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WHY NOT ASCRIPTION? ORGANIZATIONS' EMPLOYMENT OF MALE AND FEMALE MANAGERS

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We examine the effects of organizations' employment practices on sex-based ascription in managerial jobs. Given men's initial preponderance in management, we argue that inertia, sex labels, and power dynamics predispose organizations to use sex-based ascription when staffing managerial jobs, but that personnel practices can invite or curtail ascription. Our results—based on data from a national probability sample of 516 work organizations—show that specific personnel practices affect the sexual division of managerial labor. Net of controls for the composition of the labor supply, open recruitment methods are associated with women holding a greater share of management jobs, while recruitment through informal networks increases men's share. Formalizing personnel practices reduces men's share of management jobs, especially in large establishments, presumably because formalization checks ascription in job assignments, evaluation, and factors that affect attrition. Thus, through their personnel practices, establishments license or limit ascription.

BARON and Bielby (1980) encouraged researchers interested in labor market inequality to “bring the firm back in” because firms “link the ‘macro’ and ‘micro’ dimensions of work organization and inequality” (p. 738). Researchers who have taken up the call have demonstrated the importance of organizational structures, such as their non-profit or government status or their size, for sustaining or eroding sex-based ascription (Baron 1991; Baron and Newman 1990; Nelson and Bridges 1999; Tomaskovic-Devey 1993). Relatively little is known,

however, about the effects of establishments' personnel practices, and it is these practices that are the proximate causes of establishment-based gender inequality (Bielby 2000; Reskin 2000). We examine the effects of organizations' employment practices on sex-based ascription in managerial jobs for a national probability sample of establishments.

Ascription exists when a status, position, or opportunity is allocated at least in part on the basis of an ascribed characteristic (Kemper 1974; Mayhew 1968; Parsons 1964). Baron (1991:143), for example, has contended that employers practice ascription when employees' ascribed characteristics directly influence their jobs or rewards. Thus, ascription involves differential treatment based on sex, race, ethnicity, and the like. Sex-based ascription does not necessarily involve invidious intent; it can occur when custom shapes employers' personnel practices, when sex stereotypes or jobs' sex labels affect allocation decisions, when decision-makers have the discretion to act on their biases, or when they use sex as a proxy for productivity or employment costs. Impulses toward ascription may originate in or-

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ganizational inertia, shared cultural understandings, intergroup dynamics, or even organizations' attempts at rationality.

Until the last third of the twentieth century, sex-based ascription was standard practice for filling managerial positions (Baron 1991; Bielby and Baron 1984, 1986; Powell 1993; Tomaskovic-Devey 1993). For the first 60 years of the century, women's share of managerial and administrative jobs grew by just 10 percentage points, to one manager in seven in 1960 (Powell 1993:21; U.S. Census Bureau 1943, table 26; 1956, table 1; 1963, table 2). Men's virtual monopoly of the first management jobs meant that inertia has predisposed organizations to continue to staff managerial jobs partly through sex-based ascription. This propensity toward ascription, unless checked, favors men for management positions. However, establishments' personnel practices can curtail propensities toward ascription (Baron 1991). We ask how organizations' practices affect their sexual division of managerial labor. The answer, in brief, is that establishments' personnel practices can and do exert substantial effects on the division of management jobs between the sexes.

We focus on management because the attractiveness of managerial jobs and the general nature of managerial skills draw both sexes to these positions. Managers usually outearn nonmanagers; they enjoy more prestige, autonomy, and authority; and they are better protected from outside competition (Baron and Bielby 1986:565; Baron, Davis-Blake, and Bielby 1986:263; Blum, Fields, and Goodman 1994; Jacobs 1992; Wright, Baxter, and Birkelund 1995:407, 413). From the vantage point of workers, one of the most important things that organizations do is allocate employees to positions, and whether that position is a managerial one makes a considerable difference for workers. The sex composition of managers also matters for organizations. It affects hiring, compensation, evaluation, and promotion practices (Pfeffer 1983, 1991), as well as the extent of sex inequality in organizations (Baron and Newman 1989; Cohen, Broschak, and Haveman 1998; Haberfeld 1992:162; Shenhav and Haberfeld 1992:125; Szafran 1982:180). For example, California state agencies headed by women integrated

jobs more rapidly than did those headed by men (Baron, Mittman, and Newman 1991), and the more female managers in an establishment, the smaller the gender pay gap (Shenhav and Haberfeld 1992:131). Finally, a substantial portion of the labor force works as managers. In 1995, more than four in ten employees were managers or administrators (U.S. Census Bureau 1996, table 637). In sum, employers' use of ascription in filling managerial jobs is consequential both for individuals and for organizations.

PROPENSITIES TOWARD SEX-BASED ASCRIPTION IN MANAGERIAL EMPLOYMENT

Although we are interested in the effect of sex-based ascription on the sexual division of managerial jobs, we cannot observe organizations' reliance on ascription in job assignments with national survey data. We would need data from participant observation along with in-depth interviews. So our strategy is as follows: First, we discuss the forces within organizations that favor ascription to make the case that the impulse to use ascription persists in work organizations. Then we consider the organizational practices that can check or license this impulse. Finally, we empirically assess the effects of these practices on our dependent variable, the sexual division of managerial jobs.

CUSTOM AND STRUCTURAL INERTIA

That at least 85 percent of managers were male through the first two-thirds of the twentieth century figures importantly in establishments' continued impulse toward using sex-based ascription to fill management jobs. In the first place, early in the century, managers sought to legitimize their role through a "managerial ethic" that characterized management as embodying male qualities and incorporated stereotypically male traits, such as "tough-mindedness," into the managerial role (Kanter 1977:22-25). As a result, management was equated with masculinity—the "cognitive schema" for managers resembles that for men more closely than that for women (Eagly, Makhijani, and Klonsky 1992; Heilman, Block, and Martell 1995; Heilman et al. 1989; Powell 1993:86-

87). This labeling of manager as male also gives men's entitlement to management jobs the sanction of custom. Organizational practices often institutionalize custom in job requirements, career ladders, and the like (Acker 1990), and once institutionalized within establishments' formal structures and their informal traditions, these practices resist alteration (Baron 1991:115, 127).

More generally, establishments and workers become accustomed to sex-based job segregation, given the high levels of job segregation within establishments (Bielby and Baron 1984; Carrington and Troske 1994, 1998; Petersen and Morgan 1995; Tomaskovic-Devey 1993). Thus, a sexual division of labor within managerial jobs is in keeping with sex segregation both within and across establishments.

SELECTION COSTS

The staying power of ascription was summed up in three words by Mayhew (1968:110): It is cheap.¹ To minimize their transaction costs in filling jobs, organizations use existing "structures"—by which Mayhew meant workers' demographic characteristics—instead of creating new, formal structures. Mayhew's account of ascription encompasses statistical discrimination, word-of-mouth recruiting, and subjective evaluation.

RISK AVERSION

Filling management positions entails risks, and risk-averse employers try to hedge their bets by using ascription. When job candidates include persons from demographic groups that an organization has and has not employed, choosing the familiar minimizes risks because employers feel better able to predict their performance. Women's underrepresentation in management means that most employers are more familiar with male managers than female managers and hence are likely to see a male choice as less risky. More generally, when it is not clear who the best choice is, decision-makers minimize

risk by opting for persons who resemble themselves (Pfeffer and Salancik 1978:146; Salancik and Pfeffer 1978). In addition, Kanter (1977:63) attributed men's predominance in management to high-level managers' propensity to minimize risk in filling positions that involve uncertainty or require discretion through homosocial reproduction—the selection of their social clones whom they believe are likely to make decisions similar to the ones they would make. Establishments also practice homosocial reproduction when employers try to improve communication and trust by seeking managers who will "fit in" (Mittman 1992:17). In sum, employers use ascription to reduce risk in personnel decisions, and men's preponderance in management means that ascription is likely to favor males

GROUP POWER AND INGROUP PREFERENCE

Another force for sex-based ascription in allocating managerial status is that powerful groups seek to institutionalize their privileges (Baron 1991:136; Kemper 1974). Incumbents' opportunities depend in part on restricting outsiders' access to desirable jobs (Acker 1990:153). Feminist analysis sees men's stake in organizational arrangements that perpetuate their privileged status in this light (Cockburn 1991:61; Steinberg 1992:576). In line with this view, Bergmann (1986:114–16) has reasoned that the impulse of male organizational leaders to retain their sex's advantage has led to a "segregation code" that prohibits women from occupying positions that involve, or could lead to, their exercising authority over men. More generally, Strober (1984) has argued that patriarchal impulses lead male employers to give men "first dibs" on the best jobs (also see Killingsworth 1985:89–91; Nelson and Bridges 1999:298). And, based on their analysis of the feminization of customarily male occupations, Reskin and Roos (1990) concluded that employers tend to place men ahead of women in labor queues for the most desirable jobs (also see Anderson and Tomaskovic-Devey 1995).

Even without conscious efforts by men to preserve their power, people's nonconscious automatic propensity to favor members of

¹ Marwell (1975:445) provided a similar explanation for ascription in the sexual division of domestic labor.

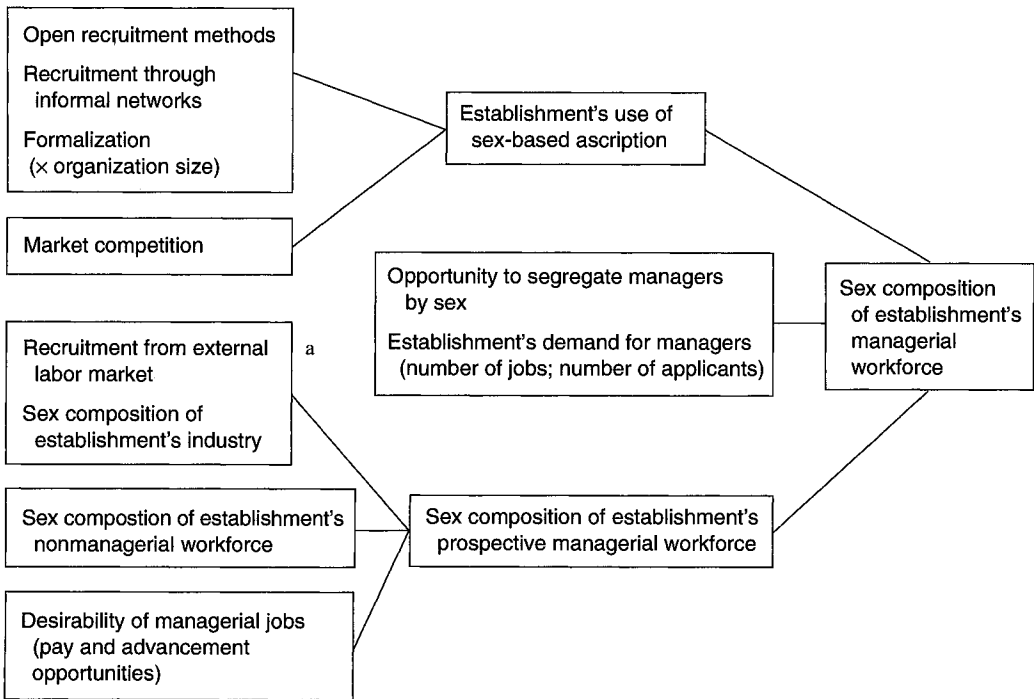


Figure 1. Heuristic Model of the Effects of Personnel Practices on the Sex Composition of Managers

^a The sex composition of an establishment's industry affects the sex composition of prospective managers only when the establishment recruits managers from an external labor market.

their own ingroup can have the same ascriptive effect. According to social cognition research, people prefer ingroup members to outgroup members, and favor them in evaluations and rewards (Brewer and Brown 1998:567).

SUMMARY

A variety of factors predispose employers to fall back on sex-based ascription when filling organizational positions. This propensity is manifest throughout organizations in the definition of jobs (Baron 1991:116-21), the devaluation of women's work (Acker 1989; Baron 1991:125; Baron and Newman 1990; England, Reid, and Kilbourne 1996), and the segregation of the sexes into different establishments, jobs, and internal labor markets (Baron et al. 1986; Carrington and Troske 1998; Reskin 1993; Tomaskovic-Devey 1993). We hypothesize that this propensity, unless checked, gives men an advantage in managerial employment. This hypothesis is consistent with evidence linking organizational characteristics to the sexes' access to

managerial jobs (Blum et al. 1994; Tomaskovic-Devey, Kalleberg, and Marsden 1996, app.), the pay and promotion gaps (Bridges and Nelson 1989; Kalleberg and Reskin 1995; Tomaskovic-Devey 1993, table 6.4), sex segregation (Baron et al. 1991; Bielby and Baron 1984), and the devaluation of predominantly female jobs (Baron and Newman 1990).

THE EFFECTS OF ORGANIZATIONAL PRACTICES AND STRUCTURES ON ASCRIPTION

In this section, we discuss personnel practices that should invite or limit ascription in managerial employment. Figure 1 depicts how these factors affect men's share of managerial jobs in organizations. Although we are primarily interested in personnel practices that influence the sex composition of the managerial pool by constraining or permitting sex-based ascription (shown in the top half of Figure 1), to assess their effects we take into account other factors that

affect the sex composition of management (in the bottom half of Figure 1).

RECRUITMENT METHODS

The ways that organizations recruit managers are especially important for the extent of sex-based ascription. Using social networks to identify and select managers—a method employers favor for its efficiency, low cost, and ability to provide information unavailable through formal sources (Granovetter and Tilly 1988; Marsden 1994; Pfeffer 1977)—tends to favor ingroups (Braddock and McPartland 1987; Campbell and Rosenfeld 1985; Powell 1993:207). For this reason, recruiting through networks is a barrier to blacks' employment opportunities (Braddock and McPartland 1987). Two mechanisms help to create barriers. First, as Marsden and Gorman (1999) observed, "by using informal channels . . . , organizations provide an opening for not just supervisory discretion and good judgment, but also prejudice and favoritism to enter promotion and transfer decisions" (p. 183). Second, recruitment through workers' social ties tends to replicate an establishment's demographic composition (Braddock and McPartland 1987; Campbell and Rosenfeld 1985). Given men's predominance in managerial positions, using informal referrals should be associated with selecting male managers.

In contrast, strategies that minimize discretion by informal gatekeepers—by reducing bias either in the recruitment stage by publicizing openings or in the selection stage by specifying objective selection criteria—should curtail sex-based ascription and hence should be negatively associated with men's share of managerial jobs. Although open recruitment methods (e.g., posting or advertising positions) do not preclude ascription in the selection of managers, such methods should reduce it by broadening the applicant pool.

FORMALIZATION OF PERSONNEL PRACTICES

Recruitment is one of several personnel practices that affect the sexual division of managerial labor; others include promotion and job assignment, evaluation, and factors

that influence retention (Mittman 1992:13). In all these processes, informal practices invite cronyism, subjectivity, sex stereotyping, and bias (Heilman 1995:11). Thus, when organizations allow individuals latitude in selecting managers, supervisors may consciously or unconsciously take workers' sex into account (Mittman 1992:16; Reskin 2000). According to organizational and social psychological theories, bureaucratizing personnel practices undermines ascription by reducing subjectivity in personnel decisions (Baron and Bielby 1980:742; Bielby 2000; Heilman 1995; Pfeffer 1977:557; Reskin 2000). Insofar as formal employment practices require employers to standardize procedures and achievement criteria, managerial sex composition in organizations with highly formalized personnel practices will be less affected by ascription. Considerable empirical research indicates that formalization reduces sex-based ascription (Anderson and Tomaskovic-Devey 1995; Pfeffer 1983:314–15; Pfeffer and Cohen 1984; Sutton et al. 1994; Tomaskovic-Devey et al. 1996:287–88; but see Huffman and Velasco 1997:238–40; Jewson and Mason 1986:53–57). Thus, we expect the formalization of personnel practices to limit sex-based ascription and hence to be negatively associated with men's share of managerial jobs.

Of course, employers may formalize their personnel practices on paper without eliminating decision-makers' discretion in managerial selection. This should be especially common in small establishments that formalize personnel practices in emulation of large organizations in order to achieve legitimacy (Dobbin et al. 1993; Meyer and Rowan 1977; Tolbert and Zucker 1983). On the assumption that formalization for symbolic reasons is more common in small firms, we expect the effect of formalization to be stronger in large organizations.

INTERNAL VERSUS EXTERNAL MANAGERIAL RECRUITMENT

The sex composition of the pools from which establishments recruit managers—their own employees or the external labor market—sets limits on the sexes' shares of managerial jobs (Baron 1991:129; Davis-Blake 1992), and hence affects the sex composition of their

managers (Blum et al. 1994; Cohen et al. 1998; Shaeffer and Lynton 1979; Tomaskovic-Devey et al. 1996). For establishments whose internal pool—nonmanagerial employees—is similar in its sex makeup to its external pool—their industry—the choice of a recruitment pool will not affect the sex composition of the supply of prospective managers. But when the composition of these two pools differs, organizational policies define the appropriate labor pool (Baron and Newman 1990:173). Whether establishments choose the more or less male-dominated pool will foster or curtail sex-based ascription. This choice must be viewed as a personnel practice that affects ascription.

MARKET COMPETITION

To the extent that employers opt for male managers, they pay to indulge a taste for the higher-wage sex (Becker 1957). According to neoclassical economic theory, market competition acts as a brake on ascription. The more competitive the establishment's environment, the more sparing it should be in indulging any preference for male managers. Consistent with this expectation, women have made more headway into male-dominated jobs in organizations that were exposed to market competition than in those that were not (Cohn 1985; also see Roos and Jones 1993; Tolbert 1986).² It follows from this reasoning and the empirical evidence that the greater the market competition, the greater establishments' incentive to minimize ascription in filling managerial jobs (Mittman 1992:17; Tolbert 1986) and hence the lower men's share of managerial jobs.

OPPORTUNITY TO SEGREGATE MALE AND FEMALE MANAGERS

The power perspective and feminist perspective on ascription contend that men act to preserve males' privileged status. Organizations can protect men's occupational turf by segregating the sexes. The more differentiated an organization's roles, the more readily

it can employ both sexes as managers without integrating them in the same departments (Bielby and Baron 1984, 1986; Reskin 1988). For example, Strang and Baron (1990:492) found that job-title proliferation was positively associated with job-level sex integration, and Tomaskovic-Devey et al. (1996:296–98) reported that the extent of horizontal differentiation in an establishment (measured by its number of departments) was negatively related to a single sex's monopoly of managerial jobs. Thus, we expect that the more functionally differentiated an organization, the lower men's share of managerial jobs.

ESTABLISHMENTS' DEMAND FOR MANAGERS

The number of managerial positions in an organization affects workers' access to managerial jobs. All else equal, the fewer managers in an establishment (and thus the scarcer managerial jobs are), the more likely there will be enough qualified male candidates to fill them (Wright et al. 1995:411). At the other extreme, shortages of male workers have helped to open customarily male jobs to women (Blum et al. 1994; Reskin and Roos 1990). Thus, we expect the level of the demand for managers to be negatively related to men's representation in management.

THE SEX COMPOSITION OF LABOR SUPPLY

The sex composition of the pools from which organizations recruit managers—its industry and its nonmanagerial workers—reflects the readily available labor supply.³ However, the sex composition of an establishment's nonmanagerial workers and that of its industry may affect its sexual division of managerial labor for other reasons than by influencing the sex composition of its labor supply.

The sex makeup of the nonmanagerial workers in an establishment may affect that of its managerial workers for other reasons

² In an exception to this pattern, Tomaskovic-Devey et al. (1996:293) found no relationship between the extent of market competition and women's share of managerial jobs.

³ In addition to the limits set by the sex composition of the recruitment pool, sex stereotyping is more likely when women are a minority of the applicant pool (Heilman 1995:10–11).

as well. First, it is a proxy for women's ability to challenge men for desirable jobs or otherwise influence sex-based ascription (Baron 1991:128-29; Baron et al. 1991; Kulis and Miller-Loessi 1992; Nelson and Bridges 1999:88). Second, organizations' tendency to match subordinates and supervisors on sex creates a sex-specific demand for managers of one sex or the other (Blum et al. 1994:245; Boyd, Mulvihill, and Myles 1991:423; Tsui and O'Reilly 1989:412).

Organizations favor patterns and practices that resemble those in the industry in which they operate (Baron 1991:115). As a result, their gender practices and sex composition tend to mirror those of other establishments in their industry (Bridges and Nelson 1999: 11). Thus, we expect the sex composition of establishments' industries to be positively related to establishments' sexual division of managerial labor, regardless of whether they recruited any managers from outside the establishment.

DESIRABILITY OF MANAGERIAL POSITIONS

Also likely to affect the sex composition of the pool of prospective managers is the desirability of managerial jobs. In view of the sex gap in earnings, men feel entitled to, and hold out for, higher pay than women do (Major 1989, 1994; Major and Konar 1984). It follows that the more establishments pay managers, the more likely they will attract male managers. For example, Blau (1977:2-3) concluded that employers' rank in inter-firm wage hierarchies affected their ability to employ men in white-collar jobs, and several researchers have reported a positive relationship between earnings and the percentage of men in occupations (Baron and Newman 1990; Bridges and Nelson 1989; Jacobs 1992; Pfeffer and Davis-Blake 1987) and in management (Blum et al. 1994:260-61).

ORGANIZATION'S AGE

Organizational structures tend to reflect the broader cultural environment present when they were founded, and these structures are subject to inertia (Baron 1991:125-26; Hannan and Freeman 1984; Stinchcombe 1965). If the propensity toward ascription

originates in customs in place at establishments' birth, organizational age should serve as a proxy for an inertia-based propensity toward ascription. Consistent with this reasoning, Baron and Newman (1989, 1990) found that young state agencies progressed more quickly toward gender equity than did older agencies.

SUMMARY

For most of the history of work organizations, sex-based ascription has been the virtual default in managerial employment (Kanter 1977; Powell 1993:21). By the end of the twentieth century, however, sex-based ascription among managers was no longer the norm. In 1995, for example, almost 43 percent of managers, administrators, and executives were female (U.S. Census Bureau 1996, table 637). Nonetheless, a variety of evidence indicates that the propensity toward sex-based ascription continues to affect organizations' employment of male and female managers. We submit that organizational practices are critical in containing or sustaining any predisposition toward sex-based ascription (Baron and Newman 1990: 172; Perry, Davis-Blake, and Kulik 1994: 811). Although we cannot directly measure the role of ascription in managerial staffing, we examine the organizational practices that should transmit the influence of ascription to the sex composition of managerial jobs, net of the sex composition of the supply of managers. More concretely, we investigate how establishments' personnel practices affect men's and women's shares of managerial jobs.

METHODS

DATA

We analyze data from a national sample of work organizations collected in the 1991 National Organizations Study (NOS) (Kalleberg et al. 1996). In sampling establishments, the NOS began with the names, addresses, and phone numbers of the employers of the 1991 General Social Survey (GSS) respondents and their spouses. Telephone interviews with the person in charge of hiring—the owner of small establishments or

the head of the personnel department in large establishments—provided information on establishments' personnel practices.

Because GSS respondents constitute a probability sample of the population, their employers are a probability sample of all work organizations, with an establishment's probability of inclusion in the sample proportional to its number of employees (Kalleberg et al. 1996). The employers of about one-fifth of the GSS respondents were excluded from the NOS, either because the respondent provided inadequate information or because the employer was ineligible. Of the 1,127 usable nominations, 727 establishments (64.5 percent) completed interviews. These establishments are reasonably representative of U.S. establishments with respect to industry, occupational distribution, and size (Kalleberg et al. 1996:33–36).⁴ For our study, we excluded 179 establishments that had only one manager (and hence whose value on the dependent variable was either 0 or 100 percent), so our results apply only to establishments with more than one manager.⁵ We also dropped two establishments whose managers were unpaid, two establishments in which key variables had suspicious values, and three establishments that lacked data for our dependent variable—the sex composition of managers. Our final sample includes 516 establishments, employing from 2 to 45,442 workers. To each establishment's record, we added data on its industry taken from the 1990 census data.

VARIABLES AND MEASURES

Coding details, our treatment of missing data, and the means and standard deviations for all variables appear in Appendix A.

⁴ As a result of cluster sampling in the GSS design, 39 establishments appeared more than once in the sample because they employed more than one GSS respondent or spouse. We dropped these duplicate establishments from the analysis.

⁵ In their sex composition these establishments resemble those with more than one manager. They do not differ significantly in the percentage of full-time or part-time employees who were female, the percentages of their "core" or GSS workers who were female, or the percentage of female workers in their industries (results not shown).

DEPENDENT VARIABLE. Our dependent variable is the proportion of an establishment's managers and administrators who are male. Because linear regression can predict values less than 0 and greater than 1, we transformed this proportion to a logit (the natural log of the odds ratio of the proportion male managers to 1 minus the proportion male managers).⁶

MANAGERIAL RECRUITMENT. We measured *recruitment through personal networks* by how often an establishment filled management jobs internally by inviting employees to apply or through personal recommendations by the person leaving the job or others at the workplace, or externally through business contacts. Establishments that reported that they "frequently" used any of these informal methods to recruit managers were coded 2; those that used them "sometimes" were coded 1; those that "never" used them were coded 0.

We measured *recruitment through open methods* by how frequently an establishment used the following methods to fill management jobs: internally through seniority systems or job postings, or externally through advertisements, employment agencies, signs, or walk-ins. If an establishment reported using any of these methods "frequently," we gave it a score of 2; if it "sometimes" used any of these methods, we coded it 1; if it "never" used any of these methods, we scored it 0. Fifty-five establishments that had not hired any managers during the past two years were not asked about their recruitment methods. To avoid losing these cases, we coded them 0 on these variables and included a control variable that distinguished between establishments that had and had not hired managers during the past two years.

FORMALIZATION. The *formalization of personnel procedures* taps employment practices that influence the candidate-selection and -retention processes. Following Kalleberg et al. (1996:75), our measure of formalization is the number of the following

⁶ The logit is undefined when the proportion male managers equals 0 or 1, so when it equaled 0 we substituted $1/2N_i$, and when it equaled 1 we substituted $1 - 1/2N_i$, where N_i represents the number of managers in the organization (Hanushek and Jackson 1977:150–53).

eight practices for which an organization had written documents: rules and procedures, job descriptions for most jobs, performance records for nearly all employees, employment contracts, hiring and firing procedures, personnel evaluation, fringe benefits, and safety and hygiene. To model the possibility that the formalization in which small firms engage is nominal and hence less consequential, our analysis includes a product term for formalization by establishment size. We measured establishment size as the total number of full-time and part-time employees.⁷ Although researchers often log establishment size (Bielby and Baron 1986; Shenhav and Haberfeld 1992:130; Villemez and Bridges 1988:239), our model fit the data slightly better when we did not log size. Because the substantive differences were trivial, our final results do not log size.

EXTERNAL CONSTRAINTS ON ASCRIPTION. We measured the degree of *market competition* by the informant's characterization of the establishment's level of competition in its main market or service area on a scale from "none" (coded 0) to "a great deal" (coded 3).

OPPORTUNITIES TO SEGREGATE MALE AND FEMALE MANAGERS. Following Kalleberg et al. (1996:74), we measured an establishment's ability to segregate male and female managers by determining how many of eight functions it had organized as departments (finance, personnel/labor relations, accounting, health and safety, public relations, research and development, long-range planning, and marketing and sales).

DEMAND FOR MANAGERS. We measured the demand for managers in two ways. The first is the number of managerial jobs in the establishment. For consistency with our dependent variable, we constructed this variable as the percentage of employees who

were managers. Our second indicator measures the shortage of prospective managers with an item that asked about the number of applicants for a managerial position. Unfortunately, this item was asked only of establishments that had hired managers from the outside in the past two years, so almost half of the establishments lacked data for this item. We dealt with this by creating a set of dummy variables for the number of applications received (one to five, six to nine, and so forth), including a dummy variable indicating that the establishment had not been asked the number of managerial applications.⁸ Preliminary analyses indicated that the only distinction that mattered was whether the establishment considered at least 30 applicants, compared with a reference group that included establishments with fewer than 30 applicants and establishments that were not asked the number of applicants. Thus, we measure the shortage of prospective managers with a dichotomous variable indicating whether the establishment had at least 30 applicants for a managerial job.

SEX COMPOSITION OF SUPPLY OF PROSPECTIVE MANAGERS. Organizations recruit managers from outside and inside the establishment. To measure the sex composition of the *internal supply* of prospective managers, we calculated men's share of non-managerial positions. To measure the sex composition of the *external supply* of prospective managers, we calculated men's share of employment in the establishment's detailed (three-digit) industry from the 1990 census 5-percent Public Use Microdata Sample (PUMS). However, any supply-based effect of industry's sex composition should be limited to establishments that hired managers from outside. To model this expectation, we included a product term for industrial sex composition by outside hiring

⁷ Previous research reports a positive association between logged establishment size and employment opportunities for both sexes (Baron and Bielby 1985:237; Baron et al. 1986; Bielby and Baron 1986; Shenhav and Haberfeld 1992:130; Villemez and Bridges 1988:239). We suspect that these effects stem largely from organizational structures or practices such as formalization or differentiation that researchers did not measure (Dobbin et al. 1993:413; Kalleberg et al. 1996; Pfeffer 1977:557).

⁸ Mean substitution was inappropriate here because whether an establishment lacked information on this variable was strongly correlated with whether it had hired any managers from outside, a predictor in our equation. Estimating missing values with regression was not appropriate either because different variables presumably predict the number of applicants for establishments that had hired managers from the outside and whether an establishment had not recruited from the outside.

of managers. Any additive effect of industry's sex composition (i.e., an effect that holds for establishments that did not recruit any managers from the outside) would signal the effect of institutional norms regarding the sex labeling of jobs.

ORGANIZATION'S AGE. We measured establishment's age in years, logged years, and binary variables that distinguished old and young organizations or those founded in the last 20 years or 10 years from all others. However, none of these measures was significantly related to the sex composition of organizations' managers (net of the employment practices and characteristics described above), presumably because establishment size and the personnel practices in our model capture any results of age-linked inertia. Therefore, our final model omits establishment's age.

DESIRABILITY OF MANAGERIAL JOBS. The desirability of managerial jobs is operationalized in terms of *managerial pay* and *opportunities for advancement*. We have two measures of managerial pay. The first is the annual earnings of most of the establishment's managers and administrators. Our second measure compares managerial pay in the establishment with pay in its industry (calculated from the PUMS data); it is the deviation of average managerial earnings from the 1989 median earnings for managers and administrators in an establishment's detailed industry. We also have two measures of managers' advancement opportunity: the difference between the highest and lowest managerial pay, and the number of levels between the highest and lowest positions in the organization.⁹

⁹ An alternative indicator—whether establishments had more than one managerial level—proved too crude to capture differences across establishments in managers' promotion chances. Our measure, the number of levels in the establishment, includes job ladders that can provide paths between managerial jobs, paths between nonmanagerial jobs, and paths connecting nonmanagerial jobs with managerial jobs. Because most organizations and job ladders tend to be highly segregated by sex (Baron et al. 1986; Bielby and Baron 1986), however, job ladders into managerial jobs are as likely to reproduce sex segregation in lower-level jobs as to provide a path into management for women.

We recognize that the relationship between the attractiveness of managerial jobs and our dependent variable, the sex composition of the supply of prospective managers, may be reciprocal. For instance, the 1979 demographic composition of California state jobs and the change in composition between 1979 and 1985 significantly affected the jobs' 1985 pay rates (Baron and Newman 1989:122; also see England et al. 1996). Nonetheless, other research and our preliminary analyses warrant treating average managerial pay as influencing the sex makeup of managerial jobs.

ANALYSIS

Because the disturbance variation of units of different sizes presumably varies inversely with establishment size, the data violate the OLS assumption of homoscedasticity. Therefore, we used weighted least squares (WLS) with establishment size as the weight variable to correct for heteroscedastic disturbances.

Although some of our independent variables are moderately correlated (see Appendix B), multicollinearity is not a problem.¹⁰ To control for any difference between establishments that were and were not missing data, our preliminary equations included binary variables denoting whether we estimated a variable's value. Only the missing-data indicator for managerial earnings was statistically significant; the final model omits the other missing-data indicators.

RESULTS

In this national probability sample of establishments, sex-based ascription was neither unusual nor universal. On average, in the establishments we studied 62 percent of managers were male,¹¹ in one establishment in four, women held less than 10 percent of managerial jobs. Nonetheless, in almost 45 percent of the establishments at least 40 percent of the managers were female.

¹⁰ None of the condition indices exceeded 30 (Belsley, Kuh, and Welsch 1980).

¹¹ This is in keeping with men holding 60 percent of the jobs in occupations that the U.S. Census Bureau (1992) classified as managerial, administrative, and executive.

Table 1. Coefficients and Odds Ratios from the Regression of Men's Proportion Managerial Jobs on Selected Organizational Characteristics

Organizational Characteristic	Unstandardized Logit Coefficient	Standard Error	Odds Ratio ^a
<i>Factors Contributing to Sex-Based Ascription</i>			
Recruited managers through informal networks	.138*	(.066)	1.148
Recruited managers through open methods	-.242**	(.098)	.785
Hired no managers in past two years	-.423	(.612)	.378
Formalized personnel practices × establishment size	-.000017***	(.000)	.9999
Establishment size	.00008***	(.000)	1.0001
Formalized personnel practices	-.061	(.049)	.941
Percentage of males in industry × any outside hiring	.015*	(.004)	1.015
Percentage of male workers in industry	-.0029	(.005)	.997
Hired any managers from outside the establishment	-1.307*	(.259)	.271
Level of market competition	-.179***	(.048)	.836
Departmentalization	.031	(.021)	1.031
<i>Other Factors Affecting the Sex Composition of Managers</i>			
Percentage of jobs that are managerial	-.006	(.004)	.994
More than 30 applications for managerial jobs	.513***	(.099)	1.670
Percentage of male nonmanagerial workers in establishment	.023***	(.003)	1.023
Average managerial pay in establishment (in \$1,000s)	.062***	(.007)	1.064
Deviation of managerial pay from industry median (in \$1,000s)	.041***	(.007)	1.042
Salary advancement opportunities for managers (in \$1,000s)	.0009	(.001)	1.0009
Number of levels in establishment	.013***	(.002)	1.013
Estimated missing values for earnings data	-.401***	(.107)	.670
y-intercept	-1.237**	(.517)	.290
Adjusted R ²	.676*		

Note: Numbers in parentheses are standard errors; N = 516 organizations.

^a Odds ratios less than 1 predict a decrease in men's share of managerial jobs (i.e., an increase in women's share); odds ratios greater than 1 predict an increase in men's share (i.e., a decrease for women).

* $p < .05$ ** $p < .01$ *** $p < .001$ (one-tailed tests)

To preview our major findings, organizations' personnel practices strongly affect their sexual division of managerial labor. The use of open recruitment methods, recruitment through informal networks, and the formalization of personnel practices, as well as the practice of recruiting managers from outside the organization in predominantly male industries, jointly account for 45 percent the variation across organizations in the sexual division of managerial labor (not shown tabularly).¹²

RECRUITMENT THROUGH INFORMAL NETWORKS

One of the mechanisms through which ascription favors men for managerial jobs is recruitment through informal referrals. As Mayhew (1968) observed, organizations seldom

overlook the possibility of using ascriptive channels to the labor market. In fact, such

for formalization × establishment size and for outside recruitment × the sex composition of the industry.

¹² This model included the interaction terms

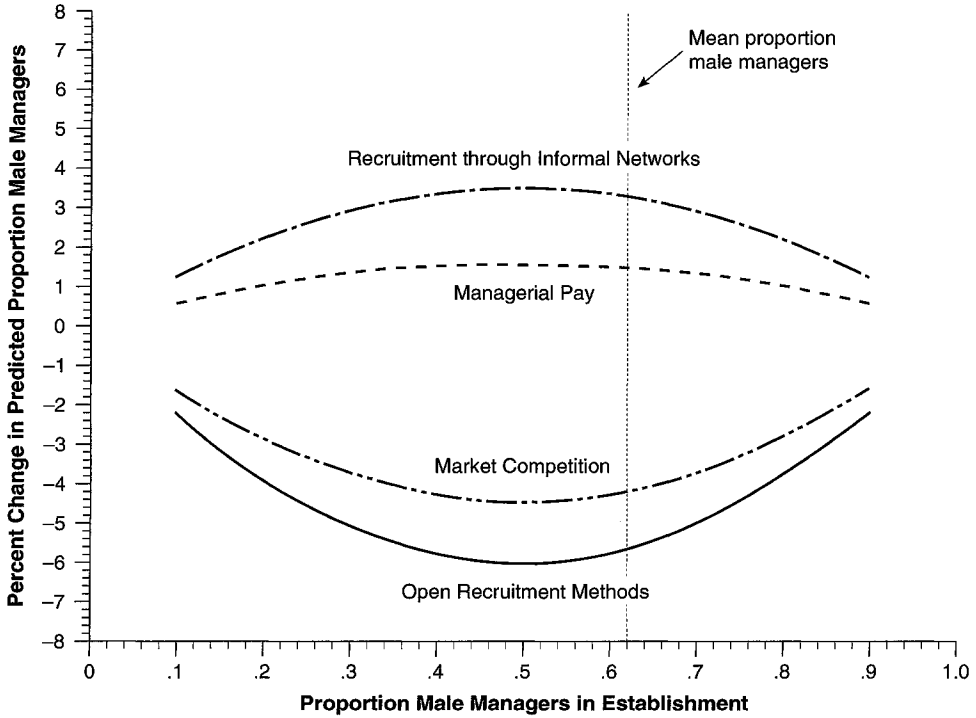


Figure 2. Effects of Selected Independent Variables on Change in the Predicted Proportion Male Managers, by Proportion Male Managers in Establishment

channels may be assiduously cultivated and protected as “inside tracks” to scarce resources. After all, the problem of a personnel manager is not to find the best possible persons to fill all available positions [but] to fill positions with qualified applicants at *minimum cost to the organization*. (P. 111, emphasis in original)

The practice that Mayhew described over 30 years ago remains common. Of the 461 establishments that had hired any managers in the two years before the survey, half had “frequently” recruited them through a referral or a direct invitation to apply; only 7 percent had never done so.

The more establishments rely on referrals or encourage specific employees to apply, the larger men’s share of managerial positions (see Table 1). By exponentiating the logit coefficient, we obtain the more interpretable coefficient for the odds ratio. This coefficient for the effect of recruiting through informal networks represents the difference between “never” and “sometimes” using informal referrals; the coefficient is sizable, indicating a 14.8-percent in-

crease in the odds ratio for the proportion male managers. This effect is consistent with men being the primary actors in the selection of managers and with men favoring other men.

Logistic regression assumes that the effects of independent variables depend on the value of the dependent variable (expressed as a proportion). Given the S-shape of the logistic curve, their effects are necessarily smaller as the proportion male managers approaches 0 or 1. As a result, independent variables’ effects were strongest in establishments in which about half of the managers were male. For example, as Figure 2 shows, the effect of hiring through informal networks had the greatest impact in establishments whose proportion male managers ranged from .4 to .6.¹³ In such establish-

¹³ To represent the effect of the j th independent variable on the proportion managers who were male, we employed the ΔP_j coefficient, which gives the difference between the predicted proportion associated with a one-unit change in X_j , holding all other independent variables constant (Kaufman 1996:97–99).

ments, a change from "never" to "sometimes" or from "sometimes" to "usually" using referrals would have resulted, on average, in a 3.3- to 3.5-percent increase in the proportion male managers. In contrast, in establishments in which at least 90 percent of the managers were men, an increase in the reliance on referrals would have raised the proportion male managers by just 1.2 percent.

RECRUITMENT THROUGH OPEN METHODS

The use of open recruitment methods (e.g., advertising openings or recruiting through employment agencies) was associated with women holding a greater share of managerial jobs. A shift from "never" using open methods to "sometimes" using them would have reduced the odds ratio for men's share of managerial jobs to .785, a drop of 21.5 percent. In establishments with 40 to 60 percent male managers, using open methods "sometimes" rather than "never" was associated with about a 6-percentage-point decline in the predicted proportion male managers (Figure 2). If an establishment with mean values on all of the independent variables had used open methods "often" rather than "never," the proportion male managers would have increased by 11 percent (results not shown).

FORMALIZATION OF PERSONNEL PRACTICES

We expected the formalization of an establishment's personnel practices (e.g., written rules and procedures, written hiring and firing procedures, written job descriptions, written performance records, and written evaluations) to reduce ascription and thereby lower men's share of managerial posts. However, the typically high levels of formalization among the establishments in this sample (77 percent had formalized at least six of the eight practices about which the survey asked) are consistent with some establishments having developed written documents without changing their actual practices. The significant negative interaction term for formalization \times establishment size, which indicates the increasing effectiveness

of formalization with increased establishment size, confirms our suspicion that formalization in small organizations is likely to be only nominal.¹⁴

The significant interaction between formalization and establishment size means that the strength of the effect of formalization depends on establishment size. To estimate its effect for an organization of size n , we summed the coefficient for the additive term for formalization and the product of the interaction term's coefficient multiplied by establishment size (Stolzenberg 1980:471-73). In establishments with 100 employees, for example, the predicted effect on the logit of formalizing an additional personnel practice would be $-.061 + (-.000017 \times 100)$, or $-.0627$. Exponentiating $-.0627$ yields a coefficient of .939 for the effect of formalization on the odds ratio, which means that each additional formalized procedure would reduce the odds ratio for male managers by 6.1 percentage points. In an average-sized establishment (i.e., one with 892 employees), the effect of formalizing a single personnel practice would be $-.076$ (i.e., $-.061 + [-.000017 \times 892]$)—the corresponding coefficient for the odds ratio is .927. In an establishment with 5,000 employees, the logit for formalization is $-.146$, which corresponds to a coefficient for the odds ratio of .864. Thus, in an establishment with 5,000 employees, each formalized procedure reduced the odds ratio for male managers by 13.6 percent.

The effect of formalization on the proportion male managers, like the effects of the other independent variables, was strongest in establishments that employed equal numbers of female and male managers. However, as Figure 3 shows, the larger the establishment, the stronger the effect of formalization, net of the sex composition of its managers. For example, in an average-sized establishment (892 employees) with the average proportion

¹⁴ The statistically significant regression coefficient for the additive term for establishment size ($b = .00008$) holds for the 17 establishments in the NOS that had not formalized any of their employment practices. The largest of these 17 establishments employed just 67 workers, too few for size to meaningfully affect their sex composition. The additive (and nonsignificant) term for formalization is substantively meaningless because it applies to establishments of size 0.

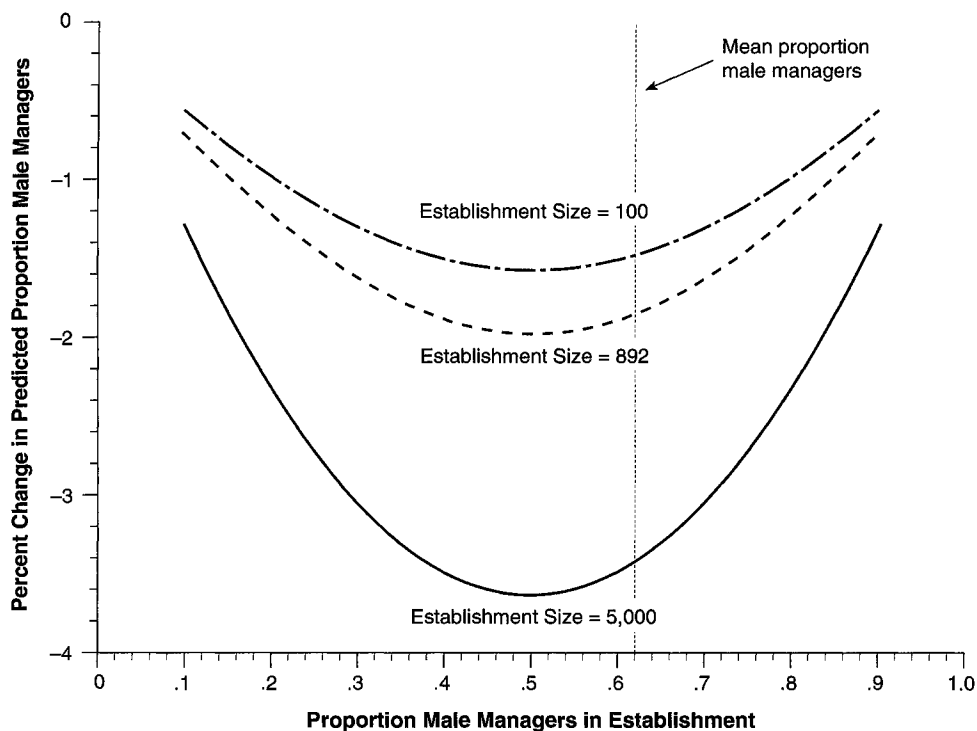


Figure 3. Effect of Formalization on Change in the Predicted Proportion Male Managers, by Size of Establishment and Proportion Male Managers in Establishment

male managers (.62), each formalized personnel practice was associated with a predicted decline of 1.84 percent in the proportion male managers (see Figure 3). In establishments with 40 to 60 percent male managers and 100 workers, formalizing an additional personnel practice would have reduced the proportion male managers by 1.5 percent. In contrast, in an establishment with 5,000 employees, formalizing an additional personnel practice would have led to a decline of 3.4 percent. Establishments in which most managers are male must be quite large for formalizing one additional personnel practice to increase women's share of managerial jobs by just 1 percentage point. For instance, an establishment must employ at least 2,950 workers before the formalization of one additional personnel practice would reduce men's proportion from .90 to .89.¹⁵ In sum, the weaker effect of formalization in smaller establishments is consistent with

the latter formalizing their practices in emulation of industry practices or in nominal compliance with external regulatory pressures without altering their normal personnel practices.

One reason formalization does not act as a stronger brake on ascription is that highly formalized organizations nonetheless often rely heavily on informal recruitment channels (Pinfield 1995), as indicated by the significant correlation ($r = .24$) between formalization and recruitment through personal networks (see Appendix B). A promotion discrimination lawsuit against a large corporation in which the senior author served as an expert witness illustrates the vulnerability of formalization to top managers' prerogative of deciding who should join their ranks. Although this firm would have scored at the top of our formalization scale, a group of male executives charged with filling two high-level management posts did not review any of the written applications, did not examine any of the candidates' personnel records or written evaluations, did not consult the written job descriptions in selecting

¹⁵ To estimate this value, we set ΔP_j to $-.01$ and solved for establishment size using the formula in Kaufman (1996:98).

finalists, and ignored the organization's written procedures for filling the positions. Instead they generated a short list by "blue skying." For top-level positions, this organization's formal structures were no more than "ceremonial gestures" (Edelman and Pettersen 1999) that did not reduce subjectivity or bias. In sum, formalization has the potential to undermine ascription, but it cannot do so when formal requirements are largely symbolic or when establishments recruit managers through informal networks.

**EXTERNAL VERSUS INTERNAL
MANAGERIAL RECRUITMENT
AND THE COMPOSITION OF THE
RECRUITMENT POOL**

Among establishments that recruited any managers from the external labor market, the sex composition of their industry is a proxy for the composition of the external labor supply. For these establishments, the effect of their industry's sex composition is the sum of the coefficient for industry's sex composition (-.0029) and the coefficient for the interaction of sex composition and outside hiring (.015). Thus, each additional 1 percent male in an industry's labor force was associated with a 1.21-percent increase in the logit for the proportion male managers, and with a .1- to .3-percent change in the proportion male managers, depending on men's share of managerial jobs (results not shown).¹⁶

For establishments whose internal and external recruitment pools differ in sex composition, this positive effect on men's share of managerial jobs sometimes reflects ascription. Consider the 266 establishments in our sample in majority-male industries. Of those whose nonmanagerial workers were primarily male, only 45 percent recruited managers from outside the firm compared to 60 percent of those whose nonmanagerial workers were primarily female (results not shown). Given the positive effect of recruit-

ing managers from predominantly male pools on men's share of an establishment's managerial jobs, the choice of a recruitment pool has ramifications for an establishment's sexual division of managerial labor. The opposite situation at Proctor and Gamble illustrates our point. Given attrition among female managerial prospects, Proctor and Gamble's former practice of promoting from within had inevitably limited women's representation in middle and upper management (Parker-Pope 1998).

MARKET COMPETITION

Competitive markets for establishments' products or services apparently temper their use of ascription, as we hypothesized. A one-unit change in the four-unit scale measuring competition was associated with a 16.4-percent drop in the odds ratio (see Table 1). As Figure 2 shows, a one-unit increase in competition would have decreased men's proportion of managerial jobs by between 1.6 and 4.5 percent, depending on the establishment's sexual division of managerial labor. This negative effect of market competition on men's representation in management means that highly competitive markets restrain establishments from taking advantage of any short-run cost saving associated with the use of ascription.

**OPPORTUNITY TO SEGREGATE MALE AND
FEMALE MANAGERS**

We had hypothesized that the degree of departmentalization within establishments would be negatively associated with the proportion male managers because departmentalization permits establishments to segregate female and male managers into different departments. Our results belie this expectation. The coefficient for the number of standard functions that establishments organized as departments was nonsignificant (and positive).

**THE SUPPLY OF AND DEMAND FOR
MANAGERS**

Most of our indicators of the supply of and demand for managers significantly affected the prevalence of sex-based ascription, as

¹⁶ Although the regression coefficient for any outside recruitment is statistically significant, it is substantively meaningless because it applies only to establishments in industries that were entirely female, and there were no such establishments in the NOS.

hypothesized. A large supply of prospective managers—as measured by the establishment having received at least 30 applications for a managerial position—substantially increased men's share of managerial jobs. Receiving “at least 30” rather than “fewer than 30” applications increased the odds ratio for proportion male managers by 67 percent. This association confirms that the link between labor supply and women's access to nontraditional jobs (Reskin and Roos 1990). The sex composition of one of the pools from which establishments recruit managers—their own nonmanagerial employees—affected the sex composition of their managerial workforce. As men's share of the nonmanagerial jobs within an establishment increased by 1 percentage point, the odds ratio for the proportion male managers increased by 2.3 percent. The effect of a 1-percent change in men's share of nonmanagerial workers on the proportion male managers ranged from .2 to .6 percent, depending on the sex composition of establishments' managers (results not shown). In addition to denoting the labor supply, this effect may tap organizations' tendency to match subordinates and their managers on the basis of their sex.

We speculated that industries' sex composition might capture institutional norms regarding the sex labeling of jobs and hence affect the sexual division of managerial labor even in establishments that did not recruit managers from the external labor force. The data did not bear this out (note the non-significant additive term for industries' sex composition in Table 1). Thus, industries' sex composition directly affects the gender makeup of establishments' managers only through its effect on the external supply of prospective managers.

DESIRABILITY OF MANAGERIAL POSITIONS

We expected the level of managerial compensation to influence establishments' ability to attract male managers and therefore whether they needed to turn to women. Although any association between these two variables may result from reciprocal causality between sex composition and rewards, the nature of organizational compensation

practices supports treating the causal process as running primarily from rewards to sex composition. Since the middle of the century, employers have widely used job evaluation procedures to set pay (Baron, Dobbin, and Jennings 1986), and most contemporary employers strive for pay structures that are internally consistent across jobs. According to Nelson and Bridges (1999:74, 79–80, 90), the compensation systems of large organizations are designed to achieve internal equity in pay across jobs. The relationship between the average pay in different jobs in the NOS establishments is consistent with Nelson and Bridges' claim: Our analyses revealed that high-paying establishments tend to pay all jobs well, and low-paying establishments tend to pay most jobs poorly.¹⁷ Thus, administrative considerations are the primary bases of pay within establishments; effects of the sex composition of job incumbents are likely to be secondary. Longitudinal analysis of the relationship between pay and workers' sex composition further supports treating sex composition as endogenous. The strongest evidence comes from the finding that educational institutions that raised administrators' pay relative to competing institutions were more likely to subsequently hire male administrators (Pfeffer and Davis-Blake 1987:21). Given these results, we treat the coefficients for managerial rewards as primarily reflecting causal influences on managerial sex composition rather than the reverse.

All three indicators of how well establishments pay managers—average managerial

¹⁷ Among the 516 establishments in our sample, the correlation of .46 between the average pay of managers and the average pay of the organization's “core” worker indicates internally consistent pay structures within establishments. This result replicates Blau's (1977, chap. 5) finding for the relative wage standing of firms. We conducted a stronger test of the causal priority of managerial pay by regressing average managerial pay on the average pay of core workers and on the proportion managers who were male. The standardized regression coefficient for core workers' average pay was almost twice the coefficient for the percentage of managers who were male (.437 and .247), consistent with establishment-level wage hierarchies causally preceding their sex composition.

salary, how much that salary exceeds the industry average, and the possibility for earnings growth for managers—are positively associated with men's share of management jobs. As Table 1 shows, each additional \$1,000 in average managerial earnings is associated with a 6.4–percentage-point increase in the odds ratio for men's share of managerial jobs. The effect of average managerial earnings on the proportion male managers ranged from .6 to 1.6 percent (see Figure 2). If the causal ordering runs exclusively from pay to composition, increasing managerial pay by \$1,000 in an establishment that was average in the sex composition of its managers (.62) would have raised men's expected proportion managerial jobs to .635.

The effect of the deviation of establishments' managerial pay from the average in their industry is smaller, but statistically significant. Managerial salaries that exceeded those of the industry by \$1,000 would have increased the proportion managers who were male by .37 to 1.0 percent, depending on the sex composition of the establishment's managers (results not shown; see note 14 for computational details). The effect of the range of managerial pay within the establishment was in the expected direction, but did not attain statistical significance at the conventional $p < .05$ level.

Finally, the association between the total number of hierarchical levels in an organization and its sexual division of managerial labor is positive, but small: Each vertical level is associated with a change of just .013 in the odds ratio for the proportion male managers. Given a reciprocal relationship between the number of vertical levels and men's share of managerial jobs (Strang and Baron 1990:492), the effect of an additional vertical level on the proportion male managers is no more than 1.3 percent (results not shown; see note 14).

In sum, although the relationship between the attractiveness of managerial jobs and managerial sex composition may be reciprocal, the positive coefficients for these four measures indicate that the more attractive an establishment's management positions, the more of its managers will be male. One interpretation of these effects focuses on men's job queues: More attractive managerial jobs draw ample numbers of

male applicants (see Figure 1). However, these effects are also consistent with establishments reserving the most desirable managerial jobs for men (Anderson and Tomaskovic-Devey 1995:332).

CONCLUSIONS

Although organizational structures have been shown to sustain or erode ascription (Baron 1991; Baron and Newman 1990), there has been little research on how specific personnel practices affect establishments' propensity toward ascription. This study begins to fill the gap by showing that establishments' personnel practices can constrain the impulse toward sex-based ascription in the sexual division of managerial labor.

Recruitment is the first step in the process that determines the sex composition of an establishment's managers. Our analysis shows that the methods establishments use to recruit managers strongly affect the sex composition of management. Open recruitment—posting or advertising managerial jobs, recruiting through employment agencies, or promoting according to seniority—while not eliminating ascription, minimizes it in the recruitment phase. In contrast, the more establishments rely on referrals to recruit managers, the greater men's share of managerial jobs. Using informal networks limits the recruitment pool to people with ties to a decision-maker, and people in social networks tend to resemble one another demographically. Heavy use of networks in recruitment is hard to combat because many managers believe that members of their personal networks are more talented than outsiders. For example, an officer of a financial services corporation recounted how he got promotions for members of his networks by getting them added to the promotion lists of his fellow vice presidents, and, when asked, he returned the favor. In his judgment, only “losers” used the formal channels (McGuire 2000). Although decision-makers may intend to be meritocratic, the effect of network-based recruitment is to increase sex-based ascription in the staffing of management positions.

Managerial selection and job assignment that involve subjectivity, stereotyping, bias, and ingroup favoritism introduce ascription.

Reducing subjectivity in selection and job assignment will therefore increase women's share of managerial jobs. Our measure of formalization taps procedures that should increase the objectivity of the personnel practices involved in hiring, job assignment, and retention: written rules and procedures, written hiring and firing procedures, written job descriptions, written performance records, and written evaluations. In keeping with our expectation, NOS establishments' level of formalization exerted a positive net effect on the proportion of women they employed as managers, which we interpret as formalization curbing ascription by minimizing subjectivity and bias. As Szafran (1982:175) observed, when organizations formalize qualifications in written documents, they are not likely to list ascribed characteristics.

Nominal formalization, however, will not check propensities toward ascription. Although establishment size is not necessarily linked to the degree to which establishments' actual practices conform to their written procedures, the impact of formalization increases with the size of the establishment, consistent with small organizations formalizing more in word than in substance. Even in very large establishments, however, formalization is less important than recruitment methods, indicating that recruitment is a critical stage for exclusion or inclusion. But, as in the discrimination case described above, in which the search committee generated candidates for top management jobs by brainstorming, the modest effect of formalization also reflects the fact that formalizing procedures does not ensure gatekeepers' compliance. Regardless of the size of the establishment, the potential of formalization to derail ascription is most likely to be realized when combined with mechanisms that ensure that actual practice conforms to the formal procedures. Such mechanisms include giving human resource personnel oversight responsibility and holding decision-makers responsible for their selections (Heilman 1995; Tetlock 1992). The fact that court-approved settlements in discrimination suits often require employers to provide for such oversight reflects courts' recognition of the importance of accountability.

The effect of the sex composition of recruitment pools is in part a sign of the im-

pact of ascription because the choice of a recruitment pool—whether by design or habit—is a personnel practice that has the potential to reduce or support ascription in managerial staffing, at least for establishments with access to recruitment pools whose sex composition varies. The effect of the decision to recruit managers from outside by establishments whose industries are more male than their internal nonmanagerial labor force is ascriptive. In addition, although we cannot pin down the causal order of the positive relationships between indicators of the desirability of managerial jobs and men's share of these jobs, they are consistent with establishments giving men the first chance at the best management jobs and turning to women when they cannot attract enough qualified men. In effect, such establishments either prefer male managers or they defer to men's desire for attractive managerial jobs.

Others have shown that establishments' characteristics influence the degree of gender equality in organizations. We go further, showing that establishments' personnel practices substantially affect the sexual division of managerial labor. Although the sex composition of the supply of qualified prospective managers is important, focusing on supply-side factors, or—more generally—on the operation of labor markets, distracts us from the key role of organizational practices. By recruiting through “old-boy networks” and using personnel practices that are vulnerable to subjectivity, employers reduce women's access to managerial jobs. Formalizing personnel practices and reducing the reliance on informal networks improves women's opportunity to compete with men on an equal footing. These changes are particularly important in predominantly male work settings that lack “a visible contingent of minority employees [that] may be a precondition for success in desegregating work” (Baron and Bielby 1985:248).

Competition in establishments' product or service markets, although not within establishments' control, encourages them either to seek the best available candidates without regard for sex, or—given women's lower average pay—to reduce their labor costs by relying more heavily on female managers. The fact that competition and labor short-

ages can override any predisposition toward sex-based ascription is further evidence that it is within establishments' control.

In small establishments and in those whose managers are mostly male, however, changing personnel practices is unlikely to substantially alter the sexual division of managerial labor. In these establishments, external pressure may be required to counter the forces that favor ascription. The more male an establishment's managers and the more male its industry, the more necessary are affirmative pressures if women are to have an equal chance at managerial jobs. Such efforts include identifying and eliminating barriers at every stage of the placement process: using innovative recruitment methods, altering internal labor markets (e.g., allowing promotions across job ladders or departments), setting goals for women's share of managerial jobs, and rewarding top managers for meeting those goals. When neither competition nor labor shortages is appreciable and no internal mandate exists, pressures by regulatory agencies provide the only viable force for checking sex-based ascription in work organizations.

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Appendix A. Variables and Measures of Establishment Characteristics

Variable	Measure	Range	Mean
<i>Dependent Variable</i>			
Managerial sex composition ^a	Natural log of the ratio of the proportion managerial positions that men fill to one minus the proportion managerial positions that men fill.	-3.66 to 4.6	.65 (1.35)
<i>Independent Variables</i>			
Use of open methods to recruit managers	Frequency that establishment used any of the following methods to recruit managers; a three-point scale, from "never" to "frequently": (a) seniority, (b) posting, (c) signs announcing positions, (d) advertisements, (e) employment agencies, (f) walk-ins.	0 to 2	1.49 (.78)
Use of informal networks to recruit managers	Frequency that establishment used any of the following methods to recruit managers, a three-point scale, from "never" to "frequently": (a) referrals from current employees, (b) referrals from business contacts, (c) recommendations from the person leaving the job, (d) recommendations from other current employees, (e) encouraging specific employees to apply.	0 to 2	1.27 (.73)
Establishment size	Number of full-time and part-time employees.	2 to 45,442	891.95 (2,842.38)
Formalized personnel practices	Number of the following written documents in establishment: (a) rules and procedures, (b) job descriptions for most jobs, (c) performance records for nearly all employees, (d) employment contracts, (e) hiring and firing procedures, (f) personnel evaluation, (g) fringe benefits, (h) safety and hygiene.	0 to 8	6.22 (2.02)

(Continued on next page)

(Appendix A continued)

Variable	Measure	Range	Mean
Level of market competition ^b	Amount of competition in establishment's main market area (none = 0, a great deal = 3).	0 to 3	2.24 (.83)
Departmentalization	Number of the following departments in establishment: (a) finance, (b) accounting, (c) health and safety, (d) public relations, (e) personnel/labor relations, (f) research and development, (g) long-range planning, (h) marketing or sales.	0 to 8	2.65 (2.54)
Managerial job opportunities	Percentage of establishment's workforce who are managers.	12 to 100	15.29 (17.66)
Supply of prospective managers	Did at least 30 persons apply for a managerial job?	0, 1	.15 (.35)
Sex composition of nonmanagers	Percentage of nonmanagerial jobs filled by men.	0 to 100	49.01 (30.36)
Sex composition of industry	Percentage of workers in 1990 census three-digit industry who were male.	4.6 to 93.7	52.53 (22.65)
Outside hiring ^b	Did establishment hire any managers from outside in last two years?	0, 1	.54 (.50)
Average managerial pay ^b	Average managerial pay in establishment (in \$1,000s).	75 to 1,000	413.05 (145.97)
Managerial pay relative to industry ^b	Average managerial pay in establishment minus median managerial pay in 3-digit industry (in \$1,000s).	-60 to 27.5	-11.78 (13.44)
Opportunities for salary advancement ^b	Range of managerial pay (highest managers' pay minus lowest managerial pay; in \$1,000s).	0 to 950	52.70 (69.34)
Opportunities for positional advancement ^b	Number of levels between highest and lowest position in establishment.	1 to 96	8.30 (.52)

Note: Numbers in parentheses are standard errors.

^a The range for the percentage of managerial jobs held by men is 3 percent to 99 percent; the mean is 62.0 percent, and the standard deviation is 24.4 percent.

^b We used regression to estimate missing values for the following: the level of competition for 85 establishments; any outside hiring for 4 establishments; average managerial pay for 84 establishments; average managerial pay relative to establishment's industry for 84 establishments; opportunities for salary advancement for 83 establishments; and opportunities for positional advancement for 31 establishments.

Appendix B. Correlations among Variables

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) Managerial sex composition	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(2) Open recruitment methods	-.05	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) Recruitment by informal networks	.06	.39*	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(4) No managers hired in past two years	-.08	-.63*	-.57*	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—
(5) Establishment size	.09	.14*	.10*	-.10*	1.00	—	—	—	—	—	—	—	—	—	—	—	—
(6) Formalized personnel practices	.02	.45*	.24*	-.37*	.12*	1.00	—	—	—	—	—	—	—	—	—	—	—
(7) Level of market competition	.01	-.11*	.10*	-.01	-.01	-.09*	1.00	—	—	—	—	—	—	—	—	—	—
(8) Departmentalization	.14*	.29*	.22*	-.26*	.39*	.34*	.08	1.00	—	—	—	—	—	—	—	—	—

(Continued on next page)

(Appendix B continued from previous page)

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(9) Percentage of establishment's workforce in management	-.04	-.30*	-.23*	.34*	-.11*	-.40*	.03	-.18*	1.00	—	—	—	—	—	—	—	—
(10) More than 30 applications for management job	.08	.21*	.13*	-.14*	.02	.18*	.05	.18*	-.02	1.00	—	—	—	—	—	—	—
(11) Sex composition of nonmanagers	.48*	-.12*	-.14*	.12*	.08	-.14*	.02	-.02	.22*	-.00	1.00	—	—	—	—	—	—
(12) Sex composition of industry	.56*	-.13*	-.06	.04	.04	-.17*	.12*	.05	.12*	.03	.69*	1.00	—	—	—	—	—
(13) Outside hiring of managers	-.06	.40*	.32*	-.36*	.14*	.24*	.03	.28*	-.16*	.38*	-.11*	-.12*	1.00	—	—	—	—
(14) Average managerial pay	.32*	.11*	.05	-.10*	.18*	.17*	.03	.33*	-.17*	.10*	.10*	.12*	.05	1.00	—	—	—
(15) Managerial pay relative to industry	-.12*	-.08	-.03	.07	-.11*	-.08	-.04	-.22*	.14*	-.07	.07	.10*	-.02	-.89*	1.00	—	—
(16) Opportunity for salary advancement	.10*	.07	.05	-.07	.13*	.02	.16*	.30*	-.02	.14*	-.03	.11*	.12*	.35*	-.31*	1.00	—
(17) Number of levels in establishment	.12*	.15*	.09*	-.15*	.17*	.19*	.01	.36*	-.14*	.01	-.01	.03	.05	.16*	-.09	.23*	1.00

* $p < .05$ (two-tailed tests)

REFERENCES

Acker, Joan R. 1989. *Doing Comparable Worth: Gender, Class, and Pay Equity*. Philadelphia, PA: Temple University Press.

———. 1990. "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations." *Gender and Society* 4:139-58.

Anderson, Cynthia and Donald Tomaskovic-Devey. 1995. "Patriarchal Pressures: An Exploration of Organizational Processes That Exacerbate and Erode Gender Earnings Inequality." *Work and Occupations* 22:328-56.

Baron, James N. 1991. "Organizational Evidence of Ascription in Labor Markets." Pp. 113-43 in *New Approaches to Economic and Social Analyses of Discrimination*, edited by R. R. Cornwall and P. V. Wunnava. New York: Praeger.

Baron, James N. and William T. Bielby. 1980. "Bringing the Firm Back In: Stratification, Segmentation, and the Organization of Work." *American Sociological Review* 45:737-65.

———. 1985. "Organizational Barriers to Gender Equality: Sex Segregation of Jobs and Opportunities." Pp. 233-51 in *Gender and the Life Course*, edited by A. S. Rossi. New York: Aldine.

———. 1986. "The Proliferation of Job Titles in Organizations." *Administrative Science Quarterly* 31:561-86.

Baron, James N., Alison Davis-Blake, and William T. Bielby. 1986. "The Structure of Opportunity: How Promotion Ladders Vary within and among Organizations." *Administrative Science Quarterly* 31:248-73.

Baron, James N., Frank R. Dobbin, and P. Devereaux Jennings. 1986. "War and Peace: The Evolution of Modern Personnel Administration in U.S. Industry." *American Journal of Sociology* 92:350-83.

Baron, James N., Brian S. Mittman, and Andrew E. Newman. 1991. "Targets of Opportunity: Organizational and Environmental Determinants of Gender Integration within the California Civil Service, 1979-1985." *American Journal of Sociology* 96:1362-1401.

Baron, James N. and Andrew E. Newman. 1989. "Pay the Man: Effects of Demographic Composition on Prescribed Wage Rates in the California Civil Service." Pp. 107-29 in *Pay Equity: Empirical Inquiries*, edited by R. T. Michael, H. Hartmann, and B. O'Farrell. Washington, DC: National Academy Press.

———. 1990. "For What It's Worth: Organizations, Occupations, and the Value of Work Done by Women and Nonwhites." *American Sociological Review* 55:155-75.

Becker, Gary. 1957. *The Economics of Discrimination*. Chicago, IL: University of Chicago Press.

Belsley, David A., Edwin Kuh, and Roy E.

- Welsch. 1980. *Regression Diagnostics: Identifying Influential Data and Sources of Col-linearity*. New York: Wiley.
- Bergmann, Barbara R. 1986. *The Economic Emergence of Women*. New York: Basic Books.
- Bielby, William T. 2000. "Minimizing Work-place Gender and Racial Bias." *Contemporary Sociology* 29:120-29.
- Bielby, William T. and James N. Baron. 1984. "A Woman's Place Is with Other Women: Sex Segregation within Organizations." Pp. 27-55 in *Sex Segregation in the Workplace*, edited by B. F. Reskin. Washington, DC: National Academy Press.
- . 1986. "Men and Women at Work: Sex Segregation and Statistical Discrimination." *American Journal of Sociology* 91:759-99.
- Blau, Francine. 1977. *Equal Pay in the Office*. Lexington, MA: Lexington Books.
- Blum, Terry C., Dail L. Fields, and Jodi S. Goodman. 1994. "Organizational-Level Determinants of Women in Management." *Academy of Management Journal* 37:241-68.
- Boyd, Monica, Mary Ann Mulvihill, and John Myles. 1991. "Gender, Power, and Postindustrialism." *Canadian Review of Sociology and Anthropology* 28:407-35.
- Braddock, Jomills Henry, II and James M. McPartland. 1987. "How Minorities Continue to Be Excluded from Equal Employment Opportunities: Research on Labor Market and Institutional Barriers." *Journal of Social Issues* 43:5-39.
- Brewer, Marilyn B. and Rupert J. Brown. 1998. "Intergroup Relations." Pp. 554-94 in *Handbook of Social Psychology*, edited by D. T. Gilbert, S. T. Fiske, and G. Lindzey. New York: McGraw-Hill.
- Bridges, William P. and Robert L. Nelson. 1989. "Markets in Hierarchies: Organizations and Market Influences on Gender Inequality in a State Pay System." *American Journal of Sociology* 95:616-58.
- Campbell, Karen E. and Rachel A. Rosenfeld. 1985. "Job Search and Job Mobility: Sex and Race Differences." *Sociology of Work and Occupations* 3:147-74.
- Carrington, William J. and Kenneth R. Troske. 1994. "Gender Segregation in Small Firms." *Journal of Human Resources* 30:503-33.
- . 1998. "Sex Segregation across U.S. Manufacturing Firms." *Industrial and Labor Relations Review* 51:445-64.
- Cohen, Lisa E., Joseph P. Broschak, and Heather A. Haveman. 1998. "And Then There Were More? The Effect of Organizational Sex Composition on Hiring and Promotion." *American Sociological Review* 63:711-27.
- Cohn, Samuel. 1985. *The Process of Occupa-tional Sex-Typing: The Feminization of Clerical Labor in Great Britain*. Philadelphia, PA: Temple University Press.
- Cockburn, Cynthia. 1991. *In the Way of Women: Men's Resistance to Sex Equality in Organizations*. Ithaca, NY: ILR Press.
- Davis-Blake, Alison. 1992. "The Consequences of Organizational Demography: Beyond Social Integration Effects." *Research in the Sociology of Organizations* 10:175-97.
- Dobbin, Frank, John R. Sutton, John W. Meyer, and W. Richard Scott. 1993. "Equal Opportunity Law and the Construction of Internal Labor Markets." *American Journal of Sociology* 99:396-427.
- Eagly, Alice H., Mona Makhijani, and Bruce Klonsky. 1992. "Gender and the Evaluation of Leaders: A Meta-Analysis." *Psychological Bulletin* 111:3-22.
- Edelman, Lauren B. and Stephen Petterson. 1999. "Symbols and Substance in Organizational Response to Civil Rights Law." *Research in Social Stratification* 17:107-35.
- England, Paula, Lori L. Reid, and Barbara Stanek Kilbourne. 1996. "The Effect of Sex Composition on the Starting Wages in an Organization: Findings from the NLSY." *Demography* 33:511-22.
- Granovetter, Mark and Charles Tilly. 1988. "In-equality and Labor Process." Pp 175-221 in *Handbook of Sociology*, edited by N. J. Smelser. Newbury Park, CA: Sage.
- Haberfeld, Yitchak. 1992. "Employment Discrimination: An Organizational Model." *Academy of Management Journal* 35:161-80.
- Hannan, Michael T. and John H. Freeman. 1984. "Structural Inertia and Organizational Change." *American Sociological Review* 49: 149-64.
- Hanushek, Eric A. and John E. Jackson. 1977. *Statistical Methods for Social Scientists*. New York: Academic.
- Heilman, Madeline E. 1995. "Sex Stereotypes and Their Effects in the Workplace: What We Know and What We Don't Know." *Gender in the Workplace*. Special issue of *Journal of Social Behavior and Personality* 10:3-26.
- Heilman, Madeline E., Caryn J. Block, and Richard F. Martell. 1995. "Sex Stereotypes: Do They Influence Perceptions of Managers?" *Gender in the Workplace*. Special issue of *Journal of Social Behavior and Personality* 10:237-52.
- Heilman, Madeline E., Caryn J. Block, Richard F. Martell, and Michael C. Simon. 1989. "Has Anything Changed? Current Characterizations of Men, Women, and Managers." *Journal of Applied Social Psychology* 74:935-42.
- Huffman, Matt L. and Steven Velasco. 1997. "When More Is Less: Sex Composition, Orga-

- nizations, and Earnings in U.S. Firms." *Work and Occupations* 24:214-44.
- Jacobs, Jerry A. 1992. "Women's Entry into Management: Trends in Earnings, Authority, Values, and Attitudes among Salaried Managers." *Administrative Science Quarterly* 37:282-301.
- Jewson, Nick and David Mason. 1986. "Modes of Discrimination in the Recruitment Process: Formalisation, Fairness, and Efficiency." *Sociology* 20:43-63.
- Kalleberg, Arne, David Knoke, Peter V. Marsden, and Joe L. Spaeth. 1996. *Organizations in America*. Thousand Oaks, CA: Sage.
- Kalleberg, Arne and Barbara Reskin. 1995. "Sex Differences in Promotion Experiences in the United States and Norway." *Research in Social Stratification and Mobility* 14:237-64.
- Kanter, Rosabeth Moss. 1977. *Men and Women of the Corporation*. New York: Basic Books.
- Kaufman, Robert L. 1996. "Comparing Effects in Dichotomous Logistic Regression: A Variety of Standardized Coefficients." *Social Science Quarterly* 77:90-109.
- Kemper, Theodore. 1974. "On the Nature and Purpose of Ascription." *American Sociological Review* 39:844-53.
- Killingsworth, Mark. 1985. "The Economics of Comparable Worth: Analytic, Empirical, and Policy Questions." Pp. 86-115 in *Comparable Worth: New Directions for Research*, edited by H. Hartmann. Washington, DC: National Academy Press.
- Kulis, Stephen and Karen Miller-Loessi. 1992. "Organizational Dynamics and Gender Equity: The Case of Sociology Departments in the Pacific Region." *Work and Occupations* 19:157-83.
- Major, Brenda. 1989. "Gender Differences in Comparisons and Entitlement: Implications for Comparable Worth." *Journal of Social Issues* 45:99-115.
- . 1994. "From Social Inequality to Personal Entitlement: The Role of Social Comparisons, Legitimacy Appraisals, and Group Membership." *Advances in Experimental Social Psychology* 26:293-355.
- Major, Brenda and Ellen Konar. 1984. "An Investigation of Sex Differences in Pay Expectations and Their Possible Causes." *Academy of Management Journal* 27:777-92.
- Marsden, Peter V. 1994. "The Hiring Process: Recruitment Methods." *American Behavioral Scientist* 37:79-91.
- Marsden, Peter V. and Elizabeth H. Gorman. 1999. "Social Capital in Internal Staffing Practices." Pp. 167-83 in *Corporate Social Capital*, edited by R. Th. A. J. Leenders and S. Gabbay. Amsterdam, Netherlands: Kluwer.
- Marwell, Gerald. 1975. "Why Ascription? Parts of a More or Less Formal Theory of the Functions and Dysfunctions of Sex Roles." *American Sociological Review* 40:445-55.
- Mayhew, Leon. 1968. "Ascription in Modern Societies." *Sociological Inquiry* 38:105-20.
- McGuire, Gail. 2000. "It's Not Simply Who You Know: How Employee's Gender, Race, and Ethnicity Affect the Informal Help They Get." Department of Sociology, Indiana University, South Bend, IN. Unpublished manuscript.
- Meyer, John W. and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83:440-63.
- Mittman, Brian S. 1992. "Theoretical and Methodological Issues in the Study of Organizational Demography and Demographic Change." *Research in the Sociology of Organizations* 10:3-53.
- Nelson, Robert L. and William P. Bridges. 1999. *Legalizing Gender Inequality: Courts, Markets, and Unequal Pay for Women in America*. New York: Cambridge University Press.
- Parker-Pope, Tara. 1998. "Inside P&G, a Pitch to Keep Women Employees." *Wall Street Journal*, September 9, pp. B1, B6.
- Parsons, Talcott. 1964. *The Social System*. New York: Free Press.
- Perry, Elissa L., Alison Davis-Blake, and Carol T. Kulik. 1994. "Explaining Gender-Based Selection Decisions: A Synthesis of Contextual and Cognitive Approaches." *Academy of Management Review* 19:786-820.
- Petersen, Trond and Laurie A. Morgan. 1995. "Separate and Unequal: Occupation-Establishment Sex Segregation and the Gender Wage Gap." *American Journal of Sociology* 101:329-65.
- Pfeffer, Jeffrey. 1977. "Toward an Explanation of Stratification in Organizations." *Administrative Science Quarterly* 22:553-67.
- . 1983. "Organizational Demography." Pp. 299-357 in *Research in Organizational Behavior*, vol. 5, edited by L. L. Cummings and B. M. Staw. Greenwich, CT: JAI Press.
- . 1991. "Organization Theory and Structural Perspectives on Management." *Journal of Management* 17:789-803.
- Pfeffer, Jeffrey and Yinon Cohen. 1984. "Determinants of Internal Labor Markets in Organizations." *Administrative Science Quarterly* 29:550-72.
- Pfeffer, Jeffrey and Alison Davis-Blake. 1987. "The Effect of the Proportion of Women on Salaries: The Case of College Administrators." *Administrative Science Quarterly* 32:1-24.
- Pfeffer, Jeffrey and Gerald R. Salancik. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper and Row.
- Pinfield, Lawrence T. 1995. *The Operation of In-*

- ternal Labor Markets: Staffing Practices and Vacancy Chains.* New York: Plenum.
- Powell, Gary N. 1993. *Women and Men in Management.* Newbury Park, CA: Sage.
- Reskin, Barbara F. 1988. "Bringing the Men Back In: Sex Differentiation and the Devaluation of Women's Work." *Gender and Society* 2:58-81.
- . 1993. "Sex Segregation in the Workplace." *Annual Review of Sociology* 19:241-70.
- . 2000. "The Proximate Causes of Employment Discrimination." *Contemporary Sociology* 29:319-29.
- Reskin, Barbara F. and Patricia A. Roos. 1990. *Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations.* Philadelphia, PA: Temple University Press.
- Roos, Patricia A. and Katharine W. Jones. 1993. "Shifting Gender Boundaries: Women's Inroads into Academic Sociology." *Work and Occupations* 20:395-428.
- Salancik, Gerald R. and Jeffrey Pfeffer. 1978. "Uncertainty, Secrecy, and the Choice of Similar Others." *Social Psychology* 41:246-55.
- Shaeffer, Ruth G. and Edith F. Lynton. 1979. "Corporate Experiences in Improving Women's Job Opportunities." Conference Board Report No. 755. New York: The Conference Board.
- Shenhav, Yehouda and Yitchak Haberfeld. 1992. "Organizational Demography and Inequality." *Social Forces* 71:123-43.
- Steinberg, Ronnie J. 1992. "Gender on the Agenda: Male Advantage in Organizations." *Contemporary Sociology* 21:576-81.
- Stinchcombe, Arthur L. 1965. "Social Structures and Organizations." Pp. 142-93 in *Handbook of Organizations*, edited by J.G. March. Chicago, IL: Rand-McNally.
- Stolzenberg, Ross M. 1980. "The Measurement and Decomposition of Causal Effects in Non-linear and Nonadditive Models." *Sociological Methodology* 10:459-88.
- Strang, David and James N. Baron. 1990. "Categorical Imperatives: The Structure of Job Titles in California State Government Agencies." *American Sociological Review* 55:479-95.
- Strober, Myra H. 1984. "Segregation by Gender in Public School Teaching: Toward a General Theory of Occupational Segregation." Pp. 144-56 in *Sex Segregation in the Workplace: Trends, Explanations, Remedies*, edited by B. F. Reskin. Washington, DC: National Academy Press.
- Sutton, John R., Frank Dobbin, John W. Meyer, and Richard W. Scott. 1994. "The Legalization of the Workplace." *American Journal of Sociology* 99:944-71.
- Szafran, Robert F. 1982. "What Kind of Firms Hire and Promote Women and Blacks: A Review of the Literature." *Sociological Quarterly* 23:171-90.
- Tetlock, Philip E. 1992. "The Impact of Accountability of Judgment and Choice: Toward a Social Contingency Model." *Advances in Experimental Social Psychology* 25:331-76.
- Tolbert, Pamela S. 1986. "Organizations and Inequality: Sources of Earnings Differences between Male and Female Faculty." *Sociology of Education* 59:227-36.
- Tolbert, Pamela S. and Lynne G. Zucker. 1983. "Institutional Sources of Change in the Formal Structure of Organizations: The Diffusion of Civil Service Reform, 1880-1935." *Administrative Science Quarterly* 28:22-39.
- Tomaskovic-Devey, Donald. 1993. *Gender and Racial Inequality at Work.* Ithaca, NY: Cornell University.
- Tomaskovic-Devey, Donald, Arne L. Kalleberg, and Peter V. Marsden. 1996. "Organizational Patterns of Gender Segregation." Pp. 276-301 in *Organizations in America*, edited by A. L. Kalleberg, D. Knoke, P. V. Marsden, and J. L. Spaeth. Newbury Park, CA: Sage.
- Tsui, Anne S. and Charles A. O'Reilly. 1989. "Beyond Simple Demographic Effects: The Importance of Relational Demography in Superior-Subordinate Dyads." *Academy of Management Journal* 32:402-23.
- U.S. Census Bureau. 1943. *U.S. Census of the Population: 1960. Employment and Personal Characteristics.* Table 26. Washington, DC: U.S. Government Printing Office.
- . 1956. *U.S. Census of the Population: 1950. Vol. 4, Special Reports: Occupational Characteristics.* Table 1. Washington, DC: U.S. Government Printing Office.
- . 1963. *U.S. Census of the Population: 1960. Subject Reports: Occupational Characteristics.* Final Report PC(2)-7A. Table 2. Washington, DC: U.S. Government Printing Office.
- . 1992. *Detailed Occupation and Other Characteristics from the EEO File for the United States.* 1990 CP-S-1-1. Washington, DC: U.S. Department of Commerce.
- . 1996. *Statistical Abstracts of the United States, 1995.* Washington, DC: U.S. Department of Commerce.
- Villemez, Wayne J. and William P. Bridges. 1988. "When Bigger Is Better: Differences in the Individual-Level Effects of Firm and Establishment Size." *American Sociological Review* 53:237-55.
- Wright, Erik Olin, Janeen Baxter, and Elisabeth Gunn Birkelund. 1995. "The Gender Gap in Workplace Authority: A Cross-National Study." *American Sociological Review* 60:407-35.