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The incumbency disadvantage and women's election to legislative office

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Abstract

An important explanation for the underrepresentation of women in legislatures may be incumbency. When the vast majority of incumbents are men, as is the case in most national legislatures, incumbency emerges as a male advantage that could hinder the election of women. However, there has been no multi-country—cross-institutional, cross-socioeconomic—study of the relationship between incumbency and women's descriptive representation. Using time-serial data on 33 national legislatures, I examine whether incumbency is a disadvantage for women's election. I find that higher retention rates lead to fewer women winning office after controlling for socioeconomic factors, gender quotas, and electoral rules. Further, term limits, although not designed to promote the election of women, have a positive side effect for women's representation.

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Traditionally, the political arena has been a male arena. In the last 50 years, women have run for election to political offices in growing numbers, but they have not achieved parity yet with men. The worldwide average percentage of women in national representative bodies is 15% (IPU, 2003), and although regional variation is wide, ranging from 40% in the Nordic countries to 6% in Arab states, most regional averages fall between 12% and 18% (IPU, 2003). Some countries are approaching parity, for example Sweden where the election of women has reached a high of 45%

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(IPU, 2003). However, most countries lag far behind Sweden and some, Kuwait for example, have no women in their assemblies (IPU, 2003).

A number of factors have been shown to influence the election of women to legislative office, including socioeconomic dynamics such as the participation of women in the workforce and high levels of economic development, party rules such as gender quotas, and electoral arrangements such as the type of electoral system (proportional representation or single-member district) and district magnitude. Yet, another potentially important factor for women's representation is incumbency. When incumbents run for and win office in succeeding terms, it limits the entry of new individuals and new interests to the political arena. When the large majority of incumbents are men, as is the case in most national legislatures, incumbency can be a disadvantage for women because they have to challenge and defeat male incumbents to win office.

Several studies have shown that high levels of incumbency in the United States (averaging 85% between 1980 and 1994) are linked to the small proportions of women holding seats in the House of Representatives (6% during the same period) (Andersen and Thorson, 1984; Darcy and Choike, 1986; Thompson and Moncrief, 1993). Relatedly, research on Great Britain suggests that high rates of incumbent reelection (averaging 76% from 1979 to 1992) contribute to the small representation of female MPs (6% during the same period) (Norris et al., 1992; Norris, 1993). However, these studies suffer from a form of selection bias in that they focus only on countries where incumbency is high. Does that mean that incumbency has no effect when the reelection rate of incumbents is low? It is reasonable to expect that high levels of incumbency should *hinder* the election of women while low levels should *help* the election of women. In fact, a study of the comparably higher rates of turnover in Canadian legislative elections suggests that decreasing incumbency contributes to women's election (Young, 1991). Yet, to date, there has been no study examining the effect of widely varying levels of incumbency on women's election.

Further, it is unknown whether incumbency would have effects comparable to those demonstrated in the U.S., British, and Canadian studies in the context of varying institutional and socioeconomic environments. Is incumbency a disadvantage for women under proportional representation electoral systems with high district magnitudes, or is it just a problem in single-member district plurality systems, such as the United States and Great Britain? Is incumbency still an obstacle to the election of women when a party or legislature employs a direct tool, such as gender quotas, to promote women's representation? Does incumbency remain a significant disadvantage to women in societies where socioeconomic and cultural factors yield fewer women in the candidate pool with qualifications and experience for public office?

In this paper, I conduct a cross-national, time-serial analysis that draws on data from two to seven elections in 33 countries to examine the impact of incumbency, measured as retention rates, on women's election to legislative office. In addition, I analyze an extreme case of retention, term limits, where retention rates are zero. By reducing or eliminating incumbency, term limits may increase women's election to legislative office. While term limits are less popular in national legislatures than in U.S. states, several cases of term limits in national legislatures do exist. In an effort to

maximize variation on socioeconomic, party, and electoral rules, this study includes 24 OECD countries and nine Latin American countries where retention rates were available.

1. The incumbency “disadvantage”

Numerous studies suggest that incumbency may be a disadvantage to the election of women to legislatures (Skard and Haavio-Mannila, 1985; Rule, 1987; Welch and Studlar, 1990; Studlar and McAllister, 1991; Norris, 1993; Darcy et al., 1994; Welch and Studlar, 1996; Gaddie and Bullock, 1997). When representatives run for and win reelection, less circulation of political elites occurs (Andersen and Thorson, 1984). If men hold the dominant positions in the political arena and the system permits unlimited reelection, then the election of female legislators will be unlikely. Men will be the disproportionately advantaged incumbent candidates while women will be the disproportionately disadvantaged challengers.¹ However, if the rate at which incumbents get reelected decreases, then there is more room for female candidates to run for and win legislative seats. Several studies of the U.S. Congress and state legislatures have found that high rates of turnover, or their inverse—low retention rates—hinder the election of women (Andersen and Thorson, 1984; Darcy and Choike, 1986; Thompson and Moncrief, 1993).

Studying the effect of incumbency on women’s representation in the United States has two important limitations. First, the U.S. is plagued by relatively high levels of incumbency with little variation over time. The number of representatives in the House that returned to the succeeding term has remained relatively stable for the past quarter century ranging only from 75% (1992) to 92% (1988) (Stanley and Niemi, 2000). With limited variation, it is impossible to know whether incumbency is only an obstacle to women’s representation when it is very high and whether significantly decreasing incumbency will benefit women’s election to legislative office. Greater variation in incumbency exists at state levels, but a limited range of electoral rules, socioeconomic environments, and party rules accompanies it. This is the second limitation—the inability to test whether the disadvantage of incumbency is just in U.S.-like systems with single-member district plurality elections, no gender quotas, and moderate representation of women in the candidate pool. There is little reason to expect that the obstacles produced by incumbency are unique to certain types of political systems, but until it is examined in a broader context, the generalizability of the incumbency disadvantage is limited.

¹ It is true that female legislators who are already in office do benefit from being incumbents, but two factors mute this. One is that female representatives often have lower retention rates than male representatives, leaving office for a variety of reasons other than being voted out (Darcy et al., 1994). For example, women often retire earlier than men in the U.S. House of Representatives (Lawless and Theriault, 2003). Thus, female officeholders tend not to exploit the incumbency advantage to the same extent as male incumbents. Second, even when women hold legislative seats, incumbency still can hinder the entry of a larger number of female challengers into the legislative arena.

Table 1

Countries and election years in the study ranked by the average percentage of women and average retention rates for lower houses or unicameral national legislatures

Country	Election years	Average percentage of women	Average retention rate (%)
Norway	1981, 1985, 1989, 1993	34	61
Sweden	1979, 1982, 1985, 1988, 1991, 1994	33	74
Finland	1979, 1983, 1987, 1991	32	65
Denmark	1981, 1984, 1987, 1988, 1990, 1994	29	75
Netherlands	1981, 1982, 1986, 1989, 1994	21	64
New Zealand	1981, 1984, 1987, 1990, 1993	15	73
Iceland	1979, 1983, 1987, 1991	14	66
Austria	1979, 1983, 1986, 1990	13	61
Switzerland	1979, 1983, 1987, 1991	13	64
Ireland	1981, 1982 (Feb), 1982 (Nov), 1987, 1989, 1992	12	76
Luxembourg	1979, 1984, 1989, 1994	11	65
Spain	1982, 1986, 1989, 1993	11	56
Canada	1980, 1984, 1988, 1993	10	53
Costa Rica	1978, 1982, 1986, 1990, 1994	10	0
Mexico	1979, 1982, 1985, 1988, 1991	10	0
Italy	1979, 1983, 1987, 1992	9	64
Chile	1994, 1998	9	62
Argentina	1985, 1987, 1989, 1991, 1993, 1995	9	56
Honduras	1990, 1994, 1998	9	30
Belgium	1981, 1985, 1987, 1991	8	69
Colombia	1978, 1982, 1986, 1990, 1991, 1994, 1998	8	38
Israel	1981, 1984, 1988, 1992	7	64
Portugal	1980, 1983, 1985, 1987, 1991	7	55
United States	1980, 1982, 1984, 1986, 1988, 1990, 1992, 1994	6	85
United Kingdom	1979, 1983, 1987, 1992	6	76
France	1978, 1981, 1993	6	58
Australia	1980, 1983, 1984, 1987, 1990, 1993	5	80
Greece	1981, 1985, 1989 (June), 1989 (Nov), 1990, 1993	5	65
Brazil	1982, 1986, 1990, 1994, 1998	5	47
Venezuela	1969, 1974, 1979, 1984, 1989, 1994	4	37
Ecuador	1979, 1984, 1986, 1988, 1990	4	0
Malta	1981, 1987, 1992	3	71
Japan	1979, 1983, 1987, 1992	2	75

A cross-national study provides wide variation in retention rates, women's representation, and political contexts. Table 1 presents the countries and election years in this study along with the average percentage of women in the national legislature and average retention rates computed across all elections in each country. Women's representation ranges from a high of 40.4% after the 1994 Swedish election to a low of 1.4% in Japan after the 1986 election. Retention rates range from 92.4% in the United States (1988 election) to only 24.2% in Honduras (1990 election). The three countries with term limits have retention rates of 0%. In addition, countries included in this project offer variation on political institutions and socioeconomic factors providing a rigorous test of incumbency's effect on women's representation across varying national contexts.

Incumbency effects can be reduced and even eliminated. A “sure-fire” method of eliminating incumbency is the imposition of legislative term limits. The two most common forms of term limits are those that limit representatives to two or more terms and those that prohibit immediate reelection of representatives. If reelection is limited to three terms, for example, the number of open seats increases when the limits expire, but since every legislator’s limits expire at different times, the effect is just to reduce the number of incumbent candidates. If term limits prohibit immediate reelection, then they eliminate incumbency completely by reducing the retention rate to 0%.

Term limits are a recent phenomenon in U.S. states and only in the past few years have some states’ limits forced incumbents from office. Initial findings suggest that term limits have not had an overwhelming influence on the election of women. [Caress \(1999\)](#) finds negligible changes in the election of women after a full cycle of term limits expired in California. [Carroll \(2001\)](#) and [Carroll and Jenkins \(2001\)](#) find that the proportions of women in state legislatures *decreased* when term limits expired because more women were ousted from office due to the limits than were elected to replace them. On the other hand, [Carey et al. \(1998\)](#) show that term limited legislatures tend to have more women than non-term limited legislatures, however, they cannot directly link that observation to the implementation of term limits.

Limiting the study of term limits and women’s representation to U.S. states also has disadvantages. First, term limits have been in place only for a short period, suggesting caution when interpreting their consequences. Second, U.S. states have limited terms only by placing caps on the total number of terms or years a representative can serve rather than eliminating the incumbency factor entirely by prohibiting reelection. This makes it difficult to detect the effect that eliminating incumbency would have on the election of women. Expanding the focus to national legislatures around the world reveals four countries with term limits for representatives. The Philippines limits Senators to two successive terms and Representatives to three successive terms ([Carey, 1996](#)). Three other countries prohibit immediate reelection of national legislators in at least one of their legislative chambers: Mexico since 1933, Ecuador from 1979 to 1994, and Costa Rica since 1949. Term limits in the Philippines did not take effect until 1995 for the House of Representatives and 1998 for the Senate ([Carey, 1996](#)), which provides too short a time frame for analysis. The three Latin American countries are suitable for analysis, and although it is a small number of cases, these instances provide important insights into whether eliminating incumbency by prohibiting reelection increases women’s representation.

2. Additional influences on women’s representation

Institutional, socioeconomic, and cultural factors have important effects on the representation of women across national settings. Electoral rules are one of the key influences on the election of women. When representatives are elected through a proportional representation (PR) system that allocates two or more seats per electoral district, a legislature will have greater gender diversity than a legislature

that elects representatives in a single-member district (SMD) system (Duverger, 1955; Rule, 1981; Norris, 1985; Rule, 1987; Darcy et al., 1994; Rule, 1994; Matland and Studlar, 1996). This occurs because in PR systems, there is room for both women and men to win seats. In a single-member district system, winning a legislative seat is a zero-sum game where only one sex can be represented in each district. Winning a seat in a PR system is not a zero-sum game and both female and male candidates can win office.

The distinction between PR and SMD electoral systems is the most common and consistently significant influence on the election of women.² Yet electoral system scholars argue that district magnitude is a more appropriate measure because it examines incremental differences in electoral systems (Taagepera and Shugart, 1989; Cox, 1997). Whereas the PR/SMD categorization distinguishes between systems with a single seat and all others, district magnitude illuminates variations across PR systems. Findings on district magnitude and women's representation have been mixed, with some studies showing a significant relationship between district magnitude and women's representation (Engstrom, 1987; Rule, 1987; Matland and Brown, 1992), and others revealing a less direct and more inconsistent relationship (Welch and Studlar, 1990; Studlar and Welch, 1991; Matland, 1993).

A number of reasons, both theoretical and methodological, could account for the mixed findings. One is that district magnitude may matter only in PR settings, not in plurality, multi-member systems (Welch and Studlar, 1990; Studlar and Welch, 1991). Another is that the effect of district magnitude may not be linear (Studlar and Welch, 1991). Legislatures with large district magnitudes tend to have a large number of parties (Taagepera and Shugart, 1989; Jones, 1993; Cox, 1997; Mainwaring and Shugart, 1997a). This results in each party expecting to win only a small number of seats, which negates the benefits of a large district magnitude and leaves women no more likely to win office than if the district magnitude was small (Matland, 1993; Darcy et al., 1994; Matland and Taylor, 1997). For example, in a single-member district system, each party can expect to win at most one seat. As district magnitude increases to 5, each party can expect to win some or all of those 5 seats. But when district magnitude gets very large, as in the nationwide district of 150 seats in The Netherlands, many parties compete for election and each party expects to win only a small fraction of the total number of seats. Thus, the benefits of electing women to office in a 150-seat district are not linearly greater than in the 5-seat district. One way to account for this "diminishing returns" or "plateau" effect is to log district magnitude. In this study, I examine two measures of the electoral system, the proportional representation versus single-member district distinction and

² Previous cross-national studies that explain women's descriptive representation only distinguish between list PR generally and SMD electoral systems. However, differences may exist in the impact of electoral system nuances, such as closed list and open list proportional representation, mixed systems, etc., on women's election. While a study of the varying effects of the different types of PR is needed, it would require significantly more theoretical development and empirical modeling than I could give in this paper. My primary concern is to control for variations in electoral systems in an effort to isolate the impact of incumbency and, while not optimal, the general distinction between PR and SMD suffices.

logged district magnitude. I expect positive and significant relationships between both of the electoral system variables and women's representation.

Another set of political institutions that help women gain access to the legislature are party rules, such as gender quotas. Gender quotas dictate that a certain percentage of a party's candidates must be female. Political parties in several countries have employed quotas since the 1970s (IPU, 1997; Caul, 2001). In 1991, Argentina passed the first national quota law requiring all political parties running candidates in national legislative elections to place women in at least 30% of "electable" list positions (Jones, 1996, 1998; Htun and Jones, 1999). Since then, more than half of Latin American countries and several European countries have passed similar laws.

Mixed findings emerge from studies of gender quotas. Several studies show that party quotas and national laws have not had the overwhelming impact that theory predicted (Caul, 1999; Htun and Jones, 1999). These null findings may result, in part, from studying quota laws when they have been in place for only one election (Htun and Jones, 1999). Another reason may be that both party and national quotas will be effective only if they are implemented and enforced properly. For example, it is not enough to require that women must hold a certain percentage of positions on party lists, but the rules also must require women's placement on the list to be in "electable" positions where they have a good chance of actually winning a legislative seat. Jones (1998) examines Argentine provincial elections from 1991 to 1995, where quotas mandating that women be placed in electable positions were employed in many provinces, and finds that gender quotas increased the percentage of women in office. In a comparative study, it is difficult to measure whether party and national quota laws are well designed and implemented, and I have not attempted to do so in this paper. More important here is to remove any bias in the estimated effect of incumbency that might occur from not isolating the influence of gender quotas. I control for quotas using two variables—one for national quota laws and one for party quotas—and expect that both the presence of a national law and the use of party quotas will lead to more women in legislative office.

With or without quotas, it is important to have qualified women in the "pool" of potential candidates who can be nominated to party ballots. Most candidates for public office have similar educational and occupational backgrounds such as university educations and, often, advanced degrees, relevant private or public sector jobs (e.g. lawyer, business leader, or professional), or previous political experience, which are important because voters and political parties see these as unwritten qualifications for public office.³ As women gain qualifications for public office, they become viable contenders for election. Women's participation in the paid labor force is one of the strongest socioeconomic determinants of women's representation (Rule, 1981; Norris, 1985; Randall, 1987; Rule, 1987; Studlar and McAllister, 1991; Oakes

³ Relatively little research in developing countries has examined social requisites for candidates to political offices. However, anecdotal evidence suggests that the social qualifications for office in developed countries extend to developing countries, and one study of politicians' backgrounds in Mexico found patterns of university educations and careers in law and economics, among other things (Smith, 1979).

and Almquist, 1993). These studies also show, though with less consistency, that literacy rates, women's participation in education, unemployment rates, and fertility rates affect women's representation. An additional socioeconomic factor of interest is the level of economic development in a country (Rule, 1981; Matland, 1998). While level of development is not a direct measure of women gaining qualifications for public office, it provides a broader indication of the socioeconomic environment. Economically developed countries tend to have better social conditions and less social inequality. Each of these indicators of the socioeconomic environment in a country can influence the extent to which women are part of the candidate pool. As the percentage of women eligible for election increases, I expect larger proportions of women to hold seats in national legislatures.

Finally, cultural factors can help explain women's representation. Religious fundamentalist governments, such as Iran, or heavily Catholic societies, such as those in Latin America, are unlikely to support the movement of women out of traditional, private, family roles into the public arena of politics, while social democracies and Protestant societies, such as the Scandinavian countries, may be much more open to gender equality in government (Norris, 1985; Rule, 1987). Unfortunately, there is little reliable data on cultural differences in a large number of countries over a long time-series. I create a substitute for direct measures of culture that groups together those countries that are most similar in terms of the cultural characteristics that might advance or inhibit gender equality. While far from a perfect measure of culture, controlling for key country groupings does provide a reasonable test for whether incumbency still has an effect after adjusting for rudimentary cultural differences across countries. I would expect that Latin American countries, non-Western countries, and other Western countries, would have significantly fewer women than Scandinavian countries.⁴

In sum, cultural and socioeconomic factors should influence who will be in the pool of potential candidates for political office, and, as women attain the unwritten qualifications for holding public office, they will be more likely to become political candidates and officeholders. Party rules should affect the placement of women on party ballots and thereby increase women's chances of getting into office. Electoral rules define the process by which candidates become elected representatives and, consequently, should directly affect women's representation. I hypothesize that descriptive representation of women will increase as more women attain the qualifications necessary for political office, when rules such as gender quotas are implemented by parties, and where electoral arrangements stipulate the election of multiple candidates in each district by proportional formula. Further, I expect incumbency to impede the election of women even after controlling for these other influences.

⁴ Scandinavian countries include Denmark, Finland, Norway, and Sweden. Other western countries include Australia, Austria, Belgium, Canada, France, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, The Netherlands, New Zealand, Portugal, Spain, Switzerland, United Kingdom, and United States. Latin American countries include Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, Honduras, Mexico, and Venezuela. Non-western countries include Israel and Japan.

3. The data

The dependent variable is the percentage of women in the lower or only house of a national legislature (IPU, 1995, 2000).⁵ The covariate of primary theoretical interest is incumbency, which I operationalize with two variables: retention rates and term limits. The retention rate is the percentage of legislators who return to the succeeding legislature.⁶ This variable indicates whether increases in incumbency obstruct opportunities for female candidates to win legislative office. Term limits are an “extreme” case of retention where incumbency is eliminated (i.e. the reelection rate is 0%). I use a dummy variable to measure the presence or absence of term limits since the national legislatures in this data set either prohibit immediate reelection or allow unlimited reelection. Fifteen cases have term limits (five legislatures each in Costa Rica, Mexico, and Ecuador). Retention rates vary widely ranging from 24% (Honduras 1990) to 92% (United States 1986) with an average retention rate for the sample of 57% and a median rate of 63%.

I operationalize the remaining variables in the following way. The type of electoral system is a dummy variable where single-member district systems are coded zero and proportional representation systems are coded one (Mainwaring and Shugart, 1997b; Lijphart, 1999). District magnitude is the number of legislators from each electoral district averaged across all districts in a country (Taagepera and Shugart, 1989; Lijphart, 1994; Jones, 1995). As discussed earlier, I log average district magnitude because the benefits of increasing the size of districts should be greater at low to moderate district magnitudes and level-out as district magnitude becomes very large. I control for gender quotas with two variables to separate the effect of national quota laws from that of party quotas. The first is a dummy variable for whether or not a country has a national gender quota law. The second is a continuous measure of the percentage of seats in the legislature held by parties with quota rules (IPU, 1997; Htun and Jones, 1999; Caul, 2001). If no party has gender quotas or the country has a national law, then the variable is coded 0. If, for example, three parties have gender quotas and hold 40% of the seats combined, then the case is coded 40. Socioeconomic variables are the percentage of women in the paid labor force and the level of economic development measured as logged gross national product per capita (World Bank, 1999). I create a categorical variable that divides countries into groups representing Scandinavia, other Western countries,

⁵ The cross-national data on women’s representation are only available at the congress-level and not disaggregated by electoral district, party, or candidates. While it would be more appropriate to test for the *direct* effects of district magnitude, gender quotas, and socioeconomic factors on disaggregated gender statistics, it is not possible. As other studies have done, I make the assumption that the percentage of female legislators is a function of their numbers in individual districts, on party lists, and in the candidate pool.

⁶ The data on retention rates in the OECD countries are from Matland and Studlar (2004). I computed retention for the Latin American countries from data collected by Crisp, Jones, Jones, and Taylor-Robinson (National Science Foundation Grant # SBR-9708936). Venezuela retention rates are from Carey (1996) and the Brazilian retention rates are from Samuels (2002).

Latin America, and non-Western countries. The omitted category in the statistical models is Scandinavia because I expect all other groups of countries to have comparably fewer women in office than the rather progressive Scandinavian countries.

I conduct a pooled time-series statistical analysis on data from 33 countries, with two to seven observations in each country.⁷ The total number of cases in the data set is 157—each election year in each country is a case. I use OLS regression with panel-corrected standard errors to adjust for panel heteroskedasticity and cross-sectional correlation (Beck and Katz, 1995a, 1995b).⁸ In addition, I adjust for first-order autocorrelation to limit bias from time-serial correlation. I do not include a lagged dependent variable because I want to test directly the effects of the substantive variables rather than the atheoretical lagged dependent variable (Achen, 2000) and because most of my time-series are relatively short.⁹

4. Findings

Table 2 reports results of the statistical analysis of women's representation regressed on incumbency with controls for electoral, party, socioeconomic, and cultural influences. I present four models due to high theoretical and empirical correlations between (1) retention rates and term limits ($r = -0.79$), and (2) the type of electoral system and logged average district magnitude ($r = 0.74$). Models 1 and 2 reveal a statistically significant relationship between retention rates and the percentage of women in the legislature. Incremental increases in the retention of representatives decrease the proportion of women in office by 0.07 when the type of electoral system is controlled and by 0.06 when I adjust for logged average district magnitude instead. To be sure that these results were not a function of the 15 cases with 0% retention being outliers, I logged the retention variable and re-ran the models.¹⁰ Retention remains statistically significant at the 0.01 level in both models. Thus, increases in incumbency do not obliterate women's representation but clearly create an additional obstacle for women running for office. When women challengers compete against large numbers of male incumbents, women win fewer seats than when incumbency is low.

A further test of the constraining effect of incumbency is whether eliminating incumbency through a tool such as term limits facilitates women's entry into legislative

⁷ Although a balanced research design would be preferable, the data constraints do not permit it. The models are not overly compromised, however, because STATA makes the necessary adjustments for unbalanced, pooled time-series models. It computes standard errors from the data that are available in each comparable time-series.

⁸ Random effects models yield results very similar to those presented below.

⁹ Another drawback to including a lagged dependent variable is that it decreases the number of observations by 22% ($n = 119$), sacrificing degrees of freedom in an already small data set.

¹⁰ It is impossible to log the number "0," so I transform the retention variable by adding "1" to every data point prior to logging it. This method preserves the number of observations in the data set and still provides a reliable estimate of statistical significance of the variable.

Table 2
Determinants of the percentage of women in national legislatures

	Model 1	Model 2	Model 3	Model 4
Incumbency				
Retention rate	−0.07** (0.02)	−0.06** (0.02)	–	–
Term limits	–	–	5.54** (1.87)	5.16** (1.70)
Electoral rules				
Proportional representation	4.28** (0.27)	–	5.60** (0.55)	–
Logged district magnitude	–	1.71** (0.23)	–	2.10** (0.29)
Party rules				
Party quotas	0.06** (0.02)	0.04* (0.02)	0.05* (0.02)	0.04 (0.02)
National quota law	0.61 (2.54)	0.17 (2.75)	−0.10 (2.48)	0.37 (2.69)
Socioeconomic environment				
Women in the workforce	0.44** (0.08)	0.39** (0.09)	0.55** (0.13)	0.47** (0.12)
Logged GNP per capita	2.71** (0.55)	2.75** (0.57)	2.45** (0.54)	2.53** (0.57)
Region controls				
Latin American countries	−11.45** (2.23)	−11.90** (2.53)	−9.40** (2.02)	−10.16** (2.30)
Non-Western countries	−18.13** (2.29)	−22.59** (2.49)	−17.05** (2.30)	−22.57** (2.65)
Other Western countries	−14.13** (1.62)	−15.30** (1.73)	−13.07** (1.53)	−14.54** (1.69)
Constant	−16.27** (4.91)	−13.89** (5.01)	−24.27** (6.30)	−20.42** (5.92)
R^2	0.71	0.71	0.65	0.66
N	157	157	157	157

* $p < 0.05$; ** $p < 0.01$.

Statistics are parameter estimates followed by panel-corrected standard errors in parentheses.

office. Models 3 and 4 estimate the effect of term limits on the election of women and suggest that they do contribute to greater women's representation. The models predict that, in legislatures with term limits, the percentage of women in office should be about 5% higher, on average, than in legislatures without term limits. It is important to remember that these models are generalizing from a limited set of cases with term limits so the results are not as conclusive as they would be with a more variable sample. However, the findings do provide initial comparative evidence that term limits can be beneficial for women's election by eliminating the incumbency advantage.

One potential problem with the four models is that the dependent variable is slightly positively skewed (skewness = 1.42) which could produce results that are inappropriately influenced by extreme values. I logged the percentage of women in the legislature to normalize the dependent variable, and the results are very similar to those presented in Table 2.¹¹ Retention rates and term limits both remain statistically significant at the 99% confidence level. Given the robustness of the findings, these models support the well-known hypothesis that incumbency is a disadvantage to women's election.

An important implication of these findings on incumbency is that the incumbency disadvantage is not limited to the United States or Great Britain where it is most

¹¹ Results are available upon request.

often discussed as problematic for women's representation. It extends to countries with varying electoral, party, and socioeconomic arrangements, and it exists in almost all of the regions examined in this study. Regional models reveal that in Scandinavia and Latin America, retention rates remain statistically significant and negatively correlated with women's election after controlling for the other variables.¹² Further, the effect of term limits continues to be strong when limited to Latin America where the three countries with term limits are located. The one possible exception is the "other Western countries" where retention rates are still negative but lose some significance achieving a *p*-value of 0.09 when the dichotomous electoral system measure is included and 0.18 with logged average district magnitude.

Not surprisingly, most of the control variables also are statistically significant in Table 2.¹³ In Models 1 and 3, the dummy variable for proportional representation electoral systems shows that more women are elected in that type of system than in single-member district systems. In the model with retention rates (Model 1), proportional representation electoral systems have 4% more women, on average, than single-member district systems. In the model controlling for term limits and other factors (Model 3), PR systems result in an average of 6% more women in legislative office than SMD electoral systems. Models 2 and 4 reveal that the electoral system measured by logged average district magnitude also plays a significant role in determining the proportion of women in office. As predicted, district magnitude produces effects with diminishing returns. Using the coefficients from Model 2, if the average district magnitude is 4, the percentage of women in the legislature should be 1.28% larger on average than in a country with an average district magnitude of 3. If average district magnitude increases from 19 to 20, women's proportion in office should increase by a smaller 0.6%, and if district magnitude is 150, then its effect on women's representation is only 0.35.¹⁴ Thus, as average district magnitude increases, women's representation increases as well but at a slower rate.

The effects of gender quotas are statistically significant in three of the four models for party quotas but not in any of the models for national quota laws. As the percentage of seats held by political parties with quotas increases, representation of women in the entire legislature increases as well. Party quotas appear to have their intended effect, and more importantly, once the positive influence of party quotas are taken into account, incumbency continues to diminish women's opportunity for election. One reason for the non-significance of national laws may be methodological as there are only four observations of national laws during the time period of this

¹² The Scandinavian, other Western countries, and Latin American regional models are available upon request. It was not possible to run models for the non-Western countries because of the small number of observations in the grouping.

¹³ It may strike some readers as unusual that almost all of the independent variables are statistically significant. This occurs because I carefully selected control variables that other scholars consistently find to influence women's representation in cross-national studies. Thus, it is not surprising that they are statistically significant in these models as well.

¹⁴ The formula for calculating estimates of the dependent variable at points along a logarithmic curve is $\Delta y = b_i(\Delta x_k/x_i)$ (Gujarati, 1995). In this instance, I am using $\Delta x_k = 1$, therefore $\Delta y = b_i/x_i$.

study. It can be difficult to elucidate statistically the impact of a variable with very few 1's and a large number of 0's. An alternative reason may be that those countries that did have laws in the period covered in this study, Argentina and Brazil, were in the early stages of their implementation. Consequently, it is possible that insufficient time has passed to see the full effects of the quotas. Thus, I hesitate to interpret these findings as evidence of national quota laws being ineffective at the very thing they are designed to do, but instead, I suggest further study of the effect of national gender quota laws as sufficient time passes to allow appropriate study of them.

Socioeconomic factors also significantly influence the percentage of women in legislative office. Women's workforce participation strongly affects women's representation contributing to about a 0.5% increase in the percentage of women in office for every 1% increase of women in the paid labor force. Similarly, as a country's level of development grows, the proportion of women in office increases rapidly at low levels of development and more slowly at higher levels of development.¹⁵ Getting more women into the candidate pool clearly corresponds to women's opportunities for elected office.

Finally, the region controls, proxying broad cultural differences across countries, reveal significant differences in women's representation across regions. Latin American countries, the non-Western countries, and other Western countries, have significantly fewer women in legislative office than the Scandinavian countries.¹⁶ The non-Western countries are the most different from the Scandinavian region with the percentage of women in the legislature averaging about 20% less across the four models. The extent to which these differences are due to culture is difficult to discern from these models and would require a more detailed study of specific cultural characteristics that were unavailable for this data set. However, the broad region controls do account for any confounding effect that unique characteristics of the regions might have on the results for incumbency.¹⁷ The findings reveal that, while regional groupings explain a significant amount of variation, incumbency is still an obstacle to the election of women.

¹⁵ GNP per capita correlates on the higher side with several other variables in the statistical models including women in the workforce ($r = 0.74$), the Latin America region variable ($r = 0.81$), and retention rates ($r = 0.71$). There are no significant changes to the model results when I omit GNP per capita. These models are available upon request.

¹⁶ The Latin American countries category of the regional grouping variable correlates with women in the workforce, GNP per capita, and, most problematically, with retention. I re-ran the retention models without the Latin American cases. Retention remains statistically significant at the 0.05 level and its substantive effect drops only slightly from -0.08 and -0.07 to -0.05 in both models. The effects of all other variables remain statistically significant and substantively comparable.

¹⁷ Models without a region control are comparable to the models presented in Table 2. Logged GNP per capita loses statistical significance in two of the models, but the other variables remain significant in the hypothesized directions. In addition, regardless of which region is excluded, the results are similar. Women's representation in Latin America is significantly different from that of other Western countries and non-Western countries, and Western countries and non-Western countries are significantly different from each other. Thus, it is not just that Scandinavia is unique from the others but the others are distinct from one another as well.

5. Consequences of incumbency

Incumbency, electoral rules, party rules, and socioeconomic environments all influence the extent to which women attain seats in legislatures. Countries where women participate in the workforce and where there is greater economic wealth have more women in legislative office most likely because they increase women's representation in the candidate pool. Party-level gender quotas that are designed to give women more representation on party ballots help women attain a larger proportion of legislative seats. Electoral rules that proportionately allocate seats and do so in districts of moderate size rather than single-member districts make room for more women to win office. Although these findings are important for explaining women's representation, they are not particularly new or unexpected. What is new is the finding that incumbency is a key obstacle to women's election across all kinds of political systems.

Incumbency is frequently mentioned as a reason why women are significantly underrepresented in legislative politics, but few attempts have been made at empirically testing that idea. The findings of this paper reveal that higher retention rates constrain opportunities for women to compete for and win legislative office. As the rate at which incumbents get reelected increases, it creates a growing disadvantage for women's participation in legislative politics. Although the incremental effect of decreasing retention is small, even a small change could have a significant impact on legislative politics when women's representation is low, as it is in many countries.

The results presented here also show that incumbency is an impediment to women's representation in an international context across varying institutional designs and socioeconomic environments. Much of the previous research on incumbency and women's representation has been limited to the United States, which is a relatively unfavorable system for the election of women. The U.S. Congress falls just below the world average (14.2%) with women comprising only 14% of the House of Representatives and 13% of the U.S. Senate. The socioeconomic environment places a large proportion of women in the candidate pool, but party rules and electoral arrangements make it difficult for women to win office. On top of this, high levels of incumbency further impede women's push for parity. This study moves beyond the U.S. context and examines incumbency's effect across countries. I find that the impact of incumbency on women's representation does extend beyond U.S.-style political environments and remains an obstacle to the election of women across varying political institutions and socioeconomic dynamics. Even in a country with a favorable climate for women's election, such as one with a proportional representation electoral system with a moderate district magnitude and high levels of social equality between men and women, incumbency impedes the goal of increasing the proportions of women in legislative office.

One practical solution for increasing turnover in a legislature where retention is traditionally high is to implement a legal provision limiting legislative terms. Although most research on term limits has been limited to U.S. states, I show with cross-national data that term limits can increase women's election even after taking into account other influences. However, the study of term limits in this paper is a bit

limiting for two reasons. One is that I only examine limits that prohibit immediate reelection of legislators. There are other forms of term limits, such as those that allow reelection but limit representatives to a specific number of terms; however, no national cases of those kinds of term limits exist. Thus, it is important to emphasize that the significant impact of term limits reported here is specific to term limits that completely eliminate immediate reelection. A second limitation is the fact that only three countries have term limits prohibiting immediate reelection and all are in Latin America. It is important to be careful when generalizing from experiences of only three countries in one region. While the implications of this study should not be overstated, the fact that these countries represent a range of electoral rules and, to a lesser extent, socioeconomic environments strengthens the conclusion that term limits can produce a positive side effect for women's representation.

It is also worth noting that while term limits produce some attractive outcomes, they have some less desirable consequences as well. For example, term limits force experienced policymakers out of office and replace them with representatives less experienced in legislative politics, decreasing professionalization of the legislature. These new faces spend a significant amount of time learning the rules and nuances of policymaking, which decreases the time they can spend creating policy. In addition, legislatures lose the advantage of policy expertise that career legislators develop over time. Term limits are less detrimental when they limit representatives to two or three terms in office than when they force turnover of the entire legislature at the end of every term, but both forms of term limits produce less professionalized legislatures. Term limits eliminate incumbency and, while they can be beneficial for women's representation, they also can negatively affect legislative professionalism.

This paper has shown that incumbency is an obstacle to women's representation and, less conclusively, that term limits may help women's election by removing that disadvantage. When women run as challengers and must defeat incumbents in order to win office, gender equality in legislative politics is more difficult to achieve. Increasing women's participation in the labor force, implementing gender quotas, and using proportional representation systems with moderate-sized districts can lead to greater representation of women in countries, but until the incumbency disadvantage is overcome, women are likely to continue being underrepresented in legislative politics.

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