The Returns to Mobility and Job Search by Gender

2 authors:

Kristen Keith
University of Toledo
10 PUBLICATIONS   302 CITATIONS

SEE PROFILE

Abagail Mcwilliams
University of Illinois at Chicago
57 PUBLICATIONS   13,145 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:

Project

The Oxford Handbook of Corporate Social Responsibility: Psychological and Organizational Perspectives, edited volume (with 4 co-editors) to be published in '18 View project

The Wage Effects of Cumulative Job Mobility
Author(s): Kristen Keith and Abagail McWilliams
Reviewed work(s):
Source: *Industrial and Labor Relations Review*, Vol. 49, No. 1 (Oct., 1995), pp. 121-137
Published by: Cornell University, School of Industrial & Labor Relations
Stable URL: http://www.jstor.org/stable/2524916
Accessed: 25/05/2012 11:10

THE WAGE EFFECTS OF CUMULATIVE JOB MOBILITY

KRISTEN KEITH and ABAGAIL MCWILLIAMS*

This analysis of data from the National Longitudinal Survey of Youth shows that cumulative job mobility had statistically significant effects on wages in the years 1979–88. The direction of the wage effects (positive or negative) and their magnitude varied depending on the type of cumulative mobility examined: employee-initiated versus employer-initiated separations, economic versus family-related quits, layoffs versus discharges. The results also indicate that although men and women had different mobility histories—men, for example, had been discharged more often than women, and women had quit for family-related reasons more often than men—the wage effects of each type of cumulative mobility (economic quits, family-related quits, layoffs, and discharges) were similar for men and women.

In this paper we examine the impact of cumulative job mobility on the subsequent wages of young men and women. Most previous work on this subject has focused on the impact of specific mobility events such as quits or layoffs, rather than on the impact of total job history on wages. Researchers looking at single mobility decisions have consistently reported evidence that a change in employers does affect a worker's subsequent wage. Therefore, it is reasonable to ask whether the impact of job change is cumulative. That is, does a worker's current wage reflect the impact of all past mobility decisions—quits, layoffs, and discharges? Also, since most of the earlier work has looked only at the mobility of men, it is reasonable to ask whether there are gender differences in job history patterns or in the effect of mobility on wages. Ours is the first study to look at the cumulative mobility of both young men and young women and to disaggregate mobility into four distinct categories: layoffs, discharges, family-related quits, and other quits.

One reason for comparing the mobility histories of young men with those of young women is to put to trial the still common assumption that young women, unlike men, are only intermittently attached to the labor market. Although that assumption may have been valid until fairly recently, there is good reason to suspect that young women today are less likely than in the past to

A data appendix with additional results, and copies of the computer programs used to generate the results presented in this paper, can be obtained from Kristen Keith at the University of Toledo, Department of Economics, Toledo, OH 43606.

interrupt their careers for appreciable lengths of time when they marry or have children. A related question is whether the wage effect of mobility is similar for men and women. Employers' interpretation of workers' mobility may depend partly on the workers' gender: young women who have moved from job to job may be seen as having limited attachment to the labor force, whereas young men with the same job histories may be seen as looking for a better job match or higher wages. If so, the returns to mobility may differ discriminatorily by gender.

To address the above issues, we examine several aspects of mobility, including whether there is a cumulative effect of mobility, whether employee-initiated and employer-initiated separations have different effects, whether different types of employee-initiated separations have different effects, whether different types of employer-initiated separations have different effects, and whether there are gender differences in job history and the wage effects of mobility. Our approach allows us to distinguish not only the wage effects of job shopping from those of firm-specific capital, but also the wage effects of exogenous market conditions from those of incompetence or malfeasance.

The principal analysis is based on OLS regressions of the log of the hourly wage on variables reflecting the cumulative mobility of young men and women who were employed in 1988. The data were drawn from the National Longitudinal Survey of Youth (NLSY). The NLSY is a panel study that has, since 1979, annually collected information on the labor market activities of approximately 12,000 men and women who were 14 to 22 years old in 1979. Using these data, we calculate descriptive statistics to compare the mobility histories of young men and women and we estimate the wage consequences of different types of mobility decisions for men and women.

Job Mobility and Wages

It is well established that men are more mobile early in their careers than they are

later in their careers. For example, Topel and Ward (1992) reported that during the first ten years of labor force participation a typical male will hold seven out of the ten jobs that he will hold in the course of his entire career. However, most studies of turnover have failed to consider the wage effects of cumulative prior mobility events. Two exceptions are Mincer and Jovanovic (1981) and Ruhm (1987).

Mincer and Jovanovic examined the effect of men's cumulative (interfirm) mobility on their current wages. Using samples of older men, younger men, and men of all ages, they found that cumulative job mobility did not affect the current wages of the young men, but it negatively affected the current wages of the men from the other age groups. This finding of no wage effect of young men's cumulative mobility is somewhat surprising, given the other evidence that has been reported on mobility. Many studies have reported that specific mobility events have significant wage effects (for example, Bartel and Borjas 1981; Mincer 1986; Flinn 1986; Antel 1986, 1991; McLaughlin 1990, 1991; and Blank 1990). Additionally, Ruhm (1987) has reported significant effects of multiple job separations.

Using the Panel Study of Income Dynamics (PSID) for the years 1969 to 1980, Ruhm (1987) examined the wage effects of multiple job separations for a sample of male and female heads of households. Data limitations restricted Ruhm to disaggregating mobility only into voluntary and involuntary separations.[1] His results indicated that multiple job separations affected workers differently depending on gender and race: white men benefited more from voluntary mobility than did women or nonwhite men, and the returns to women depended crucially on the stability of employ-

---

ment after a job change, whereas the returns to men did not.

Researchers who limited their analysis to a single mobility event among young workers also reported gender and race differences in mobility and the wage consequences of mobility. Blau and Kahn (1981a,b) examined the likelihood and consequences of layoffs and quits for samples of young men and young women who participated in the labor force in the early 1970s. They found that women experienced substantially less involuntary turnover than men, which they attributed in part to gender differences in collective bargaining coverage. Also, they found that although the average quit rate was higher for women than for men, an analysis that controlled for personal characteristics and job characteristics revealed similar quit propensities for men and women.[2]

With respect to the consequences of mobility, Blau and Kahn found that white men were hurt more by a layoff than were black men and that women appeared to be unaffected by layoffs. In addition, they found that quitting appeared to improve the current wage and long-run earning prospects of all young workers. In contrast, Loprest (1992) found evidence of gender differences in the consequences of quitting for a sample of young workers who entered the labor force a decade later than the young workers in Blau and Kahn's research. Loprest found that for a sample of predominantly full-time, continuously employed young men and women, on average, the increase in wages from changing employers was twice as high for men as for women.[3]

The current study extends this literature on the wage effects of mobility by examining (1) the separate effects of cumulative voluntary (employee-initiated) and invol-

untary (employer-initiated) mobility events, (2) the separate effects of cumulative economic quits and family-related quits, and (3) the separate effects of cumulative layoffs and discharges for both young men and young women. By examining cumulative mobility, as well as separating the different components of mobility, we develop a clearer picture of the effect of job history on the subsequent wages of young men and women.

The data for this study are drawn from the NLSY data files for 1979 through 1988. The NLSY contains extensive information on each respondent's work history, information which, unlike that used by Ruhm, allows an analysis of the effects of different kinds of voluntary and involuntary mobility on subsequent wages. Specifically, for every job separation (up to five jobs per year), the respondent is asked, "Which of the reasons on this card best describes why you happened to leave this job?" The possible responses to this question can be classified as (1) a layoff (temporary or permanent), (2) a discharge, (3) a quit for pregnancy or other family-related reason, and (4) a quit for any other reason. From this information it is possible to construct four separate cumulative mobility variables.

The Cumulative Mobility Variables

The Cumulative Quit Variable

Since few studies include cumulative quit, layoff, and discharge variables in a standard human capital earnings function, a brief discussion of these variables is warranted. The cumulative quit variable is the sum of the respondent's prior voluntary job changes. As a utility-maximizing mobility hypothesis would suggest, this measure of voluntary mobility contains a potentially large self-selection element. Individuals usually voluntarily change jobs (quit) if the expected benefits to changing jobs outweigh the expected costs. The expected benefits of changing jobs may include higher wages, more benefits, or a better job match. The expected costs may include the loss of firm-specific investments, such as

---

[2]Studies that have focused on gender differences in quit behavior include Viscusi (1980), Meitzen (1986), and Light and Ureta (1990, 1992).

[3]Loprest pointed out that her strict work-continuity restriction results in a sample that is not representative of young workers in general.

firm-specific training (Becker 1964, Parsons 1972) or deferred compensation (Becker and Stigler 1974; Lazear 1981). Movers may improve their wages through job change as a result of job shopping, because job shopping can allow workers to determine their comparative advantage (Johnson 1978) or to find a better job match (Jovanovic 1979).[4] Alternatively, stayers may realize wage gains by investing in firm-specific capital such as firm-specific on-the-job training.

For an employed worker, job shopping and firm-specific training may represent mutually exclusive previous human capital investment strategies, making it difficult to interpret the meaning of an OLS wage-quit estimate. A positive coefficient on previous quits could reflect the returns from previous job shopping, and a negative coefficient could imply that those with fewer quits have higher wages due to longer periods of firm-specific investment. Therefore, if our sample includes both individuals who were highly mobile because they were job shopping and other individuals whose mobility was constrained because of their firm-specific investments, we may be inadvertently aggregating wage effects of opposite signs. One way to control for this problem is to distinguish the types of quits that are motivated by job-related reasons from those that are not. This approach was used by Bartel and Borjas (1981), who showed that a job-related quit has a larger effect on wage growth than a personal quit, with the highest wage growth resulting from successful job shopping.

Cumulative Economic and Family-Related Quits Variables

The NLSY distinguishes between family-related and other quits. We were thus able to disaggregate the cumulative quit variable into family-related quits and economic (other) quits.[5] This disaggregation is important because we hypothesize that economic quits and family-related quits have different effects on subsequent wages. Specifically, we hypothesize that economic quits are more likely to have a positive effect on subsequent wages than are family-related quits because economic quits are more likely to be associated with pre-quit, or on-the-job, job search.[6]

An economic quit is likely to be job-related, for example, due to low pay. If a worker is dissatisfied with his or her current job, and is thinking about changing jobs, he or she is likely to engage in pre-quit job search. If the job search is successful, the worker will change jobs (employers), that is, engage in job shopping. In the case of an economic quit, it is likely that this job-shopping effect will dominate the lost-specific-capital effect—otherwise the worker will not quit. For this reason, it is likely that economic quits and subsequent wages will be positively related.

Family-related quits are not as likely as economic quits to be positively related to subsequent wages for two reasons. First, if a substantial percentage of family-related quits are motivated by the search for non-financial gains, such as flexible hours, the subsequent wage rate may not be a broad enough measure of the gains from this type of voluntary mobility. Second, family-related quits are more likely than economic quits to be due to unexpected random events such as family members' health crises. Because these are random events, the worker may be less likely to engage in pre-

---

[4]Job search refers to the act of looking for a different job (employer). Burdett's (1978) model of employed job search recognizes that job search can take place on the job. Job shopping refers to a change in employment that results from a successful job search. Some workers will job search but will not change jobs because they do not find a better job. Therefore, job shopping may result from job search, but job search does not necessarily result in job shopping.

quit job search. For both of these reasons, the lost-specific-capital effect may dominate the job-shopping effect, resulting in smaller wage gains (relative to those from an economic quit) from a family-related quit decision.

The Cumulative Layoff and Discharge Variables

The cumulative layoff variable is the sum of all job changes due to layoffs, and the cumulative discharge variable is the sum of all job changes due to discharges. Using the Bureau of Labor Statistics' definitions (U.S. Department of Labor 1971), we make the following distinction between layoffs and discharges: layoffs are employer-initiated terminations for such reasons as lack of orders and the end of seasonal or temporary employment, whereas discharges are terminations of employment initiated by the employer for such reasons as incompetence, violation of rules, or dishonesty. The primary difference between a layoff and a discharge is that a layoff is assumed to result from exogenous circumstances, or circumstances beyond the control of the employee, whereas a discharge is assumed to result from circumstances that are within the control of the employee, such as incompetence or malfeasance.

As with employee-initiated separations, wage growth following an employer-initiated separation is likely to be influenced by two effects—the return to post-separation job search and the loss of firm-specific capital. Since layoffs and discharges are presumably events that occur independent of the worker's volition, they are less likely than quits to be preceded by job search. In addition, if the terminated employee has firm-specific investments, such as firm-specific training, the loss of firm-specific capital may dominate any returns from the post-layoff job search. Consequently, cumulative layoffs and discharges are not as likely as cumulative quits to be positively related to current wages and may, in fact, be negatively related. Furthermore, if a discharge has reputational effects, that is, if it signals that the terminated individual is

incompetent or his or her behavior was malfeasant, the effects of a discharge on subsequent wages may be different from those of a layoff. Parsons (1989) made this argument and found support for it in evidence that a discharge imposes a large malfeasance wage penalty on young men.

Mobility Decisions and Job Search

Before examining the wage effects of cumulative economic quits, family-related quits, layoffs, and discharges, we looked at whether different types of mobility events were associated with different amounts of pre-separation job search. There is substantial evidence to support the hypothesis that pre-separation job search is important. For example, an early study by Mattila (1974) found that 50–60% of job changes involved no intervening spell of unemployment. More recently, Parsons (1991) reported that 50% of a sample of men had a new job lined up before they quit their previous job. And although no studies have directly examined whether the determinants of pre-quit job search are different for economic quits and family-related quits, Parsons (1991) provided some indirect evidence that individuals quitting for a family-related reason engaged in less pre-quit job search. He found that young women were more likely than young men to quit for family-related reasons, and they were also less likely than young men to have new jobs lined up before they quit.

In Table 1 we present evidence on the likelihood of employed job search by type of mobility and by gender. Columns 1 and 3 of Table 1 contain the percentage of men and women who had a new job lined up before they left their old job. These percentages are calculated separately for the total number of job changes due to economic quits, family-related quits, layoffs, and discharges between 1980 and 1988. During this nine-year period, men and women who quit for an economic reason were twice as likely to have a new job lined up before they quit as were those who were laid off, and they were four to five times as likely to have a new job lined up before they

Table 1. The Percentage of Young Men and Young Women
Who Had a New Job Lined Up Prior to Job Separation: NLSY, 1980–88.[a]

Had a New Job Lined up Prior to:	Men			Women			
	Mean	S.E.	n	Mean	S.E.	n	t
An Economic Quit	53.0%	0.004	16,211	49.0%	0.004	13,572	7.1***
A Family-Related Quit	30.0%	0.027	229	14.0%	0.011	968	5.5***
A Layoff[b]	23.0%	0.004	7,751	25.0%	0.006	5,515	-2.8***
A Discharge	13.0%	0.008	1,538	10.0%	0.010	989	2.3**

[a]The number of observations, n, refers to multiple job separation observations between 1980 and 1988 on individuals who continued to participate in the labor force.

[b]The layoff category does not distinguish between temporary and permanent layoffs.

Source: National Longitudinal Survey of Youth, 1980–88.

**The difference between men and women is statistically significant at the .05 level; ***at the .01 level (two-tailed tests).

quit as were those who were discharged. Further, men and women who were laid off were twice as likely to have a new job lined up before they were laid off than were those who were discharged.

Gender differences in job search are most noticeable in relation to family-related quits. Men were more than twice as likely as women to have a new job lined up before quitting for a family-related reason. Perhaps men and women differ in the behavioral dynamics leading to family-related quits. For example, if women who quit for family-related reasons are more likely to exit the labor force (even temporarily) than are men who quit for family-related reasons, it seems likely that they will engage in less pre-quit job search.

The Young Male and Young Female Samples

For this study, we selected samples of young (24–31-year-old) men and women within their first decade of recorded job history who reported being employed at the time of their 1988 interview. We chose to look at young workers for several reasons. First, although workers may be in the labor market for over four decades, most of their job mobility occurs in the first decade of work. Therefore, most of the effect of mobility can be captured by examining the histories of young workers. Second, we are interested in determining whether recent

changes in the societal expectations of, and labor market opportunities for, men and women are reflected in employers' treatment of mobility. In particular, because expectations and opportunities have become more equal for men and women, it may be that employers' interpretation of mobility has also become less influenced by workers' gender. Finally, there is strong evidence that each new cohort of women that enters the labor market exhibits higher participation rates, more continuous participation, and more education than the one before (O'Neill 1992). Therefore, more recent data on younger women should be more accurate in describing current market outcomes and more reliable for predicting future outcomes.

In order to be included in the sample, these individuals had to have a wage observation in 1988 and had to have been surveyed annually from 1979 to 1988. We imposed the latter restriction to ensure that no individual's post–1979 mobility history contained missing observations. These sample restrictions resulted in samples comprised of 3,074 young men and 2,839 young women.

Table 2 presents the descriptive statistics of selected variables for both samples. (The variables are described in detail in Appendix A.) The first and third columns contain the sample means for the respondents from the men's and women's samples, respectively. The men were younger and had

Table 2. Selected Sample Means and Standard Errors,
Young Men and Young Women in the 1979–88 NLSY.

| Variable | Men (n = 3,074) | | Women (n = 2,839) | | |
	Mean	SE	Mean	SE	t
Hourly Wage	9.53	0.102	7.89	0.092	11.94***
Log Wage	2.12	0.010	1.93	0.010	13.44***
All Prior Mobility Decisions:					
Cumulative Mobility	6.90	0.078	6.06	0.073	7.86***
Voluntary Mobility	4.15	0.054	4.12	0.057	0.38
Involuntary Mobility	2.75	0.046	1.94	0.038	13.58***
Economic Quits	3.95	0.053	3.64	0.054	4.10***
Family-Related Quits	0.20	0.008	0.48	0.015	−16.47***
Layoffs	2.36	0.042	1.70	0.036	11.93***
Discharges	0.40	0.016	0.24	0.011	8.24***
Personal Characteristics:					
Age	26.83	0.041	26.97	0.042	2.39**
AFQT Score	43.37	0.545	43.83	0.512	−0.62
Education	12.82	0.043	13.21	0.041	−6.56***
Experience	7.06	0.054	5.81	0.051	16.83***
Tenure	2.95	0.053	2.83	0.052	1.62
Job Characteristics:					
Full-Time	93.0%	0.005	80.1%	0.007	15.00***
Union	17.7%	0.007	14.4%	0.007	3.33***

Source: National Longitudinal Survey of Youth, 1979–88.
**The difference between men and women is statistically significant at the .05 level; ***at the .01 level (two-tailed tests).

fewer years of education than the women, but they had more years of actual job experience. Although some of these differences in human capital variables are statistically significant, none are very large.

There is no difference between men's and women's average lengths of tenure or AFQT scores. The AFQT (Armed Forces Qualifying Test) is a summary measure of mental ability used by the armed forces. It is composed of standardized scores from tests of word and math knowledge, paragraph comprehension, and arithmetic reasoning. Because those who have more ability may have more opportunities and thus more job mobility, we have included the AFQT in this study to control for this type of unobservable heterogeneity.

Of more interest to this study are the means of the job mobility variables. The cumulative mobility variable represents the number of previous (interfirm) jobs held by an individual. The men had held an average of 6.9 jobs, the women 6.1. Disaggregating cumulative job mobility into voluntary (employee-initiated) and involuntary (employer-initiated) mobility events, we find no statistically significant difference between men and women in the number of voluntary separations. There is, however, a statistical difference by gender in the number of involuntary separations. Young men had nearly 1.5 times as many involuntary job changes as young women.[7] Thus it appears that the difference in the average number of jobs in the two samples

---

[7]Although there are possible sources of bias in these self-reported data—for example, under-reporting of discharges as layoffs—there is some evidence that employer-reported data would produce similar measures of cumulative quits, layoffs, and discharges. Parsons (1989) compared the consistency of employee-reported reasons for turnover from the NLSY to employer-reported reasons for turnover from the EOPP-NCRVE Employer Survey, a survey sponsored by the National Institute of Education and the National Center for Research in Vocational Education. He found that the pattern of turnover reported by employees was quite similar to that reported by employers when firm size was controlled.

is primarily a result of the men having experienced more involuntary job separations than the women.

Disaggregation of voluntary mobility into family-related and economic quits, and involuntary mobility into layoffs and discharges, reveals significant gender differences in all types of mobility events. Young women reported more family-related quits, but fewer economic quits, layoffs, and discharges, than young men did.

It is important to note here that we have not controlled for gender differences in occupation and industry. If certain occupations and industries are associated with higher layoff and discharge rates than others, and if men disproportionately work in these occupations and industries, then controlling for occupation and industry may account for some of the gender difference in the average number of layoffs and discharges.

Having established that there are gender differences in mobility history for the young men and women in our sample, we looked at the wage consequences of mobility for each group.

Regression Results

Determinants of Wages

There is some evidence that women's wage equations differ from men's (Groshen 1991; Hersch and Reagan 1991) and that mobility affects women and men differently (Light and Ureta 1992; Loprest 1992). Because of this evidence, we examined whether the structures of the men's and women's wage equations were similar by testing for (1) differences in the intercepts and (2) differences in the intercepts and slopes. The results from two F-tests allow us to reject the hypothesis of a similar structure for the wage equations. Therefore, separate wage estimates for the men and women are presented in Tables 3 and 4.

The estimated coefficients from the OLS wage equations are shown in Tables 3 and 4 for men and women, respectively. To the extent that people who have a history of many layoffs and discharges are less likely

than others to be employed at any particular time (in this case, the time of the annual survey), a sample of employed workers may have sample selection problems.[8] When we used the standard two-stage Heckman correction to examine the extent of employment bias present in our sample (Heckman 1979), however, we found that the corrected estimates did not differ significantly from their OLS counterparts. The results from the OLS estimation are therefore included in Tables 3 and 4 and the corrected estimates are reported in Appendix B.

In both Table 3 and Table 4, the first column contains the aggregated cumulative mobility estimates. The third and fifth columns contain the disaggregated cumulative mobility estimates: cumulative voluntary and involuntary mobility estimates are in the third column, and cumulative family-related quits, economic quits, layoffs, and discharges are in the fifth column. Three things are worth noting. First, the wage effects of the standard human capital variables are generally of the expected sign. Second, the differences between the men's and women's wage equations are differences that are common to cross-sectional analyses of the determinants of men's and women's wages (see, for example, Corcoran and Duncan 1979; Freeman and Leonard 1987; Hill 1979; Korenman and Neumark 1991, 1992; and Even and Macpherson 1993). Third, a row-by-row examination of the non-mobility variables in Tables 3 and 4 shows that, in general, disaggregating the prior mobility variables does not affect the sign or the magnitude of the other independent variables' estimates.[9]

---

[8]The family-related quit variable represents another potential source of sample selectivity. The decision to quit for a family-related reason is not likely to be correlated with subsequent wages. However, the decision to return to work from a family-related quit may be correlated with subsequent wages, since those who take a job after exiting for a family-related reason are likely to be the ones with the highest wage offers.

[9]In response to concerns of a referee, we also estimated our model with lagged wage as an explanatory variable. This procedure reduced our sample size by 50%, but did not change any of the results significantly. Using this specification, we found that

Table 3. The OLS Determinants of the Hourly (log) Wage of Young Men (n = 3,074),
with Aggregated and Disaggregated Cumulative Job Mobility from 1979 to 1988.[a]

Independent Variable	Model 1		Model 2		Model 3	
	β̂	t-Value	β̂	t-Value	β̂	t-Value
Cumulative Mobility	−0.004	1.58	—	—	—	—
Voluntary Mobility	—	—	0.007**	2.09	—	—
Involuntary Mobility	—	—	−0.016***	4.47	—	—
Economic Quits	—	—	—	—	0.008**	2.26
Family-Related Quits	—	—	—	—	0.025	1.32
Layoffs	—	—	—	—	−0.009**	2.41
Discharges	—	—	—	—	−0.061***	5.97
Age	0.001	0.23	0.003	0.68	0.003	0.63
AFQT Score	0.003***	6.29	0.003***	6.05	0.003***	6.06
Married	0.118***	5.80	0.116***	5.74	0.112***	5.55
No. of Children < 6 Yrs. Old	0.002	0.18	0.002	0.18	0.002	0.12
No. of Children ≥ 6 Yrs. Old	0.006	0.27	0.006	0.28	0.006	0.29
White	0.046**	2.28	0.039*	1.93	0.040**	1.96
Education	0.043***	8.85	0.041***	8.35	0.037***	7.57
Experience	0.078***	7.06	0.074***	6.67	0.075***	6.81
Experience^2	−0.004***	5.22	−0.004***	5.21	−0.004***	5.34
Tenure	0.048***	4.77	0.052***	5.16	0.049***	4.90
Tenure^2	−0.003***	3.51	−0.004***	3.70	−0.003***	3.46
Full-Time	0.079**	2.32	0.083**	2.44	0.079**	2.33
Union	0.029***	3.67	0.028***	3.55	0.026***	3.28
Urban	0.137***	6.19	0.134***	6.06	0.138***	6.28
Unemployment Rates						
U2	−0.133***	3.67	−0.130***	3.59	−0.129***	3.59
U3	−0.181***	4.75	−0.173***	4.54	−0.173***	4.55
U4	−0.241***	5.56	−0.230***	5.31	−0.231***	5.36
U5	−0.276***	3.09	−0.264***	2.96	−0.264***	2.97
U6	−0.344***	3.20	−0.335***	3.12	−0.334***	3.12
East	0.046*	1.67	0.048*	1.74	0.050*	1.83
Central	−0.063***	2.34	−0.055**	2.06	−0.052**	1.96
South	−0.109***	4.51	−0.115***	4.75	−0.115***	4.77
Constant	0.967***	7.19	0.954***	7.11	0.999***	7.37
Adj. R^2	0.271	—	0.276	—	0.281	—

[a]The dependent variable is the log of the hourly wage measured in 1988 dollars. Hourly wages greater than $100 were deleted.
Source: National Longitudinal Survey of Youth, 1979–88.
*Statistically significant at the .10 level; **at the .05 level; ***at the .01 level (two-tailed tests).

The Wage Effects of Cumulative Mobility

The aggregate cumulative mobility estimates for both men and women are insig-

economic quits are positively related to subsequent wages; layoffs and discharges are negatively related to subsequent wages; and (for women only) family-related quits are negatively related to subsequent wages. The absolute value of the magnitudes of the women's cumulative family-related quits estimate and the men's cumulative discharges estimate did increase. These results are available on request to the authors.

nificant at a 5% two-tailed level. However, when disaggregated, the cumulative voluntary and involuntary mobility estimates for both samples are significant: a prior voluntary move increases current wages by approximately 1%, and a prior involuntary move decreases current wages by approximately 2%. It may be that Mincer and Jovanovic (1981) found no significant wage effects of young men's cumulative mobility because an aggregated cumulative mobility variable disguises the offsetting effects of

Table 4. The OLS Determinants of the Hourly (log) Wage of Young Women (n = 2,839), with Aggregated and Disaggregated Cumulative Job Mobility from 1979 to 1988.[a]

Independent Variable	Model 1		Model 2		Model 3	
	$\hat{\beta}$	t-Value	$\hat{\beta}$	t-Value	$\hat{\beta}$	t-Value
Cumulative Mobility	−0.001	0.47	—	—	—	—
Voluntary Mobility	—	—	0.007**	2.06	—	—
Involuntary Mobility	—	—	−0.016***	3.47	—	—
Economic Quits	—	—	—	—	0.011***	3.10
Family-Related Quits	—	—	—	—	−0.024**	2.04
Layoffs	—	—	—	—	−0.012***	2.55
Discharges	—	—	—	—	−0.054***	3.76
Age	−0.007	1.43	−0.007	1.47	−0.005	1.04
AFQT score	0.004***	8.85	0.004***	8.71	0.004***	8.68
Married	−0.010	0.54	−0.012	0.66	−0.013	0.72
No. of Children < 6 Yrs. Old	−0.030**	2.35	−0.032**	2.44	−0.023**	1.71
No. of Children ≥ 6 Yrs. Old	0.010	0.72	0.009	0.67	0.017	1.20
White	−0.011	0.52	−0.019	0.88	−0.015	0.70
Education	0.048***	9.28	0.051***	9.60	0.048***	9.02
Experience	0.042***	3.11	0.039***	2.87	0.043***	3.14
Experience²	−0.0002	0.17	−0.0001	0.14	−0.0005	0.48
Tenure	0.063***	5.84	0.067***	6.14	0.066***	6.10
Tenure²	−0.005***	4.32	−0.005***	4.44	−0.005***	4.43
Full-Time	0.074***	3.30	0.075***	3.37	0.073***	3.27
Union	0.019***	2.57	0.018**	2.54	0.018***	2.50
Urban	0.146***	6.73	0.143***	6.59	0.147***	6.82
Unemployment Rates						
U2	−0.118***	3.64	−0.112***	3.48	−0.114***	3.54
U3	−0.193***	5.60	−0.188***	5.47	−0.189***	5.52
U4	−0.165***	4.00	−0.157***	3.80	−0.161***	3.90
U5	−0.311***	3.48	−0.277***	3.08	−0.275***	3.07
U6	−0.221**	2.15	−0.204**	1.99	−0.213**	2.08
East	0.054*	1.90	0.057**	1.99	0.056**	1.99
Central	−0.091***	3.30	−0.088***	3.20	−0.091***	3.29
South	−0.103***	4.17	−0.104***	4.23	−0.105***	4.29
Constant	1.000***	7.36	0.992***	7.31	0.962***	7.04
Adj. R²	0.320	—	0.324	—	0.327	—

[a]The dependent variable is the log of the hourly wage measured in 1988 dollars. Hourly wages greater than $100 were deleted.

Source: National Longitudinal Survey of Youth, 1979–88.

**Statistically significant at the .05 level; ***at the .01 level (two-tailed tests).

voluntary and involuntary mobility on subsequent wages.

The evidence from the disaggregated cumulative mobility analysis is consistent with evidence from prior studies of the wage effects of specific mobility events, which suggest that voluntary mobility is positively related to subsequent wages and involuntary mobility is negatively related to subsequent wages. It is also consistent with the hypothesis that on-the-job job search

can affect the outcome of mobility on wages. To the extent that workers cannot anticipate an employer-initiated separation, they will be less likely to have engaged in pre-separation job search. If this generalization holds for each mobility event, we would expect a less positive wage effect from cumulative employer-initiated separations than from cumulative employee-initiated separations.

An examination of column 5 in Tables 3

and 4 reveals additional information about the wage effect of cumulative mobility. For both men and women, discharges and lay-offs negatively affected subsequent wages, and economic quits positively affected subsequent wages. A prior family-related quit had no significant effect on the subsequent wage of men, but decreased the subsequent wage of women by approximately 2%. We interpret these results as evidence that the likelihood of pre-separation job search explains some of the differential effect of turnover type on wages. However, differences in the likelihood of employed job search do not explain the large negative effect on wages that results from cumulative discharges. The negative effect of discharges may, instead, be consistent with a reputational effect of discharges.

The wage effects of the different types of cumulative mobility are similar for young men and women. The only difference is in the family-related quits estimate, which is not significant for men but is significant and negative for women. The lack of significance for the family-related quits estimate for the men can be explained, at least in part, by the vast difference between men and women in the rate of occurrence of this type of mobility event. For example, women had twice as many prior family-related quits as did men. In addition, we believe that men's greater likelihood of having a new job lined up prior to quitting for a family-related reason may also help explain why men did not suffer the same wage losses from family-related quits as women did.

The Relative Impact of the Most Recent Mobility Decision

It is possible that the estimated returns to cumulative mobility are driven principally by the returns to the most recent mobility event. Furthermore, because the cumulative economic quits variable includes the most recent mobility event, there may be simultaneous equations bias. To determine whether there actually is a cumulative effect of mobility, and to perform a simple test of the robustness of the OLS economic quits estimate, we separate the wage effect

of individuals' most recent mobility events from the wage effect of their earlier mobility events. We do so by disaggregating cumulative mobility into an individual's most recent job separation and the remainder of his or her cumulative mobility history. For example, if the individual's most recent separation was an economic quit, it would be classified as "quit for an economic reason" with a dummy variable. The cumulative family-related quit, layoff, and discharge variables would be the same as before, but the economic quit variable would contain one less economic quit.

To separate out the effect of the most recent separation, we defined four dummy variables: quit for an economic reason, quit for a family-related reason, laid off, and discharged. The means and standard errors of these variables are presented in Table 5. An examination of columns 1 and 3 shows that the gender pattern for men's and women's most recent mobility event is the same as the gender pattern for their cumulative mobility. Sixty-five percent of the young men and women reported that their most recent instance of mobility was an economic quit. Once again, however, there were differences between men and women. Men were more likely than women to report that their most recent job separation was employer-initiated, and less likely than women to report that it was a family-related quit. Women were less likely than men to report an employer-initiated separation, but were eight times more likely than men to report a family-related quit.

The estimates from the time-based disaggregation of cumulative mobility are presented in Table 6. The estimates for the men and women are in columns 1 and 3, respectively. To conduct this analysis, we omitted the dummy variable for economic quits. Thus, the effect of quitting for a family-related reason, of being laid off, or of being discharged can be interpreted relative to quitting for an economic reason. An examination of the mobility estimates reveals that the wages of young men who were discharged were significantly lower than those of men who quit for an economic reason. Men who were laid off and those

Table 5. Means and Standard Errors of Young Men's
and Young Women's Most Recent Job Separation.

Most Recent Mobility Decision[a]	Men (n = 3,074)		Women (n = 2,839)		
	Mean	*SE*	*Mean*	*SE*	*t*
Quit for an Economic Reason	65.6%	0.009	65.2%	0.009	0.31
Quit for a Family Reason	1.0%	0.002	8.0%	0.005	−13.00***
Laid Off	26.7%	0.008	20.7%	0.008	5.30***
Discharged	4.3%	0.004	3.1%	0.003	2.40**

[a]The most recent mobility rates do not sum to 100% because 2.6% of the respondents have no prior mobility.
Source: National Longitudinal Survey of Youth, 1979–88.
**The difference between men and women is statistically significant at the .05 level; ***at the .01 level (two-tailed tests).

who quit for a family-related reason did not appear to have lower wages than men who quit for an economic reason. The wages of women who quit for a family-related reason, were laid off, or were discharged were significantly lower than those of women who quit for an economic reason. The disaggregation of cumulative prior mobility into the most recent separation and all others did not affect the estimates of the other independent variables.

Table 6 also contains the estimates for cumulative prior mobility. The analysis that distinguishes between the most recent mobility events and cumulative prior mobility reveals that for young men cumulative economic quits, layoffs, and discharges still affect current wages, whereas for young women only cumulative economic quits and discharges affect current wages. Thus, an analysis that isolates the most recent mobility event reveals that there are additional gender differences: cumulative economic quits and discharges affect the subsequent wages of both men and women, but cumulative layoffs affect only men's subsequent wages (keeping in mind that men are more likely than women to be laid off). Also, interestingly, family-related quits appear to have had no cumulative effect for either gender.

Although the time-based disaggregation reduced the levels of significance of the economic quits estimates, it did not change their values. We also estimated a model in which we excluded the last mobility event. The cumulative mobility estimates from this model were similar to those from the original OLS estimation (Tables 3 and 4) and the time-based disaggregation model (Table 6). Because economic quits estimates from a model that excluded the most recent mobility event do not differ from those presented in Tables 3, 4, and 6, we believe the potential correlation of economic quits with the wage residuals is not of great practical importance. In addition, there are at least two reasons why the economic quits estimates are conservative estimates of the true effect of cumulative economic quits on subsequent wages. First, for both men and women, we were unable to sort out the wage-based reasons for a job-related quit from the non-wage-based reasons. Aggregating these two types of job-related quits potentially introduces a downward bias in the wage effect of cumulative economic quits. Second, for men it is possible that some family-related quits are misclassified as economic quits, as explained in footnote 5. This type of misclassification could introduce a downward bias in estimates of men's cumulative economic quits.

The finding of no cumulative effect of family-related quits for either men or women may result from two very different phenomena. In the case of men, it may simply be that the number of observations of family-related quits is too small to show a statistically significant relationship. In the case of women, however, the finding of no cumulative effect of family-related quits cannot be explained by a lack of observations, and we therefore believe that it may

Table 6. The Effect on Young Men's and Young Women's Wage Equations of Separating Cumulative Mobility into the Most Recent Job Separation and All Other Mobility Events.[a]

Independent Variable	Men (n = 3,074)		Women (n = 2,839)	
	$\hat{\beta}$	t-Value	$\hat{\beta}$	t-Value
Most Recent Mobility Decision:[b]				
Quit for a Family Reason	−0.009	0.11	−0.086***	2.69
Laid Off	−0.024	1.27	−0.091***	4.25
Discharged	−0.124***	3.01	−0.108**	2.21
Other Cumulative Mobility:				
Economic Quits	0.006*	1.83	0.007*	1.92
Family-Related Quits	0.029	1.50	−0.019	1.46
Layoffs	−0.009**	2.33	−0.008	1.63
Discharges	−0.057***	5.30	−0.051***	3.37
Adj. R^2	0.290	—	0.332	—

[a]The dependent variable is the log of the hourly wage measured in 1988 dollars. Hourly wages greater than $100 were deleted.

[b]Quit for an economic reason is the omitted dummy variable. The following variables were included in the regression, but not reported: AFQT score, age, marital status, number of children aged less than 6, number of children aged 6 or older, race, education, experience, experience squared, tenure, tenure squared, full-time, union status, local unemployment rates, geographic area, urban, and a dummy variable for no prior mobility.

Source: National Longitudinal Survey of Youth, 1979–88.

*Statistically significant at the .10 level; **at the .05 level; ***at the .01 level (two-tailed tests).

tell us something about women's behavior. If there is a relatively high probability that a woman will have to quit a job for family-related reasons, she will be more likely than a man to choose an occupation in which there are not high costs associated with this type of mobility. This speculation is consistent with earlier work that has shown that women chose occupations in which there is low skill atrophy (Polachek 1981).

Conclusions

Earlier studies of job mobility, which have looked primarily at men, have found that mobility affects subsequent wages, that is, that the subsequent wages of workers who change employers differ significantly from the subsequent wages of workers who do not change employers. It has also been shown that wage effects differ between employee-initiated and employer-initiated separations; between discharges and layoffs; and between quits for personal reasons and job-related quits. In this study, the first of its kind, our interest has been in whether these effects are cumulative and whether mobility patterns and wage effects

differ by gender. Therefore, we addressed the following questions: (1) whether employee-initiated and employer-initiated separations have different effects, (2) whether different types of employee-initiated separations have different effects, (3) whether different types of employer-initiated separations have different effects, (4) whether the different types of mobility have cumulative effects, (5) whether men and women have different job histories, and (6) whether the effect of job history is different for men and women. Our analysis, based on data for a sample of young men and women in the years 1979–88, provides evidence relevant to all six questions, as follows.

(1) The effect of employee-initiated separations did differ from that of employer-initiated separations: employee-initiated separations increased subsequent wages, and employer-initiated separations decreased them. (2) There is evidence that the different types of employee-initiated separations had different effects. Quits that were made for economic reasons had a significant positive effect on subsequent wages for both men and women. Family-

related quits, on the other hand, had no effect on men's subsequent wages but had a significant negative effect on women's wages, at least in the short run. (3) It is clear that the different types of employer-initiated separations had different wage effects. Discharges had a larger effect on subsequent wages than did layoffs. (4) We found evidence that there is a cumulative effect of previous mobility. The wage mobility estimates are not dominated by the most recent single job separation—implying that job history does matter for both men and women.

(5) There is evidence that young men and women did have different job histories, on average. Men were much more likely than women to be discharged or laid off, and they were also more likely to quit for an economic reason. On the other hand, women were more likely than men to quit for a family-related reason. Finally, (6) we found that for each type of separation, with but one exception, the wage effect was similar for men and women. The only exception was that there was no significant (negative) effect of family-related quits for men. We believe this result is due to two factors: the insignificant number of reported family-related quits for men, and men's greater amount of pre-separation job search. For women, even though the most recent family-related quit had a significant negative effect, there appears to have been no cumulative effect of family-related quits.

These results are not necessarily inconsistent. We believe that the negative effect of the most recent family-related quit may be due in part to a lack of pre-separation job search, which is rational behavior for women who plan to leave the labor market for even a relatively short time or for women who have limited foreknowledge of a quit. Further, we believe that the insignificant effect of cumulative family-related quits may occur because women who expect to have intermittent labor force participation select occupations in which there is limited skill atrophy. If so, this occupational choice should mitigate the effects of intermittent labor force participation.

For young women entering the labor force, then, our evidence on mobility and wages is mixed. The good news is that the effect of a given mobility history on the wages received by a female worker appear to have been no different from the effect of the same mobility history on the wages received by a male worker, implying that employers' interpretations of workers' job mobility were not affected by the workers' gender. The bad news is that women in our sample were still much more likely than men to quit a job for a family-related reason. To the extent that these quits come without warning, women will not be able to engage in pre-separation job search and may suffer a wage penalty in their next job. Furthermore, to the extent that women expect these quits to result in intermittent labor force participation, they may continue to choose occupations that have low skill atrophy and wages that are low relative to the occupations chosen by men.

APPENDIX A

Variable Definitions

Variable	Definition
Continuous Variables:	
Log Wage	The natural logarithm of the 1988 hourly wage
Cumulative Mobility	The number of job changes between 1979 and 1988.
Voluntary Mobility	The number of employee-initiated job changes between 1979 and 1988.
Involuntary Mobility	The number of employer-initiated job changes between 1979 and 1988.
Family-Related Quits	The number of employee-initiated job changes between 1979 and 1988 that are due to family-related reasons.
Economic Quits	The number of employee-initiated job changes between 1979 and 1988 that are due to non-family-related reasons.
Discharges	The number of employer-initiated job changes between 1979 and 1988 that are due to a discharge.
Layoffs	The number of temporary and permanent layoffs between 1979 and 1988.
AFQT Score	Armed Forces Qualification Test (AFQT) score. AFQT = Arithmetic Reasoning + Math Knowledge + 2(Word Knowledge + Paragraph Comprehension).
Age	Age on January 1, 1988.
Education	Years of schooling.
Experience	Years of actual work experience from 1979 to 1988.
Tenure	Years with current employer.
Dummy Variables: (equal to 1 if)	
Married:	Married, spouse present.
White:	White.
Full-Time:	Hours worked per week > 34.
Union:	Wages are set by collective bargaining.
Urban:	Urban.
U1:	Local unemployment rate is less than 3%.
U2:	Local unemployment rate is 3% to 5.9%.
U3:	Local unemployment rate is 6% To 8.9%.
U4:	Local unemployment rate is 9% to 11.9%.
U5:	Local unemployment rate is 12% To 14.9%.
U6:	Local unemployment rate is greater than 15%.
East:	Area is East.
Central:	Area is Central.
South:	Area is South.
West:	Area is West.

APPENDIX B

OLS Determinants of the Hourly (log) Wage of Young Men and Young Women Corrected for Reemployment Selection Bias Using Heckman's Two-Stage Technique

Independent Variable	Men (n = 3,074)		Women (n = 2,839)	
	$\hat{\beta}$	t-Value	$\hat{\beta}$	t-Value
Economic Quits	0.008**	2.24	0.011***	3.13
Family-Related Quits	0.025	1.36	−0.026**	2.01
Layoffs	−0.009**	2.20	−0.012**	2.52
Discharges	−0.060***	5.89	−0.056***	3.66
Age	0.005	0.88	−0.006	1.09
AFQT Score	0.002***	5.98	0.004***	8.72
Married	0.110***	5.43	−0.013	0.71
No. of Children <6 Yrs. Old	0.003	0.24	−0.025	1.64
No. of Children ≥6 Yrs. Old	0.005	0.22	0.018	1.25
White	0.041**	2.01	−0.015	0.70
Education	0.036***	7.17	0.049***	8.74
Experience	0.068***	4.28	0.047	2.43
Experience^2	−0.003***	3.82	−0.001	0.59
Tenure	0.045***	3.56	0.070***	4.47
Tenure^2	−0.003***	2.58	−0.005***	3.59
Full-Time	0.041	0.62	0.085**	2.01
Union	0.026***	3.33	0.017**	2.14
Urban	0.137***	6.22	0.148***	6.85
Unemployment Rates				
U2	−0.144***	3.41	−0.114***	3.55
U3	−0.185***	4.40	−0.188***	5.48
U4	−0.242***	5.26	−0.161***	3.93
U5	−0.267***	3.01	−0.273***	3.06
U6	−0.323***	3.00	0.058	0.45
East	0.051	1.85	0.056**	2.00
Central	−0.052**	1.96	−0.090***	3.30
South	−0.115***	4.77	−0.105***	4.29
Inverse Mills	−0.078	0.66	0.031	0.33
Constant	1.063***	6.39	0.931***	5.68
Adj. R^2	0.280	—	0.327	

[a]Variables included in the first stage of the Heckman two-stage technique are family-related and economic quits, layoffs, discharges, age, AFQT score, marital status, number of children less than 6 years old, number of children 6 years old or older, race, education, experience, experience squared, tenure, tenure squared, union status, full-time, local unemployment rates, geographic area, urban, nonwage income, and a health limitations variable. The probit estimates for the probability of employment included 3,755 young men and 4,221 young women.

Source: National Longitudinal Survey of Youth, 1979 to 1988.

*Statistically significant at the .10 level; **at the .05 level; ***at the .01 level (two-tailed tests).

REFERENCES

Antel, John J. 1986. "Human Capital Investment Specialization and the Wage Effects of Voluntary Mobility." *Review of Economics and Statistics,* Vol. 68, No. 3 (August), pp. 477–83.

_____. 1991. The Wage Effects of Voluntary Labor Mobility With and Without Intervening Unemployment." *Industrial and Labor Relations Review,* Vol. 44, No. 2 (January), pp. 299–306.

Bartel, Ann P., and George J. Borjas. 1981. "Wage Growth and Job Turnover: An Empirical Analysis." In Sherwin Rosen, ed., *Studies in Labor Markets.* Chicago: University of Chicago Press, pp. 65–84.

Becker, Gary. 1964. *Human Capital.* New York: Columbia University Press for the NBER.

Becker, Gary, and George Stigler. 1974. "Law Enforcement, Malfeasance, and Compensation of En-

forcers." *Journal of Legal Studies,* Vol. 3 (January), pp. 1–18.

Blank, Emily C. 1990. "Effects of Layoffs on Wage Growth: The Role of Timing and Tenure." *Atlantic Economic Journal,* Vol. 18, No. 4 (December), pp. 68–74.

Blau, Francine D., and Lawrence M. Kahn. 1981a. "Causes and Consequences of Layoffs." *Economic Inquiry,* Vol. 19, No. 2 (April), pp. 270–96.

____. 1981b. "Race and Sex Differentials in Quits by Young Workers." *Industrial and Labor Relations Review,* Vol. 34, No. 4 (July), pp. 563–77.

Burdett, Kenneth. 1978. "A Theory of Employee Job Search and Quit Rates." *American Economic Review,* Vol. 68, No. 1 (March), pp. 212–20.

Corcoran, Mary, and Greg J. Duncan. 1979. "Work History, Labor Force Attachments, and Earnings Differentials Between the Races and Sexes." *Journal of Human Resources,* Vol. 14, No. 1 (Winter), pp. 3–20.

Even, William E., and David A. Macpherson. 1993. "The Decline of Private Sector Unionism and the Gender Wage Gap." *Journal of Human Resources,* Vol. 28, No. 2 (Spring), pp. 279–96.

Flinn, Christopher J. 1986. "Wages and Job Mobility of Young Workers." *Journal of Political Economy,* Vol. 94, No. 2 (June, Part 2), pp. S88–S110.

Freeman, Richard B., and Jonathan S. Leonard. 1987. "Union Maids: Unions and the Female Work Force." In Clair Brown and Joseph A. Pechman, eds., *Gender in the Workplace.* Washington, D.C.: Brookings Institution, pp. 189–216.

Groshen, Erica L. 1991. "The Structure of the Female/Male Wage Differential: Is It Who You Are, What You Do, or Where You Work?" *Journal of Human Resources,* Vol. 26, No. 3 (Summer), pp. 457–72.

Heckman, James J. 1979. "Sample Selection Bias as Specification Error." *Econometrica,* Vol. 47, No. 1 (January), pp. 153–61.

Hersch, Joni, and Patricia Reagan. 1991. "Efficient Gender-Specific Wage-Tenure Profits." Unpublished paper, University of Wyoming and The Ohio State University.

Hill, Martha S. 1979. "The Wage Effects of Marital Status and Children." *Journal of Human Resources,* Vol. 14, No. 4 (Fall), pp. 579–94.

Johnson, William R. 1978. "A Theory of Job Shopping." *Quarterly Journal of Economics,* Vol. 92, No. 2 (May), pp. 261–77.

Jovanovic, Boyan. 1979. "Job Matching and the Theory of Turnover." *Journal of Political Economy,* Vol. 87, No. 5 (October, Part 1), pp. 972–90.

Korenman, Sanders, and David Neumark. 1991. "Does Marriage Really Make Men More Productive?" *Journal of Human Resources,* Vol. 26, No. 2 (Spring), pp. 282–307.

____. 1992. "Marriage, Motherhood, and Wages." *Journal of Human Resources,* Vol. 27, No. 2 (Spring), pp. 233–55.

Lazear, Edward P. 1981. "Agency, Earnings Profiles, Productivity, and Hours Restrictions." *American Economic Review,* Vol. 71, No. 4 (September), pp. 606–20.

Light, Audrey, and Manuelita Ureta. 1990. "Gender Differences in Wages and Job Turnover Among Continuously Employed Workers." *AER Papers and Proceedings,* Vol. 80, No. 2 (May), pp. 293–97.

____. 1992. "Panel Estimates of Male and Female Job Turnover Behavior: Can Female Nonquitters Be Identified?" *Journal of Labor Economics,* Vol. 10, No. 2 (April), pp. 156–81.

Loprest, Pamela J. 1992. "Gender Differences in Wage Growth and Job Mobility." *AER Papers and Proceedings,* Vol. 82, No. 2 (May), pp. 526–32.

Mattila, J. Peter. 1974. "Job Quitting and Frictional Unemployment." *American Economic Review,* Vol. 64, No. 1 (March), pp. 235–39.

McLaughlin, Kenneth J. 1990. "General Productivity Growth in a Theory of Quits and Layoffs." *Journal of Labor Economics,* Vol. 8, No. 1 (January, Part 1), pp. 75–98.

____. 1991. "A Theory of Quits and Layoffs with Efficient Turnover." *Journal of Political Economy,* Vol. 99, No. 1 (February), pp. 1–29.

Meitzen, Mark E. 1986. "Differences in Male and Female Job-Quitting Behavior." *Journal of Labor Economics,* Vol. 4, No. 2 (April), pp. 151–67.

Mincer, Jacob. 1986. "Wage Changes and Job Changes." In Ronald G. Ehrenberg, ed., *Research in Labor Economics: A Research Annual.* Greenwich, Conn.: JAI Press, Vol. 8 (Part A), pp. 171–97.

Mincer, Jacob, and Boyan Jovanovic. 1981. "Labor Mobility and Wages." In Sherwin Rosen, ed., *Studies in Labor Markets.* Chicago: University of Chicago Press, pp. 21–63.

O'Neill, June. 1992. "A Flexible Work Force: Opportunities for Women." *Journal of Labor Research,* Vol. 13, No. 1 (Winter), pp. 67–72.

Parsons, Donald O. 1972. "Specific Human Capital: An Application to Quit Rates and Layoff Rates." *Journal of Political Economy,* Vol. 80, No. 6 (November/December), pp. 1120–43.

____. 1989. "Reputational Bonding of Job Performance: The Wage Consequences of Being Fired." Unpublished paper, The Ohio State University.

____. 1991. "The Job Search Behavior of Employed Youth." *Review of Economics and Statistics,* Vol. 73, No. 4 (November), pp. 597–604.

Polachek, Solomon W. 1981. "Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure." *Review of Economics and Statistics,* Vol. 63, No. 1, pp. 60–69.

Ruhm, Christopher J. 1987. "The Economic Consequences of Labor Mobility." *Industrial and Labor Relations Review,* Vol. 41, No. 1 (October), pp. 30–42.

Topel, Robert H., and Michael P. Ward. 1992. "Job Mobility and the Careers of Young Men." *Quarterly Journal of Economics,* Vol. 107, No. 2 (May), pp. 439–79.

U.S. Department of Labor. 1971. *BLS Handbook of Methods for Surveys and Studies.* Bulletin 1711, Chapter 3, pp. 35–36.

Viscusi, W. Kip. 1980. "Sex Differences in Worker Quitting." *Review of Economics and Statistics,* Vol. 62, No. 3 (August), pp. 388–98.