Gender Quotas, Women’s Representation, and Legislative Diversity

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Diversity in the characteristics of political leaders increases the quality of policy, perceptions of legitimacy, and accountability to constituents. Yet, increasing leaders’ diversity proves one of the most difficult challenges facing modern democracy. Efforts like gender quotas shift descriptive representation on the targeted characteristic, but critics argue that women selected via quotas are as homogenous as those selected via traditional methods. In this article, we theorize that quotas (re)conceptualize views of potential political leaders and transform party recruitment networks. In doing so, quotas increase the diversity of all leaders in office. We evaluate these claims with a new measure of diversity and a data set of over 1,700 legislators in Argentinian subnational government. We show that quotas increase the professional and personal diversity of women and men in office over time, suggesting that electoral gender quotas transform parties, political networks, and how women (and men) perceive political office.

Diversity among the personal and professional characteristics, experiences, and backgrounds of public officials is fundamental for political representation (Escobar-Lemmon and Taylor-Robinson 2014; Hughes 2011). Characteristics like gender, race, class, parental status, education, and occupation can shape representatives’ preferences and priorities (Barnes 2016; Barnes, Beall, and Holman 2020; Holman 2015) and influence the type of legislation they advocate for, introduce, and support (Barnes et al. 2020; Clayton and Zetterberg 2018; O’Grady 2019). Despite significant interest in electing a descriptively representative group of leaders, increasing the diversity of representation has proved to be a difficult task. Indeed, one of the great challenges of democracies in the twenty-first century has been uncovering ways to increase the diversity of those who serve in political office (Childs and Hughes 2018; Kerevel 2019; O’Brien 2015).

One method of increasing the descriptive diversity of political bodies has been to institute quotas that mandate a level of representation on the ballot or in the decision-making body by women, racial and ethnic minorities, or other underrepresented groups (Krook and O’Brien 2010). Quotas effectively increase women’s numeric representation (Schwindt-Bayer 2009), but debates continue over the deeper effects of quotas, particularly whether quotas change how institutions operate (Verge and Claveria 2016) or merely select representatives with similar backgrounds to those elected via traditional mechanisms (Nugent and Krook 2016). These discussions raise the question: Do gender quotas just increase descriptive representation, or do they produce comprehensive changes in the characteristics of those who serve in political office?

We contribute to the literature by theorizing that quotas change how parties work, how networks operate, and how individuals engage with politics through two complementary mechanisms. First, quotas redefine potential leaders’ and political parties’ perceptions of an ideal candidate by reshaping the legislature descriptively. Specifically, as the share of women in political office grows, so does an understanding that a broader set of politicians, with diverse qualifications, can lead (Alexander 2012; Beauregard 2017). We should,
thus, see a direct connection between increasing the descriptive representation of women in office and the diversity of leaders who hold positions in that body. Second, quotas disrupt gendered institutional patterns (or that institutions operate in ways constrained by and constraining of gender) and force parties to expand their recruiting patterns (Hawkesworth 2003; Hinojosa and Correa 2016). Indeed, quotas have the potential of interrupting the insular and homophilic networks of parties (Butler and Preece 2016; Crowder-Meyer and Cooperman 2018; Weeks 2018), including how they recruit candidates and decide strategically to place candidates on the ballot (Jones 2012; Kerevel 2015). The longer a quota is in place (especially when combined with a high rate of turnover), the more the diversity of elected officials should increase. Further, our theory implies that both mechanisms foster opportunities not only among women but also among men, as the networks and perceptions of leaders that exclude women from office also limit some men’s access. This is critical, as a dearth of men’s diversity has substantial consequences for the quality of representation (Murray 2014; Taylor-Robinson 2010) and for citizens attachments to representative institutions (Barnes and Saxton 2019).

We evaluate the implications of our theory with a novel, holistic, and multifaceted measure of legislative diversity, which we adapted from measures of population diversity (Hero 2000) and a new data set that includes our coding of the backgrounds of more than 1,700 legislators across 10 provincial chambers in Argentina in multiple electoral cycles (a total of 36 chamber-years). We take advantage of the variation in implementation and success of Argentina’s provincial gender quota (Barnes 2016) to examine the relationship between women’s numeric representation, the time since quota adoption, and legislative diversity. Further, we leverage insights from interviews with provincial-level politicians to contextualize our quantitative results.

We approach the idea of diversity from a holistic standpoint by adopting a measure that examines various characteristics of legislative representatives through aggregate, rather than discrete, categories. In doing so, we argue that one appropriate direction for research on descriptive representation is to adopt a comprehensive evaluation of diversity that incorporates the crosscutting cleavages in who holds political office. Thus, we build on scholarship on the diversity among women (Brown and Gershon 2016; Cassese and Barnes 2019; Farris and Holman 2014; Strolovitch 2006) and on class differences (Barnes and Saxton 2019; Barnes et al. 2020; Taylor-Robinson 2010), to account for the interactions across indicators of diversity. A measure that simultaneously accounts for different forms of diversity allows for a more flexible view, one that incorporates diversity in and across both heterogeneous and homogeneous populations.

We find that the time since quota adoption has a strong positive association with professional and personal diversity indexes across Argentinian subnational legislatures. Further, the percentage of women in the political body is associated with increases in diversity, suggesting a twofold effect of gender quotas: the time that quotas are in place is associated with increases in diversity, but quotas also increase women’s numeric representation, which has an independent and positive association with diversity. These findings, combined with evidence from elite interviews, bring to bear important evidence in support of our theory that quotas transform patterns of political recruitment. If party leaders responded to quotas by simply recruiting women who conform to the established political profile or by selecting unqualified women, increases in women’s numeric representation would not be associated with changes in men’s diversity. This relationship between women’s access to office and men’s diversity is consistent with recent literature demonstrating that quotas serve to erode gendered legislative patterns by improving the overall competence of the legislature by disrupting “cozy arrangements” among mediocre leaders (Besley et al. 2017). Our findings thus underscore the ability of institutional changes to redefine political cultures, challenge entrenched gendered norms, and restructure political party behavior.

**DESCRIPTIVE REPRESENTATION, POLITICAL NETWORKS, AND DIVERSITY**

Gender quotas have “been perhaps the most radical and intensely debated reform in the area of gender equality in the past fifty to sixty years” (Zetterberg 2009, 715). Quotas influence the gender composition of those who serve in political office by requiring that women make up a particular proportion of political candidates or officials (Hughes 2011; Jones 1998; Krook 2004). Some proponents of quotas argue that quotas have been successful, in that they have accomplished the overall goal: to increase the number of women in office. Others argue that for quotas to be successful, they need to disrupt gendered institutional patterns (Clayton and Zetterberg 2018; Nugent and Krook 2016).

What would it look like if gender quotas disrupted the “rules of the game”? In politics, both formal and informal processes are gendered (Krook and Mackay 2011). The idea that simply increasing women’s numeric representation without changing other institutional processes will transform the gendered nature of politics runs counter to a substantial literature on gendered institutions (Hawkesworth 2003). We argue that beyond simply bringing more women into the legislature, quotas can disrupt the gendered nature of politics over time by altering conceptualizations of political leaders and transforming political party recruitment.
patterns. For these two reasons, we argue that quotas can have downstream effects for increasing the diversity of both men and women in elected office.

REDEFINING AND GENDERING QUALITY CANDIDATES

Gendered norms and processes govern candidate selection and recruitment. For example, when leaders attempt to identify quality candidates, they may place more value on masculine attributes and characteristics; these decisions shape the supply and demand of women running for office. As there are likely fewer women than men who possess masculine attributes, the supply of women who fit the masculine concept of “quality” may be low (Murray 2014; Oliver and Conroy 2017). Moreover, if parties privilege masculine characteristics, this also reduces the demand for women (Crowder-Meyer 2013; Verge and Claveria 2016). In this way, “political parties may select their candidates on the basis of subtly gendered criteria, which shapes the available supply of female candidates and may also result in women selecting themselves out of the process” (Kenny 2013, 23). The practice of seeking individuals with masculine characteristics and then failing to find a robust pool of women with those characteristics reaffirms gendered patterns of recruitment. The pattern is unlikely to change unless an interruption, such as the implementation of a gender quota, forces party leaders to look outside their normal pools or apply new criteria for selection.

We argue that the adoption of gender quotas may disrupt these gendered norms of political recruitment by redefining candidate quality. That is, to fill quotas, party leaders may be forced to expand their definition of “quality” candidates to those who do not necessarily have masculine characteristics. This might include nominees who possess a wider range of characteristics and backgrounds. Likewise, individuals with marginalized identities and those who have not held the typical pipeline careers may be more likely to see themselves as potential leaders (e.g., Wolbrecht and Campbell 2007; but see Zetterberg 2009). Research on role model effects have found that exemplars can reshape how an underrepresented group sees their own capacity to lead, “symboliz[ing] a more open political arena,” which changes “beliefs about the group’s role in politics” (Alexander 2012, 437; Holman and Schneider 2018). And, as potential candidates are rational and strategic, they are more likely to seek office in circumstances where they will be selected (Bernick and Heidbreder 2018). Consequently, increasing women’s access to office may work to change how both party leaders and potential candidates perceive who is viewed as an acceptable leader. Evolving perceptions of candidate quality can thus work to unpin gendered patterns of candidate supply and demand.

Implicit in this argument is the idea that by increasing women’s representation, the diversity of those who serve in political office will also increase. Quotas are simply a mechanism for increasing descriptive representation, and other methods of increasing descriptive representation (such as candidate trainings or donor networks) would produce the same outcome of increasing the diversity of politicians. Under this assumption, as the proportion of women in a political body increases, so should the diversity of people in the body. Thus, we posit the following hypothesis:

H1. Increases in women’s descriptive representation will be positively associated with legislative diversity.

ERODING THE GENDERED NATURE OF RECRUITMENT

We further theorize that the implementation of quotas over time can disrupt the gendered nature of political recruitment by inciting parties to change their recruitment patterns and processes, which is impactful, given the centrality of parties in most political systems. In short, we argue that the adoption of quotas alone is likely insufficient to engender change. If coupled with high turnover, however, quotas will transform the recruitment process, as parties are thus required to replenish the supply of women for their lists over time. For this reason, quotas likely produce more diversity over time when combined with higher legislative turnover.

In political systems with low turnover, political parties could comply with gender quotas by only identifying a few women. As such, the quota would not reshape the networks and mechanisms of selection. Party leaders are most likely to first consider women who are involved in their immediate social, organizational, and occupational networks (Kenny 2013; Verge and Claveria 2016). These networks matter: the homophily of elite networks (Kerevel 2019) means that leaders recruited from insular networks are more likely to have homogenous backgrounds and characteristics (Bjarnegård 2013). Indeed, the initial adoption of gender quotas frequently led to the recruitment of women primarily from influential political families, with some quotas explicitly seen as a tool for cultivating “obedient” women (Carrió 2003, 170) who would owe their allegiance to their party and their powerful political families. Thus, if a political body has very high incumbency rates and low levels of turnover (e.g., US Congress), then parties will need to recruit an initial cohort of women when

1. Although quotas may extended the practice of political nepotism to women, this was already a common method of candidate selection used among male politicians (Murray 2014).
the quota is implemented; in subsequent elections, large numbers of the same women may pursue reelection. Thus, absent electoral turnover, quotas may not require parties to look beyond their established networks.

And yet, turnover itself (absent quotas) is likely insufficient to diversify the backgrounds of legislators. Parties “seek candidates for elected office who mirror their own image” (Escobar-Lemmon and Taylor-Robinson 2016, 6) by recruiting from eligibility pools; these pools are functional because they contain individuals who parties believe can win elections and because party leaders (who are mostly men; see Barnes 2016; Morgan and Hinojosa 2018; O’Brien 2015) satisfice in recruiting by selecting individuals like themselves (Crowder-Meyer 2013; Cruz, Labonne, and Querubín 2017). These patterns mean that the “political elite literally reproduce themselves” (Prewitt and Stone 1973, 133). As individuals are recruited from these networks, the positions are refilled, and networks are replicated by those with similar backgrounds and characteristics (Mäkelä, Björkman, and Ehrnrooth 2010). Thus, absent an institutional change, high turnover is insufficient to cultivate a more diverse pool of candidates.

We argue that the use of quotas over time—as the legislative body turns over—requires parties to change their recruitment patterns. That is, the number of women in established circles of power are likely too few to comply with quota requirements over several electoral cycles in places where legislators rarely serve multiple terms, as is the case across most of Latin America and in many Western European countries (Gouglas, Maddens, and Brans 2018; Martinez Rosón 2011). In this circumstance, where high turnover demands a larger supply of candidates and quotas require an influx of women into these positions, parties may be forced to recruit outside normal networks. The effect of quotas on political party behavior thus may break some of the gendered institutional patterns that formerly governed which networks served as the foundation for political party recruiting (Bjarnegård 2013). As these networks expand, heterogeneity in the backgrounds and characteristics of the people recruited for office should also increase. Thus, if it is the case that quotas promote changes in political recruitment patterns, it implies that the longer quotas are in place in political contexts with high turnover, the more parties will need to draw women from a wider array of networks and, consequently, the more diversity we should observe among the group of people who hold office. Accordingly, we hypothesize:

**H2.** The number of years since the adoption of legislative gender quotas will be positively associated with legislative diversity.

**GENDER QUOTAS AND MEN’S LEGISLATIVE DIVERSITY**

Although men dominate most legislatures, this does not mean that all men have a chance to serve in political office. Indeed, men’s access is similarly restricted by the very narrow and elite pool of acceptable candidates (Barnes and Saxton 2019; Besley et al. 2017; O’Grady 2019). Yet, as we explain, an implication of our theory is that the adoption of quotas should also work to diversify the composition of men in office and the composition of the legislature more broadly. We posit that a more diverse group of male legislators is likely to be elected to office when there is a broader conceptualization of quality candidates and when parties recruit candidates from beyond their traditional power networks.

Our argument suggests that two of the major concerns about gender quotas may be incorrect. Previously, critics have claimed that while quotas increase the descriptive representation of women, they do so by selecting an elite group of representatives that mirror women elected without quotas or an unqualified group of representatives (Nugent and Krook 2016). If all quotas do is elect a larger group of women that mirrors those elected without quotas, then quotas should have no effect on men, other than depressing the total number of men who hold office. If anything, we should anticipate that as women’s numeric representation increases (and thus, men’s numeric representation decreases), men in office should become more homogenous, as men’s legislative access will be restricted to the most elite candidates (Besley et al. 2017). Moreover, if increases in women’s access to office only serve to bring more unqualified women into the fold, this too should have no bearing on men’s legislative diversity. The lack of “qualified” women would not alter the pool of “qualified” men. Thus, if quotas do not increase the diversity of women, or only do so by filling seats with unqualified women, then men should remain unaffected.

But, what if quotas do increase the diversity of women in office through the mechanisms we posited? If so, these changes should also cultivate diversity among male legislators. That is, as women’s numeric representation increases, women with different backgrounds and different credentials enter politics. Their presence serves to transform the accepted definition of quality candidates. As women break the mold of a traditional politician, party leaders and potential male candidates may foster a broader conception of viable political candidates. As the definition of quality candidates evolves, men from outside of the traditional pipelines may become political aspirants. If so, we should observe support for the following hypothesis:

**H3.** Increases in women’s numeric representation will be positively associated with men’s legislative diversity.
By a similar logic, if political parties look to fill quotas only by choosing women from within established networks, the recruitment of women should have no effect on patterns of recruitment of men, given that the party networks will remain exclusive and insular (Kenny 2013). It is our contention, however, that gender quotas disrupt gendered patterns of political recruitment. Thus, if gender quotas encourage parties to alter their political recruitment process to draw candidates from new and different networks, this will shape the type of men who are recruited into office. And, if gender quotas work to break down exclusive patterns of political recruitment, supplanting these methods with an approach that draws candidates from more diverse networks, then the longer quotas are in place, the more diversity we should see among men in office. As such, we evaluate the following hypothesis:

**H4.** Increases in the number of years since the adoption of legislative gender quotas will be positively associated with men’s legislative diversity.

**THE ARGENTINE CASE**

To test our hypotheses, we leverage subnational data from provincial legislatures in Argentina. Argentina is a federal republic with 23 provinces and an autonomous Federal District. The subnational analysis facilitates a comparison in legislative diversity across a large number of cases over a substantial number of years, where numerous chambers successfully implemented gender quotas and other potentially confounding country-level factors are held constant. The subnational analysis of Argentina is particularly well suited to test our hypotheses.

The staggered quota diffusion across the provinces (Barnes 2016) offers an opportunity for us to test our expectations. Figure 1 presents a timeline of our data set, with the years (X-axis) and share of chambers that have adopted a quota and percentage of women in the chamber (Y-axes). The variation in adoption enables us to assess how increases in the number of quota years relate to legislative diversity. In all but one case, gender quota legislation was adopted in conjunction with placement mandates, requiring women to be placed in electable positions on all party lists (typically interpreted to mean a woman must be placed in every third position on the ballot), and enforcement mechanisms barring parties that do not comply with these regulations from competing in the election. As a result, women hold a sizable share of seats in every chamber in our sample where quotas are in use. And yet, variation in women’s numeric representation is still present across chambers and over time (ranging from 19% to 45% women in chambers with quotas in our sample), partially owing to variations in provincial electoral laws (Jones 1998).

Variation in women’s numeric representation is critical for assessing the relationship between women’s numeric representation and legislative diversity independent of successful gender quotas.

Our theory suggests that gender quotas can incite parties to change the recruitment patterns and processes when political parties are central to candidate selection and recruitment, as is the case in Argentina. Provincial-level parties rely on elite arrangements, assembly election, and direct primaries to elect candidates (De Luca, Jones, and Tula 2002). In each circumstance, recruitment and nomination is concentrated in the hands of the local party bosses, not voters or even incumbent legislators. Party bosses arrange a list of

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2. Given that penalties prohibit parties who do not comply with the quota from competing in elections, all political parties abide by the quotas. As a result, women are not systematically more represented in some parties than in others.
negotiated candidates to compete in elections. The provincial party organizations are so strong that Levitsky (2001) describes them as being able to effectively resist any efforts from the national party organization to influence the candidate nomination process. Instead, party bosses rely on insular political networks (often maintaining control of the provincial parties for decades) to replenish the candidate supply (Levitsky 2001). Further, in an effort to secure their own political power and avoid being challenged by competent politicians, party bosses frequently rotate politicians through different political posts or simply curtail their political careers (Jones 2012; Micozzi 2014).

Finally, the Argentinian provinces also provide an excellent test case because legislative turnover for both men and women is very high: only about 20% of provincial legislators go on to serve a second term in office (Barnes 2016). High levels of legislative turnover could force party leaders to eventually look beyond their narrow eligibility pool to recruit women, resulting in more legislative diversity (Kerevel and Atkeson 2013). In provinces with legislative gender quotas, the obligation party leaders have to comply with gender quotas is amplified by the high turnover rate, as parties must field a large number of women in these legislative elections.

EXPLAINING LEGISLATIVE DIVERSITY: DATA AND ANALYSIS

Our data come from 10 subnational legislative chambers (across six provinces) in Argentina from 2006 to 2014, for a total of 36 chamber-years (see table A1 for sample details; tables A1–A5 are available online). Specifically, the data in our analysis were collected following provincial elections, such that each year represents a new (or partially new) cohort of legislators. All but two of the chambers included in our sample use partial renovation to elect half of the seats in office once every two years. The remaining two chambers use full renovation and hold elections once every four years. Our analysis includes every election year in every provincial legislative chamber for which there were systematic data available for the dependent variable. Finally, we draw on insights gained from interviews with provincial-level politicians to further contextualize our quantitative results.

Measuring legislative diversity as our dependent variable

Have the gender quotas in Argentina introduced more diversity in the backgrounds of the women and men who serve in political office? We code and analyze an existing directory of the professional and personal backgrounds of subnational legislators in Argentina (Directorio Legislativo; for research using the national legislative profiles, see Barnes and Holman 2019; Franceschet and Piscopo 2014; Micozzi 2018). The Directorio has been compiled by a nongovernmental organization since 2006 at the provincial level and provides the personal background, prior political offices, professional occupations, and party experience of the legislators. We use the data contained in the directory to create a new way of measuring legislative diversity, which builds on measures of state- and local-level diversity (Barnes and Holman 2019; Hero 2000).

We aggregate this information about legislators’ personal and professional backgrounds to create two distinct chamber-year-level measures of diversity such that our unit of analysis is the chamber-year. The diversity measurement strategy examines the level of diversity via a probability term, where a single figure represents the proportion of characteristics on which a randomly drawn pair of individuals will differ, assuming sampling with replacement. The figure is adaptable to a wide set of types of diversity and is commonly used in research on demographic diversity of geographic areas (i.e., urban neighborhoods or states; Hero 2000). We measure the diversity in each legislative body using a probability function:

$$A_w = 1 - \frac{\sum_{k=1}^{p} Y_k^2}{V},$$

where $A_w$ is the weighted average of each chamber-year, $Y_k$ is the proportion of the legislative body falling in a given category $(k)$ within each of the variables $(Y)$, $V$ is the number of variables, and $p$ is the number of categories within all of the variables.

Higher values indicate more diversity, while lower values indicate less diversity. We use this measure to examine the professional and personal diversity of politicians. Specifically, we construct a women’s professional diversity index. To do so, we code whether $(=1)$ or not $(=0)$ each representative listed previously held (1) a public position, (2) a private career position, (3) a position in a party organization, (4) a political office (an elected official, a political appointment in the executive, or a party leader), (5) a public or private blue-collar position (service professions and workers), (6) or a previous public or private white-collar position, such as a lawyer, doctor, business person, or private sector professional. Categories are not mutually exclusive; some legislators

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3. Barnes conducted interviews with over 200 current and former provincial deputies, journalists, and other political elites in 19 Argentinian provinces from 2009 to 2013.

4. Although we account for whether individuals have previous political experience, we do not incorporate variations in the level or type of political
We focus on these measures because they represent the traditional markers of political experience and policy-making perspectives (Barnes et al. 2020; Franceschet and Piscopo 2014; Schwindt-Bayer 2011). We draw a distinction between white- and blue-collar workers given the importance of class in shaping political experiences. In Latin America, for example, legislators from working-class backgrounds (i.e., blue collar) bring different policy priorities (Micozzi 2018) to the legislative process than do white-collar professionals. We also include a subcategory of whether the politician has prior political experience. In their study of cabinet ministers, Escobar-Lemmon and Taylor-Robinson (2016) explain that it is critical to consider political connections because they can be at least as valuable as skills and policy expertise. They signal loyalty to political leaders and increase the likelihood that individuals can navigate political issues. If quotas incite leaders to expand beyond their established networks to recruit politicians, we may see a change in the share of legislators with previous political and party positions.

To calculate the index, these values are then aggregated to the chamber-year level, so that each chamber-year in our data set has a percentage of women and men who have held (or not) each of these positions. The sum of squares of those measures is taken, divided by six (given the number of variables), and subtracted from one. The mean of the overall professional diversity index is 0.362, with a standard deviation of 0.053 (see table A2). We present the professional diversity index for the chamber in the left half of figure 2, compared against the percentage of women in the chamber and the years since quotas. As shown, professional diversity varies widely across the chamber-years and increases with the share of women in the body and the years since quotas.

Second, we create a personal diversity index that incorporates the chamber-year calculations of whether a legislator (1) has children, (2) is married, and (3) reports no college education, a bachelor’s degree or equivalent, or an advanced degree. The mean of the overall personal diversity index is 0.390 with a standard deviation of 0.065. Personal diversity is another critically important dimension on which legislators vary. Indeed, legislators’ personal backgrounds—ranging from education to child-bearing and marital status—influence representatives’ behavior (Schwindt-Bayer 2011; Sharrow et al. 2018).

We expect a similar relationship but anticipate the relationship may be weaker given that personal diversification would be a by-product of the increase in professional diversification. For example, although party-recruiting patterns
may have a direct impact on the positions of power that parties look to for new candidates, those same parties are less likely to look to a group of parents or single individuals. Instead, the change in the professional network may also mean a natural evolution in the personal backgrounds of those who serve. The descriptive characteristics of the personal diversity index are presented in the right half of figure 2. Overall, there is a 39% chance that two legislators drawn from the full sample will have different personal backgrounds. Women’s and men’s personal diversity levels are similar to the overall level.5

**Key variables of interest**

We measure the time since quota adoption as the difference between the year the survey was conducted and the year that quotas were first adopted in each provincial chamber. This variable ranges from a low of zero in the 2014 Santa Fe Senate to a high of 20 in the 2014 Santa Fe House. As Santa Fe has never adopted a gender quota for the Senate, but was one of the early adopters in the House, the two chambers in Santa Fe represent the extremes in our data. Notably, the within and between province variation means that quota years do not covary with other time-variant factors such as development or women’s economic integration, which do not vary between different chambers in the same province. We measure women’s numeric representation using the percentage of women in the chamber session at the time the survey was conducted. The percentage of women in the legislative chamber ranges from 5% in the 2012 Santa Fe Senate to 45% in the 2014 Corrientes Senate.

**Control variables**

We control for a variety of economic and political factors that have the potential to shape (1) the diversity of women (and men) in political office, (2) when and whether a chamber has adopted quotas, and (3) the overall level of women’s numeric representation in the chamber. We control for political institutions via the average district magnitude (logged) from which legislators in the chamber are elected. District magnitude influences women’s access to office (Jones 1998) and may also influence the types of women who have access to office. In provinces with very large district magnitudes, women—and perhaps legislators more generally—tend to be drawn from the urban centers. These women may have more homogenous career backgrounds than women in chambers that are drawn from across the province, as is the case in chambers with multimember districts. Further, we may expect more personal diversity among legislators when they are drawn from the urban center, as it is easier for women with children to hold elected posts and attend committee meetings and legislative sessions if they live in the capital. We also control for whether the chamber is a Senate or House/unicameral Chamber. Senates are more prestigious than lower chambers, thus senators may be drawn from a narrower set of backgrounds than are deputies and be less likely to be women. There is one province in our sample (Santa Fe) where the upper and lower chamber did not implement quotas simultaneously. In this circumstance, there could be spillover effects in the selection and recruitment strategies across chambers, as the same party bosses recruit candidates for both chambers. This would bias our results toward the null. Moreover, spillover in recruitment and selection is likely minimized when senators and deputies are drawn from different pools; for example, in the case of Santa Fe, senators are selected from single member districts across the entire province, whereas deputies are selected from one province-wide district and are, thus, more likely to come from urban centers.

We have theoretical reason to believe that high unemployment will both increase diversity in the legislature, particularly among men, and be associated with lower levels of women’s numeric representation and years since quotas. Specifically, as unemployment increases, women are often pushed out of the economy to make room for men—the traditional breadwinners (Karamessini and Rubery 2013). This means that men occupy a wider range of jobs in contexts with high unemployment, and more jobs are likely regarded as potential recruitment grounds for male politicians. Likewise, it is possible that quotas are less likely to be adopted (and hence women’s descriptive representation is likely to be low) in the context of low economic development. To account for this, we control for the level of unemployment in the province with unemployment data from the Argentinian Ministry of Economics. It ranges from 4% in Mendoza to 10.6% in Santa Fe.

Women may have more opportunities in the public and private sector, resulting in both more diversity among women in office and a higher share of women in office, in provinces with higher levels of gender equality. We use the Gender-Related Development Index (GDI) to measure gender equality in each province. The measure accounts for gender differences in life expectancy rates, adult literacy rates, and standards of living. As gender disparities increase, the value of the GDI decreases. GDI data come from the UN Development Programme’s human development reports in 2006, 2009, and 2011. In our sample, GDI ranges from 0.797 in Misiones to 0.887 in the Federal District.

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5. The combination of components in the diversity measure means that it takes a log form after eight individuals. With a very small $N$, the measure is dependent on a single member in the group. Once we exceed eight, the possible number of combinations is 8, so each change in a background characteristic of an individual legislator results in a diminished change in the overall measure.
Modeling strategy
Given that our dependent variable is theoretically bound between 0 and 1, we estimate generalized linear models (GLMs) with a Gaussian distribution and a normal link function. The results are displayed in table 1. Ordinary least squares replication is available in table A5.

EXPLAINING LEGISLATIVE DIVERSITY
We theorized that increases in women’s numeric representation would be associated with increases in legislative diversity and that the adoption of gender quotas work to reshape political party recruitment tactics and broaden the network from which women are drawn. As expected, in table 1 models 1 and 2, we find a positive and significant increase for professional diversity as the percentage of women in the chamber increases (the positive relationship for personal diversity is limited to women legislators). We also find that, consistent with expectations, the longer quotas are in place, the more diversity there is in the legislative chamber.

Importantly, in most models, women’s numeric representation and years since quota are independently associated with an increase in legislative diversity, thus demonstrating support for our theory that the adoption of a gender quota fosters legislative diversity through two distinct and interrelated mechanisms. To evaluate the magnitude of these relationships, we calculate the expected value of the professional and personal diversity indexes for different values of interest, while all other values are held at their means and dummy variables are set to their modes. Figure 3 plots these expected values surrounded by 90% confidence intervals.

The top of figure 3 charts the increase in women’s numeric representation on the X-axis and the expected value for professional/personal diversity on the Y-axis. Recall that the diversity indexes represent the probability that if we drew two legislators from the same chamber, they would have different professional backgrounds. Higher (lower) values indicate that legislators have more distinct (similar) backgrounds. As women’s numeric representation increases from 5% to 45%, women’s professional diversity increases from 0.316 to 0.412. In other words: as women’s numeric representation increases from the minimum to the maximum, the odds that two legislators will have different professional backgrounds increases from about three in seven to one in five. We do not find, however, that increases in the share of women are associated with personal diversity. Instead, the line depicted in figure 3B is flat and insignificant. In sum, these results indicate

Table 1. Professional and Personal Diversity

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<td>.134*</td>
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<tr>
<td></td>
<td>(.048)</td>
<td>(.060)</td>
<td>(.097)</td>
<td>(.126)</td>
<td>(.072)</td>
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<tr>
<td>Quota years</td>
<td>.006***</td>
<td>.015***</td>
<td>.012***</td>
<td>.019***</td>
<td>.007***</td>
</tr>
<tr>
<td></td>
<td>(.002)</td>
<td>(.001)</td>
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<tr>
<td>Log(district magnitude)</td>
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<td>-.016**</td>
<td>.032</td>
<td>.030</td>
<td>-.018</td>
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<tr>
<td></td>
<td>(.016)</td>
<td>(.008)</td>
<td>(.025)</td>
<td>(.025)</td>
<td>(.022)</td>
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<td>-.003</td>
<td>-.017</td>
<td>.073*</td>
<td>-.060**</td>
</tr>
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<td>(.017)</td>
<td>(.10)</td>
<td>(.030)</td>
<td>(.041)</td>
<td>(.026)</td>
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<td>Unemployment</td>
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<td>.017***</td>
<td>.005</td>
<td>.013*</td>
<td>.013***</td>
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<td></td>
<td>(.002)</td>
<td>(.001)</td>
<td>(.006)</td>
<td>(.008)</td>
<td>(.004)</td>
</tr>
<tr>
<td>GDI</td>
<td>.370*</td>
<td>.842***</td>
<td>.534</td>
<td>-.166</td>
<td>.405</td>
</tr>
<tr>
<td></td>
<td>(.213)</td>
<td>(.201)</td>
<td>(.339)</td>
<td>(.397)</td>
<td>(.362)</td>
</tr>
<tr>
<td>Constant</td>
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<td>-.566***</td>
<td>-.448*</td>
<td>-.060</td>
<td>-.151</td>
</tr>
<tr>
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<td>(.173)</td>
<td>(.172)</td>
<td>(.272)</td>
<td>(.341)</td>
<td>(.306)</td>
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<td>1,716</td>
<td>420</td>
<td>491</td>
<td>1,044</td>
</tr>
<tr>
<td>N chamber-years</td>
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<td>36</td>
<td>31</td>
<td>36</td>
<td>31</td>
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Note. Standard errors in parentheses. GDI = Gender-Related Development Index.
* p < .10.
** p < .05.
*** p < .01.
that increases in women’s presence are associated with more diversity in legislators’ professional backgrounds before entering office but not with their personal backgrounds.

Interviews with provincial-level legislators in Argentina provide evidence consistent with our argument that increases in women’s numeric representation may work to transform potential candidates’ and party leaders’ ideas about who is qualified for office. Whereas political parties historically have done the minimum to comply with quotas, interviews suggest that more than 15 years after the adoption of quotas, parties view women as competitive politicians and sometimes recruit them to compete at the top of the legislative list. As a Mendoza senator explained: “You can see how the change is spreading, there are cases where we do not even need the quota . . . But that is still not the norm.” She was not the only one to suggest that women are starting to “earn” a seat at the table on the basis of their qualifications apart from the quota and that today more women, including younger women, are being recruited to compete at the top of the list. These interviews illustrate that women’s presence in office has worked to alter views about who is qualified to hold office.

Next, we theorized that independent of women’s numeric representation, the increases in the time since the adoption of gender quotas is also positively associated with legislative diversity. In the bottom of figure 3, we plot the years since quota adoption (on the X-axis) and increases in diversity (on the Y-axis). As the number of quota years increases from zero to 20, professional legislative diversity increases from 0.291 to 0.415, with a steady increase across the time since quota adoption. Likewise, personal legislative diversity increases from 0.198 to 0.491 over the range of years since quota adoption, suggesting that quotas are a powerful mechanism for increasing all forms of legislative diversity.

Representatives saw parties and recruitment networks as insular but also suggested that quotas may be transforming the selection and recruitment process. A former deputy from Neuquén explained that “due to our culture, the first women who got there [to the legislature] were family members.” But over time, “Women without the last names, without husbands in politics, started to earn their spots.” Views like this help to illustrate the idea that simply increasing women’s numeric representation in the first election, without legislative turnover, could result in a rather homogenous group of women. The comments further illustrate that when parties are forced to comply with quotas election after election, they move beyond their established networks—in this case, powerful political families—to recruit women.

**WOMEN’S AND MEN’S DIVERSITY**

A major implication of our theory is that if quotas do diversify the legislature through changes to party recruitment and conceptualizations of acceptable leaders, then increases in women’s numeric representation and time since quota

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6. Author interview with female provincial senator, Mendoza 2013.
7. Author interview with female provincial deputy, Neuquén 2010.
Author interview with female provincial deputy, Salta 2013.

8. Author interview with female former provincial deputy, Neuquén 2010.
adoption should not just increase legislative diversity via women’s characteristics but also work to produce diversity among men in office. Specifically, we posit that the same mechanisms that work to redefine perceptions of what it means to be a qualified politician and to broaden the networks from which parties draw candidates will increase diversity among men.

To test these implications, we evaluate whether increases in chamber-wide diversity are driven exclusively by large increases in women’s diversity or whether men are also diversifying. We first calculate the professional and personal indexes for the subset of men and women in the chamber. We present each of the diversity indexes compared against the percentage of women in the chamber and the years since quotas in figure 4. As shown, professional and personal diversity varies widely across the chamber-years. With the exception of men’s personal diversity and the percentage of women in the chamber, both women’s and men’s professional and personal diversity increases with the share of women in the chamber and the years since quotas.

Next, we estimate models for each using GLMs and present the results in table 1 models 3–6 and in figure 5. Turning first to professional diversity, models 3 and 5 demonstrate that increases in women’s numeric representation are also associated with increases in both women’s and men’s professional diversity, providing support for hypothesis 3. Figures 5A and 5C show the magnitude of this relationship. As women’s numeric representation increases from 5% to 45%, women’s professional diversity increases from 0.264 to 0.364 and men’s professional diversity increases from 0.323 to 0.376. Although the increases in men’s professional diversity are more modest than the increases in women’s professional diversity, the change is statistically significant, indicating that results observed in the chamber-wide analysis are not driven by increases in women’s diversity alone. Moreover, the lower intercept for women’s professional diversity indicates that women tend to have much lower levels of diversity than men when there are only a few women in the chamber, but when women occupy upward of 45% of the seats in the legislature, the women in office are as diverse as the men.

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Figure 4. Women’s (left half) and men’s (right half) professional and personal legislative diversity measures by the percentage of women in the chamber (table A3 models 3 and 5, table A4 models 3 and 5) and the number of years since quota (table A3 models 4 and 6, table A4 models 4 and 6). Line represents correlation best fit. Betas, standard errors, and r-squared values from bivariate ordinary least squares regression models shown (see tables A3 and A4 for bivariate results). Individual components of the indexes are compared against the percentage of women and the years since quota in figures A3–A6.
Turning to personal diversity, an increase from 5% to 45% women is associated with an increase from 0.228 to 0.392 on women’s personal diversity index (fig. 5B), yet the same trend does not hold for men. Rather, as women’s numeric representation increases from 5% to 45%, men’s personal diversity (fig. 5D) decreases from 0.417 to 0.334—albeit a relationship that is not statistically significant at the \( p < .10 \) level. Thus, for men’s personal diversity, we do not find support for hypothesis 3. This finding may be unsurprising given that personal background is not a criterion that men are typically evaluated on in the political arena. Whereas men tend to be judged primarily on professional backgrounds, women running for office are typically evaluated on both personal and professional characteristics (Thomas and Bittner 2017). For example, motherhood is a salient identity used to convey important information about women’s political preferences and priorities, but voters rarely use fatherhood to judge the appropriateness of candidates (Greenlee 2014). Consistent with this research, our analysis indicates that increases in women’s numeric representation work to erode norms about the type of women who need to be elected but does not necessarily shape norms about men’s personal lives.

That said, the relationship between women’s representation and men’s professional diversity supports our theory. If party leaders were simply increasing women’s legislative diversity by choosing elite women or by selecting unqualified women to stand for office, increases in women’s numeric representation would not be associated with changes in men’s professional diversity. Yet we observe a positive relationship between women’s representation and men’s professional diversity, indicating that women’s access to the legislature may be working to transform ideas about representation, thereby broadening the pool of eligible men. That women’s numeric representation is associated with men’s professional diversity also helps illustrate the validity of our dependent variable. If diversity was simply an artifact of the overall increase in the number of women in office, then we would expect either no relationship or an inverse relationship as the pool of men shrinks and becomes more homogenous. The positive correlation we observe suggest this is not an artifact of the measure; instead, increasing women’s access to office serves to recast the role of political leaders.

The demands placed on party leaders to fill gender quotas should work to slowly erode the gendered norms and processes governing political recruitment, particularly in environments with high legislative turnover. To this end, we anticipated that party leaders would begin to draw candidates from outside of the established power networks, resulting in more diversity among both female and male politicians. Table 1 models 3–6 demonstrate support for this expectation (hypothesis 4). That is, we find that increases in the number of years since quota adoption is also positively correlated with both women’s and men’s professional and personal diversity. The bottom of figure 5 illustrates that as the number of quota years increases from 0 to 20, the expected level of women’s professional diversity increases from
0.168 to 0.408, with a steady increase across the time since quota adoption. Likewise, men’s professional diversity increases from 0.26 to 0.41. Finally, turning to personal diversity, we find that increases in quota years are associated with a positive and significant increase in women’s and men’s personal diversity. As figures 5F and 5H show, women’s personal diversity increases from 0.082 to 0.461, and men’s from 0.198 to 0.490, as quota years increases from 0 to 20.

The low level of professional diversity in the absence of gender quotas is consistent with our understanding of the legislative recruitment process. As one provincial deputy from Jujuy (a province that had not yet adopted a quota at the time of the interview and one of the few provinces with a sizable indigenous population) put it: “What represents us are men, intellectuals, the majority whites.” Men who are elected to office in her province have, she explained, “economic power—that is fundamental—a little knowledge, and a social network that supports them.” Interviews with other legislators likewise indicate that many politicians gain their positions in power via access to political networks. As one Mendoza deputy suggests, “obedient” women legislators (Carrió 2003, 170) are just as common as “obedient” men: “I always defend the quota. Although they say that it is used to put friends, the obsequious servants, [in office], there is everything. As with men, there are friends, there are obsequious servants. And there are people with political experience and political loyalty. These are the rules of the game of politics.” Interviews explain it is not that qualified women do not exist, it is that they are absent from the party’s networks. As a senator from Mendoza put it, women are underrepresented in politics because party leaders “don’t look [for women]. There are millions of capable women in the province.” Despite the political networks that fuel the candidate recruitment and selection process, our models indicate that quotas work to diversify legislative recruitment over time.

The results from our second set of analyses show that increases in women’s numeric representation and the years since quota adoption are both independently associated with increases in men’s professional diversity. But only the years since quota adoption is associated with an increase in men’s personal diversity. The distinction is important because it indicates that although an increase in women’s numeric representation is important for facilitating diversity among men, women’s numeric representation alone is not sufficient to accelerate diversity. Instead, restructuring patterns of political recruitment requires gender quotas.

10. Author interview with female provincial deputy, Mendoza 2013; emphasis added.
11. Author interview with female senator, Mendoza 2013.

OTHER FACTORS ASSOCIATED WITH LEGISLATIVE DIVERSITY

Our model includes four control variables that we believe are theoretically correlated with both our dependent variables and the two key variables of interest. District magnitude is not significantly associated with legislative diversity in any of the models except for personal diversity, in the chamber-wide analysis, where there is a negative significant relationship. We are agnostic about this relationship. Looking at our control for prestige, the Senate, our models indicate lower levels of professional diversity both among men and chamber-wide in the Senate, indicating that the more elite nature of the Senate may result in a narrower recruitment pool. Unemployment is positive and significantly associated with both personal and professional diversity in all cases except women’s professional diversity, which is in line with the argument that as unemployment increases, women are often pushed out of the economy to make room for men (Karayiannis and Rubery 2013). The more general trend, however, suggests that in poor economic circumstances, societal elites who are likely to be tracked into politics hold a more diverse range of occupations. Finally, GDI is negative and significantly associated with men’s personal diversity, and professional and personal diversity chamber wide, suggesting that more gender equality is associated with more professional and personal diversity in the chamber.

CONCLUSION

Our results show that increases in women’s representation and the adoption of legislative gender quotas work to increase legislative diversity. Although both factors are important for eroding traditional pathways to power, absent an institutional intervention such as legislative quotas, increases in women’s numeric representation alone are associated with only modest increases in legislative diversity. Indeed, the substantive effect of quotas is much stronger for professional and personal diversity chamber wide and for both women and men.

We push the research on quotas in a new direction by thinking more broadly about diversity. Specifically, we theorize that quotas may interrupt entrenched patterns of political recruitment, giving way to a more diverse set of men and women in political office. To evaluate support for our argument, we leverage a novel measurement of diversity (that simultaneously accounts for different aspects of diversity) and test our argument using data on the composition of legislative bodies over time. In demonstrating that quotas give way to a more professionally and personally diverse legislature, we underscore the importance of considering the broader and somewhat unintended consequences of increasing
women’s representation. Our new measure of legislative diversity constitutes a unique contribution to the research on representation, as it can be applied to any group of representatives, is flexible to accommodate different aspects of diversity (e.g., professional or personal backgrounds), and can easily be adapted to a variety of contexts.

Our results provide evidence in support of our theory that quotas change the way political parties operate and recruit. We argue that quotas force parties to change their eligibility pool. In this way, even when quotas are specifically aimed at increasing women’s representation, these structures may destroy the “myth of meritocracy” (Besley et al. 2017; Murray 2014) and require that parties find the better candidate, rather than the convenient candidate from their insular network (Cruz et al. 2017).

Our theory and findings are particularly important, as they provide additional evidence for the argument that quotas may enhance the representation of both men and women (Murray 2014). Scholars have long recognized that the disruption of male-dominated networks can have downstream effects in transforming institutions for women. We contribute to this line of scholarship by evaluating the relationship between quotas and women’s and men’s diversity. Research has shown that only men have access to various types of political capital, which tends to structure electoral success and limits women’s access to political power (Bjarnegård 2013). Our research finds evidence that by interrupting these patterns, quotas shape men’s representation.

At the same time, we do not find that quotas lead to the selection of nonelite or unqualified men and women—instead, these new members are just different kinds of elite. Evidence of this is found in the increased share of women with college degrees and in white-collar jobs as the number of quota years or as the share of women in the body increases (see table A5). In this way, we both push back against the existing scholarship that suggests quotas just replicate existing patterns (after all, we do find differences in the level of diversity chamber wide) and confirm work that finds that quotas often select elite women (Franceschet and Piscopo 2014). Indeed, within this framework, simply increasing women’s representation may not fundamentally reshape existing patterns of privilege that structure access to office or the distribution of power within legislatures and political parties (Barnes 2016; Holman 2015; O’Brien 2015). And, to the extent that quotas disrupt the gendered patterns of selection and recruitment into the legislature, this may further incentivize party bosses to preserve the gendered hierarchies that govern political advancement beyond the legislature (Franceschet and Piscopo 2014; Kerevel 2019). Future research might evaluate the ways quotas change how elites are viewed by parties and leaders and the effect of quotas not just on diversity in selection but also on diversity in ascension within parties (Folke and Rickne 2016).

A major contribution of our research is a new data set that codes legislators’ biographical data across 36 chamber sessions, which represents a large expansion over previous studies. Extant research using biographical data is typically limited to a very small number of chamber sessions. At the same time, it is extremely difficult to get systematic biographical data across a range of chamber sessions. Our analysis is thus limited to a context where most chambers introduced successful gender quotas, women’s numeric representation is abysmal absent quotas, and there is high legislative turnover. Despite the empirical focus on the Argentine context, our theory is very general and should apply across a range of cases in which countries have adopted legislative gender quotas to increase women’s numeric representation. To further evaluate the independent relationship between gender quotas and women’s numeric representation, future research should consider cases in which women gain access to legislatures in larger shares absent the intervention of gender quotas and compare those to cases in which increases in women’s numeric representation are a product of successful quotas. Research might also evaluate how varying levels of turnover interact with quotas to accelerate or decelerate the effect of quotas on legislative diversity, as well as querying whether high levels of turnover might be sufficient on their own to increase diversity in legislators’ backgrounds, as turnover creates more opportunities for women to gain access to office (Schwindt-Bayer 2005). Such research would be particularly important, given the scholarly debate about the degree to which institutional factors like term limits help or hinder the election of marginalized groups like women and people of color and the degree to which legislative turnover shapes policy (Carter and Nordstrom 2017).

Our findings demonstrate the need to think clearly about gendered institutional patterns as drivers in perpetuating homophily among political leaders. State-mandated legislative gender quotas, because they require proactive action by parties and changes in recruitment networks, have the potential to promote a diverse group of women—and men—who bring a broad set of qualifications to political office. Together, our findings contribute to the growing bodies of work on class and political representation, diversity, gender and politics, and electoral reform.

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