (0.009)	0.002 (0.008)	-0.003 (0.007)	-0.003 (0.007)
West		0.034** (0.011)	0.040** (0.010)	0.025** (0.009)	0.025** (0.008)
Fair or poor health		0.049** (0.015)	0.027** (0.013)	0.019* (0.011)	0.019* (0.011)

Table 2 (continued).

	(1)	(2)	(3)	(4)	(5)
Natural log of monthly earnings			-0.023** (0.002)	-0.017** (0.001)	-0.017** (0.001)
Employer size (no. of employees)					
Less than 25			0.067** (0.009)	0.044** (0.008)	0.044** (0.008)
25 to 99			0.049** (0.011)	0.028** (0.009)	0.028** (0.009)
[Reference: 100 or more]					
Part-time employment			0.054** (0.011)	0.028** (0.009)	0.028** (0.009)
Union member			-0.042** (0.008)	-0.001 (0.008)	-0.001 (0.008)
Job tenure (months)				-0.001** (0.00004)	-0.001** (0.00004)
Year [Reference: 1996-2000]					
2001-2003	0.094** (0.010)	0.090** (0.010)	0.086** (0.009)	0.067** (0.008)	0.046** (0.014)
2004-2007	-0.009 (0.009)	-0.003 (0.008)	-0.007 (0.008)	-0.011* (0.007)	-0.026** (0.013)
Year-Age Interactions					
Age 18-24*Year 2001-2003					0.002 (0.020)
Age 35-49*Year 2001-2003					0.027 (0.018)
Age 50-61*Year 2001-2003					0.063** (0.027)
Age 62+* Year 2001-2003					-0.014 (0.031)
Age 18-24*Year 2004-2007					0.004 (0.021)
Age 35-49*Year 2004-2007					0.023 (0.019)
Age 50-61*Year 2004-2007					0.032 (0.024)
Age 62+* Year 2004-2007					0.034 (0.038)
Occupation and industry controls	No	No	Yes	Yes	Yes
N	1,743,700	1,743,700	1,743,700	1,743,700	1,743,700
Pseudo r-squared	0.006	0.013	0.027	0.041	0.041
Mean of dep. variable (times 100)	0.231	0.231	0.231	0.231	0.231

Source: Authors' tabulations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996-2007.

Notes: Cell entries show the percentage point impact of each variable on the likelihood of losing one's job because of layoff, slack work, or employer bankruptcy, or because the employer sold the business, based on discrete-time hazard models. Standard errors are in parenetheses. Models are estimated as logits. All financial amounts are measured in constant 2009 dollars. ** p < .05; * .10 > p > .05

Table 3. Estimated Marginal Efrects on the Likelihood of Being Displaced from One's Job, Female Wage and Salary Workers Age 18 and Older

	(1)	(2)	(3)	(4)	(5)
Age					
18-24	0.047**	0.011	-0.007	-0.017**	-0.010
	(0.013)	(0.012)	(0.010)	(0.008)	(0.014)
[Reference: 25-34]					
35-49	-0.030**	-0.030**	-0.019**	0.008	0.015
	(0.008)	(0.008)	(0.007)	(0.007)	(0.011)
50-61	-0.059**	-0.060**	-0.042**	0.011	0.023
	(0.009)	(0.008)	(0.008)	(0.009)	(0.015)
62 and older	-0.026*	-0.042**	-0.045**	0.020	0.018
	(0.014)	(0.012)	(0.010)	(0.014)	(0.023)
Race and ethnicity					
African American		0.031**	0.055**	0.050**	0.050**
		(0.010)	(0.010)	(0.009)	(0.009)
Hispanic		0.035**	0.028**	0.020**	0.020**
		(0.011)	(0.010)	(0.009)	(0.009)
[Reference: Non-Hispanic white]					
Other		0.001	-0.004	-0.011	-0.012
		(0.014)	(0.012)	(0.011)	(0.011)
Education					
Not high school graduate		0.120**	0.079**	0.061**	0.061**
		(0.015)	(0.013)	(0.011)	(0.011)
[Reference: High school graduate]					
Some college		-0.030**	-0.010	-0.011*	-0.011*
20000		(0.007)	(0.007)	(0.006)	(0.006)
4 or more years of college		-0.092**	-0.036**	-0.037**	-0.037**
		(0.007)	(0.008)	(0.007)	(0.007)
Marital Status					
[Reference: Married]					
Widowed		-0.003	0.0003	-0.004	-0.004
Widowed		(0.017)	(0.016)	(0.014)	(0.014)
Divorced or separated		0.044**	0.044**	0.032**	0.032**
Divorced of separated		(0.010)	(0.009)	(0.008)	(0.008)
Never married		0.032**	0.031**	0.026**	0.026**
Never married		(0.010)	(0.009)	(0.008)	(0.008)
Region		(*** *)	(******)	(*****)	(,
<u> </u>		0.046**	0.040**	0.042**	0.042**
Northeast		0.046** (0.011)	0.049** (0.010)	0.042** (0.009)	(0.009)
[Deference Midwest]					
[Reference: Midwest]		0.017*	0.011	0.007	0.007
South		0.017*	0.011	0.007	0.007
***		(0.009)	(0.008)	(0.007)	(0.007)
West		0.062**	0.059**	0.046**	0.046**
		(0.011)	(0.010)	(0.009)	(0.009)
Fair or poor health		0.058**	0.043**	0.034**	0.034**
		(0.013)	(0.011)	(0.010)	(0.010)

Table 3 (continued).

	(1)	(2)	(3)	(4)	(5)
Natural log of earnings			-0.015** (0.001)	-0.011** (0.001)	-0.011** (0.001)
Employer size (no. of employees)					
Fewer than 25			0.052** (0.008)	0.037** (0.007)	0.037** (0.007)
25 to 99			0.029** (0.009)	0.017** (0.008)	0.017** (0.008)
[Reference: 100 or more]					
Part-time employment			0.033** (0.007)	0.018** (0.006)	0.018** (0.006)
Union member			-0.096** (0.007)	-0.070** (0.007)	-0.070** (0.007)
Job tenure (months)				-0.001** (0.0004)	-0.001** (0.0004)
Year					
[Reference: 1996-2000]					
2001-2003	0.079** (0.010)	0.076** (0.009)	0.073** (0.008)	0.059** (0.007)	0.067** (0.015)
2004-2007	-0.005 (0.008)	0.006 (0.008)	-0.0004 (0.008)	-0.005 (0.007)	0.004 (0.013)
Year-Age Interactions					
Age 18-24*Year 2001-2003					-0.010 (0.019)
Age 35-49*Year 2001-2003					-0.006 (0.015)
Age 50-61*Year 2001-2003					-0.016 (0.017)
Age 62+* Year 2001-2003					-0.007 (0.028)
Age 18-24*Year 2004-2007					-0.010 (0.019)
Age 35-49*Year 2004-2007					-0.014 (0.015)
Age 50-61*Year 2004-2007					-0.016 (0.017)
Age 62+* Year 2004-2007					0.010 (0.029)
Occupation and industry controls	No	No	Yes	Yes	Yes
N	1,702,822	1,702,822	1,702,822	1,702,822	1,702,822
Pseudo r-squared	0.004	0.015	0.033	0.042	0.042
Mean of dependent variable (times 100)	0.199	0.199	0.199	0.199	0.199

Source: Authors' tabulations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996-2007.

Notes: Cell entries show the percentage point impact of each variable on the likelihood of losing one's job because of layoff, slack work, or employer bankruptcy, or because the employer sold the business, based on discrete-time hazard models. Standard errors are in parentheses. Models are estimated as logits. All financial amounts are measured in constant 2009 dollars. ** p < .05; * .10 > p > .05

Table 4. Characteristics of Reemployment Sample

433	3.5	_	10.24	25.24	Age	5 0.61	
All	Men	Women	18-24	25-34	35-49	50-61	62+
56.7	61.9	50.2	51.7	61.7	61.7	52.0	25.8
51.9	58.9	43.5	48.9	57.9	57.0	45.5	22.6
							21.2
							40.3
							37.0
46.8	43.7	50.7	66.0	57.8	48.7	38.1	0.0
							0.0
							0.0
							0.0
							0.0
4.7	4.2	5.3	0.0	0.0	0.0	0.0	100.0
12.9	11.2	15.0	14.3	14.6	12.9	9.2	12.5
16.6	17.1	16.0	24.3	21.1	14.2	11.2	5.3
65.3	66.5	63.8	57.1	59.8	67.0	74.4	76.7
5.2	5.2	5.2	4.3	4.5	5.9	5.3	5.5
16.9	17.7	15.8	25.7	15.4	13.9	14.8	23.9
34.9	35.9	33.7	42.1	34.1	33.9	31.0	35.2
31.0	29.4	33.1	29.2	31.4	31.5	31.9	27.9
17.2	17.0	17.4	2.9	19.1	20.6	22.2	13.0
50.4	50.4	50.5	12.6	50.4	59.9	66.2	53.7
2.2	1.3	3.4	0.0	0.2	1.1	4.5	21.0
16.0	14.0	18.5	2.9	10.6	21.7	22.3	22.3
31.4	34.4	27.7	84.5	38.8	17.3	7.0	3.0
36.4	31.9	42.1	8.6	37.7	46.5	44.4	20.2
9.2	8.2	10.6	3.8	6.4	9.9	14.6	18.9
17.4	18.0	16.5	7.0	18.2	21.0	19.5	13.7
2,638	3,022	2,155	1,362	2,486	3,059	3,377	1,971
5,977	6,017	5,927	5,428	5,373	6,470	6,652	4,680
147,407	150,984	142,910	116,027	89,404	145,080	232,462	273,219
27.6	29.1	25.7	31.3	27.7	26.7	23.9	34.2
14.5	15.8	12.7	13.2	14.3	15.1	14.8	13.1
58.0	55.1	61.6	55.5	58.0	58.3	61.3	52.7
22.8	16.7	30.5	41.0	16.4	18.0	17.5	48.2
9.4	12.5	5.6	4.0	8.0	11.4	12.8	8.3
59.5	60.1	58.7	13.8	36.3	67.9	106.3	107.6
	57.9 63.9 64.2 46.8 16.8 24.1 37.6 16.8 4.7 12.9 16.6 65.3 5.2 16.9 34.9 31.0 17.2 50.4 2.2 16.0 31.4 36.4 9.2 17.4 2,638 5,977 147,407 27.6 14.5 58.0 22.8 9.4	56.7 61.9 51.9 58.9 57.9 62.2 63.9 67.4 64.2 69.0 46.8 43.7 16.8 18.0 24.1 23.9 37.6 37.0 16.8 16.8 4.7 4.2 12.9 11.2 16.6 17.1 65.3 66.5 5.2 5.2 16.9 17.7 34.9 35.9 31.0 29.4 17.2 17.0 50.4 50.4 2.2 1.3 16.0 14.0 31.4 34.4 36.4 31.9 9.2 8.2 17.4 18.0 2,638 3,022 5,977 6,017 147,407 150,984 27.6 29.1 14.5 15.8 58.0 55.1 22.8 16.7 9.4 12.5	56.7 61.9 50.2 51.9 58.9 43.5 57.9 62.2 52.5 63.9 67.4 59.1 64.2 69.0 58.1 46.8 43.7 50.7 16.8 18.0 15.3 24.1 23.9 24.4 37.6 37.0 38.3 16.8 16.8 16.7 4.7 4.2 5.3 12.9 11.2 15.0 16.6 17.1 16.0 65.3 66.5 63.8 5.2 5.2 5.2 16.9 17.7 15.8 34.9 35.9 33.7 31.0 29.4 33.1 17.2 17.0 17.4 50.4 50.4 50.5 2.2 1.3 3.4 16.0 14.0 18.5 31.4 34.4 27.7 36.4 31.9 42.1	56.7 61.9 50.2 51.7 51.9 58.9 43.5 48.9 57.9 62.2 52.5 49.9 63.9 67.4 59.1 55.4 64.2 69.0 58.1 62.5 46.8 43.7 50.7 66.0 16.8 18.0 15.3 100.0 24.1 23.9 24.4 0.0 37.6 37.0 38.3 0.0 16.8 16.8 16.7 0.0 4.7 4.2 5.3 0.0 12.9 11.2 15.0 14.3 16.6 17.1 16.0 24.3 65.3 66.5 63.8 57.1 5.2 5.2 5.2 4.3 16.9 17.7 15.8 25.7 34.9 35.9 33.7 42.1 31.0 29.4 33.1 29.2 17.2 17.0 17.4 2.9 5	56.7 61.9 50.2 51.7 61.7 51.9 58.9 43.5 48.9 57.9 57.9 62.2 52.5 49.9 67.2 63.9 67.4 59.1 55.4 65.8 64.2 69.0 58.1 62.5 64.5 46.8 43.7 50.7 66.0 57.8 16.8 18.0 15.3 100.0 0.0 24.1 23.9 24.4 0.0 100.0 37.6 37.0 38.3 0.0 0.0 4.7 4.2 5.3 0.0 0.0 4.7 4.2 5.3 0.0 0.0 12.9 11.2 15.0 14.3 14.6 16.6 17.1 16.0 24.3 21.1 65.3 66.5 63.8 57.1 59.8 5.2 5.2 5.2 4.3 45. 16.9 17.7 15.8 25.7 15.4 <td>All Men Women 18-24 25-34 35-49 56.7 61.9 50.2 51.7 61.7 61.7 51.9 58.9 43.5 48.9 57.9 57.0 57.9 62.2 52.5 49.9 67.2 60.5 63.9 67.4 59.1 55.4 65.8 71.1 64.2 69.0 58.1 62.5 64.5 67.7 46.8 43.7 50.7 66.0 57.8 48.7 16.8 18.0 15.3 100.0 0.0 0.0 24.1 23.9 24.4 0.0 100.0 0.0 37.6 37.0 38.3 0.0 0.0 0.0 4.7 4.2 5.3 0.0 0.0 0.0 4.7 4.2 5.3 0.0 0.0 0.0 5.2 5.2 5.2 4.3 4.5 5.9 16.9 17.7 15.8 25.7</td> <td>All Men Women 18-24 25-34 35-49 50-61 56.7 61.9 50.2 51.7 61.7 61.7 52.0 51.9 58.9 43.5 48.9 57.9 57.0 45.5 57.9 62.2 52.5 49.9 67.2 60.5 57.3 63.9 67.4 59.1 55.4 65.8 71.1 57.7 64.2 69.0 58.1 62.5 64.5 67.7 61.8 46.8 43.7 50.7 66.0 57.8 48.7 38.1 16.8 18.0 15.3 100.0 0.0 0.0 0.0 24.1 23.9 24.4 0.0 100.0 0.0 0.0 37.6 37.0 38.3 0.0 0.0 0.0 0.0 4.7 4.2 5.3 0.0 0.0 0.0 0.0 12.9 11.2 15.0 14.3 14.6 12.9</td>	All Men Women 18-24 25-34 35-49 56.7 61.9 50.2 51.7 61.7 61.7 51.9 58.9 43.5 48.9 57.9 57.0 57.9 62.2 52.5 49.9 67.2 60.5 63.9 67.4 59.1 55.4 65.8 71.1 64.2 69.0 58.1 62.5 64.5 67.7 46.8 43.7 50.7 66.0 57.8 48.7 16.8 18.0 15.3 100.0 0.0 0.0 24.1 23.9 24.4 0.0 100.0 0.0 37.6 37.0 38.3 0.0 0.0 0.0 4.7 4.2 5.3 0.0 0.0 0.0 4.7 4.2 5.3 0.0 0.0 0.0 5.2 5.2 5.2 4.3 4.5 5.9 16.9 17.7 15.8 25.7	All Men Women 18-24 25-34 35-49 50-61 56.7 61.9 50.2 51.7 61.7 61.7 52.0 51.9 58.9 43.5 48.9 57.9 57.0 45.5 57.9 62.2 52.5 49.9 67.2 60.5 57.3 63.9 67.4 59.1 55.4 65.8 71.1 57.7 64.2 69.0 58.1 62.5 64.5 67.7 61.8 46.8 43.7 50.7 66.0 57.8 48.7 38.1 16.8 18.0 15.3 100.0 0.0 0.0 0.0 24.1 23.9 24.4 0.0 100.0 0.0 0.0 37.6 37.0 38.3 0.0 0.0 0.0 0.0 4.7 4.2 5.3 0.0 0.0 0.0 0.0 12.9 11.2 15.0 14.3 14.6 12.9

Source: Authors' estimates from 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007

Note: The sample is restricted to workers age 18 and older who were displaced from a wage and salary job. Financial amounts are measured in constant 2009 dollars.

Table 5. Marginal Impact on the Likelihood of Becoming Reemployed, for Displaced Male Wage and Salary Workers Age 18 and Older

	(1)	(2)	(3)	(4)
Age				
18-24	-0.004	-0.007	-0.010	-0.003
	(0.012)	(0.012)	(0.012)	(0.013)
[Reference: 25-34]				
35-49	-0.027**	-0.023**	-0.019**	-0.020**
	(0.009)	(0.009)	(0.010)	(0.010)
50-61	-0.086**	-0.080**	-0.077**	-0.077**
	(0.009)	(0.010)	(0.010)	(0.010)
62 and older	-0.104**	-0.100**	-0.100**	-0.100**
	(0.014)	(0.014)	(0.014)	(0.014)
Race and ethnicity				
African American			-0.067**	-0.064**
			(0.010)	(0.010)
Hispanic			-0.050**	-0.050**
			(0.010)	(0.010)
[Reference: Non-Hispanic white]				
Other race			-0.039**	-0.039**
			(0.014)	(0.014)
Education				
Not high school graduate			-0.008	-0.007
			(0.011)	(0.011)
[Reference: high school graduate]				
Some college			0.014	0.015
Ç			(0.009)	(0.010)
Four or more years of college			0.004	0.007
			(0.012)	(0.014)
Marital Status				
[Reference: Married]				
Widowed			0.002	0.007
Widowed			(0.037)	(0.037)
Divorced or separated			-0.028**	-0.025**
Divorced of Separated		_	(0.012)	(0.012)
Never married			-0.036**	-0.031**
never married			(0.011)	(0.011)
S pouse is employed			0.004	0.006
s pouse is emproyeu			0.004	0.000

Table 5 (continued).

	(1)	(2)	(3)	(4)
Region				
Northeast			-0.016 (0.011)	-0.018* (0.011)
[Reference: Midwest]				
South			0.008 (0.010)	0.008 (0.010)
West			0.022* (0.011)	0.023* (0.012)
Fair or poor health			-0.043** (0.012)	-0.041** (0.012)
Months since job loss			-0.011** (0.001)	-0.011** (0.001)
Receiving unemployment insurance benefits			-0.076** (0.008)	-0.075** (0.008)
Natural log of household income			-0.002 (0.002)	-0.002 (0.002)
Natural log of household wealth			0.002 (0.002)	0.002 (0.002)
Indicator for negative household wealth			0.050* (0.030)	0.050* (0.030)
Natural log of earnings last month employed				0.001 (0.003)
Employer size (no. of employees)				
Fewer than 25				-0.002 (0.009)
25 to 99				-0.001 (0.011)
[Reference: 100 or more]				
Part-time work				-0.011 (0.011)
Union member				0.010 (0.012)
Job tenure in months, end of last job				0.00001 (0.0001)

Table 5 (continued).

	(1)	(2)	(3)	(4)
Year				
[Reference: 1996]				
1007		0.012	0.004	0.004
1997		-0.013	0.004	0.004
1000		(0.015)	(0.015)	(0.015)
1998		-0.008	0.013	0.015
		(0.018)	(0.019)	(0.019)
1999		-0.054**	-0.035*	-0.033*
		(0.017)	(0.018)	(0.019)
2000		-0.066*	-0.057	-0.057
		(0.039)	(0.040)	(0.040)
2001		-0.022*	-0.021	-0.019
		(0.013)	(0.013)	(0.013)
2002		-0.074**	-0.049**	-0.050**
		(0.011)	(0.012)	(0.012)
2003		-0.087**	-0.057**	-0.057**
		(0.012)	(0.013)	(0.013)
2004		-0.034**	-0.037**	-0.045**
		(0.013)	(0.013)	(0.013)
2005		-0.058**	-0.044**	-0.051**
		(0.012)	(0.013)	(0.013)
2006		-0.054**	-0.023	-0.031*
		(0.015)	(0.017)	(0.017)
2007		-0.056**	-0.023	-0.027
		(0.023)	(0.027)	(0.026)
Occupation and industry controls	No	No	No	Yes
N	11231	11231	11231	11230
Pseudo R-squared	0.009	0.016	0.045	0.048
Mean of dependent variable	0.198	0.198	0.198	0.198
ivican of dependent variable	0.170	0.170	0.170	0.170

Source: Authors' tabulations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996-2007.

Notes: Cell entries show the impact of each variable on the likelihood of becoming reemployed, based on discrete-time hazard models. Models are estimated as logits. All financial amounts are measured in constant 2009 dollars.

^{**} p < .05; * .10 > p > .05

Table 6. Marginal Impact on the Likelihood of Becoming Reemployed, for Displaced Female Wage and Salary Workers Age 18 and Older

	(1)	(2)	(3)	(4)
Age				
18-24	0.031** (0.014)	0.029** (0.014)	0.003 (0.013)	0.0004 (0.013)
[Reference: 25-34]				
35-49	-0.015 (0.009)	-0.013 (0.009)	-0.009 (0.009)	-0.004 (0.010)
50-61	-0.037** (0.010)	-0.037** (0.010)	-0.033** (0.011)	-0.028** (0.011)
62 and older	-0.094** (0.012)	-0.091** (0.013)	-0.088** (0.012)	-0.080** (0.014)
Race and ethnicity				
African American			-0.048** (0.009)	-0.051** (0.009)
Hispanic			-0.047** (0.010)	-0.042** (0.010)
[Reference: Non-Hispanic white]				
Other race			-0.025* (0.014)	-0.025* (0.014)
Education				
Not high school graduate			-0.017 (0.011)	-0.016 (0.011)
[Reference: high school graduate]				
Some college			0.006 (0.009)	-0.003 (0.009)
Four or more years of college			0.006 (0.011)	-0.008 (0.012)
Marital Status				
[Reference: Married]				
Widowed			0.051 (0.032)	0.043 (0.031)
Divorced or separated			0.046** (0.018)	0.039** (0.017)
Never married			0.041** (0.018)	0.037** (0.018)
S pouse is employed			0.017 (0.015)	0.013 (0.015)

Table 6 (continued).

	(1)	(2)	(3)	(4)
Region				
Northeast			0.007 (0.011)	0.006 (0.011)
[Reference: Midwest]				
South			0.009 (0.010)	0.009 (0.010)
West			0.004 (0.011)	0.0004 (0.011)
Fair or poor health			-0.024** (0.011)	-0.022** (0.011)
Months since job loss			-0.006** (0.001)	-0.006** (0.001)
Receiving unemployment insurance benefits			-0.068** (0.007)	-0.069** (0.007)
Natural log of household income			0.001 (0.002)	0.001 (0.002)
Natural log of household wealth			-0.001 (0.002)	-0.002 (0.002)
Indicator for negative household wealth			-0.029 (0.024)	-0.033 (0.023)
Natural log of earnings last month employed				0.004 (0.003)
Employer size (no. of employees)				
Fewer than 25				0.008 (0.009)
25 to 99				-0.011 (0.011)
[Reference: 100 or more]				
Part-time work				-0.012 (0.009)
Union member				0.038** (0.019)
Job tenure in months, end of last job				-0.0001** (0.000)

Table 6 (continued).

	(1)	(2)	(3)	(4)
Year				
[Reference: 1996]				
1997		0.006 (0.015)	0.011 (0.015)	0.013 (0.015)
1998		-0.011 (0.017)	0.004 (0.018)	0.011 (0.018)
1999		-0.009 (0.020)	0.010 (0.021)	0.009 (0.021)
2000		-0.138** (0.018)	-0.131** (0.017)	-0.130** (0.016)
2001		-0.017 (0.013)	-0.014 (0.013)	-0.016 (0.013)
2002		-0.060** (0.011)	-0.037** (0.012)	-0.039** (0.012)
2003		-0.054** (0.013)	-0.027* (0.015)	-0.027* (0.015)
2004		-0.045** (0.013)	-0.048** (0.012)	-0.046** (0.013)
2005		-0.014 (0.014)	-0.004 (0.014)	-0.004 (0.015)
2006		-0.022 (0.017)	-0.005 (0.019)	-0.004 (0.020)
2007		-0.049** (0.021)	-0.028 (0.024)	-0.027 (0.024)
Occupation and industry controls	No	No	No	Yes
N	9,517	9517	9517	9517
Pseudo R-squared	0.007	0.014	0.040	0.046
Mean of dependent variable	0.159	0.159	0.159	0.159

Source: Authors' tabulations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996-2007.

Notes: Cell entries show the impact of each variable on the likelihood of becoming reemployed, based on discrete-time hazard models. Models are estimated as logits. All financial amounts are measured in constant 2009 dollars.

^{**} p < .05; * .10 > p > .05

Table 7. Percentage of Reemployed Displaced Wage and Salary Workers Who Change Occupation or Industry, by Age and Sex

		New	New	No. of
Sex	Age	Occupation	Industry	Obs.
Men				
	18-24	60.2 **	63.5 **	518
	25-34	49.9	49.5	695
	35-49	47.6	50.4	1061
	50-61	49.0	54.0	444
	62+	46.9	41.0	87
Women	l			
	18-24	61.5 *	47.9	330
	25-34	54.7	52.3	567
	35-49	48.1 **	44.4 **	855
	50-61	52.5	45.6 *	358
	62+	37.9 **	36.6 **	67

Source: Authors' computations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.

Note: The sample is restricted to wage and salary workers age 18 and older displaced from their jobs because of lay off, slack work, or employer bankruptcy, or because the employer sold the business, who become reemployed during the observation period. Asterisks indicate that the value differs significantly from that for workers age 25 to 34 (** p < .05; * .10 > p > .05).

Table 8. Percentage of Reemployed Displaced Wage and Salary Workers Who Are Self-Employed on the New Job, by Age and Sex

Age	All	Men	Women
18-24	2.2 **	2.9	1.0 **
25-34	4.0	3.8	4.3
35-49	4.3	5.1	3.3
50-61	5.0	6.0	3.6
62 and older	0.3 **	0.0 **	1.0 **

Source: Authors' computations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.

Note: The sample is restricted to wage and salary workers age 18 and older displaced from their jobs because of layoff, slack work, or employer bankruptcy, or because the employer sold the business, who become reemployed during the observation period. Asterisks indicate that the value differs significantly from that for workers age 25 to 34 (** p < .05; * .10 > p > .05).

Table 9. Mean Weekly Hours on the New and Old Job for Reemployed Displaced Workers, by Age and Full-Time Status on Old Job

Status on				
old job	Age	Old job	New job	Change
Full-time				
	18-24	41.2 **	40.3 **	-0.9 **
	25-34	42.4	42.0	-0.4 **
	35-49	43.1 **	42.8 **	-0.3 **
	50-61	43.0 *	42.8 **	-0.2
	62+	42.0	40.9	-1.1
Part-time				
	18-24	21.7	22.9 **	1.2 **
	25-34	22.5	25.1	2.6 **
	35-49	23.0	25.3	2.3 **
	50-61	23.8	26.2	2.4 **
	62+	18.4 **	20.6 **	2.2 **

 $\it Source: Authors' computations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.$

Note: Part-time employment is defined as fewer than 35 hours of employment per week. The sample is restricted to wage and salary workers age 18 and older displaced from their jobs because of layoff, slack work, or employer bankruptcy, or because the employer sold the business, who become reemployed during the observation period. Asterisks on mean hours values indicate that they differ significantly from that for workers age 25 to 34. Asterisks on the change values indicate that they differ significantly from zero (** p < .05; * .10 > p > .05).

Table 10. Median Hourly Wage on the New and Old Job and Change in Hourly Wage for Displaced Wage and Salary Workers Who Become Reemployed

		-	Median Hou	ırly Wage (\$)		Pct. of Worke	ers Earning:	
Sex	Age	Old job	New job	Difference	Percentage Change	At least 10% more on new job	At least 10% less on new job	Number of obs.
Men								
	18-24	9.3 **	9.5 **	0.2	2.2	40.4	45.3	518
	25-34	13.1	12.9	-0.2	-1.5	38.0	42.0	695
	35-49	16.7 **	16.0 **	-0.7	-4.2	35.8	44.1	1061
	50-61	18.9 **	15.1 **	-3.8 **	-20.1	28.0 **	53.9 **	444
	62+	16.0	10.3	-5.7 **	-35.6	25.2 **	63.0 **	87
Women	ı							
	18-24	8.1 **	8.6 **	0.5 **	6.8	41.7 **	47.7	330
	25-34	13.1	10.7	-2.4 **	-18.3	32.0	51.1	567
	35-49	12.7	11.4 **	-1.3 **	-10.2	31.1	50.5	855
	50-61	13.3	10.5	-2.8 **	-21.1	30.4	54.0	358
	62+	9.0 **	7.6 **	-1.4 **	-15.6	29.3	56.8	67

Source: Authors' computations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.

Note: The sample is restricted to wage and salary workers age 18 and older displaced from their jobs because of lay off, slack work, or employer bankruptcy, or because the employer sold the business, who become reemployed during the observation period. Wages are measured in constant 2009 dollars. Asterisks indicate that the value differs significantly from that for workers age 25 to 34 (** p < .05; * .10 > p > .05).

Table 11. Median Monthly Earnings on the New and Old Job and Change in Monthly Earnings for Displaced Wage and Salary Workers Who Become Reemployed

		N	Median Monthly	Earnings (\$)		Pct. of Work	ers Earning:	
Sex	Age	Old job	New job	Difference	Percentage Change	At least 10% more on new job	At least 10% less on new job	Number of obs.
Men								
	18-24	1337 **	1367 **	30	2.2	40.3	45.9	518
	25-34	2139	2074	-65	-3.0	38.9	42.8	695
	35-49	2862 **	2632 **	-230 *	-8.0	36.3	43.7	1061
	50-61	3159 **	2509 **	-650 **	-20.6	27.3 **	53.3 **	444
	62+	1908	1336	-572 **	-30.0	25.9 **	62.4 **	87
Women	ı							
	18-24	984 **	1066 **	82	8.3	43.7 **	46.8	330
	25-34	2021	1474	-547 **	-27.1	32.0	51.7	567
	35-49	1903	1603 *	-300 **	-15.8	31.2	50.1	855
	50-61	1886	1562	-324 **	-17.2	31.8	51.8	358
	62+	1135 **	852 **	-283 **	-24.9	28.2	54.1	67

Source: Urban Institute computations from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.

Note: The sample is restricted to wage and salary workers age 18 and older displaced from their jobs because of layoff, slack work, or employer bankruptcy, or because the employer sold the business, who become reemployed during the observation period. Earnings are measured in constant 2009 dollars. Asterisks indicate that the value differs significantly from that for workers age 25 to 34 (** p < .05; * .10 > p > .05).

Table 12. OLS Regressions of Change in Hourly Earnings for Displaced Male Wage and Salary Workers who Become Reemployed

	(1)	(2)	(3)	(4)
Age				
18-24	0.952 (0.789)	-0.692 (0.869)	-0.727 (0.872)	-0.617 (0.874)
[Reference: 25-34]				
35-49	-0.573 (0.657)	0.359 (0.683)	0.357 (0.687)	0.355 (0.687)
50-61	-3.937** (0.819)	-2.356** (0.889)	-2.406** (0.898)	-2.382** (0.898)
62 and older	-4.058** (1.510)	-4.339** (1.588)	-4.434** (1.605)	-4.544** (1.605)
Race and ethnicity				
African American		0.642 (0.870)	0.612 (0.878)	0.671 (0.879)
Hispanic		1.300* (0.779)	1.325* (0.786)	1.301* (0.786)
[Reference: Non-Hispanic white]				
Other		-0.558 (1.151)	-0.542 (1.153)	-0.572 (1.153)
Education				
Not high school graduate		-0.0155 (0.775)	0.0150 (0.777)	-0.0164 (0.777)
[Reference: High school graduate]				
Some college		-1.074* (0.627)	-1.111* (0.629)	-1.093* (0.629)
Four or more years of college		-2.193** (0.798)	-2.296** (0.820)	-2.291** (0.821)
Marital status				
[Reference: Married]				
Divorced or separated		0.310 (0.926)	0.337 (0.928)	0.390 (0.928)
Widowed		1.484 (2.442)	1.531 (2.443)	1.581 (2.443)
Never married		0.778 (0.826)	0.776 (0.826)	0.787 (0.826)
Spouse employed		1.155 (0.732)	1.153 (0.733)	1.178 (0.733)
Health Status				
Fair or poor on new job, better on old job		-3.012 (2.105)	-3.059 (2.106)	-3.058 (2.105)
Excellent, very good, or good on new job, worse on old job		1.383 (1.936)	1.380 (1.936)	1.432 (1.937)
Fair or poor on both jobs		-0.185 (1.135)	-0.179 (1.139)	-0.235 (1.139)
[Ref: Excellent, very good, good on both jobs]				

Table 12 (continued).

	(1)	(2)	(3)	(4)
Region				
Northeast		-0.524 (0.783)	-0.522 (0.783)	-0.497 (0.783)
[Reference: Midwest]				
South		-0.446 (0.703)	-0.419 (0.704)	-0.397 (0.704)
West		-1.062 (0.758)	-1.057 (0.759)	-1.065 (0.759)
Union member		0.275 (0.775)	0.257 (0.776)	0.149 (0.779)
Job tenure (in months), old job		-0.0137** (0.004)	-0.0138** (0.004)	-0.0138** (0.004)
Self employed on new job		1.238 (1.436)	1.201 (1.437)	1.506 (1.446)
Employer size (no. of employees)				
Moved to larger employer than old job		0.581 (0.677)	0.588 (0.677)	0.642 (0.679)
Moved to smaller employer		-1.103* (0.651)	-1.118* (0.652)	-1.037 (0.653)
[Reference: New employer is same size]				
Part-time status				
Moved from full-time to part-time		-6.712** (2.093)	-6.702** (2.096)	-6.795** (2.099)
Moved from part-time to full-time		-1.797 (1.762)	-1.803 (1.763)	-1.882 (1.764)
Part-time on both jobs		-4.373** (0.829)	-4.378** (0.830)	-4.418** (0.832)
[Reference: Full-time on both jobs]				
Log of household wealth			0.121 (0.161)	0.128 (0.161)
Indicator for negative wealth			1.779 (1.810)	1.856 (1.810)
Work in same occupation, both jobs				-0.0334 (0.546)
Work in same industry, both jobs				0.995* (0.546)

Table 12 (continued).

	(1)	(2)	(3)	(4)
Year				
[Reference: 1996]				
1997		-0.465 (1.050)	-0.465 (1.050)	-0.399 (1.051)
1998		2.178* (1.226)	2.186* (1.226)	2.219* (1.226)
1999		1.141 (1.497)	1.139 (1.497)	1.229 (1.497)
2000		-4.687 (4.651)	-4.775 (4.652)	-4.681 (4.653)
2001		-0.664 (1.022)	-0.718 (1.024)	-0.663 (1.025)
2002		-1.642 (1.048)	-1.632 (1.049)	-1.610 (1.050)
2003		-2.105* (1.189)	-2.127* (1.190)	-2.023* (1.191)
2004		-0.211 (1.028)	-0.253 (1.029)	-0.179 (1.030)
2005		-1.415 (1.093)	-1.450 (1.094)	-1.413 (1.094)
2006		-1.623 (1.282)	-1.654 (1.283)	-1.657 (1.283)
2007		1.811 (2.004)	1.789 (2.004)	1.787 (2.005)
Constant	-0.0592 (0.511)	5.124** (1.440)	3.774* (2.202)	3.164 (2.229)
N	2641	2641	2641	2641
R-squared Mean of dependent variable	0.015 -0.860	0.052 -0.860	0.052 -0.860	0.054 -0.860

Source: Authors' estimates from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.

Note: Standard errors are in parenthesis. All financial amounts are expressed in constant 2009 dollars. The sample is restricted to wage and salary workers age 18 and older who left their jobs because of layoff, slack work, or employer bankruptcy, or because the employer sold the business, and became reemployed during the observation period. Unless noted, variables are measured at the beginning of the new job.

^{**} p < .05; * .10 > p > .05

Table 13. OLS Regressions of Change in Hourly Earnings for Displaced Female Wage and Salary Workers who Become Reemployed

	(1)	(2)	(3)	(4)
Age				
18-24	3.731** (0.784)	2.453** (0.842)	2.563** (0.846)	2.648** (0.849)
[Reference: 25-34]				
35-49	0.193 (0.608)	0.162 (0.632)	0.299 (0.640)	0.240 (0.640)
50-61	-0.433 (0.757)	-0.119 (0.819)	0.114 (0.834)	0.0522 (0.835)
62 and older	-0.499 (1.434)	-1.552 (1.569)	-1.094 (1.599)	-1.223 (1.600)
Race and ethnicity				
African American		-0.311 (0.701)	-0.479 (0.716)	-0.512 (0.716)
Hispanic		0.00893 (0.750)	-0.104 (0.755)	-0.165 (0.756)
[Reference: Non-Hispanic white]				
Other		0.508 (1.083)	0.443 (1.084)	0.388 (1.085)
Education				
Not high school graduate		1.171 (0.772)	1.065 (0.775)	0.981 (0.778)
[Reference: High school graduate]				
Some college		0.130 (0.577)	0.178 (0.578)	0.165 (0.578)
Four or more years of college		-0.417 (0.743)	-0.217 (0.755)	-0.258 (0.755)
Marital status				
[Reference: Married]				
Divorced or separated		-0.454 (1.059)	-0.508 (1.061)	-0.504 (1.061)
Widowed		-0.264 (1.709)	-0.263 (1.709)	-0.297 (1.709)
Never married		-1.069 (1.098)	-1.028 (1.100)	-1.116 (1.101)
Spouse employed		-0.365 (1.001)	-0.257 (1.004)	-0.303 (1.004)
Health Status				
Fair or poor on new job, better on old job		-0.447 (1.693)	-0.557 (1.694)	-0.498 (1.694)
Excellent, very good, or good on new job, worse on old job		-2.157 (1.553)	-2.211 (1.554)	-2.232 (1.553)
Fair or poor on both jobs		0.155 (0.964)	0.0643 (0.967)	0.0622 (0.967)
[Ref: Excellent, very good, good on both jobs]				

Table 13 (continued).

	(1)	(2)	(3)	(4)
Region				
Northeast		0.263 (0.755)	0.320 (0.758)	0.264 (0.759)
[Reference: Midwest]				
South		0.0662 (0.669)	0.0505 (0.669)	0.0497 (0.669)
West		0.163 (0.745)	0.201 (0.746)	0.187 (0.746)
Union member		-0.315 (1.050)	-0.351 (1.050)	-0.453 (1.052)
Job tenure (in months), old job		-0.0104** (0.004)	-0.00982** (0.004)	-0.00979** (0.004)
Self employed on new job		0.852 (1.576)	0.904 (1.577)	1.214 (1.589)
Employer size (no. of employees)				
Moved to larger employer than old job		1.133* (0.635)	1.099* (0.635)	1.145* (0.636)
Moved to smaller employer		-1.454** (0.610)	-1.467** (0.610)	-1.381** (0.612)
[Reference: New employer is same size]				
Part-time status				
Moved from full-time to part-time		-5.059** (1.644)	-5.139** (1.644)	-5.138** (1.644)
Moved from part-time to full-time		-0.567 (1.306)	-0.659 (1.307)	-0.636 (1.307)
Part-time on both jobs		-4.343** (0.573)	-4.375** (0.575)	-4.294** (0.577)
[Reference: Full-time on both jobs]				
Log of household wealth			-0.236 (0.156)	-0.233 (0.156)
Indicator for negative wealth			-2.261 (1.724)	-2.212 (1.724)
Work in same occupation, both jobs				0.417 (0.502)
Work in same industry, both jobs				0.614 (0.506)

Table 13 (continued).

	(1)	(2)	(3)	(4)
Year				
[Reference: 1996]				
1997		-0.189 (1.001)	-0.216 (1.001)	-0.171 (1.002)
1998		0.345 (1.164)	0.347 (1.164)	0.418 (1.165)
1999		0.918 (1.255)	0.922 (1.254)	1.032 (1.257)
2000		-7.133 (4.933)	-7.087 (4.933)	-6.758 (4.936)
2001		0.605 (1.035)	0.568 (1.035)	0.626 (1.035)
2002		-0.821 (1.024)	-0.831 (1.026)	-0.695 (1.030)
2003		-0.820 (1.161)	-0.783 (1.161)	-0.726 (1.163)
2004		0.810 (1.051)	0.770 (1.052)	0.841 (1.053)
2005		-0.668 (1.035)	-0.683 (1.035)	-0.562 (1.038)
2006		-1.284 (1.221)	-1.281 (1.220)	-1.208 (1.221)
2007		-0.927 (1.835)	-0.932 (1.835)	-1.011 (1.836)
Constant	-1.674** (0.473)	2.719* (1.463)	5.055** (2.150)	4.453** (2.178)
N R-squared Mean of dependent variable	2093 0.015 -1.132	2093 0.069 -1.132	2093 0.070 -1.132	2093 0.071 -1.132

Source: Authors' estimates from the 1996, 2001, and 2004 SIPP panels, spanning the years 1996 to 2007.

Note: Standard errors are in parenthesis. All financial amounts are expressed in constant 2009 dollars. The sample is restricted to wage and salary workers age 18 and older who left their jobs because of layoff, slack work, or employer bankruptcy, or because the employer sold the business, and became reemployed during the observation period. Unless noted, variables are measured at the beginning of the new job.

^{**} p < .05; * .10 > p > .05

Table 14. Job Search Activities in Past Four Weeks by Unemployed Workers, March, April, May, and June 2010

	Percentage of Unemployed Workers Engaged in Each Activity										-	
	Contacted employer directly/ Interviewed/ Sent resume or application	Contacted public employment agency	Contacted private employment agency	Contacted school employment center	Checked professional/ union registers	Contacted friends or relatives	Placed or answered ads	Looked at ads	Attended job training	Other	Mean number of search methods	No. of obs
All	77.1	19.6	7.7	3.2	3.3	27.8	16.3	29.2	1.3	7.4	1.94	17,750
Age												
18-24	84.0	15.7	5.8	3.8	1.6	23.6	15.0	27.5	0.7	6.7	1.86	4,667
25-34	78.9	20.9	7.8	3.5	3.5	27.7	15.3	29.6	1.8	6.9	1.97	4,358
35-49	74.3	22.6	8.7	2.9	3.8	30.3	17.1	29.8	1.6	8.4	2.00	4,553
50-61	71.6	20.8	9.2	2.8	5.4	30.8	20.0	31.2	1.4	7.8	2.02	3,153
62+	62.2	15.5	6.6	1.7	2.5	30.0	12.9	27.7	1.2	7.8	1.67	1,019
Sex												
Male	75.4	20.0	7.7	3.0	3.8	29.7	15.8	28.2	1.3	7.3	1.92	9,875
Female	79.3	19.0	7.6	3.5	2.7	25.4	17.1	30.6	1.4	7.6	1.96	7,875
Race and ethnicity												
African American	80.8	23.5	8.8	4.5	2.9	27.2	14.9	28.3	2.2	7.2	2.03	2,931
Hispanic	75.4	19.9	8.2	2.7	2.2	31.5	12.3	24.7	1.3	6.1	1.85	2,903
Non-Hispanic white	76.4	18.3	7.0	2.8	3.8	26.5	18.1	30.8	1.1	7.8	1.93	10,508
Other	80.6	22.8	3.1	1.4	2.7	18.8	21.0	28.5	1.1	8.7	1.90	305
Education												
Not high school grad	76.6	18.1	6.3	2.1	1.9	28.7	12.4	25.6	1.0	5.7	1.79	3,269
High school grad	76.2	21.2	7.6	2.2	2.9	27.9	16.5	30.2	1.0	6.1	1.93	6,727
Some College	78.6	19.6	7.6	4.0	3.1	25.9	16.8	30.6	1.8	8.5	1.98	4,997
Four or more yrs of college	77.0	17.3	9.7	5.7	6.4	29.9	19.9	29.1	1.6	10.8	2.09	2,757

Source: Authors' computations from the March, April, May, and June 2010 Current Population Survey.