Hierarchical Rank and Women’s Organizational Mobility: Glass Ceilings in Corporate Law Firms

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This article revives the debate over whether women’s upward mobility prospects decline as they climb organizational hierarchies. Although this proposition is a core element of the “glass ceiling” metaphor, it has failed to gain strong support in previous research. The article establishes a firm theoretical foundation for expecting an increasing female disadvantage, with an eye toward defining the scope conditions and extending the model to upper-level external hires. The approach is illustrated in an empirical setting that meets the proposed scope conditions: corporate law firms in the United States. Results confirm that in this setting, the female mobility disadvantage is greater at higher organizational levels in the case of internal promotions, but not in the case of external hires.

The numbers of women at the top levels of business organizations remain low, despite a slow increase over time (Padavic and Reskin 2002, pp. 97–107; Creswell 2006). Women’s persistent underrepresentation in powerful organizational positions presents a puzzle. Given that more than three decades have passed since the large-scale entry of women into traditionally...
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male professional and managerial occupations, the passage of time has undermined the view that not enough women have yet made their way through the “pipeline” to higher organizational levels. In search of an alternative explanation, researchers have sought to understand how women’s mobility processes differ at different levels of organizational hierarchies (DiPrete and Soule 1988; Petersen and Saporta 2004).

Much recent work has examined the claim that women encounter increasing obstacles relative to men as they move up the organizational ladder. This proposition, which we term the increasing-disadvantage model, is a core element of the popular glass ceiling metaphor (Hymowitz and Schellhardt 1986; Federal Glass Ceiling Commission 1995a, p. 9; 1995b; Baxter and Wright 2000). Despite continued widespread public acceptance of the glass ceiling idea (Economist 2005) and some consistent findings (Paulin and Mellor 1996; Cohen, Broschak, and Haveman 1998), most research to date has failed to support the increasing-disadvantage model. Indeed, several studies based on private-sector firms find that women’s mobility prospects improve, rather than decline, as they climb upward in corporate hierarchies (Bruderl, Preisendorfer, and Ziegler 1993; Spilerman and Petersen 1999; Petersen and Saporta 2004; Dencker 2008).

In the public sector, researchers have found either no sex differences in mobility (Lewis 1986; Powell and Butterfield 1994) or a larger female disadvantage in lower grades (DiPrete and Soule 1988). Comparing cross-sectional national samples of workers, Baxter and Wright (2000) found no evidence in the United States, and only limited evidence in Sweden and Australia, that women’s probability of being located in a higher versus a lower hierarchical level declined relative to men’s at higher levels. Taken together, these findings suggest that the glass ceiling may be a myth. Women’s scarcity in top organizational ranks may simply represent the cumulative effect of a constant—or even decreasing—disadvantage at successive hierarchical levels (Baxter and Wright 2000).

Nevertheless, theoretical and empirical problems make it difficult to draw firm conclusions from these studies. Researchers have largely neglected to theorize why we should expect women’s and men’s relative mobility prospects to vary by organizational level, and this failure to specify relevant processes has likely led to inattention to confounding factors. Another theoretical difficulty has been the failure to identify scope conditions under which we would expect to see an increasing-disadvantage pattern. Without clear guidelines for applying the increasing-disadvantage model to specific contexts, contradictory results are predictable. In addition, most research on the increasing-disadvantage model has focused exclusively on promotion into upper-level positions, neglecting the issue of external hiring. Yet, as traditional notions of long-term loyalty between organizations and employees fade, corporations and professional
firms increasingly look to the external labor market to fill high-ranking positions. Different patterns may be evident in women’s internal and external mobility.

One empirical challenge to demonstrating a pattern of increasing disadvantage in women’s mobility has been the difficulty of gaining access to data on samples of organizations with comparable hierarchies. Most prior studies have analyzed the personnel records of single organizations during specific spans of time, but this type of data may be idiosyncratic in important respects. The alternative approach adopted by Baxter and Wright (2000)—analysis of national samples of workers—may be misleading, as they themselves point out, because the same rank or title may have a different substantive meaning in different types of employing organizations. A second empirical problem has been the lack of attention to defining and measuring the sex composition of the pools of competitors from which successful candidates are selected. Without controlling for the sex composition of the relevant candidate pool, findings concerning men’s and women’s relative mobility are likely to be biased.

In this article, we seek to reopen the debate on the increasing-disadvantage model of women’s organizational mobility. We pursue two interrelated objectives. First, we seek to provide a firmer foundation for the increasing-disadvantage model by developing a theoretical basis for expecting women’s relative mobility prospects to decline at higher hierarchical levels. Central to our argument is the idea that high-ranking organizational positions are characterized by three key factors—high status, work uncertainty, and the historical predominance of male incumbents—that combine to trigger biases in decision makers’ evaluations of male and female candidates. In addition, the cumulative effects of biased decisions in earlier organizational contests may generate objective gaps in skill and motivation between male and female candidates for high-level jobs. We qualify our argument in two important ways, however. First, we outline scope conditions, defining settings where these processes are more likely to occur and the increasing-disadvantage pattern is more likely to be observed. Second, we contend that the decline in women’s mobility prospects is reduced or even reversed in upper-level hiring to the extent that viable external candidates already hold comparable positions in other organizations.

Our second objective is to demonstrate the presence of an increasing-

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2 For example, the organization studied by Petersen and Saporta (2004) was actively trying to promote women in order to solve an “image problem” during the period of observation, 1978–86. Indeed, several studies analyze data from the 1970s and early 1980s, a period of relatively vigorous enforcement of employment discrimination laws in the United States (e.g., DiPrete and Soule 1988; Spilerman and Petersen 1999).
disadvantage pattern in internal promotion, and the absence of such a pattern in external hiring, in a setting that falls within the scope conditions we identify—the professional ranks of corporate law firms. This setting is attractive because it permits us to study multiple organizations with highly comparable organizational structures. In addition, given the relatively undifferentiated nature of entry-level law firm positions and the uniform educational requirements for obtaining them, women and men enter law firms with highly similar levels of skill and motivation. Finally, law firms’ relatively simple job ladders facilitate identification of candidate pools and examination of the effects of their gender composition.

WHY EXPECT AN INCREASING FEMALE DISADVANTAGE IN MOBILITY?

An individual’s chances of mobility into or within an organization in a given time period depend on three factors: (1) the number of vacancies arising in that period for which the individual is eligible, (2) the number of competitors for each vacancy, and (3) organizational decision makers’ preference distributions with respect to various individual characteristics (Stewman and Konda 1983). Of particular interest here are decision makers’ preferences with respect to gender. If women’s mobility chances decline relative to men’s as they move up the organizational hierarchy, their increasing disadvantage must be attributable to an increasing decision-maker preference for men over women. Neither the number of vacancies nor the number of competitors for each vacancy should, in itself, affect the relative mobility chances of women and men.3 Thus, the increasing-disadvantage hypothesis in effect proposes that decision makers’ propensities to select men over women increase at higher hierarchical levels.

In this section, we develop our theoretical argument for an increasing-disadvantage model of women’s organizational mobility. First, we identify basic mechanisms that lead decision makers to prefer men over women in selection decisions at all levels. We then explain why certain characteristics of high-ranking jobs accentuate these mechanisms. Finally, we show that repeated biased selection processes have a cumulative negative impact on women’s prospects of mobility into higher ranks.

3 As an illustration, consider a law firm where 10 eligible candidates vie for one partnership vacancy in a given year. In the absence of a decision-maker preference for men or women, each candidate—whether male or female—has a 10% chance of being selected. If instead two vacancies occur, each candidate has a 20% chance; if only one vacancy occurs but there are instead only five eligible candidates, each candidate again has a 20% chance. The average mobility chances of women and men remain equal.
Decision Makers’ Gender Preferences: Some Fundamental Mechanisms

Sociological and psychological theory and research point to three important processes that can bias organizational decision makers’ assessments of job candidates and lead them to prefer men over equally qualified women: (1) decision makers’ reliance on gender as an indicator of general competence, (2) the influence of gender-stereotypical selection criteria on decision makers’ perceptions of candidates’ suitability for particular jobs, and (3) in-group favoritism. Processes such as these, involving the perception and evaluation of others, can operate under conscious control or through implicit, automatic cognition (Greenwald and Banaji 1995). They are likely to have important implications for women’s and men’s prospects of organizational mobility.

**Gender as an indicator of competence.**—For both male and female decision makers, gender is likely to function as an indicator of general competence. Competence cannot be observed directly; instead, it must be inferred from observable evidence, such as evidence of performance. In the case of hiring, decision makers consider candidates’ performance in schools and previous jobs (transcripts, résumés, and recommendations), as well as their performance in job interviews (Miller and Rosenbaum 1997). In the case of promotion, decision makers consider candidates’ records of performance within the organization. However, performance evidence is never the only basis for ability expectations. Evaluators also base ability inferences on social characteristics such as gender, race, and social class (Berger, Rosenholtz, and Zelditch 1980; Ridgeway 1997). High competence is part of the male gender stereotype, and low competence is part of the female gender stereotype (Broverman et al. 1972; Heilman et al. 1989). Indeed, an extensive body of laboratory research demonstrates that men are presumed to be more competent than women (e.g., Wagner, Ford, and Ford 1986; Dovidio et al. 1988; Lucas 2003). Evidence of strong performance does not obviate the impact of gender. Even if a man and a woman are perceived to have performed equally well, inferences based on gender will still raise the ability expectation for the man and lower it for the woman (Pugh and Wahrman 1983; Wagner et al. 1986). Thus, women must do more to prove their ability than men must do (Foschi 1996; Biernat and Kobrynowicz 1997).

**Masculine role-incumbent schemas.**—Decision makers charged with

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4 The inferential link between performance and ability is tighter in some cases than in others. Thus, although it is not possible to observe marathon-running ability per se, completion of a marathon in record time is nearly unquestionable evidence of that ability. In contrast, a stellar performance as a corporate manager—for example, turning a record profit for one’s unit—could more easily be due to chance or to the contributions of others.
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filling an organizational position always look for competence, at least to some degree. However, they also typically have in mind a more detailed mental model, or schema, of the prototypical or desired incumbent of the specific role in question, and they look for candidates that demonstrate congruity with this schema (Heilman 1983; Perry, Davis-Blake, and Kulik 1994). The attributes of role-incumbent schemas can include both sex itself and stereotypically gendered abilities and skills. When the attributes of a role-incumbent schema include either the male sex category or stereotypically masculine qualities, male candidates seem better suited for the position (Zebrowitz, Tenenbaum, and Goldstein 1991; Eagly and Karau 2002; Gorman 2005).

In particular, role-incumbent schemas typically include specific abilities and skills, some of which may be stereotypically associated with men or women. Skills can be cognitive and technical (“hard”) or interpersonal and motivational (“soft”) (Moss and Tilly 2001, p. 44). Mathematical and mechanical skills are examples of stereotypically masculine hard skills, while sewing is a stereotypically feminine hard skill (Dovidio et al. 1988; Nosek, Banaji, and Greenwald 2002). Examples of soft skills conventionally attributed to men include independence, decisiveness, and leadership ability; conventionally feminine soft skills include warmth, nurturance, and willingness to cooperate with others (Spence and Helmreich 1978; Swim 1994). It is well established that people’s impressions of others are influenced by applicable stereotypes (for reviews, see Hilton and von Hippel 1996; Fiske, Lin, and Neuberg 1999). Thus, employers are likely to perceive male candidates as possessing stereotypically masculine abilities and female candidates as lacking them.5

“In-group” favoritism.—Unlike the previous two processes, the final mechanism depends on the sex of the decision maker. Research has repeatedly documented the prevalence of favoritism toward members of the focal individual’s own group, or in-group (for a review, see Brewer and Brown 1998). In-group favoritism influences people’s impressions and evaluations of others. In particular, people are likely to rate in-group members more highly than members of other groups on dimensions such as warmth, trustworthiness, and cooperativeness (Inske et al. 1990; Fiske et al. 2002). Consistent with these processes, male decision makers are more likely than female decision makers to prefer male candidates for hiring and promotion (Beckman and Phillips 2005; Gorman 2005, 2006).

5 Moss and Tilly (2001) provide qualitative evidence that employers’ perceptions of job candidates mix accurate observation of individual qualities with inaccurate assumptions stemming from race and gender stereotypes.
The Intensification of Gender Bias in High-Ranking Positions

Compared to lower-ranking positions, higher-ranking positions are typically characterized by higher social status and greater authority over subordinates and organizational resources. Work processes at higher organizational levels also tend to involve more uncertainty. Higher-level work encompasses a wider and less-predictable variety of issues and problems, calls for decision making based on more ambiguous information, and depends more heavily on cooperation from peers and subordinates (Kanter 1977; Kotter 1982; Jackall 1988; Thomas and Gabarro 1999). Finally, the historical predominance of men has been especially persistent in high-ranking positions. These characteristics should affect the basic mechanisms outlined above in multiple ways (see table 1).

Gender as an indicator of competence.—The higher status and authority of upper-level positions are likely to intensify the impact of gender as an indicator of competence in selection decisions. Individuals who hold positions of high status and authority generally have a greater influence, for good or ill, on the overall performance of their organizations than do persons in lesser positions. When a role incumbent’s success or failure can more substantially affect the organization’s collective performance, decision makers are likely to place a stronger emphasis on competence in selecting personnel for that role (Jacobs 1981). Thus, they can be expected to pay closer attention to evidence of competence—including the “evidence” of gender—and to be less willing to take unnecessary risks by selecting a candidate whose real or inferred qualities raise doubts.

The greater work uncertainty involved in upper-level positions should also accentuate decision makers’ reliance on gender as an indicator of competence. When there is no question that performance outcomes reflect ability, observers ignore the performer’s sex and base inferences of ability on performance alone (Foddy and Smithson 1999). Uncertainty about the processes involved in transforming work inputs into outputs creates doubt about the extent to which performance outcomes are attributable to ability, thus undermining the value of performance as an indicator of ability. When problems are unpredictable, when the relevant principles of cause and effect are not well understood, or when strategy implementation depends on autonomous others, inferences of competence based on past successes may prove ill founded later (Kanter 1977, pp. 52–53; Gorman 2006). In that case, decision makers are likely to give less weight to candidates’ performance records and more to their social characteristics, including gender. Consequently, at higher organizational levels, the performance standard for inferring ability is likely to be more lenient for men and more exacting for women, creating a more marked advantage in performance expectations for men.
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<td>RELIANCE ON GENDER AS AN INDICATOR OF GENERAL COMPETENCE</td>
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<td>Status and authority</td>
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<td>Male predominance among incumbents</td>
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Masculine role-incumbent schemas.—Role-incumbent schemas for high-level jobs are likely to have a masculine slant. The male sex category itself is more likely to be part of the role-incumbent profile when the role carries high status or authority, because prevalent cultural beliefs associate status and authority with men (Eagly and Karau 2002; Lucas 2003; Ridge-way and Correll 2004). Role-incumbent schemas for high-authority positions also include more stereotypically masculine soft skills, such as leadership ability, and fewer stereotypically feminine ones, such as nurturance (Huddy and Terkildsen 1993; Dodge, Gilroy, and Fenzel 1995; Martell et al. 1998). Moreover, such soft skills take on greater importance relative to hard skills at higher hierarchical levels (Jackall 1988, pp. 46–64). The greater work uncertainty associated with high-level jobs may also intensify perceptions that such jobs require stereotypically masculine traits such as leadership ability, judgment, and decisiveness.

The greater historical male predominance in high-ranking roles is likely to shape role-incumbent schemas as well. Over time, roles that are predominantly held by men become labeled as men’s work (Oppenheimer 1968), so that the male gender forms a part of the applicable role-incumbent schema. Moreover, when a role is predominantly held by men, people are likely to perceive it as requiring masculine skills (Leidner 1991; Ely 1995). Consistent with these processes, employers are less likely to hire and promote women when previous incumbents of the role in question were predominantly male (Konrad and Pfeffer 1991; Cohen et al. 1998).

In-group favoritism.—Finally, in-group favoritism may operate with greater force in the case of high-status positions. Because the status and privileges of such positions are greater than those of other positions, men have a greater incentive to preserve their control over them (Reskin 1988). The work uncertainty inherent in upper-level positions is also likely to intensify processes of in-group favoritism, according to Kanter’s (1977, pp. 49–53) theory of “homosocial reproduction.” When employees must work together under uncertain conditions that require the exercise of discretion, each individual’s bosses and co-workers must rely on her or him to judge wisely and choose appropriate and effective courses of action. Because communication and trust are generally easier among in-group members, decision makers feel more comfortable selecting candidates who are similar to themselves. Finally, given that incumbents are more likely to participate in selecting their peers at higher organizational levels, the greater predominance of men at higher levels suggests greater in-group-based preference for men.
The Cumulative Effects of Past Selection Decisions

Because high-ranking organizational roles are rarely open to inexperienced employees, any candidate for a high-level position is almost certain to have experienced repeated selection processes over the course of her or his previous career. In organizations with many levels, employees typically enter a promotion tournament involving several rounds of formal selection processes as they progress upward through the hierarchy (Rosenbaum 1979). Less formally, decision makers engage in similar processes of evaluating and selecting employees for important developmental assignments, places on key project or client teams, and even mentor-protégé relationships. All three of the biasing processes discussed above—reliance on gender as an indicator of competence, use of sex-labeled roles and gender stereotypes as heuristics in assessing role fit, and in-group favoritism—are likely to operate in all these selection decisions, putting women at a disadvantage. As a result, many women stop advancing, or even leave their organizations, well short of the top ranks. Even those who survive long enough to compete for high-ranking positions, however, feel the cumulative effects of prior selection decisions. Over time, the effects of these “demand-side” processes are likely to produce “supply-side” differences between women and men.

One consequence is that women’s rate of skill development is likely to be slower than men’s. Organizations shape their employees’ skill development in important ways (Thomas and Gabarro 1999). In professional and managerial occupations, skill development normally occurs through on-the-job experience as individuals progress to increasingly challenging tasks. Through promotions, transfers, and specific task assignments, organizations provide (or deny) opportunities to build skills. Employees who are repeatedly assigned to the same tasks will not develop as extensive a set of skills as those who are given varied and challenging assignments. In addition, senior employees serve as mentors for some junior employees, providing advice and coaching to protégés. Over time, differences in the allocation of assignments and mentoring are likely to generate a substantial skill gap between men and women who begin their careers at the same time and with similar capabilities. Because of these cumulative effects, objective sex differences in skills are likely to be greater among candidates for high-level positions than among candidates for low-level positions.

A second consequence of women’s repeated encounters with bias is that they may lose confidence in their abilities or enthusiasm for their work—or both. Because the cause-and-effect relationship between performance and reward holds less strongly for women than for men, women are more likely than men to experience failure when they could reasonably have
expected success (Valian 1998, pp. 183–84). When things repeatedly go wrong, although their best judgment says they should have gone right, women may develop feelings of self-doubt or a sense of futility. In either case, they will be less likely to exhibit many of the soft skills that are expected of organizational leaders—such as ambition, assertiveness, decisiveness, energy, leadership, and self-confidence (Heilman et al. 1989).

SCOPE CONDITIONS

The weakness of empirical support for the increasing-disadvantage model to date stems in part from a lack of attention to organizational context. The increasing-disadvantage model is subject to scope conditions, and thus it will not be evident in all samples of workers. First, the increasing-disadvantage pattern should be more evident in large organizations than in small ones. Differences between high-level and low-level positions with respect to status, work uncertainty, and gender composition are likely to be greater in large organizations than in start-ups or mom-and-pop businesses. Indeed, it is not unusual for women to hold leadership roles in small, entrepreneurial organizations (Moore 1999). Consistent with this view, public concern about the glass ceiling has focused on large corporations (Hymowitz and Schellhardt 1986; Morrison et al. 1994; Federal Glass Ceiling Commission 1995a).

In addition, the increasing-disadvantage model is most readily applied to comparisons between higher and lower ranks within identifiable job ladders. Large organizations often cluster jobs that share similar functions and technology into recognizable ladders, with successive levels linked by increasing skill gradients and clear patterns of promotion (Baron, Davis-Blake, and Bielby 1986; Althauser 1989). In particular, unmistakable formal or informal promotion ceilings often mark the boundaries between lower-tier manual, clerical, or technical jobs and upper-tier professional and managerial jobs (DiPrete and Soule 1988; Spilerman and Petersen 1999). All employees located below these ceilings confront visible structural barriers to further upward mobility. Accordingly, studies that compare women’s promotion rates at the top of lower-tier job ladders to their rates on higher-ranking professional or managerial ladders are likely to conclude that women’s promotion chances are better at higher organizational levels (see DiPrete and Soule 1988; Spilerman and Petersen 1999). This scope condition is implicit in the glass ceiling metaphor. A glass ceiling is transparent and invisible from the vantage point of those below it; women do not see the glass ceiling itself, but rather see through it to higher positions that appear to be accessible. This implies that there
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are no formal obstacles to upward movement, as there are in positions at job-ladder ceilings or tier boundaries.

Finally, the processes we describe are most likely to take place within ladders or career paths that are relatively sex integrated, at least at their lower levels. In job ladders that are severely segregated by sex, women’s and men’s relative promotion rates will be determined by the number of vacancies and the number of competing candidates in their separate ladders, rather than by their employer’s propensity to select one sex over the other. Indeed, if men and women are competing for different jobs, the very idea of a female mobility disadvantage is not really meaningful; the disadvantage lies at the point of entry to separate male and female career paths.

In practice, all three scope conditions are most likely to be met in the professional and managerial ranks of large corporations or professional service firms. Such organizations are large by definition; professionals and managers in such organizations face no visible barriers and can anticipate advancement to the highest positions; and women and men typically begin their climb through the ranks on an apparently equal footing.

EXTERNAL HIRING INTO HIGH-LEVEL POSITIONS

Should we expect the processes discussed above to apply to external hiring into high-level positions, as well as to internal promotion? We believe that the answer is yes. The basic processes that tend to bias all selection decisions operate in the case of external hiring. The characteristics of upper-level positions exacerbate these processes, regardless of whether they are filled through promotion or through hiring.

Nevertheless, women’s disadvantage in mobility into high-ranking jobs should be lower in the case of external hiring than in the case of internal promotion—if the external labor market is such that viable candidates for hiring into senior positions typically hold comparable positions in organizations of similar size and prominence. An example is the market for tenured university faculty: most serious candidates for such positions already hold tenured jobs at other institutions of similar prestige. Under these circumstances, external candidates have already been vetted through selection processes in other organizations, and thus they carry a seal of approval that internal candidates for promotion lack. Although this difference should not affect preferences for men per se (assumptions that men are better suited to “male” sex-labeled jobs and in-group favoritism), it should attenuate biases based on gender stereotypes (reliance on gender as a signal of competence and use of gender stereotypes as heuristics in evaluating role suitability).
As we noted above, decision makers look to gender as an indicator of ability when performance evidence is not conclusive. In those circumstances, they pay attention to other signals of quality and productivity as well. A high-ranking position in an organization is a clear signal of that organization’s positive evaluation of an employee’s capabilities (Waldman 1990). External candidates who hold senior positions in peer organizations have already been designated as competent and successful by knowledgeable judges applying standards similar to those of the hiring firm. For women, this positive signal should offset some or all of the negative impact of their sex on decision makers’ expectations concerning their competence. Consistent with this reasoning, Heilman, Martell, and Simon (1988) found that when experiment subjects reviewing the files of hypothetical job applicants were told that expert judges had already screened the candidates and rated them as finalists, female candidates were evaluated as favorably as or more favorably than male candidates. In contrast, female candidates were rated less favorably than males when this information was not provided.

Female external candidates who hold upper-level positions in peer organizations should also benefit in a second way: their designation as “successful” should trigger a different schema in the minds of hiring decision makers. Instead of holding a single global and homogeneous stereotype of members of a social category, people recognize subcategories, each with its own set of stereotypic associations (Allport 1954, p. 263). Thus, the prevailing stereotype of the successful career woman differs from the stereotype of women in general and more closely resembles role-incumbent schemas for professional and managerial jobs (Clifton, McGrath, and Wick 1976; Heilman et al. 1989). Heilman and her colleagues (1989) found that research subjects’ mental models of “successful women managers” were quite similar to those of “successful managers” in the abstract—including such characteristics as self-confidence, assertiveness, and independence—whereas their schemas of “women in general” were very different. For decision makers, then, women who have already been labeled as successful are more likely to appear suitable for a high-level position than women who have not.

RESEARCH SETTING: CORPORATE LAW FIRMS

In the United States, the legal profession is largely divided into two “hemispheres,” or market segments (Heinz et al. 2006). In one hemisphere, lawyers serve the needs of large corporations, in fields such as banking, tax, and securities law, and typically work in firms ranging from approximately 30 to more than a thousand lawyers. In the other, lawyers
handle the legal problems of individuals and small businesses, in fields such as criminal, personal injury, and residential real estate law, and work as sole practitioners or in small partnerships. We focus here on corporate law firms, which hire and promote lawyers on a more regular basis and have more standardized structures than do small partnerships. In recent decades, corporate law firms have experienced rapid growth, and most now have multiple offices located in various cities in the United States and abroad.

Corporate law firms are organized as partnerships (or substantially equivalent forms). Partners own equity interests in their firms, share in profits and losses, and supervise the work of other lawyers.\(^6\) Below the rank of partner are salaried associates—junior lawyers employed on a probationary basis during a “partnership track” period before they are considered for promotion to partnership.\(^7\) Most entering associates are hired through on-campus recruiting at law schools (Ginsburg and Wolf 2003). Associates work for multiple partners on a changing portfolio of assignments (Dinovitzer et al. 2004). Although they take on increasing responsibility as their skills develop, they receive no formal promotions during this period. As a general rule, only associates in the final year of the partnership track are eligible for promotion to partnership. Since the 1980s, law firms have increasingly brought in new partners through external or “lateral” hiring as well as promoting partners from their associate ranks (Galanter and Palay 1991, pp. 54–55).\(^8\)

Corporate law firms meet our scope conditions in that they are relatively large, they have clearly recognizable professional job ladders, and the lower rungs of these ladders are sex integrated. As a research setting, they also offer several additional advantages. Importantly, because almost all corporate law firms have the same basic structure, the setting allows us to combine data on multiple organizations and their employees without encountering the problem of noncomparable organizational titles and ranks. Moreover, because all associates and partners in a firm are located on the same two-rung job ladder, their transitions are easily observable and interpretable. There is no difficulty in determining whether or not a particular individual’s internal move is a promotion, as there sometimes

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\(^6\) Since the 1990s, a growing number of firms have added a second tier of salaried nonequity partners who may or may not be eligible for promotion to equity-owning status.

\(^7\) In our data, firm partnership tracks range from 5 to 10 years, with a mean of 7.5 years.

\(^8\) Firms typically promote and hire partners for different reasons. Firms add partners by promotion in order to strengthen existing practices; they add partners by lateral hiring in order to add new practice areas, expand new offices, or gain visibility with high-profile names (McCann 2004; McDonough 2004; Carter 2006).
is in the case of business corporations. The corporate law firm setting also minimizes the problem of unobserved heterogeneity in employee skill or motivation that could be correlated with gender. Almost all new lawyers hired into entry-level law firm positions have had the same amount of education: four years of college and three years of law school. Most new lawyers have had only limited amounts of work experience prior to law school and little or no experience relevant to their work as lawyers. The time, effort, and foregone earnings required to complete legal training imply a high degree of motivation on the part of male and female lawyers alike (Noonan, Corcoran, and Courant 2005).

Several previous studies have found that women's prospects of promotion to law firm partnership are lower than men's (Spurr 1990; Spurr and Sueyoshi 1994; Kay and Hagan 1998, 1999; Gorman 2006). In this study, in line with the contrast between entry and "top" levels implicit in the glass ceiling metaphor (Hymowitz and Schellhardt 1986), we compare women's mobility into entering associate positions with their mobility into partner positions. We expect that women's mobility disadvantage, relative to men, is greater in promotion to partnership than in entry-level hiring. However, we do not expect a greater mobility disadvantage for women in partner hiring than in entry-level hiring.9

DATA, MODELS, AND MEASURES

Data Sources

We drew our sample from the 1996–97 edition of the National Directory of Legal Employers (hereafter the NALP Directory; NALP 1996) prepared by the National Association for Law Placement (NALP), a nonprofit organization established to provide information concerning legal employment to law schools and their students. Each year, the NALP surveys law firms that intend to participate in on-campus recruiting activities at law schools, asking for quantitative and qualitative information, and compiles the results in annual editions of the NALP Directory. Most large law firms provide information specific to each office. The 1996 edition of the NALP Directory contains data on more than 900 establishments. We excluded offices that employed fewer than five lawyers, because employment patterns in such small establishments are likely to be idiosyncratic,

9 In comparing mobility into entry-level and partnership positions, we do not mean to imply that partnership is a panacea for women’s disadvantage. There is considerable variation among partners within the same firm in power, earnings, and access to important clients (Wilkins 1999), and firms are increasingly willing to terminate partners whose billings do not meet firm goals (Goldberg 2007). Gender inequality in earnings persists among partners (Reichman and Sterling 2004).
as well as offices that neither hired nor promoted any lawyers between the fall of 1994 and the fall of 1995. Among the remaining 796 establishments, 715 hired at least one entering associate, 457 promoted at least one associate to partner, and 475 hired at least one lateral partner. Within the 796 establishments, a total of 6,900 selection decisions took place, including 4,401 entry-level hires, 1,291 promotions to partnership, and 1,208 lateral partner hires.

Data on the number and gender of newly hired entry-level associates and newly hired and promoted partners come from comparison of the names of lawyers listed in the 1995 and 1996 editions of the *Martindale-Hubbell Law Directory* (Martindale-Hubbell 1995, 1996). This widely used annual directory lists virtually every law office in the United States, together with names, titles, and brief biographies of individual attorneys. The 1996 edition includes the names of lawyers who were newly hired or promoted as of the fall of 1995. Gender was coded based on lawyers’ first names.

A limitation of the data is that they do not include measures of human capital. However, as discussed above, the sample itself holds roughly constant lawyers’ skills and motivation prior to joining their firms. If anything, because female law students had higher grades in both college and law school than male students in the first half of the 1990s (Clydesdale 2004), it is likely that the female lawyers employed by sample establishments entered their organizations with better qualifications than their male peers. Any female deficit in skill that may have emerged after lawyers joined their firms was thus most likely due to employer bias in the form of differential training and development of male and female associates.

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10 Data in each edition of the *NALP Directory* reflect the establishment as of February 1 of that year.

11 Data in each edition of the *Martindale-Hubbell Law Directory* were collected during the second half of the prior calendar year (Martindale-Hubbell Customer Relations, personal communication, November 21, 1996). Firms decide how much biographical information to include. Listings generally do not distinguish equity from nonequity partners.

12 In the case of androgynous names, we examined the additional information provided for clues as to sex. For example, a lawyer named “Chris” who had attended Wellesley College or was a member of a state women’s bar association would be coded as female; one named “Dale Jones Jr.” would be coded as male. In the absence of such information, we followed previous research (Cohen et al. 1998; Gorman 2005) in coding gender based on whether the name was more frequently given to girls or to boys at the time of the individual’s birth. For example, an associate named “Leslie” born in 1967 would be coded as female. Across establishments, the mean and median percentages of androgynous associate names were 4% and 3%, respectively.

13 Clydesdale analyzed data on 27,478 students who entered law school in 1991 (from the Bar Passage Study administered by the Law School Admissions Council).
Descriptive Analyses

One form of evidence of an increasing-disadvantage pattern is a decline in the ratio of the probability of women’s mobility, relative to men’s, at higher hierarchical levels—as long as this decline is not due to women’s disproportionate self-selection into alternative career paths (Baxter and Wright 2000). Accordingly, we begin with simple comparisons of women’s and men’s mobility rates and the ratio of these rates at the entry and partnership levels.

We calculate male and female mobility rates for each type of selection decision for each establishment by taking the ratio of the number of selected men or women to the number of men or women in the relevant candidate pool. These rates describe the mobility chances of the average woman or the average man in the relevant candidate pool in a given establishment. In order to rule out differential self-selection as an alternative explanation, it is necessary to identify the relevant candidate pool with some care. Defining the pool too broadly may include individuals who in fact selected themselves out of the running for the position. Circumscribing it too narrowly may exclude individuals who actually intended to compete for the position but were informally screened out by the employer prior to the formal decision. In either case, analyses are likely to misrepresent women’s (and men’s) mobility prospects.

Ideally, the candidate pool for a promotion into a given position in a given year should be defined to include all individuals who entered the relevant competition at any time and did not subsequently withdraw for purely voluntary reasons. Stated another way, the candidate pool should include both those who were actually considered for the promotion and those who were previously eliminated from contention by the employer, either formally or informally. We conceive of informal elimination by the employer as including ostensibly voluntary withdrawal in anticipation of formal rejection. In contrast, individuals who opt out of the competition without employer pressure do select themselves out of the competition and should not be included in the candidate pool. Of course, it is one thing to define the candidate pool as a theoretical matter and quite another to measure it empirically. Data bearing on individuals’ entrances and exits from the competition for a particular position are likely to be difficult to obtain, or, if obtainable, difficult to interpret. As a result, it will almost always be necessary to estimate the size and composition of the candidate pool. We turn to the specific issues that arise in the case of law firm entry-level hiring, partner promotion, and lateral partner hiring.

**Entry-level hiring.**—For entry-level hiring decisions, the key difficulty lies in knowing who has chosen to enter the relevant external pool. According to our reasoning above, this pool should include both individuals
who applied or otherwise indicated interest in being considered for a particular position and those who would have done so had they not been prevented or discouraged from doing so by the firm. Unless the researcher has access to an organization’s personnel records, however, it is rarely possible to know much about the individuals who formally applied, let alone individuals who were discouraged from applying. One approach to this problem is to assume that the characteristics of the candidate pool reflect those of the broader pool from which candidates are drawn. For example, in a study of managerial hiring and promotion in California savings and loan associations, Cohen et al. (1998) controlled for the sex composition of the external pools of managers employed in the California thrift industry at and below the focal job level. Two arguments weigh in favor of this approach. First, organizations often shape the demographic composition of their applicants through their choice of recruiting methods (Braddock and McPartland 1987; Reskin and McBrier 2000). Individuals who would have applied had they learned of the opportunity, but did not because the employer relied on informal referrals or targeted formal notices to specific audiences, can be viewed as having been eliminated by the employer before they could select themselves in. As a result, the sex composition of the pool of potential candidates may actually better reflect the composition of the true candidate pool, as defined above, than does the sex composition of actual applicants. Second, there will often be no strong reasons to expect that women or men are disproportionately attracted to different employers. Gender differences in job-attribute preferences are small and declining over time (Konrad et al. 2000). If researchers believe that certain organizational characteristics (e.g., part-time employment policies) may hold a different appeal for men and women, it will often be possible to control for measures of these characteristics in multivariate statistical models, as we do in this study (see also Gorman 2005).

In the case of hiring into entry-level professional and managerial jobs, the relevant external pool usually consists of graduating students in the colleges or professional schools where organizations recruit new employees. Thus, we use the pool of students in the law schools where the relevant law office conducted on-campus recruiting. Offices listed these schools in the *NALP Directory*. Data on the numbers of female and male students enrolled in each law school come from *The Official Guide to U.S. Law Schools* (Law School Admissions Council 1995, 1996). We assume that the overall sex composition of a law school in the fall of 1994 closely approximates the sex composition of that school’s graduating class in that year. Law school sex composition did not change dramatically from year to year in the mid-1990s (Cronbach’s $\alpha$ for the average of 1994–95 and 1995–96 is 0.89).
lishment, we summed the numbers of female and male students, respectively, at the relevant schools.¹⁵

**Partnership positions: promotions.**—In the case of partnership positions filled through internal promotion, the central difficulty lies in identifying exits from the candidate pool—in particular, in distinguishing between employees who voluntarily withdrew from the competition for promotion in order to pursue a preferred alternative and those who withdrew because they anticipated formal rejection by the employer. It is almost never possible to know the motives of those who ostensibly leave voluntarily—that is, those who are not fired or laid off. They may be voluntarily choosing to pursue more attractive opportunities, or they may be responding to their employers’ negative hints.

In the case of corporate law firms, most departures during the first, second, and third years of the partnership track are probably motivated by a desire to pursue other career paths. Many law school graduates who take jobs with corporate law firms intend to stay only long enough to repay education loans and gain what they hope will be valuable experience. Others decide to give big-firm life a try; if it is not for them, they are likely to reach this conclusion by the end of the third year. The third and fourth years are also when associates reach their peak marketability: they have gained sufficient skills to be productive but are not as expensive as more senior associates and are more willing to move without an assurance of future promotion to partnership (Kimball 1997; Davis 2000). Moreover, firms generally do not encourage associates to leave before the end of the third year, except in the cases of manifest incompetence or misconduct. At about this point, associates begin to be profitable for firms, and firms hope to reap returns on their early-year investments in associate training (Ginsburg and Wolf 2003).

In contrast, departures in the fourth and later years of the partnership track are more likely to reflect associates’ discouragement about partnership prospects (Noonan and Corcoran 2004). The process of selecting candidates for promotion to partnership spans several years during which associates are evaluated and screened (Wilkins and Gulati 1996, 1998; Reichman and Sterling 2002). Law firms generally begin serious evalu-

¹⁵ In the case of 69 establishments that did not provide the names of the law schools where they conducted on-campus recruiting in 1994–95, we imputed either (1) a value equal to the sex composition of law schools visited in 1995–96 less the mean difference between law school sex composition in the two years, or, if 1995–96 data were not available for the establishment, (2) the mean value of the sex composition variable in 1994–95. This affected 208 of 4,401 entry-level vacancies. Supplementary analyses excluding these cases yielded almost identical results. In supplementary analyses where these cases were included and flagged with a dichotomous variable, the dichotomous variable failed to reach statistical significance.
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Evaluation of associates’ partnership prospects at about the fourth year of the partnership track. Firms communicate these evaluations to associates, both formally in annual performance reviews and informally through the allocation of more and less desirable assignments. Associates who perceive their promotion chances as slim often leave their firms in the fourth, fifth, or later years of the partnership track, preferring not to wait for a formal rejection for partnership (Davis 2000). The turning point at about the fourth year of the partnership track is also reflected in men’s and women’s patterns of attrition from law firm practice. Differences between men’s and women’s departure rates in the first three years are slight. The gap begins to widen in the fourth year, with women’s attrition increasingly exceeding men’s (Noonan and Corcoran 2004).

Accordingly, we identify the cohort of associates considered for promotion to partner in the fall of 1994 (the “focal cohort”) and estimate the numbers of women and men in that cohort at the beginning of that cohort’s fourth year.¹⁶ We begin with the length of each office’s partnership track, which allows us to identify the year of law school graduation for partnership candidates in 1994–95. Thus, if the track was five years long, the cohort considered for promotion in 1994–95 graduated from law school in 1989; if the track was six years long, the cohort graduated in 1988; if it was seven years long, the cohort was from the class of 1987, and so on.

Although our data include the observed total number of associates in each establishment in the fall of 1994, neither the *NALP Directory* nor the *Martindale-Hubbell Law Directory* indicates the numbers of male and female associates in specific cohorts. However, a separate NALP survey of 154 corporate law firms (NALP Foundation for Research and Education 1998) reports the numbers of men and women hired by those firms from the classes of 1988 through 1996 and the average cumulative attrition rates for these men and women over the nine years following law school graduation (in other words, the percentages of men and women who had left by the end of the first year, by the end of the second year, by the end of the third year, and so on). We assign the class of 1988 attrition rates to the classes of 1985, 1986, and 1987.¹⁷ Based on this information, we

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¹⁶ Because the length of the partnership track varies across firms, the focal cohort’s fourth year may have occurred in one of several possible calendar years.

¹⁷ Associate attrition rates tend to fluctuate in response to the ups and downs of the economy, but the U.S. economy was relatively stable and strong throughout the period from 1985 to 1996 (with the exception of a brief downturn in 1991–92). Consistent with this point, the NALP’s survey results indicate that associate attrition rates were relatively stable across the classes of 1988–96, with a slight increasing trend; for example, men’s attrition at the end of the second year was 23.5% for the class of 1988 and 27.6% for the class of 1995, while the corresponding figures for women were 27.3%
estimate the proportions of the female and male associates employed in the average law firm in the fall of 1994 who entered the firm in each of the cohorts from 1985 through 1994. We then multiply these proportions by the total numbers of female and male associates in each establishment in the fall of 1994. This procedure yields estimates of the numbers of women and men in each cohort in each establishment, including the focal cohort. We then use the NALP’s average male and female attrition rates for each year for the focal cohort to work backward from the numbers of men and women in that cohort in the fall of 1994 to an estimate of the numbers of men and women at the beginning of the focal cohort’s fourth year.

Partnership positions: hires.—For partnership positions filled through external or lateral hiring, we take an approach similar to the one used for entry-level positions and focus on the external pool of potential candidates. The pool of potential candidates for a lateral partner position consists primarily of partners in other law firms in the same metropolitan area or the same state. Although the practice of most corporate law firms is now national and international in scope, individual lawyers often remain locally based, because movement would often entail the loss of important human and social capital. Because lawyers are licensed to practice at the state level in the United States, movement from one state to another requires familiarization with a new set of state laws and admission to a new state’s bar. In addition, it is important for lawyers to remain

and 30.4%. Thus, it seems reasonable to assume that attrition rates for the classes of 1985–87 were similar to those for the class of 1988. If anything, attrition for the earlier classes may have been lower. Thus, we may slightly overestimate self-selection, leading to more conservative estimates of promotion rates.

18 These proportions depend on the length of the establishment’s partnership track. If the track was five years long, only the classes of 1989–94 are included; if the track was six years long, the classes of 1988–94 are included, and so on. If the track was nine years long, all classes from 1985 to 1994 are included.

19 For example, suppose that in a given establishment, the seventh-year cohort was eligible for promotion in 1994–95 and there were four men remaining in that cohort in that year. In the NALP survey, average male associate attrition for that cohort between the beginning of the fourth year and the beginning of the seventh year was 45%. We would estimate that the number of men in that cohort at the beginning of their fourth year was \( \frac{4}{(1 - 0.45)} \approx 7 \). When the estimated number of men or women was less than the number actually promoted, we substituted the latter number (\( n = 175 \) establishments).

20 Among lateral partners who joined the 200 largest U.S. firms in 2000 and 2001, 89% moved from other firms; the remainder came from corporate legal departments, government, and other types of organizations. Ninety-four percent of lateral partner moves took place within a single metropolitan area; among the remaining moves, 26% took place within the same state (these figures are based on our analysis of the American Lawyer Media file “2000–2001 Lateral Partner Moves,” available at http://www.alresearchonline.com).
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close to the industries and clients that they serve or to legal forums where they have special expertise and contacts. Lawyers who represent Wall Street investment banks are likely to stay in New York City, while those with proficiency in dealing with U.S. federal agencies can be expected to remain in Washington, D.C.

To estimate the numbers of women and men in each office’s lateral partner candidate pool, we use the numbers of female and male partners in the other sample offices in the focal metropolitan area (or, if there were fewer than three sample offices in a given metropolitan area, in the focal state). Because few lawyers move from the personal sector of the bar to the corporate sector (Heinz and Laumann 1982; Heinz et al. 2006) and most corporate law firms are listed in the NALP Directory, this approach should provide reasonably plausible measures. However, it is likely that these numbers undercount the numbers of men and women in establishments’ lateral candidate pools by some extent, and thus the hiring rates we report should be interpreted with caution. Nevertheless, as there is no reason to suspect that undercounting differentially affects men or women, our approach should provide roughly accurate ratios of female and male hiring rates, thus allowing us to compare women’s and men’s hiring success. As a check on our measurement strategy, we compared our statewide numbers of male and female partners to statewide numbers of male and female lawyers age 40 and over employed in firms of more than 50 lawyers in 1995, obtained from the Lawyer Statistical Report compiled by the American Bar Foundation (Carson 1999). The two sets of numbers were correlated at .93 for women and .99 for men. We also calculated lateral partner hiring rates using the Lawyer Statistical Report’s statewide numbers. The ratios of female and male hiring rates calculated using this alternative method were highly similar to those we present here (results available on request).

Multivariate Analyses

For more complex analyses, we estimate multilevel logistic regression models to predict the probability that a selection decision results in the selection of a woman. Our data raise two issues that require careful consideration: the choice of unit of analysis and the use of multilevel modeling. We discuss these issues before turning to descriptions of measures.

21 The American Bar Foundation periodically issues Lawyer Statistical Reports reporting numbers and descriptive statistics on the U.S. legal profession at the national and state levels. The report covering 1995 presents numbers and statistics on lawyers in private practice, broken down by age (less than 40, 40 and over) and firm size (solo, 2–20 lawyers, 21–50 lawyers, and 51 or more lawyers).
Unit of analysis.—Most previous research exploring the relationship between organizational level and unequal mobility has treated persons as the unit of analysis and modeled individual promotion probabilities or hazard rates (e.g., DiPrete and Soule 1988; Petersen and Saporta 2004). An alternative approach is to treat selection decisions as the unit of analysis and estimate the probability that decision makers select a candidate with a specific characteristic, such as sex, to fill the vacancy (e.g., DiPrete and Soule 1986; Cohen et al. 1998; Phillips and Sørensen 2003). We have opted for the latter strategy.22

Although the person-based approach has the advantage of modeling the ultimate outcome of interest to job candidates—their probability of hire or promotion—it also has important disadvantages. As we noted above, the question of interest is whether and to what extent decision makers’ propensity to select women for job openings declines at higher organizational levels. The person-based approach does not model this propensity directly, but instead models a consequence of this propensity—the individual probability of mobility. However, the individual probability of mobility is also influenced by the number of openings in the relevant time period, the number of competitors for each position, and decision-maker preferences for characteristics other than gender (Stewman and Konda 1983). As a result, the modeling task becomes quite complicated. The process of interest here—how organizational rank affects decision-maker gender preference—would have to be modeled by an interaction between hierarchical level and respondent gender. The inclusion of job and establishment characteristics as control variables would require further interactions with respondent sex. Regression coefficients would be difficult to interpret and would also likely be affected by multicollinearity.23

In contrast to the person-based approach, the decision-based analytical strategy focuses directly on the outcome of interest—decision-maker pro-

Law firms generally do not have vacancies in the strict sense of a preexisting role with well-defined responsibilities that has been vacated by a previous incumbent. However, like academic departments, they generally do not hire or promote individuals unless they have identified needs for those individuals to fill. In this article, we use the term vacancy in this looser sense. In the case of entry-level hiring and partner promotion, for example, openings exist when the demand for the firm’s services is expected to provide work for lawyers to do and the firm’s revenues are expected to be sufficient to support them. Similarly, in the case of lateral partner hiring, firms typically seek new partners in order to fill identified gaps in their practices, even though the new partners may be expected to bring clients with them.

In the conclusion to this article, we suggest exploration of how the increasing-disadvantage model varies with a number of organizational characteristics as a promising direction for future research. With a person-based modeling strategy, such analyses would require three-way interactions.
pensity to select women or men. Formulating a model thus becomes more straightforward. The process of theoretical interest here can be represented as a simple effect of decision type—entry-level hiring, partner promotion, or partner hiring—on the probability that a woman is chosen for the job. Features of both decisions and establishments can be included without the need for interactions.

A person-based modeling strategy also raises difficulties for the use of multilevel modeling (see discussion below). Multilevel modeling could be used to analyze individual probabilities of promotion for lawyers already employed within establishments, but it cannot be used to assess probabilities of hire. Although current employees are clearly clustered within law firm offices, candidates for hire are not. In the case of entry-level hiring, because many law offices interview at the same law schools, establishments’ candidate pools overlap extensively. In the case of partner hiring, firms in the same metropolitan area or state largely draw on the same candidate pool. The decision-based approach does not encounter this problem. Selection decisions at both the entry and partnership levels are uniquely nested within establishments.

Multilevel modeling.—Because of the nested structure of the data, we estimate two-level hierarchical logistic models. Multilevel modeling is desirable when lower-level units are clustered within higher-level units (Guo and Zhao 2000; Raudenbush and Bryk 2002). In that case, observations from the same cluster tend to be more alike than observations from different clusters. A standard single-level logistic regression model, which assumes that cases are independent, is then likely to produce imprecise parameter estimates and incorrect standard errors (DiPrete and Forristal 1994; Guo and Zhao 2000). Hierarchical models avoid these problems through the simultaneous estimation of micro- and macrolevel equations.

At the level of the selection decision, we model the probability that firm decision makers select a woman to fill the vacancy in question. Specifically, if $\pi_{ij}$ is the probability that vacancy $i$ in establishment $j$ is filled by a woman, our level-1 model is expressed as

$$\log \left( \frac{\pi_{ij}}{1 - \pi_{ij}} \right) = \beta_{0j} + \beta_{1j}X_{1ij} + \beta_{2j}X_{2ij} + \ldots + \beta_{kj}X_{kij},$$

where $\beta_{0j}$ is the intercept within the establishment $j$, and the coefficients $\beta_{1j}$ through $\beta_{kj}$ represent the net effects of the $k$ decision-level predictors

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24 Establishments are also nested within firms, which may have offices in multiple cities or countries. However, preliminary three-level analyses indicated no substantial further variation at the firm level.
in establishment \( j \). At the establishment level, we are interested in predicting variation across establishments in the intercept of the decision-level model. Accordingly, the level-2 model is expressed as

\[
\beta_{0j} = \gamma_{00} + \gamma_{01}W_{0j} + \gamma_{02}W_{1j} + \ldots + \gamma_{0q}W_{qj} + u_{0j},
\]

where \( u_{0j} \) represents a disturbance term that accounts for all unobserved establishment characteristics. In the model of the decision-level intercept \( \beta_{0j} \), \( \gamma_{00} \) is the intercept, and \( \gamma_{01} \) through \( \gamma_{0q} \) are the net effects of the \( q \) establishment-level predictors on \( \beta_{0j} \). The level-1 and level-2 models can be combined by substituting the level-2 model into the level-1 model:

\[
\log \left( \frac{p_{ij}}{1 - p_{ij}} \right) = \gamma_{00} + \gamma_{01}W_{0j} + \gamma_{02}W_{1j} + \ldots + \gamma_{0q}W_{qj} + \beta_{ij}X_{ij} + \beta_{2j}X_{2ij} + \ldots + \beta_{kj}X_{kj} + u_{1j}.
\]

All of the continuous predictors are centered around their grand means at the appropriate level, while binary indicator variables are uncentered (see Raudenbush and Bryk 2002, pp. 32–33). Thus, the intercept of the combined model can be interpreted as the logarithm of the odds that a woman is selected to fill a position when all continuous predictor variables are at their means and all binary variables are equal to zero.

Several methods are available for estimating multilevel models. We chose to estimate our models using adaptive Gauss-Hermite quadrature, a procedure that yields more accurate estimates than other commonly used methods when the response is dichotomous and the cluster sizes are relatively small (Rabe-Hesketh, Toulopoulou, and Murray 2001; Rodriguez and Goldman 2001).\(^\text{25}\) In our data, the average cluster size is 8.67, and nearly half of the clusters (\( n = 374 \)) comprise five or fewer level-1 units.

**Measures.**—The dependent variable in our multivariate models is a binary indicator coded 1 if a woman was selected for the position and 0 if a man was selected. The principal independent variables are two binary indicators coded 1 if the selection decision was a partner promotion or a lateral partner hire, respectively, and 0 if it was an entry-level hire.

We include a number of control variables at both level 1 and level 2. We opted to include a control variable when it could conceivably be correlated with the type of selection decision and it could also affect that firm’s propensity to select women—or because it influences decision makers’ gender preferences or because it affects male and female candidates’ relative inclination to seek the position. At the selection decision

\(^{25}\) We used the **xtlogit** procedure in the Stata statistical software package.
level, the most important control variable is the \textit{\%female in the relevant candidate pool}, which we calculate using the numbers of women and men discussed in the preceding section. We also include the \textit{number of vacancies} for the relevant type of selection decision (entry-level hire, partner promotion, partner hire). According to queuing theory, women stand behind men in employers’ “labor queues” for filling jobs (Reskin and Roos 1990). Because employers with more jobs to fill may be more likely to exhaust the supply of qualified male candidates and be obliged to move deeper into their labor queues, the chances that a woman is selected for a given job may be higher when there are more openings. In most establishments, there are more openings for entering associates than for either partner promotions or partner hires.

Firms may feel greater desire or pressure to select women when they have experienced a larger number of departures by female employees, even though law offices do not typically hire or promote new associates or partners as direct replacements for particular departing associates or partners. It is reasonable to believe that the overall numbers of departing female associates and partners, respectively, influence decision makers’ perceptions of the need to hire women at the relevant levels. For example, firms that have experienced female departures may fear that they will be seen as “unfriendly” to women. We measure the extent of this pressure on organizational decision makers with the \textit{number of female departures per vacancy}—departures of female partners for the analysis of vacancies at the partner level and of female associates for vacancies at the entry level. Unfortunately, we only have information on contemporaneous female departures (occurring between the fall of 1994 and the fall of 1995). This measure overlaps, but is probably not coextensive, with the number of departures that decision makers knew of when making hiring and promotion decisions. Decision makers could have been affected by departures in the prior year, and they may not have anticipated some of the contemporaneous departures.\footnote{In supplementary models, we also attempted to control for compensation at level 1 by including a measure that reflected associate starting salary for entry-level vacancies and partner profit for partner vacancies. Conceptually, although they are not co-terminous, the meanings of status and compensation substantially overlap. In professional and managerial positions, especially, where pay levels are often well above what is needed to live comfortably, pay becomes a signifier of competence and worth and therefore a measure of status (see, e.g., Roth 2006, pp. 36–38). Mirroring this conceptual overlap, logged compensation was so highly correlated with associate/partner status ($r = .95$) that it was impossible to distinguish the effects of compensation and decision type in multivariate analyses.}

At the establishment level, two dichotomous variables tap whether an establishment’s \textit{part-time work policy} permitted part-time work on a case-
by-case basis or made it available to all lawyers (coded 1 if yes, 0 if no; establishments in the reference category did not allow part-time work). An additional binary variable indicates whether the establishment’s benefits included paid family-related leave (coded 1 if yes, 0 if no). Although sex segregation across fields of legal practice is low (Jacobs 1989; Epstein et al. 1995; Gorman 2005), we nevertheless control for the proportion of each establishment’s lawyers working in each of three broad areas that are sometimes perceived as gender typed: litigation (masculine), business transactions law (masculine), and people-oriented fields, such as family law, trust and estate law, and employment law (feminine) (see Epstein 1993; Pierce 1995). Three dichotomous variables represent minimum client-billable hours requirements of up to 1,800 hours per year, 1,801 to 1,900 hours per year, and more than 1,900 hours per year, respectively (coded 1 if yes, 0 if no; the reference category is no minimum billable hours requirement).

Men might be more attracted to a position (or decision makers might consider men more suitable for a position) when compensation is higher (see Kmec 2006). We therefore include a measure of the starting salary offered to entry-level associates. Because salary levels vary widely across cities, we subtracted the mean starting salary for offices in the relevant city to yield a measure of the law office’s relative standing as a high- or low-paying employer in its local labor market. Differences in starting salary broadly reflect differences in compensation for more senior associates and partners as well, although variability across establishments increases at higher levels of pay.

Because there is some evidence that women care more than men do about altruistic work values (Marini et al. 1996), we include a variable coded 1 if the office exhibited a strong commitment to charitable pro bono work in its responses to the NALP Directory survey, 0 otherwise. We considered establishments to be strongly committed to pro bono if they had implemented at least two of several possible pro bono policies or practices.27 Organizational size is tapped by two measures: establishment size (the number of lawyers in the establishment as reported in the 1996

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27 Sample policies and practices included signing the American Bar Association’s Pro Bono Challenge, which committed the office to devoting at least 3% of attorney hours to pro bono; independently committing to devote at least 3% of attorney hours to pro bono; requiring individual attorneys to devote at least 3% of their hours or 50 hours per year to pro bono; giving billable-hour credit for a minimum of 3% of attorney hours or 50 hours per attorney per year devoted to pro bono; establishing a pro bono coordinator or committee that actively arranges for pro bono work; having a formal arrangement with one or more bar or charitable organizations for bringing in pro bono work; staffing the office’s own pro bono legal clinic; and winning an award for pro bono work from a bar association or charitable group.
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NALP Directory) and whether the establishment is part of a national or international firm based on the geographic dispersion of the firm’s offices. A dichotomous variable indicates the presence of a two-tier partnership scheme in an establishment (coded 1 if present, 0 otherwise). Two-tiered firms have both equity partners and a lower tier of nonequity partners; such firms are likely to have more partner openings and may also be more likely to select women. Dichotomous variables indicating geographical region (Northeast, South, West, and Midwest) were included to tap regional variation in gender role attitudes and economic conditions. Finally, to capture the influence of female partners on hiring and promotion decisions, we include \%female among existing partners in the fall of 1994.

RESULTS
Women’s Representation and Mobility Rates
In the mid-1990s, law firms exhibited a pattern of decreasing female representation at higher organizational levels. Table 2 outlines that pattern across the establishments in the sample. Women constituted 43% of the pool of students at the law schools where the average law firm office recruited new employees. In the average establishment, women’s representation dropped slightly to 39% among new entry-level associates and held steady at 39% among all associates. Women’s presence declined noticeably to 25% among newly promoted partners and fell further to only 14% of the entire partnership.

However, declining female representation at higher hierarchical ranks is not in itself sufficient to infer a pattern of increasing female disadvantage in mobility (Baxter and Wright 2000). Accordingly, we turn to our examination of men’s and women’s mobility rates. Table 3 compares women’s and men’s mobility rates across establishments. Entry-level hiring rates for both women and men are quite low, which is to be expected

\[\text{Results were essentially unchanged in supplementary models that replaced the measure of national or international scope with a measure of firm size (the total number of lawyers in all firm offices) or the (logged) 1995 gross revenues of the firm, as reported by American Lawyer magazine. American Lawyer publishes an annual ranking of the top 100 U.S. law firms by revenues, modeled after the Fortune 500 for business corporations. Unlike publicly held corporations, law firms are not required to make their revenues and profits public; nevertheless, according to the magazine’s annual description of its methodology, most firms provide their financial numbers voluntarily. We used regression imputation to impute values to establishments not in the American Lawyer 100.}\]

\[\text{Supplementary analyses showed that the effects of the selection-decision-type indicators do not vary across single-tier and two-tier partnerships.}\]
### TABLE 2
Proportion Female among Law Students and Lawyers across Law Firm Establishments, 1994–95

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
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<tr>
<td>Law students at schools where establishment recruited</td>
<td>.43</td>
<td>.02</td>
<td>.38</td>
<td>.43</td>
<td>.43</td>
<td>.44</td>
<td>.55</td>
<td>796</td>
</tr>
<tr>
<td>Entry-level associates</td>
<td>.39</td>
<td>.30</td>
<td>0</td>
<td>.17</td>
<td>.40</td>
<td>.56</td>
<td>1</td>
<td>715</td>
</tr>
<tr>
<td>All associates</td>
<td>.39</td>
<td>.12</td>
<td>0</td>
<td>.33</td>
<td>.39</td>
<td>.46</td>
<td>1</td>
<td>796</td>
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<tr>
<td>Newly promoted partners</td>
<td>.25</td>
<td>.32</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.43</td>
<td>457</td>
</tr>
<tr>
<td>Newly hired partners</td>
<td>.16</td>
<td>.31</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>.20</td>
<td>475</td>
</tr>
<tr>
<td>All partners</td>
<td>.14</td>
<td>.09</td>
<td>0</td>
<td>.08</td>
<td>.13</td>
<td>.17</td>
<td>1</td>
<td>796</td>
</tr>
</tbody>
</table>

### TABLE 3
Women’s and Men’s Mobility Rates in Law Firm Establishments, 1994–95

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>Max</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry-level hiring:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>.002</td>
<td>.002</td>
<td>0</td>
<td>.000</td>
<td>.001</td>
<td>.003</td>
<td>.027</td>
<td>715</td>
</tr>
<tr>
<td>Men</td>
<td>.002</td>
<td>.002</td>
<td>0</td>
<td>.001</td>
<td>.001</td>
<td>.003</td>
<td>.040</td>
<td>715</td>
</tr>
<tr>
<td>Partnership promotion:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>.334</td>
<td>.397</td>
<td>0</td>
<td>0</td>
<td>.691</td>
<td>1</td>
<td>457</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>.584</td>
<td>.342</td>
<td>0</td>
<td>.300</td>
<td>.984</td>
<td>1</td>
<td>457</td>
<td></td>
</tr>
<tr>
<td>Lateral partner hiring:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>.009</td>
<td>.056</td>
<td>0</td>
<td>0</td>
<td>.002</td>
<td>1</td>
<td>475</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>.005</td>
<td>.011</td>
<td>0</td>
<td>.000</td>
<td>.004</td>
<td>.107</td>
<td>475</td>
<td></td>
</tr>
</tbody>
</table>

Note.—Rates represent the ratio of the number of women or men hired or promoted in 1994–95 to the number of women or men, respectively, in the appropriate candidate pool, as described in the text.

given the large pools of potential candidates. However, it is clear that women’s and men’s entry-level hiring rates are approximately equal in the average law firm office. Women’s and men’s entry-level hiring rates are also roughly equal at the twenty-fifth, fiftieth, and seventy-fifth percentiles of the two distributions. In contrast, the average promotion rate for women is only a little more than half of the average promotion rate for men. Moreover, more than half of the establishments in the sample promoted no women at all, although more than three-quarters promoted at least one man.

As we noted above, the figures on lateral partner hiring rates should
be interpreted with caution, due to the likely undercounting of potential lateral candidates. Nevertheless, the results here suggest certain patterns. Lateral partner hiring is less common than the other two types of selection decisions, with more than 25% of establishments hiring no male lateral partners and more than half hiring no female lateral partners. The average partner hiring rate for women is actually higher than that for men, but it is clear that this average is pulled up by a few establishments with especially high female hiring rates. Inspection of the data revealed that these offices are located in relatively small legal markets such as Harrisburg, Pennsylvania, and Jacksonville, Florida, where the pool of law firm partners—and especially female law firm partners—is quite small.

Whereas table 3 compares women’s and men’s mobility rates across the entire sample of establishments, table 4 presents ratios of women’s and men’s mobility rates in the same establishment. Because ratios with a denominator of zero are undefined, it is necessary to make choices concerning the treatment of offices where either the female or male mobility rate is zero. Given that the women’s rate was zero far more frequently than the corresponding men’s rate, we lose far fewer cases if we use the men’s mobility rate as the denominator. Thus, the table first presents ratios based on the subsamples of offices where at least one man was selected. Here, in an establishment where the ratio of female to male entry-level hiring rates is at its mean, the two rates are approximately equal. In contrast, when the ratio of female to male promotion rates is at its mean, the female rate is only half the male promotion rate. In an establishment where the ratio of female to male lateral partner hiring rates is at its mean, the female rate is approximately three-quarters of the male rate.

An alternative approach is to examine ratios of mobility rates in the smaller subsamples of establishments where both the men’s and women’s selection rates were greater than zero. Among establishments that hired both men and women into entry-level positions, when the ratio of female to male entry-level hiring rates is at its mean, the women’s rate actually exceeds the men’s rate by almost one-third. Among establishments that promoted both women and men to partnership, the average female-to-male ratio of promotion rates still slightly favors women, but it is lower than the entry-level ratio. Finally, in the average establishment that hired both women and men as lateral partners, the ratio is substantially higher than the entry-level hiring ratio. Comparison of the two sets of results in table 4 makes clear that the increasing-disadvantage pattern exhibited in the first set stems primarily from offices that select no women at all for open positions. Taken together, these numbers suggest that Baxter and Wright’s (2000) criterion for discerning an increasing-disadvantage pattern is met across the sample of law firm offices in the case of promotion:
the ratio of the probability of women’s mobility, relative to men’s, declines as hierarchical level increases. In the case of external partner hiring, we observe a weaker increasing-disadvantage pattern across the sample if establishments that hired no women are included; this pattern is reversed if we examine only establishments that hired both men and women.

Finally, in table 5, we explore whether the same patterns of increasing or decreasing disadvantage hold within establishments by examining differences between ratios of men’s and women’s mobility rates in the same establishment. Again, we first present figures based on the subsamples where men’s rates were greater than zero (that is, including cases where women’s rates equaled zero). The size of the subsamples declines here because only 347 establishments hired at least one man at the entry level and promoted at least one man to partner, and only 355 establishments hired at least one man at the entry level and hired at least one male lateral partner. On average, women’s mobility rate relative to men’s falls by approximately 53 percentage points from entry-level hiring to partnership promotion. Moreover, the difference between women’s relative promotion rate and relative entry-level hiring rate is negative in 60% of establishments. Women’s rate of lateral partner hiring, relative to men’s, is roughly 21 percentage points less than their relative entry-level hiring rate, on average; the difference is negative in 66% of establishments.

Table 5 next presents corresponding differences based on the subsamples where both men’s and women’s rates were greater than zero. The
Women’s Organizational Mobility

TABLE 5
DIFFERENCES BETWEEN RATIOS OF WOMEN’S AND MEN’S MOBILITY RATES IN THE SAME ESTABLISHMENT

<table>
<thead>
<tr>
<th>Difference</th>
<th>Mean</th>
<th>Min</th>
<th>25th Percentile</th>
<th>Median</th>
<th>75th Percentile</th>
<th>Max</th>
<th>% Where Diff. &lt; 0</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on subsamples where men’s rates &gt; 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vs. entry-level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hiring ratios</td>
<td>−.529</td>
<td>−9.614</td>
<td>−1.013</td>
<td>−.338</td>
<td>.111</td>
<td>3.503</td>
<td>60</td>
<td>347</td>
</tr>
<tr>
<td>Lateral partner hiring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vs. entry-level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hiring ratios</td>
<td>−.211</td>
<td>−7.521</td>
<td>−1.299</td>
<td>−.608</td>
<td>0</td>
<td>13.855</td>
<td>66</td>
<td>355</td>
</tr>
<tr>
<td>Based on subsamples where both men’s and women’s rates &gt; 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vs. entry-level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Lateral partner hiring</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vs. entry-level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hiring ratios</td>
<td>2.356</td>
<td>−7.201</td>
<td>−.613</td>
<td>2.175</td>
<td>4.512</td>
<td>13.856</td>
<td>21</td>
<td>67</td>
</tr>
</tbody>
</table>

size of the subsamples drops further here; as a result, we interpret these numbers with some caution. Only 145 establishments hired both men and women at the entry level and promoted both men and women to partnership. In the average office where this occurred, women’s mobility rate, relative to men’s, fell by 17 percentage points from entry-level hiring to partnership promotion, and the difference was negative in half of the cases. Only 67 offices hired both men and women at the entry level and hired both male and female lateral partners. Among these offices, on average, women’s relative hiring rate was more than 200 percentage points higher at the lateral partner level than at the entry level. Taken together, the results in table 5 provide evidence that the increasing-disadvantage model holds within establishments in the case of promotion.

In the case of external hiring, we observe a weaker increasing-disadvantage pattern within establishments, just as we did across establishments, if we include establishments that hired no women. We observe an opposite pattern of improvement in women’s relative prospects when we exclude those establishments.

Multivariate Analyses
We now turn to the analysis of decision makers’ propensities to select
women for positions at different levels of the law firm hierarchy. Table 6 reports descriptive statistics for the level-1 variables used in the multivariate analyses, by type of selection decision. For the average law firm office, women represented 43% of the candidate pool for entry-level hires, 36% of the candidate pool for partnership promotions, and 14% of the candidate pool for lateral partner hires.

Table 7 reports descriptive statistics for level-2 variables. The characteristics of law offices in the sample clearly mark them as members of the corporate market segment of the legal profession. The average office has approximately 86 lawyers, and only 10% of its practice is devoted to serving the needs of individuals rather than businesses. Sixty percent of offices are part of national or international firms.

Table 8 presents estimates from multilevel logistic regression models. Model 1 is a baseline model including only the control variables at both level 1 and level 2. Model 2 includes only the indicators for partner promotions and partner hires (the omitted category is entry-level hires). Model 3 introduces control variables at the level of the selection decision, and model 4 adds control variables at the level of the law firm office. We present odds ratios as well as coefficients to aid interpretation of the results.

The coefficient for the partner promotion indicator is negative and significant across the three models that include it. Because the reference category is entry-level hires, these results indicate that the probability that a woman is selected is significantly lower in the case of partner promotions than in the case of entry-level hires. The magnitude of the negative effect diminishes substantially when the sex composition of the candidate pool is controlled in model 3, but the odds that a woman is selected for promotion are still considerably less than the corresponding odds in the case of entry-level hiring. When establishment-level controls are entered in model 4, the coefficient for promotion to partner becomes slightly more negative.

The coefficient for the partner hire indicator is sharply negative in the model without controls. However, inclusion of the sex composition of the candidate pool causes the coefficient to become significantly positive in

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Our data raised the possibility of sample selection bias because the outcome—whether a woman was selected—is not observed when an establishment made no selection at all (i.e., had no vacancy). Although we doubted that the propensity to select a woman for a vacancy was correlated with the propensity to have one or more vacancies, we investigated this possibility with a Heckman-style supplementary model. We first estimated a probit model of the probability that an establishment had at least one vacancy; then, we included the nonselection hazard (or “inverse Mills ratio”) in our principal equation. Results were almost unchanged, and the coefficient for the nonselection hazard was not statistically significant.
### TABLE 6
**Means, Standard Deviations, and Ranges of Level-1 Variables Used in the Multivariate Analyses, by Type of Selection Decision**

<table>
<thead>
<tr>
<th>Selection-Decision Characteristic</th>
<th>ENTRY-LEVEL HIRES (n = 4,401)</th>
<th>PARTNER PROMOTIONS (n = 1,291)</th>
<th>LATERAL PARTNER HIRES (n = 1,208)</th>
</tr>
</thead>
<tbody>
<tr>
<td>%female in candidate pool ..........</td>
<td>43.37 (1.36) 37.53–55</td>
<td>35.52 (10.25) 0–100</td>
<td>13.75 (3.06) 2.22–32.17</td>
</tr>
<tr>
<td>No. of vacancies ....</td>
<td>13.10 (10.64) 1–53</td>
<td>4.51 (2.86) 1–14</td>
<td>5.73 (6.27) 1–31</td>
</tr>
<tr>
<td>No. of female departures per vacancy ..........</td>
<td>.59 (.53) 0–6.50</td>
<td>.18 (.36) 0–4</td>
<td>.20 (.44) 0–3</td>
</tr>
</tbody>
</table>

### TABLE 7
**Means, Standard Deviations, and Ranges of Level-2 Variables Used in the Multivariate Analyses**

<table>
<thead>
<tr>
<th>Establishment Characteristic (n = 796)</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of establishment lawyers practicing in:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business law</td>
<td>.39</td>
<td>.18</td>
<td>0–1</td>
</tr>
<tr>
<td>Litigation</td>
<td>.36</td>
<td>.16</td>
<td>0–1</td>
</tr>
<tr>
<td>People-oriented law</td>
<td>.10</td>
<td>.12</td>
<td>0–1</td>
</tr>
<tr>
<td>Part-time availability:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available case by case</td>
<td>.38</td>
<td>.49</td>
<td>0, 1</td>
</tr>
<tr>
<td>Available to all</td>
<td>.54</td>
<td>.50</td>
<td>0, 1</td>
</tr>
<tr>
<td>Family leave policy</td>
<td>.63</td>
<td>.48</td>
<td>0, 1</td>
</tr>
<tr>
<td>Minimum billable hours requirement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No minimum</td>
<td>.49</td>
<td>.50</td>
<td>0, 1</td>
</tr>
<tr>
<td>&lt; 1,800 hours</td>
<td>.21</td>
<td>.41</td>
<td>0, 1</td>
</tr>
<tr>
<td>&gt; 1,800 hours but ≤ 1,900 hours</td>
<td>.21</td>
<td>.41</td>
<td>0, 1</td>
</tr>
<tr>
<td>&gt; 1,900 hours</td>
<td>.08</td>
<td>.27</td>
<td>0, 1</td>
</tr>
<tr>
<td>Starting salary less city mean (in US$1,000s)</td>
<td>-.07</td>
<td>4.21</td>
<td>-16.41–22.95</td>
</tr>
<tr>
<td>Pro bono emphasis</td>
<td>.31</td>
<td>.46</td>
<td>0, 1</td>
</tr>
<tr>
<td>%female among existing partners</td>
<td>13.38</td>
<td>8.85</td>
<td>0–100</td>
</tr>
<tr>
<td>Establishment size</td>
<td>85.76</td>
<td>72.93</td>
<td>5–546</td>
</tr>
<tr>
<td>Two-tier partnership</td>
<td>.38</td>
<td>.49</td>
<td>0, 1</td>
</tr>
<tr>
<td>National or international firm</td>
<td>.60</td>
<td>.49</td>
<td>0, 1</td>
</tr>
<tr>
<td>Geographic location:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Midwest</td>
<td>.17</td>
<td>.37</td>
<td>0, 1</td>
</tr>
<tr>
<td>Northeast</td>
<td>.36</td>
<td>.48</td>
<td>0, 1</td>
</tr>
<tr>
<td>South</td>
<td>.21</td>
<td>.41</td>
<td>0, 1</td>
</tr>
<tr>
<td>West</td>
<td>.26</td>
<td>.44</td>
<td>0, 1</td>
</tr>
<tr>
<td>VARIABLE</td>
<td>MODEL 1</td>
<td></td>
<td>MODEL 2</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>Coefficient</td>
<td>Odds Ratio</td>
<td>Coefficient</td>
</tr>
<tr>
<td>Intercept</td>
<td>-.919*** (.161)</td>
<td></td>
<td>-.410*** (.034)</td>
</tr>
<tr>
<td>Selection decision type (reference: entry-level hire):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner promotion</td>
<td>-.662*** (.072)</td>
<td>.52</td>
<td>-.238** (.090)</td>
</tr>
<tr>
<td>Partner hire</td>
<td>-1.389*** (.090)</td>
<td>.25</td>
<td>.527* (.214)</td>
</tr>
<tr>
<td>Decision-level controls:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%female in candidate pool</td>
<td>.050*** (.003)</td>
<td>1.65</td>
<td>.065*** (.007)</td>
</tr>
<tr>
<td>No. of vacancies</td>
<td>.010* (.004)</td>
<td>1.01</td>
<td>-.002 (.003)</td>
</tr>
<tr>
<td>No. of female departures per vacancy</td>
<td>.107* (.053)</td>
<td>1.11</td>
<td>.036 (.055)</td>
</tr>
<tr>
<td>Establishment-level controls:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extent of practice in:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business law</td>
<td>.070 (.202)</td>
<td>1.07</td>
<td>.071 (.202)</td>
</tr>
<tr>
<td>Litigation</td>
<td>.095 (.231)</td>
<td>1.10</td>
<td>.073 (.231)</td>
</tr>
<tr>
<td>People-oriented law</td>
<td>-.268 (.344)</td>
<td>.76</td>
<td>-.268 (.346)</td>
</tr>
<tr>
<td>Part-time availability (reference: no part-time):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available case by case</td>
<td>.282* (.136)</td>
<td>1.33</td>
<td>.267* (.137)</td>
</tr>
<tr>
<td>Available to all</td>
<td>.269* (.136)</td>
<td>1.31</td>
<td>.249* (.136)</td>
</tr>
<tr>
<td>Family-leave policy</td>
<td>-.042 (.064)</td>
<td>.96</td>
<td>-.043 (.064)</td>
</tr>
</tbody>
</table>
Minimum billable hours requirement (reference: no minimum):

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Coefficient</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1,800 hours</td>
<td>.169* (.085)</td>
<td>1.18</td>
<td></td>
<td>.164* (.085)</td>
</tr>
<tr>
<td>&gt; 1,800 hours but ≤ 1,900 hours</td>
<td>.039 (.079)</td>
<td>1.04</td>
<td></td>
<td>.040 (.079)</td>
</tr>
<tr>
<td>&gt; 1,900 hours</td>
<td>- .096 (.106)</td>
<td>.91</td>
<td></td>
<td>- .097 (.106)</td>
</tr>
</tbody>
</table>

Starting salary less city mean (in US$1,000s):

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Coefficient</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 1,800 but &gt; 1,700</td>
<td>-.015* (.008)</td>
<td>.99</td>
<td></td>
<td>-.016* (.008)</td>
</tr>
<tr>
<td>&gt; 1,900 but ≤ 2,000</td>
<td>.125* (.063)</td>
<td>1.13</td>
<td></td>
<td>.126* (.063)</td>
</tr>
</tbody>
</table>

Pro bono emphasis:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Coefficient</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>%female among existing partners</td>
<td>.010* (.005)</td>
<td>1.11</td>
<td></td>
<td>.010* (.005)</td>
</tr>
</tbody>
</table>

Establishment size:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Coefficient</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>National or international firm</td>
<td>-.001* (.000)</td>
<td>.99</td>
<td></td>
<td>-.000 (.001)</td>
</tr>
</tbody>
</table>

Two-tier partnership:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Coefficient</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic location (reference: Midwest):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>.001 (.097)</td>
<td>1.00</td>
<td></td>
<td>.004 (.097)</td>
</tr>
<tr>
<td>Northeast</td>
<td>-.076 (.086)</td>
<td>.93</td>
<td></td>
<td>-.097 (.086)</td>
</tr>
<tr>
<td>West</td>
<td>-.154 (.097)</td>
<td>.86</td>
<td></td>
<td>-.171* (.098)</td>
</tr>
</tbody>
</table>

Intercept variance:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Coefficient</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept variance</td>
<td>.032</td>
<td>.069</td>
<td>.039</td>
<td>.031</td>
</tr>
</tbody>
</table>

Latent ICC:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Coefficient</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latent ICC</td>
<td>.010*</td>
<td>.021**</td>
<td>.012*</td>
<td>.009**</td>
</tr>
</tbody>
</table>

Note.—n of vacancies = 6,900; n of establishments = 796. All continuous variables are centered at the appropriate level. Numbers in parentheses are SEs.

* P < .10 (all two-tailed tests).
* P < .05.
** P < .01.
*** P < .001.
model 3. This effect declines somewhat, but remains positive and significant, when establishment-level controls are included in model 4.

Our results illustrate the importance of controlling the sex composition of the candidate pool in analyses of hiring and promotion. As we expected, this variable has a dramatic effect on the probability that a woman is selected. In both model 3 and model 4, the net odds of a female selection increase by 7% for every percentage-point increase in the representation of women in the candidate pool. Inclusion of the candidate pool sex composition also has a substantial impact on the coefficients for the partner promotion and partner hiring indicators, implying that analyses that omit this variable are likely to be biased. As to other decision-level controls, the number of vacancies at the relevant organizational level and the number of female departures per vacancy show the anticipated positive effects in the baseline model, but these effects lose statistical significance with the inclusion of indicators of selection-decision type.

Turning to establishment-level controls, an office’s share of lawyers in litigation, business transaction law, or people-oriented areas does not affect women’s selection. Women’s mobility prospects are better in offices with part-time policies than in those that do not permit part-time work, but family leave policies do not make a difference. Women are more often selected in offices that impose relatively low minimum billable hours requirements than in those that have no minimum hours requirement. Law offices are more likely to choose women for openings when more of their existing partners are women and when they emphasize pro bono work. Establishments are less likely to choose women when they pay higher starting salaries relative to their local competition, when they are part of a national or international firm, and when they are located in western states (relative to midwestern ones).

With the full set of control variables included, the intraclass correlation (ICC) drops to less than 1%, indicating that there is very little remaining establishment-level variance in the selection of women for vacant positions. When a multilevel model includes a random intercept but no random slopes, the ICC represents the proportion of the unexplained variance accounted for by unobserved characteristics of the level-2 units (Reynolds 2006).31

31 The ICCs reported here are based on the assumption that the binary dependent variable reflects a latent continuous variable (Long 1997; Guo and Zhao 2000). They represent the correlation between $y_{ij}$ and $y_{ij}'$, where $i \neq i'$, and $y_{ij}$ and $y_{ij}'$ are unobserved latent variables underlying $y_{ij}$ and $y_{ij}'$. 

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DISCUSSION AND CONCLUSION

We have pursued two central objectives in this article. First, we sought to develop a theoretical foundation for the proposition that women’s disadvantage in organizational mobility increases as they move higher in organizational hierarchies. While this view has long held intuitive appeal, previous research has not adequately articulated the reasoning supporting it. We argue that fundamental processes—reliance on gender as a proxy for competence, use of sex-labeled roles and gender stereotypes as heuristics to assess candidate suitability for particular roles, and in-group favoritism—lead decision makers to prefer men over women in selection decisions at all levels. The high status, work uncertainty, and traditional male domination of upper-level positions intensify these decision-maker gender biases. In addition, the cumulative effects of repeated biased selection processes can lead to objective gender differences in skills and motivation among candidates for higher-level positions. These processes combine to create an increasing disadvantage for women as they climb organizational hierarchies.

We qualify our argument in two ways. First, scope conditions apply. The increasing-disadvantage pattern is most likely to appear in large organizations, on identifiable job ladders, and where entry-level positions are relatively sex integrated. The scope conditions that we delineate represent contingencies that should produce differences in the relationship between organizational level and women’s mobility across settings. For example, when researchers compare promotion rates for individuals holding jobs in the top rungs of manual or clerical job ladders (where mobility is, by definition, sharply limited) with promotion rates for individuals in the lower rungs of professional or managerial job ladders, they may well observe a greater female mobility disadvantage in the “lower” manual or clerical grades. Second, we contend that women’s relative mobility prospects do not diminish from entry-level hiring to upper-level hiring, at least to the extent that viable candidates for external hire hold comparable positions in similar organizations. In that case, female candidates benefit because the external position serves as a signal of competence and triggers a different subcategory stereotype—the stereotype of “successful” professional or managerial women.

This theoretical framework sets the stage for our second goal: demonstrating an increasing-disadvantage pattern in internal promotion, and the absence of such a pattern in external hiring, in the setting of corporate law firms in the mid-1990s. The driving force behind the relative mobility chances of men and women is organizational decision makers’ propensity to select either male or female candidates. We find that law firms’ propensity to select women declines between entry-level hiring and partner
promotion. This propensity does not diminish, however, between entry-level hiring and lateral partner hiring; indeed, it appears to increase.

In our research context—corporate law firms—employees perform a particular type of professional work in organizations with relatively simple career structures. Other settings, such as large business corporations or government agencies, may involve more diverse forms of work and more multifaceted career trajectories. Within the scope conditions we identify, we expect that the same patterns hold in these more complex settings. The substantive processes we describe are not unique to any organizational form or industry. Indeed, if anything, reliance on gender as an indicator of competence, use of sex-labeled roles and gender stereotypes as heuristics for assessing role suitability, and in-group favoritism may be even more pronounced in settings where career pathways are more varied, because decision makers face greater uncertainties about the nature of candidates’ experience and preparation for a position. Thus, the increase in women’s mobility disadvantage at higher levels may be more severe in some of these settings than in the law firm context. Future research could elaborate the boundaries of the increasing-disadvantage pattern by comparing women’s organizational mobility in settings that do and do not meet the scope conditions, or do so in varying degrees (for example, in large organizations where job ladders are heavily gender imbalanced even at lower levels). Such comparisons will shed light on which, if any, scope condition is most salient in shaping patterns of mobility.

Extending this line of argument, it would be interesting to investigate the extent to which the presence and severity of the increasing-disadvantage model depend on the characteristics of specific organizations. Our theoretical account suggests that the relative decline in women’s mobility prospects at higher levels should be greater in organizations where there are greater differentials in status and authority, work uncertainty, and sex composition between lower and higher ranks. One could also test a series of hypotheses about how the increasing-disadvantage pattern varies with such organizational characteristics as predominant industry or occupation, the steepness or flatness of organizational pyramids, organizational dispersion across geographical or product markets, or the gender traditionalism of organizational culture.

In laying a theoretical foundation for the increasing-disadvantage model, this study contributes to clarifying the larger theoretical framework guiding research in workplace gender inequality. In particular, our approach and findings are at odds with the view, put forward by Petersen and Saporta (2004), that discrimination is more or less constant across organizational selection decisions and that variations in women’s mobility disadvantage are due primarily to variations in decision makers’ opportunities to discriminate. Petersen and Saporta reason further that the
opportunity to discriminate is greatest at the point of hire, because dis-
appointed job applicants are unlikely to challenge adverse decisions. Con-
sequently, they urge gender inequality researchers to focus on the hiring
process. Although we do not doubt that opportunity to discriminate plays
an important role in shaping workplace gender inequality, we take issue
with Petersen and Saporta on two points. First, we contend that discrim-
ination—or, to use a broader term that encompasses unintentional pro-
cesses, bias—is not constant across levels and types of selection decision.
For the reasons we set forth above, we suggest that bias is most severe
in upper-level promotion decisions and perhaps also in upper-level hiring
that involves elevating an external candidate from a lower position in
another organization (as is often the case when an organization recruits
an external chief executive officer, for example).

Second, we argue that the opportunity to discriminate is not markedly
less in promotion than in hiring, at least in the case of professional and
managerial jobs. Rejected promotion candidates also often face equally
strong disincentives to contest a negative decision, especially in higher
organizational ranks. Raising a charge of discrimination, even if it is
arguably warranted, may alienate colleagues and superiors, damaging the
claimant’s network ties and earning her a reputation as a troublemaker.
Often, the claimant’s ability to function within the organization is so
impaired that the decision to pursue a discrimination charge is tantamount
to a decision to leave the firm. Moreover, the difficulties of gathering
evidence and mounting a persuasive legal case are likely to be just as
great in the case of promotion as in the case of external hiring (Baron
1995). Because high-level work involves extensive uncertainty and de-
pends significantly on soft skills, decision makers’ performance evalua-
tions and ability inferences are necessarily subjective, making it extremely
challenging for plaintiffs to show that an adverse promotion decision was
due to bias rather than to their own deficiencies. Even when plaintiffs
are able to present strongly suggestive evidence, courts faced with chal-
lenges to professional and managerial promotion decisions typically de-
cline to scrutinize employers’ selection practices.

The case of Ezold v. Wolf, Block, Schorr & Solis-Cohen provides an
instructive example of the difficulties involved in a legal challenge to an
adverse upper-level promotion decision.32 The plaintiff, Nancy Ezold, was
denied promotion to law firm partnership despite clear evidence that her
evaluations were more positive than those of several male attorneys who
were promoted, that the firm had given her inferior assignments that
prevented her from developing and demonstrating her skills, and that
firm partners had told her that she was perceived differently because of

her sex. In deciding against her, the federal appeals court emphasized that courts should avoid “unwarranted invasion or intrusion into matters involving professional judgments about an employee’s qualifications for promotion.” Indeed, one legal commentator has argued that upper-level cases confront courts with their own world, and judges are reluctant to criticize traditional, subjective selection procedures similar to those from which they themselves have benefited (Bartholet 1982).

The present study also makes a methodological contribution to research on gender inequality in hiring and promotion by highlighting the importance of accounting for the sex composition of the relevant candidate pool, a factor that has been omitted in most previous analyses. Our findings suggest that coefficients are substantially biased in the absence of a measure of the sex composition of the candidate pool. Of course, the task of defining the candidate pool for promotion decisions is likely to be more difficult in more complex organizational settings. The group of individuals who at one time or another entered the competition for a high-ranking job may include employees who began their careers in different functions or divisions or at different times. It may also be difficult to identify exits from the competition for a promotion. In some organizations, for example, a transfer from a “line” to a “staff” position, or from one subunit to another, may indicate that an individual is out of the running; in others, such moves may indicate that a manager is acquiring skills needed for further advancement. If exiting individuals can be identified, it will often be hard to determine whether the exit was truly voluntary or encouraged by the employer. To overcome these difficulties, it may be helpful to trace common career trajectories from empirical data (see, e.g., Spilerman 1977; Gaertner 1990).

Finally, our finding that the female disadvantage is greater at higher levels of organizational hierarchies has implications for policy interventions aimed at increasing women’s presence among organizational leaders. Our theoretical reasoning suggests that, in the absence of change in either organizational practices or legal standards, the increasing-disadvantage pattern will change only very slowly over time. Moreover, we conclude that efforts to recruit women into the lower rungs of job ladders will not eliminate women’s underrepresentation at the top. We do not suggest that organizations do away with practices aimed at getting women to the starting gate. Rather, our research challenges employers and policy makers to think seriously about the possibility that biases in selection-decision making systematically impede the advancement of women after the point

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33 In organizations with largely autonomous subunits, however, it may make sense to investigate mobility patterns within subunits. For example, hospitals typically have distinct medical and administrative hierarchies.
of hire, and indeed that such biases operate with increasing force as women rise higher. Our approach suggests that shattering the glass ceiling will require new policies, at both the organizational and governmental levels, to reduce or constrain these biases.

REFERENCES


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American Journal of Sociology


