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Center for Data Analysis

## Job-to-Job Transitions: More Mobility and Security in the Workforce

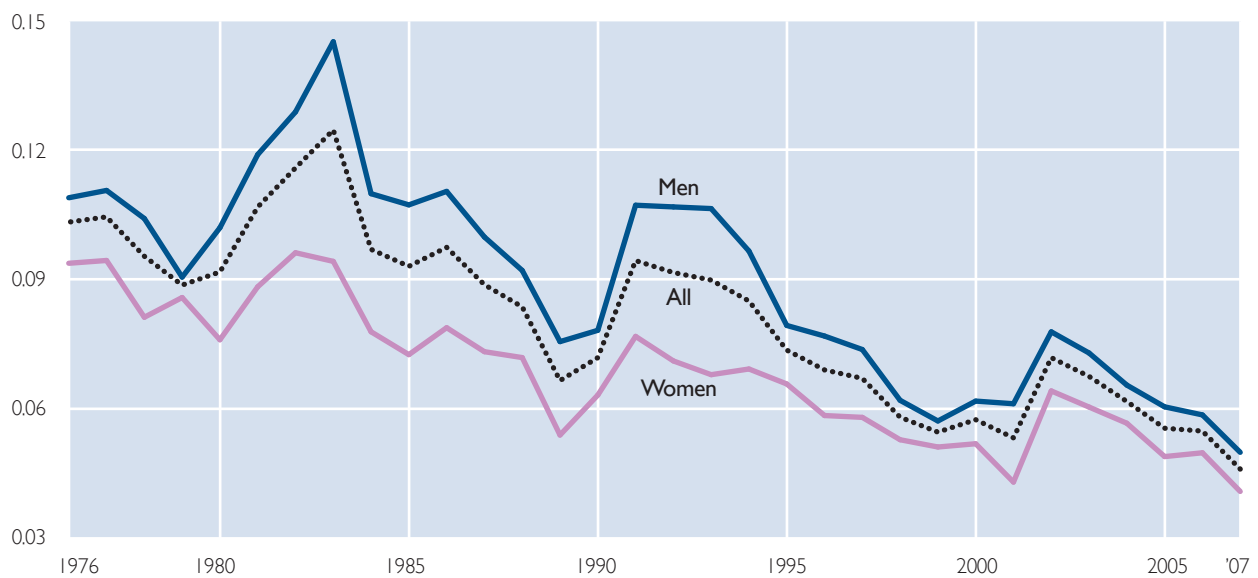
James Sherk

CDA08-06

September 2, 2008

### Workers Today Are Less Likely to Be Fired or Laid Off

Employment-to-Unemployment Transition Rate



# A REPORT OF THE HERITAGE CENTER FOR DATA ANALYSIS

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MORE MOBILITY AND SECURITY  
IN THE WORKFORCE

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# JOB-TO-JOB TRANSITIONS: MORE MOBILITY AND SECURITY IN THE WORKFORCE

JAMES SHERK

How secure are American jobs? Conventional wisdom holds that Americans are more likely to be laid off today than they were a generation ago and that globalization and corporate greed are putting more and more jobs at risk. Good jobs are being outsourced to countries where workers earn a fraction of American wages. The era of jobs for life is over; even long-time employees are no longer safe. Today, it seems, no job is secure.

This perception, like so much conventional wisdom, is wrong. The stories that fill the media about decreasing job security are heart-wrenching individual examples of Americans in dire situations,<sup>1</sup> but discerning whether American workers' job security in general has changed requires analysis of empirical data.

Government data show that American workers are substantially *less* likely to lose their jobs today than they were a generation ago. Today, many more workers change jobs voluntarily. The reports of middle-aged workers heartlessly laid off misrepresent the experiences of most Americans.

## CONVENTIONAL WISDOM

Conventional wisdom holds that American's jobs are increasingly unstable. A generation ago, diligent workers could count on lifetime job security with a single company. Businesses respected and protected their employees.

Today, the prevailing wisdom holds that this has changed. Corporate greed—or at least an increased focus on the bottom line—supposedly means that hard work no longer guarantees a lifelong job. Media stories about companies callously laying off long-time workers abound.<sup>2</sup> Globalization is exposing workers to new competitive pressures. Good jobs are said to be disappearing overseas, leaving burger-flipping for Americans.<sup>3</sup> For millions of American workers, a pink slip could arrive at any time. The very idea of a lifetime job has disappeared.

## ANECDOTES ARE INSUFFICIENT

This conventional wisdom about out-of-control job loss rests on a weak foundation. It is not based on empirical studies of how job security has changed over time.<sup>4</sup> Instead, it is based on heart-wrenching but anecdotal stories of workers who lost their jobs or reports about the number of jobs lost to foreign competition.

But such reports do not demonstrate anything. Sizeable job losses are natural in an economy as large as America's. The U.S. economy is in constant flux. Employers created 57.8 million new jobs in 2007 while ending 54.6 million positions.<sup>5</sup>

With tens of millions of jobs created and terminated each year, there will always be Americans who lose their jobs in dire circumstances. There are also tens of millions of employees who stayed with their

1. See, for example, Steven Greenhouse, *The Big Squeeze: Tough Times for the American Worker* (New York: Random House, 2008), Chapter 11.
2. *Ibid.*
3. AFL-CIO, "Exporting America," at <http://www.aflcio.org/issues/jobseconomy/exportingamerica/> (August 26, 2008).
4. See, for example, Greenhouse, *The Big Squeeze: Tough Times for the American Worker*.

employers and earned salary increases or who changed jobs for better pay. Individual tragic stories reveal little about whether workers in general are more likely to lose their jobs.

## FACTS BASED ON DATA

Understanding how job security has changed over the past generation requires examining data trends instead of anecdotes. The Heritage Foundation analyzed data from the 1976–2007 Current Population Survey (CPS) and the March supplement to the CPS collected in a joint project of the Census Bureau and the Bureau of Labor Statistics. The CPS is a monthly survey of American households that the government uses to estimate the unemployment rate and other economic statistics. In March of each year, the CPS includes a supplemental survey that asks respondents about their income and employment in the previous year.

The Heritage Foundation adapted a methodology developed by the Bureau of Labor Statistics, combining data from the basic CPS and the March supplement to identify workers who changed jobs, became unemployed, or left the labor force over the previous year. Using this method, it is also possible to estimate whether these workers changed jobs voluntarily or involuntarily.

## VOLUNTARY VS. INVOLUNTARY JOB CHANGES

It typically takes workers several weeks or months to find a new job after their employers fire them or lay them off. Workers who become involuntarily unemployed rarely find work the week after leaving their old jobs. Workers who voluntarily change jobs, on the other hand, typically spend little time unemployed between jobs. They left their old employers because they had a better offer from another employer.

The fact that workers who voluntarily switch jobs usually spend little time unemployed between jobs makes it possible to use CPS data to identify the types of transitions that employees make.

- An employee who changed jobs over the previous year and at the time of the March survey was

either unemployed or unemployed for more than two weeks between jobs is classified as an involuntary job-to-unemployment switcher.

- A worker who switched jobs, was employed at the time of the March survey, and experienced two weeks or less of unemployment during the job change is classified as a voluntary job-to-job switcher.
- A worker who was employed in the previous year but left the labor force at the time of the March survey is classified as a worker who leaves the labor force. No assumptions are made about whether the choice to leave the labor force was voluntary or involuntary.

These definitions are not perfect. Some employees who lose their jobs do find new work immediately, so some workers classified as voluntary job switchers are not. Conversely, some workers currently unemployed left their old positions voluntarily, and some workers who leave their old jobs for new ones spend more than two weeks unemployed before starting their new jobs.

However, these definitions do reasonably approximate whether workers chose to leave their employers or not. This allows a factual examination of how job security has changed over time. For more details on these calculations, see Appendix A.

## JOB STABILITY VS. JOB SECURITY

The distinction between voluntary and involuntary job changes is important. Concerns about decreasing job security are legitimate. Most people find unemployment painful. The unexpected loss of income and the risk of not finding a comparable new job affect families financially and emotionally. If employers have become more likely to lay off their employees, this will affect the well-being of millions of American workers.

Changes in job *stability*, on the other hand, should not worry workers or policymakers if they occur because workers switch jobs voluntarily. Most workers who do so prefer their new jobs to their old ones. Congress should not be concerned if Americans are more likely to change jobs today

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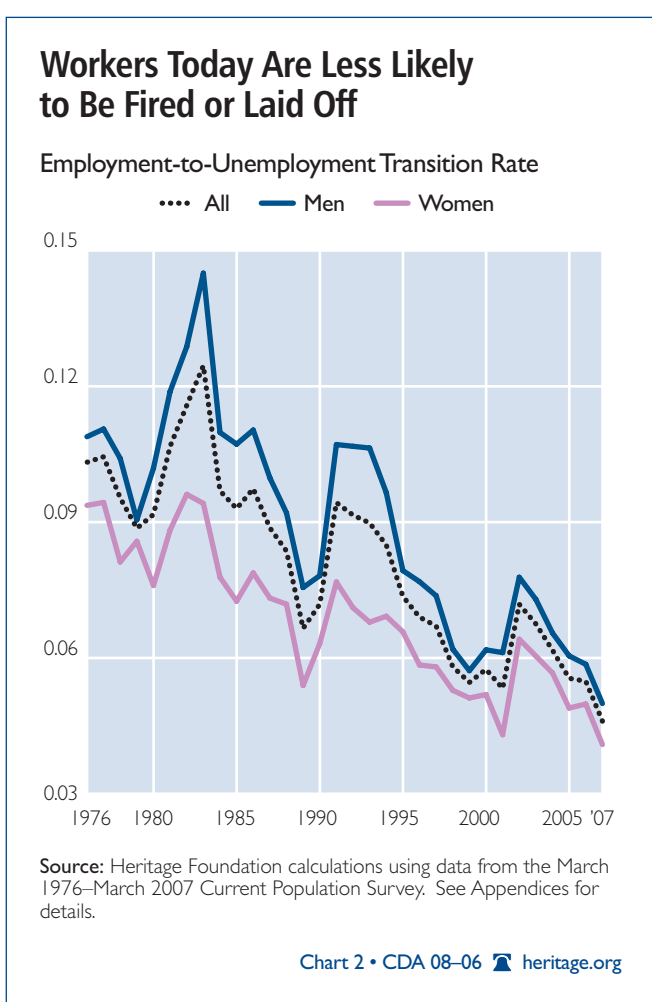
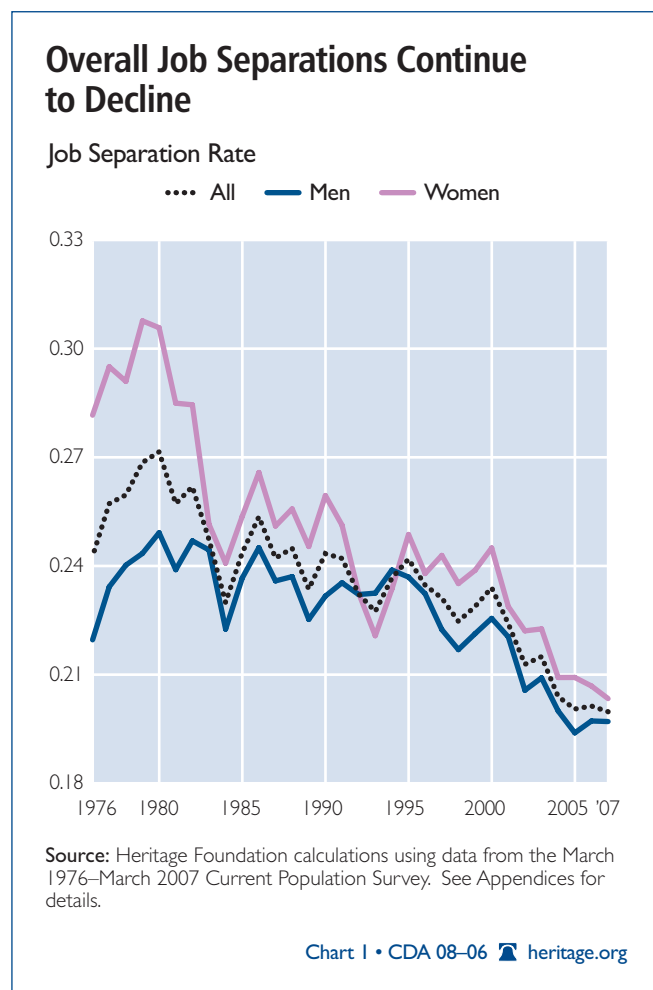
5. News release, “Job Openings and Labor Turnover: January 2008,” U.S. Department of Labor, Bureau of Labor Statistics, March 12, 2008, at [http://www.bls.gov/news.release/archives/jolts\\_03122008.htm](http://www.bls.gov/news.release/archives/jolts_03122008.htm) (August 26, 2008). This is not identical to the number of new workers over this time because the survey measures new hires and job separations, not the status of individual workers. A student who worked part time as a waiter, left that position to become a tutor, and then worked as an engineer after receiving his degree would represent three new hires and two job separations in this survey.

than they were a generation ago. If anything, that mobility demonstrates that Americans have more job opportunities and options than they had in the past.

### INCREASED JOB SECURITY AND MOBILITY

Chart 1 shows the probability that a worker left his or her job for any reason over the preceding year between 1976 to 2007.<sup>6</sup> Workers are less likely to leave their jobs today than in the past. From 1975 to 1976, almost a quarter—24 percent—of workers separated from their jobs over the course of the year. By 2006 and 2007, that figure had fallen to 20 percent.

Charts 2 through 4 break down these overall separations into job-to-unemployment, job-to-job, and job-to-outside-the-labor-force switches. They differ strikingly.



Workers are much less likely to lose their jobs today than they were a generation ago. This probability rises and falls with the business cycle, but the trend is steadily downwards. The typical worker had a 10 percent chance of losing his or her job between 1975 and 1976. Contrary to popular perceptions, the 1970s were not a golden era of lifetime jobs. Today, only 5 percent of workers lose their jobs over the course of a year. Job security has increased markedly over the past generation.

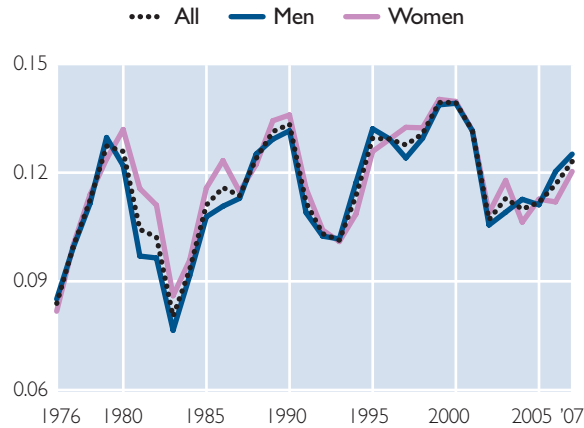
Workers have become more likely to move between employers voluntarily over that same time period. Unsurprisingly, workers are more likely to make voluntary job changes in good economic times than during recessions.

Again, however, the trend is clear. Between 1975 and 1976, only 8 percent of employees stopped working for one employer and promptly started

6. The time span is 14.5 months, from January 1 of the previous year to March of the subsequent year when the respondent answered the CPS survey.

### Workers More Likely to Switch Jobs

Job-to-Job Transition Rate



Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

Chart 3 • CDA 08–06 [heritage.org](http://heritage.org)

working for another. Fully 12 percent chose to change jobs between 2006 and 2007. The labor market offers workers much more mobility than in the past. This benefits American workers. Increased mobility increases workers’ choices and opportunities.

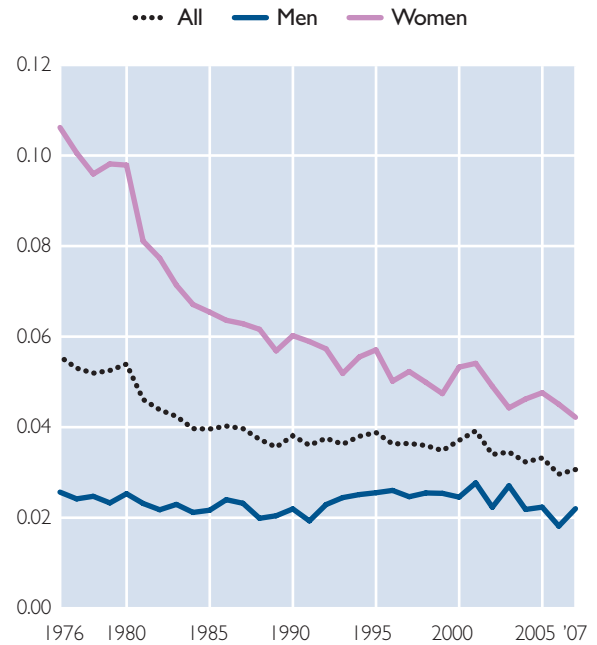
Women have also become much less likely to leave the labor force. Chart 4 shows the percentage of men and women who exited the labor force in 1975–1976 and 2006–2007. Men are no more or less likely to leave the labor force than they were in the past. Women, however, are significantly less likely to leave the labor force than they were a generation ago. Of the women working in 1975, 11 percent left the labor force by the following March. The same was true of only 4 percent of women working in 2006. Society has changed over the past generation, and women are now much more closely tied to the labor force.

### EXAMINING OTHER FACTORS

Economists use regressions to examine relationships between variables in greater detail. Appendix B reports marginal effects, from probit regression esti-

### Women Today Are Less Likely to Leave the Labor Force

Employed-to-Outside Labor Force Transition Rate



Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

Chart 4 • CDA 08–06 [heritage.org](http://heritage.org)

mates, on the probability of switching jobs. These regressions control for age, education, marital status, and geographic region. The Heritage Foundation used these probit estimates to calculate the change over time in the probability that workers would change jobs, controlling for these other factors.<sup>7</sup>

Table 1 shows the change in 1975–1976 and 2006–2007 in the probability that workers will leave their job, be fired, switch jobs, or leave the labor force, expressed as a percentage of the 1975–1976 probability. The top row reports the overall change.

The results confirm the findings of the earlier analysis. The probability that both men and women separate from their jobs for any reason has fallen since the 1970s. Men are 6 percent, and women 10

7. Probit regressions are a method of assessing the effect of independent variables on a dependent variable that takes one of two values. In this example, a worker can either switch jobs or not switch jobs during the course of the year. Probit regressions are distinct from Ordinary Least Squares (OLS) regressions, which assume that the dependent variable is a continuous variable that takes multiple values, such as how much money a worker earns in the year.

## Job Transition Rates Since 1976

Changes in the Probability of Job Transitions Between 1976 and 2007 as a Percentage of the 1976 Transition Rates

	Men				Women			
	All Separations	Job to Job	Job to Un-employment	Left the Labor Force	All Separations	Job to Job	Job to Un-employment	Left the Labor Force
ALL	-5.9%	39.4%	-45.6%	0.0%	-9.5%	29.4%	-33.3%	-34.8%
AGE								
19–24	-14.2%	17.0%	-49.4%	52.2%	-7.3%	41.4%	-43.2%	-25.8%
25–34	-4.6%	38.1%	-48.1%	10.5%	-18.4%	30.4%	-43.7%	-50.9%
35–44	1.9%	52.3%	-44.0%	21.8%	-19.2%	39.9%	-38.3%	-64.2%
45–54	19.4%	109.8%	-31.4%	-4.7%	-6.0%	94.5%	-35.7%	-54.7%
EDUCATION								
High School Dropouts	-15.1%	33.1%	-40.5%	20.2%	-16.3%	25.0%	-20.7%	-30.4%
High School	-7.3%	35.1%	-44.3%	76.8%	-25.6%	18.0%	-40.3%	-52.6%
Some College	-8.6%	24.0%	-42.3%	-14.3%	-25.6%	1.8%	-40.3%	-51.8%
Bachelor's Degree or Greater	-1.5%	14.3%	-38.2%	-4.8%	-24.3%	0.0%	-52.6%	-51.9%
RACE								
White	-12.8%	31.1%	-53.7%	10.4%	-30.8%	18.0%	-54.2%	-61.0%
Nonwhite	-17.4%	66.3%	-54.7%	-24.5%	-15.1%	72.8%	-42.9%	-48.4%
MARITAL STATUS								
Married and Spouse Present	-12.6%	35.0%	-56.3%	2.4%	-42.8%	21.6%	-62.7%	-71.4%
Other	-29.7%	13.4%	-58.2%	-22.9%	-11.1%	18.0%	-40.3%	-17.5%

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

Table I • CDA 08–06 [heritage.org](http://heritage.org)

percent, less likely to leave their jobs than in the early 1970s. Both men and women are significantly less likely to be laid off and more likely to change jobs voluntarily than a generation ago. Men are 39 percent more likely to change jobs and 46 percent less likely to lose their jobs. Women are now 29 percent more likely to move between jobs and 33 percent less likely to lose their jobs. Women are also 35 percent less likely to leave the labor force, while men's likelihood of leaving the labor force has not changed.

The belief that workers had more job security a generation ago has no factual basis. Workers have more employment options today than in the past but are much less likely to lose their jobs.

### AGE, EDUCATION, AND MARITAL STATUS

Looking more closely at the data shows that these changes in job opportunities and job security have not been uniform. The subsequent rows show the change for specific demographic groups, estimated separately. The separate rows should be interpreted as the change in the probability over time for that demographic group. For example, men ages 25 to 34 were 38.1 percent more likely to make a job-to-job switch voluntarily between 2006 and 2007 than they were between 1975 and 1976.<sup>8</sup>

Although younger workers are more mobile overall, over the past 30 years, the job-to-job mobility of older workers has increased significantly more than the job-to-job mobility of younger workers.

## Job Transition Rates Since 1992

Changes in the Probability of Job Transitions Between 1992 and 2007 as a Percentage of the 1992 Transition Rates

	Men				Women			
	All Separations	Job to Job	Job to Un-employment	Left the Labor Force	All Separations	Job to Job	Job to Un-employment	Left the Labor Force
ALL	-15.8%	9.5%	-45.7%	-16.3%	-6.9%	7.5%	-28.6%	-10.6%
<b>AGE</b>								
19–24	-29.3%	-12.1%	-47.1%	-32.7%	-15.6%	-9.1%	-27.9%	-16.4%
25–34	-16.0%	1.1%	-47.1%	21.3%	-7.9%	2.5%	-29.9%	-6.1%
35–44	-5.5%	26.2%	-44.7%	-2.3%	-3.5%	26.9%	-35.2%	-24.4%
45–54	-0.2%	39.5%	-36.2%	-16.4%	-1.5%	31.3%	-28.7%	-25.8%
<b>EDUCATION</b>								
High School Dropouts	-35.2%	-6.1%	-54.7%	-17.6%	-16.5%	-0.5%	-19.6%	-23.6%
High School	-16.9%	11.2%	-46.5%	13.6%	-10.6%	11.0%	-30.4%	-20.4%
Some College	-17.7%	-1.7%	-38.6%	-25.2%	-12.4%	-4.3%	-26.4%	-14.5%
Bachelor's Degree or Greater	-5.9%	4.0%	-33.2%	-9.1%	-15.1%	-5.4%	-44.8%	-11.0%
<b>RACE</b>								
White	-19.5%	2.1%	-49.6%	-8.1%	-15.1%	1.8%	-40.2%	-20.7%
Nonwhite	-16.7%	23.3%	-45.1%	-29.5%	-12.9%	14.9%	-28.4%	-33.7%
<b>MARITAL STATUS</b>								
Married and Spouse Present	-14.8%	10.9%	-51.1%	-11.9%	-18.4%	6.0%	-49.2%	-28.8%
Other	-26.0%	-6.5%	-46.9%	-18.1%	-11.9%	-1.3%	-25.8%	-15.1%

Source: Heritage Foundation calculations using data from the March 1992–March 2007 Current Population Survey. See Appendices for details.

Table 2 • CDA 08–06  heritage.org

The increases in job security, however, have occurred relatively uniformly across age groups.

Among both men and women, the workers whose job-to-job mobility increased the most were workers without a high school degree. Workers with some college education or a bachelor's degree have seen smaller increases in mobility.

The vast majority of the decrease in women who choose to leave the labor force has occurred among

married women. Such women are now 71 percent less likely to leave the labor force than in the 1970s. Among all other women, the rate of exiting the labor force has fallen by 18 percent.

### CHANGES DURING THE 1990S

Table 2 presents the same estimates for changes in job mobility since 1991–1992.<sup>9</sup> This table shows how job transitions have changed more recently. Job mobility has not increased as rapidly since the early

8. In several cases, the change in the probability trends for individual demographic groups exceeds that of the overall rate. This is because the method used to account for the control variables when computing the changes in probabilities for these individual demographic groups is different from the method used to calculate the overall rate. See Appendix B for details.
9. 1991–1992 was chosen as a base period comparable to 1975–1976. In 1975, the economy had just left a recession and was recovering. The same was true of 1991, although the recession continued into the first quarter of 1991.



1990s as it did in the 1970s and the 1980s. Men were 10 percent, and women 8 percent, more likely to choose to change jobs in 2006–2007 than in 1991–1992. Job security has continued to increase at a rather steady pace. Women are 29 percent, and men 46 percent, less likely to lose their jobs now than they were in the early 1990s.

The increasing labor force attachment of women has slowed since the early 1990s. Women are now only 11 percent less likely to leave the labor force than in 1992, indicating that many of the social and economic changes that lead women to stay in the labor force occurred before 1992.

The same trends evident since the 1970s continued in the more recent period of 1992 to 2007. Older workers had a higher probability of changing

jobs voluntarily, while the increase in job security was similar across all age groups. The job-to-job mobility gains have been greatest for workers with a high school diploma. Again, married women were the least likely to leave the labor force.

## CHANGES BY INDUSTRY

The preceding analysis does not show how job mobility and job security have changed within industries. Table 3 shows the probability by industry that workers will change jobs, lose their jobs, or leave the labor force in 2006–2007 and how that probability has changed since 1975–1976.<sup>10</sup>

Workers in almost every occupation now enjoy more job security than in the past. The only exceptions are telecommunications, utilities, and sanitary

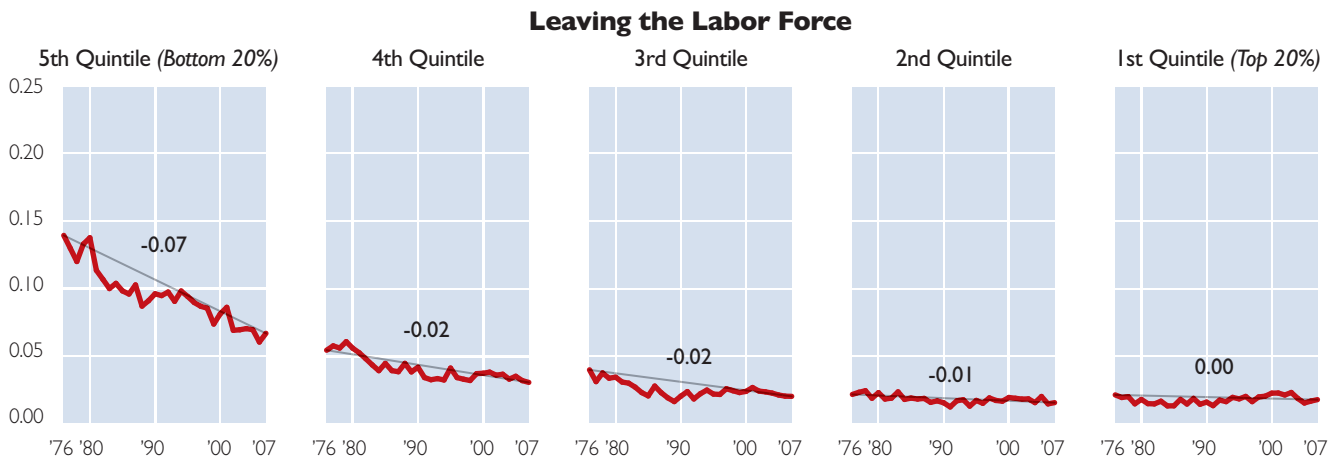
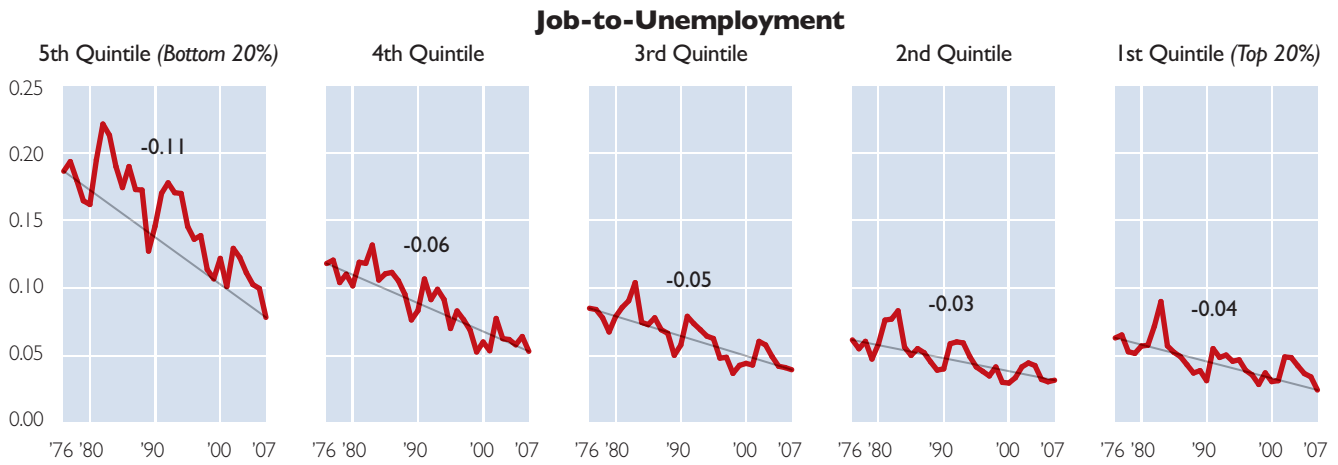
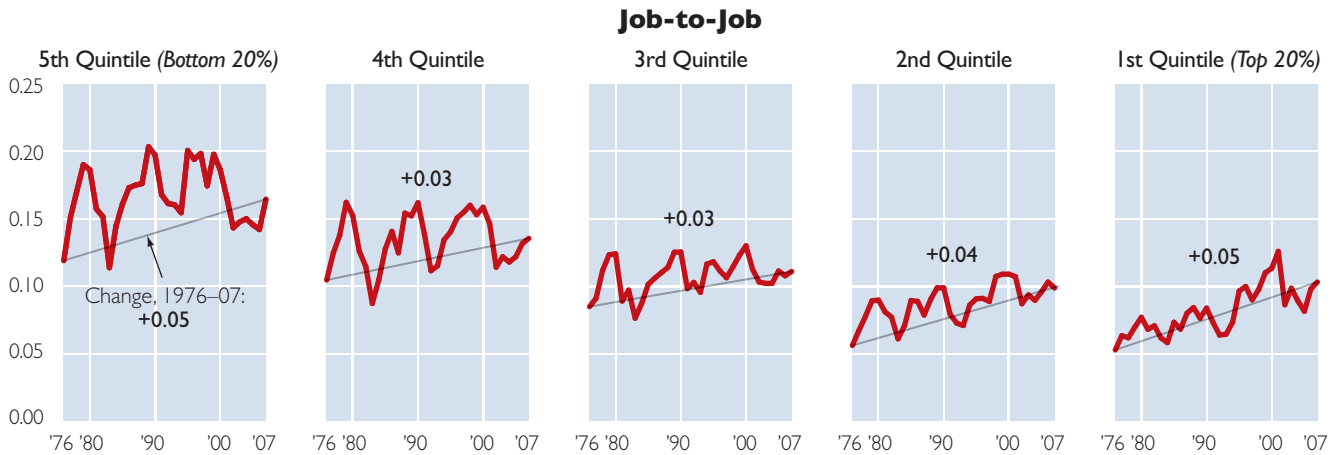
## Job Transition Rates by Industry

Probability of Transitioning Between Jobs in 2006–2007 and the Percent Change in that Transition Probability Since 1975–1976, by Industry

	Job Changers		Job to Unemployment		Left the Labor Force	
	Transition Probability in 2006–2007	Percent Change in Transition Rate Since 1975–1976	Transition Probability in 2006–2007	Percent Change in Transition Rate Since 1975–1976	Transition Probability in 2006–2007	Percent Change in Transition Rate Since 1975–1976
ALL	11.7%	23.5%	4.5%	-49.3%	2.9%	-27.8%
<b>INDUSTRY LAST YEAR</b>						
Agriculture, Forestry, and Fishing	10.8%	-21.8%	11.8%	-42.1%	3.7%	-68.1%
Mining	8.6%	-17.7%	7.4%	-48.5%	2.8%	-14.7%
Construction	10.2%	-16.5%	10.6%	-65.9%	2.9%	-26.8%
Manufacturing–Durable Goods	7.9%	22.4%	4.6%	-55.9%	2.2%	-23.0%
Manufacturing–Nondurable Goods	8.3%	31.4%	4.8%	-51.5%	3.2%	-31.3%
Transportation	11.3%	29.6%	5.8%	-49.3%	2.7%	11.5%
Telecommunications	12.6%	245.5%	5.2%	135.6%	3.0%	49.0%
Utilities and Sanitary Services	21.6%	1,028.3%	3.1%	0.6%	2.5%	117.5%
Wholesale Trade	10.8%	-7.7%	4.0%	-55.4%	2.2%	-33.0%
Retail Trade	13.1%	-1.6%	6.1%	-51.1%	3.7%	-46.5%
Finance, Insurance, and Real Estate	11.4%	5.8%	3.4%	-42.1%	2.2%	-45.4%
Business and Repair Services	18.2%	47.6%	7.4%	-41.0%	3.2%	-42.8%
Personal Services	12.1%	-3.8%	5.6%	-58.3%	4.3%	-66.5%
Entertainment and Recreation Services	14.3%	-11.6%	6.9%	-60.6%	3.4%	-55.4%
Professional and Related Services	11.9%	0.3%	3.0%	-52.0%	2.4%	-61.9%
Federal Government	9.8%	104.4%	1.8%	-62.0%	2.9%	-11.1%
State Government	11.2%	63.8%	1.5%	-68.1%	2.0%	-46.6%
Local Government	10.9%	41.0%	1.3%	-70.9%	1.7%	-55.5%

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

# Job Transition Rates, by Income Group



Source: Heritage Foundation calculations using data from the March 1980–March 2007 Current Population Survey. See Appendices for details.

services. The most secure jobs are with the government. Civil service rules and public-sector unions ensure that it is virtually impossible to lay off government employees. Only 1 percent of local government workers and 2 percent of federal or state workers lost their jobs in 2006—dramatically fewer than in 1975.

Perhaps surprisingly, manufacturing workers' job security has *increased*. Manufacturing employees were less than half as likely to lose their jobs in 2006 as they were in 1975.

The employees most likely to lose their jobs work in agriculture and construction: 11 percent of construction workers and 12 percent of agricultural workers lost their jobs and had extended spells of unemployment. While these are high job losses, this is far more job security than existed in these industries 30 years ago.

Voluntary job changes are more common in many industries. Utilities and sanitary services workers are, probably unsurprisingly, the most likely to switch jobs: 22 percent of these workers in 2006 changed jobs by 2007. Utilities workers are more than 10 times as likely to change jobs today as in the 1970s. The second most mobile industry is businesses and repair services, 18 percent of whose workers changed employers between 2006 and 2007. This represents a 48 percent increase in mobility since 1975–1976. Transportation, manufacturing, telecommunications, and government employees are also more likely to change jobs than in the past. However, agriculture, mining, construction, and entertainment workers are less likely to choose to change jobs today than a generation ago.

Overall, job security and job mobility have increased in almost every industry.

## **JOB TRANSITIONS BY EARNINGS QUINTILES**

Job mobility has increased, and job security has improved over the past generation. However, the experiences of the average employee aggregates the experiences of workers at the top, middle, and bottom of the economic ladder and may not reflect the actual experiences of any group of employees. To

examine labor market conditions for workers at different income levels, The Heritage Foundation included controls for income quintiles.<sup>11</sup>

Workers' chances of either switching or losing their jobs differ noticeably by income level. Chart 5 shows the probabilities that workers will choose to change jobs, become unemployed, or leave the labor force by income quintile. Low-income workers are more likely to experience all of these transitions than are high-income workers. The gap between low-income and high-income workers has shifted, however. The changing labor market has not affected all groups equally.

Table 4 shows how these transitions have changed over time by income group. Low-income workers' job security has improved disproportionately. Workers at the bottom of the economic ladder are substantially less likely to be fired than they were a generation ago. Men in the bottom quintile are now 60 percent less likely to lose their jobs than they were in 1975, while men in the top quintile are only 47 percent less likely to lose their jobs. Women in the bottom quintile are 44 percent less likely to lose their jobs than in the past, while women in the top quintile are only 33 percent less likely to do so. Low-income workers have enjoyed the greatest increases in job security.

On the other hand, high-income workers have benefited the most from increased job mobility. While workers in the bottom quintile saw relatively small increases in their probability of changing jobs, workers in the top quintile are substantially—84 percent to 86 percent—more likely to change jobs than in the past. Workers in the bottom quintile have become only slightly more likely to choose to change jobs. Voluntary employee mobility has increased, but primarily for workers outside the bottom of the wage distribution.

## **MOBILITY BY PENSION STATUS**

Why has job-to-job mobility increased so sharply, and why for predominantly middle- and upper-middle-class workers? Research suggests that the transition from defined-benefit to defined-contribution pensions has made workers more mobile.<sup>12</sup> In

11. Income quintiles are generated by dividing annual wage and salary income by total hours worked to estimate the average hourly wage. See Appendix B for details.

12. Alicia H. Munnell, Kelly Haverstick, and Geoffrey Sanzenbacher, "Job Tenure and the Spread of 401(k)s," Boston College, Center for Retirement Research *Issue in Brief* No. 55, October 2006, at [http://crr.bc.edu/images/stories/Briefs/ib\\_55.pdf](http://crr.bc.edu/images/stories/Briefs/ib_55.pdf) (August 26, 2008).

## Trends in Job Separation Rates by Income Quintile

Change in the Probability of Job Transitions between 1976 and 2007 as a Percentage of 1976 Probabilities

	Men				Women			
	All Separations	Job to Job	Job to Un-employment	Left the Labor Force	All Separations	Job to Job	Job to Un-employment	Left the Labor Force
ALL	-16.7%	26.4%	-52.9%	-12.5%	-12.0%	28.8%	-36.1%	-38.6%
HOURLY EARNINGS LAST YEAR								
Quintile 5 (Bottom 20%)	-36.8%	-0.6%	-60.2%	-23.8%	-30.1%	15.2%	-44.3%	-52.5%
Quintile 4	-33.1%	2.4%	-63.6%	-6.7%	-20.1%	25.3%	-45.8%	-52.6%
Quintile 3	-22.1%	13.7%	-57.0%	-10.8%	-7.4%	47.4%	-41.2%	-49.3%
Quintile 2	0.1%	51.6%	-47.5%	5.3%	-0.4%	63.3%	-40.8%	-53.9%
Quintile 1 (Top 20%)	13.3%	83.6%	-47.0%	24.2%	2.9%	85.5%	-33.1%	-49.3%

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

Table 4 • CDA 08–06 [heritage.org](http://heritage.org)

a defined-benefit pension, the employer guarantees a set benefit to the worker after retirement, such as 1.5 percent of the worker's final salary multiplied by the number of years that he or she worked. In a defined-contribution plan, the employer contributes a set amount to a pension plan owned by the employee—for example, by depositing an amount equal to 6 percent of the employee's earnings into a 401(k) account.

The structure of defined-benefit pensions often penalizes workers who switch jobs, costing them significant retirement income. Workers with defined-benefit pensions are often chained to their jobs with golden handcuffs, unwilling to leave because they do not want to lose a large portion of their pension benefits.

In the 1970s, defined-benefit pensions were the dominant pension plans. Two-thirds of workers with pensions in 1980 had a defined benefit pension. Legal changes in the 1980s encouraged companies to start offering defined-contribution pensions, which do not penalize workers for switching jobs, and employers started doing so in large numbers. By 2003, that ratio had more than switched, with 70 percent of workers with pensions

being in a defined-contribution plan.<sup>13</sup> As this happened, workers became more willing to switch jobs.

Starting in 1979, the CPS identifies workers that have pensions but does not distinguish between defined-benefit and defined-contribution pensions. Table 5 presents estimates of how job-to-job, job-to-unemployment, and job-to-outside-the-labor-force rates have changed for private-sector workers since 1979.

Job security improvements vary moderately by pension status. Workers who are offered a pension plan at work and participate in it saw a somewhat larger increase in job security than those without pensions and a noticeably larger increase in job security than workers who are offered pensions but do not participate in them.

Changes in job mobility, on the other hand, are almost entirely dependent on pension status. Private-sector workers without a pension plan, or those who did not participate in one that was offered them, were no more or less likely to change employers voluntarily in 2006–2007 than they were in 1979–1980. Workers with a pension account for virtually the entire increase in job-to-job mobility during this time period are 42 percent

13. Heritage Foundation calculations based on data from Marric Buessing and Mauricio Soto, "The State of Private Pensions: Current 5500 Data," Boston College, Center for Retirement Research *Issue in Brief* No. 42, February 2006, Table E10.

## Change in Job Separation Rates by Pension Status

Change in Job Transition Rates of Private Sector Workers by Pension Status as a Percentage of 1980 Transition Rates

	All Separations	Job to Job	Job to Unemployment	Left the Labor Force
All	-18.4%	17.6%	-50.7%	-19.9%
No Pension Plan at Work	-32.9%	-5.6%	-53.5%	-33.8%
Pension Plan at Work, but Not Included	-16.4%	7.2%	-37.6%	-34.6%
Included in Pension Plan at Work	-14.0%	41.9%	-63.8%	-24.6%

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

Table 5 • CDA 08–06 [heritage.org](http://heritage.org)

more likely to switch employers now than they were a generation ago. This strongly suggests that the increase in defined-contribution pensions has had a major role in enabling workers to change jobs. Mobile pensions have made for mobile workers.

### CONCLUSION

It has become conventional wisdom that Americans have less job security today than they had a generation ago, that globalization and corporate greed have put the jobs of even diligent workers at risk.

But like so much of conventional wisdom, this view is simply wrong. American workers are significantly *less* likely to find themselves involuntarily or unexpectedly unemployed than they were a generation ago. This is especially true for workers at the bottom of the economic ladder.

Workers today have more job choices available to them than ever before. Defined-contribution plans allow workers to change jobs without losing pension benefits, and American workers have embraced this

freedom. Workers with pension plans are significantly more likely to change jobs today than they were in the past, giving them the opportunity to seek out jobs that more closely suit their needs.

Many Americans are understandably worried about their job security during this current economic weakness. Job security does rise and fall with the business cycle. However, policymakers should understand that American jobs are more secure today than in past years. Employers are much less likely to fire or lay off workers now than they were during the 1991 or 1982 recessions. The economy is going through difficult times, but workers have much less to worry about than they had 30 years ago.

—James Sherk is Bradley Fellow in Labor Policy in the Center for Data Analysis at The Heritage Foundation. The author thanks Heritage Foundation intern Victoria Strokova, who performed the lion's share of the data processing and analysis.

## APPENDIX A

### Data and Sample

The data come from the 1976–2007 March Current Population Survey (CPS) files extracted from the Integrated Public Use Microdata Series (IPUMS-CPS).<sup>14</sup> The choice of 1976 as a starting year was dictated by the availability of a key variable used to determine occurrence of a labor market transition. The data and calculations used are available upon request.

The sample has been restricted to men and women who worked at least one week in the previous year and were between the ages of 19 and 55 when the March survey occurred. Individuals with less than one year of work experience were excluded. Self-employed workers were also excluded, excepting the incorporated self-employed, who were included to ensure consistency of the sample over time.<sup>15</sup> Part-time workers, those working for fewer than 35 hours per week in the previous year, and unpaid family workers were also excluded from the sample. Hispanic and State Children's Health Insurance Program (SCHIP) oversamples are also excluded because they are not representative of the entire population with respect to labor-market transitions.

Only the last four rotation groups (months-in-sample 5 through 8) were used in the analysis. This resulted in a sample of 699,197 observations. This exclusion was chosen because workers in the first four rotation groups (months-in-sample 1 through 4) in one year appear in the last four rotation groups in the subsequent year. To avoid complications in calculating standard errors resulting from including the same workers in two subsequent years, workers were included only when they appeared in the sample in the last four rotation groups.

Potential experience is defined as age minus years of schooling minus six.<sup>16</sup> The “years of schooling” variable was constructed using the educational attainment variable. Prior to 1992, respondents were asked for the highest grade of school they completed. Starting in 1992, respondents were asked to report the highest level of educational attainment.

Converting the “highest grade of school” variable into “years of schooling” is straightforward,<sup>17</sup> but it is less clear how to interpret level of education as years of schooling. In order to obtain a consistent measure of years of schooling, the “levels of educational attainment” variable was coded as highest grade achieved using the “plausible numbers” suggested by Jin Heum Park, who investigated similarities and differences between the new and old education measures.<sup>18</sup>

### Identifying Labor Market Transitions

The methodology of identifying job separations and three types of labor market transitions is adopted from a recent work by Jay Stewart.<sup>19</sup> The author thanks Jay Stewart for generously sharing his code and for answering questions about how to apply the methodology.

The basic monthly CPS contains information about employment status during the previous week, and the March Income Supplement (the Annual Social and Economic Study) includes a number of questions about employment during the previous year: for example, the number of employers and number of spells of unemployment. Combining information from the basic monthly CPS and the Income Supplement allows construction of

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14. Miriam King, Steven Ruggles, Trent Alexander, Donna Leicach, and Matthew Sobek, Integrated Public Use Microdata Series, Current Population Survey: Version 2.0 (machine-readable database), University of Minnesota, Minnesota Population Center, producer and distributor, 2004, at <http://cps.ipums.org/cps> (August 26, 2008).
  15. The CPS has distinguished between incorporated and non-incorporated self-employed workers since 1988. In earlier years, incorporated self-employed workers were classified as wage and salary workers. See Jay Stewart, “Using March CPS Data to Analyze Labor Market Transitions,” *Journal of Economic and Social Measurement*, Vol. 32 (2007), pp. 177–197.
  16. Most students start first grade at six years of age, so age minus years of education minus six closely approximates how many years an individual could have worked.
  17. For simplicity, if a grade was started but not finished, years of schooling equaling the highest grade completed was incremented by half a year.
  18. Jin Heum Park, “Estimation of Sheepskin Effects Using the Old and the New Measures of Educational Attainment in the Current Population Survey,” *Economics Letters*, Vol. 62, Issue 2 (February 1, 1999), pp. 237–240.
  19. Stewart, “Using March CPS Data to Analyze Labor Market Transitions.”

a labor market history that covers approximately 14 months.

Using the basic CPS and March supplement to estimate transitions has a number of advantages over using CPS files to construct a two-year panel. The relatively high rate of attrition due to non-response, mortality, migration, and recording errors severely impairs matching individuals across monthly CPS files.<sup>20</sup>

The overall non-merge rate is estimated at about 30 percent, which could result in a significant bias. David Neumark and Daiji Kawaguchi conclude that attrition bias in labor economics research using matched CPS files is likely to be severe when the effect of the independent variable on the dependent variable affects whether attrition occurs.<sup>21</sup> This issue is salient in this study since the probability of moving is correlated with the probability of making a labor market transition, such as a job change. Variables that affect job transitions will probably also affect whether workers move to new houses and drop out of the sample. Using retrospective data from the Income Supplement without matching the CPS files allows avoiding attrition bias and further issues related to matching observations and gaps in data. A drawback to this approach is that it is impossible to observe a change in some variables that may be of interest, such as union status, since they are asked only in the basic survey and are not retrospectively in the March supplement.

The three types of transitions identified using the data described above are employment-to-employment changes (EE transitions); employment-to-unemployment changes (EU transitions); and job-to-not-in-labor-force changes (EN transitions). An individual is classified as experiencing a job change if he or she is employed in March of the current year and at least one of the following occurred: the individual had two or more employers in the previous year; the individual had one employer in the previous year, but there was a change in the one-digit industry code between the longest job in the previ-

ous year and the main job in the previous week; the individual had one employer in the previous year, had the same one-digit industry code, and experienced two or more spells of unemployment in the previous year.<sup>22</sup>

Workers making EE transitions are further divided into those making direct job-to-job transitions and those making employment-to-unemployment-to-employment transitions (EUE). This methodology allows inferring whether a job change is likely to have been voluntary or involuntary. A voluntary job change is not likely to be accompanied by a prolonged unemployment spell. Therefore, if a person changed a job but also was unemployed for more than two weeks, he or she is very likely to have left the job involuntarily.

Using the questions about the number of weeks unemployed and the number of unemployment spells, it is possible to determine whether at least one of the unemployment spells lasted more than two weeks. If so, an individual is classified as having made an EUE transition and treated as someone who lost his job involuntarily.

For instance, an individual who reported two unemployment spells last year and was unemployed for at least four weeks could have had at least one three-week spell. In this case, he or she is classified as having made an EUE transition. If an unemployment spell could not have lasted more than two weeks, a job-to-job transition is classified as an EE transition. A job-to-job transition that was accompanied by some unemployment last year is classified as an EE transition if one of the following holds: an individual had one unemployment spell and was unemployed for two weeks or less; an individual had two unemployment spells and was unemployed for three weeks or less; an individual had three or more unemployment spells and was unemployed for four weeks or less.<sup>23</sup>

An individual is determined to have made an involuntary EU transition if he or she worked the previous year and was unemployed in March of the current year or if he or she made an EUE transition.

20. Brigitte C. Madrian and Lars John Lefgren, "A Note on Longitudinally Matching Current Population Survey Respondents," National Bureau of Economic Research *Working Paper* No. T0247, 1999.

21. David Neumark and Daiji Kawaguchi, "Attrition Bias in Economic Relationships Estimated with Matched CPS Files," National Bureau of Economic Research *Working Paper* No. 8663, December 2001.

22. Stewart, "Using March CPS Data to Analyze Labor Market Transitions."

23. *Ibid.*

Individuals who worked the previous year but were not in the labor force when the March survey was taken were classified as making an EN transition.

### **Time Series Comparability**

Stewart provides guidance on how to make the data comparable over time in regard to two changes in the CPS: a 1989 overhaul of the March CPS processing system and a 1994 redesign of the monthly CPS. The 1994 redesign is corrected for by reweighting the microdata using adjustment factors available from the Bureau of Labor Statistics study by Anne Polivka and Stephen Miller.<sup>24</sup>

The March CPS processing change in 1989 included modifications in the procedures for imputing missing data, which complicates comparisons between job transition rates for the pre-1989 and post-1988 period.<sup>25</sup> Stewart suggests dropping the so-called entire-record-allocated observations from the post-1988 period that have artificially high EE transition rates and making two optional weighting adjustments in the remaining data. However, Stewart finds that the weighting adjustments have little effect on the results but that eliminating the entire-record-allocations is essential for generating comparable data over time.<sup>26</sup> Consequently, the entire-record-allocated records were dropped from the sample, but the weighting adjustment was not performed.<sup>27</sup>

Additional manipulations of the data were necessary to identify entire-record-allocated observations in the post-1988 sample since the flag used to iden-

tify them (fl 665) could not be obtained from IPUMS-CPS. IPUMS-CPS was used despite lacking the fl 665 flag because IPUMS data have been processed to make variables comparable over all years.

To identify the entire-record-allocated observations with the fl 665 flag, CPS data files available on the National Bureau of Economic Research Web site for the post-1988 period were merged to the corresponding IPUMS-CPS files.<sup>28</sup> Unfortunately, a direct merge using variables identifying households in the monthly CPS files was not possible because IPUMS-CPS has its own identifying numbers unique to each household in a given survey year. To merge records, the following variables were used for all but year 2001: household income, line number, age, marital status, and March CPS weight. Merging records for all month-in-sample groups resulted in an insignificant number of non-merged observations ranging from 8 for year 1992 to 75 for year 2003. For 2001, merging these records using these matching variables resulted in a few hundred non-merged observations. Using household income, line number, age, gender, month-in-sample, marital status, and basic CPS weight instead resulted in only 64 non-merged observations. A total of 658 observations were deleted as a result of merging the IPUMS-CPS with the NBER files. This represents less than half a percent of all rotation groups in the post-1988 sample.

The data were rescaled so that all years receive equal weight.

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24. Anne E. Polivka and Stephen M. Miller, "The CPS After the Redesign: Refocusing the Economic Lens," 1995, at <http://www.bls.gov/osmr/abstract/ec/ec950090.htm> (August 26, 2008).

25. For further details, see Stewart, "Using March CPS Data to Analyze Labor Market Transitions."

26. *Ibid.*

27. The total number of deleted observations is 49,776.

28. See "CPS Supplement Files at NBER," at <http://www.nber.org/data/current-population-survey-data.html> (August 26, 2008).



## APPENDIX B

### Overall Analysis

The data were analyzed using a probit regression model. The dependent variables are dummy variables for a job separation or a particular type of transition: EE, EU, or EN. Each type of transition and overall job separation is analyzed separately for men and women in the basic analysis. Each regression includes dummy variables controlling for age (19–24, 25–34, 35–44, 45–54); educational attainment (high school dropouts, high school, some college, college graduates); race (white/non-white); marital status (married, spouse present; married, spouse absent; separated, divorced, widowed, never married/single); and region (Northeast, Midwest, South, West). The independent variable of interest is the time trend.

Appendix Tables 1 and 2 show the marginal effects estimates from these probit estimates for 1975–1976 to 2006–2007 and 1991–1992 to 2006–2007. The first row shows the coefficient on the time trend variable. For ease of presentation, the coefficients on the control variables are omitted. To analyze how trends for various age, education, race, and marital status groups have changed, the time trend was interacted with the corresponding dummy variables. Separate regressions were run for each group. The subsequent rows show the marginal effects coefficient on these interactions.

These marginal-effects coefficients were used to calculate the change in probability that a worker experienced a given transition. For the first row (the overall transition rate), the probability of the transition's occurring in the base year (1976) was calculated holding all other variables constant at their mean. The probability of the transition occurring in the final year (2007) was then calculated, again holding all other variables constant at their mean. The difference between the two is the change in the probability of the event's occurring between the final year and the base year. It is divided by the probability that it occurs in the base year to arrive at the percent change in likelihood that the transition occurs, holding all other variables constant.

For the subsequent rows reporting changes in transition rates by demographic characteristics (age, education, etc.), the change in probability was calculated in the following manner: The probability of the transition's occurring for workers of that demographic group (i.e., high school graduates) in the

base year was estimated, holding all other variables constant at their mean in that base year. The probability of the transition's occurring in the final year was then calculated for that group, again holding all other variables constant at their mean in the final year. The reported values are the difference between these two.

Note that this shows the change in the probability over time that high school graduates will experience a job-to-job transition, allowing the other characteristics of high school graduates—such as age or regional location—to vary. This differs from the methodology for the overall transition rates, which holds all control variables constant at the same level over time. Consequently, the top and subsequent rows are not strictly comparable. This different methodology was used to show the changes in job security for members of different demographic groups, recognizing that the characteristics of the typical member of these groups have changed over time.

### Industry Analysis

The industry is the industry of the longest job the employee worked in during the previous year. The regression analysis was the same as in the previous regressions, with dummy variables for industry added. The change in probabilities over time is calculated using the same methodology as in the initial analysis. Public-sector workers appear only as state, federal, or local employees and do not appear separately in any other industry. Appendix Table 3 shows the marginal-effects coefficient on the time trend and the time trend interacted with the industry variables.

### Pension Analysis

For the pension analysis, the sample is restricted to 1980–2007 because the pension variable is not available for years prior to 1980. Individuals were classified as working in the private sector if they reported being a wage/salary worker in the private sector for the longest job held during the previous calendar year. Appendix Table 4 shows the marginal-effects analysis used to generate the change in probabilities.

### Earnings Analysis

To generate income quintiles, the hourly wage measure for the previous year was constructed as follows: Total pre-tax wage and salary income for

# Marginal-Effects Coefficients for Job Separation Rates, 1976–2007

Standard errors are in italics.

	Men				Women			
	All Separations	Job to Job	Job to Un-employment	Left the Labor Force	All Separations	Job to Job	Job to Un-employment	Left the Labor Force
ALL	-0.0004 ** <i>0.0001</i>	0.0011 ** <i>0.0001</i>	-0.0015 ** <i>0.0000</i>	0.0000 <i>0.0000</i>	-0.0008 ** <i>0.0001</i>	0.0009 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>	-0.0007 ** <i>0.0001</i>
AGE								
19–24	-0.0022 ** <i>0.0002</i>	0.0006 ** <i>0.0001</i>	-0.0024 ** <i>0.0001</i>	0.0001 * <i>0.0000</i>	-0.0007 ** <i>0.0002</i>	0.0011 ** <i>0.0002</i>	-0.0013 ** <i>0.0001</i>	-0.0002 <i>0.0001</i>
25–34	-0.0009 ** <i>0.0001</i>	0.0011 ** <i>0.0001</i>	-0.0019 ** <i>0.0001</i>	-0.0001 * <i>0.0000</i>	-0.0013 ** <i>0.0002</i>	0.0007 ** <i>0.0001</i>	-0.0010 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>
35–44	0.0000 <i>0.0002</i>	0.0011 ** <i>0.0001</i>	-0.0011 ** <i>0.0001</i>	0.0001 <i>0.0001</i>	-0.0009 ** <i>0.0002</i>	0.0006 ** <i>0.0001</i>	-0.0005 ** <i>0.0001</i>	-0.0011 ** <i>0.0001</i>
45–54	0.0012 ** <i>0.0002</i>	0.0018 ** <i>0.0001</i>	-0.0004 ** <i>0.0001</i>	0.0000 <i>0.0000</i>	0.0003 <i>0.0002</i>	0.0015 ** <i>0.0002</i>	-0.0003 ** <i>0.0001</i>	-0.0007 ** <i>0.0001</i>
EDUCATION								
High School Dropouts	-0.0024 ** <i>0.0002</i>	0.0005 ** <i>0.0002</i>	-0.0020 ** <i>0.0001</i>	0.0000 <i>0.0001</i>	-0.0016 ** <i>0.0003</i>	0.0006 ** <i>0.0002</i>	-0.0007 ** <i>0.0001</i>	-0.0006 ** <i>0.0001</i>
High School	-0.0003 * <i>0.0001</i>	0.0014 ** <i>0.0001</i>	-0.0016 ** <i>0.0001</i>	0.0002 ** <i>0.0000</i>	-0.0007 ** <i>0.0002</i>	0.0013 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>
Some College	0.0001 <i>0.0002</i>	0.0014 ** <i>0.0001</i>	-0.0012 ** <i>0.0001</i>	-0.0002 ** <i>0.0000</i>	-0.0005 ** <i>0.0002</i>	0.0008 ** <i>0.0001</i>	-0.0007 ** <i>0.0001</i>	-0.0007 ** <i>0.0001</i>
College Graduates	0.0004 * <i>0.0002</i>	0.0009 ** <i>0.0001</i>	-0.0009 ** <i>0.0001</i>	-0.0001 <i>0.0001</i>	-0.0007 ** <i>0.0002</i>	0.0006 ** <i>0.0001</i>	-0.0010 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>
RACE								
White	-0.0004 ** <i>0.0001</i>	0.0010 ** <i>0.0001</i>	-0.0015 ** <i>0.0001</i>	0.0000 <i>0.0000</i>	-0.0010 ** <i>0.0001</i>	0.0007 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>
Nonwhite	-0.0004 <i>0.0002</i>	0.0018 ** <i>0.0002</i>	-0.0014 ** <i>0.0001</i>	-0.0001 * <i>0.0001</i>	0.0005 ** <i>0.0002</i>	0.0018 ** <i>0.0002</i>	-0.0005 ** <i>0.0001</i>	-0.0003 ** <i>0.0001</i>
MARITAL STATUS								
Married With Spouse Present	0.0002 * <i>0.0001</i>	0.0012 ** <i>0.0001</i>	-0.0012 ** <i>0.0001</i>	0.0001 * <i>0.0000</i>	-0.0020 ** <i>0.0001</i>	0.0009 ** <i>0.0001</i>	-0.0011 ** <i>0.0001</i>	-0.0014 ** <i>0.0001</i>
Other	-0.0015 ** <i>0.0001</i>	0.0010 ** <i>0.0001</i>	-0.0019 ** <i>0.0001</i>	-0.0001 * <i>0.0000</i>	0.0007 ** <i>0.0001</i>	0.0009 ** <i>0.0001</i>	-0.0005 ** <i>0.0001</i>	0.0004 ** <i>0.0001</i>

\* Coefficient is significant at the 1% level.

\*\* Coefficient is significant at the 5% level.

Note: The coefficients on the control variables are not reported here.

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

Appendix Table I • CDA 08–06  heritage.org

the previous calendar year was divided by the number of weeks worked last year and further divided by the number of usual hours worked per week last year. Income quintiles were determined separately

for each year. To simplify the presentation, Chart 5 was estimated for both men and women combined. Appendix Table 5 contains the marginal-effects coefficients from the probit estimates.

# Marginal-Effects Coefficients for Job Separation Rates, 1992–2007

Standard errors are in italics.

	Men				Women			
	All Separations	Job to Job	Job to Un-employment	Left the Labor Force	All Separations	Job to Job	Job to Un-employment	Left the Labor Force
<b>ALL</b>	-0.0024 ** <i>0.0002</i>	0.0007 ** <i>0.0002</i>	-0.0025 ** <i>0.0001</i>	-0.0002 ** <i>0.0001</i>	-0.0010 ** <i>0.0003</i>	0.0005 ** <i>0.0002</i>	-0.0011 ** <i>0.0001</i>	-0.0003 * <i>0.0001</i>
<b>AGE</b>								
<b>19–24</b>	-0.0076 ** <i>0.0007</i>	-0.0014 ** <i>0.0005</i>	-0.0034 ** <i>0.0003</i>	-0.0008 ** <i>0.0002</i>	-0.0038 ** <i>0.0008</i>	-0.0013 * <i>0.0005</i>	-0.0013 ** <i>0.0004</i>	-0.0004 <i>0.0003</i>
<b>25–34</b>	-0.0029 ** <i>0.0004</i>	-0.0001 <i>0.0003</i>	-0.0027 ** <i>0.0002</i>	0.0001 <i>0.0001</i>	-0.0013 ** <i>0.0005</i>	-0.0001 <i>0.0003</i>	-0.0011 ** <i>0.0002</i>	0.0000 <i>0.0002</i>
<b>35–44</b>	-0.0010 * <i>0.0004</i>	0.0017 ** <i>0.0003</i>	-0.0025 ** <i>0.0003</i>	-0.0001 <i>0.0001</i>	-0.0005 <i>0.0005</i>	0.0014 ** <i>0.0004</i>	-0.0013 ** <i>0.0003</i>	-0.0006 ** <i>0.0003</i>
<b>45–54</b>	-0.0003 <i>0.0005</i>	0.0020 ** <i>0.0004</i>	-0.0017 ** <i>0.0003</i>	-0.0003 * <i>0.0001</i>	0.0001 <i>0.0005</i>	0.0015 ** <i>0.0004</i>	-0.0008 ** <i>0.0003</i>	-0.0005 * <i>0.0003</i>
<b>EDUCATION</b>								
<b>High School Dropouts</b>	-0.0067 ** <i>0.0007</i>	-0.0004 <i>0.0006</i>	-0.0040 ** <i>0.0003</i>	-0.0003 <i>0.0002</i>	-0.0028 ** <i>0.0009</i>	0.0001 <i>0.0008</i>	-0.0009 * <i>0.0004</i>	-0.0008 * <i>0.0004</i>
<b>High School</b>	-0.0020 ** <i>0.0004</i>	0.0015 ** <i>0.0003</i>	-0.0028 ** <i>0.0002</i>	0.0000 <i>0.0001</i>	-0.0006 <i>0.0005</i>	0.0013 ** <i>0.0004</i>	-0.0012 ** <i>0.0002</i>	-0.0004 <i>0.0002</i>
<b>Some College</b>	-0.0023 ** <i>0.0004</i>	0.0004 <i>0.0003</i>	-0.0020 ** <i>0.0003</i>	-0.0005 ** <i>0.0001</i>	-0.0007 <i>0.0005</i>	0.0003 <i>0.0004</i>	-0.0008 ** <i>0.0003</i>	-0.0002 <i>0.0002</i>
<b>College Graduates</b>	-0.0006 <i>0.0004</i>	0.0006 <i>0.0003</i>	-0.0015 ** <i>0.0003</i>	-0.0002 <i>0.0002</i>	-0.0014 ** <i>0.0005</i>	0.0001 <i>0.0003</i>	-0.0016 ** <i>0.0003</i>	-0.0002 <i>0.0003</i>
<b>RACE</b>								
<b>White</b>	-0.0025 ** <i>0.0003</i>	0.0005 ** <i>0.0002</i>	-0.0022 ** <i>0.0004</i>	-0.0002 * <i>0.0001</i>	-0.0011 ** <i>0.0003</i>	0.0004 * <i>0.0002</i>	-0.0013 * <i>0.0002</i>	-0.0002 <i>0.0001</i>
<b>Nonwhite</b>	-0.0019 ** <i>0.0006</i>	0.0018 ** <i>0.0005</i>	-0.0026 ** <i>0.0001</i>	-0.0005 ** <i>0.0002</i>	-0.0007 <i>0.0006</i>	0.0012 * <i>0.0005</i>	-0.0007 * <i>0.0003</i>	-0.0007 * <i>0.0003</i>
<b>MARITAL STATUS</b>								
<b>Married With Spouse Present</b>	-0.0013 ** <i>0.0003</i>	0.0011 ** <i>0.0002</i>	-0.0025 ** <i>0.0002</i>	-0.0002 <i>0.0001</i>	-0.0013 ** <i>0.0004</i>	0.0008 ** <i>0.0003</i>	-0.0007 ** <i>0.0002</i>	-0.0005 ** <i>0.0002</i>
<b>Other</b>	-0.0038 ** <i>0.0004</i>	0.0000 <i>0.0003</i>	-0.0026 ** <i>0.0002</i>	-0.0003 ** <i>0.0001</i>	-0.0008 * <i>0.0004</i>	0.0003 <i>0.0003</i>	-0.0016 ** <i>0.0002</i>	-0.0001 <i>0.0002</i>

\* Coefficient is significant at the 1% level.

\*\* Coefficient is significant at the 5% level.

Note: The coefficients on the control variables are not reported here.

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

# Marginal-Effects Coefficients for Job Separation Rates by Industry, 1976–2007

Standard errors are in italics.

	All Separations	Job to Job	Job to Unemployment	Left the Labor Force
ALL	-0.0012 ** <i>0.0001</i>	0.0007 ** <i>0.0000</i>	-0.0014 ** <i>0.0000</i>	-0.0004 ** <i>0.0000</i>
<b>INDUSTRY LAST YEAR</b>				
Agriculture, Forestry, and Fishing	-0.0039 ** <i>0.0004</i>	-0.0007 * <i>0.0003</i>	-0.0010 ** <i>0.0002</i>	-0.0011 ** <i>0.0002</i>
Mining	-0.0023 ** <i>0.0007</i>	-0.0005 <i>0.0005</i>	-0.0014 ** <i>0.0003</i>	0.0001 <i>0.0003</i>
Construction	-0.0060 ** <i>0.0002</i>	-0.0007 ** <i>0.0002</i>	-0.0030 ** <i>0.0001</i>	-0.0002 <i>0.0001</i>
Manufacturing–Durable Goods	-0.0009 ** <i>0.0002</i>	0.0007 ** <i>0.0001</i>	-0.0013 ** <i>0.0001</i>	0.0001 <i>0.0001</i>
Manufacturing–Nondurable Goods	-0.0008 ** <i>0.0002</i>	0.0010 ** <i>0.0002</i>	-0.0012 ** <i>0.0001</i>	-0.0001 <i>0.0001</i>
Transportation	-0.0002 <i>0.0003</i>	0.0011 ** <i>0.0002</i>	-0.0014 ** <i>0.0002</i>	0.0003 <i>0.0002</i>
Telecommunications	0.0071 ** <i>0.0006</i>	0.0041 ** <i>0.0004</i>	0.0021 ** <i>0.0004</i>	0.0008 ** <i>0.0002</i>
Utilities and Sanitary Services	0.0103 ** <i>0.0007</i>	0.0079 ** <i>0.0005</i>	0.0003 <i>0.0004</i>	0.0010 ** <i>0.0003</i>
Wholesale Trade	-0.0015 ** <i>0.0003</i>	-0.0001 <i>0.0002</i>	-0.0013 ** <i>0.0002</i>	-0.0001 <i>0.0001</i>
Retail Trade	-0.0023 ** <i>0.0002</i>	0.0001 <i>0.0001</i>	-0.0015 ** <i>0.0001</i>	-0.0005 ** <i>0.0001</i>
Finance, Insurance, and Real Estate	-0.0002 <i>0.0002</i>	0.0005 ** <i>0.0002</i>	-0.0006 ** <i>0.0002</i>	-0.0003 ** <i>0.0001</i>
Business and Repair Services	0.0004 <i>0.0002</i>	0.0017 ** <i>0.0002</i>	-0.0009 ** <i>0.0001</i>	-0.0003 ** <i>0.0001</i>
Personal Services	-0.0040 ** <i>0.0004</i>	0.0000 <i>0.0003</i>	-0.0017 ** <i>0.0002</i>	-0.0011 ** <i>0.0001</i>
Entertainment and Recreation Services	0.0035 ** <i>0.0005</i>	-0.0001 <i>0.0003</i>	-0.0019 ** <i>0.0003</i>	-0.0007 ** <i>0.0002</i>
Professional and Related Services	-0.0012 ** <i>0.0002</i>	0.0004 ** <i>0.0001</i>	-0.0009 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>
Federal Government	0.0014 ** <i>0.0004</i>	0.0023 ** <i>0.0003</i>	-0.0014 ** <i>0.0002</i>	0.0002 <i>0.0001</i>
State Government	0.0006 <i>0.0003</i>	0.0018 ** <i>0.0002</i>	-0.0017 ** <i>0.0002</i>	-0.0004 ** <i>0.0001</i>
Local Government	-0.0001 <i>0.0002</i>	0.0014 ** <i>0.0002</i>	-0.0018 ** <i>0.0002</i>	-0.0006 ** <i>0.0001</i>

\* Coefficient is significant at the 1% level.

\*\* Coefficient is significant at the 5% level.

Note: The coefficients on the control variables are not reported here.

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

## Marginal-Effects Coefficients for Job Separation Rates by Income Quintile, 1976–2007

Standard errors are in italics.

	Men				Women			
	All Separations	Job to Job	Job to Un-employment	Left the Labor Force	All Separations	Job to Job	Job to Un-employment	Left the Labor Force
ALL	-0.0012 ** <i>0.0001</i>	0.0008 ** <i>0.0001</i>	-0.0018 ** <i>0.0000</i>	-0.0001 ** <i>0.0000</i>	-0.0010 ** <i>0.0001</i>	0.0009 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>	-0.0008 ** <i>0.0000</i>
HOURLY EARNINGS LAST YEAR								
Quintile 5 (Bottom 20%)	-0.0043 ** <i>0.0002</i>	0.0001 <i>0.0001</i>	-0.0028 ** <i>0.0001</i>	-0.0002 * <i>0.0000</i>	-0.0028 ** <i>0.0002</i>	0.0004 ** <i>0.0001</i>	-0.0011 ** <i>0.0001</i>	-0.0009 ** <i>0.0001</i>
Quintile 4	-0.0025 ** <i>0.0002</i>	0.0003 * <i>0.0001</i>	-0.0024 ** <i>0.0001</i>	-0.0001 <i>0.0001</i>	-0.0007 ** <i>0.0002</i>	0.0008 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>	-0.0007 ** <i>0.0001</i>
Quintile 3	-0.0012 ** <i>0.0002</i>	0.0005 ** <i>0.0001</i>	-0.0016 ** <i>0.0001</i>	-0.0001 <i>0.0001</i>	0.0002 <i>0.0002</i>	0.0011 ** <i>0.0002</i>	-0.0006 ** <i>0.0001</i>	-0.0006 ** <i>0.0001</i>
Quintile 2	0.0003 * <i>0.0002</i>	0.0012 ** <i>0.0001</i>	-0.0010 ** <i>0.0001</i>	0.0000 <i>0.0001</i>	0.0008 ** <i>0.0003</i>	0.0016 ** <i>0.0002</i>	-0.0005 ** <i>0.0002</i>	-0.0008 ** <i>0.0002</i>
Quintile 1 (Top 20%)	0.0010 ** <i>0.0002</i>	0.0016 ** <i>0.0001</i>	-0.0008 ** <i>0.0001</i>	0.0001 <i>0.0001</i>	0.0007 * <i>0.0004</i>	0.0018 ** <i>0.0003</i>	-0.0003 <i>0.0002</i>	-0.0008 ** <i>0.0002</i>

\* Coefficient is significant at the 1% level.

\*\* Coefficient is significant at the 5% level.

Note: The coefficients on the control variables are not reported here.

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

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## Marginal-Effects Coefficients for Job Separation Rates for Private Sector Workers by Pension Status, 1980–2007

Standard errors are in italics.

	All Separations	Job to Job	Job to Unemployment	Left the Labor Force
ALL	-0.0018 ** <i>0.0001</i>	0.0007 ** <i>0.0001</i>	-0.0020 ** <i>0.0001</i>	-0.0003 ** <i>0.0000</i>
PENSION				
No Pension Plan at Work	-0.0032 ** <i>0.0001</i>	0.0001 <i>0.0001</i>	-0.0021 ** <i>0.0001</i>	-0.0003 ** <i>0.0000</i>
Pension Plan at Work, but Not Included	-0.0010 ** <i>0.0003</i>	0.0008 ** <i>0.0002</i>	-0.0012 ** <i>0.0001</i>	-0.0003 ** <i>0.0001</i>
Included in Pension Plan at Work	-0.0002 <i>0.0001</i>	0.0013 ** <i>0.0001</i>	-0.0020 ** <i>0.0001</i>	-0.0001 <i>0.0001</i>

\* Coefficient is significant at the 1% level.

\*\* Coefficient is significant at the 5% level.

Note: The coefficients on the control variables are not reported here.

Source: Heritage Foundation calculations using data from the March 1976–March 2007 Current Population Survey. See Appendices for details.

Appendix Table 5 • CDA 08–06  heritage.org