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Gender and Family Ties in Latin American Legislatures

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Abstract

Are women disproportionately more likely than men to have family ties in politics? We study this question in Latin America, where legacies have been historically common, and we focus specifically on legislatures, where women's representation has increased dramatically in many countries. We hypothesize that, counter to conventional wisdom, women should be no more likely than men to have ties to political families. However, this may vary across legislatures with and without gender quotas. Our empirical analysis uses data from the Parliamentary Elites of Latin America (PELA) survey. We find more gender similarities than differences in legislators' patterns of family ties both today and over the past twenty years. We also find that women are more likely to have family ties than men in legislatures without gender quotas, whereas this difference disappears in legislatures with quotas.

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Gender and Family Ties in Latin American Legislatures

The election of Latin American women to high level political offices has often been accompanied by news coverage that highlights the political family connections of those women: Cristina Fernández de Kirchner, president of Argentina from 2007-2015, was the wife of former president Nestor Kirchner; Mireya Moscoso, Panamanian president from 1999-2004, was the widow of a three-time former president; Zury Ríos, a Guatemalan congresswoman from 1996-2012 was the daughter of infamous former dictator, Efraín Ríos Montt; Keiko Fujimori was elected to the Peruvian Congress, 2006-2011, and was the daughter of former president Alberto Fujimori.¹ Academic research has similarly highlighted that many women executives in Latin America have family ties to other politicians (Hinojosa 2012; Jalalzai 2004; Skard 2015; Murray 2010) and that these ties were highly relevant to their presidencies. In legislatures, early scholarship asserted that family ties were critical to women getting elected (Chaney 1979), as women often assumed seats upon the death of a husband or other relative (Hinojosa 2012), and many women legislators attributed their interest in politics to family members in politics (Saint-Germain and Metoyer 2008). In recent years too, critics of gender quotas have sometimes suggested that quotas have led to an increase in “legacy” women or “wives of” other well-known politicians in legislatures (Infobae 2017).

The attention given to women politicians’ family ties in Latin America implicitly suggests that this is something unique to women and that it has played, perhaps, a more important role in women’s political lives than men’s. Yet, political dynasties have long been common in politics worldwide, and in Latin America more specifically, and little research has

¹ <https://www.bbc.com/news/world-latin-america-11447598>.

explored gender differences in patterns of family ties, particularly within legislatures. Where it has, the research usually focuses only on one country, giving us little sense of what gender and family ties look like regionwide. Thus, we do not know whether women in office are disproportionately more likely to have family ties compared to men. If women in legislative office in Latin America are more likely to have political family ties than men, it could have significant negative consequences on gender equality in legislative politics.

In this paper, we explore whether women and men legislators in Latin America have different patterns of family ties. We study this in the context of Latin American legislatures because political family ties have long been characteristic of elites in the region and women have increasingly been elected and appointed to office in recent years. We expect that women should be just as likely as men to have family connections in Latin American legislatures today. We think this is because family ties are no longer a requisite for women to be involved in politics in Latin America. Where women might disproportionately benefit from family ties compared to men is in contexts where women would otherwise be excluded from politics without the benefit of family ties (i.e., where family ties are a necessary condition for women's entry to the political arena). This may occur when women are not well-represented among political aspirants or contenders, and/or when strong party leader or voter discrimination exists against women in politics.

In most of Latin America today, however, these two conditions are not met. Women's access to the political arena has increased with greater cultural and socioeconomic equality for women, and voters and elites are more open to the inclusion of women in politics. Family ties are not necessary for women to be attractive politicians to parties or voters. Family ties may still be important in countries' politics, but they should not provide disproportionately different benefits

to women than men. This may vary, however, across legislatures with and without gender quotas. The adoption of gender quotas has significantly increased women's presence in politics and limited the ability of party leaders and voters to discriminate against women in the candidate recruitment and selection process. Thus, where quotas are in place, family ties may provide no added benefit to women compared to men. Where quotas are not used, in contrast, women's access to the legislative arena is not mandated and discrimination against women may persist. Women may need the benefits that family ties provide to be viewed as viable contenders for office. Thus, we expect similar patterns of family ties for male and female legislators in Latin America, in general, but differences may occur in legislatures with and without gender quotas.

We examine this question empirically with data from two to six waves (running from 1998-2011) of the Parliamentary Elites of Latin America (PELA) survey, which asks legislators in all Latin American countries about their political family ties.² We test three specific hypotheses: 1) women and men should be equally likely to have family ties in politics, 2) these similarities exist across the period of the mid-1990's to 2010's, and 3) gender quotas moderate the relationship such that no gender differences in the probability of legislators having family ties exist in quota systems, but differences do exist in the absence of quotas. We find that women and men have similar patterns of family ties in Latin American legislatures and this persists across most countries and across the entire time period. We also find some evidence that differences in family tie patterns among men and women legislators exist in countries without gender quotas but not in countries with gender quotas.

² We cannot directly test the causal mechanisms of our theory in this paper due to the lack of data on candidates in the PELA study and the limited time period. However, the PELA data provide us with a unique opportunity to explore patterns in the family ties of elected officials in recent years and offer a plausible theory for why they exist. The causal mechanisms at work will need to be explored in individual countries where the collection of family history data can be conducted.

Existing Research on Family Ties

Existing research on the familial connections of elected officials (also called *legacies* in some studies) has been minimal. The research that has studied family ties has tended to study family ties among all politicians, without consideration of gender or women, or it has studied the family connections of women only, without much comparative attention to men. Some studies have highlighted the possibility for gender differences in family ties but more as footnotes to larger studies on the career paths or political backgrounds of elected officials. Research on family ties also has most often been single country studies rather than cross national, and research on women, gender, and familial connections in politics has rarely looked at legislators, specifically. In sum, legislative politics research has not put sex or gender front and center in analyses of legacy patterns or considered whether, why, or where we might expect (or not expect) differences in patterns of family ties for women and men legislators.

A few studies have examined the pervasiveness of political dynasties or family legacies in politics, focusing predominantly on the U.S., Mexico, or southeast Asia (Clubok et al. 1969; Camp 1982; Dal Bó et al. 2009; Feinstein 2010; Purdey 2016; Smith and Martin 2017; Geys and Smith 2017; van Coppenolle 2017; Smith 2018). Clubok et al. (1969), Dal Bó et al. (2009), and Feinstein (2010) study the U.S. Congress, and show that dynasties are more common in Congress than in other occupations (Dal Bó et al. 2009; Feinstein 2010) but that the importance of dynasties declined over time in the early 20th century (Clubok et al. 1969). Feinstein shows that dynastic candidates are more likely to win elections to Congress than those candidates not from family dynasties, but he does not explore gender differences in that. Camp (1982) finds that family ties have been very important for politicians of all types in Mexico but began to decline over time beginning in the 1980's (Camp 1995). In the Philippines, in contrast, the importance of

family dynasties has been and remains high (Purdey 2016; Querubin 2016). One cross-national study considered legacies among Latin American legislators, but the focus on legacies was one small part of a wider analysis on legislator quality in Latin America. Martínez Rosen (2008) found an inverse relationship between having political family ties and the experience of legislators, such that more experienced legislators have fewer family connections in Latin America.

This research, however, has not explored gender and legacies. Scholars of women and politics have emphasized the importance of family ties, particularly for women executives, suggesting that those ties may be determinants of women's accession to office (Hinojosa 2012). Jalalzai's (2004, 2012) worldwide analyses of women prime ministers and presidents, found that, particularly in Asia and Latin America, many women executives have family members who previously held political office or were involved in politics. Skard (2015) also argues that, in Latin America, "all the top women were politically aligned with prominent men" (246), and she notes that in Asia, family ties were relevant because many of the women who became executives took over as widows for their husbands (244). Chaney (1979) made a similar point about Latin America noting in her research that women in office in the 1960's often had family members in politics. Jalalzai's (2015) analysis of family ties among women presidents in Latin America similarly reports that 6 of the 8 women who have served as president in the region had family ties (approximately 75%). She argued that "women required these advantages to surmount obstacles traditionally encountered in exercising dominant executive powers, though this offered no guarantees of success (Hodson 1997)" (8). Reyes-Housholder and Thomas (2018), however, dispute the importance of family ties for women presidents in Latin America and suggest that

connections to family in politics among these Latin American women presidents were more distant and less important than Jalalzai and others allow.³

This work has primarily focused on women only (see, however, Baturu and Gray 2018; Folke et al. 2019). Yet, Jalalzai and Krook (2010, 13) make an important point about that: “It is important to recognize that women are not the only ones benefiting from family connections. First, many political dynasties do not even include women. Second, in countries where women have ruled, including Nicaragua, Panama, and Sri Lanka, men family members may later come to power. Thus, while political dynasties originate with men family members, women leaders may in turn help propel members of their own immediate families into power, either directly or indirectly through the family name.” Attention to gender differences in patterns of family ties, however, has been minimal.

Escobar-Lemmon and Taylor-Robinson (2016) examine gender differences in family ties across cabinet ministers in four Latin American countries and the United States. They found that only 7% of ministers hail from political families, but 14% of women did so compared to only 5% of men.⁴ In contrast, Camp (1995) reports in Table 6.3 that only 15% of women politicians (i.e., individuals in a wide range of political offices) in his dataset had a relative in political office from 1934-1991 compared to 28% of men.⁵ Beer and Camp (2016) update that analysis in their recent article on gender quotas and political recruitment in Mexico to the period 1964-2012 and

³ Jalalzai notes that some recent women presidents have taken office not only because of their family ties. She notes that Bachelet, Chinchilla, and Rousseff were divorced, and Bachelet and Chinchilla were unmarried mothers. These women also had strong political credentials.

⁴ Note that sex differences in family political connections were only significant in Argentina, the U.S., and Colombia; not in Chile and Costa Rica.

⁵ Camp’s *Mexican Political Biographies* project does not include all politicians. It includes “influential” politicians from a variety of political offices, and the only members of congress included are those who held office more than once (which means it includes a relatively small proportion of legislators since legislators are not permitted to be immediately reelected).

focus just on 541 senators (only 53 of whom were women). One part of their analysis considers differences in the family connections of senators, but they find no differences in political family ties—39% of men had family ties compared to 41.5% of women. This persisted across time periods within 1964-2012, even when women may have needed the advantage of family ties to overcome other forms of discrimination against women candidates.

Why Family Ties Matter

Existing work has highlighted several reasons why family ties benefit elected officials. First, family connections provide name recognition and visibility that politicians and candidates without family ties do not have, and this may provide them with an advantage at election time (Hinojosa 2012; Jalalzai 2012; Dal Bó et al. 2009; Feinstein 2010; Smith and Martin 2017). Family ties also work to socialize individuals into a life in politics, perhaps making them better campaigners and politicians (Beer and Camp 2016; Hinojosa 2012). Third, family ties may provide an indication of greater trustworthiness, since politicians come from a family with extensive knowledge of and participation in the political process (Hinojosa 2012). Fourth, family dynasties have access to resources that may help put family members in a more competitive political position. Smith and Martin (2017), for example, find that cabinet ministers in Ireland benefit not from an “electoral advantage” associated with being in a political family but from “informational advantages” that result from being in a political dynasty. More specifically, the dynasty benefit may be an artifact of higher levels of education associated with being in an elite family or stronger networks that dynasty candidates build at elite schools.

Yet, it is not clear that these benefits—name recognition, socialization, trustworthiness, education, and networks—would matter more for women than men. Some studies have

suggested that political family ties help women overcome discrimination in politics and the obstacles associated with getting women into office (Jalalzai 2015; Baturo and Gray 2018; Hinojosa 2012; Escobar-Lemmon and Taylor-Robinson 2016; Beer and Camp 2016). Jalalzai (2015), for example, argues that the office of the Latin American presidency has been so strongly gendered that family ties were a necessary condition for women winning the presidency. Baturo and Gray's (2018) recent comparative study of women and men chief executives found that family ties are the only background characteristic that differs for men and women, with women having more than men. This declines over time, however, as women have been in politics longer. Escobar-Lemmon and Taylor-Robinson (2016, footnote 7) find that women cabinet members may have more family ties than men and this may be because women need the family political connections to compensate for being newcomers to the political arena and lacking political experience. But, they also note that most of the women with family political connections had significant policy experience that made them qualified for the post they held, indicating that family connections were not actually a compensation tool. Beer and Camp (2016) argue that family ties may help women senators because of a need to overcome other forms of discrimination that might keep them out of office, although they actually find no differences for men and women. Hinojosa (2012) points out that family ties may benefit women getting access to party ballots where self-nomination and local power monopolies would otherwise limit their political participation.

All of this suggests that family ties serve an important purpose—they help politicians be successful. Family ties provide benefits of name recognition, socialization, increased trustworthiness, educational backgrounds and networks, and these should be important for both women and men politicians. Women should only benefit more from family ties than men when

they otherwise would not be equal with men. Legislatures where family ties might provide more benefits for women than men could be those where political, societal, and cultural contexts create a gendered environment that disadvantages women in the political arena. This might be where socioeconomic conditions limit the number of women with typical qualifications for office and relevant political experience or where extensive party leader or voter discrimination against women exists. Family ties, in those contexts, are a necessary condition for women's access to politics.

This may have described Latin America in the middle of the 20th century when women had only recently gotten the right to vote and run for office, when democracy was limited and rare, and when women lacked significant cultural, social, and economic equality with men. However, we do not think that this describes most of Latin America today. Socioeconomic and cultural gender equality has increased, and women in Latin American politics today have backgrounds and experiences that are more similar to men (Schwindt-Bayer 2011; Escobar-Lemmon and Taylor-Robinson 2014; Baturo and Gray 2018). Citizen attitudes toward women political leaders are largely supportive of women in political office, though with variation across countries (Morgan and Buice 2013; Morgan 2015), and women are more incorporated into political parties, even serving in party leadership (Morgan and Hinojosa 2018). Female presidents have been elected in five countries over the past twenty years, several of them with weak family connections and several of them reelected (Reyes-Housholder and Thomas 2018). Thus, we hypothesize that family ties are unlikely to be gendered in Latin American politics, on average, today.

One possible context where we might still see a gender difference in legacies would be in countries or time periods without gender quotas. In Latin America, gender quotas are legislative

candidate quotas that require all political parties competing in legislative elections to include women on party ballots in each district. Quotas can vary in their design and their implementation across countries, and they have changed quite a bit over time (Schwindt-Bayer 2010; Piscopo 2015). But today, nearly every country has a legislative candidate gender quota in place.⁶

Where women's representation is legally mandated, the political process is more open to women and the ability of parties or voters to discriminate against women is more limited. Quotas put women and men on more equal footing in politics (Krook 2009; Dahlerup and Freidenvall 2005). Indeed, recent research emphasizes that the adoption of quotas in Latin America should be viewed as an indication of states' commitments to gender equality and state efforts to "guarantee women's political inclusion" (Piscopo 2015, 28). In quota contexts, family ties are unlikely to provide additional benefits to women than men because women are already on more equal footing with men due to legal requirements for quotas and/or the state's commitment to gender equality. Family ties provide little additional benefit to women compared to men.

Where quotas are not in place, however, no such protections against discrimination exist. Without gender quotas, there is no requirement for women's representation or explicit state commitment to gender equity, such that women may be disproportionately less likely to gain access to politics than men. It is precisely in this context that women may benefit disproportionately from family ties in politics. Without quotas, women may need the name recognition, socialization, image of being trustworthy, and network advantages that family ties bring to politicians to have equal access to the political arena. The advantages that family ties

⁶ The only exception is Guatemala. Unfortunately, we do not have enough degrees of freedom in our data to be able to theorize about or test how different quota designs or implementation might interact with gendered family ties. We also are unable to explore any time-based effects of quotas, such as how long it takes since quota adoption for a quota to eliminate the need for a legacy advantage for women. This is difficult to do with only 18 countries. Instead, we focus only on whether a quota is in place or not for our theory and empirics.

provide may, in fact, be gendered where gender quotas are absent. Therefore, we hypothesize that where quotas are in place, women and men in Latin American legislatures should be equally likely to come from political families, but where they are not, women legislators may be more likely to have political family ties than men.

In the empirical analysis below, we examine 1) whether women have more family ties than men in Latin American legislatures, in general, 2) whether this persists over time in recent years, and 3) whether more women have family ties than men in countries when gender quotas are not in place. We expect similar patterns in family ties across countries and over the recent time period, but we expect gender quotas to possibly moderate this relationship such that women may be more advantaged by family ties where quotas are absent and have similar legacy connections where quotas exist. We are not able to test directly how family ties affect the election of women and men candidates because we lack data on candidates' family ties, but we are able to explore legacy patterns among elected legislators and do so across all countries in Latin America. This is important in its own right, given how often conventional wisdom suggests that legacies are something unique to women and that women are somehow less qualified than men in politics needing special treatment as a family member of a well-known politician.

An Empirical Analysis of Gender and Family Ties in Latin America

Our empirical analysis uses data from the PELA survey.⁷ PELA contains answers from face-to-face interview surveys with national legislators in all 18 Latin American countries starting in 1994, with one to six survey waves in each country. The number of legislators interviewed in a country depends on the size of the legislature, but response rates were often high

⁷ For a more detailed description of the PELA project, go to <http://americo.usal.es/oir/elites/>.

(see online appendix Table A.1). Our dataset includes surveys from 1998 through 2011 (waves 2 through 6).⁸ The total number of surveyed legislators in our dataset is 5,268, from 18 countries and a total of 59 country-survey waves.⁹

Our focus is an analysis of the relationship between the gender of a legislator and whether or not a legislator has a family member who previously held political office. To measure family ties, we use information from two PELA survey questions. First, we examined the answers to the question: “Have any of your family members worked in politics for a living, despite no current professional political involvement?” to determine who said “yes” and “no.” Once we identified those legislators who answered affirmatively, we examined the answers to a second question, “Which position?,” to identify those legislators who mentioned a family member in a national or subnational executive or legislative branch political position.¹⁰ We follow existing studies of legacies that focus on these types of political offices. We create a

⁸ The PELA survey collection is ongoing. Due to when we created our dataset, the only country surveys from wave 6 that we included are El Salvador and Mexico.

⁹ Note that Peru had two surveys conducted during one legislature (in 2006 and 2010) so we only include the 2006 data for wave 3. We also exclude the two survey waves conducted in Paraguay from all of our analyses because in neither of the surveys conducted were any women legislators interviewed. Given that our focus is on gender differences within legislatures, the lack of variation on gender makes the inclusion of Paraguay inappropriate. Small amounts of missing data on various variables also decrease the total number of observations in the analyses. See online appendix Table A.4 for the number of observations for each variable.

¹⁰ The types of offices included in our analysis are president, vice-president, cabinet minister, senator, representative, speaker of the house, member of a constitutional convention, governor, state senator, state representative, mayor, or city council member. Table A.2 in the online appendix shows the numbers and percentages of respondents in each type of political office. We exclude the following types of reported offices: union representatives, party officials, military, judiciary, adviser, public official, or any other bureaucratic office. As noted in the text, this ensures comparability with other legacy studies. We recognize that the term “political office” is not a perfect fit here because some of the excluded offices could also be considered “political” offices, but we lack a better fitting term that is still concise and intuitive.

family ties variable that codes legislators with a family member in these political offices as “1,” and those with no relatives in these political offices as “0.”¹¹

Overall, 32.6% of the surveyed legislators in our dataset reported having a family member who has held a political office. Figure 1 shows the variation across countries and survey waves. Some countries clearly have more legislators with family ties than others. For example, Honduras has an average of 46.5% of its legislators having family ties (across 4 surveys conducted between 1998 and 2010) compared to 15.5% in the Dominican Republic (average across 4 surveys from 2000-2011). The rest of the countries fall in between these two extremes. This kind of cross-country variation is similar to what has been documented elsewhere: only 7% of U.S. members of Congress have a relative in political office (Dal Bó et al. 2009) whereas almost half of Philippine legislators have family ties (Querubin 2016). The prevalence of legacies can vary within countries too.¹² For instance, the percentage of surveyed legislators in Bolivia with family ties in politics decreased from 44% in the third wave to 25% in the fourth wave. In contrast, Panama reported an increase in the percentage of surveyed legislators with family ties from the second to the third wave, going from 31% to 46%. Other countries report almost constant percentages of legislators with family ties over time. Guatemala and Nicaragua, for example, had little change across the three survey waves conducted in those countries.

Figure 1 here

A Bivariate Analysis of Gender and Family Ties

¹¹ We do not explore differences across types of family members who may have previously held political office, but online appendix Table A.3 presents the family ties disaggregated by type of family relationship.

¹² We have little reason to expect any sampling bias within countries over time, given similar response rates over time in most countries.

Our main hypothesis is that men and women legislators should have similar patterns of ties to family in politics. We first explore this by comparing differences in the percentages of men and women legislators with political family ties. Pooling all of the countries and survey waves together, we find that the percentage of respondents who reported having a family member previously in politics is almost identical for both men and women (32.6% for men and 32.8% for women). This varies little across countries. Figure 2 shows the percentage of men and women legislators with family ties by country (pooled across survey waves). The only difference that is statistically significant is in Peru ($p=0.023$), where 37% of women legislators declared having a family member who previously held political office compared to the 19% of men legislators answering the same question. The rest of the countries show negligible differences across gender and no clear pattern across countries. This is similar to what has been observed in industrialized democracies during the last thirty years, where legacy rates between women and men legislators have practically converged (Smith 2018).¹³

Figure 2 here

The lack of significant differences in the percentage of women and men legislators with family ties holds across survey waves, as well. Figure 3 shows the percentage of men and women

¹³ One concern with our results could be the possibility that the data come from a non-random sample of legislators. The PELA survey samples are legislators who responded to the survey, which may not be a random sample of all legislators. We have no reason to expect that women with family ties would be any less likely to respond to the survey than men with family ties because the survey is a wide-ranging instrument asking questions about many dimensions of legislative experiences and processes, not just family connections in politics. Women's and men's response rates are often similar too. But, we can empirically check the robustness of our results in case non-randomness did occur in some parts of the survey data. We ran robustness checks on this, and they are presented in the online appendix, Figures A.1 and A.2. Those models produce similar results.

legislators with family ties pooled across country for each wave of the survey. The figures hover around 30% for all waves and for both men and women. The largest difference reported (5 percentage points) appears in the first wave for which we have data (wave 2) and this covers the years 1998 to 2002. No other waves have significant differences in the percentage of men and women legislators with family ties. We can speculate that this might indicate the end of an earlier period in Latin America where family ties may have been more common for women legislators. However, since we lack data from earlier time periods, this interpretation cannot go beyond mere speculation.

Figure 3 here

A Multivariate Analysis of Gender and Family Ties

We next explore the relationship between legislator gender and the probability of a legislator reporting having a relative in politics while controlling for potential covariates that could confound the relationship. We include a battery of control variables that account for additional legislators' characteristics.¹⁴ First, we consider whether more senior legislators are more likely to have family ties than junior legislators. Senior legislators may be more likely to have family ties because they entered politics earlier, and those connections may have helped them develop a political or legislative career. This could confound the relationship between gender and family ties. Because seniority comes from having previously held a seat in the legislature or having held any other political office previously, we measure seniority in two ways: *first time in the legislature* distinguishes those legislators who are in their first legislative

¹⁴ See online appendix Table A.4 for descriptive statistics.

period (“1”) from those who have been in the legislature previously (“0”), and *previous experience in politics* identifies those legislators who have previously held any elective office (“1”) and those who have not (“0”).

Next, we control for the age and education of the legislators. Legislators’ ages in our sample range from 22 to 86 years old. Legislators’ education level is coded as an ordinal variable ranging from 1 (no studies) to 6 (graduate school degree). We also control for the ideology of the legislator. Conservative legislators usually represent traditional parties and are less supportive of gender equality in politics. They often are less likely to be women. Conservative legislators are also more likely to have family ties as they tend to be wealthy elites who come from families with long political legacies. Ideology is an ordinal variable that reports the self-placement of respondents on a 1 to 10, left to right scale.

To identify the effect of gender quotas on family ties, we identify whether the legislature has adopted a legislative candidate quota. We acknowledge that the variable does not specify the different types of quotas in the region—some are parity quotas, some require only one-third of party ballots to be women, some have placement mandates, and some have stronger enforcement mechanisms than others. It only codes whether some type of quota was in place or not.

We also account for country and time effects. Latin American countries differ in a number of ways that could be related to women’s representation in politics and legislators’ likelihood of having family ties. For example, different levels of progressive values across countries may influence politicians’ and citizens’ attitudes toward women in politics (Morgan and Buice 2013). Latin American countries also have varying histories with democracy and operate at varying levels of representative democracy today, which can shape patterns of gender representation in the region (Schwindt-Bayer 2018). The countries have changed over time, as

well, in ways that need to be accounted for in models of gender and family ties. To ensure that institutional and temporal variations do not bias our results, we include country and survey wave fixed effects in the models.

Model 1 of Table 1 presents the results of a multivariate logit model that uses whether or not a legislator has family ties as the dependent variable.¹⁵ The results show meager and non-significant differences between women and men legislators with relatives who previously held political office. This is illustrated using predicted probabilities in Figure 4, which shows the probability of a legislator having a family tie by gender. Men's and women's probability of having family ties in politics is not significantly different—the predicted probability for men is 0.31 and it is 0.33 for women. Model 1 also shows results for the control variables. Legislator age and previous experience in any political office have no statistically significant relationship with family ties, but political family ties are more likely to exist among legislators with greater education, those with legislative seniority, and those with a self-reported ideology leaning toward the right. Legislators with more education may have greater political and social capital which could provide similar benefits to having family connections in politics. This may also be the case for legislators with more experience (seniority) and greater wealth, which tends to be associated with conservative, rightist parties. The analysis shows no significant differences in the probability of having political family ties between men and women legislators, however.

Table 1 here

Figure 4 here

¹⁵ We ran robustness checks to address a number of possible concerns with the models and the results are available in the online appendix. Results across all models are consistent with what is presented here.

The Moderating Effect of Quotas

We next explore whether women representatives are more likely to report having relatives in political offices, comparing quota and non-quota country waves. Quotas were implemented for the first time in Latin America in Argentina in 1991, and since then, they have been gradually adopted in all Latin American countries except Guatemala.¹⁶ Eight countries had a quota in place across all survey waves and seven had no quota. Only in Honduras and Mexico was a quota adopted between survey waves.¹⁷ We provide a brief discussion and further analysis of these two cases at the end of this subsection.

An initial analysis comparing the percentage of men and women legislators who report family ties suggests a difference in quota and non-quota systems. Where a quota was in place, similar percentages of men and women reported family ties—31.5% for men and 30.2% for women. Where quotas were absent, however, 34% of men reported having family ties compared to 38% of women.¹⁸ Model 2 of Table 1 regresses family ties on the interaction of gender and quotas and its constituent variables without any control variables. The estimates of Model 2 are similar to what we just reported and are in the directions consistent with our expectation—women legislators are more likely to have family ties only in those countries with no gender quota. The estimates are not statistically different, however.

¹⁶ We coded as “1” any national lower chamber legislature with a quota regardless of the quota’s size or any post-adoption modifications. A legislator is coded “0” if in a legislature that did not use a gender quota.

¹⁷ In Honduras, the quota was not in place during the second wave but was for waves 3 through 5. In Mexico, the quota was adopted in 2002 so was absent for legislators surveyed in waves 2 and 3 but present for those surveyed in waves 4 through 6.

¹⁸ A chi-square test comparing the proportions finds that the bivariate gender differences are statistically insignificant in non-quota systems ($p=0.16$).

Model 3 in Table 1 reports the findings of the interaction after including legislator controls. This model tests the heart of the argument. The analysis shows that once legislator characteristics are controlled the estimate for the interaction is statistically significant—women legislators are more likely to have political family ties than men in legislatures when quotas are not in place but not when quotas are in effect. This is illustrated more clearly in Figure 5, which shows the marginal difference in the predicted probability of a woman legislator having a political family tie compared to a man legislator having one in legislatures with and without quotas. In a country with no legislative quotas, the difference between women’s and men’s probability of having family ties is a statistically significant 0.07, with women having a higher probability than men.¹⁹ However, this relationship vanishes in legislatures with gender quotas, where the difference between men and women legislators is negligible.²⁰ The results from Model 3 suggest that including legislators’ characteristics as control variables reduces the error variance between gender, legislative quotas, and family ties, producing a better estimate of the gender, quotas, and the family ties relationship.²¹

Figure 5 here

Figure 6 presents a more detailed illustration of our argument by comparing the representation of men and women respondents with family ties in Honduras and Mexico, pre-

¹⁹ The predicted probability for women was 0.39 compared to 0.32 for men, where quotas were absent. The predicted probability for both women and men was 0.30, where quotas were present.

²⁰ To account for any heterogeneity in family ties at the national and party level, Table A.5 in the online appendix shows the results of a multilevel logistic regression model with random effects for country and political party. The outcome is similar in size and statistical significance to the results shown in Table 1.

²¹ A crucial assumption to this interpretation is that the control variables are not collinear with the independent variables of interest. We present robustness checks in the online appendix, Tables A.6 and A.7 that test this premise and show that it holds.

and post-quota. As mentioned above, these countries are the only two cases in our dataset where we can observe the pre- and post-quota adoption periods. Each bar represents the percentage of respondents with family ties by gender and legislative session, and we indicate the implementation of the gender quota with a dashed line in each case. Honduras adopted a 30 percent quota for women in 2000, and the first legislative election held under this new law was in 2001.²² Legislators in Honduras were elected using closed lists before 2005 and open lists after an electoral reform enacted that year. In Mexico, a reform in 2002 required political parties to ensure that at least 30 percent of their candidates were women (Dahlerup et al. 2013).²³ Mexico has a mixed electoral system for its lower house in which 300 legislators are elected from single-member plurality districts and 200 legislators are elected through closed-list proportional representation. The quota applied to both tiers, although it did initially allow political parties that used primary elections to be excused from the quota (Baldez 2004).

Figure 6 here

In the case of Honduras, our pre-quota data shows that 62% of women had family ties, compared to 41% of men, whereas the percentage of legislator respondents with family ties after the implementation of the quota in 2000 shows the reverse pattern. For the first post-quota legislature (2002-2006), 5 out of the 11 (45%) women had family connections to politicians compared to 50% of men. The 2006 election led to a larger number of women in the legislature,

²² *Ley de Igualdad de Oportunidades para la Mujer*, Congress decree 34-2000, Article 81.

²³ *Código Federal de Instituciones y Procedimientos Electorales*, Article 175. Before this reform, there was a temporary law enacted in 1996 that only *encouraged* political parties to adopt in their internal statutes a rule that establishes at least 30 percent of candidates to be women for the Senate and Chamber of Deputies.

but the percentage of women respondents with family ties did not change much. In the 2006-2010 legislature, the percentage of respondents with family ties was 47% for women and 57% for men. The percentages for both men and women dropped in the 2010-2014 legislature. Thirty-seven percent of men respondents in the 2010-2014 legislature reported family ties compared to 33% of women. Although the percentage of women with family ties dropped, it does not mean that the quota system diluted the advantages of family ties for women (or men) entirely. In fact, for the 2006-2010 legislature, the deputy who won the largest number of votes was a woman, Lizzy Flores (Liberal Party), the daughter of the former president Carlos Flores (Taylor-Robinson 2007). What the evidence may suggest, however, is that the prevalence of political legacies in the country benefit women and men in more similar ways (Freidenberg 2019, 22).

In the case of Mexico, our dataset has two legislatures before the quota was adopted and three after. Before quotas were adopted, 45% of surveyed women legislators had relatives in political office compared to 30% of the men (the average of the two legislatures). In the post-quota period, 22% of women had family ties in politics compared to 27% of men (average of the three legislatures). Similar to what we observed in Honduras, this evidence suggests that while the quota system did not erode the prevalence of family ties entirely, the representation of women with family ties in politics did drop.²⁴ Indeed, scholarly research has pointed out that the quota system opened the door to women with no prior links to the party elite (Bruhn 2003). Relatedly, Zetterberg (2008, 450) suggests that youth and political inexperience was an electoral asset to women in Mexico rather than a liability when running for office under the new gender quota.

²⁴ See, for example, “Cambian a varones y entran parientes” *Reforma*. March 30, 2012, p. 4.

Conclusion

This study examined patterns of family ties among women and men in Latin American legislatures. Revisiting the existent arguments and evidence available on political legacies and gender representation, we argued that men and women legislators in Latin American countries today should be equally likely to have connections to family in politics, except in country years that lack gender quotas. Exploring survey responses of Latin American legislators from the 1990's and 2000's, our findings show that percentages of men and women legislators with family ties are quite similar, and no significant differences exist in the probability that men and women legislators have family connections in politics, even after accounting for other legislator characteristics. We do find, however, that gender quotas may be an important moderator in this relationship. Whereas women legislators are more likely than men legislators to report political family ties in countries or survey waves that do not have gender quotas, this difference disappears in legislatures with gender quotas. Mexico and Honduras illustrate this change quite clearly.

Political dynasties are prevalent among legislators in Latin America. Variation does exist across countries, however. More importantly for our study, the prevalence of political legacies is not gendered unless gender quotas are absent. In Latin America, where nearly all countries have gender quotas today, this generally means that women legislators are rarely more likely than men legislators to have political family ties. This is important because it contradicts a common assumption made about women who get elected to national political offices in Latin America—that having familial connections is unique and may be the reason for their political success. Yes, a political legacy may exist for women in office, but they are present for men too. Our study

shows that women and men are equally likely to have political family ties and thus conclusions cannot be implicitly drawn about women with legacies that are not also drawn about legacy men.

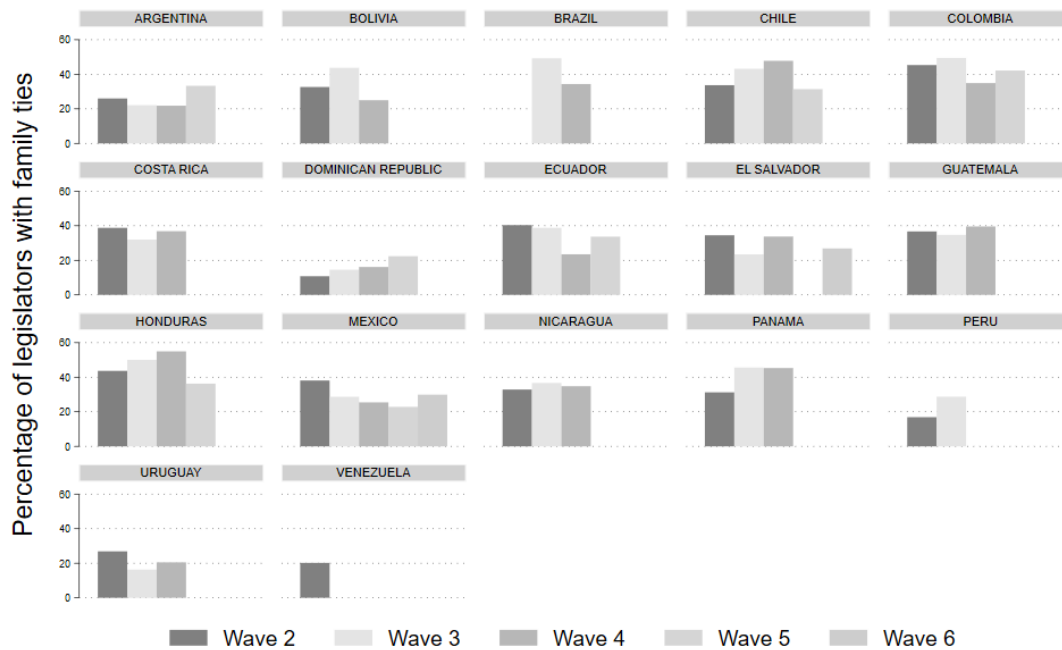
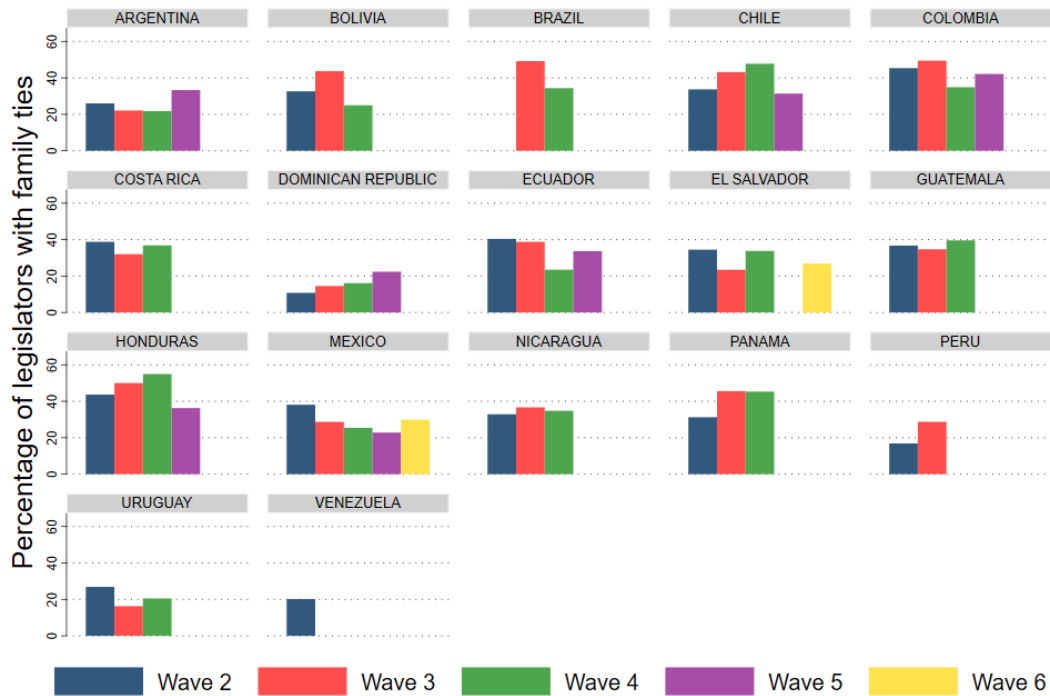
Much remains to be learned about the connection between gender and family ties (or the lack thereof) in Latin America. Our study establishes the absence of gender differences in family ties in legislatures, but it does not test empirically the mechanism that explains it. We posit that the cause could be the advantages of name recognition, socialization, trustworthiness, education, and networks that family ties provide to politicians, but we cannot test the role that these various factors might play in women's political success. We also think that greater cultural and socioeconomic equality and reduced party and voter discrimination have likely helped level the playing field for women and men in recent years, such that the benefits of family ties matter less today than in years past. But, we also cannot test which of these specific mechanisms are at work with the data we have now. Finally, part of the argument rests on these changes affecting women's access to various stages of the election process—getting into the candidate pool, being candidates on party ballots, and ultimately winning office, and we cannot parse out exactly where in the election process family ties are more or less beneficial because cross-country and time-serial data on family ties are sparse. Thus, future research should move from the legislator level to the candidate level and explore whether women candidates with family ties have the same probability of getting elected as men candidates with family ties and whether the theoretical mechanisms we propose are the correct explanations for that. Future studies also could collect more historical data on gender and family ties to explore the change over a much longer time period.

Although further research is needed, our analysis does undermine the conventional wisdom that women in Latin American politics are somehow unique and advantaged when they

are legacies. Women and men legislators are equally likely to have family ties in Latin America, except when gender quotas are not in place. Future research can expand our theories on this and explore empirically exactly how, why, and when family ties benefit women disproportionately compared to men. The lack of differences for women and men in office on its own, however, is important for understanding gender equality in Latin American legislative politics.

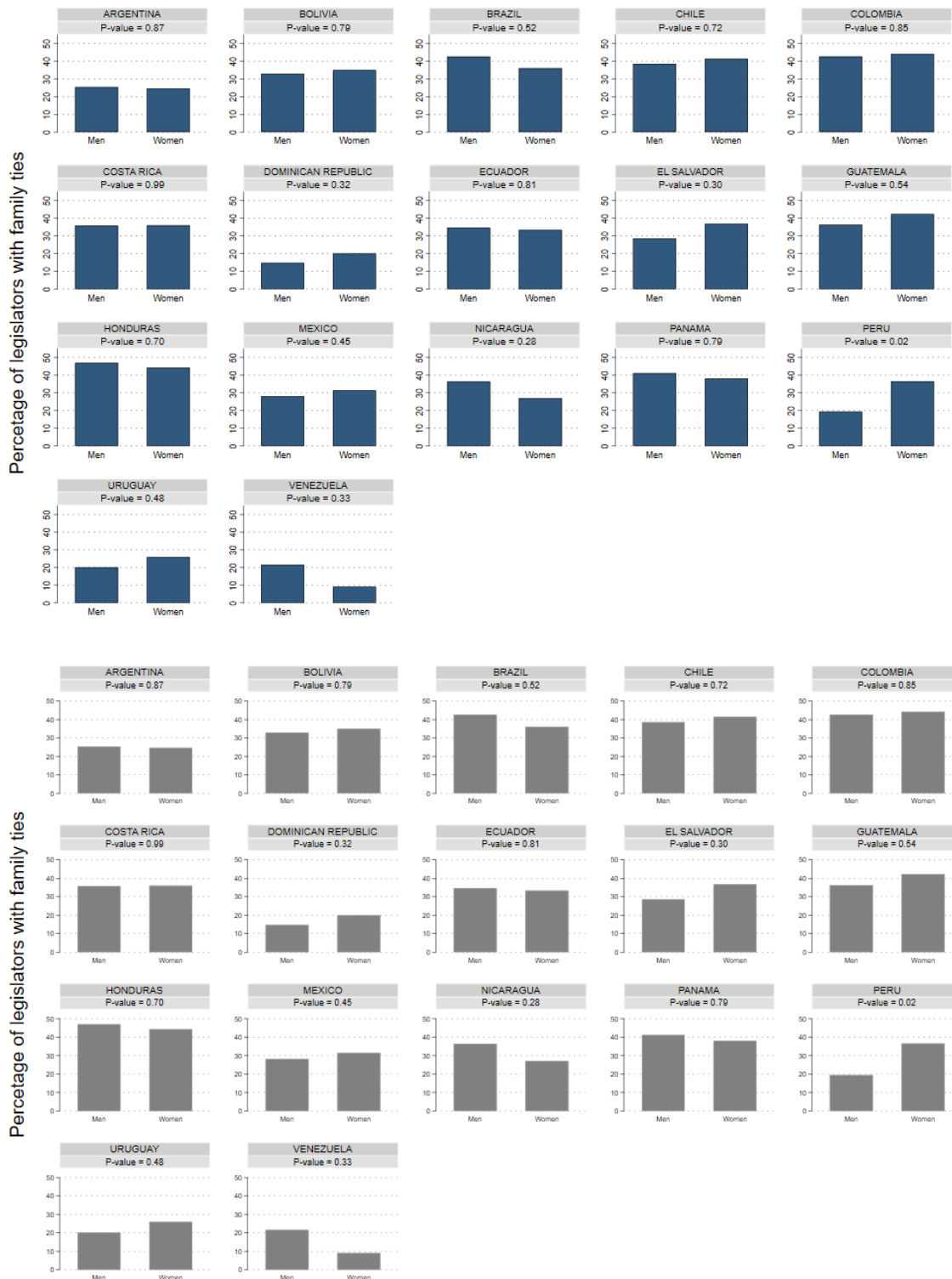
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Figure 1: Family Ties by Country and Survey Wave here



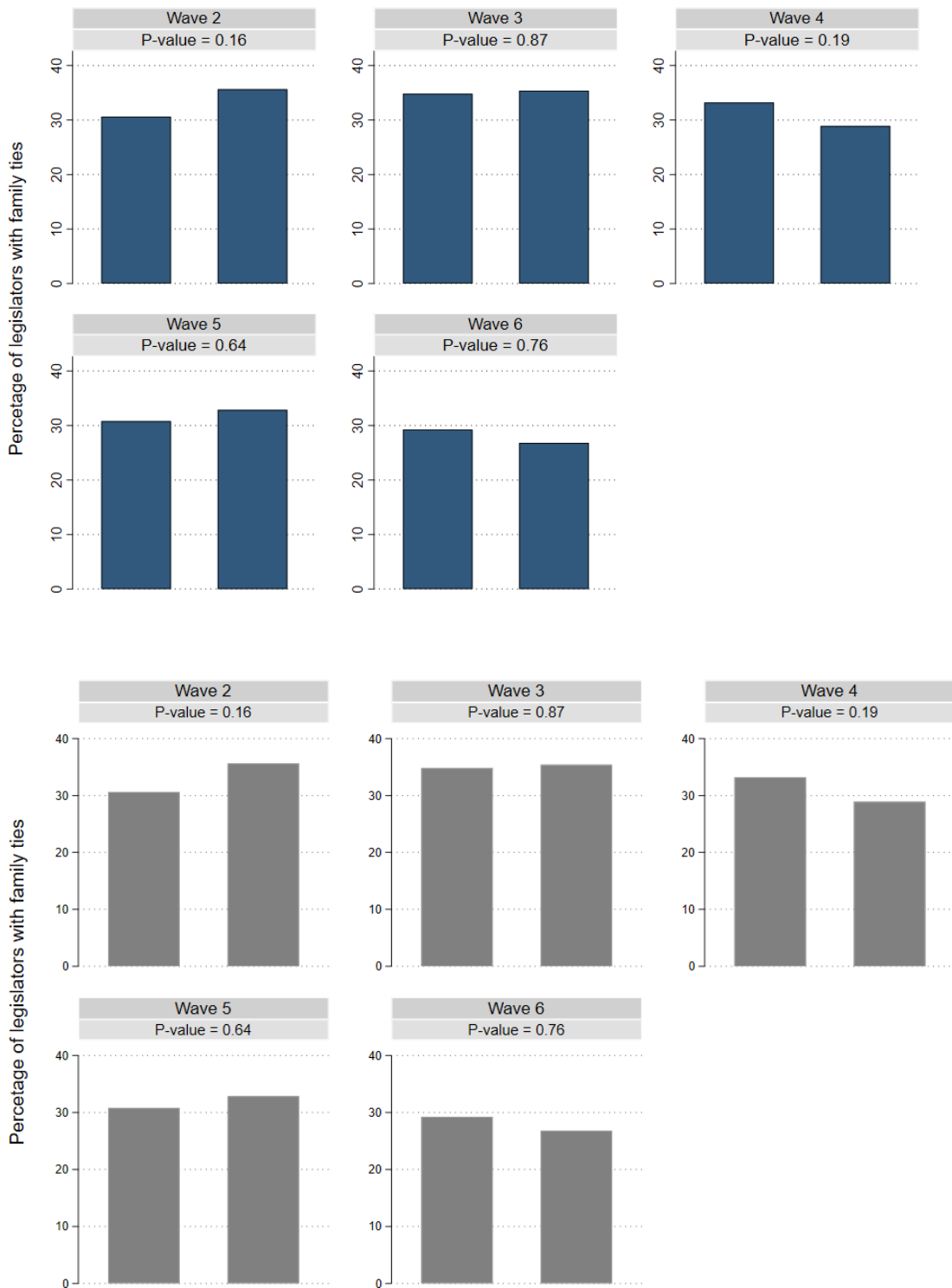
Note: This figure shows the percentage of legislators having family members who previously held political office by country and survey wave.

Figure 2: Family Ties by Country and Sex



Note: This figure shows the percentage of legislators having family members who previously held political office by country and gender.

Figure 3: Family Ties by Sex and Survey Wave



Note: This figure shows the percentage of legislators having family members who previously held political office by survey wave and gender.

Table 1: Multivariate Analysis of Gender and Family Ties in Latin American Legislatures and the Moderating Effect of Quotas

	Model 1 DV: Relatives in political offices	Model 2 DV: Relatives in political offices	Model 3 DV: Relatives in political offices
Women	0.101 (0.085)	0.213 (0.134)	0.298** (0.139)
Quota		-0.079 (0.175)	-0.115 (0.179)
Women x Quota		-0.217 (0.169)	-0.313* (0.175)
Age	-0.005 (0.003)		-0.005 (0.003)
Level of Education	0.171*** (0.036)		0.172*** (0.036)
Previous Experience in Politics	0.097*** (0.016)		0.114 (0.069)
First Time in Legislature	0.111 (0.069)		-0.260*** (0.070)
Legislator Ideology	-0.258*** (0.070)		0.099*** (0.016)
Constant	-1.998*** (0.313)	-0.998*** (0.201)	-1.876*** (0.352)
Chi2	255.33	185.06	259.51
N	4793	4990	4793
Log-likelihood	-2896.3842	-3057.896	-2894.281

Standard errors are in parentheses. Fixed effects for country and survey wave included in models but not presented in table.

**** denotes significance at the 1% level; ** denotes significance at the 5% level; and * denotes significance at the 10% level.*

Figure 4: Predicted Probability of Having Family Ties for Men and Women (based on the results of Model 1 in Table 1)

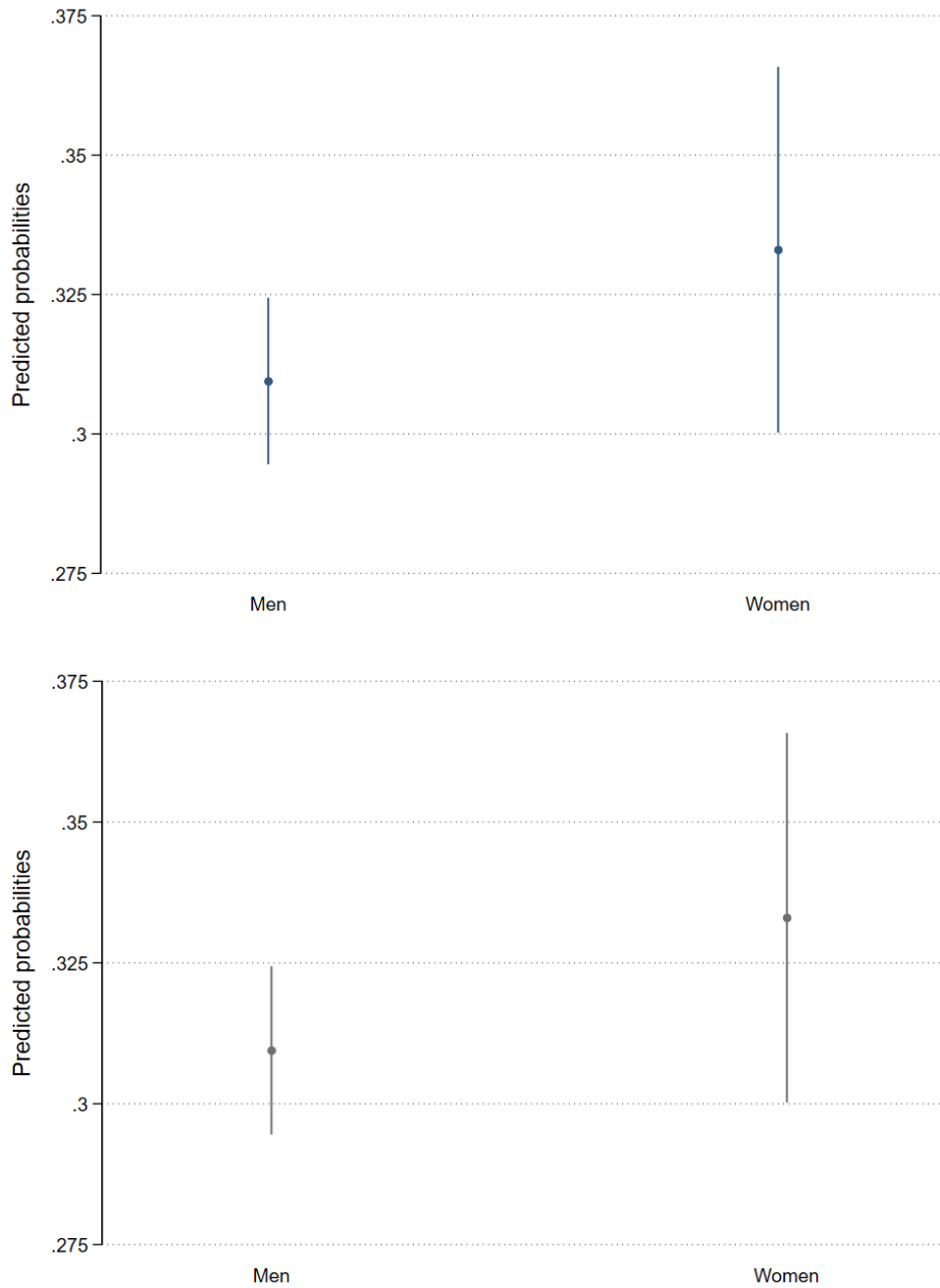
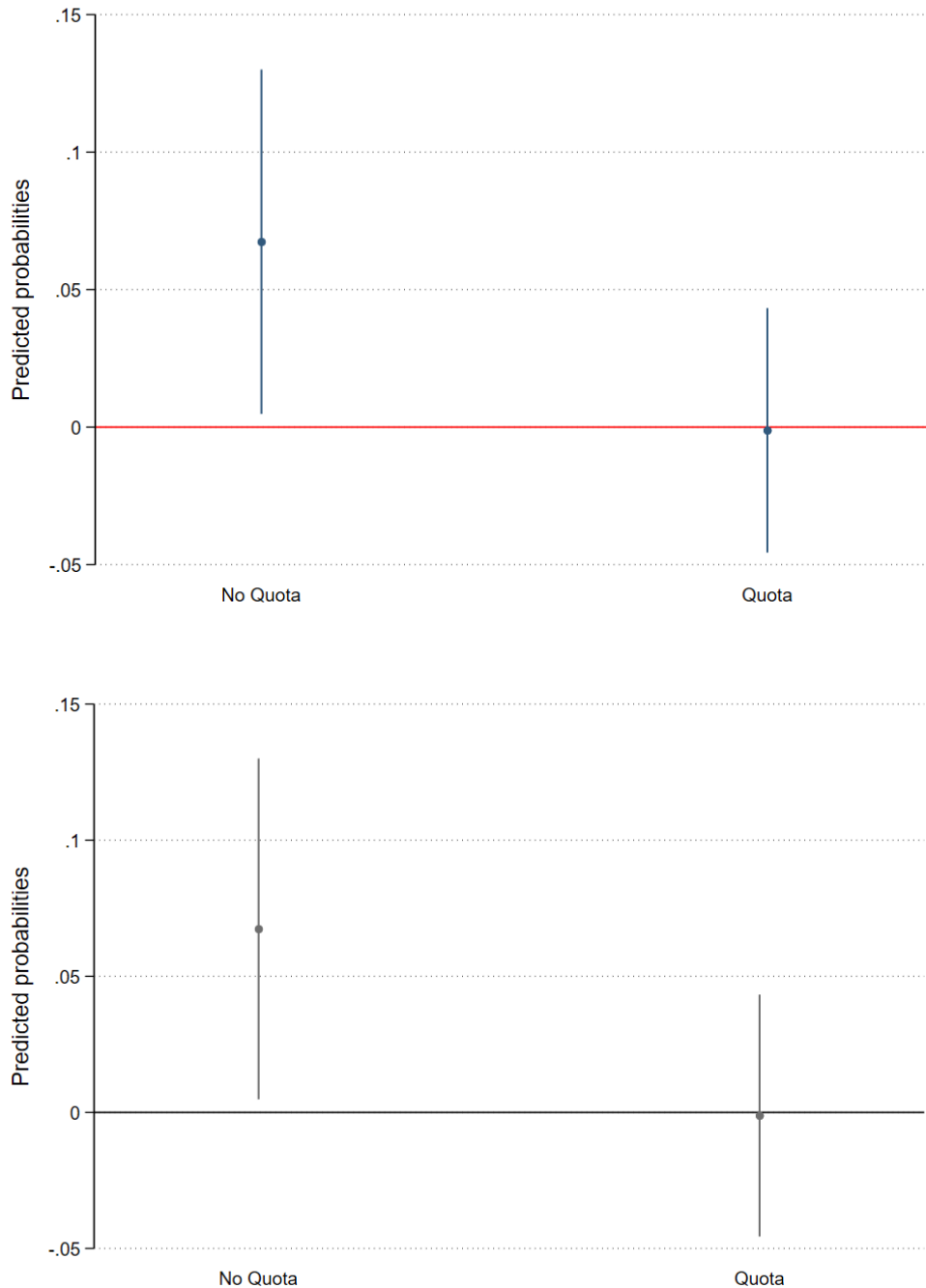
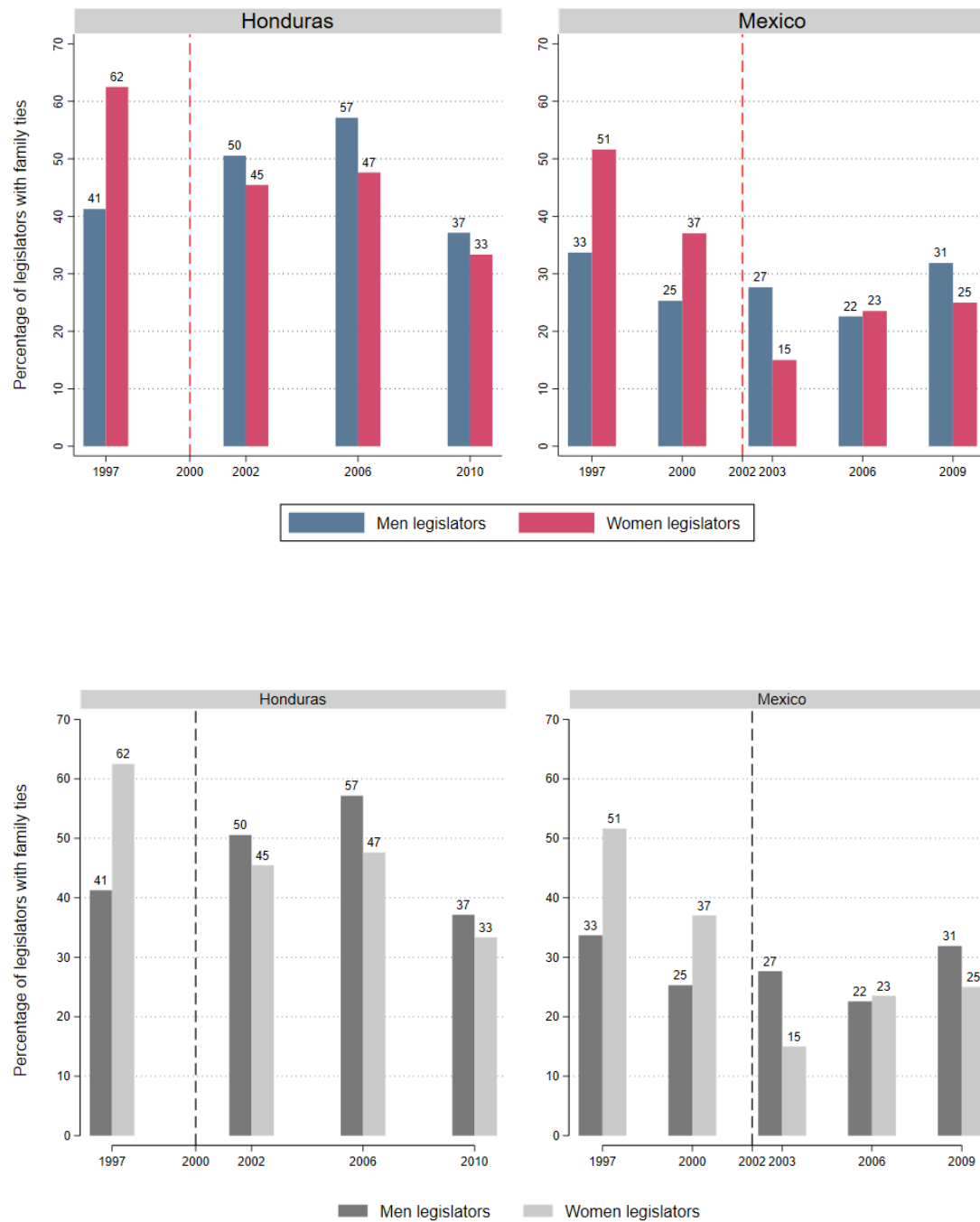


Figure 5: Gender Differences in Predicted Probability of Having Family Ties in Non-quota and Quota Systems



Note: This graph shows the mean difference and 95% confidence interval in the predicted probability that men and women legislators report having a family tie, holding the control variables at their sample means. A positive difference means more women than men are predicted to have family ties. The estimations are based on Model 3 of Table 1.

Figure 6: Legislators with Family Ties in Honduras and Mexico Pre and Post quota, by gender



Notes: This figure shows the percentage of legislators having family members who previously held political office by gender. The year of the adoption of gender quotas (shown with dashed lines) was 2000 for Honduras and 2002 for Mexico. The x-axis years are the initial year of the legislative term in the country.

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Gender and Family Ties in Latin American Legislatures

Online Appendix

Schwindt-Bayer, Leslie A., Agustín Vallejo, and Francisco Cantú. Forthcoming at *Politics & Gender*.

Table A.1: PELA Survey Response Rates and Gender Quotas

Country name	Survey Wave	Study	Legis- lature	# Respon- dents	# Women Resp	# Seats in Chamber	# Women in Chamber	% Women in Chamber	% Women in Survey	Total Response Rate	Women Response Rate	Men Response Rate	Quota
ARGENTINA	Wave 2	5	1997-2001	128	31	257	71	27.6	24.2	49.81	43.65	52.15	YES
	Wave 3	51	2003-2007	105	34	257	87	34	32.4	40.86	39.08	41.75	YES
	Wave 4	67	2007-2011	110	37	257	103	40	33.59	42.79	35.91	47.4	YES
	Wave 5	73	2009-2013	70	26	257	99	38.5	37.09	27.23	26.26	27.85	YES
BOLIVIA	Wave 2	9	1997-2002	98	14	130	14	9.399	14.3	75.37	100	72.41	YES
	Wave 3	47	2002-2006	80	13	130	24	18.5	16.29	61.54	54.16	63.2	YES
	Wave 4	62	2006-2010	98	13	130	22	16.89	13.3	75.37	59.09	78.69	YES
BRAZIL	Wave 3	55	2003-2007	134	11	513	44	8.6	8.199	26.12	25	26.22	YES
	Wave 4	75	2007-2011	129	14	513	45	8.8	10.89	25.14	31.11	24.56	YES
CHILE	Wave 2	3	1997-2001	89	9	120	13	10.8	10.1	74.16	69.23	74.76	NO
	Wave 3	42	2002-2006	88	9	120	15	12.5	10.19	73.33	60	75.23	NO
	Wave 4	60	2006-2010	90	13	120	18	15	14.39	75	72.22	75.48	NO
	Wave 5	77	2010-2014	86	10	120	17	14.19	11.6	71.66	58.81	73.79	NO
COLOMBIA	Wave 2	13	1998-2002	88	9	161	20	12.69	10.19	54.65	45	56.02	NO
	Wave 3	46	2002-2006	95	12	166	20	12	12.6	57.22	60	56.84	NO
	Wave 4	59	2006-2010	107	15	163	15	8.399	14	65.63	100	62.15	NO
	Wave 5	83	2010-2014	91	8	166	21	12.69	8.8	54.81	38.09	57.24	NO
COSTA RICA	Wave 2	15	1998-2002	49	9	57	11	19.29	18.39	85.95	81.81	86.95	YES
	Wave 3	43	2002-2006	51	19	57	19	31.6	37.29	89.47	100	84.2	YES
	Wave 4	56	2006-2010	57	22	57	22	38.59	38.59	100	100	100	YES
DOMINICAN REPUBLIC	Wave 2	29	1998-2002	103	13	149	24	16.1	12.6	69.12	54.16	72	YES
	Wave 3	44	2002-2006	118	12	150	26	17.29	10.19	78.66	46.15	85.48	YES
	Wave 4	64	2006-2010	93	14	178	35	19.7	15.1	52.25	40	55.24	YES
	Wave 5	82	2010-2016	78	16	183	38	20.79	20.5	42.61	42.11	42.75	YES
ECUADOR	Wave 2	23	1998-2002	112	15	120	21	17.39	13.39	93.33	71.43	97.98	YES
	Wave 3	45	2002-2006	98	16	100	16	16	16.29	98	100	97.62	YES
	Wave 4	65	2007-2008	98	36	130	46	35	36.7	75.37	78.26	73.8	YES
	Wave 5	72	2009-2013	95	32	124	40	32.29	33.7	76.61	80	75	

	5		2012										YES
EL SALVADOR	Wave 2	7	1997-2000	58	11	84	14	16.7	19	69.05	78.56	67.13	NO
	Wave 3	27	2000-2003	64	7	84	8	9.52	10.89	76.19	87.5	75	NO
	Wave 4	48	2003-2006	80	7	84	7	8.8	8.8	95.23	100	94.8	NO
	Wave 6	70	2009-2011	68	14	84	16	19	20.6	80.94	87.5	79.41	NO
GUATEMALA	Wave 2	38	2000-2004	79	4	113	10	8.8	5.099	69.91	40	72.81	NO
	Wave 3	52	2004-2008	121	10	158	13	8.199	8.3	76.58	76.91	76.55	NO
	Wave 4	68	2008-2012	97	13	158	19	12	13.39	61.38	68.41	60.43	NO
HONDURAS	Wave 2	11	1997-2001	71	8	128	12	9.399	11.3	55.47	66.66	54.31	NO
	Wave 3	40	2002-2006	102	11	128	11	5.5	10.8	79.69	100	77.77	YES
	Wave 4	57	2006-2010	91	21	128	30	23.39	23.1	71.08	70	71.43	YES
	Wave 5	74	2010-2014	91	21	128	23	18	23.1	71.08	91.3	66.66	YES
MEXICO	Wave 2	1	1997-2000	126	31	500	87	17.39	24.6	25.2	35.63	23	NO
	Wave 3	37	2000-2003	124	28	500	80	16	22.6	24.79	35	22.86	NO
	Wave 4	50	2003-2006	124	21	500	113	22.6	16.89	24.79	18.57	26.61	YES
	Wave 5	63	2006-2009	128	34	500	113	22.6	26.6	25.6	30.09	24.29	YES
	Wave 6	79	2009-2012	98	28	500	131	26.2	28.6	19.6	21.37	18.96	YES
NICARAGUA	Wave 2	17	1996-2001	70	9	90	10	10.8	12.89	77.77	90	76.25	NO
	Wave 3	39	2001-2006	60	16	90	19	20.7	26.7	66.66	84.2	61.97	NO
	Wave 4	66	2007-2011	69	12	90	17	18.5	17.39	76.66	70.58	78.08	NO
PANAMA	Wave 2	41	1999-2004	64	7	71	7	9.899	10.89	90.13	100	89.05	YES
	Wave 3	53	2004-2009	68	9	73	12	16.7	13.19	93.15	75	96.72	YES
	Wave 4	71	2009-2013	64	5	71	6	8.5	7.8	90.13	83.33	90.76	YES
PERU	Wave 2	31	2001-2006	83	15	120	21	17.5	18.1	69.16	71.43	68.69	YES
	Wave 3	61	2006-2011	96	27	120	35	29.2	28.1	80	77.13	81.18	YES
URUGUAY	Wave 2	33	2000-2005	68	8	99	12	12.1	11.8	68.69	66.66	68.97	NO
	Wave 3	54	2005-2010	86	11	99	11	11.1	12.8	86.87	100	85.23	NO
	Wave 4	76	2010-2015	79	9	99	15	15.19	11.39	79.8	60	83.33	NO
VENEZUELA	Wave 2	35	2000-2005	100	11	165	16	9.689	11	60.61	68.75	59.72	NO

Table A.2: Descriptive Statistics of Family Ties to Different Types of Political Offices

Table A.2 shows the frequency and percentages of legislators in the sample with family ties to politicians that have previously held political office. The table shows information about the office, the number of people with family ties who held/hold each office, and its percentage, by gender and by quota.

Office	Total			Pre-Quota			Post-Quota		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Cabinet Minister	111	22	133	57	7	64	54	15	69
(%)	2.81	2.61	2.77	3.23	2.53	3.13	2.47	2.65	2.51
City Council Member	170	32	202	79	8	87	91	24	115
(%)	4.30	3.79	4.21	4.47	2.89	4.26	4.17	4.23	4.18
Constitutional Convention	4	1	5	1	0	1	3	1	4
(%)	0.10	0.12	0.10	0.06	0.00	0.05	0.14	0.18	0.15
Governor	49	12	61	17	2	19	32	10	42
(%)	1.24	1.42	1.27	0.96	0.72	0.93	1.47	1.76	1.53
House Representative	404	66	470	191	27	218	213	39	252
(%)	10.23	7.82	9.81	10.82	9.75	10.67	9.76	6.88	9.16
Mayor	327	84	411	151	40	191	176	44	220
(%)	8.28	9.95	8.58	8.55	14.44	9.35	8.06	7.76	8.00
President	64	20	84	28	7	35	36	13	49
(%)	1.62	2.37	1.75	1.59	2.53	1.71	1.65	2.29	1.78
Senator	75	17	92	44	8	52	31	9	40
(%)	1.90	2.01	1.92	2.49	2.89	2.55	1.42	1.59	1.45
Speaker	11	1	12	7	0	7	4	1	5
(%)	0.28	0.12	0.25	0.40	0.00	0.34	0.18	0.18	0.18
State Representative	42	12	54	11	3	14	31	9	40
(%)	1.06	1.42	1.13	0.62	1.08	0.69	1.42	1.59	1.45
State Senator	5	0	5	0	0	0	5	0	5
(%)	0.13	0.00	0.10	0.00	0.00	0.00	0.23	0.00	0.18
Vice President	9	5	14	3	0	3	6	5	11
(%)	0.23	0.59	0.29	0.17	0.00	0.15	0.27	0.88	0.40
Total	1271	272	1543	589	102	691	682	170	852
(%)	32.19	32.23	32.19	33.35	36.82	33.82	31.24	29.98	30.98

Table A.3: Descriptive Statistics of Political Family Relationships

Table A.3 shows the frequencies and percentages of the type of relatives with political offices that elected legislators reported in our analysis. These are the exact answers that legislators gave to PELA.

Relationship	Total N and %			Pre-Quota N and %			Post-Quota N and %		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Grandfather and Grandmother	148 3.75	29 3.44	177 3.69	73 4.13	12 4.33	85 4.16	75 3.44	17 3.00	92 3.35
Great-grandfather	4 0.10	0 0.00	4 0.08	4 0.23	0 0.00	4 0.20	0 0.00	0 0.00	0 0.00
Spouse	7 0.18	18 2.13	25 0.52	4 0.23	7 2.53	11 0.54	3 0.14	11 1.94	14 0.51
Sister/bother in Law	1 0.03	0 0.00	1 0.02	0 0.00	0 0.00	0 0.00	1 0.05	0 0.00	1 0.04
Sister/Brother	188 4.76	29 3.44	217 4.53	80 4.53	10 3.61	90 4.41	108 4.95	19 3.35	127 4.62
Daughter/Brother	12 0.30	2 0.24	14 0.29	3 0.17	0 0.00	3 0.15	9 0.41	2 0.35	11 0.40
Mother	32 0.81	19 2.25	51 1.06	18 1.02	9 3.25	27 1.32	14 0.64	10 1.76	24 0.87
Others	55 1.39	23 2.73	78 1.63	16 0.91	5 1.81	21 1.03	39 1.79	18 3.17	57 2.07
Father	564 14.28	110 13.03	674 14.06	263 14.89	46 16.61	309 15.12	301 13.79	64 11.29	365 13.27
Cousin	82 2.08	7 0.83	89 1.86	41 2.32	1 0.36	42 2.06	41 1.88	6 1.06	47 1.71
Father/Mother in Law	1 0.03	0 0.00	1 0.02	0 0.00	0 0.00	0 0.00	1 0.05	0 0.00	1 0.04
Great Uncle	1 0.03	0 0.00	1 0.02	1 0.06	0 0.00	1 0.05	0 0.00	0 0.00	0 0.00
Uncle/Aunt	176 4.46	35 4.15	211 4.40	86 4.87	12 4.33	98 4.80	90 4.12	23 4.06	113 4.11
No Family Ties	2678 67.81	572 67.77	3250 67.81	1177 66.65	175 63.18	1352 66.18	1501 68.76	397 70.02	1898 69.02
Total	3949 100	844 100	4793 100	1766 100	277 100	2043 100	2183 100	567 100	2750 100

Table A.4: Descriptive Statistics of Variables in Multivariate Models

	Obs.	Mean	Standard Deviation	Min	Max
Family Ties	5011	0.326	0.469	0	1
Women	5042	0.176	0.381	0	1
Quota	5067	0.575	0.494	0	1
Age	4987	47.67	9.858	22	86
Education	5046	4.986	0.947	1	6
Previous experience in Politics	5020	0.408	0.492	0	1
First time in Legislature	5046	0.651	0.477	0	1
Legislator's Ideology	4965	4.973	2.050	1	10

Table A.5: Multilevel Logistic Regression on the Moderating Effects of Quotas with Random Effects by Country and Survey Wave

In Table A.5 we replicate the three models of Table 1 with random effects instead of fixed effects by country and survey wave to test for unexplained variance between countries. Results are consistent with what we presented in the paper.

	Model 1 DV: Relatives in political offices	Model 2 DV: Relatives in political offices	Model 3 DV: Relatives in political offices
Women	0.0949 (0.0851)	0.216 (0.133)	0.305** (0.139)
Quota		-0.0913 (0.132)	-0.0746 (0.135)
Women * Quota		-0.234 (0.169)	-0.329* (0.175)
Age	-0.00461 (0.00343)		-0.00459 (0.00343)
Level of Education	0.166*** (0.0359)		0.167*** (0.0359)
Legislator Ideology	0.0987*** (0.0161)		0.101*** (0.0161)
Previous Experience in Politics	0.114* (0.0681)		0.117* (0.0681)
First Time in Legislature	-0.265*** (0.0697)		-0.264*** (0.0697)
Constant	-1.789*** (0.299)	-0.726*** (0.129)	-1.759*** (0.308)
Country (Variance)	-0.972*** (0.201)	-0.920*** (0.196)	-0.965*** (0.202)
Survey wave (Variance)	-2.537*** (0.617)	-3.296** (1.465)	-2.664*** (0.681)
N	4793	4990	4793

*Estimates are based on multi-level logistic regressions using family ties as the dependent variable with fixed effects for survey wave (not shown) and random effects for country and political party. Standard errors are in parentheses. *** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.*

Table A.6: Analysis of Residuals

Table A.6 tests the assumption that the control variables are not collinear with the independent variables of interest in Table 1, Model 3. It presents the residual estimates from that model regressed against each control variable. The only pattern that appears is for legislator ideology, with the residuals showing positive and large values for those legislators leaning toward the right. However, since this variable is poorly correlated with both legislator gender ($r=-0.0717$) and quotas ($r=-0.0136$), legislator ideology reduces the error variance of our model without inducing multicollinearity in our data. This increases our confidence that the results in Table 1 are valid.

	Model 1: No Controls	Model 2: With Controls
Ideology of Legislator	0.0212** (0.007)	0.0210** (0.007)
Age		0.0005 (0.001)
Education		0.010 (0.016)
Previous Experience		0.001 (0.030)
First Time in Legislature		-0.021 (0.320)
Constant	-0.122** (0.038)	-0.181 (0.125)
R^2	0.001	0.002
N	4899	4793

Estimates are from an OLS model using the residuals of Model 3 from Table 1 as the dependent variable. Standard errors are in parentheses.

**** is significant at the 1% level; ** is significant at the 5% level; and * is significant at the 10% level.*

Table A.7: Multivariate Model with All Control Variables and the Interaction between Gender and Ideology

This table shows our second test of whether ideology creates any bias in our analysis. It presents a re-estimation of Table 1, Model 3 with an additional interaction term for legislator ideology and gender. It shows that the coefficients of interest for gender, quotas, and their interaction remain significant while the ideology and gender interaction is not statistically different from zero. This robustness check underscores the validity of the findings from Table 1, Model 3; thus, our analyses support the hypothesis that differences in the probability of family ties for men and women legislators only exists in non-gender quota settings.

	Model 1: DV: Relatives in political offices
Women	0.450* (0.230)
Quota	-0.113 (0.180)
Women x Quota	-0.304* (0.175)
Age	-0.005 (0.003)
Level of Education	0.172*** (0.036)
Previous Experience in Politics	0.114 (0.069)
First Time in Legislature	-0.259*** (0.070)
Legislator Ideology	0.105*** (0.018)
Women x Legislator Ideology	-0.032 (0.039)
Constant	-1.915*** (0.356)
Chi2	260.19
N	4793
Log-likelihood	-2893.941

Standard errors are in parentheses. Fixed effects for country and survey wave included in models but not presented in table.

**** denotes significant the 1% level; ** denotes significance at the 5% level; and * denotes significance at the 10% level.*

Figure A.1: Matching Results

This figure compares the legacy rates between men and women legislators after matching on their sociodemographic characteristics and legislative experience. For the matching procedure, we apply the sparse optimal matching method using the *rcbalance* R package (Pimentel 2017). This method simultaneously matches treated units to control units, allowing for an exact balance among nominal covariates and the shortest covariance distance between treated units and control ones. We try to reduce the distance between treated and control units for legislators' age and education and include an exact matching by ideology (on a 1-10 scale). We made sure that male legislators belong to the same party and country wave as their correspondent female legislators. We find very similar results to what we presented in Figure 2. No overall gender differences exist, and the only country with a significant difference is Peru ($p=0.05$), just as we find in the paper.

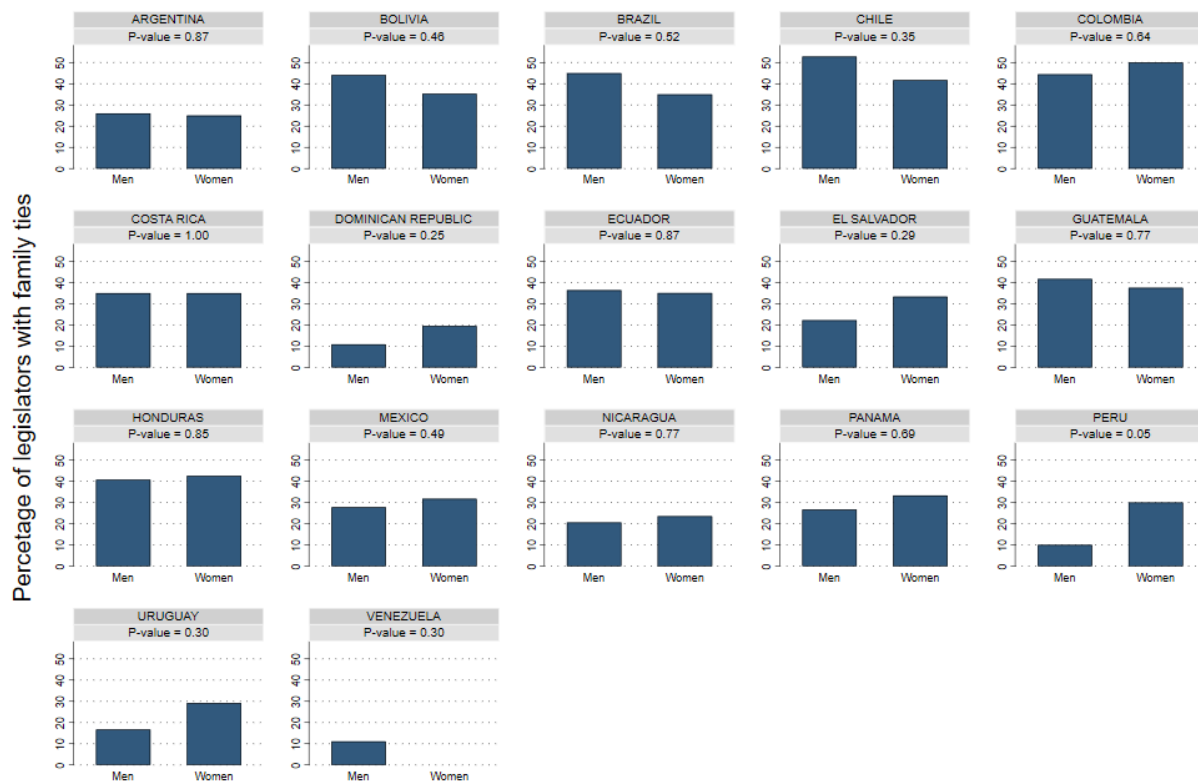
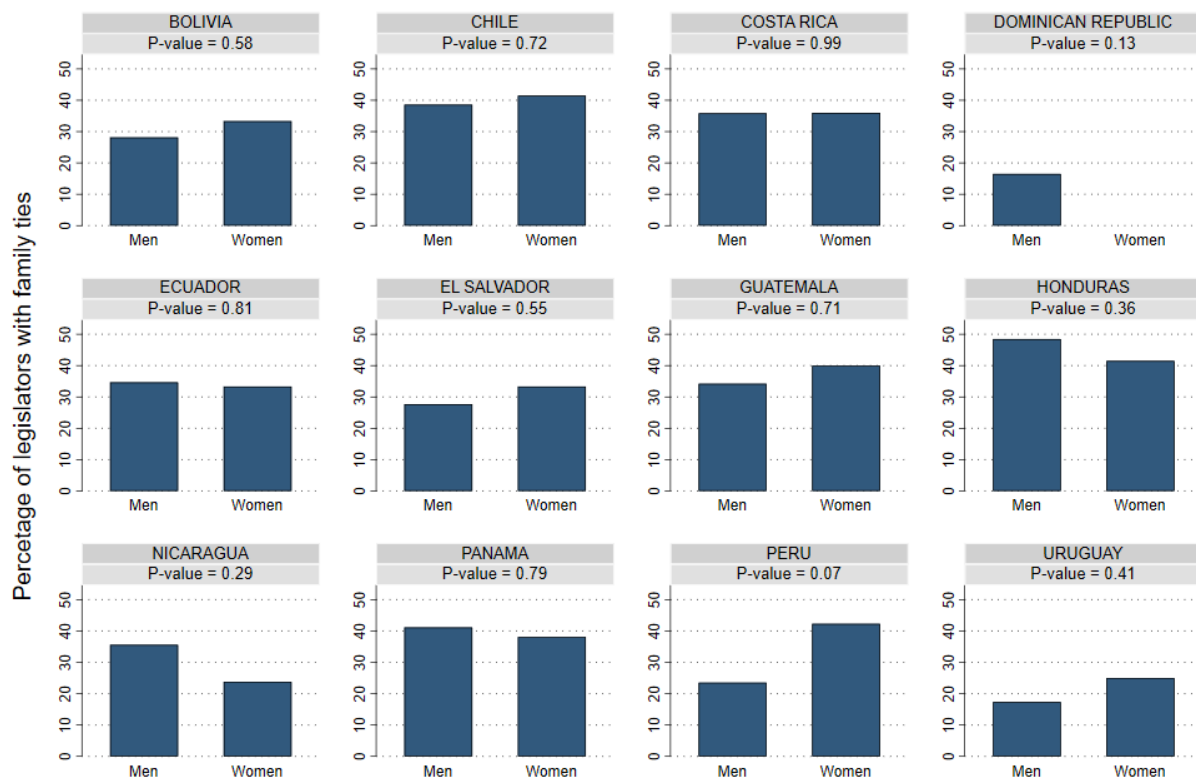


Figure A.2: Results including only Surveys with Response Rates for at least 70% of Legislators

We run a robustness check to ensure that sample size and non-responses are not biasing the results of Figure 2. As shown in Table A.1, PELA response rates vary across waves from 19.6% to 100%. For that reason, we replicated the models of Figure 2 just for those waves with at least 70% of the response rate. Figure A.2 shows those results by country. Results from Figure A2 are very similar to Figure 2. The only relevant difference between the two figures is in the case of Peru. In Figure 2, Peru was the only case where women legislators were significantly more likely to have family ties than men legislators. In Figure A2, where waves with less than 70% of the chamber responding were excluded, the difference is still present but the level of statistical significance gets lower. The p-value goes from 0.02 in Figure 2, to 0.07 in Figure A2. This result suggests that non-response bias and smaller sample sizes in some country-waves do not bias our analyses.



Author Bios (max. 75 words each)

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