

Barriers Facing Women in the Competition for Legislative Seats

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Abstract

Historically, men have been elected to political offices at far higher rates than women. This pattern has begun to erode, but female representation in legislative bodies still remains far below their proportion of the population. The question addressed here is "why do women hold elective office in smaller numbers than men?" The theory of entry barriers in politics offers an effective means for examining the electoral success of women in state legislatures. Among the barriers to elective office faced by challengers are the costs of providing information about the candidate's positions on issues which are important to the electorate, occupation, and other opportunity costs. The influence of entry barriers on the proportion of women in state legislatures is explored in a cross-section analysis within an OLS framework.

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1. Introduction

Over the past three decades, women have made significant strides in getting elected to public office. The percentage of women in state legislatures has risen from an average below five percent in 1971 to slightly above twenty-two and a half percent in 2005 (Center for the American Woman and Politics 2005). In Congress, gains have been less striking in both the levels and the rates of growth of representation by women, with women making up three percent of the Congress in 1971 versus about fifteen percent in 2005 (Center for the American Woman and Politics 2005). While recent gains may indicate some improvement in political representation of women, the percentages of women in both the U.S. Congress and state legislatures remain far below the percentage of women voting.

The relative under-representation of women in legislative bodies may occur for one of two basic reasons. First, it may be that voters reject female candidates at higher rates than male candidates. Alternatively, women may not run for office as frequently as do men. Welch *et al.* (1985) find that women do as well as men when they run for open seats, suggesting that the latter reason is dominant. In general elections they find that women are as successful as men, after accounting for incumbency differences. However, they find that more male candidates are unopposed or have the advantage of being an incumbent. Of course, we recognize that running for office reflects a person's estimation of the likelihood of success, with likelihood of success meaning attracting candidates, voters, and contributors. Why women run for office less than men is important to know. If the differences in representation are due to institutions that favor incumbents over challengers or even men over women, then constitutional change may be appropriate. However, if women are relatively under-represented due to differences in socialization or differences in occupational choices, and so, differences in opportunity costs of being a legislator, then collective action to alter the proportion of women in legislative offices is both more difficult to accomplish and more difficult to justify.

Lower rates of election to legislatures do not necessarily mean that issues that are more important to women do not receive attention in legislatures. However, differences in gender composition of state houses may still translate into policy differences across states. Sue Thomas (1991) finds that women are more likely to introduce bills concerning women, children and families than are men, and are more successful in getting such bills passed. She also finds that greater percentages of women in the legislature and the presence of women's caucuses makes it more likely that women legislators will introduce and pass bills involving women, children and family issues. Therefore, while women, children and family issues may be raised in legislatures that are predominantly made up of men, the nature of debate and the character of legislation may be influenced by the absence of women in such legislative bodies.

While we believe that the cross-sectional model we test provides some insights into the reasons for the relative under-representation of women in state legislatures, we also recognize that its major limitation is that it cannot capture the dynamics of women's progress over the past third of a century. Election outcomes now and those in 1997 that we study here were influenced by a host of factors that predated these elections. A more complete understanding of the election outcomes requires an examination of both an earlier distribution of rates of female representation across the states and various changes since then that influence the ability of women candidates to get elected. For example, we know that some states, principally those in the West, have long traditions of female participation in politics. While we attempt to control for these differences in state political cultures, we cannot, in a simple cross-sectional study, hope to capture the evolution of the various cultural foundations over time.

The average proportion of women in legislatures conceals the wide range among the states. In 2005 about 34 percent of Maryland's legislature was female, while in South Carolina only 9 percent

of the legislature was composed of women (Center for the American Woman and Politics 2005).

There are several reasons that one could give for both the under-representation of women in politics and the variation in gender representation among the states. One reason could be attitudes and preferences of voters, donors and potential candidates. This may have to do with the longstanding social and political culture of the state. Another possible explanation is that there may be barriers to entry, differential costs of entry facing potential competitors, limiting women's presence in elective offices. Barriers to entry in legislatures have concerned economists who study the competitive processes of democratic politics since Tullock (1965). In this paper, we are concerned with examining the influence of a variety of barriers to entry on female representation in state legislatures.

2. Direct and Indirect Barriers to Entry to Legislatures

We begin by considering two classes of barriers to entry into legislatures, direct and indirect entry barriers. First, our political institutions may have barriers that either limit entry by women in particular or by political challengers in general. We refer to these institutional barriers as direct entry barriers. Second, barriers may exist because of differences in opportunity costs such as occupational differences, which we refer to as indirect barriers.

One type of direct barrier to entry noted by Crain and Goff (1986) is the single-member district. Challengers find it easier to gain entry into the legislature in multi-member districts. Matland and Brown (1992) show that multi-member districts reduce entry barriers, increasing female representation. However, a number of researchers have found that brand-name capital (such as name recognition), which is what campaign funds purchase, is an effective barrier to entry. Evidence of campaign spending as investment in brand-name or informational capital can be found in Lott (1987), Crain and Goff (1986, 1988), Coats and Dalton (1992a, 1992b), Yen, Coats and Dalton (1992), Palda and Palda (1985), and Jacobson (1976, 1978).

Gerrymandered political districts can also reduce electoral opportunities of women. Werner (1968) and Nechemias (1987) find evidence that reapportionment adversely affected female office holding in the 1960's.

The distinction between indirect and direct entry barriers is important because more can be done about direct entry barriers than about gender differences in occupations. Removing gender barriers in occupations only slowly changes the gender composition of that occupation, while removing the direct or institutional barriers to entry in politics more quickly changes the composition of legislatures. Further, socialization differences between the sexes can maintain occupational differences over considerable periods of time.

3. Direct Barriers to Entry: Cost of Information and Gerrymandering

Downs (1957) showed that voters have little incentive to become informed about election alternatives because there is little chance any individual voter affects the outcome. Gathering information about the candidates and issues improves the collective outcome, but the costs fall only on those who gather the information. It is not surprising that candidates have a strong incentive to "educate" the voters about their own positive traits as well as the negative attributes of their opponents, internalizing the externalities of information gathering. Anything that increases the costs of communicating with voters in the district, such as increasing the number of voters per district or the distances to traverse the district for face-to-face campaigning has a tendency to protect incumbents, making it more difficult for any challenger to get elected.

Since voters do remember, information about candidates' positions on issues and their character traits persist long after election day. To the candidates, information held by the voters is useful in producing a desired result, support for office, both now and in the future. Information is capital for the candidate, brand-name capital. Purchasing such capital is an act of investment by the candidate. Any

limitation on campaign spending (advertising) during any one election naturally favors those who have already amassed a substantial quantity of brand-name capital. Since campaign spending limitations make it even more difficult for challengers to get elected, Gary Jacobson (1976, 1978) calls campaign-spending laws "Incumbent Reelection Acts."¹

Gerrymandering electoral districts may reduce representation by women for three distinct reasons. First, if the districts are drawn to concentrate black voters into one district to create a majority black district, white voters are concentrated into other districts. Removing black or Hispanic voters from the majority-white districts shifts the political centers of majority-white districts to the right because black voters tend to vote for more liberal candidates. Since women politicians tend to be more liberal than men (Leader (1977) and Welch 1985), liberal and even moderate women candidates have little chance in these very conservative districts. Districts become more ideologically differentiated as they become racially differentiated through race-based districting.

The second reason that gerrymandering districts along racial or any other lines reduces representation of women is that it raises the costs of campaigning in these oddly shaped districts. Since advertising in any market must reach a certain level before it begins to "connect" to the voters with its message, a challenger cannot merely spread the campaign dollars more thinly across these various advertising markets.

To create racial minority districts, legislatures often draw peculiar boundaries, such as the Z-shape of Cleo Fields' district in Louisiana in the 1992 election. Congressman Field's district stretched from the toe of the Louisiana boot to Baton Rouge to the northeast corner of the state and over to the northwest corner of the state. Fields' district was 600 miles long and ran through 28 of Louisiana's 64 parishes. At one point the district was only a strip 80 feet wide. At the end of 1993 federal judges ruled that the district's meandering shape was unconstitutional (Associated Press December 29, 1993).

Running for office in such a district means buying campaign advertisements in the many broadcast and print markets in the district. Face-to-face campaigning also becomes expensive and exhausting, as travel time in the district increases. In addition, the costs are higher for voters to get together, to organize opposition and to transfer information (e.g. reading newspapers or seeing telecasts from other parts of the district). While campaign costs are higher for both male and female candidates, the better-known politician is given the advantage, but women are seldom the better-known politicians in elections.

Incumbents in odd-shaped, non-compact districts are not only more costly to challenge, but enjoy longer tenures in office and gain greater seniority. An information-cost advantage often means that incumbents in these Picasso-drawn dispersed districts can use excess political capital to follow their own political agendas, paying less attention to the preferences of voters.

The third reason is that some legislatures reapportion so as to afford the greatest protection to incumbents, making it difficult for any challenger to get elected except in open seats where no one is an incumbent.

4. Indirect Barriers to Entry: Opportunity Costs of Legislative Service

What has brought the question of differential costs of being a legislator to mind is the extensive literature that shows that being a legislator favors certain occupations (McCormick and Tollison 1981; and Stigler 1971) and that women tend to be under-represented in the favored occupations (Schramm 1981; Gertzog 1979; Welch 1978 and Williams 1990). Often, these occupations, such as law, involve heavy investments in human capital, and women tend to invest less in human capital than do men for various reasons (see any labor economics text, such as McConnell, Brue and McPherson 2003), reducing their representation in such occupations. Darcy, Welch and Clark (1987) found that the increase in the percent of women candidates for state legislative office was about half the percent

increase of women in the legal profession.

Lawyers and entrepreneurs have been identified as the two largest occupations of state legislators in 1975 by the Insurance Information Institute's *Occupation Profile of State Legislators* (1976). McCormick and Tollison (pp. 79-81) suggest that a lawyer can more effectively combine her role as a lawyer with legislative work than can a medical doctor, a CPA or those in most other occupations. There are two reasons that those who wish to influence legislation may hire the lawyer/legislator's firm for legal services at rates that exceed regular rates without being seen as bribing the legislator. First, the variations in quality and rates of compensation are large, making it difficult to distinguish improper from proper fees. Second, since every firm, organization and person could have a legitimate reason to employ a lawyer, a lawyer/legislator who receives payments to influence legislation can do so under the guise of doing legal work, the nature of which is guarded under attorney-client privilege, increasing the voters' costs of monitoring payoffs to legislators. Overpayment for services is both more visible and easier to prosecute with legislators who do not practice law. Therefore, it is less costly for a lawyer to enter politics than a medical doctor, a dentist or an engineer. Also, a lawyer who has served in the legislature and has friends there may be able to increase earnings after legislative service because of recognition gained while in office--the costs of exit from legislative markets are lower for lawyers and legislative experience is an important form of investment in human capital for lawyers. Entrepreneurs may also have a comparative advantage as legislators because they need not give up their income to become a legislator, and entrepreneurial skills prove valuable to a legislator.

From 1971 till 2002, the enrollment of women in ABA approved law schools grew from 9 percent to 49 percent (American Bar Association 2002). In 2003 women still made up only about 29 percent of lawyers in the U.S. (ABA Commission on Women in the Profession 2003). It will be a long

time before women make up half of the legal profession, especially since women, on average, have higher rates of breaks in their careers due to family considerations. One reason women may have sought legal training at lower rates than men is that women lawyers working full time currently make only about 76 percent of what their male counterparts make (ABA Commission on Women in the Profession 2003). Rhode (2001) also mentions sexual harassment, quality of life and work-family issues and the educational climate as problems making the legal profession less attractive to women.

Associated with the gender differences in costs because of different market occupations are gender differences in costs because of family jobs, such as parenting and household responsibilities (Mezey 1978 and Deber 1982). The differences in costs of seeking office for those in different occupations (both market and family occupations) may help explain the differences we see in the gender composition of legislatures. Differential costs of seeking office across family jobs and responsibilities suggests that states with low rates of labor force participation by women have lower rates of political participation by women as candidates because of high opportunity costs of leaving their family jobs. Indirect barriers to entry can be posited if we accept that the costs of entering politics vary across occupations and recognize that female participation in traditionally male occupations has been limited (why the differential rates of market penetration across occupations by women has occurred is another matter).

Individuals who have low-paying alternatives to legislative service, or for whom legislative service is unlikely to conflict with their regular jobs may be likely candidates for office, even though their legislative service may not enhance the earnings from their regular jobs. Higher pay attracts more non-lawyers to legislative service. For instance, a teacher with no other income source could not afford to give up her teaching job to become a legislator if legislative pay did not begin to replace her teacher pay. However, if a legislator's pay were considerably more than her teacher salary (with

similar benefits) she might view the prospect of serving in the legislature as a worthwhile alternative.

5. Sex-specific and Non-sex-specific Barriers to Entry

As noted above, entry barriers to politics may be either direct or indirect. There also may be sex-specific and non-sex-specific barriers to entry in politics. The direct entry barriers described so far do not seem to be sex-specific, that is, the barriers seem to affect male and female challengers alike. While we know of no blatantly sex-specific direct entry barriers, some entry barriers may favor one sex or the other by having a greater impact on one sex. The sex-specific effect of the entry barrier may even outweigh the non-specific effect, i.e. the incumbent-protection effect. Low-pay is likely to have a greater impact on keeping women out of the legislature if women have few alternatives outside of the home. But if the labor force participation rate of women is low to begin with, better pay in the legislature is likely to have a more substantial increase in women seeking legislative seats than if women were in the labor force at very high rates.

Finally, we note that another possible indirect barrier to entry is the greater difficulty challengers may have in raising campaign funds. However, Uhlaner and Scholzman (1986) find little difference in the ability of men and women to raise campaign funds in legislative races.

6. Explaining the Variation in Female Representation across the States: Preferences or Costs?

There is a wide variation across the states in both seeking and obtaining a seat in the lower houses of the legislatures. In a simple regression of women candidates per seat on women legislators for the 1992 legislature (lower house only), women candidates per seat accounted for 70 percent of the variation in the percentages of women legislators, with a regression coefficient of 0.495 (with a t-statistic greater than 10, and the intercept was 3.4 and it was significantly different from 0) indicating that women candidates win half of the time (however, this estimate is likely to be biased due to specification error).

Welch *et al.* (1985) suggest that if more women ran for open legislative seats, legislatures would soon become more nearly proportionate to the population of voters in sex, but that women run for legislative office at lower rates than do men. The reason so few women run for office may be because men and women, on average, have different attitudes and preferences concerning the electoral-office level of political involvement (as opposed to voting or campaign-worker levels of involvement). An alternative reason may be that the costs of becoming a candidate may vary by sex. Of course, a combination of differences in costs and in preferences (or attitudes) may cause the differences in the rates of candidacy. Further, being satisfied that differences in attitudes and preferences is the reason for differences in outcomes usually blinds one to the possibility that differences may have their roots in cost differences. Since we find no substantial differences between voters' preferences for men and women candidates, we make the economist's usual assumption that the differences are not due to differences between men and women in tastes for elected office.

7. Empirical Models

What is suggested by the theory as we have discussed it so far is that the percentage of women in state legislatures is related to the percentage of lawyers who are women, the percentage of firms owned by women, the pay of legislators, the extent of multi-member districts, the average size of districts, gerrymandering to increase racial composition of the legislature and campaign expenditure limits in the state. To examine the degree to which female representation in legislatures is related to the entry barriers we have discussed above, we use an OLS model with two different dependent variables, the percentage of women in the lower house of the state legislature in 1997, *WOMEN IN HOUSE*, and the percentage of women in the entire state legislature in 1997, *WOMEN IN LEGISLATURE* (Center for the American Woman 1997). To measure the lower opportunity cost (the comparative advantage) that lawyers have as legislators, we use the percentage of lawyers who are

women in 1995, *FEMALE LAWYERS 95* (Carson 1999). To account for the high opportunity costs women may have in taking jobs outside of the home (which we can also think of as the degree of feminization), we include the rate of labor force participation of women in 1997, *FEMALE LABORFORCE PARTICIPATION 97* (U.S. Census Bureau 1997). We examine the degree to which female entrepreneurship is related to the percentage of women in the legislature by including the percentage of firms in a state owned by women (in 1997), *FEMALE FIRMS 97* (U.S. Census Bureau 1997). To account for the long political traditions of including women in politics in mostly western states, a matter of political culture, we use a measure of the number of years before 1921 (the year after nineteenth to the U.S. Constitution was ratified in 1920) that the right of women to vote was recognized by the state and then take the natural log of those years for the variable we call *SUFFRAGE*. Since the nineteenth amendment came into effect in 1920, this variable is the log of 1, or zero for most states.

States have various provisions regarding what is allowed to be taken into account, what must be taken into account and what cannot be taken into account in order to reapportion the state legislature. Some states allow the protection of incumbents to be taken into account in drawing district maps. In the states that allow this incumbent protection are coded as a 1 in our binary *INCUMBENT PROTECTION* variable (National Conference of State Legislatures 1999). Where the state constitution or the US Department of Justice is silent on incumbent protection as a rationale or where it is expressly forbidden, *INCUMBENT PROTECTION* is coded as zero. Whether forbidding incumbent protection has any differential effect on the rate at which women get elected to state legislatures is left unexplored here.

To account for the lower entry costs in multi-seat districts, we introduce the variable *SEATS PER DISTRICT* into our model (National Conference of State Legislatures 1999). To control for the effect of the size of the district on a candidate's costs of informing the constituency of her positions on

the issues, as well as its influence on the diversity of districts, we include *DISTRICT POPULATION*, the average population of districts within the state measured in thousands of people per district (U.S. Census Bureau 2004 and National Conference of State Legislatures 1999).

Our basic models are then

$$\begin{aligned}
 \text{WOMEN IN HOUSE} = & B_0 + B_1 \text{ FEMALE LABOR FORCE PARTICIPATION} + B_2 \text{ FEMALE FIRMS 97} \\
 & + B_3 \text{ LAWYERS FEMALE 95} + B_4 \text{ SUFFRAGE} + B_5 \text{ CUMBENT PROTECTION} \\
 & + B_6 \text{ SEATS PER DISTRICT HOUSE} + B_7 \text{ POPULATION PER HOUSE DISTRICT}
 \end{aligned}$$

and

$$\begin{aligned}
 \text{WOMEN IN LEGISLATURE} = & b_0 + b_1 \text{ FEMALE LABOR FORCE PARTICIPATION} + b_2 \text{ FEMALE FIRMS 97} \\
 & + b_3 \text{ LAWYERS FEMALE 95} + b_4 \text{ SUFFRAGE} + b_5 \text{ INCUMBENT PROTECTION} \\
 & + b_6 \text{ SEATS PER DISTRICT LEGISLATURE} + b_7 \text{ POPULATION PER LEGISLATIVE DISTRICT.}
 \end{aligned}$$

The summary statistics for the dependent and independent variables we use are shown in Table 1. In addition to this information, we note that there were thirteen states in 1997 with multi-seat districts and six states where incumbent protection is expressly allowed for reapportionment.

Table 1. Summary Statistics	MEAN	ST. DEV.	MAX	MIN
<i>FEMALE LEGISLATURES (AGGREGATE)</i>	22.6237	6.8514	35.3741	9.4118
<i>FEMALE LEGISLATURES (HOUSE)</i>	23.2589	7.7531	48.5714	10.4762
<i>FEMALE LABOR FORCE PARTICIPATION</i>	60.7360	4.4659	71.2000	46.8000
<i>FEMALE FIRMS 97</i>	25.2701	1.7840	29.3929	21.4634
<i>LAWYERS FEMALE 95</i>	21.4100	3.2585	27.4000	15.0000
<i>SUFFRAGE</i>	4.9600	7.2926	31.0000	1.0000
<i>INCUMBENT PROTECTION</i>	0.1200	0.3283	1.0000	0.0000
<i>SEATS PER DISTRICT (AGGREGATE)</i>	114.1470	31.7624	271.7949	100.0000
<i>SEATS PER DISTRICT HOUSE</i>	121.3968	45.5932	303.0303	100.0000
<i>POPULATION PER HOUSE DISTRICT (AGGREGATE)</i>	39268.0504	42280.3614	268480.9000	4865.0000
<i>POPULATION PER HOUSE DISTRICT</i>	57962.5466	65169.7347	402721.3500	5450.6019

8. Empirical Results

We examine our model over two similar data sets: 1) for the lower chambers and 2) for the entire legislatures. These are shown in Table 2 and Table 3. We encountered some collinearity between the *LAWYERS FEMALE 95* and the *FEMALE FIRMS 97* variables, and so we report three models over each of data sets: a) both *LAWYERS FEMALE 95* and the *FEMALE FIRMS 97*; b) the *FEMALE FIRMS 97* variable and other variables, but eliminating the *LAWYERS FEMALE 95* variable; and *LAWYERS FEMALE 95* and variable and other variables, but eliminating the *FEMALE FIRMS 97* variable. The *WOMEN IN HOUSE* model accounts for between 39 to 48 percent of the cross-state variation in female representation in the lower chambers, and the *WOMEN IN LEGISLATURE* model accounts for between 48 and 58 percent of the cross-state variation in female representation in the entire legislature.

Lower opportunity costs for women outside of the home as measured by the female labor force participation rate increases the female share of membership in legislative office. We find that for about every one-percent increase in the rate of labor force participation by women, the rate of representation by women in the lower chamber and in the entire legislature by a little more than one percent, a somewhat elastic response. A lower degree of "feminization," or perhaps "marketization" of women, as indicated by lower rates of labor force participation by women, contributes to lower rates of female representation in the legislature. If the opportunity cost for women to become part of the labor force is relatively high in some states, one would expect lower rates of women in the legislature.

For every 1-percent increase in the proportion of lawyers in a state who are women, the percentage of women in the state legislature rises by about 0.9 percent in the lower chamber in model 1C, but is not significantly different from zero in the full model, 1A, because it is affected by the collinearity with *FEMALE FIRMS 97*. In the full legislature model, model 2, *LAWYERS FEMALE 95* is mildly

Table 2. Regression Results from Model 1	WOMEN IN HOUSE					
	MODEL 1A		MODEL 1B		MODEL 1C	
	Coefficient	p-Value	Coefficient	p-Value	Coefficient	p-Value
<i>INTERCEPT</i>	-11.165	0.001	-12.090	0.0002	-5.229	0.038
<i>FEMALE LABOR FORCE PARTICIPATION</i>	1.245	0.032	1.375	0.0145	1.044	0.088
<i>FEMALE FIRMS 97</i>	2.052	0.009	2.453	0.0002		
<i>LAWYERS FEMALE 95</i>	0.317	0.377			0.906	0.005
<i>SUFFRAGE</i>	0.073	0.073	0.059	0.112	0.099	0.021
<i>INCUMBENT PROTECTION</i>	-0.177	0.160	-0.187	0.135	-0.125	0.348
<i>SEATS PER DISTRICT HOUSE</i>	0.322	0.023	0.335	0.018	0.253	0.087
<i>POPULATION PER HOUSE DISTRICT</i>	-0.000	0.721	-0.000	0.891	-0.000	0.966
Overall Significance (F)	0.0001		<0.0001		0.001	
R ²	0.481		0.471		0.387	
ADJ- R ²	0.394		0.397		0.302	

Table 3. Regression Results from Model 2	WOMEN IN LEGISLATURE					
	MODEL 2A		MODEL 2B		MODEL 3C	
	Coefficient	p-Value	Coefficient	p-Value	Coefficient	p-Value
<i>INTERCEPT</i>	-11.993	<0.0001	-13.683	<0.0001	-6.264	0.007
<i>FEMALE LABOR FORCE PARTICIPATION</i>	1.348	0.007	1.566	0.002	1.141	0.033
<i>FEMALE FIRMS 97</i>	1.950	0.004	2.632	<0.0001		
<i>LAWYERS FEMALE 95</i>	0.533	0.086			1.100	0.0001
<i>SUFFRAGE</i>	0.077	0.027	0.055	0.090	0.101	0.007
<i>INCUMBENT PROTECTION</i>	-0.141	0.190	-0.159	0.148	-0.091	0.432
<i>SEATS PER DISTRICT LEGISLATURE</i>	0.334	0.040	0.382	0.021	0.258	0.137
<i>POPULATION PER LEGISLATIVE DISTRICT</i>	-0.000	0.687	-0.000	0.988	-0.000	0.940
Overall Significance (F)	<0.0001		<0.0001		<0.0001	
R ²	0.579		0.548		0.484	
ADJ- R ²	0.509		0.485		0.412	

to strongly significant with elasticities ranging from .5 to 1.1. Of course, the collinearity problem makes it difficult to measure the effect of the proportion of lawyers who are women on female representation. In addition, for one-percent increase in women-owned firms in a state, we find an associated increase in female representation by about two percent or more across the four combinations

of data sets and models. Our contention that lawyers and female entrepreneurs have relatively lower opportunity costs in becoming state legislators seems to be borne out.

Since it is easier to win, place or show in a district than to win in a district, the presence and prevalence of multi-member districts should increase the representation of women by making it easier for any challenger to enter the legislature. In two states where the lower legislative chambers are alike in every respect except that one has all two-seat districts and the other has only single-seat districts, the one with the two-seat districts has, on average, 25 to 38 percent higher rates of female representation, and the effect of multi-seat districting is somewhat statistically significant.

Increasing the average population of state legislative districts seemed to have no effect on the percent of female legislators in the state. While *INCUMBENT PROTECTION* was never statistically significant at the 0.1 level, it was often substantially close, with a consistently relationship with female representation. This is a variable that should be measured more carefully (perhaps taking into account the states with prohibitions on considering incumbent protection in reapportionment).

9. Conclusions

This paper examines the reasons for the under-representation of women in state legislatures. The question of under-representation is important both because it seems to be inherently unfair that women have not achieved equality with men in the political sphere, and because a representative democracy should rest upon a foundation that insures that every segment has an equal chance of serving as representatives. While men candidates seek the support of women voters and women candidates seek the support of men voters, barriers to entry allow incumbents to shirk and not fully represent their constituency. A political system which is biased against the members of one or another group will probably produce legislative results which are disadvantageous to those of the disenfranchised group.

The major result of our paper is that a variety of direct and indirect barriers to entry have limited the gains women have made in increasing their legislative representation. These barriers range from the opportunity costs of occupational choice to the relatively higher costs of challenging incumbents in racially gerrymandered districts. On the other hand, it appears that women challengers are less affected than men by other barriers to entry such as laws imposing campaign expenditure limits.

The effects of past discrimination usually explain the relatively low representation of women and minorities. While we do not explore the original source of the under-representation of women, we do accept the merits of the argument that women faced significant discrimination in the past. We examine the effects of current laws that tend to perpetuate existing patterns of legislative representation. The effects of past discrimination are institutionalized by rules that increase campaign advantages of the incumbent (usually white men). While not all of the advantages held by incumbents can or even should be eliminated (e.g., the newsmaker and speechmaker advantages), it is questionable policy that reinforces barriers to challengers, making it harder for all challengers to get elected, particularly since challengers are likely to be more diverse and representative than the present group of incumbents.

Even if entry barriers are no higher for female challengers than for male challengers, entry barriers still function to keep the female proportion of the legislative body to a fraction of the proportion of female voters. However, some entry barriers may be higher for those of one sex than of another. We find that some entry barriers affect men and women differently. For instance, low pay and expenditure limits seem to be more of a hindrance to men than to women.

Entry barriers due to differences in opportunity costs seem to be a major part of the reason women are elected at lower rates than men. When women are candidates, they are elected to state

legislatures on par with men. We find evidence that the greater the representation of women in certain occupations, particularly entrepreneurship and (or?) the practice of law, the greater chance women have of getting elected to office. Likewise, the greater the proportion of women in home occupations, the less likely women are to run and get elected to the state legislature, as home occupations are costly to give up to work outside the home, including working as a legislator in the state capital. This can especially be seen with the women legislator elasticities with respect to female labor force participation in excess of unity in all six versions of the model.

With women making up no more than about 27 percent of the attorneys in any state and no more than about 29 percent of the owners of firms in any state (see Table 1), and with coefficients from our regression model for these variables between 0.5 and 2.45, we can see that occupational differences are important reasons why women are represented in state legislatures at rates far below their proportion in the population.

Seniority systems in various work settings function to institutionalize past discrimination so that members of formerly-discriminated-against groups are the first to be laid off, making it more difficult for women, blacks, and other minorities to gain toe-holds in such areas. While not all of the advantages held by incumbents can or even should be eliminated (e.g. the newsmaker and speechmaker advantages), it is questionable policy, such as incumbent protection reapportionment, that reinforces barriers to challengers, making it harder for all challengers to get elected.

One policy implication of our results is that unambiguously beneficial electoral reforms may be hard to find. For example, while racial gerrymandering has the laudable goal of increasing minority representation, it may have the unintended negative consequence of reducing the representation of women. This observed conflict among policies affecting direct barriers also suggests that we need to reexamine the usually less effective ways in which we can reduce indirect barriers that often can

benefit one group without harming another. For example, the on-going entry of women into the labor force and the occupations (law and self employment), where the opportunity costs to legislative duty are lower, will have the long-run effect of increasing female representation. While some informational-cost entry barriers cannot be destroyed, there is no reason to compound barriers, increasing the difficulty of electing challengers, particularly since challengers are likely to be more diverse and representative than incumbents.

A direct barrier we examined which exhibited a significant effect on female representation was single-seat districting. Multi-seat districting can be made much more effective at increasing competitiveness and the representation of minorities by reducing the votes each voter is able to cast to less than the number of seats available. More seats than votes in a district became part of the *Second Reform Act* (1867) of Britain (Smith 1966) and was closely analyzed and praised by Charles Dodgson (alias Lewis Carroll) for moving toward proportional representation (McLean, McMillan and Monroe 1996]. Under this system, voters (and candidates) can partition themselves along whatever lines they wish, whether the lines are race, sex, geography, party, or ideology.

Though we may be able to pinpoint policies that lead to increased representation by women, increasing representation by women in legislatures usually entails decreasing the chances of re-election for incumbents. It is difficult to imagine incumbents voting for rules that have the potential of reducing their chances for re-election. However, states do have constitutional conventions from time to time, where such matters are more likely to gain support.

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Notes

¹ It should be noted that not all campaign spending is advertising or investment in informational capital. Spending on get-out-the-vote drives and keep-the-vote-home drives (as Ed Rollins boasted of waging in New Jersey) is not spending on informational capital but on overcoming or increasing the costs of voting. This spending does not have the durable effect on information that we discuss here.

Not only does previous campaign spending give the incumbent an advantage, but, once in office, incumbents are able to get their positions known to voters at very little costs to themselves or the campaign accounts. This is through the use of franking privileges (for Congressmen), performance of constituent services, and by the incumbent's natural position as newsmaker and popular speaker.