Job Mobility, Earnings, and the Price of Motherhood

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ABSTRACT

Job mobility is increasingly common today compared with a few decades ago. This study evaluates whether this emerging trend affects men's and women's earnings differently under different macroeconomic conditions. Using longitudinal data drawn from the 2004 and 2008 panels of the Survey of Income and Program Participation, I examine the effect of job mobility on women's and men's subsequent earnings in the pre-recession and recession years. The results show that changing employers for job-related reasons results in earnings growth. While the earnings growth is greater for women than for men, mothers benefit the least from this type of mobility among all groups of workers. This motherhood wage penalty is greater in the recession. Job mobility incurred by layoffs leads to greater earnings losses for women than for men in all years, but men's earnings losses increase sharply during the recession. The subsequent analyses examine the effect of selectivity associated with reemployment in estimating the mobility effects.

As the U.S. economy has shifted from manufacturing to service production, average rates of job mobility in the U.S. labor market have increased substantially (Altonji and Shakotko 1987; Cappelli 1999; Heckscher 1995). Since 1980, this structural shift has led to waves of corporate downsizing and industrial restructuring, producing a massive number of layoffs, quits, and displacements (see Baumol, Blinder, and Wolff 2005; DiPrete, Goux, and Maurin 2002; Kletzer 1998). Further, the structural change has also fundamentally changed employer-employee relationships by spreading human resource practices that emphasize flexible labor contracts and hiring patterns (see Arthur and Rousseau 1996; Baker and Aldrich 1996; Cappelli 1995; Herzenberg, Alic, and Wial 1998; Kalleberg 2001, 2003; Kalleberg, Reynolds, and Marsden 2003; Valcour and Tolbert 2003). That is, moving up the career ladder within firm boundaries has become rare, while job-to-job transition between firms has become increasingly common. Under this flexible economy, job mobility is beginning to be perceived as a new career pattern. Workers in today's economy actively search for better opportunities across firm boundaries throughout their careers.

This emerging trend is not a gender-neutral phenomenon. Widely held gender beliefs prescribe primary caregiving responsibilities to women and prioritize men's careers, which constrains the job-search processes of women, especially married women and women with children (e.g., Bielby and Bielby 1992; Han and Moen 1998; Pixley 2000). Because women's mobility decisions tend to be made under more constraints, compared with those of men, job mobility may result in different wage consequences for women and men. Furthermore, persistent gender stereotypes, especially based on motherhood status, may continue to disadvantage women in their reemployment processes (Correll, Benard, and Paik 2007; Ridgeway 1997). The primary

goal of this study is to determine whether the new emerging trend of job mobility affects men's and women's earnings differently.

While job mobility initiated by career advancement leads to discrete earnings growth, economic job quits – job quits incurred by an employer's operating decision, such as a plant closing or a layoff – are known to be associated with negative career outcomes (e.g., Bartel and Borjas 1981; Farber 2003). Those who change employers for these "economic reasons" typically experience long spells of unemployment, and, even when re-employed, they suffer from substantial earnings losses (Farber 1997, 2003; Hipple 1999; Jacobson, LaLonde, and Sullivan 1993). In addition, workers who quit for non-job-related reasons, such as familial or personal reasons (e.g., to raise children, illness) may be qualitatively different from those who quit for job-related reasons, or perceived to be different, in their productivities and commitment, which may result in earnings losses after quitting (Fuller 2008, Keith and McWilliams 1995). This study examines how these different types of mobility result in different earnings outcomes for men and women in the era of increased interorganizational mobility.

The secondary goal of this study is to evaluate the impact of macro-economic conditions on mobility outcomes for men and women. The rates of worker displacement and job quits have increased as a new wave of restructuring has begun with the recession of 2008 and 2009. The common perception is that men are more negatively affected by the recent economic recession because job-displacement rates are higher in male-dominated occupations. However, the extent to which the economic recession influences the returns to different types of mobility remains largely unexplored. The present research offers an analysis to systematically evaluate how macroeconomic conditions affect men's and women's mobility patterns and their outcomes differently.

To investigate these questions, I use longitudinal data drawn from the 2004 and 2008 panels of the Survey of Income and Program Participation, which largely coincides with the prerecession and recession years, and estimate the effect of three types of job mobility on men's and
women's earnings in the subsequent time point. Also, given that worker heterogeneity is a
critical concern in estimating the mobility effect (e.g., Bartel and Borjas 1981; Gibbons and Katz
1991; Mincer 1986), this study further assesses the effects of selectivity in estimating the
mobility effects under different macroeconomic conditions.

DATA

The analyses draw on data from the 2004 and 2008 panels of the Survey of Income and Program Participation (Bureau of Labor Statistics / NBER). The SIPP is a national longitudinal household survey collected by the U.S. Census Bureau. The respondents for the SIPP were interviewed every four months over 48- (2004 panel) or 52-month (2008 panel) periods (each dataset is called a wave). The 2004 panel covers 2004 through 2007. The 2008 panel is not completed yet, but I use the first 6 available waves of data, which covers 2008 through 2010. The span of each panel allows comparing the mobility effect in the pre-recession years to that in recession years (the most recent recession officially started in December 2007 and ended in June 2009; NBER). The panel structure of SIPP helps to capture the causal effect of job mobility on earnings, by allowing the time different between the times of mobility and earnings changes. Because the survey was conducted every four months, I give four months lag between mobility variables and earnings and other variables.

SIPP has several attractive features for studying job mobility. First, SIPP offers a large sample size, compared to other panel data, which helps to increase the accuracy of the estimated

mobility effect, given that mobility is a rare labor market event. Second, while many national panel data are collected once every year, SIPP data are collected more frequently (every four months), which helps to reduce recall bias.

After restricting the sample to respondents between the ages of 18 and 64 who are not contingent workers and have positive earnings, the sample size is 299,072 person-months for the 2004 panel, and 156,079 person-months for the 2008 panel. All data are weighted by the BLS-provided sampling weights.

VARIABLES

The dependent variable is the natural logarithm of monthly earnings. Earnings are adjusted to 2004 dollars using the Bureau of Economic Analysis' personal consumption expenditures deflator. Not surprisingly, men's earnings are higher than women's earnings in both panels (see table 1). The average monthly earnings are \$3,716 for men and \$2,534 for women in the 2004 panel data; \$3,823 for men and \$2,742 for women in the 2008 panel data.

[Table 1]

The key independent variables measure whether the respondents change employers between two adjacent times. They are based on these two survey items: "is . . . still working for this employer," "what is the main reason ... stopped working for ...?" I construct three variables that measure three types of job mobility based on the reasons for employer changes: due to (1) job related reasons ("job-related quit"), (2) layoffs or displacement ("layoff"), and (3) other reasons ("other quit"). The job-related quitters include those who "quit to take another job," or quit because of "unsatisfactory work arrangements (e.g., pay, hours)." The last residual category includes reasons for schooling, retirement, illness, childcare, and other family-related reasons. To

measure the discrete earnings growth followed by job changes, I use the variable measured four months prior to the time when earnings are measured. The reference category is those who stay with the same employer.

To investigate the motherhood wage penalty in the job mobility process, I use a set of dummy variables indicating whether the respondent resides together with his or her own child under the age of 6 ("younger child"), or between 6 and 18 ("older child"), and allow these variables to interact with the mobility variables.

The models include standard covariates for earnings regression, such as age, age squared, marital status, education (5 categories), family income (logged), years of job tenure, usual hours worked per week at all jobs, whether the job is part-time position, whether the worker is a union member, whether the job is in the public sector, metropolitan residency, region (4 categories), occupation (7 categories), and time (waves, 12 categories for the 2004 panel and 6 categories for the 2008 panel).

METHODS

I estimate the effects of all variables including three types of job mobility on the log of monthly earnings using the fixed effects regression models. The models take the general form:

$$y_{ij} = x_{ij}\beta + \alpha_i + \varepsilon_{ij} \tag{1}$$

where y is the natural logarithm of monthly earnings for individual i at time j, x is a row vector of variables, and β is a column vector of regression coefficients. Residuals are composed of two parts: α_i represents unobserved stable characteristics of person i, and ϵ_{ij} is a random disturbance term, which is assumed to be normally distributed with a mean of zero and constant variance. I

fit all models separately by gender and panel to estimate gender- and panel- specific effects for all covariates.

Prior research suggests that worker heterogeneity may introduce bias in estimating the job mobility effect on earnings (e.g., Bartel and Borjas 1981; Gibbons and Katz 1991; Mincer 1986). For example, the earnings losses for those who are laid off may be because they are less productive workers than stayers, not because they are laid off. Likewise, those who change employers for job-related reasons may experience disproportionately greater wage growth than stayers because they are more productive workers than stayers, not because they change employers.

Including person-level fixed effects helps to adjust for all stable characteristics of persons, such as time invariant aspects of intelligence, preferences, and work habits. After adjusting for the effects of all stable characteristics of individual workers, the residual variance left to explain is attributed to longitudinal change within persons. This implies that the mobility effect is estimated by comparing times with mobility to times without mobility for each person, rather than comparing between workers who stayed with the same employers and workers who change employers. Because the mobility effect is estimated within the same person, the extent to which worker heterogeneity introduces bias substantially reduced. Still, there is a possibility that heterogeneity resulting from time varying sources (e.g., workers change their attitudes or behaviors at the time of the mobility, compared to times they stay with the same employers) remains as a potential source of selectivity. However, previous research has shown that the unobserved time-varying component is not a major source that biases the effect of job mobility (e.g., Le Grand and Tahlin 2002).

In addition to selection into mobility, selection into *reemployment* is not a random process and likely to be associated with gender and macroeconomic condition. The data shows that 55 percent of movers are reemployed right away during the pre-recession years while only 42 percent of them are during the recession years. Also, the reemployment rates are higher for men, about 60 percent in the 2004 panel data, compared to 50 percent for women, suggesting that analyzing earnings of those who are reemployed right away only may underestimate the job mobility effect more for women than for men. However, men's reemployment rate in economic recession dropped to a greater extent, to 44 percent, than that of women (41 percent), suggesting that in the economic recession, this underestimation may be greater for men than for women.

To address this non-random reemployment process, I analyze those who are reemployed, but weighted the models with the inverse of the probability of inclusion in this analysis sample. With this weight adjustment, the models reflect the characteristics of all workers who no longer work for the same employers regardless of whether they are reemployed immediately or remain unemployed in the subsequent months. What this procedure does is estimate the mobility effect under the counterfactual scenario that those who remain unemployed were instead reemployed at wages equivalent to the wages of those with matching characteristics who were in fact reemployed. The matching is based on the probability of being reemployed calculated from a logistic regression model with predictor variables for age, age squared, race, parental status, marital status, educational attainment, quit types, weekly work hours, years of job tenure, years of job tenure squared, public sector, regions, union membership, and metropolitan residency, part-time status, family income, family income squared, poverty status, and occupations. After the weight variables are constructed, I examine the standardized bias to check whether the reweighting procedure has successfully balanced the sample characteristics between those who

are reemployed and those who remain unemployed (see Morgan and Todd 2008; Rosenbaum and Rubin 1985; Rubin 1991). The results of the balance test show a substantial decrease in differences of the sample characteristics between these two group of workers after this reweighting procedure has been applied. By addressing the selectivity associated with the reemployment process, the mobility effects from the 2004 and 2008 panels also becomes more comparable, given that economic recession is likely to exacerbate the selection effect.

RESULTS

I present three sets of analyses. The first analysis estimates job mobility effects using the 2004 panel data. The second analysis examines the effects in the 2008 panel data. The first two sets of results allow a simple comparison of the mobility effect in economic recession to that of pre-recession years. However, this simple comparison ignores the selectivity into immediate reemployment that is not adjusted by the person-level fixed effects and other control variables. The final analysis evaluates how this remaining selectivity may influence men's and women's earnings outcomes differently under different macroeconomic conditions.

The effect of job mobility on men's and women's earnings in pre-recession years

I begin with examining the effect of job mobility in the pre-recession years. Table 2 presents fixed effects regression models predicting the log of monthly earnings fit to the 2004 panel data. The first two models estimate the effects of three types of job mobility and covariates, and the last two models add the interaction effects between job mobility and the parental status variables. All variables except the mobility and child variables are centered at

their mean values, and therefore, the constant term represents the log of earnings of nonparents when they stay with the same employers.

[Table 2]

Not surprisingly, the constant terms of models 1a and 1b indicate that monthly earnings are greater for men than for women. More specifically, when childless men who hold average characteristics stay with the same employer, their monthly earnings are 2510 dollars (i.e., exp[7.8279]=2510), while they are 1878 dollars for their female counterparts, indicating a 25 percent of the gender earnings gap among stayers. The mobility variables suggest that an employer change affect subsequent earnings differently, depending on the reason for job mobility. Overall, employer changes motivated by job-related reasons result in earnings growth, while employer changes incurred by economic reasons or other reasons lead to earnings losses. However, the magnitudes of the effects are greater for women than men for all types of mobility. That is, earnings growth as a result of job-related quitting is greater for women, but earnings losses from layoffs and other quits are also greater for women than for men. This means that layoff or quitting for other reasons widens the gender gap in earnings, while quitting for job-related reasons contributes to closing the gap.

More specifically, for those who change employers for job-related reasons, earnings growth is about twice as large for women (5.7 percent) as for men (2.7 percent). However, the model with the interaction effect between mobility and parental status indicates that women's gain is driven by childless women. The main effect of job-related quits in model 2b shows that childless women experience about 8 percent of earnings growth after changing employers for job-related reasons. In contrast, this wage premium is significantly reduced for mothers of children under age 6, as indicated by the negative interaction effect. In fact, these mothers

experience minor earnings losses, by 0.5 percent (0.0793-0.0845= -0.005), after changing employers. This wage penalty associated with the employer change for job-related reasons is not present for mothers of older children (age between 6 and 18) or fathers.

The motherhood wage penalty can be more effectively illustrated by comparing the predicted earnings by mobility and parental status (see figure 1). The predicted earnings are calculated from model 2b. Because being a mother does not significantly change returns to other mobility types, nor does fatherhood status, I examine only the effect of motherhood on the relationship between job-related quits and subsequent earnings.

[Figure 1]

Figure 1 shows that childless women's earnings increase substantially when they change employers for a job-related reason. More specifically, monthly earnings of when childless women stay with the same employer are 1878 dollars, whereas their earnings increase to 2033 dollars when they change employers for job-related reasons, which represents about 8.3 percent earnings growth. However, mothers with younger children lose approximately 1 percent of their earnings, as their earnings decrease from 1796 to 1786 when they quit for job-related reasons.

A different way to look at this is to compare the earnings gap between mothers and non-mothers by mobility status. Consistent with prior research (e.g., Anderson, Binder and Krause 2002; Budig and England 2001; Budig and Hodges 2010; Waldfogel 1997), figure 1 shows that mothers earn substantially less than their childless counterparts do. This earnings gap between non-mothers and mothers are greater among job-related quitters than among stayers. For example, among stayers, mothers of younger children earn 4.5 percent less than childless women, but this gap increases to 12 percent among job-related quitters. This suggests that the motherhood wage penalty is exacerbated through the job mobility process.

Finally, table 2 shows that employer change resulting from economic reasons leads to earnings losses to a greater extent for women than for men. When women change employers due to layoff, their earnings decrease by 5.8 percent, whereas men with similar characteristics experience 3.4 percent earnings losses. Similarly, other quits also result in greater earnings losses for women (8.9 percent) than for men (5.5 percent). For these two types of mobility, parental status does not differentiate the earnings outcome for both men and women.

The effect of job mobility in the economic recession

Next, I examine the effect of job mobility on earnings in the recession years. Table 3 fit the same set of models presented in table 2 using the 2008 panel data, which largely coincides with the years of economic recession. The results are similar to those in the 2004 panel data presented in table 2, but the magnitude of the effects are generally larger in the 2008 panel data.

[Table 3]

One notable difference in the 2008 panel data compared to the 2004 panel is that jobrelated quits bring greater earnings growth for men than for women: men experience about 7
percent earnings growth when they change employers for job-related reasons, whereas women
does not experience a significant earnings increase after this type of quitting (see models 1a and
1b). Non-fathers particularly benefit from job-related quitting, as their earnings increase by 10
percent after job-related quitting (see model 2a). The added interaction terms in model 2b also
shows that the non-significant effect for women's job-related quits is partly explained by the
large motherhood penalty. In fact, childless women experience slightly greater earnings growth
(over 8.2 percent) when they quit for job-related reasons, compared to that in the pre-recession
years (7.9 percent; see table 2). It is mothers who fare worse in economic recession. Model 2b

shows that the motherhood wage penalty for job-related quits are 11 percent for those with younger children and 12 percent for having older child, which completely offsets the earnings growth from job-related quits (8 percent), resulting in 2.7 to 3.7 percent earnings losses, depending on the age of their youngest child.

Figure 2 illustrates this motherhood wage penalty in economic recession through changes in predicted earnings by mobility and parental status. Childless women's earnings growth after job-related quits is observed consistently in the economic recession as we saw earlier in the pre-recession data (see figure 1). In the economic recession, childless women gain by 8.6 percent (from 1940 to 2107 dollars) after they quit for job-related reasons.

[Figure 2]

However, this earnings growth is substantially reduced for mothers. Like figure 1, Figure 2 also shows that the earnings gap between non-mothers and mothers are greater among job-related quitters than among stayers. However, this motherhood penalty is even greater in the economic recession. Specifically, mothers of younger children earn 12 percent less, and mothers of older children earn 14 percent less than childless women, all else being equal. While having younger children brings a wage penalty similar to the one in the 2004 panel data, the wage penalty of having older children becomes substantially greater in the recession data, unlike the pre-recession data, in which the motherhood penalty for having older children was modest and statistically nonsignificant (see table 2).

Next, table 3 also shows that layoffs result in greater earnings losses for both men and women in the economic recession. More specifically, earnings decrease by 6 percent for men and 7 percent for women after they are laid off. While earnings losses from layoffs are still slightly greater for women, as we saw in the 2004 panel data, the extent to which the economic recession

increases the earnings penalty is greater for men than for women (the earnings penalty was 3 percent for men, and 6 percent for women in the 2004 panel data; see table 2). The earnings losses resulting from other quits are also slightly greater in the recession years (9 percent for women and 6 percent men), compared to those in the pre-recession years (see table 2 for comparison). No significant motherhood penalty effects are observed for layoffs or other quits, except for fathers of older children, who experience large earnings losses, about 20 percent.

Selectivity associated with reemployment

So far, I have directly compared the results in the 2004 and 2008 data to discuss the effect of the economic recession on earnings. However, one issue may complicate the comparability of the results: selection into reemployment. The sample includes only job-to-job transitions, meaning that those who are not reemployed immediately are not included in the analysis sample. This omission may be systematically associated with gender, given that gender is one of the main factors that affects individual employment decisions and hiring processes (Bielby and Bielby 1992; Dwyer 2004; Gerson 1986; Meiksins and Whalley 2003; Pixley and Moen 2003; Sicherman 1996). This selectivity may also operate differently under different macroeconomic conditions

The data show that about 60 percent men and 51 percent women who changed employers were reemployed within 4 months in the 2004 panel data, whereas only 44 percent men and 41 percent women were in the 2008 data. This suggests that selection into reemployment could affect the estimation of the gender as well as economic recession effects. The analysis presented in table 4 further assesses the remaining selectivity associated with the reemployment process by performing the reweighting procedure described earlier (see the method section). The second

panel presents the models that adjust for selection into reemployment. The coefficients and standard errors of the mobility effects from models without weight adjustment (i.e., models 1a and 1b in tables 2 and 3) are also presented for comparison.

[Table 4]

To assess whether selection into reemployment explains the wage effect of each type of job mobility, I use data weighted by the inverse probability of being reemployed. The weighted data reflect all quitters (both those who are reemployed immediately and those become unemployed), and the mobility effect in the weighted data indicate what the returns to mobility would have been like if those who are not reemployed were in fact reemployed. These results are reported under "weighted for unemployment" and show three general patterns.

First, interestingly, the adjusted effects of job-related quitting generally show that if those who are not reemployed immediately were in fact reemployed right away, earnings growth due to job-related quits would have been greater. This means that those who were not reemployed within the subsequent four months tend to be workers with better labor market qualifications compared to those who are reemployed right away. This tendency is especially strong for men across different time periods. For example, in economic recession, the magnitude of the earnings growth is 6.9 percent in the observational data, but the result with weight adjustment suggests that the wage growth rate would have been 7.5 percent, if those who were not reemployed immediately had been reemployed. This positive selectivity may be explained by the fact that those who can afford wait to be reemployed may end up with better earnings outcomes because they could better improve job match by investing more time on job search. It could also be the case that those who anticipate greater earnings growth may opt into a "break" from employment while they are in a job-to-job transition.

Second, the results for layoffs indicate that selectivity operates differently by macroeconomic conditions. While men who are not reemployed right away in pre-recession years tend to be slightly less qualified workers than stayers, as indicated by exacerbated wage losses in the weighted data, this is not the case in economic recession. On the contrary, the model with weight adjustment in the recession data shows that men's earnings losses would have decreased, if all quitters, instead of only those who are actually reemployed, were reemployed. This suggests that even the workers with higher productivity or better labor market qualifications could not be reemployed right away under economic recession.

Lastly, worker heterogeneity associated with reemployment is most prominent among other quitters. The differences in the effects estimated from the original data and weighted data are largest among other quitters, especially for men in pre-recession and women in recession years. For example, in the recession years, women who quit for other reasons experience 9.4 percent earnings losses, but the earnings losses would have been even greater as 14.6 percent if those who remain unemployed had been reemployed. Put differently, ignoring those who are not reemployed in the earnings estimation is likely to underestimate the wage losses of other quitters to the greatest extent.

DISCUSSION

The labor market has experienced several major structural changes over the last few decades. The formal structure of both organizations and employment relationships has become more flexible. On the one hand, these structural changes have redefined workers' career processes by making their careers "boundaryless" (Arthur and Rousseau 1996l Baker and Aldrich 1996; Tolbert 1996) Compared to the past, more workers in today's labor market move

across organizations rather than staying with one employer throughout their careers. On the other hand, this labor market restructuring, followed by a wave of downsizing, abolished a massive number of jobs in production work and replaced them with many low-wage service sector jobs. This study examines whether these structural changes have different career implications for women and men. The findings of this study uncover the following gendered outcomes of the job mobility process.

The findings of this study suggest that increased job mobility have different earnings implications for men and women. While scholars who advocate the boundaryless career thesis tend to perceive this new phenomenon as an empowerment of workers, who can choose their career paths without confining themselves to firm boundaries (Arthur and Rousseau 1996, Baker and Aldrich 1996, Tolbert 1996; Valcour and Tolbert 2003), this study shows that flexible labor markets may have adverse effects for women with children. This motherhood wage penalty is magnified by economic recession. As numerous studies have shown, mothers in the U.S. fare worse in the labor market than men and childless women. While the labor force participation gap between men and women shrank dramatically over the last few decades, the gap between mothers and non-mothers remains substantial. Extensive studies have shown that mothers experience a 4 to 12 percent wage penalty (e.g., Anderson, Binder and Krause 2002; Budig and England 2001; Lundberg and Rose 2000; Waldfogel 1997). This study sheds light on the sources of the continuing disparity between mothers and other workers by pointing to job mobility as an important factor that exacerbates earnings disparity between mothers and other workers.

Also, unlike the common perception that layoffs may disadvantage men to a greater extent than women, the findings of this study suggests that while a greater proportion of men are laid off, the wage losses from layoffs are in fact greater for women than for men in both

recession and pre-recession years. However, economic recession reduces the gender gap by decreasing men's earnings to a greater extent, compared to the pre-recession years. Other quits lead to greater earnings losses for women than for men in both recession and pre-recession years.

This study also carefully examines the role of selectivity associated with mobility and reemployment. In addition to using the fixed effects models that adjust for all stable characteristics of workers, this study further adjusts for the remaining worker heterogeneity by performing a reweighting procedure based on the counterfactual model framework. The results after reweighting procedure is performed produce substantively very similar results to the ones from the initial models, which suggests that selectivity due to reemployment processes may be a less of a concern. Even so, comparing the reweighted results to those from the standard fixed effects models suggest several interesting findings. Selection into unemployment tends to be in a positive direction for job-related quits and a negative direction for layoffs and other quits. That is, better qualified workers tend not to be reemployed immediately when the quit was motivated by job-related reasons, which suppresses the returns to the mobility. In contrast, less qualified workers tend to select into unemployment if they change employers because they were laid off, which inflates earnings losses. However, in economic recession, this negative selectivity dissipates for men who are laid off, suggesting that poor economic condition indiscriminately determines unemployment, regardless of worker qualifications.

REFERENCES

Altonji, Joseph. G. and Robert. A. Shakotko. 1987. "Do Wages Rise with Seniority?" *Review of Economic Studies* 54(1987):437-59.

Anderson, D. J., M. Binder, and K. Krause. 2002. "The Motherhood Wage Penalty: Which Mothers Pay It and Why?" *The American Economic Review* 92(2):354-358.

- Arthur, M. B. and D. M. Rousseau. 1996. *The Boundaryless Careers: A New Employment Principle for a New Organizational Era*: Oxford University Press.
- Baker, T. and H. E. Aldrich. 1996. "Prometheus Stretches: Building Identity and Cumulative Knowledge in Multi-Employer Careers." Pp. 123-149 in *The Boundaryless Career*, edited by M. B. Arthur and D. M. Rousseau. New York: Oxford University Press.
- Bartel, Ann P., and George J. Borjas. 1981. "Wage Growth and Job Turnover: An Empirical Analysis." in *Studies in Labor Market*, edited by Sherwin Rosen. Chicago: University of Chicago Press.
- Baumol, William J., Alan S. Blinder, and Edward N. Wolff. 2005. *Downsizing in America: Reality, Causes, and Consequences*. New York: Russell Sage Foundation.
- Bielby, William T. and Denise D. Bielby. 1992. "I Will Follow Him: Family Ties, Gender-Role Beliefs, and Reluctance to Relocate for a Better Job." *The American Journal of Sociology* 97(5):1241-1267.
- Budig, Michelle J. and Paula England. 2001. "The Wage Penalty for Motherhood." *American Sociological Review* 66(2):204-225.
 - Budig, Michelle J. and Melissa J. Hodges. 2010. "Differences in Disadvantage." *American Sociological Review* 75(5):705-728.
- Cappelli, Peter. 1995. "Rethinking Employment." *British Journal of Industrial Relations* 33(4):563-602.
- Cappelli, Peter. 1999. "Career Jobs Are Dead." California Management Review 42(1):146-67.
- Correll, Shelley J., Stephen Benard, and In Y. Paik. 2007. "Getting a Job: Is There a Motherhood Penalty?" *American Journal of Sociology* 112(5):1297-1338.
- DiPrete, Thomas A., Dominique Goux, and Eric Maurin. 2002. "Internal Labor Markets and Earnings Trajectories in the Post-Fordist Economy: An Analysis of Recent Trends." *Social Science Research* 31(2):175-196.
- Dwyer, Rachel E. 2004. "Downward Earnings Mobility after Voluntary Employer Exits." *Work and Occupations* 31(1):111-139.
- Farber, Henry S. 1997. "The Changing Face of Job Loss in the United States, 1981-1995." Pp. 55-142 in *Brookings Papers on Economic Activity. Microeconomics*, vol. 1997, edited by H. S. Farber, J. Haltiwanger, and K. G. Abraham. Washington: The Brookings Institution.
- Farber, Henry S. 2003. "Job Loss in the United States, 1981-2001." NBER Working Paper.

- Fuller, Sylvia. 2008. "Job Mobility and Wage Trajectories for Men and Women in the United States." *American Sociological Review* 73(1):158-183.
- Gerson, Kathleen. 1986. *Hard Choices: How Women Decide About Work, Career, and Motherhood*. Berkeley: University of California Press.
- Gibbons, Robert and Lawrence F. Katz. 1991. "Layoffs and Lemons." *Journal of Labor Economics* 9:351.
- Han, S. K. and P. Moen. 1998. "Interlocking Careers: Pathways through Work and Family for Men and Women." *Proceedings of the Annual Meeting-Industrial Relations Research Association* 1:218-227.
- Heckscher, Charles C. 1995. White-Collar Blues: Management Loyalties in an Age of Corporate Restructuring. New York: Basic Books.
- Herzenberg, Stephen. A., John A. Alic, and Howard Wial. 1998. *New Rules for a New Economy: Employment and Opportunity in Postindustrial America*. Ithaca: Cornell University

 Press.
- Hipple, Steven. 1999. "Worker Displacement in the Mid-1990s." *Monthly Labor Review* 122(7):15-32.
- Jacobson, L. S., R. J. LaLonde, and D. G. Sullivan. 1993. "Earnings Losses of Displaced Workers." *The American Economic Review* 83(4):685-709.
- Kalleberg, Arne L. 2001. "Evolving Employment Relations in the United States." Pp. 187-206 in *Sourcebook of Labor Markets: Evolving Structures and Processes*, edited by I. E. Berg and A. L. Kalleberg. New York: Kluwer.
- Kalleberg, Arne L. 2003. "Flexible Firms and Labor Market Segmentation: Effects of Workplace Restructuring on Jobs and Workers." *Work and Occupations* 30(2):154-175.
- Kalleberg, Arne L., Jeremy Reynolds, and Peter V. Marsden. 2003. "Externalizing Employment: Flexible Staffing Arrangement in Us Organizations." *Social Science Research* 32:525-52.
- Keith, Kristen and Abagail McWilliams. 1995. "The Wage Effects of Cumulative Job Mobility." *Industrial and Labor Relations Review* 49(1):121-137.
- Keith, Kristen and Abagail McWilliams. 1999. "The Returns to Mobility and Job Search by Gender." *Industrial and Labor Relations Review* 52(3):460-477.
- Kletzer, L. G. 1998. "Job Displacement." *The Journal of Economic Perspectives* 12(1):115-136.
- Le Grand, Carl, and Michael Tahlin. 2002. "Job Mobility and Earnings Growth." *European Sociological Review* 18(4):381-400.

- Lundberg, Shelly and Elaina Rose. 2000. "Parenthood and the Earnings of Married Men and Women." *Labour Economics* 7:689-710.
- Meiksins, Peter and Peter Whalley. 2003. *Putting Work in Its Place: A Quiet Revolution*, vol. 82. Ithaca: Cornell University Press.
- Mincer, Jacob. 1986. "Wage Changes and Job Changes." Pp. 171-197 in *Research in Labor Economics*. A Research Annual 8 (Part A), edited by Ronald G. Ehrenberg. Greenwich: JAI Press.
- Morgan, Stephen L. and Jennifer J. Todd. 2008. "A Diagnostic Routine for the Detection of Consequential Heterogeneity of Causal Effects." *Sociological Methodology* 38:231-81.
- Pixley, Joy E. and Phyllis Moen. 2003. "Prioritizing Careers." Pp. 183-200 in *It's About Time: Couple and Careers*, edited by P. Moen. Ithaca: Cornell University Press.
- Ridgeway, Cecilia L. 1997. "Interaction and the Conservation of Gender Inequality: Considering Employment." *American Sociological Review* 62(2):218-235.
- Rosenbaum, P. R. and D. B. Rubin. 1985. "Constructing a Control Group Using Multivariate Matched Sampling Methods That Incorporate the Propensity Score." *The American Statistician* 39(1):33-38.
- Rubin, D. B. 1991. "Practical Implications of Modes of Statistical Inference for Causal Effects and the Critical Role of the Assignment Mechanism." *Biometrics* 47(4):1213-1234.
- Sicherman, Nachum. 1996. "Gender Differences in Departures from a Large Firm." *Industrial and Labor Relations Review* 49:484-505.
- Tolbert, Pamela S. 1996. "Occupations, Organizations, and Boundaryless Careers." Pp. 331-349 in *The Boundaryless Careers: A New Employment Principle for a New Organizational Era*, edited by M. B. Arthur and D. M. Rousseau. New York: Oxford University Press.
- Valcour, P. Monique and Pamela S. Tolbert. 2003. "Gender, Family and Career in the Era of Boundarylessness: Determinants and Effects of Intra-and Inter-Organizational Mobility." *International Journal of Human Resource Management* 14(5):768-787.
- Waldfogel, Jane. 1997. "The Effect of Children on Women's Wages." *American Sociological Review* 62(2):209-217.

Table 1. Means and standard deviations for the variables used for the analysis

	2004 Panel				2008 Pane	1		
	Men		Women		Men		Women	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Monthly earnings		0.000						0.004
(log)	7.895	0.838	7.530	0.853	7.900	0.892	7.579	0.894
Job mobility:								
Job-related quit	0.017		0.016		0.008		0.009	
Layoffs	0.013		0.010		0.019		0.011	
Other quit	0.010		0.013		0.007		0.010	
Child under 6	0.187		0.166		0.180		0.161	
Child 6-18	0.209		0.251		0.197		0.232	
Married	0.597		0.554		0.593		0.547	
Age	39.627	11.919	40.183	12.125	40.246	12.172	40.774	12.442
Age^2	1712.348	963.528	1761.696	982.479	1767.872	995.583	1817.271	1017.960
Education: High school								
graduates	0.294		0.258		0.257		0.220	
Some college	0.351		0.390		0.343		0.386	
College graduates	0.182		0.205		0.204		0.221	
Advanced degree	0.095		0.103		0.106		0.117	
Weekly work hours	42.488	10.820	37.671	10.881	41.248	11.261	37.154	11.207
Job tenure	7.211	8.318	6.544	7.634	8.065	8.586	7.527	8.052
Public sector	0.136		0.203		0.153		0.212	
Metropolitan	0.837		0.835		0.850		0.847	
Region								
Midwest	0.233		0.239		0.235		0.244	
South	0.357		0.362		0.360		0.371	
West	0.226		0.208		0.221		0.199	
Union	0.155		0.141		0.162		0.139	
Part-time	0.196		0.330		0.233		0.344	
Family income (log)	8.409	1.236	8.358	1.200	8.397	1.402	8.355	1.376
Occupations:								
Professional	0.169		0.267		0.189		0.283	
Service	0.134		0.186		0.148		0.198	
Sales, clerical	0.170		0.345		0.167		0.323	
Farming	0.010		0.004		0.011		0.003	
Production	0.278		0.053		0.249		0.041	
Operatives	0.106		0.020		0.098		0.020	
Time		10 categorie				4 categorie	es included	
N		150944		148128		77525		78554

Table 2. Person-level fixed effects regression coefficients for the effect of job mobility (4 months prior) on the log of monthly earnings, SIPP 2004

	2004 Panel			
	Model 1a	Model 1b	Model 2a	Model 2b
	Men	Women	Men	Women
Constant	7.8279**	7.5380**	7.8275**	7.5380**
	(0.0041)	(0.0058)	(0.0041)	(0.0058)
ob-related quit	0.0272	0.0564**	0.0364	0.0793**
	(0.0152)	(0.0140)	(0.0206)	(0.0193)
child under 6			-0.0008	-0.0845*
			(0.0312)	(0.0354)
child 6-18			-0.0610	-0.0274
			(0.0449)	(0.0314)
ayoff	-0.0342*	-0.0584**	-0.0169	-0.0530
	(0.0166)	(0.0204)	(0.0228)	(0.0305)
have child under 6			-0.0354	-0.0252
			(0.0370)	(0.0483)
have child 6-18			-0.0633	-0.0008
			(0.0400)	(0.0450)
Other quit	-0.0547*	-0.0886**	-0.0524*	-0.1059**
	(0.0248)	(0.0207)	(0.0260)	(0.0288)
child under 6			0.0015	0.0142
			(0.0836)	(0.0501)
child 6-18			-0.0229	0.0833
			(0.0968)	(0.0437)
hild under 6	0.0138	-0.0462**	0.0142	-0.0450**
	(0.0090)	(0.0104)	(0.0090)	(0.0104)
hild 6-18	-0.0114	-0.0129	-0.0098	-0.0134
	(0.0085)	(0.0084)	(0.0084)	(0.0084)
ge	0.0772**	0.0813**	0.0773**	0.0813**
	(0.0051)	(0.0062)	(0.0051)	(0.0062)
ge^2	-0.0010**	-0.0010**	-0.0010**	-0.0010**
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Married (0.0121	-0.0177	0.0123	-0.0176
	(0.0103)	(0.0110)	(0.0102)	(0.0110)
ducation ("less than high school" is omitted)				
ligh school graduates	0.0759**	0.0160	0.0763**	0.0163
-	(0.0136)	(0.0189)	(0.0136)	(0.0189)
ome college	0.0830**	0.0054	0.0834**	0.0056
-	(0.0240)	(0.0263)	(0.0240)	(0.0263)
College graduates	0.3225**	0.2892**	0.3228**	0.2890**
	(0.0376)	(0.0347)	(0.0376)	(0.0346)
Advanced degree	0.3743**	0.3178**	0.3744**	0.3174**
Č				

	(0.0517)	(0.0452)	(0.0517)	(0.0452)
Weekly work hours	0.0067**	0.0108**	0.0067**	0.0108**
	(0.0003)	(0.0003)	(0.0003)	(0.0003)
Job tenure	0.0030**	0.0035**	0.0030**	0.0035**
	(0.0008)	(0.0009)	(0.0008)	(0.0009)
Public sector	-0.0537*	0.0146	-0.0537*	0.0146
	(0.0236)	(0.0180)	(0.0236)	(0.0180)
Metropolitan	0.0549**	0.0516**	0.0550**	0.0519**
	(0.0191)	(0.0194)	(0.0190)	(0.0194)
Region ("East" is omitted)				
Midwest	-0.0035	-0.1208*	-0.0038	-0.1197*
	(0.0533)	(0.0592)	(0.0533)	(0.0591)
South	-0.0261	0.0031	-0.0263	0.0033
	(0.0457)	(0.0507)	(0.0457)	(0.0507)
West	0.1145*	-0.0208	0.1143*	-0.0197
	(0.0461)	(0.0567)	(0.0461)	(0.0566)
Union	0.1111**	0.1241**	0.1109**	0.1240**
	(0.0168)	(0.0169)	(0.0168)	(0.0169)
Part-time	-0.1201**	-0.1166**	-0.1200**	-0.1167**
	(0.0050)	(0.0046)	(0.0050)	(0.0046)
Family income (logged)	0.0748**	0.0702**	0.0749**	0.0702**
	(0.0047)	(0.0043)	(0.0047)	(0.0043)
Occupation ("managerial" is omitted)				
Professional	-0.0438**	-0.0638**	-0.0435**	-0.0637**
	(0.0166)	(0.0149)	(0.0166)	(0.0149)
Service	-0.2500**	-0.2664**	-0.2500**	-0.2664**
	(0.0185)	(0.0175)	(0.0185)	(0.0174)
Sales, clerical	-0.1457**	-0.1229**	-0.1456**	-0.1230**
	(0.0148)	(0.0130)	(0.0148)	(0.0130)
Farming	-0.3374**	-0.2803**	-0.3376**	-0.2807**
	(0.0419)	(0.0676)	(0.0419)	(0.0676)
Production	-0.0551**	-0.1266**	-0.0551**	-0.1268**
	(0.0154)	(0.0223)	(0.0154)	(0.0223)
Operatives	-0.1442**	-0.1774**	-0.1439**	-0.1769**
	(0.0184)	(0.0277)	(0.0184)	(0.0277)
Time (10 categories)	included			
Observations	150944	148128	150944	148128
R-squared	0.86	0.85	0.86	0.85
Notes: Robust standard errors are presented in pare	nthagas All agn	tral variables o	ra contared at t	hair manns

Notes: Robust standard errors are presented in parentheses. All control variables are centered at their means. ** p < 0.05, *** p < 0.01 (two-tailed).

Table 3. Person-level fixed effects regression coefficients for the effect of job mobility (4 months prior) on the log of monthly earnings, SIPP 2008

	2008 Panel			
	Model 1a Model 1b		Model 2a	Model 2b
	Men	Women	Men	Women
Constant	7.8319**	7.5733**	7.8312**	7.5729**
	(0.0073)	(0.0105)	(0.0073)	(0.0105)
ob-related quit	0.0690**	0.0433	0.0996**	0.0811**
	(0.0265)	(0.0251)	(0.0335)	(0.0309)
child under 6			-0.0837	-0.0850
			(0.0617)	(0.0713)
child 6-18			-0.0929	-0.1167*
			(0.0779)	(0.0560)
ayoff	-0.0592**	-0.0713*	-0.0593*	-0.0432
	(0.0201)	(0.0309)	(0.0263)	(0.0424)
have child under 6			0.0623	-0.0524
			(0.0466)	(0.0849)
have child 6-18			-0.0768	-0.0855
			(0.0541)	(0.0664)
ther quit	-0.0618+	-0.0937**	-0.0150	-0.1033*
	(0.0356)	(0.0360)	(0.0426)	(0.0470)
child under 6			-0.1439	0.0515
			(0.0916)	(0.0870)
child 6-18			-0.2036	-0.0011
			(0.1043)	(0.0929)
hild under 6	0.0156	-0.0222	0.0167	-0.0216
	(0.0149)	(0.0172)	(0.0149)	(0.0170)
hild 6-18	0.0127	-0.0314*	0.0158	-0.0303*
	(0.0162)	(0.0138)	(0.0162)	(0.0138)
ge	0.0421**	0.0486**	0.0423**	0.0486**
	(0.0098)	(0.0108)	(0.0098)	(0.0108)
$-ge^2$	-0.0006**	-0.0006**	-0.0006**	-0.0006**
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
f arried	-0.0289	-0.0496**	-0.0289	-0.0491**
	(0.0162)	(0.0168)	(0.0162)	(0.0168)
ducation ("less than high school" is omitted)				
igh school graduates	0.0320	0.0491*	0.0325	0.0488*
	(0.0197)	(0.0245)	(0.0196)	(0.0245)
ome college	-0.0244	0.0843*	-0.0240	0.0849*
	(0.0450)	(0.0398)	(0.0450)	(0.0397)
follege graduates	0.0964	0.2199**	0.0983	0.2195**
	(0.0659)	(0.0508)	(0.0659)	(0.0508)
	· ·	· ·	· ·	

	(0.1077)	(0.0631)	(0.1077)	(0.0631)
Weekly work hours	0.0062**	0.0088**	0.0062**	0.0088**
•	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Job tenure	0.0062**	0.0067**	0.0062**	0.0067**
	(0.0022)	(0.0022)	(0.0022)	(0.0022)
Public sector	0.0720	0.0241	0.0738	0.0247
	(0.0469)	(0.0423)	(0.0470)	(0.0423)
Metropolitan	0.0022	0.0481	0.0018	0.0480
	(0.0457)	(0.0497)	(0.0456)	(0.0496)
Region ("East" is omitted)				
Midwest	-0.0135	-0.1213	-0.0159	-0.1219
	(0.1048)	(0.0712)	(0.1051)	(0.0716)
South	-0.0452	-0.1185*	-0.0443	-0.1185*
	(0.1099)	(0.0548)	(0.1103)	(0.0548)
West	0.1692	-0.0903	0.1681	-0.0899
	(0.1107)	(0.0688)	(0.1109)	(0.0690)
Union	0.1181**	0.0989**	0.1159**	0.0994**
	(0.0317)	(0.0336)	(0.0317)	(0.0336)
Part-time	-0.0895**	-0.0831**	-0.0895**	-0.0830**
	(0.0064)	(0.0060)	(0.0064)	(0.0060)
Family income (logged)	0.0513**	0.0404**	0.0513**	0.0404**
	(0.0043)	(0.0036)	(0.0043)	(0.0036)
Occupation ("managerial" is omitted)				
Professional	-0.1380**	-0.1157*	-0.1373**	-0.1161*
	(0.0496)	(0.0469)	(0.0495)	(0.0468)
Service	-0.3014**	-0.2937**	-0.3006**	-0.2930**
	(0.0490)	(0.0538)	(0.0490)	(0.0538)
Sales, clerical	-0.2279**	-0.1906**	-0.2267**	-0.1902**
	(0.0435)	(0.0449)	(0.0435)	(0.0449)
Farming	-0.2733**	-0.0998	-0.2741**	-0.1008
	(0.0922)	(0.1554)	(0.0922)	(0.1567)
Production	-0.0946*	-0.2447**	-0.0944*	-0.2448**
	(0.0449)	(0.0732)	(0.0449)	(0.0731)
Operatives	-0.2117**	-0.2521**	-0.2106**	-0.2505**
	(0.0493)	(0.0759)	(0.0493)	(0.0758)
Time (10 categories)	included			
Observations	77525	78554	77525	78554
R-squared	0.90	0.90	0.90	0.90

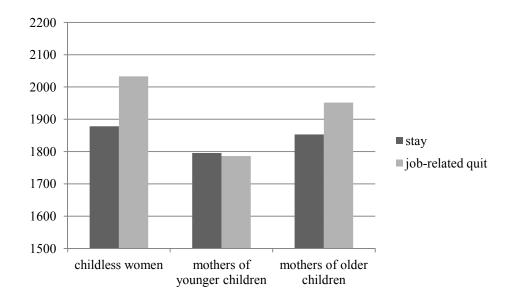
Notes: Robust standard errors in parentheses. All control variables are centered at their means. ** p<0.05, *** p<0.01 (two-tailed).

Table 4. Fixed effects regression coefficients for the effect of job mobility on the log of monthly earnings

		Weighted for unemployment			
	Men	Women	Men	Women	
	(a) 2004 Panel				
Job-related quit	0.0272	0.0564**	0.0316	0.0583**	
	(0.0152)	(0.0140)	(0.0162)	(0.0138)	
Layoff	-0.0342*	-0.0584**	-0.0395*	-0.0568*	
	(0.0166)	(0.0204)	(0.0174)	(0.0223)	
Other quit	-0.0547*	-0.0886**	-0.0867**	-0.0883**	
	(0.0248)	(0.0207)	(0.0328)	(0.0216)	
			(b) 2008 Panel		
Job-related quit	0.0690**	0.0433 +	0.0748**	0.0435+	
	(0.0265)	(0.0251)	(0.0272)	(0.0252)	
Layoff	-0.0592**	-0.0713*	-0.0444*	-0.0773**	
	(0.0201)	(0.0309)	(0.0222)	(0.0298)	
Other quit	-0.0618+	-0.0937**	-0.0121	-0.1463**	
	(0.0356)	(0.0360)	(0.0486)	(0.0510)	

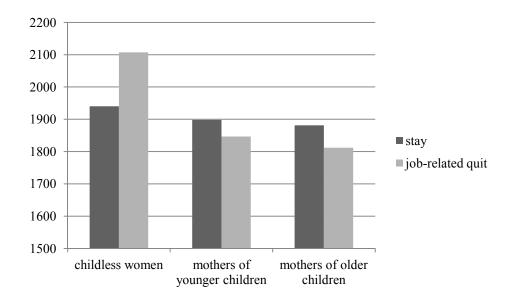
Notes: Robust standard errors in parentheses. For description of models and control variables, see the list in table 1. ** p<0.05, *** p<0.01 (two-tailed).

Figure 1. Predicted earnings by parental and mobility status in the 2004 panel data



Notes: Estimates are based on the model 2b of tables 2. All control variables are set to their mean values.

Figure 2. Predicted earnings by parental and mobility status in the 2008 panel data



Notes: Estimates are based on the model 2b of tables 3. All control variables are set to their mean values.