Assessing the Effectiveness of Gender Quotas in Open-List Proportional Representation Electoral Systems*

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Objective. Gender quota laws are an increasingly popular method of addressing the legislative underrepresentation of women. It is unclear, however, if quotas will result in a notable increase in the percentage of women elected in countries that employ open-list proportional representation. Methods. We analyze Chilean municipal election data to explore the effect of the percentage of women candidates on the percentage of women elected. Results. While the percentage of women candidates has a robust overall effect on the percentage of women elected, there is a diminishing rate of return as the percentage of women candidates increases. Conclusions. The adoption of quotas in open-list proportional representation systems will not have as positive an effect on the percentage of women elected as has been the case in many closed-list proportional representation systems. Furthermore, larger quotas (e.g., 40% instead of 25%) are unlikely to be significantly more effective, suggesting that advocates should opt for smaller quotas, which will meet less legislative resistance.

The percentage of women representatives in a legislature is vitally important, affecting both public policy (Dodson et al., 1995; Thomas, 1994) and democratic legitimacy (Darcy, Welch, and Clark, 1994; Rule, 1994). Unfortunately, the percentage of women in the world’s legislatures remains extremely low. As of late 1997 women accounted for only 12% of the world’s legislators (Inter-Parliamentary Union, 1997). In Latin America the figure was an equally anemic 13%.

In response to these dismal levels of representation, a growing number of Latin American countries are adopting quota laws specifying minimum levels of female presence on the party lists used to elect national legislators. The first country to adopt a national quota law was Argentina in 1991 (Jones, 1996). The Argentine Ley de Cupos (Law of Quotas) was first

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applied in the 1993 election of the Argentine Chamber of Deputies. The Ley de Cupos increased the percentage of women elected from a meager average of 4% during the 1983–1991 period, to 21% in 1993, 28% in 1995, and 27% in 1997.

The success of the Ley de Cupos and of party quota rules employed in the late 1980s and early 1990s in several Western European countries (Caul, 1998; Rule, 1997), as well as the increasing support for quotas displayed by prominent international institutions (e.g., Inter-Parliamentary Union, 1994; United Nations, 1995), helped provide the impetus for Bolivia, Brazil, Costa Rica, the Dominican Republic, Ecuador, Panama, Peru, and Venezuela to adopt quotas for the election of their national legislators between 1996 and 1998.1 Quotas are also currently under consideration in countries such as Chile, Colombia, and Uruguay. Among the world’s democracies only Belgium possesses quota legislation similar to that found in Latin America.2

It is uncertain if all of the Latin American countries that have recently adopted quota laws will experience increases in the percentage of women elected similar to that seen in Argentina. This doubt stems primarily from a salient difference between the method employed to elect Argentine Chamber deputies and the method employed to elect national legislators in many of those countries that have adopted quotas: the type of party list used. Whereas Argentina uses a closed party list, one-half of the countries that recently have adopted quota laws use an open list.

This study utilizes data from Chile’s 1996 municipal elections to explore the link between open-list electoral systems and the election of women.3 Chile has not yet adopted quotas. Thus Chilean municipal elections provide an ideal population with which to examine this relationship, due primarily to the considerable variance in the percentage of women candidates. Such variance generally becomes quite constrained in countries that utilize quotas. Other benefits of this population are the large number of municipalities and the availability of accurate and complete election data.

The article begins with a discussion of the link between the electoral system, gender quotas, and the election of women. Then, descriptions of the

1An average of 9% of the national legislators in these eight countries were women when the respective quota laws were adopted.

2The Belgium quota law (which requires a minimum of one of every three candidates to be a woman) will first be utilized in the next national legislative election, tentatively scheduled for June 1999. Taiwan employs a mixture of a quota and reserved-seat system. The effect of this rule is, however, quite mild due to the small size of the quota (roughly 10%). Italy’s very modest quota law was declared unconstitutional in 1995.

3Unlike the case in many advanced industrial democracies such as the United States, in Latin America there are generally no significant differences in the percentage of women representatives at the national, state, and municipal levels. For example, data from the sole recent regional comparison of women’s representation at the national and municipal levels (Valdés and Gomáriz, 1995) indicate that the average difference between the percentage of women national legislators and municipal councilors is a mere 2%, with women only slightly better represented at the municipal level.
Chilean political system and women's political participation in Chile are provided. Finally, the data and variables utilized in the study are detailed, followed by the empirical analysis, and a discussion of the implications of the principal findings.

Legislative Election Methods and Gender Quotas

All nine Latin American countries that possess national quota laws elect their lower- or single-house legislators (employing party lists), either from multimember districts using proportional representation or from a mixture of single-member districts and multimember proportional representation districts. Both the size of the districts from which the legislators are elected (i.e., the district magnitude) and the type of party list used have a profound effect on the functioning of quotas (Jones, 1998).

District magnitude has a positive effect on the efficacy of quotas. Holding other factors constant, the greater the number of legislators elected per district, the greater the efficacy of quotas is likely to be.

The average district magnitude varies considerably across these nine countries. At the low end, with an average district magnitude of less than 5, are Bolivia, Panama, and Venezuela, which combine a large number of single-member districts (for which no minimum presence of women candidates is mandated) with multimember proportional representation districts. Small district magnitudes (particularly when combined with a large number of parties winning seats in the legislature), severely limit the effectiveness of quotas, since parties normally win only one or two seats in a district. At least in closed-list systems, the top positions on the party list are normally occupied by men.

At the other end of the continuum are Brazil and Peru. The average Brazilian district has 20 legislators elected from it, while in Peru a single national district (with 120 legislators) is used. Argentina, Costa Rica, the Dominican Republic, and Ecuador occupy an intermediate position, with 5, 8, 5, and 6 legislators elected from the average district, respectively. Other factors held constant, quotas should be more effective in the larger-magnitude systems.

Two types of party lists are used in these countries: closed and open. Argentina, Bolivia, Costa Rica, the Dominican Republic, and Venezuela employ closed lists while Brazil, Ecuador, Panama, and Peru employ open lists. Where closed party lists are used, the political parties present a rank-ordered list of candidates in each of the multimember districts where they are contesting seats. Voters cast a ballot for the entire list; they cannot alter the ordering of the candidates. Once a party's seat allocation has been determined (using a proportional representation allocation formula), its seats are distributed based on the list's rank ordering. If a party wins three seats, then the first three people on its list are elected.
Where open party lists are used, the political parties also present a list of candidates. There is, however, no rank ordering, and voters are required to select a candidate on the party list (i.e., exercise a preference vote), although in a few instances they can also cast a vote for the list. The seats are allocated among the parties in the same way as in the closed-list systems. However, the seats are distributed among the party’s candidates not in regard to their ordering on the list, but rather based on the number of preference votes they received. For example, if a party wins three seats, then the three party candidates who obtained the most preference votes are elected.

The Argentine Ley de Cupos mandates (1) that women account for a minimum of 30% of the candidates on the party list, and (2) that these women be placed in electable positions on the list. The second requisite has been interpreted as signifying that at the minimum every third (and sixth, ninth, etc.) candidate on the party list must be a woman, except in districts in which a party is renewing two seats—where the second candidate, at the minimum, must be a woman. The Argentine quota law differs from the laws in Costa Rica, the Dominican Republic, and Venezuela, which, while specifying that women must respectively occupy at least 40%, 25%, and 30% of the positions on the party list, say nothing about the location of women on the list. The Bolivian law is similar to the Ley de Cupos both in terms of its minimum percentage (30%) and its requisite that at least one of every three positions on the list must be occupied by a woman.

The Argentine case highlights two vital elements that condition the effectiveness of any quota law: presence and placement. In Argentina, the political party has control over both access to the party list (presence) and the location of candidates on the rank-ordered list (placement). This is not the case, however, in the open-list systems. There, the quota law specifies the minimum percentage of women candidates who must be on the party list, but because there is no rank-ordering, the quota law cannot make any demands related to placement. For example, in elections for the Argentine Chamber of Deputies, use of a quota law signifies that if a party wins six seats in a district, a minimum of two of its winning candidates will be women. In a similar district using the open-list method, employment of a quota law provides no such guarantee. Thus, while the four open-list countries have quotas mandating a minimum presence for women (Brazil, 25%; Ecuador, 20%; Panama, 30%; Peru, 25%), the laws say nothing about placement. While these quota laws guarantee a significant increase in the percentage of women candidates, they provide no guarantee of a corresponding significant increase in the percentage of women elected.

4 In Panama the quota applies to the list used in the internal party primary that in turn produces the list presented in the general election. The Brazilian quota is 25% for the 1998 election, and will be 30% for future elections. Ecuador currently employs a nonproportional form of open-list voting (i.e., the block vote). Belgium also employs an open-list framework, albeit one that is less open than that utilized in the Latin American countries.
Gender Quotas and Election Laws

The present study employs data from the 1996 Chilean municipal elections to examine the relationship between the percentage of a party’s candidates who are women, and the percentage of its elected candidates (municipal councilors) who are women. It provides important insights into the potential effects of the use of gender quotas in open-list proportional representation systems, which is the electoral method most commonly employed by countries recently active in the passage of gender quota legislation.

Chilean Politics and the 1996 Municipal Elections

Since 1988 Chile has been undergoing a slow but steady process of democratization. The 1988 plebiscite, on whether or not to grant General Augusto Pinochet and his regime an additional eight-year term, marked the return of electoral politics, as Chileans went to the polls for the first time since 1973. The victory of the democratic forces (who supported a “No” vote) resulted in presidential and congressional elections in 1989. Later constitutional reforms led to the establishment of the democratic election of municipal officials, with the first election taking place in 1992.

The traditional three-way split (left-center-right) in the Chilean electorate and party system was truncated with the 1973 military coup (Valenzuela and Valenzuela, 1986). The re-emergence of electoral politics in the early 1980s in turn was shaped by the existence of the military government. Political parties aligned into pro-Pinochet and prodemocracy camps, with the 1988 plebiscite a catalyst for the unification of the prodemocracy forces (Drake and Jacks, 1991). The Concertación por el No (Coalition for the “No” Vote) was formed by seventeen different political parties and groups. However, the Christian Democratic Party (PDC) and several socialist groups were the main partners in the Concertación. The Concertación parties successfully managed to put aside their ideological differences after their 1988 victory and form the Concertación por la Democracia. The 1989 electoral results and the successful reunification of all socialist factions reduced the number of political parties in the Concertación to six: the PDC, Socialist Party (PS), Party for Democracy (PPD), Radical Party (PR), Social Democratic Party (PSD), and Humanist Party (PH) (Caviedes, 1991). By 1996 the number of Concertación parties was effectively reduced to four: the PDC, PPD, PS, and PRSD (Radical Social Democratic Party, formed by a merger of the PR and PSD).

The principal forces that supported the Pinochet dictatorship and campaigned for a “Yes” vote in the 1988 plebiscite also ran together in the 1989 and subsequent elections as the Unión por el Progreso de Chile (UPCh).5

5The UPCh is the name used between 1993 and 1996. Prior to 1993 the pact was called Democracia y Progreso (Democracy and Progress), while since 1997 it has been called Unión por Chile (Union for Chile).
The two main parties that comprise the UPCh are National Renovation (RN) and the more conservative Independent Democratic Union (UDI).

The electoral system designed by the Pinochet regime to bolster the chances of the conservative political parties in national legislative elections has induced parties to form broad coalitions (Scully, 1995; Siavelis and Valenzuela, 1996). While there exists some evidence that Chile's traditional left-center-right split remains in terms of the voting preferences of the electorate (Scully, 1995; Siavelis and Valenzuela, 1996; Valenzuela, 1994), current electoral competition in Chile occurs between two durable and relatively cohesive pacts representing the center-left (Concertación) and right (UPCh) (Agüero, 1998; Guzmán, 1993; Magar, Rosenblum, and Samuels, 1998; Rabkin, 1996).

All of Chile's 341 municipalities (comunas) held elections in 1996. The municipal councils have six, eight, or ten members, depending on the municipality's population. The councilors are elected from a single municipal-wide district using open-list proportional representation, with seats allocated among the pacts employing the d'Hondt divisor formula. Under Chile's open-list rules, citizens cast a vote for one candidate from any pact. Votes are counted by pact, with the first seat allocation taking place among the pacts using proportional representation. Later allocations occur between subpacts within the pacts, with the final allocation taking place among candidates. In this final allocation the candidates are rank-ordered based on the number of preference votes they received.

**Women and Electoral Politics in Chile**

The full enfranchisement of Chilean women did not occur until 1949 (in 1932 women received the right to vote in municipal elections). During the 1949–1973 democratic period two key aspects of women's political participation stand out: (1) women's severe underrepresentation in legislative bodies, and (2) a tendency for women to support centrist and conservative parties to a greater extent than men. Between 1949 and 1973, women on average held only 4% of the seats in the Congress (i.e., the Chamber of Deputies and Senate combined). The percentage of women ranged from a high of 8% in 1973 to a low of 1% for the 1953–1957 legislature. At the municipal level (between 1944 and 1973), women on average occupied only 4% of the municipal council seats (Valdés and Gomáriz, 1992).

During this period, women in aggregate clearly tended to be more supportive than men of political parties (and presidential candidates) on the center and right of the political spectrum (Aylwin, Correa, and Piñera, 1986; Jaquette, 1976). There exist a wide variety of explanations for this gender gap, which for space reasons cannot be discussed in detail here. These explanations generally express one of three basic arguments: (1)
women were intrinsically more conservative (or less radical) than men (Aylwin, Correa, and Piñera, 1986; Correa Morandé, 1974); (2) women possessed lower levels of education and political socialization than men, and therefore were more susceptible to the discourse of the right and center (Roxborough, O’Brien, and Roddick, 1977); and (3) the left failed to adopt an effective strategy to obtain the support of women (e.g., Chaney, 1974; Jaquette, 1976).

Since the return to democracy in 1989, differences between male and female electoral preferences have decreased considerably compared to the 1949–1973 period. In the three most recent elections (1993, 1996, and 1997) they almost vanished entirely (with one minor exception in 1997). In the 1996 municipal elections, for example, the gender gap between the Concertación and UPCh was less than one percentage point.

While the gender gap has for all intents and purposes disappeared, the severe underrepresentation of women in legislative bodies remains. In the three congressional periods since 1989 (1990–1994, 1994–1998, 1998–2002) women have on average held only 7% of the seats in Congress. Following the 1997 elections, women occupied a mere thirteen (8%) of the seats. At the municipal level—the only other electoral arena—women have held only 12% (in the 1992–1996 period) and 14% (in the 1996–2000 period) of the seats in the country’s municipal councils.

Data and Variables

We employ data from the 1996 Chilean municipal elections to examine the link between the percentage of women candidates and the percentage of women elected. The unit of analysis is the municipal-level pact. The analysis is restricted to the two principal pacts in Chile (Concertación and UPCh). These were the only two pacts to present candidates in all 341 municipalities, and together they won 95.02% of the municipal council seats.

An ordinary least squares analysis of the effect of the percentage of women candidates on the percentage of women elected cannot include those cases where the percentage of women candidates is zero (273 out of a total of 682), since by definition the percentage of women elected will be zero. As the analysis can only be conducted with interior solutions, these corner solution cases are excluded. Similarly, since our focus is on the percentage of seats won by women, those few cases where a pact won no seats (27 total, in 17 of which no women candidates were presented) also are excluded. The absence of data for two of our control variables reduces the number of cases to a final population of 387.

WOMENELECT. Our dependent variable is the percentage of a pact’s elected representatives in a municipality who were women. It ranges

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6 All electoral and census data were obtained from the Chilean Ministry of the Interior.
from 0% to 100%, with a mean of 23.30% and a standard deviation of 25.66.

WOMENCANDS. This independent variable measures the percentage of a pact’s candidates in a municipality who were women. It is calculated by dividing the number of women candidates for a pact by the pact’s total number of candidates. The values for this variable range from 12.50% to 75.00%, with a mean of 26.28% and a standard deviation of 11.27.\footnote{Overall, 18.94% and 13.65% of the respective UPCh and Concertación candidates were women. These figures are based on the total population of 682.}

MAGNITUDE. The magnitude of a district is the number of legislators elected in the municipality. District magnitude has been found to have a positive effect on the percentage of women legislators elected (Norris, 1996; Rule, 1987). The mean for this variable is 6.34, while the standard deviation is 0.84.

Darcy, Welch, and Clark (1994), Matland (1998), Rule (1994), and others have highlighted the important link between a country’s level of development and its election of women legislators: the more developed, the greater the percentage of women elected. Complete municipal-level data for the more refined variables employed by many of these authors (e.g., the percentage of women in the labor force and the percentage of women with some university education) are not publicly available in Chile. Therefore, following Matland (1998) we include two general variables to control for the municipality’s level of development. These variables have the added advantage of providing substantively meaningful cross-sectional control variables.

ILLITERACY. The percentage of a municipality’s population (those six years of age and older) that is illiterate (or, for young children, not in school) provides a good proxy for the level of human development in a municipality. The greater the level of illiteracy, the less developed the municipality’s human capital. The percentage of the population that is illiterate in these municipalities ranges from a low of 0.03% to a high of 35.15%, with a mean of 12.54% and a standard deviation of 6.46.

ELECTRICITY. The percentage of homes in a municipality that have electricity is used as a measure of the municipality’s infrastructural development. The greater the percentage of homes with electricity, the more developed the municipality. The percentage of homes with electric service in these municipalities ranges from 15.90% to 100.00%, with a mean of 78.07% and a standard deviation of 20.85.

CONCERTACION. Political parties on the left of the political spectrum are generally identified as more progressive in terms of the election of women than parties on the right (Matland and Studlar, 1996; Matland and Taylor, 1997; Rule, 1987). In addition to being ideologically to the left of the UPCh, the Concertación also has been more active than the UPCh in supporting women’s rights and women’s political participation (Baldez,
Gender Quotas and Election Laws

1997; Waylen, 1996). To control for the partisanship of the pact, a CONCERTACION variable is used, with the 196 Concertación pacts coded 1 and the 191 UPCh pacts coded 0.

Analysis

Table 1 provides the results of seven ordinary least squares regression analyses of the determinants of the percentage of women elected by the municipal-level pacts. Following Leamer (1983) our focus is on the effect of our influential variable, WOMENCANDS. The four other variables are included merely for purposes of control.8

Equation R1 provides an analysis of the full population of 387. It uncovers a strong and significant (and not particularly surprising) positive relationship between the percentage of women candidates (WOMENCANDS) and the percentage of women elected (WOMENELECT). The estimated coefficient of 0.903 indicates that for every one unit increase in the percentage of women candidates there is a corresponding 0.903 unit increase in the percentage of women elected. Based on this finding alone, we would predict that increasing the percentage of women candidates via the use of a quota law would have a strong and significant effect on the percentage of women legislators elected. For example, holding other factors constant, we would expect an increase in the percentage of women candidates of 10% to result in an increase in the percentage of women elected of 9%.

To further investigate this issue we split the population into progressively smaller subpopulations, using the quota percentages employed (or proposed) in Latin America as the cutoff points (i.e., 20%, 25%, 30%, 35%, 40%, 50%). Thus equation R2 includes those cases where the percentage of women candidates was greater than or equal to 20%, and R3 those cases where the percentage of women candidates was greater than or equal to 25%. The corresponding percentages for R4, R5, R6, and R7 are 30%, 35%, 40%, and 50%, respectively.9

The results in Table 1 indicate that as the percentage of women candidates increases, the marginal rate of return on each additional percentage

8Thus the modest collinearity that exists among the other four independent variables, as it does not affect WOMENCANDS, is not relevant. We do not include in the analysis the number of seats a party won or expected to win (i.e., party magnitude), which has been identified as an important determinant of the election of women (Darcy, Welch, and Clark, 1994; Matland, 1993; Matland and Taylor, 1997). Party magnitude is a concept developed primarily for closed-list systems, since in pure open-list systems party leaders lack the ability to determine list order. A bivariate correlation between a party magnitude variable and WOMENELECT (−0.052) reveals that in Chilean municipal elections party magnitude is not significantly linked to the percentage of women elected.

9The mean and standard deviation (in parentheses) for WOMENCANDS in equations R2 through R7 are: R2, 31.52 (10.75); R3, 35.77 (9.56); R4, 39.59 (8.32); R5, 43.35 (7.66); R6, 45.90 (7.66); R7, 52.87 (6.45).
<table>
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<tr>
<th>Independent Variables</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
<th>R5</th>
<th>R6</th>
<th>R7</th>
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<td>0.832</td>
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<td>-0.010</td>
<td>-0.158</td>
<td>-0.760</td>
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<td>2.441</td>
<td>6.497</td>
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<td>[1.505]</td>
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<td>[1.363]</td>
<td>[2.513]</td>
<td>[2.182]</td>
<td>[1.999]</td>
<td>[0.560]</td>
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<td>[0.785]</td>
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<td>.057</td>
<td>.077</td>
<td>.093</td>
<td>.101</td>
<td>.101</td>
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<td>184</td>
<td>135</td>
<td>72</td>
<td>67</td>
<td>30</td>
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<tr>
<td>WOMENCANDS &gt;=</td>
<td>1%</td>
<td>20%</td>
<td>25%</td>
<td>30%</td>
<td>35%</td>
<td>40%</td>
<td>50%</td>
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**Note:** T ratios are under the estimated coefficients in brackets. An ordinary least squares model with robust standard errors is employed.
Gender Quotas and Election Laws

of women candidates decreases. For the population of pacts where at least 20% of the candidates were women (equation R2), a 1% increase in women candidates results in a 0.832 increase in the percentage of women elected. The estimated coefficients for WOMENCANDS continue to drop as the population is progressively restricted to those municipal pacts with larger and larger percentages of women candidates. By the time the 30% threshold (R4) is reached the effect of WOMENCANDS is very modest, providing a much lower rate of return on an increase in the percentage of women candidates. For example, in contrast to R1 where a 10% increase in the percentage of women candidates would result in a 9% increase in the percentage of women elected, a similar increase for R4 would lead to a boost in the percentage of women elected of only 5%. Finally, for pacts with a percentage of women candidates greater than or equal to 35%, 40%, and 50%, WOMENCANDS has no noteworthy effect on the percentage of women elected.

As a diagnostic we examined the same seven populations, but with only one independent variable: WOMENCANDS. These models provided estimated coefficients that were not significantly different from those in Table 1, and more importantly followed the same trend of diminishing marginal returns. For the respective populations included in equations R1 through R7 the estimated coefficient and t ratio (in parentheses) for WOMENCANDS were: R1, 0.860 (8.004); R2, 0.790 (4.950); R3, 0.665 (2.935); R4, 0.571 (1.884); R5, 0.454 (0.103); R6, −0.631 (−0.120); and R7, −0.385 (−0.502).

The data at hand do not allow us to provide any concrete explanations for this diminishing rate of return. However, it would appear that two factors are at work. First, the number of women candidates in Chile who play an important and active role in the political parties, as well as possess the independent political resources necessary to campaign effectively, continues to be limited. As the percentage of viable women candidates increases, we would expect to see the rates of return for WOMENCANDS increase.

Second, open-list systems are likely to be most valuable to women candidates when there is a substantial percentage of the electorate actively voting in favor of women candidates, perhaps best empirically observed by the presence of a large and politically salient women's movement. This type of voting is likely to be relatively widespread only in the most developed countries (and certainly not in all), and would be expected to

10This finding is supported by additional analysis in which the same variables and population used in R1 were employed, with the exception that a variable WOMENCANDS^2 (i.e., WOMENCANDS squared) was included, thereby introducing a nonlinear functional form. The respective estimated coefficient and t ratio for WOMENCANDS^2 are −0.017 and −1.984, indicating a significant diminishing marginal return for the effect of the percentage of women candidates on the percentage of women elected. The complete results of this additional analysis are in the Appendix.

11We thank Wilma Rule for this insight.
comprise only a very modest percentage of the overall vote in a country with a medium level of development such as Chile.

Discussion

This analysis suggests that the implementation of gender quotas in open-list proportional representation systems will generally not have as positive an effect on the percentage of women elected as has been the case in closed-list systems such as Argentina.\(^{12}\) It indicates a clearly diminishing rate of return for the effect of the percentage of women candidates as that percentage increases.

Given the current extremely low percentages of women candidates in virtually all open-list systems in the developing world (both those that have adopted quotas and those that have not), we would expect (based on our findings here) the implementation of quotas to result in an initial moderate increase in the percentage of women elected. However regardless of the percentage mandated by the quota law (e.g., 20%, 25%, 30%, 40%), as the percentage of women candidates reaches the 20–30% range we would expect the rate of return on each additional candidate to decline substantially.

Interestingly, these findings indicate that gender quota advocates in open-list systems who have lobbied for quotas in the 20–30% range (for which they often have been critiqued for agreeing to quotas that are insufficiently large), actually may have been quite astute. These pragmatic quota supporters had rejected proposals by their more militant colleagues for quotas that were very large (e.g., 40% to 50%), and thus extremely unlikely to be passed by the male-dominated legislatures. Instead, they opted to lobby for more modest quotas, that, due to their lesser threat to the political careers of male politicians, were more likely to achieve legislative approval.

By agreeing to lower quotas, it appeared at the time that these pragmatists also were accepting quotas that would be much less effective in increasing women's representation. However, this analysis suggests that by sacrificing quota percentage points, they were only slightly reducing the percentage of women who would be elected under the quota law, due to the diminishing marginal returns of an increase in the percentage of women candidates. Yet at the same time, by achieving the passage of the quota legislation, they insured that there would be at least modest growth in the percentage of women elected.

Further, even the limited political space created by the smaller quotas provides women with increased opportunities to build political careers and independent power bases, which, in the long run, should increase the number of viable women candidates. This growth in the number of viable candidates...
Gender quotas and election laws

candidates should in turn improve the rates of return on any increases in the percentage of women candidates.

Conclusion

Gender quotas are an increasingly popular method of addressing the legislative underrepresentation of women, especially in Latin America. In their zeal to adopt quotas, however, many reformers have neglected the manner in which quotas interact with a country’s pre-existing electoral rules. This article suggests that in countries that utilize an open-list form of proportional representation, the adoption of quotas is likely to result in an increase in the percentage of women elected that is inferior to that seen in several countries, such as Argentina, that employ a closed-list form of proportional representation.

Nevertheless, these findings indicate that even in many open-list systems, quotas are likely to increase the percentage of women elected due to the current severe levels of female legislative underrepresentation (i.e., below 15%) in these countries. However, the rate of return on each percentage increase in women candidates is likely to progressively decrease as the percentage of women candidates rises. This suggests that quota advocates in countries with open-list systems (at least those lacking a large and politically salient women’s movement) who lobby for relatively small quotas (e.g., 25%) instead of larger quotas (e.g., 40%) are not sacrificing a great deal in terms of augmenting the representation of women, but are increasing the probability that the quota law will be adopted.

APPENDIX

The Determinants of the Percentage of Women Councilors Elected

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>R8</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOMENCANDS</td>
<td>2.024 [3.659]</td>
</tr>
<tr>
<td>WOMENCANDS2</td>
<td>-0.017 [-1.984]</td>
</tr>
<tr>
<td>MAGNITUDE</td>
<td>1.030 [0.745]</td>
</tr>
<tr>
<td>CONCERTACION</td>
<td>3.476 [1.424]</td>
</tr>
<tr>
<td>ILLITERACY</td>
<td>0.490 [1.807]</td>
</tr>
<tr>
<td>ELECTRICITY</td>
<td>0.134 [1.779]</td>
</tr>
<tr>
<td>Constant</td>
<td>-41.057 [-2.573]</td>
</tr>
<tr>
<td>R-squared</td>
<td>.164</td>
</tr>
<tr>
<td>Observations</td>
<td>387</td>
</tr>
</tbody>
</table>

Note: T ratios are under the estimated coefficients in brackets. An ordinary least squares model with robust standard errors is employed.
REFERENCES


Gender Quotas and Election Laws


