Women in Law–Equal Justice for All?

Barb Kube '94
Illinois Wesleyan University

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WOMEN IN LAW--EQUAL JUSTICE FOR ALL?

by:

Barb Kube

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WOMEN IN LAW--EQUAL JUSTICE FOR ALL?

Barb Kube
Student, IWU (Class of 1994)

Research Honors
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Research Honors Committee:
Mona Gardner, Ph.D.
Robert Leekley, Ph.D.
Wayne McManus, J.D.
Michael Seeborg, Ph.D. (Chair)
WOMEN IN LAW—EQUAL JUSTICE FOR ALL?
Barb Kube, Department of Economics, IWU, Dr. Michael Seeborg

This study uses Dr. Barbara Bergmann's Model of Labor Market Overcrowding to test for gender discrimination in the legal profession. Bergmann's model suggests that stereotypes and society's perceptions about what is "normal" divide male and female lawyers into two separate labor markets such that 1) females are paid less than males and 2) male and female lawyers are segregated into different areas of practice—either by area of concentration or position within the firm.

Two samples, one composed of 45 young lawyers and the other consisting of 400 lawyers (200 males and 200 females), are used to test these hypotheses. The results indicate that significant wage differentials do exist for young lawyers—females earn significantly less even after controlling for experience. While there is no significant evidence of crowding in the specific areas of practice, there is statistically significant evidence of crowding with respect to partnership status.
I. INTRODUCTION:

Harvard Law School first admitted women in 1950. Harvard was not alone in its long-standing opposition to an open admissions policy. Notre Dame's law school waited until 1969 to begin enrolling women, and the law school at Washington and Lee University did not implement a similar policy until 1972 (Epstein, 50). Today females account for 40-50% of law school enrollment and around 22% of our nation's lawyers (ROUNDTABLE 2, 19).

Despite evidence that no overt wage discrimination exists between the sexes, 54% of female lawyers (and 29% of male lawyers) feel that men have a greater chance of becoming involved with firm management (ROUNDTABLE 2, 21). Furthermore, when "Gilda" (a female attorney who responded on condition of anonymity) was asked "Do you know what it takes to make partner in your firm?", a male colleague replied, "A sex change". "Gilda" countered, "Good point" (ROUNDTABLE 1, 20). Still another female lawyer reports that the firm she is working for "actually discourages women from practicing law once they have started a family" (ROUNDTABLE 1, 19). Is it possible that pecuniary discrimination, which is illegal, is being supplemented by other forms of discrimination and pressures against female lawyers? If so, how is it being manifested?

This study will attempt to reconcile the views presented by academic theory with those expounded by members of the legal profession. Following reviews of discrimination theory and previous research, a section will be devoted to explaining the empirical model that is to be utilized in this paper. Results and policy implications will also be presented.

II. AN OVERCROWDING MODEL OF GENDER DISCRIMINATION IN LAW:

Labor market discrimination occurs whenever men and women of equal productivity and aspirations are treated differently in hiring, retention, training, and promotion practices (Hoffman, 2). Economists generally agree on these principles, but they do not always agree on theoretical explanations of this phenomena. Perhaps this is because individual labor markets are unique. Also, it
may be that the explanations of labor market discrimination are as diverse as the disciplines that study it. Six general explanations include:

1. neoclassical, based on models of statistical discrimination and investments in human capital;
2. social psychological, emphasizing socialization and internalized norms;
3. institutional, emphasizing the intended and unintended consequences and inertia of organizational arrangements;
4. cultural, emphasizing taken-for-granted notions of men's work and women's work, often shared by both men and women;
5. political, stressing the different interests of male employers and employees with respect to maintaining the status quo; and
6. patriarchal, emphasizing the common interests of male workers and employers in maintaining a sex-based division of labor (Bielby, 107).

One economic theory that can potentially capture most of these effects is Dr. Barbara Bergmann's model of labor market overcrowding, and Bergmann's model serves as the central framework for this study. Rather than looking at a labor market as the sum of its parts, Bergmann argues that stereotypes and society's perceptions about what is "normal" actually divide labor markets into two separate labor markets—one for males and the other for females—in which the individuals are perfect substitutes. Bergmann's theory is summarized in Figure 1 on the following page (Blau/Ferber, 214).

Suppose the undiscriminating market of (Hm), which pays wage $w_0$ experiences discrimination and divides into a market for those discriminated against (f) and one for the preferred co-workers (m). Demand is no longer in the form of $\text{DEMAND}_{(f+m)}$, but is rather $\text{DEMAND}_f$ and $\text{DEMAND}_m$. Jobs in the separate market (m) are filled by a restricted supply of labor (m) and wages for (m) increase. Also, members of (f) must "crowd" into a restricted number of positions if they want to remain in the market. As Figure 1 illustrates, pay differentials will develop whenever, relative to their respective supplies, $\text{DEMAND}_m$ is greater than $\text{DEMAND}_f$. More females are "crowded" into a market that faces less demand. Lower wages for females result from each female attorney being less productive because she has less capital with which to work. As previously mentioned, those who remain in market (m) receive higher wages; members of (m) are more productive because each has more capital to work with. Thus, as seen in Figure 1, both groups are
Figure 1: A Model of Labor Market Overcrowding

Labor market for male and female lawyers
(no discrimination--*)

Labor market for male lawyers

Labor market for female lawyers
paid according to their productivity. It is important to remember that group (f) is forced to be less productive--they are forced into a crowded market (Blau/Ferber, 212-15).

In terms of the labor market for lawyers, the overcrowding model predicts that 1) female lawyers (f) will be paid less than their male counterparts (m), and that 2) a barrier exists between labor markets (f) and (m) which segregates female and male lawyers into different areas of practice.

Whereas Bergmann's model directly suggests a testable hypothesis regarding male and female roles within the legal profession (crowding), it does not offer as obvious of an explanation for the causes of crowding. Other theories may provide greater insight into the causes of any apparent crowding.

A. BECKER'S Economics of Discrimination

On the demand side, female participation in the legal labor market (f) is influenced by employers, consumers and fellow employees. What causes these three groups to treat female lawyers as fundamentally different from their male counterparts? One of the pioneering theories of discrimination, developed by Dr. Gary S. Becker, provides further insight into this issue. In his The Economics of Discrimination (1957, 1971), Becker theorizes that employers, employees and consumers have different "tastes" for discrimination which cause them to act "as if" they are "willing to pay something either directly or in the form of a reduced income to be associated with some persons instead of others"; the dollar value that each individual is willing to "pay" is called a discrimination coefficient (DC). Employers and consumers perceive net wages and net prices as relatively higher because they are "paying" for undesirable associations with the discriminated-against person; their DC is positive. Similarly, discriminating employees perceive lower net wages because of the "disutility" associated with working with the discriminated-against co-worker, and therefore have a negative DC. Non-discriminators have a DC of zero.

In terms of this study, if \( w_f \) is the wage received by female lawyers (the discriminated-against factor) and \( w_m \) is the wage of male lawyers, assuming that productivity is equal, \( w_f \) should equal \( w_m \). However, the full cost that a discriminating employer perceives when employing a female lawyer is \( (w_f + DC_{emn}) \). Thus, if the male attorney receives \( w_m \), the discriminated against female
receives \((w_m - DC_{emp})\) (Becker, *Econ of Disc*, 14-15). At least in the short-run, the differences in DCs will result in wage differentials and job segregation across firms.

Using the Neoclassical theories of marginal productivity and utility maximization, as well as the assumption of competition, Becker contends that firms with lower DCs should have lower production costs. Lower production costs give firms with lower DCs a comparative advantage. If the comparative advantage persists, *ceteris paribus*, it will drive firms with higher DCs out of the market and eliminate discrimination--firms will compete by lowering DCs until the DC for surviving firms is zero.

However, the persistence of discrimination depends on the market structure. As the market becomes less competitive, employers can engage in higher degrees of discrimination without fearing cut-throat wage competition (Blau/Ferber, 203-4).

Within the legal profession, competition may be inhibited by several factors. Consumer and employee discrimination are two such factors. Even if an employer has no taste for discrimination, he/she may, in the name of profit-maximizing, be forced to discriminate when other employees or customers have discriminatory tastes (Blau/Ferber, 1992). One example might involve firms specializing in labor law; union officials have been known to be reluctant and even opposed to working with female attorneys (ROUNDTABLE 2, 28). If unions refuse to be represented by a female, the productivity of the female lawyer is diminished. Rather than hiring a female attorney, the firm will opt for hiring a male; supply of labor lawyers is restricted, and their wages increase. Becker's assumption of perfect competition is not maintained.

As mentioned earlier, the Bergmann model predicts that female and male lawyers will be segregated into different areas of practice. If this is the case, what are the forces behind this sector-specific segregation? On the supply-side, Becker relies on the Neoclassical theories of utility maximization and human capital theory. These theories suggest that an increase in the store of human capital through training and education will be undertaken by the employee or provided by the employer if the benefits exceed the cost.
There are two types of training: general training and firm-specific training. General training will increase an individual's productivity to the same extent no matter where he/she works. With firm-specific training, as its name implies, skills cannot be transferred to another firm. Who pays for the training will likely depend on who receives the benefits. In most cases, the individual pays for general training. Since it is mutually beneficial, the cost of firm-specific training is often shared by both the employer and employee. Thus, because the employer bears part of the cost, he/she is concerned with the expected employment life of the employee--how long will the firm benefit from its investment in the training (Blau/Ferber, 164-67)? Between two equally qualified candidates, a profit-maximizing firm would hire or promote the employee with the longest expected employment life. Often this decision is based on group averages or stereotypes. (Decisions based on such averages will be discussed in the next section.)

With respect to the legal profession, it is assumed that each individual starts out with similar general training--a law school degree. Although there may be differences with respect to experience--law journal, internship, and clerkship activities--when two individuals enter practice at the same level and at the same time, it is assumed that they are equally productive, ceteris paribus. When the job is secured, human capital (productivity) is enhanced by firm-specific training such as mentor-protege relationships, "power" lunches and the like. Becker postulates that profit-maximizers will invest in the employee with the longest expected employment life. Furthermore, individuals allocate both time and effort between market and non-market activities; and since women allocate more effort to home activities, they have less effort (relative to men) to allocate to work. Thus, women are less productive and should be paid accordingly (cited in Bielby). Following this line of reasoning, some argue that women cannot "hack it" in the more "demanding" areas of law, such as litigation.

Bielby (1991) offers several alternative explanations for women being just as productive as men in the workplace even though they allocate more time to non-market, home activities: 1) some men choose not to draw on reserve stockpiles of effort, 2) physiological evidence supports the notion that humans have renewable energy sources--being active is stimulating, 3) as in Becker's theory, sex
roles are taken for granted, and 4) the allocation of work effort may not be a deliberate or conscious choice.

Blau and Ferber (1992) also cast a shadow of doubt on Becker's Neoclassical theory. They point out that mentor-protege relationships are usually initiated by the experienced professional; if a field's senior members are mostly male, as is the case with law, a large majority of mentors will be male. Male mentors tend to choose male proteges. While no economic theory specifically explains why this happens, it has been suggested that male mentors feel uncomfortable and "unable to relate" to female proteges. Also, wives and colleagues may pressure them not to have female proteges (Blau/Ferber, 1992). Similar to the influence of consumers' tastes for discrimination, a non-discriminating mentor may be forced to act discriminately. Thus, males are favored as proteges and gain a human capital advantage. Specifically Michael J. Howlett Jr., a partner in a Chicago law firm, a former associate judge and special deputy outside counsel for the United States House of Representatives Ethics Committee (1988-89), points out that "Not enough of what we do generally in the practice of law is focused on how to mentor women associates. ...That is where I see a continuing glass ceiling or barrier (ROUNDTABLE 2, 25)."

Research by Baron, et al suggests that when decision makers (employers) change more frequently and/or are younger, the chance of increasing the position of females in the labor que (ranking) is greater. Such industries are expected to integrate more rapidly (cited in Reskin). Law is not one such industry. In fact, some criticize it for being patriarchal (Epstein, 111). This also supports the preceding Blau/Ferber argument.

B. STATISTICAL DISCRIMINATION

On the other hand, it is possible that discrimination is not just the result of discriminatory "tastes" or human capital choice. Instead it may be the result of a market failure, namely imperfect information. The model of statistical discrimination assumes that employers and/or consumers face imperfect information and uncertainty regarding individuals' potential productivity. As they make hiring or promotional decisions, employers project their "average" beliefs about a particular group
onto an individual applicant who belongs to that particular group. As a result, individuals are discriminated against because they (the applicants) are believed to share some undesirable stereotypic characteristic. While it may seem contradictory, if on average an employer's stereotypic views are proven correct, the resulting decisions are not discriminatory under a strict definition of discrimination (Blau/Ferber, 208-10). The actual result remains the same--some qualified applicants are erroneously excluded from employment.

Overcrowding theory would predict that the imperfect information decreases demand for female lawyers. Employers may believe that females do not have as high of an expected employment life as do their male counterparts and decide not to grant females the same opportunities of firm-specific training, job assignments or promotion that they offer to males. If, on average, these beliefs become reality the practice is not discriminatory. However, research by Viscusi, Blau and Kahn revealed that this does not seem to be the case--men and women have equal turnover rates, ceteris paribus (cited by Olson and Becker, footnote 14, 627). Therefore, segregating male and female lawyers by area of practice or job assignment fits the strict definition of discrimination if employers make stereotypes based on erroneous information; it is a case of "irrational expectations".

One other thing to consider when dealing with statistical discrimination is how it affects the employment decisions of the stereotyped group. Statistical discrimination may have feedback effects. These effects include actions and/or reactions of discriminated-against individuals that are influenced by the knowledge that they are indeed discriminated against; the result is a self-fulfilling prophesy (Blau/Ferber, 208-10). For example, a female entering the legal profession may want to specialize in litigation. However, during an internship she learns that women have few opportunities for advancement in litigation firms. In order to avoid being trapped in a dead-end job, the female decides to specialize in public interest law. On the surface this decision reinforces the stereotypes that women are not tough enough to make it in litigation and that they are "soft-hearted". But, this surface analysis reverses the causation--which came first, the chicken or the egg?
III. Previous Research:

Until now most of the literature and research has focused explicitly on the theory of wage differentials. A study by Craig A. Olson and Brian E. Becker took a different approach and examined the effect of gender on promotion and the returns to promotion (1983). Olson and Becker predicted the probability of promotion for men and women across all occupations during the years of 1973-77, using data from the Quality of Employment Panel, 1973-77. Out of an original sample of 1455 individuals who were over the age of 16 and working more than 20 hours per week, they used 408 individuals. The restricted sample excluded individuals whose data was incomplete as well as those who were either self-employed or had left their previous employer in 1973 (neither group had opportunities for promotion within the same firm for the years between 1973-1977).

After explanations of promotions, wages and sample attrition, Olson and Becker constructed a three-equation model. The promotion equation captured both observable and unobservable components of expected performance. After controlling for occupation, education, tenure, labor force experience, union status, firm size, attrition, marital status and region of employment, men and women do have significant differences in promotion. A gender variable revealed that being female decreased the likelihood of promotion; and even when they are promoted, women receive promotions of less significance. These different and unequal promotional paths result in job segregation.

After examining the impact that the promotion process had on wage differentials, they revealed that:

[O]ur results indicate that women (men) would have received substantially more (fewer) promotions had they been held to the same standards as men (women). Although the female-male wage gap narrowed by about 6 percent between 1973 and 1977, it would have narrowed even further--by 8.6 to 9.2 percent--if men and women had been promoted on the basis of the same criteria (641).

Concluding that men and women face fundamentally different promotion processes, Olson and Becker stated that:
Unequal access to opportunities, rather than unequal returns, constitutes the principal source of male-female differences in employment outcomes (641).

These findings support Bergmann's overcrowding hypothesis.

The theoretical implication of Bergmann also seems to be supported by a recent study that was conducted by Dr. David N. Laband and Dr. Bernard F. Lentz. In their study of the legal profession, they used a LOGIT regression to test the probability of an attorney achieving partnership. Probability of partnership was a positive and significant function of experience and law school performance (232). Using a dummy variable for gender, they received a significantly negative coefficient for female. However, controlling for family status decreased the significance and the value of the variable. Finding that an individual's role in the family is more important than gender in predicting partnership, they concluded that there was no sex discrimination. However, another possibility is that feedback effects are responsible for determining family status as well as type of practice. Laband and Lentz also examined wage differentials and promotion possibilities for female and male lawyers. No significant differences appeared.

Furthermore, they used job-description variables as a means of testing for covert discrimination. Subjective ratings of potential for advancement, work atmosphere, level of responsibility and office politics served as proxies for covert discrimination. Using OLS regression analysis, Laband and Lentz found that negative or low job description ratings were more significant for females than males. They concluded that "sex discrimination against women in the legal profession is a charge sustained by little tangible but much intangible evidence (Laband, 1993, 253)".

Laband and Lentz's results offer empirical support for the predictions of Bergmann's overcrowding theory—wage differentials do not exist on a same-job basis, but females and males do appear to have different roles within the legal community. Additionally, the "intangible margins" may possibly be explained by statistical discrimination. Perhaps feedback effects are responsible for determining family status as well as type of practice.
They also tried to determine whether or not female attorneys either self-selected (feedback effects) or were channeled into certain areas of practice (Laband, 248). Using a multivariate approach, Laband and Lentz ran "regression models of the determinants of time allocations to 16 subfields of law (Laband, 248)." Forty-three explanatory variables were identified, and the regression was run on 1984 data for 427 associate lawyers. Their results found "virtually no evidence of gender-based differences with respect to the self-reported percent of time respondents spent on various types of law (248)." Even though their results were not significant, it is interesting to note that for certain areas, the female coefficient was negative. These areas include: antitrust, labor/employment, natural resources, patent/trademark/copyright, public utility and torts/insurance law.

IV. Research Hypotheses:

This study uses Dr. Bergmann's overcrowding hypothesis as a theoretical framework with which to extend the work of Laband and Lentz. Bergmann's theory suggests the following hypotheses:

1) crowding in the legal labor market leads to wage differentials between male and female lawyers;

2) separate labor markets for male and female lawyers exist in the form of job segregation by type of law practiced (area of concentration);

3) male and female lawyers are segregated with respect to position within the firm.

These hypotheses will be tested using descriptive statistics, cross-tab analysis as well as OLS and LOGIT regression analysis. While two sets of data will be used to test the hypotheses, both data sources will incorporate some of the variables included in the Laband and Lentz research.

Does crowding exist?

A. WAGE DIFFERENTIALS

1. Model

One of the indirect implications of Bergmann's model is that wage differentials develop between the discriminated against (female) and the preferred (male) segments of a specific labor market (legal
labor market). A sample of 45 legal professionals (21 females and 24 males), obtained from the National Longitudinal Survey of Youth (NLSY), will be used to test this hypothesis. The NLSY database contains information on 12,686 individuals; this data was collected by means of annual personal interviews conducted by U.S. Census personnel between the years of 1979 and 1990 (Center for Human Resources, 1992). Due to the time period covered by the NLSY, this sample consists of relatively young lawyers.

Ordinary least squares (OLS) regression analysis will be used to test for statistically significant differences in annual wage income between male and female lawyers. As implied by Bergmann's theory, it is expected that being female has a negative effect on the amount of an individual's wages/salary because women are "crowded" into lower paying jobs. A dummy variable for gender (1=female; 0=male) is predicted to have a significant and negative coefficient. In order to better explain differences in wages/salary, I will try to control for work experience using proxy variables—the number of hours worked during the 1991 calendar year (HOURS) and age (AGE). As the number of hours worked (age) increases, so should the wages/salary. Positive and significant signs are expected.

Furthermore, the NLSY divides marital status into three groups: never married, married with spouse present and other. For the purposes of this study, the variables will be recoded into a dummy variable: MARRIED equals 1 if the respondent is married with his/her spouse present, and 0 if otherwise. Human capital theory indicates that marriage can impact the number of hours an individual devotes to the workplace. It may increase the number of hours worked as the individual substitutes leisure time for an increase in income. This may occur if the individual is the principal wage earner for a family. On the other hand, marriage may result in a decrease in hours worked as the individual substitutes away from work and towards time spent in non-labor market activities. In this case, the individual values time spent out of the labor market more than he/she values participation in the professional workplace. This study will use the marriage dummy variable as a control variable. Comparisons will be made with the results of Laband and Lentz.
2. Results

OLS regression results are listed in Table 1. Model A includes all of the variables: hours worked, gender, marital status and age. Model B does not control for marital status. And, Model C is a simple regression with age and gender for independent variables. In all three models, the dependent variable is the amount of the respondent's annual wages/salary for the 1991 calendar year.


<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model A</th>
<th>Model B</th>
<th>Model C</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMALE</td>
<td>-17129.87</td>
<td>-17605.91</td>
<td>-16539.18</td>
</tr>
<tr>
<td></td>
<td>(-1.729 *)</td>
<td>(-1.802 *)</td>
<td>(-1.720 *)</td>
</tr>
<tr>
<td>AGE</td>
<td>4478.46</td>
<td>4210.44</td>
<td>4603.42</td>
</tr>
<tr>
<td></td>
<td>(1.938 *)</td>
<td>(1.878 *)</td>
<td>(2.119 **)</td>
</tr>
<tr>
<td>HOURS</td>
<td>4.71</td>
<td>6.17</td>
<td>........</td>
</tr>
<tr>
<td></td>
<td>(.566 )</td>
<td>(.801 )</td>
<td></td>
</tr>
<tr>
<td>MARRIED</td>
<td>5935.52</td>
<td>........</td>
<td>........</td>
</tr>
<tr>
<td></td>
<td>(.590 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>constant</td>
<td>-91103.52</td>
<td>-83216.07</td>
<td>-81856.67</td>
</tr>
<tr>
<td>adj R²</td>
<td>.128</td>
<td>.147</td>
<td>.157</td>
</tr>
<tr>
<td>Model F-stat</td>
<td>2.25 *</td>
<td>2.95 **</td>
<td>4.17 **</td>
</tr>
<tr>
<td>n</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

Unlike the results of Laband and Lentz, all three models have a significantly negative coefficient for the female gender variable (FEMALE). This supports the hypothesis implied in Bergmann's theory: crowding in the legal labor market does lead to wage differentials between males and females. Specifically, in Model C being female reduces a lawyer's annual wages/salary by $16,539.18, ceteris paribus (See Table 2). What's more, AGE is the most significant of the proxies for experience—in Model C, one additional year of experience brings about an increase of $4603.42.
Table 2:

ESTIMATED SALARIES
(based on OLS results--MODEL C)
in the individual's annual wages/salary. **HOURS** worked and marital status (**MARRIED**) do not have significant effects on an individual's earnings.

The insignificance of the marital status variable is noteworthy because of its relationship with the results of Laband and Lentz's research. In order to approach the problem in a manner closer to that used by Laband and Lentz, who included family status variables [number of children and marital status] (237), an interaction variable was created between gender and marital status (**FEMMARRY**). Even though Laband and Lentz found no significant difference between gender and family status, a recent survey conducted by *The National Law Journal* found that, "...more than six out of 10 women, compared with just two in 10 men, said that their careers have suffered in relation to their colleagues whose 'significant others' do not work full time...."—if only because, as the respondents agree, women have primary responsibility for the children" (1993). This study agreed with *The National Law Journal*, and as is consistent with the previous discussion of labor market participation, expected that being female and married has a negative effect on wages/salary. This was not the case; when **FEMMARRY** was included in regression analysis, it was not significant. It seems that marriage does not significantly affect wages/salary. On the other hand, it may be that the young ages of the NLSY respondents biases these results.

Future research may shed some additional light on the determination of wages/salaries by including variables for different areas of concentration, firm size and urban/rural locations. These may also play a part through supply and demand as well as cost of living mechanisms.

**How is crowding manifested?**

Data from the *Martindale-Hubbell Law Directory* (1992), a state-by-state compilation of professional biographies for lawyers in private practice, was coded to create variables that represent areas of concentration, position with current employer, firm size, geographic location and educational background. Four hundred lawyers, two hundred females (an over-representation) and two hundred males, were randomly selected from all fifty states. The exclusion of in-house corporate attorneys and those employed by the government is likely to bias my results, particularly because
female lawyers are expected to be disproportionately represented in these sectors (ROUNDTABLE 2, 19). Even so, this data makes it easier to compare my results to those of Laband and Lentz. It is possible that the MDH data will provide more reliable results because the sample is representative of the national population of lawyers. (See Appendix A for a complete discussion of the data selection process.)

A: OCCUPATIONAL CROWDING

1. Model

Descriptive statistics and cross-tabs will be used to examine the distribution of lawyers in certain areas of practice. Firm size will also be examined because certain types of law may be more likely to be practiced in large firms. Also, a greater proportion of female lawyers are expected to work in small firms or solo practices—this seems to have been the general trend, with female lawyers reporting greater responsibility and a greater chance of partnership in such firms (Deakin, 1993). Proof for crowding will include significant gender differences among occupational distributions by specialty. Whereas the NLSY analysis will provide indirect evidence of possible crowding in the legal labor market, the MDH analysis will provide insight into the specific ways in which crowding may be manifested.

Theory as well as personal accounts offered by the ROUNDTABLE participants predict that female lawyers concentrate their practices in the areas of general/family practice [GP-FAM], corporate/finance law [CORP-FIN], estate/probate and tax law [EST-TAX] and criminal law [CRIM]. Societal stereotypes have long cast women in nurturing and caretaking roles—characteristics that are thought to be indicative of family law (Epstein, 102). Similar reasoning may explain the over-representation of females in the practice of estate/probate and tax law (Epstein, 102). As was previously mentioned, female lawyers are expected to be disproportionately represented in corporate in-house legal operations (ROUNDTABLE 2, Bellows, 19). Similarly, this study anticipates that females are also over-represented in corporate/finance practice. Unlike the previous areas of concentration, criminal practice does not involve typically "female" topics. Instead,
it has been hypothesized that female lawyers may have a significant presence in this area of practice because criminal law is viewed as the "lowest form of courtroom work" (Epstein, 106). Research by Laband and Lentz offers empirical support for these predictions; even though the coefficients were not statistically significant, the above-mentioned areas of concentration were positively related to a female dummy variable (249).

On the other hand, fewer women are expected to spend a significant amount of time working on cases in the following areas: litigation and appellate work [LIT-APPE], labor/employment law [LABOR], environmental concerns [ENVIR] and copyright/patent/intellectual property law [PATENT]. Presumably litigation and appellate work is viewed as an area of concentration requiring typically "male virtues" that result in a confident and aggressive courtroom presence (ROUNDTABLE 2, Howlett, 24). Clients and decision makers inside firms do not expect as good of results from a female lawyer as they do from a male. Furthermore, female attorneys with these attributes may actually be looked down upon if they do exhibit such qualities:

If they are tough in the courtroom, then they are not pleasant to work with as a partner. And if they are not tough in the courtroom, then they are a lovely person to work with, but nobody would want to be represented by them in court (ROUNDTABLE 2, Weiss, 26).

As mentioned earlier, labor and employment law tends to be male-dominated because the leadership of labor unions tends to be male-dominated. Recently participation by female lawyers has been increasing, but only slowly (ROUNDTABLE 2, Fox, 28). As for the ENVIR and PATENT classifications, males may be more dominant in these areas of concentration because of the scientific component--science has long been a stereotypically "male" field of study. Laband and Lentz found negative coefficients for their female dummy variable when it was regressed against these four areas (249). My study maintains these predictions.

The areas of civil practice [CIVIL], malpractice law [MAL], personal injury and workers' compensation law [PI], international practice [INTL] and insurance defense practice [INSDEF] are uncertain. First, the area of civil practice is very broad. It also includes a mixture of functions some
of which are traditionally thought of as "male" or "female". Second, the areas of malpractice, personal injury and insurance defense are highly specialized areas of concentration—lawyers may not report these specific areas as the focus of their practices. Furthermore, these areas often involve specialized medical and business components. As mentioned earlier, males are more traditionally found in areas dealing with medicine, and females are expected to be found in areas dealing with corporate/finance matters. It is hard to tell which subject area will dominate and even harder to tell whether or not lawyers of a particular gender will dominate these areas of practice. For these reasons no predictions are made.

2. Results

Generally, tests for "gender" crowding by area of concentration were consistent with those of previous research; there was no significant evidence of crowding. Individual cross-tabs were run between the FEMALE variable and each area of concentration. Results are reported in Table 3. As forecasted by theory and the Laband and Lentz research, the areas of corporate-finance and general-family practice did contain a larger percentage of women. While the difference was not significant in the corporate-finance area, it was significant at the .10 level for the area of general-family law. Criminal and estate-tax practices had been hypothesized to be significantly female areas of concentration, but those areas were numerically dominated by males (70.6% male and 56.7% male, respectively).

Of the areas that were hypothesized to be predominately male, only litigation-appellate law contained a larger percentage of men than women; the difference was not statistically significant. Contrary to prediction, the areas of environmental, labor and patent law had more women than men. Again, the differences were not statistically significant. Perhaps these differences are due to a combination of an increase in young female attorneys that have entered the job market recently (as identified by cross-tab analysis of EXP—experience) and the increase in demand for lawyers in areas like environmental, labor and patent law (USN&WR, 110).
TABLE 3: Cross-tabs. FEMALE and AREA(s) OF CONCENTRATION

<table>
<thead>
<tr>
<th>AREA OF CONCENTRATION</th>
<th>EXPECTED DOMINANCE</th>
<th>% MALE</th>
<th>% FEMALE</th>
<th>CHI-SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIVIL (166)</td>
<td>?</td>
<td>50.0</td>
<td>50.0</td>
<td>.0000</td>
</tr>
<tr>
<td>CORP-FIN (209)</td>
<td>F</td>
<td>49.3</td>
<td>50.7</td>
<td>.0401</td>
</tr>
<tr>
<td>CRIM (17)</td>
<td>F</td>
<td>70.6</td>
<td>29.4</td>
<td>2.2116</td>
</tr>
<tr>
<td>ENVIR (19)</td>
<td>M</td>
<td>42.1</td>
<td>57.9</td>
<td>.2210</td>
</tr>
<tr>
<td>EST-TAX (60)</td>
<td>F</td>
<td>56.7</td>
<td>43.3</td>
<td>.9608</td>
</tr>
<tr>
<td>GP-FAM (95)</td>
<td>F</td>
<td>42.1</td>
<td>57.9</td>
<td>2.7058*</td>
</tr>
<tr>
<td>INSDEF (13)</td>
<td>?</td>
<td>46.2</td>
<td>53.8</td>
<td>.0000</td>
</tr>
<tr>
<td>INTL (15)</td>
<td>?</td>
<td>46.7</td>
<td>53.3</td>
<td>.0000</td>
</tr>
<tr>
<td>LABOR (14)</td>
<td>M</td>
<td>42.9</td>
<td>57.1</td>
<td>.0740</td>
</tr>
<tr>
<td>LIT-APPE (129)</td>
<td>M</td>
<td>51.9</td>
<td>48.1</td>
<td>.1831</td>
</tr>
<tr>
<td>MAL (8)</td>
<td>?</td>
<td>50.0</td>
<td>50.0</td>
<td>.0000</td>
</tr>
<tr>
<td>PATENT (10)</td>
<td>M</td>
<td>30.0</td>
<td>70.0</td>
<td>.9231</td>
</tr>
<tr>
<td>PI (29)</td>
<td>?</td>
<td>72.4</td>
<td>27.6</td>
<td>5.3537**</td>
</tr>
</tbody>
</table>

parentheses contain the number of sample lawyers indicating a concentration in the specified area; total number does not equal 800 because some lawyers only listed one area of concentration

\[ n = 400 \]

* = significant at .10 level
** = significant at .05 level

Surprisingly, the area of concentration with the greatest significant difference between male and female lawyers was one that had no previous prediction—personal injury and workers' compensation
[P1]. Reporting a composition of 72.4% males and 27.6% females, it was significant at the .05 level. Perhaps the medical content and often litigious nature of this type of practice has generally discouraged women from entering, or has otherwise kept them out of this area. Another possibility is that this type of practice requires a significant amount of experience, and the majority of female lawyers have not been practicing long enough to get the experience that is necessary to specialize in this area.

Overall statistically significant support of the crowding hypothesis on the basis of area of concentration is weak. Apparently male and female lawyers are not significantly segregated into different areas of concentration. However, complications with the MDH data may have influenced the results. The subjective nature used to report an individual's areas of concentration poses two potential problems. First, in addition to being a reference source, the Martindale-Hubbell Law Directory can also be used as an advertising device. As such, firms and individuals may try to maximize the probability of getting new business by being very general in describing their practices. Or, firms and individuals wishing to increase their caseload in a particular area of practice may be very specific in describing their practices. Second, whether or not an individual declares a particular area of concentration depends in part on how he/she defines that particular specialty. For example, what one individual considers to be a civil practice may be considered by another to be a general-family practice. Perhaps these data complications have biased my results.

Another possibility: certain areas of concentration are more likely to be practiced in large firms. If female lawyers are, as Deakin (1993) suggests, more likely to practice in smaller firms, then they may also be less likely to specialize in these areas. To test for possible indirect effects of firm size on area of concentration, firm size variables were recoded to create BIGFIRM, a dummy variable that indicated firms having 60 or more attorneys. Cross-tabs of BIGFIRM with each area of
concentration and with FEMALE produced mixed results. Only three areas of concentration had significant differences between large and small/medium firms. Of the lawyers concentrating in the area of general-family practice, 72.6% worked in small or medium firms and 27.4% worked in large firms, at the .05 level of significance. Considered together with the cross-tabs between FEMALE and general-family practice, this appears to be consistent with Deakin as well as Laband and Lentz. On the other hand, the results for the female-dominated area of international law do not uphold this hypothesis. 46.79% of those with a concentration in international law were found to be in small/medium firms and 53.3% were in large firms; this was significant at the .01 level. Again, no concrete conclusions can be drawn. It may be that firm size plays a role in determining partnership status (Deakin), but not in determining area(s) of concentration. This will be examined in the next section.

B: PARTNERSHIP
1. Model

In addition to examining areas of concentration, the MDH data will be used to examine a lawyer's position within the firm. Division of labor within a law firm occurs between partner and associate levels. Generally, partnership status is determined after 7 1/2 to 9 1/2 years with a firm (ROUNDTABLE 1, 17); it has been determined that after ten years, 59% of males and only 23% of females become partners (ROUNDTABLE 3, 15). If "gender" crowding is present, it is expected that cross-tabs and regression analysis will reveal a statistical significance on the basis of gender. Specifically, a negative relationship is expected between partnership and a female dummy variable (1=female; 0=male).

Theoretically, the probability of a lawyer achieving partnership status depends on human capital investment, experience and other criteria:

\[
\text{PARTNER} = f(\text{HUMCAP, EXPERIENCE, OTHER})
\]

The actual variables to be used in this study are presented in Table 4. Human capital influences include law school prestige [TOPQUART, 2ndQUART, 3rdQUART], law school performance
Table 4: Determinants of Partnership

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTNER</td>
<td>Partnership status; (1 = partner; 0 = otherwise)</td>
</tr>
<tr>
<td>FEMALE</td>
<td>Gender identified as female; (1 = female; 0 = male)</td>
</tr>
<tr>
<td>EXP</td>
<td>Experience; 92-BAR, with BAR = year of first admittance to bar</td>
</tr>
<tr>
<td>EXPSQ</td>
<td>EXP * EXP</td>
</tr>
<tr>
<td>FS-1</td>
<td>Firm consists of 2-3 lawyers; (1 = firm size of 2-3; 0 = otherwise)</td>
</tr>
<tr>
<td>FS-2</td>
<td>Firm consists of 4-9 lawyers; (1 = firm size of 4-9; 0 = otherwise)</td>
</tr>
<tr>
<td>FS-3</td>
<td>Firm consists of 10-20 lawyers; (1 = firm size of 10-20; 0 = otherwise)</td>
</tr>
<tr>
<td>FS-4</td>
<td>Firm consists of 21-30 lawyers; (1 = firm size of 21-30; 0 = otherwise)</td>
</tr>
<tr>
<td>FS-5</td>
<td>Firm consists of 31-60 lawyers; (1 = firm size of 31-60; 0 = otherwise)</td>
</tr>
<tr>
<td>FS-6</td>
<td>Firm consists of 61-90 lawyers; (1 = firm size of 61-90; 0 = otherwise)</td>
</tr>
<tr>
<td>FS-7</td>
<td>Firm consists of 90+ lawyers; (1 = firm size of 90+; 0 = otherwise)</td>
</tr>
<tr>
<td>BIGFIRM</td>
<td>Firm consists of 60+ lawyers; (1 = firm size of 60+; 0 = otherwise)</td>
</tr>
<tr>
<td>TOPQUART</td>
<td>Law school is ranked in top quartile; (1 = top; 0 = otherwise)</td>
</tr>
<tr>
<td>2ndQUART</td>
<td>Law school is ranked in second quartile; (1 = second; 0 = otherwise)</td>
</tr>
<tr>
<td>3rdQUART</td>
<td>Law school is ranked in third quartile; (1 = third; 0 = otherwise)</td>
</tr>
<tr>
<td>HONORS</td>
<td>Graduated law school with honors; (1 = honors; 0 = otherwise)</td>
</tr>
<tr>
<td>REV</td>
<td>Worked on law review during law school; (1 = review; 0 = otherwise)</td>
</tr>
<tr>
<td>CLERK</td>
<td>Worked as law clerk during law school or the year following the completion of law school; (1 = clerk; 0 = otherwise)</td>
</tr>
<tr>
<td>WEST</td>
<td>Practicing in Western geographic region; (1 = yes; 0 = otherwise)</td>
</tr>
<tr>
<td>MIDWEST</td>
<td>Practicing in Midwestern geographic region; (1 = yes; 0 = otherwise)</td>
</tr>
<tr>
<td>SOUTH</td>
<td>Practicing in Southern geographic region; (1 = yes; 0 = otherwise)</td>
</tr>
<tr>
<td>NORTH</td>
<td>Practicing in the Northern geographic region; (1 = yes; 0 = otherwise)</td>
</tr>
</tbody>
</table>

[HONORS], law review experience [REV] and clerkship experience [CLERK]. Experience is measured as the number of years in practice [EXP]. To account for the likelihood of partnership status increasing at a decreasing rate with respect to experience, EXPSQ will also be included. Finally, gender [FEMALE], firm size [FS-1, FS-2, FS-3, FS-4, FS-5, FS-6, FS-7 and BIGFIRM] and geographical location [WEST, MIDWEST, NORTH, SOUTH] are included.
Law review experience and extra-curriculars are included because of their voluntary nature; the individual law student actively chooses to participate in these activities as a way enhancing his/her future performance. This additional general training is expected to be positively related to partnership.

This study uses law school prestige, as determined by the U.S. News & World Report's quartile ranking of the nation's law schools. It is expected that going to a more prestigious law school will enhance an individual's chance of making partner. These results will be compared to those of Laband and Lentz. Instead of using an established system for ranking law school, Laband and Lentz relied on the respondents' subjective opinions as to whether their law schools were "very prestigious", "somewhat prestigious", "not very prestigious" or "not prestigious" (256). Thus, the results achieved using the law school ranking and MDH data are expected to be more reliable.

Years in practice (EXP) are expected to be significantly and positively related to partnership status. However, EXPSQ is expected to have negative and significant coefficient. This would indicate that the positive effect of experience on partnership increases at a decreasing rate—as an individual spends more time with a firm in the capacity of a non-partner, the likelihood of becoming a partner increases at a slower rate. Eventually a leveling off occurs.

Laband and Lentz suggest that firm size can affect a lawyer's chance of becoming a partner. Their results indicate that a greater probability of partnership exists in smaller firms (238), a finding that is consistent with current trends as identified by Deakin (1993). This study tests the same hypotheses.

Geographic location may also influence partnership. As the National Law Journal-West Publishing Company survey results revealed, "[g]enerally, more women in Los Angeles and Washington said they felt their firms provided equal opportunities than did women in Boston or Chicago (Lewin, 15)". Regional differences were also reported regarding the complications that female lawyers face because of male-only clubs (Lewin, 15).

While this study was limited by data, the literature discusses other variables that might affect the likelihood of becoming a partner. In future research, it might be helpful to evaluate the effects that
the following variables have on partnership: years with present employer (firm), full- or part-time employment, billable hours, ability to bring in business, on-the-job extras as well as sociological variables such as race, marital status and number of children. The first two are direct quantitative measures of experience and are traditionally positively related to partnership. Likelihood of becoming a partner is positively related to full-time employment, but negatively related to part-time status (Lewin, 15).

Since the ability to bring in business and billable hours are often used as important measures of productivity, they are also taken into account as a firm’s management is making decisions regarding partnership. A positive relationship would be predicted.

On-the-job extras that come as an individual gains experience with a firm (firm-specific training) can also positively influence the likelihood of becoming a partner. Included in such "extras" are mentorship opportunities, "power" lunches or after-work cocktails and sporting activities. All of these increase an associate’s contact with partners and clients. The theory of Blau/Ferber, the testimony of John Howlett, Jr. and the results of a National Law Journal-West Publishing Company survey, in which 918 female lawyers were questioned, all indicate that women are less likely than men to have these opportunities (Blau/Ferber, 1992; ROUNDTABLE 2, 25; Lewin, 15). Specific examples involve male-only clubs, which are "supported by one in five of th[e] law firms" that had lawyers participating in the above-mentioned survey (15).

Race, marital status and number of children may affect an individual’s probability of being partner. Race would be expected to have a negative effect if the individual is a minority. Furthermore, marital status and number of children may indirectly affect an individual’s tastes for/against hours spent in the workplace (See the discussion of work-force participation on pages 9-10). Interaction variables between these variables and gender might also produce interesting results with respect to predicting partnership status.
2. Results

To begin assessing the relationship between gender and status within the firm, I eliminated solo practitioners because they have no opportunity for further advancement. In order to accurately account for the fact that partnership is generally granted between 7 1/2 and 9 1/2 years (ROUNDTABLE 1, 17), and to eliminate outliers that were detected by the cross-tabs analysis, I decided to further restrict the sample to those lawyers with between 6 and 20 years of experience. This reduces the sample size to 226 (99 males and 127 females). Only results obtained using the restricted sample will be reported here.

Bi-variate cross-tab analysis between FEMALE and PARTNER did reveal a significant relationship. Referring to Table 5, 74.7% of the male lawyers are partners, compared to 57.7% of the female lawyers. The difference is significant at the .01 level.

In hopes of better understanding the magnitude of the relationship, I switched to multi-variate regression analysis. LOGIT analysis was chosen because of the dichotomous dependent variable (PARTNER). Unlike OLS regression analysis, the LOGIT coefficients cannot be treated like probability values. However, the signs and significance of the coefficients can be analyzed in much the same way as they are in OLS. LOGIT results are presented in Table 6.

Model A, the complete model, includes all of the variables that are expected to effect partnership status. In Model B, the firm size variables are recoded into the dummy variable BIGFIRM; only the law school variable of TOPQUART remains; variables indicating an individual's geographic location are eliminated; and the human capital variables of HONORS, REV and CLERK are removed. Model C evaluates the effects of gender (FEMALE), experience (EXP and EXPSQ) and law school rank (TOPQUART) on partnership. These changes and individual results will be discussed later.

In general these results support the crowding hypothesis—male and female lawyers are segregated
Table 5:

PARTNERSHIP STATUS BY GENDER
(restricted sample)
Table 6--LOGIT REGRESSION: Dependent variable--PARTNER

Standard errors are given in parentheses.
Significance Level: * = .10  ** = .05  *** = .01

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model A</th>
<th>Model B</th>
<th>Model C</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMALE</td>
<td>-.7677***</td>
<td>-.5969*</td>
<td>-.5859*</td>
</tr>
<tr>
<td></td>
<td>(.3812)</td>
<td>(.3511)</td>
<td>(.3485)</td>
</tr>
<tr>
<td>EXP</td>
<td>1.2913***</td>
<td>1.1980***</td>
<td>1.2000***</td>
</tr>
<tr>
<td></td>
<td>(.2863)</td>
<td>(.2641)</td>
<td>(.2641)</td>
</tr>
<tr>
<td>EXPSQ</td>
<td>-.0438***</td>
<td>-.0398***</td>
<td>-.0399***</td>
</tr>
<tr>
<td></td>
<td>(.0121)</td>
<td>(.0104)</td>
<td>(.0104)</td>
</tr>
<tr>
<td>FS-1</td>
<td>.3473</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.7144)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS-2</td>
<td>.2972</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.5893)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS-3</td>
<td>.1219</td>
<td>....</td>
<td>....</td>
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<tr>
<td></td>
<td>(.5708)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS-4</td>
<td>-.7308</td>
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<td></td>
<td>(.6543)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS-5</td>
<td>.1697</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.6376)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS-6</td>
<td>1.5482*</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.9498)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIGFIRM</td>
<td></td>
<td>.0169</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(.4089)</td>
<td></td>
</tr>
<tr>
<td>TOPQUART</td>
<td>.5601</td>
<td>.7755**</td>
<td>7975***</td>
</tr>
<tr>
<td></td>
<td>(.5836)</td>
<td>(.3499)</td>
<td>(.3401)</td>
</tr>
<tr>
<td>2ndQUART</td>
<td>-.8638</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.5767)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rdQUART</td>
<td>-.0939</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.6338)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HONORS</td>
<td>-.3458</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.4382)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>REV</td>
<td>-.0921</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.4370)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLERK</td>
<td>.4700</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.6437)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIDWEST</td>
<td>.5202</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.5355)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOUTH</td>
<td>.0994</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.4909)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORTH</td>
<td>-.0082</td>
<td>....</td>
<td>....</td>
</tr>
<tr>
<td></td>
<td>(.5227)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>constant</td>
<td>-7.5072***</td>
<td>-7.2699***</td>
<td>-7.2752***</td>
</tr>
<tr>
<td>-2 log likelihood</td>
<td>218.729</td>
<td>230.015</td>
<td>230.084</td>
</tr>
<tr>
<td>Model Chi-Square</td>
<td>73.793***</td>
<td>62.507***</td>
<td>62.438***</td>
</tr>
<tr>
<td>sample size</td>
<td>226</td>
<td>226</td>
<td>226</td>
</tr>
</tbody>
</table>
with respect to position within the firm, ceteris paribus, FEMALE has the expected negative sign, and it is a statistically significant predictor of partnership status. This relationship is maintained even after controlling for geographical location, firm size, experience and human capital influences. As is consistent with human capital theory and the findings of Laband and Lentz, both EXP and EXPSQ are extremely significant.

Model A also reveals that law school, geographic region and other human capital measures (HONORS, REV and CLERK) do not significantly affect the prediction of partnership status. In order to conserve degrees of freedom, Model B drops several insignificant variables. These include sets of dummy variables for firm size, human capital investment and geographic location. Before they were dropped, the groups of variables were tested to see if, as groups, they significantly affected the prediction power of the equation. The significance of the changes in chi-square and the degrees of freedom were evaluated. No statistically significant differences were found.

The relative insignificance of the human capital variables leads me to believe that once a lawyer is hired, he/she is viewed as an equal among his/her peers. Although general training may be responsible for getting the job, there is no evidence in these results that the general training helps a lawyer achieve partnership. Perhaps firm-specific training is more important. This finding would offer support for the results of the National Law Journal-West Publishing Company survey and the Blau/Ferber research. Unfortunately, there is no way for me to directly test this hypothesis.

Of the three dummy variables which capture the quality of law school, only TOPQUART was retained in Model B. This was done to maintain the theoretical integrity of the model. Furthermore, it is possible that the ranked "quality" of the law school affects future performance more than the individual's performance in law school. TOPQUART is significant at the .05 level in Model B and the .01 level in Model C.

With the exception of FS-6, none of the firm size variables are significant. This is consistent with preliminary cross-tab analysis of partner and firm size, controlling for gender. Since firm size was implicated as an important determinant of partnership by Laband and Lentz as well as Deakin, and
because FS-6 was significant at the .10 level, a dummy variable (BIGFIRM) that indicates firms with 60 or more attorneys was added to the equation. Unlike the previous predictions, BIGFIRM is not statistically significant.

So, what do the LOGIT results reveal about "gender" crowding by position within the law firm? One way to answer this question more definitively is to see the LOGIT cumulative distribution function and the estimated LOGIT coefficients to test the accuracy of prediction for Model C. For each of the 226 lawyers, an estimated probability was calculated. A probability of more than (less than) .50 is a prediction of being a partner (non-partner). Accordingly, Model C has an error rate of 27%, with 44 Type I errors and 17 Type II errors.

In order to make specific estimates regarding the probability of being a partner, the independent variables must be assigned definite values. For example, assume that the respondent has 10 years of experience (EXP = 10 and EXPSQ = 100) and went to a top quartile law school (TOPQUART = 1). Using the logistic cumulative distribution function, it is estimated that a male lawyer has a 63.1% probability of being a partner; a female with the same qualifications has an estimated probability of 48.7%. Model C predicts that the male is a partner, while the female is not. Being female apparently reduces a lawyer's chances of being a partner by 14.4 percentage points, ceteris paribus. When other assumptions are made regarding the values of the independent variables, the computed gender differences are similar. The effect is generally around 12 percentage points. As Bergmann's crowding hypothesis suggests, male and female lawyers are segregated according to position within the firm.

On an interesting side note, the control variable for law school prestige, TOPQUART, has a highly significant impact on the probability of becoming a partner for both males and females. Using the same assumptions from above, a male (female) who had not gone to a top quartile law school would have an estimated probability of 43.5% (30.0%). The probability of being a partner decreases by nearly 20 percentage points! While this study was not able to identify the interaction effects between gender and law school prestige, cross-tab analysis of the law school variables with FEMALE indicated that males were significantly more likely to graduate from a law school in the
top quartile ($\chi^2 = 3.646^{**}$). On the other hand, females were more likely to graduate from a law school in the third quartile ($\chi^2 = 6.396^{***}$). These results are similar to those of Laband and Lentz, who found more males in the top half, and more females in the bottom half (256).

I can think of two instances in which such law school segregation might occur. First, gender discrimination on the part of admission committees at law schools may give male students an advantage. This would be an example of the direct effects of statistical discrimination (imperfect information). Or, self-segregation and feedback effects may lead women to enroll in less prestigious schools. Conditions that might influence feedback effects include parental and societal pressures as well as the knowledge that, until recently, many of the prestigious law schools were actively opposed to enrolling female students (Epstein, 50). Fearing disapproval, lack of financial support or considerable discrimination, females may choose to enroll in less prestigious schools. As manifestations of statistical discrimination, these feedback effects reinforce the stereotype that female law students are not as smart or as tough as their male counterparts (Epstein, 1981).

Thus, the cross-tab analysis and TOPQUART's significance indicate that self-segregation into a less prestigious law school, as a result of feedback effects, may adversely affect the female lawyer's quest for partnership. This is not direct, but indirect in that it gives the male who graduated from a prestigious school an advantage.

**Attitudes—origins of crowding?**

1. Model

In an attempt to uncover the origins of crowding—what causes the negative sign on the FEMALE variable in the preceding analyses—a set of attitudinal responses from the NLSY was evaluated. Eleven questions were asked about control, self-esteem and family attitudes (See appendix A, pp. 2-3 for a list of the questions). It is expected that male respondents are more likely than their female counterparts to feel a sense of control over their actions and the directions that their lives are taking (attitudes of control and self-esteem). Also, it is expected that males are more likely to favor traditional roles for females within the family unit (family attitudes). However, it is not clear if this
difference will be statistically significant. Uncertainty arises because the sample is small and because the sample is composed of young attorneys—a group that has, in general, been exposed to greater gender equality in both the home and educational environment.

2. Results

Overall males and females did not differ significantly with respect to attitudes of control. As a group, the young lawyers felt that they were in control of their plans from beginning to end. However, the results on self-esteem statements were mixed. Surprisingly, 100% of the females responded that they disagree/strongly disagree with the following statements: 1) "I feel that I am a person of worth, at least on an equal basis with others", and 2) "I am able to do things as well as most other people". Cross-tab analysis found that these differences, with respect to gender, were significant with $\chi^2 = 2.81^*$. This implies that feedback effects may indirectly play a strong role in the decisions of these young female lawyers. The societal forces that shape these females' sense of self-esteem may direct choices regarding law school, area of concentration, firm size as well as many other career-related decisions.

On the other hand, cross-tab analysis of family attitudes and gender provide different conclusions. The following statements had a significant number of males agreeing/strongly agreeing with them: 1) "A woman's place is in the home, not in the office or shop", and 2) "A wife who carries out her full family responsibilities doesn't have time for outside employment". The differences were significant with $\chi^2 = 2.81^*$ and $\chi^2 = 6.06^{**}$, respectively. While the presence of a statistically significant difference is somewhat discouraging, a closer examination is needed. For both statements 100% of the females disagreed/strongly disagreed; 87.5% (75.0%) of the male respondents disagreed/strongly disagreed with statement 1 (2). This leaves only 12.5% (25.0%) of the males who agreed/strongly agreed with the statements. The relatively low percentages of males agreeing with these statements is encouraging. Unfortunately, complications arise if the attitudes of the 12.5% of males from statement 1 and the 25.0% of males from statement 2 are shared by those lawyers who are in management positions. This would mean that management decisions, including
those regarding job assignment and partnership status, might be subconsciously biased against females.

Due to the small and age-restricted nature of the NLSY data, further generalizations and speculations could result in biased conclusions. It would be very interesting to see how a larger and more age-diverse sample of lawyers respond to these statements. Perhaps this is an area for future research.

V. CONCLUDING THOUGHTS

While the analysis of wages/salaries and partnership status shows significant support for Bergmann's overcrowding hypothesis, more can be done in an attempt to clarify and strengthen the results. Perhaps the most important area for future research would be that of determining the exact roles that feedback effects and statistical discrimination (imperfect information) play in the origination of crowding. While it is important to realize that some attitudes and variables which may be either directly or indirectly related to gender cannot be measured in a tangible manner, the NLSY attitude questions provide a starting point from which to develop a more in-depth analysis. Future research could focus on the attitude analysis of lawyers and law students, using statements similar to those found in the NLSY. By analyzing these attitudes, it might be possible to pinpoint the causes of crowding. Once the magnitudes of these effects are isolated, problem areas can be addressed.

Based on the results of this study, a two step program may be suggested. The first step would involve combating low female self-esteem; and the second would involve confronting stereotypes concerning the "proper" roles of females in the professional and domestic worlds. As Howlett suggests, "Our profession [law] is really a reflection of what is happening in the rest of society (ROUNDTABLE 2,28)". Until the stereotypes and misperceptions are eliminated, Bergmann's model of labor market overcrowding may continue to be supported by much "intangible" evidence, but little measurable evidence.
NOTES

The cumulative distribution function for LOGIT, which is used to determine probabilities, is as follows:

\[ P_i = \frac{1}{1 + e^{-Z_i}}, \text{ where } Z_i = b_1 + b_2X_{2i} + b_3X_{3i} + \ldots + b_nX_{ni} \]

For this project, each specific variable's Z value was calculated as the variable's (mean value * LOGIT coefficient). Thus, \( P_i \) was calculated as \( \frac{1}{1 + (2.71 \times \text{exp(sum of all Zs)})} \); \( e=2.71 \) (Gujarati, 1988).
SAMPLE SELECTION CRITERIA:


2. Calculated percent of lawyer population per state: (# lawyers in the state/total lawyer population).

3. Using a sample size of 200 female lawyers and 200 male lawyers (over-representation of female lawyers), calculated the necessary number of lawyers to be selected from each state so that the sample's distribution would be as representative of the population as possible: (% lawyers * 200). Rounding criteria: any number greater than 1, with .645 or higher was rounded up, and any number less than 1 was rounded up to 1.

   A. Calculate the Page Skip Factor (PSF) for each state as follows: (# pages for state x/sample # from state x). Rounding criteria: any number with .5 or higher is rounded up.
   B. Use the random number function on my Casio Scientific Calculator (fx-570A) to randomly choose a page on which to start for each specific state.
   C. Go to that page.
      a. Female attorneys: Select the first female attorney listed; proceed in selecting attorneys by using the PSF. Even if a female is not listed on the specified page, use the specified page number to continue selection. (Example: The PSF indicated that the next female should be selected from page 57, but a female first appears on page 58. Select the female from page 58, but apply the PSF to 57.)
      b. Male attorneys: (Start at the same randomly selected page. Add 5.) Select the second male attorney listed; continue selecting additional male attorneys by using the PSF--always select the second male attorney.

SPREADSHEET SET UP

rank: 1-51; indicates state's rank according to the proportion of U.S. lawyers that resides in the state, as reported by the ABF in 1988.

# lawyers: state-specific population of lawyers in 1988 as reported by the American Bar Foundation

% lawyers: % of total U.S. lawyer population as recorded by the ABF in 1988.

sample: % lawyers of a specific state * 200--number of lawyers to be selected from the state in order to ensure that the sample is representative of the true population (a population of 200 female attorneys will be selected as well as a sample of 200 male attorneys--overall, there will be an over-representation of women)
APPENDIX

sample A: a whole-number estimate of the sample. Rounding criteria: any number greater than 1, with .645 or higher was rounded up, and any number less than 1 was rounded up to 1.

pages: # of pages devoted to state x in MDH
PSF: (page skip factor = pages/sample A) Rounding criteria: any number with .5 or higher is rounded up

areas of concentration: the first two listed for each attorney, or the corresponding firm; the following areas will be identified:

CIVIL: civil, general negligence, product liability, consumer law
CORP-FIN: real estate, commercial, business, municipal & administrative, anti-trust, insurance, products defense, financial, banking, securities & bonds, bankruptcy, creditors' rights
CRIM: criminal defense, white collar crime
ENVIR: environmental, natural resources, gas, mineral, alternative energy, energy, land use
EST-TAX: estate, probate, trusts, tax
GP-FAM: general practice, family law, divorce, adoption, juvenile, traffic, pension/S.S. benefits, domestic relations, marital law
INSDEF: insurance defense
INTL: international, international trade
LABOR: labor, employment
LIT-APPEL: litigation, civil litigation, tort litigation, commercial litigation (when a specific type of litigation is listed, LIT will be identified as well as the specific area of practice); appellate, appellate advocacy
MAL: malpractice--medical, lawyer, professional, professional negligence
PATENT: patent, copyright, intellectual property, trademark
PI: personal injury, workers' compensation, automobile, wrongful death

geographic region: The region of practice is assigned based on 1) the state in which the individual is registered with respect to MDH and 2) U.S. Census divisions and regions; the following regions will be used:

WEST: AK, WA, HI, OR, CA, ID, NV, AZ, UT, MT, WY, CO, NM
MIDWEST: ND, SD, NE, KS, MO, IA, WI, IL, IN, MI, OH
SOUTH: TX, OK, AR, LA, MS, AL, TN, KY, WV, NC, SC, GA, FL, MD, DE, WASH D.C.
NORTH: ME, VT, NH, MA, RI, CT, NJ, PA, NY

NLSY ATTITUDE VARIABLES:

Attitudes of control:

CONTROL: Does the individual feel that he/she has control over the direction of his/her life is taking? 1=yes; 0=no
LUCK: Does the individual believe that he/she controls plans once they are made? 1=yes; 0=no

FLIPCOIN: "...many time we just as well decide what to do by flipping a coin." 1=yes; 0=no

BIGLUCK: Does luck have a big influence over the things that happen to the individual? 1=yes; 0=no

Attitudes of Self-Esteem:

WORTH: "I feel that I am a person of worth, at least on an equal basis with others." 1=strongly agree/agree; 0=disagree/strongly disagree

CAPABLE: "I am able to do things as well as most other people." 1=strongly agree/agree; 0=disagree/strongly disagree

SATISFACTION: "On the whole, I am satisfied with myself." 1=strongly agree/agree; 0=disagree/strongly disagree

USELESS: "I certainly feel useless at times." 1=strongly agree/agree; 0=disagree/strongly disagree

Family Attitudes:

FEMHOME: "A woman's place is in the home, not in the office or shop." 1=strongly agree/agree; 0=disagree/strongly disagree

NOTIME: "A wife who carries out her full family responsibilities doesn't have time for outside employment." 1=strongly agree/agree; 0=disagree/strongly disagree

TRADHAPPY: "Women are much happier if they stay at home and take care of the children." 1=strongly agree/agree; 0=disagree/strongly disagree
REFERENCES


**Deakin, Michelle Bates,** "Women Find Their Place in Small Firms," *Lawyers Weekly USA*, 93-10, 16 August 1993, pp. 1, 13.


