GOOD TIMES, BAD TIMES: THE EFFECTS OF ORGANIZATIONAL DYNAMICS ON THE CAREERS OF MALE AND FEMALE MANAGERS

Heather A. Haveman, Joseph P. Broschak and Lisa E. Cohen

ABSTRACT

Purpose – *This paper investigates the effects of founding, growth, decline, and merger on gender differences in managerial career mobility. These common events create and destroy many jobs, and so have big impacts on managers' careers. We build on previous research to predict gender differences in job mobility after such events, and show that these gender differences are moderated by the positions managers occupy: level, firm size, and sex composition.*

Methodology – *We test our predictions using archival data on all 3,883 managerial employees in all 333 firms in the California savings and loan industry between 1975 and 1988. We conduct logistic-regression and event-history analyses.*

Findings – *Female managers are less likely than male managers to be hired when the set of jobs expands because of founding and growth, and*

Economic Sociology of Work
Research in the Sociology of Work, Volume 18, 119–148

ISSN: 0277-2833/doi:10.1108/S0277-2833(2009)0000018008

more likely to exit when the set of jobs contracts because of decline and merger. These gender differences exist because relative to men, women occupy lower-level jobs, work in smaller firms, and work in firms with more women at all managerial ranks. The effects of all but one event (the growth of one's own employer) are moderated by managers' positions.

Value of the paper – *Our paper is the first to offer a large-scale test of gender differences in career trajectories in the wake of common organizational events. By showing that these market-shaping events affect male and female managers' careers differently, and that these effects depend on the positions of male and female managers, we demonstrate economic sociology's potential for studying inequality.*

Economic sociology promises to explain differences in economic behavior, not as the result of the atomistic decisions of individuals as economics would suggest, nor as a simple consequence of the characteristics of firms as organizational sociology would predict, but as a function of broader social structures, individuals' positions in them, and the social processes that shape production, consumption, and distribution markets (Fligstein, 2001). Studying inequality in men's and women's labor-market outcomes offers one way to deliver on economic sociology's promise. Understanding how men's and women's access to labor-market opportunities depends on their social positions and market dynamics is fundamental to the stated mission of economic sociology (Fligstein, 2001; England & Folbre, 2005; Beamish & Biggart, 2006). Yet this topic has largely escaped the attention of economic sociologists.

Other fields of sociology have paid attention to this topic. For instance, organizational sociologists have made substantial progress toward understanding why gender gaps in career mobility and socioeconomic attainment persist. Because jobs and careers are embedded in organizational structures, organizations play the dominant role in shaping social, psychological, and economic outcomes for employees; researchers should therefore look to organizational explanations for these gender gaps (Stolzenberg, 1978; Baron & Bielby, 1980). For example, Nelson and Bridges' (1999) analysis of four large employers demonstrated that pay differences between predominantly male and predominantly female jobs that were otherwise comparable were due to concrete organizational practices, not "the market" or efficiency considerations.

Some scholars have begun to investigate how the organizational dynamics that shape markets – founding, growth, decline, merger, and dissolution – also shape job opportunities. Organizational dynamics create and destroy jobs on a large scale, and so dramatically alter the job opportunities available to any worker. Growth and founding create jobs; merger shifts jobs from one employer to another; and decline, merger, and dissolution destroy jobs. One-fifth of U.S. manufacturing jobs are created and destroyed each year by plant opening, expansion, contraction, and closing (Davis, Haltiwanger, & Schuh, 1997, pp. 17–31). The movement of employees from job to job and from employer to employer is pushed (due to job closure) or pulled (due to job opening) by these changes in the number and distribution of jobs. Carroll and Hannan (2000, p. 431) estimated that across the United States, the job shifts driven by organizational dynamics constitute between one-third and one-half of all job mobility. For example, entry into start-up firms and exit from failing firms together constituted over half of managerial employees' moves between California thrifts in the 1970s and 1980s (Haveman & Cohen, 1994).

While past research has shown that organizational dynamics affect employees' job opportunities and thus their job mobility, few studies have analyzed whether these forces affect men and women differently. Analysis of Swedish employers revealed that growing organizations were more likely to hire sex-atypical workers: growing organizations with mostly male employees were more likely to hire women and those with mostly female employees were more likely to hire men (Bygren & Kumlin, 2005). In a Fortune-500 firm, women's promotion rates were slowed less than men's during workforce reductions, but this did not facilitate women's entry into leadership because they took lower-level positions than men (Dencker, 2008). These studies suggest that organizational dynamics may reduce sex segregation and benefit women's career prospects. But clearly, more work is needed. Thus, the first question we ask is: *Do men and women differ in the degree to which they seize the opportunities created by founding and growth, find shelter from the destruction of jobs that attends contraction and failure, and find safe harbors during the turbulence that accompanies merger*? In answering this question, we push economic sociology to investigate how common organizational events shape labor markets and create different opportunities for male and female workers (Tilly & Tilly, 1994; England & Folbre, 2005).

A long line of research has shown that job mobility depends on the positions workers hold. People change jobs when two things happen: they are offered jobs *and* they decide to take them; the probability of both things happening depends on workers' positions (Sørensen, 1977;

Stewman & Konda, 1983; Skvoretz, 1984a). In other words, job mobility results from being the right person in the right place at the right time (Skvoretz, 1984b). Applying this insight to economic inequality, we argue that because men and women hold different jobs in different organizations, positional differences explain the differential responses of men and women to opportunities created by growth and founding, and to problems created by contraction and merger. Analysis of industry- and occupation-level data is consonant with this argument: gender differences in job mobility are due to the fact that men and women work in different occupations, which are more or less vulnerable to economic turbulence and industrial restructuring (e.g., DiPrete & Nonnemaker, 1997). Thus, we seek to answer a second question: *Do the positions occupied by men and women account for the effects of organizational dynamics on men's and women's career mobility*? Many economic sociologists have studied how firms' positions in exchange relations affect their economic outcomes (e.g., Uzzi, 1996), but few have examined how employees' positions affect their economic outcomes. While jobs are clearly embedded in organizations and markets, men and women may be embedded differently and hence experience different outcomes. Thus, our analysis pushes economic sociologists to consider more explicitly how it is that individual position mediates the effects of large-scale social structures on inequality.

To address these questions, we study the careers of men and women managers in one industry. We focus on managers because they are among the most prestigious and well-paid workers, and because the obstacles to women's advancement in management are severe. Managerial jobs are still quite gender segregated, especially when we consider within-firm job-level sex segregation; for example, between "line" and "staff" managerial jobs or between managers at different levels of authority (Bielby & Baron, 1984, 1986; Petersen & Morgan, 1995). In 2002, women constituted 15.7% of corporate officers in Fortune 500 companies, but only 7.3% of line managers, 5.2% of top earners, and 1.6% of CEOs (Catalyst, 2007). We focus on organizational dynamics because these events are both the result of market processes and the spur to market dynamics.

In the next section, we discuss how founding, growth, contraction, and merger affect job mobility. We then hypothesize how the positions men and women occupy may account for gender differences in job mobility in the wake of organizational dynamics. After describing our research site and data sources, we present empirical results. We conclude by making sense of our findings, in particular what they mean for economic sociology.

THE EFFECTS OF ORGANIZATIONAL DYNAMICS ON CAREERS

Founding

When organizations are founded, jobs are created. A good source for personnel to fill these jobs is established organizations in the same industry, whose employees possess knowledge, skills, and abilities that are germane to new ventures. Thus, the immediate consequence of founding is that employees leave established organizations for new ventures (Haveman & Cohen, 1994).

Expansion and Contraction

When organizations expand their staffs, jobs are created. These jobs may be filled internally or externally. If filled internally, growth generates internal mobility. If filled externally, growth spurs interorganizational mobility. In contrast, when organizations cut their staffs, jobs are destroyed. The people who held these jobs may find positions elsewhere in the shrinking organization; others leave involuntarily. Organizational contraction may also generate voluntary turnover, if employees who have good prospects elsewhere leave what they view as a deteriorating situation.

Merger

When an organization is acquired, its employees are forced to change employers. Many transfer to the acquiring organization; therefore, merger generates a large-scale exodus from the acquired to the acquiring firm. But employees of the acquired firm who are not transferred to the acquiring firm must seek positions elsewhere. Some of these exits are voluntary, such as when employees move to escape post-merger chaos; some are involuntary, such as when employees are forced out during post-merger consolidation (Haveman & Cohen, 1994).

Merger also affects employees in acquiring firms, often by prompting large-scale turnover. Some employees leave voluntarily because they dislike the chaos that accompanies merger, or because their chances of promotion are derailed by the arrival of workers from acquired organizations. Others leave involuntarily when decision makers conclude that people from

acquired organizations better fit the needs of the post-merger organization. In this way, merger increases exit from acquiring organizations (Haveman & Cohen, 1994).

Gender Differences

We expect that male managers are more likely than female ones to be hired into new jobs created by founding and growth, and less likely to exit when jobs disappear during merger and contraction. The differential mobility of male and female managers is due to bias in decision making about managerial hiring, promotion, and firing, which places men ahead of women in job queues (Reskin & Roos, 1990; Ridgeway, 1997). Gender is often used as a proxy for otherwise unobservable qualifications; men are generally considered more qualified than women for managerial jobs (Reskin & Roos, 1990; Blau, Ferber, & Winkler, 2006). Therefore, men should be more likely than women to be offered managerial jobs, including those created by founding and growth, and less likely to be asked to leave managerial jobs, including those threatened by merger and contraction.

There is only indirect evidence on this subject. The promotion chances of female clerical workers in a government bureau were improved more by growth and harmed more by decline than were those of male workers (Skvoretz, 1984a). Analysis of a representative cross-section of U.S. employees in the 1960s showed a similar pattern (Bielby & Baron, 1983). However, male blue-collar workers in a German firm gained more from growth than their female counterparts, but the men lost more from decline than the women (Preisendörfer & Burgess, 1988). The lack of consistency in these studies is difficult to parse because they do not focus on managers, and they include little information about jobs and employers. Clearly, there is need for further study of whose careers, male or female managers, are more strongly affected by organizational dynamics, and why.

POSITION EXPLAINS THE GENDER GAP

Men may be preferred over women for managerial positions, and gender may be used as a proxy for otherwise unobservable qualifications. However, the positions held by employees, meaning type of job and type of firm, can provide organizational decision makers with more pertinent and accurate information on qualifications than gender alone. Thus, when decision

makers have access to such information, they have less need to use gender as a proxy for qualifications (Tosi & Einbender, 1985). Thus, taking position into account should reduce, if not eliminate, differences between men's and women's job mobility.

Decisions made by managerial employees themselves also determine who stays and who leaves. Employees' decisions depend in part on the positions they hold because position shapes perceptions of opportunities for mobility (Kanter, 1977). Thus, taking position into account should reduce, if not eliminate, differences between male and female managers' job mobility.

The positions held by male and female managers differ on three important dimensions: job level, organizational size, and organizational sex composition. First, female managers tend to occupy the lowest managerial ranks in most industries (Reskin & Roos, 1990; U.S. Department of Labor & Federal Glass Ceiling Commission, 1995; Catalyst, 2007). Second, male managers tend to work in larger organizations than female managers. For example, a recent analysis of the five most highly compensated employees in all of the Standard and Poor's Large-Cap 500, Mid-Cap 400, and Small-Cap 600 firms in the 1990s showed that female executives worked in firms that were about 40% smaller than the firms where their male counterparts worked (Bertrand & Hallock, 2001). Third, because male and female workers, including managers, rarely hold the same job within any employing organization (Bielby & Baron, 1984, 1986), workers tend to work in organizations that are sex segregated: women in organizations with higher proportions of female employees, and men in organizations with higher proportions of male employees.

Job Level

Job level is an important predictor of mobility because it signals knowledge and skills (Spence, 1973), and it creates connections to influential others. Managers near the top have more valuable industry-relevant knowledge and skills than those near the bottom; they also have more ties to powerful people. Therefore, managers near the top are more attractive, both to their current employers and to other organizations, than managers near the bottom. In addition, managers at the top have reached a ceiling for internal mobility, while those further down the ranks can move up internally as well as externally. All other things equal, managers in the middle and upper ranks are in better positions than managers in the lower ranks to be hired

into jobs created by founding and growth, and to find shelter when jobs are destroyed by decline and merger (Stewman & Konda, 1983).[1] Since men are far more likely than women to be in the middle and upper ranks of management, any observed benefits accruing to men from founding and growth, and any extra sheltering of men in the wake of contraction and merger may be due to job level; if so, including job level in models of job mobility may weaken or eliminate the effect of gender.

Organizational Size

Employer size has a huge impact on career mobility. Larger organizations have more differentiated job structures, both horizontally and vertically (Blau & Schoenherr, 1971), so they offer longer job ladders and better upward mobility prospects. Larger organizations also have more highly formalized personnel policies (Stolzenberg, 1978; Granovetter, 1984). Finally, larger organizations have better-developed internal labor markets – hierarchically arranged jobs, few entry ports at the bottom, promotion from within, and structured career paths where firm-specific skills are developed (Stolzenberg, 1978; Granovetter, 1984; Pfeffer & Cohen, 1984). It is not surprising, then, that promotion rates are higher in larger organizations (Cobb-Clark & Dunlop, 1999).

Size can have opposing effects on managerial job mobility. On the one hand, size may *reduce* the impact of founding and growth. Because large employers have more vertical levels and better-developed internal labor markets, managers in large firms can move up without crossing organizational boundaries, are thus affected less by expansion of the external pool of jobs caused by founding and growth. Furthermore, because the internal labor markets of larger employers are better developed, managers in larger firms are offered clearer and longer career lines. For this reason, positions in larger firms may be perceived as more desirable, so managers in larger firms will be less tempted to move into growing or newly founded firms. DiPrete's (1993) study of industrial turbulence and job mobility in the United States during the 1980s supports these predictions. Since male managers tend to work in larger firms than female managers, the sheltering of men from the founding and growth of other firms may be masked by ignoring differences in employer size. If so, including size in models of movement into new and growing firms may accentuate the effect of gender.

On the other hand, size may *enhance* the effect of founding and growth. Larger organizations are more visible and more prestigious; hence, their

managers are more likely to be recruited to fill vacancies in new or expanding competitors (Burton, Sørensen, & Beckman, 2002). Managers in larger firms may also be more attractive recruiting targets because they have received more training (Knoke & Kalleberg, 1996). For these reasons, managers in larger firms may be more, not less, affected by founding and growth. Since male managers tend to work in larger organizations than female managers, any observed benefits accruing to men from founding and growth may be due to organizational size, and including size in models of movement into new and growing firms may weaken or eliminate the effect of gender.

By a similar logic, managers in larger firms may be more likely to be retained following merger. This may happen because managers in larger firms have better training and, leveraging the prestige of their employers, they may have better connections. For instance, Norwegian public-sector managers in larger organizations were less likely to quit or be laid off than those in smaller organizations (Kalleberg & Mastekaasa, 1998). Again, since male managers tend to work in larger organizations than female managers, male managers will be less likely to exit following merger.

Sex Composition

The proportion of female employees is a highly salient characteristic of the employment context, one that shapes both employers' and employees' preferences and decision making (Kanter, 1977; Perry, Davis-Blake, & Kulik, 1994), and thus employees' job mobility. There are more men than women in management, especially in the highest ranks; therefore, men are the "default" sex in managerial jobs, and male managers tend to be accorded higher status than their female counterparts (Bose & Rossi, 1983; Dimitrovsky, Singer, & Yinon, 1989; Eagly, Karau, & Makhijani, 1995). Because status is often conferred by association (Podolny, 1993), the status of an organization's employees, especially valued employees like managers, can add to organizational status. If so, organizations with more women in management, especially in the highest ranks, will be lower-status employers; managers in such firms will be less attractive to recruiters. Similarly, if the status of the origin firm (the acquired or acquiring firm) affects post-merger outcomes for employees, then employees of firms with more women in management, especially top management, will be more likely to be let go following merger. Since men tend to work in firms with relatively high proportions of men, any benefits accruing to men from founding and growth, and any observed sheltering of men from the aftermath of merger

and acquisition, may be due to sex composition; therefore, including sex composition in models of job mobility may weaken or eliminate the effect of gender.

RESEARCH DESIGN

Research Site: The California Savings and Loan Industry

We study managers in the California savings and loan (thrift) industry between 1975 and 1988. This setting offers an excellent forum for testing our hypotheses. First, because this is a U.S. setting, we expect to see strong effects of organizational dynamics (DiPrete, de Graaf, Luijkx, Tåhlin, & Blossfeld, 1997), which facilitates teasing apart differential effects on men's and women's careers. Second, volatile economic and regulatory conditions caused many foundings and mergers, and pushed many established thrifts to grow or shrink dramatically.

Our data come from the Federal Home Loan Bank Board of San Francisco, the California thrift regulator, which published annual *Directories of Members* that contain a wealth of data, including names and titles of all managers. We acquired *Directories* from December 1975 to 1988 and pieced together the work histories of all 3,883 managers in all 333 thrifts, which yielded 14,648 annual observations.

Variables and Measures

Organizational Dynamics[2]

We coded *founding* as occurring the calendar year a thrift first reported to regulators. This was generally the year of incorporation or the following year. We coded *merger* as occurring the year after the last year an acquired organization reported to regulators, which was generally the same year as the merger. Finally, we measured *growth* and *contraction* as the change in the number of managers over a calendar year.

Job Mobility

We recorded the firm for which each manager worked each year and the position held (title) by each manager each year. We coded job level for each manager each year. In descending rank order, there are 12 levels: chair, president, chief executive officer, vice chair, senior executive VP, executive VP, first VP, senior VP, second VP, VP, staff (secretary, treasurer, chief loan officer, etc.), and assistant VP. We recorded a job shift whenever a manager changed job level, moved between thrifts, or left the industry.

Gender

We determined *gender* based on managers' first names. For non-Anglo names, we consulted books on culture-specific naming conventions (Hall, 2000; Hanks & Hodges, 1990; O'Neill, 1972). For gender-ambiguous names (e.g., Kelly, Jesse), which constituted 1.5% of annual observations in our data, our coding decisions were guided by the U.S. Bureau of the Census (1995) analysis of common names. For instance, Jesse is a man's name in 0.209% of the Census sample and a woman's name in 0.008% of the sample; therefore, we coded Jesse as a man's name. Kelly is a woman's name in 0.285% of the sample and a man's name in 0.063% of the sample; therefore, we coded Kelly as a woman's name. To code names that were not on the Census list, we talked with undergraduates in a large state university who came from many different countries. Appendix A lists gender-ambiguous names, along with our coding decisions. We excluded from our analyses managers for whom only initials, not first names, were recorded, and managers with uncodable first names; these totaled 3.1% of annual observations in our data. We deemed names uncodable if they were not in the Census database or our conversations with foreign students did not indicate likely gender. Appendix B lists uncodable names. In our data, 23.4% of managers with codable names were women.

Position

We study three aspects of position: job level, thrift size, and hierarchical sex composition. Management jobs are arranged in clear hierarchies, with authority and responsibility increasing along with compensation. Following a study of hiring and promotion of managers in this industry (Cohen, Broschak, & Haveman, 1998), we used a trichotomous indicator for *job level*. High-level jobs (25.2% of observations) included the top four ranks (chair, CEO, president, and vice chair); mid-level jobs (28.4% of observations) included the ranks of senior executive VP to second VP; and low-level jobs (45.4% of observations) included VPs, staff, and assistant VPs. To measure *firm size* in a way that was not confounded with growth and decline in the set of managerial jobs, we used assets, measured in constant dollars. Finally, we measured *hierarchical sex composition* as the proportions of managers who were female at the three job levels.

Analytical Methods

Gender Differences in Job Mobility

To answer our first research question – were male and female managers affected differently by organizational dynamics? – we calculated job-mobility rates. We distinguished among five types of mobility events: moves into newly founded and growing thrifts, moves out of shrinking and acquiring thrifts, and moves between acquired and acquiring thrifts.

Position Explains Gender Differences in Job Mobility

To answer our second research question – do the positions held by male and female managers explain the gender gap in job mobility? – we conducted multivariate statistical analyses. We measured variables that represent levels, such as firm size, at the beginning of each calendar year; we measured variables that represent organizational events and job mobility during each calendar year.

Our multivariate analysis focused on five different situations: two involved expansion in the set of jobs (entry into new and growing organizations), and three involved contraction (exit from shrinking, acquired, and acquiring organizations). We investigated each situation separately. Because new thrifts were founded and established thrifts grew each year, all managers were at risk of moving to a newly founded or growing firm. Accordingly, all managers in all years are included in the risk sets for moving to new and growing organizations. But only managers who actually worked in shrinking or merging firms were at risk of exiting those firms. Accordingly, only managers who worked in shrinking or merging firms were included in the risk sets for those events.

We used event-history analysis (Tuma & Hannan, 1984, pp. 43–264) to study the rates at which managers move to new and growing organizations from other locations in the industry. Our dependent variables are instantaneous transition rates defined as:

$$r(t) = \lim_{dt \downarrow 0} \frac{Pr[t \leq T < t + dt,\ \text{move jobs} | T \geq t]}{dt}$$

where $r(t)$ is the hazard rate of an individual's moving at time t, $\Pr[\cdot]$ the probability of a job shift between times t and $t + dt$, given that the individual is employed in the thrift industry at time t. We estimated models of the following general form:

$$r(t) = \exp[\beta' x(t)]$$

where β is a vector of parameter estimates, $x(t)$ a vector of time-varying covariates, γ the time-dependence parameter, and t the time clock (here, tenure in the firm). Note that this log-linear specification constrains the rate to be nonnegative. We used the GENMOD procedure in the SAS statistical package (Allison, 1995; SAS, 2004), which controls for right censoring by allowing right-censored observations to be used in estimating parameters, thereby avoiding biases that result from eliminating censored observations or treating them as though events occurred when the period ended (Sørensen, 1977; Tuma & Hannan, 1984, pp. 122–128). Because thrift managers could move multiple times, we use a repeated-events framework in which the dependent variable incorporates information on all job shifts, not just the first one.

For the analysis of *founding*, the dependent variable was coded one if a person moved into a new firm and zero otherwise. We treated other moves – within one's current firm, into other established firms, and out of the industry – as censored cases. For the analysis of *growth*, the dependent variable was coded one if a person moved into a growing firm and zero otherwise. We treated other moves – within one's current firm, into other (stable, shrinking, or newly founded) firms, and out of the industry – as censored cases.

We used logistic regression, with the LOGISTIC procedure in SAS (2004), to study male and female managers' mobility responses to the contraction or merger of their employers. The general model estimated is:

$$L = \ln \frac{P}{1 - P} = \beta' x(t)$$

where L is the log-odds ratio of a manager exiting a shrinking or merging organization, rather than staying;[3] P the probability that a manager leaves the focal organization; β a vector of parameter estimates, and $x(t)$ a vector of covariates.

To analyze turnover forced by *contraction*, we selected all 3,876 annual records on managers whose firms shrank that year, and coded the dependent variable one if an individual left the firm and zero otherwise. To analyze transfers from *acquired* to acquiring organizations, we selected all 711 annual records on thrift managers whose employers were acquired that year. We coded the dependent variable one if a manager left and zero if he or she stayed in the organization after the merger. To analyze exits from *acquiring* organizations, we selected all 444 annual records on thrift managers whose employers undertook acquisitions that year. We coded the dependent variable one if an individual left and zero if he or she stayed.

In all multivariate analyses, we controlled for experience, tenure (years) in the firm. (In results not shown here, we used tenure in the job. Those results were essentially the same as the ones we report here.) Decision makers generally prefer more-experienced employees. Therefore, more-experienced managers will benefit more from expansion in the set of jobs that attends founding and growth, and be more buffered from contraction in the set of jobs that attends decline and merger (DiPrete, 1993; DiPrete & Nonnemaker, 1997). Strong effects of decline on less-experienced managers may occur because employers often use seniority rules for promotion and retention (Parker, 1981). And despite being able to benefit from external opportunities, managers with longer tenure may be less inclined to change jobs when opportunities arise because their rewards generally increase with tenure (Halaby & Weakliem, 1989); this would dampen any mobility differences between long- and short-tenured employees in the wake of foundings and growth.

Female managers tend to have less experience in the workforce, their jobs, and their firm than male managers (Blau et al., 2006). Women's careers are often interrupted for child bearing and child rearing. Therefore, women tend to have shorter career histories than men of the same age. And women are often "trailing spouses" in geographic relocations (e.g., Bielby & Bielby, 1992). Hence, women tend to change employers more than men. Less-experienced female managers are less likely than more-experienced male managers to be offered jobs in growing or newly founded firms, and less likely to be sheltered from job loss when their current employer shrinks or merges.

Some multivariate analyses included situation-specific controls. Models of movement from established to new and growing firms controlled for whether the established firm was merged or dissolved, which would force employee turnover. Models of exit from shrinking firms controlled for the number of managers in the firm at the start of the year and for the number of managers let go during the year.

RESULTS

Effects of Organizational Dynamics on Men's and Women's Job Mobility

Table 1 shows trends in employment and job mobility. Men represented 82% of California thrift managers, and women represented 18%. Women's representation in California thrift management increased between 1975 and

Table 1. Trends in the California Savings and Loan Industry, 1975–1988: Managerial Career Dynamics.

Year	No. of Managers		Total Moves (Excluding Entries)		Moves Within Firms		Moves Between Firms in the Industry		Exits from the Industry		Entries to the Industry	
	M	F	M	F	M	F	M	F	M	F	M	F
1975–1976	932	120	189	29	78	8	24	1	87	20	52	7
1976–1977	941	128	183	21	80	5	33	1	70	15	103	28
1977–1978	964	151	199	47	74	15	26	5	99	27	96	39
1978–1979	988	180	263	59	81	16	40	2	142	41	127	58
1979–1980	1,018	213	348	79	65	15	66	8	217	56	172	71
1980–1981	954	221	378	111	55	20	66	6	257	85	152	65
1981–1982	890	194	279	61	95	18	45	5	143	38	206	58
1983–1984	989	232	396	90	116	19	41	9	239	62	238	77
1984–1985	1,030	264	396	93	93	26	56	9	247	58	284	95
1985–1986	1,092	321	391	114	104	25	40	12	247	77	296	111
1986–1987	1,091	347	377	149	90	30	59	11	228	108	240	106
1987–1988	1,060	328	406	143	73	22	22	4	311	117	203	88
Total	11,949	2,699	3,805	996	1,000	219	518	73	2,287	704	2,169	803
%	81.6	18.4	79.3	20.7	82.0	18.0	87.6	12.4	76.5	23.5	73	27
Total	14,648		4,801		1,219		591		2,991		2,972	

Notes: Managers are counted at year-end. Moves are job changes by managers; moves are measured between the two calendar years shown. The columns headed M show statistics on male managers; the columns headed F show statistics on female managers.

1988, from 11% to 24%. This mirrors the situation across the U.S. financial services sector: in 1970, women made up 19% of U.S. bank and financial managers; in 1980, that figure rose to 31% (Bird, 1990). Between 1975 and 1988, 3,883 thrift managers made 4,801 job shifts; 79% were by men, 21% were by women. About 25% of these were moves within the same firm (26% of men's moves and 22% of women's), about 12% were moves between firms in the thrift industry (14% of men's moves and 7% of women's), and the remainder (about 62%) were exits from the industry (60% of men's moves and 71% of women's). Finally, there were 2,972 entries into the industry, 73% by men and 27% by women. In sum, adjusting for the number of male and female managers, men and women were equally likely to move within their current firm, men were more likely than women to change firms and stay within the industry, and women were more likely than men to enter and exit the industry.

Over the 13 years covered by our analysis, 168 new thrifts were founded and 106 established thrifts merged. Founding created 907 jobs, and merger affected 1,204 jobs – 760 in 106 acquired thrifts and 444 in 55 acquiring thrifts. There were 1,422 growth events (excluding growth through merger), which created 2,464 jobs, and 1,758 shrinkage events, which destroyed 3,279 jobs. Collectively, these events had a big impact on managerial employees: 7,854 positions (54% of 14,648 annual records) were created by founding and growth, destroyed by shrinkage, or affected by merger. Clearly, then, much job mobility in this industry was driven by founding, growth, contraction, and merger.

Table 2 shows that men and women were affected differently by foundings and growth. The rate of mobility out of established firms and into start-up firms was 1.12% for male managers and 0.85% for female managers; thus, male managers proved 27% more likely than female managers to move from old to new thrifts. The rate of transfer into a growing thrift from another thrift was 0.61% for male managers and 0.30% for female managers; thus, male managers were twice as likely as female managers to make this kind of move. Table 2 also shows that men and women were affected differently by contraction and merger. Female managers were 25% more likely than male managers to leave shrinking thrifts: 37% of female managers and 30% of male managers in shrinking thrifts exited. Female managers were only half as likely as male managers to transfer from an acquired to an acquiring thrift: 21% of male managers in acquired organizations transferred, but only 11% of female managers did. And female managers in acquiring thrifts were 82% more likely than male managers to exit during merger: 30% of male managers and 54% of female

Table 2. The Effect of Organizational Dynamics on Men's and Women's Career Mobility.

Organizational Dynamic	Men	Women	Total
Births of new firms			
No. of managers in established firms (person-year records)	11,949	2,699	14,648
No. of managers moving from established to new firms (% of those in risk set)	134 (1.12%)	23 (0.85%)	158 (1.08%)
Growth of established firms			
No. of managers in established firms (person-year records)	11,949	2,699	14,648
No. of managers moving into growing firms (% of those in risk set)	73 (0.61%)	8 (0.30%)	81 (0.55%)
Contraction of established and ongoing firms			
No. of managers in shrinking firms	3,131	745	3,876
No. of managers exiting during contraction (% of those in risk set)	936 (29.9%)	276 (37.0%)	1,212 (31.1%)
Mergers – acquired firms (subordinate partner)			
No. of managers in acquired firms	589	122	711
No. of managers exiting during merger (% of those in risk set)	356 (78.4%)	109 (89.3%)	565 (79.5%)
Mergers – acquiring firms (dominant partner)			
No. of managers in acquiring firms	409	35	444
No. of managers exiting during merger (% of those in risk set)	122 (29.8%)	19 (54.3%)	131 (29.5%)

Notes: These statistics were calculated on 14,648 annual records of savings and loan managers between 1975 and 1988. Managers are counted at the end of the calendar year before the focal event (founding, growth, contraction, merger) occurs. Moves (entries into newly founded and growing firms, exits from shrinking, acquired, and acquiring firms) are measured in the year that the focal event occurs.

managers in acquiring firms exited the year after merger. In sum, then, men's and women's job mobility differed in the wake of these events. But the question remains as to how much of this gender gap was due to differences in position.

Does Position Explain the Gender Gap?

Table 3 presents univariate statistics and correlations for all variables in our multivariate analyses, which tease apart the effect of gender and position.

Table 3. Descriptive Statistics.

	1	2	3	4	5	6	7	8	9	10	11	12	13
Mean	0.011	0.006	0.083	0.039	0.010	0.184	0.265	0.288	0.159	0.025	0.087	0.287	6.35
Standard deviation	0.103	0.007	0.276	0.193	0.098	0.388	0.442	0.453	0.408	0.113	0.222	0.309	7.19
Sum	158	81	1,212	565	141	2,699	3,888	4,222	–	–	–	–	–
Minimum	0	0	0	0	0	0	0	0	0.0002	0	0	0	1
Maximum	1	1	1	1	1	1	1	1	3.54	1	1	1	45
1. Go to new co.		−0.008	−0.077	0.044	0.017	−0.010	−0.022	0.034	0.031	−0.018	−0.009	−0.020	−0.034
2. Go to growing co.			0.098	−0.015	012	−0.016	−0.009	0.005	−0.014	0.006	0.029	−0.003	−0.028
3. Exit shrinking co.				−0.060	−0.030	0.034	−0.059	0.004	0.008	0.006	0.015	0.027	−0.089
4. Exit acquired co.					−0.016	0.005	−0.005	0.002	−0.021	0.016	−0.002	−0.011	−0.013
5. Exit acquiring co.						−0.013	−0.015	0.036	0.029	0.003	−0.018	−0.048	−0.009
6. Female manager							−0.235	−0.127	−0.132	0.128	0.164	0.355	−0.150
7. Job level – high								−0.383	−0.051	0.038	−0.035	0.013	0.241
8. Job level – middle									0.235	−0.065	0.059	−0.131	0.026
9. Co. size (assets)										−0.004	−0.090	−0.260	0.077
10. Proportion of female managers at high levels											−0.028	0.074	−0.063
11. Proportion of female managers at middle levels												0.079	−0.028
12. Proportion of female managers at low levels													−0.079
13. Tenure in co.													

Notes: These statistics were calculated on 14,648 records of savings and loan managers between 1975–1976 and 1987–1988. Any $|r| \geq 0.0162$ is significant at $p < 0.05$. Go to new co. = 1 for managers who moved from an established to a newly founded thrift; go to growing co. = 1 for managers who moved from an established to a growing thrift. Move within growing co. = 1 if the manager's firm was growing and the manager changed jobs within that firm; leave shrinking co. = 1 if the manager's firm was shrinking and the manager exited the firm. Leave merged co. = 1 if the manager's firm was acquired by another and the manager left the post-merger entity; leave acquiring co. = 1 if the manager's firm acquired another and the manager left the firm.

Female managers in California thrifts were more likely than male managers to occupy low-level positions: women constituted 31% of low-level job holders, but only 10% and 3.2% of mid- and high-level job holders, respectively. Women generally worked in much smaller firms than men: across all 14,648 person-year records in our dataset, average assets were $18 million for records on men and $4.7 million for records on women. Women worked in firms with higher proportions of female managers than did their male counterparts. The average proportions of female managers at the top, middle, and bottom ranks were 1.8, 9.2, and 25%, respectively; for annual records on women, the proportions were 5.6, 25, and 53%, respectively.

Table 4 summarizes our multivariate analyses. Each pair of consecutive columns in this table focuses on a single situation. The first shows a baseline model containing gender, tenure in the firm, and situation-specific control variables. The second adds the three measures of position. Note that for all five situations, the fully specified models fit the data significantly better than did the baseline models.

Effects of Position

Position mediated the effect of gender, but it did so to a different degree for different events. After controlling for position, the effect of gender became nonsignificant for four out of five situations: moves into new thrifts and out of shrinking, acquired, and acquiring thrifts. Although men moved into new thrifts at higher rates than women, Models 1–2 reveal that this was due to position. When firms shrank (Models 5–6), were acquired (Models 7–8), or undertook acquisitions (Models 9–10), women were hit harder than men, but after controlling for position, men and women were equally likely to leave. The single point of contrast came from transfers into growing firms. Before controlling for position, female managers were less than half as likely as male managers to move into growing firms. Controlling for position did not reduce the effect of gender at all; instead, it increased, suggesting that growing firms recruit from small firms, where women tend to work, rather than from large firms, where men tend to work.

What aspects of position accounted for the observed gender gap? Managers in mid-level positions were more likely to move into new firms and less likely to leave acquired firms after merger than were managers in high- or low-level positions. This is consistent with the idea that mid-level managers, whose mobility into upper-management jobs may be blocked by incumbents (Stewman & Konda, 1983), are most likely to seize opportunities in start-up firms and to perceive opportunities when their employer acquires a competitor. Managers in the highest ranks were less likely to

Table 4. Analysis of Men's and Women's Career Mobility in the Wake of Organizational Events.

Model	1	2	3	4	5	6	7	8	9	10
Mobility event	Go to new Co.		Go to growing Co.		Exit shrinking Co.		Exit acquired Co.		Exit acquiring Co.	
Analytical technique	Event history		Event history		Logistic regression		Logistic regression		Logistic regression	
Constant	−4.57***	−4.67***	−4.58***	−4.61***	−0.595***	−0.465*	1.44***	1.54***	−0.371*	0.287
	(0.134)	(0.188)	(0.134)	(0.229)	(0.150)	(0.183)	(0.133)	(0.212)	(0.159)	(0.263)
Theoretical variables										
Female manager	−0.449*	−0.147	−0.892**	−1.17**	0.186*	0.070	0.890**	0.099	0.770*	0.463
	(0.227)	(0.261)	(0.373)	(0.399)	(0.090)	(0.100)	(0.312)	(0.353)	(0.363)	(0.425)
Job level – high		−189		−0.292		−0.464***		−0.343		−0.138
		(0.243)		(0.300)		(0.103)		(0.272)		(0.332)
Job level – middle		0.433*		0.193		−0.095		−0.775**		−0.035
		(0.191)		(0.265)		(0.089)		(0.244)		(0.284)
Co. size (assets)		0.418**		−0.987*		−0.111		0.038		−1.38***
		(0.133)		(0.594)		(0.102)		(0.228)		(0.278)
Proportion of female managers at high levels		−2.93**		0.903		−0.481		0.329		0.295
		(1.49)		(0.835)		(0.326)		(0.775)		(0.966)
Proportion of female managers at middle levels		−0.497		1.33***		−0.092		1.19†		2.29†
		(0.448)		(0.356)		(0.163)		(0.690)		(1.23)
Proportion of female managers at low levels		−0.239		−0.136		0.063		1.51***		−0.869
		(0.301)		(0.390)		(0.134)		(0.420)		(0.549)
Control variables										
Tenure in Co.	−0.067***	−0.071***	−0.101***	−0.093***	−0.045***	−0.039***	−0.029*	−0.030***	−0.064***	−0.058**
	(0.018)	(0.019)	(0.029)	(0.029)	(0.007)	(0.007)	(0.012)	(0.013)	(0.017)	(0.018)
Leave merging or dissolving Co.	2.38***	2.41***	−0.267	−0.318						
	(0.162)	(0.163)	(0.513)	(0.514)						
Co. size (no. of managers)					−0.108***	−0.109***				
					(0.018)	(0.022)				
Shrinkage (one-year Δ no. of managers)					0.592***	0.608***				
					(0.045)	(0.046)				
No. of observations	14,648	14,648	14,648	14,648	3,876	3,876	711	711	444	444
No. of events	158	158	81	81	1,212	1,212	146	146	141	141
Log-likelihood	−778.6	−761.6	−489.7	−480.6	−2258.0	−2244.8	−361.0	−336.8	−264.9	−243.5
χ^2 statistic (full model vs. base)		34.0		18.2		26.4		48.4		59.8
Degrees of freedom	4	10	4	10	5	11	3	9	3	8

Note: Standard errors are in parentheses below parameter estimates.
Significant values: †$p<0.10$, *$p<0.05$, **$p<0.01$, and ***$p<0.001$, two-tailed t tests.

leave shrinking firms than lower-level colleagues, suggesting that the careers of high-level managers are most buffered during contraction. Rank had no effect on transfers to growing firms or exiting acquiring firms after merger. Overall, these results suggest that those in the lowest managerial ranks are the least likely to seize new job opportunities from founding and to find shelter from job destruction following contraction and merger.

Managers in larger established firms were more likely to be hired by new ventures, probably to capture their market and organizational experience, and less likely to be hired by growing firms, perhaps because they already had abundant upward mobility opportunities. Firm size did not affect exit from shrinking firms or transfers from acquired to acquiring firms. But managers in large acquiring firms were less likely to exit following merger. Overall, working in large firms appears to shelter managers from the turbulence that accompanies growth and merger, but it also appears to make them less attractive recruiting targets for new firms.

Managers in firms with more women in the upper ranks were less likely to move into start-ups. Managers in firms with more women in the middle ranks were, unexpectedly, more likely to move to other growing firms. Managerial employees were more likely to exit following the acquisition of their firm if it had many female managers in the middle and lowest ranks. And managers were marginally more likely to leave an acquiring firm if it had many female managers in the middle ranks. Overall, it is difficult to say whether having a more gender-balanced managerial workforce advantages or disadvantages employees.[4]

DISCUSSION AND CONCLUSION

We began by noting that economic sociology promises to explain gender gaps in economic outcomes as a function of men's and women's positions in social structure. This paper takes one step toward fulfilling that promise. Male and female managers' career trajectories are very different: men and women are sorted into different jobs in different firms, and move between jobs and firms at different rates. We sought to explain these persistent differences by attending to the dynamics of employing organizations, which alter the set of jobs: founding, growth, decline, and merger. We proposed that the gender gap in managerial career mobility is caused by differential effects of these events on men and women. We posited that this happens

because male and female managers hold different jobs in different firms, so they face different situations when hiring and exit decisions are made in the wake of these events.

Our results suggest four general conclusions. First, in good times, when jobs were created through founding and growth, female managers benefited less than male managers. Second, in bad times, when jobs were destroyed through decline or merger, the careers of female managers were harmed more than those of male managers. These results are net of experience and stand in contrast to previous research, which showed that women either benefited from growth more than men (Bielby & Baron, 1983; Skvoretz, 1984a) or were harmed by contraction less than men (Preisendörfer & Burgess, 1988; DiPrete & Nonnemaker, 1997).

Third, gender per se does not explain the gender gap in job mobility. Instead, most differences between men and women can be attributed to differences in the jobs they hold and the firms where they work. That men and women are sorted into different jobs and firms will not surprise proponents of organization-centered, structuralist research on social mobility and attainment. There is considerable research showing that compared to men, women tend to be employed in smaller organizations (Bertrand & Hallock, 2001), are overrepresented in lower-level managerial positions (Reskin & Roos, 1990), and work in organizations with higher proportions of women (Bielby & Baron, 1984, 1986). Such gender segregation is a major source of differences in social, economic, and psychological rewards (Reskin, McBrier, & Kmec, 1999). But our results suggest something less obvious and more consequential to economic sociology: this sorting process has long-lasting effects on attainment by influencing job mobility in the wake of events that change firm and market structures. Because they are overrepresented in the lowest ranks and the smallest firms, women are less able to discover and take advantage of the opportunities created in good times, and less able to protect themselves when jobs are destroyed in bad times.

Our results also indicate that the mediating effects of sex composition differ across mobility events, suggesting that how location in social structure affects labor-market opportunities varies. Working in firms with more women in high ranks can hinder movement to start-ups because start-ups recruit managers from high-status firms – those with high proportions of men in high ranks. Since women tend to work in firms with more women in high ranks, their mobility opportunities are low. Similarly, working in firms with more women in low ranks speeds departure from merging firms, because women are more vulnerable when firms merge. Our findings suggest

that a fruitful avenue for future research in the sociology of work is to combine organizational and economic sociology.

Finally, our findings suggest that these organizational dynamics are unlikely to reduce the gender gap in mobility. Job level, firm size, and hierarchical sex segregation all explain differences between men's and women's chances of moving to start-up firms. Thus, after accounting for position, firms in this industry appear willing to share risky opportunities in start-up ventures with male and female managers. But, even after accounting for position, women seem to be blocked from moving to highly desirable positions in growing firms. At best, women appear to have equal access to the opportunities associated with good times. And when firms contract or acquire a competitor, women are disproportionately affected, net of tenure in the firm. These effects appear to be due entirely to the fact that women are disproportionately located in smaller firms and in the lower ranks – positions that are less critical to ongoing operations and so likely to be eliminated. Consistent with this, net of position, men and women do not differ in their likelihood of exiting firms.

Overall, these results leave us with a puzzle: If women benefit less than men from increased mobility chances during good times, and they occupy positions that are more likely to be eliminated during bad times, then hierarchical gender integration will almost never occur through these ordinary industry events. How then can the legacy of past differences be eliminated? Allocative discrimination is restricted once people take positions in employing organizations (Petersen & Saporta, 2004; Dencker, 2008), making it difficult to remediate existing inequities. Time may remedy inequality, but only if men and women work in similar positions in firms (e.g., Castilla, 2005; Fernandez & Mors, 2008).

Caveats

Although our data are comprehensive – they cover an entire industry's managerial employees for 13 years – they have limitations. First, we could not analyze all the important aspects of employees' positions, notably education or experience outside the focal industry. Similarly, we could not control for many features of the origin and destination firms, such as formal structure, strategy, or performance. Thus, any conclusions we draw about gender, position, and careers must be limited to the four aspects of position investigated here.

Second, we have not been able to examine the whole array of career moves spurred by organizational dynamics. Because we lack data on the destinations of managers who exited the industry, we could not fully investigate all possible consequences of organizational shrinkage and merger. Similarly, because we lack data on the origins of managers who entered newly founded and growing thrifts from outside the industry, we could not investigate all possible consequences of industry expansion. Thus, any conclusions we draw about gender, position, and career mobility must be limited to the job-shift events we analyzed here.

Third, our predictions have been developed using facts and logic that apply to managerial employees, which limits the generalizability of our findings to settings where the scope conditions are the same as our study; that is, employers prefer men to women, men have more experience than women, men work at higher status levels in the occupation than women, men work in larger organizations than women, and men work in organizations that are less hierarchically gender-segregated than women. Several professions satisfy these criteria, notably engineering, medicine, law, and academic natural science. Several nonprofessional occupations also satisfy these criteria, including carpenters, electricians, sports coaches and referees, police officers, and firefighters. In pursuing such questions, researchers will advance toward realizing many of the promises economic sociology holds for our understanding of the sociology of work.

NOTES

1. Of course, these relationships will be the strongest in old firms and firms in old industries, which have clear, well-established, and highly hierarchical managerial job structures.
2. Merger is the predominant route for the disappearance of firms in this industry. Many mergers were forced by federal or state regulators. Between 1984 and 1987, 26 forced mergers occurred, in which the assets and personnel of failing thrifts were acquired by newly created organizations. We analyzed such events from the point of view of the acquired thrifts, and asked where their managers went. But we obviously could not analyze such events from the point of view of the acquiring thrifts, since they had no personnel until the merger occurred.
3. Managers could move to many different locations – other firms in the industry, firms outside the industry, unemployment, retirement, school, etc. Because we lack information about where people who left the industry went, we consider only two outcomes – staying or leaving one's employer.

4. In results not shown here, we searched for evidence that sex composition had different effects on men and women's career mobility (i.e., interactions between the gender of the focal employee and sex composition), but we found no consistent effects.

ACKNOWLEDGMENTS

We thank Peter Levin and David Richmond for research assistance. This paper has benefited from suggestions by the editor and reviewer, as well as Bill Bielby, Steven Brint, Alison Davis-Blake, Cynthia Fuchs Epstein, Barbara Reskin, and Laurel Smith-Doerr, and from comments during seminars at University of Arizona, UT Austin, INSEAD, UCSB, CUNY Graduate School, UC Berkeley, Columbia, Cornell, UC Irvine, Yale, and London Business School.

REFERENCES

Allison, P. (1995). *Survival analysis using the SAS system: A practical guide*. Cary, NC: SAS Institute Inc.

Baron, J., & Bielby, W. (1980). Bringing the firms back in: Stratification, segmentation, and the organization of work. *American Sociological Review, 45*(5), 737–765.

Beamish, T., & Biggart, N. (2006). Economic worlds of work: Uniting economic sociology and the sociology of work. In: M. Korczynski, R. Hodson & P. Edwards (Eds), *Social theory at work* (pp. 233–271). Oxford: Oxford University Press.

Bertrand, M., & Hallock, K. (2001). The gender gap in top corporate jobs. *Industrial and Labor Relations Review, 55*(1), 3–21.

Bielby, W., & Baron, J. (1983). Organizations, technology, and worker attachment to the firm. *Research in Social Stratification and Mobility, 2*, 77–113.

Bielby, W., & Baron, J. (1984). A woman's place is with other women: Sex segregation within organizations. In: B. Reskin (Ed.), *Sex segregation in the workplace* (pp. 27–55). Washington, DC: National Academy Press.

Bielby, W., & Baron, J. (1986). Men and women at work: Sex segregation and statistical discrimination. *American Journal of Sociology, 91*(4), 759–799.

Bielby, W., & Bielby, D. (1992). I will follow him: Family ties, gender-role beliefs, and reluctance to relocate for a better job. *American Journal of Sociology, 97*(5), 1241–1267.

Bird, C. (1990). High finance, small change: Women's increased representation in bank management. In: B. Reskin & P. Roos (Eds), *Job queues, gender queues: Explaining women's inroads into male occupations* (pp. 145–166). Philadelphia, PA: Temple University Press.

Blau, F., Ferber, M., & Winkler, A. (2006). *The economics of men, women, and work* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.

Blau, P., & Schoenherr, R. (1971). *The structure of organizations*. New York: Basic Books.

Bose, C., & Rossi, P. (1983). Gender and jobs: Prestige standings of occupations as affected by gender. *American Sociological Review, 83*(3), 316–330.

Burton, M., Sørensen, J., & Beckman, C. (2002). Coming from good stock: Career histories and new venture formation. *Research in the Sociology of Organizations, 19*, 229–262.

Bygren, M., & Kumlin, J. (2005). Mechanisms of organizational sex segregation: Organizational characteristics and the sex of newly recruited employees. *Work and Occupations, 31*(1), 39–65.

Carroll, G. R., & Hannan, M. T. (2000). *The demography of corporations and industries*. Princeton, NJ: Princeton University Press.

Castilla, E. (2005). Social networks and employee performance in a call center. *American Journal of Sociology, 110*, 1243–1283.

Catalyst. (2007). *2007 census of women corporate officers and top earners of the fortune 500*. New York: Catalyst.

Cobb-Clark, D., & Dunlop, Y. (1999). The role of gender in promotions. *Monthly Labor Review* (December), 32–38.

Cohen, L., Broschak, J., & Haveman, H. (1998). And then there were more? The effect of organizational sex composition on the hiring and promotion of managers. *American Sociological Review, 63*(5), 711–727.

Davis, S., Haltiwanger, J., & Schuh, S. (1997). *Job creation and destruction*. Cambridge, MA: MIT Press.

Dencker, J. (2008). Corporate restructuring and sex differences in managerial promotion. *American Sociological Review, 73*(3), 455–476.

DiPrete, T. (1993). Industrial restructuring and the mobility response of American workers in the 1980s. *American Sociological Review, 58*(1), 74–96.

DiPrete, T., de Graaf, P., Luijkx, R., Tåhlin, M., & Blossfeld, H.-P. (1997). Collectivist versus individualist mobility regimes? Structural change and job mobility in four countries. *American Journal of Sociology, 103*(2), 318–358.

DiPrete, T., & Nonnemaker, K. (1997). Structural change, labor market turbulence, and labor market outcomes. *American Sociological Review, 62*(3), 386–404.

Dimitrovsky, L., Singer, J., & Yinon, Y. (1989). Masculine and feminine traits: Their relation to suitedness in training for traditionally masculine and feminine army functions. *Journal of Personality and Social Psychology, 57*(5), 839–847.

Eagly, A., Karau, S., & Makhijani, M. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin, 117*(1), 125–145.

England, P., & Folbre, N. (2005). Gender and economic sociology. In: N. Smelser & R. Swedberg (Eds), *The handbook of economic sociology* (2nd ed., pp. 627–649). Princeton, NJ and New York: Princeton University Press and the Russell Sage Foundation.

Fernandez, R., & Mors, M. L. (2008). Competing for jobs: Labor queues and gender sorting in the hiring process. *Social Science Research, 37*(4), 1061–1080.

Fligstein, N. (2001). *The architecture of markets: An economic sociology of twenty-first-century capitalist societies*. Princeton, NJ: Princeton University Press.

Granovetter, M. (1984). Small is bountiful: Labor markets and establishment size. *American Sociological Review, 49*(3), 323–334.

Halaby, C., & Weakliem, D. (1989). Worker control and attachment to the firm. *American Journal of Sociology, 95*(4), 949–991.

Hall, F. (2000). *Spanish first names*. New York: Hippocrene Books.

Hanks, P., & Hodges, F. (1990). *A dictionary of first names*. Oxford: Oxford University Press.
Haveman, H., & Cohen, L. (1994). The ecological dynamics of careers: The impact of organizational founding, dissolution, and merger on job mobility. *American Journal of Sociology, 100*(1), 104–152.
Kalleberg, A., & Mastekaasa, A. (1998). Organizational size, layoffs, and quits in Norway. *Social Forces, 76*(4), 1243–1273.
Kanter, R. (1977). *Men and women of the corporation*. New York: Basic Books.
Knoke, D., & Kalleberg, A. (1996). Job training in U.S. organizations. In: A. Kalleberg, D. Knoke, P. Marsden & J. Spaeth (Eds), *Organizations in America: Analyzing their structures and human resource practices* (pp. 157–179). Thousand Oaks, CA: Sage.
Nelson, R., & Bridges, W. (1999). *Legalizing gender inequality: Courts, markets, and unequal pay for women in America*. Cambridge: Cambridge University Press.
O'Neill, P. (1972). *Japanese names*. New York: John Weatherhill Inc.
Parker, R. (1981). Structural constraints and individual career earnings patterns. *American Sociological Review, 46*(6), 884–892.
Perry, E., Davis-Blake, A., & Kulik, C. (1994). Explaining gender-based selection decisions: A synthesis of contextual and cognitive approaches. *Academy of Management Review, 19*(4), 786–820.
Petersen, T., & Morgan, L. (1995). Separate and unequal: Occupation-establishment sex segregation and the gender wage gap. *American Journal of Sociology, 101*(2), 329–365.
Petersen, T., & Saporta, I. (2004). The opportunity structure for discrimination. *American Journal of Sociology, 109*, 852–901.
Pfeffer, J., & Cohen, Y. (1984). Determinants of internal labor market arrangements in organizations. *Administrative Science Quarterly, 29*(4), 550–572.
Podolny, J. (1993). A status-based model of market competition. *American Journal of Sociology, 98*(4), 829–872.
Preisendörfer, P., & Burgess, Y. (1988). Organizational dynamics and career patterns: Effects of organizational expansion and contraction on promotion chances in a large West German company. *European Sociological Review, 4*(1), 32–45.
Reskin, B., McBrier, D., & Kmec, J. (1999). The determinants and consequences of workplace sex and race composition. *Annual Review of Sociology, 25*, 235–261.
Reskin, B., & Roos, P. (1990). *Job queues, gender queues: Explaining women's inroads into male occupations*. Philadelphia, PA: Temple University Press.
Ridgeway, C. (1997). Interaction and the conservation of gender inequality: Considering employment. *American Sociological Review, 62*(1), 218–235.
SAS Institute. (2004). *SAS/STAT 9.1 user's guide*. Cary, NC: SAS Institute.
Skvoretz, J. (1984a). Career mobility as a Poisson process. *Social Science Research, 13*(2), 198–220.
Skvoretz, J. (1984b). The logic of opportunity and mobility. *Social Forces, 63*(1), 72–97.
Sørensen, Å. (1977). The structure of inequality and the process of attainment. *American Sociological Review, 42*(6), 1965–1978.
Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics, 87*(3), 355–374.
Stewman, S., & Konda, S. (1983). Careers and organizational labor markets: Demographic models of organizational behavior. *American Journal of Sociology, 88*(4), 637–685.
Stolzenberg, R. (1978). Bringing the boss back in: Employer size, employee schooling, and socioeconomic achievement. *American Sociological Review, 43*(6), 813–828.

Tilly, C., & Tilly, C. (1994). Capitalist work and labor markets. In: N. Smelser & R. Swedberg (Eds), *The handbook of economic sociology* (pp. 283–312). Princeton, NJ and New York: Princeton University Press and the Russell Sage Foundation.
Tosi, H., & Einbender, S. (1985). The effects of type and amount of information in sex discrimination research. *Academy of Management Journal, 28*(4), 712–723.
Tuma, N., & Hannan, M. (1984). *Social dynamics: Models and methods*. Orlando, FL: Academic Press.
U.S. Bureau of the Census. (1995). *Frequently Occurring First Names and Surnames from the 1990 Census*. Department of Commerce. Available at: http://www.census.gov/genealogy/www/freqnames.html
U.S. Department of Labor, Federal Glass Ceiling Commission. (1995). *Good for business: Making full use of the nation's human capital*. Washington, DC: U.S. G.P.O.
Uzzi, Brian. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review, 61*(4), 674–698.

APPENDIX A. AMBIGUOUS NAMES AND CODING DECISIONS

Female Names		Male Names	
Armeda	Billie	Amatlin	Albano
Dallise	Danya	Angel	Behrooz
Dian	Dorth	By	Carroll
Frances	Gallen	Chris	Dale
Gen	Geri	Delno	Firmin
Gerri	Hilde	Francis	Gene
Jackie	Jan	Guadalupe	Jesse
Jasna	Jere	Keary	Keron
Jitka	Jo	Lee	Luu Tran
Jule	Kelly	Malin	My
Kia	Kim	Nicho	Onie
Leslie	Lynn	Pei	Ranbir
Marlys	Marion	Shally	Sydney
Robin	Shealeen	Terry	Tery
Sandy	Terri	Young	

APPENDIX B. UNCODABLE NAMES

Akio	Allyn	Chung Hee	Dae
Der-Ling	Fame	Irby	Kit
Nanda	Nipa	Rellin	Stoney
Whipple	Yale	Zim	