# The Success of Female Representatives: Explaining a Gendered Distribution of Legislative Power 

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#### Abstract

Under which circumstances (if any) are female legislators as successful as their male colleagues in pursuing their policy agenda. This project highlights the importance of access to coveted positions within the assembly, particularly prestigious committees, as a means to legislative success (or failure). More specifically, we advance a new theory indicating how institutional design, which varies substantially across legislative assemblies, structures women's access to prestigious committee assignments and, as a results, shapes their ability to advance their legislative agenda. To empirically evaluate our theory, we rely on individual legislators committee appointments, preferences, party loyalty, and political career in Latin American assemblies. Importantly, in our analysis we leverage variation both in the prestige of committee within chambers and in institutional organization across chambers. We find that women are less likely than men to be appointed to the most prestigious congressional committees only if legislative committees have strong gatekeeping authority.


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## 1 Introduction

In 2015 female deputies from across the political spectrum in Cost Rica made international news when they filed a court order to prevent gendered discrimination in committee appointments. Despite that women held $40 \%$ of the seats in the national congress, they were virtually excluded from the most prestigious committees in the chamber. When the Constitutional Court questioned the speaker's selection criteria he explained: "unfortunately it was not possible to include women deputies" on the committee. Moreover, he maintained the outcome was "not a matter of discrimination or exclusion of women deputies on the basis on their gender" but on the contrary, committee appointments resulted from "mere internal adjustments" and "other [male] deputies interest in the subject matter." Regardless of the selection criteria in place, women's exclusion from these coveted committee posts is particularly problematic, because in Costa Rica committees are endowed with powerful gatekeeping authority'a legislative rule that grants committee members unparalleled influence over the legislative agenda as they have the power to prevent legislation from ever reaching the floor (Calvo and Sagarzazu, 2011; Gilligan and Krehbiel, 1990).

Women's exclusion from prestigious political appointments is not unique to Costa Rica, rather women across the globe face limited access to the most coveted political posts (Bauer and Tremblay 2011; Escobar-Lemmon and Taylor-Robinson 2016; O’Brien 2015). Importantly, even though women have been gaining access in record numbers to legislatures across the world, empirical evidence indicates that simple increases in women's numeric representation is not sufficient for female representatives to achieve influence in the legislature (Clayton et al. 2015; Kittilson 2006, SchwindtBayer 2010; O'Brien 2012). Women need to hold formal positions of power within the institution that provide additional influence over policy decisions (Barnes 2016; O'Brien and Rickne 2016). Specifically, committee membership gives legislators considerable influence in the chamber, but not all committees are created equal (Cox and McCubbins 2005; Heath et al. 2005). Whereas committees in Costa Rica have strong gatekeeping powers, surprisingly committees in some legislatures have limited authority over the legislative agenda that is the chamber floor can easily vote to advance
legislation without the committee discretion (Calvo and Chasquetti 2016; *cite brazil*). Although variation in legislative powers profoundly shapes representatives ability to influence the policymaking process, no study to date systematically compares how variation in committee powers structures legislative committee appointments in a cross-national context.

As we empirically demonstrate, existing explanations of committee appointments ranging from considerations of legislator's priorities (Shepsle and Weingast 1987) and political experiences (Polsby 1970; Katz and Sala 1996) to party loyalties, (Cox and McCubbins 1993, 2005) cannot account for cross-national variation in women's access to prestigious committees. We thus posit an institutional explanation for gendered committee appointments. We argue that one reason for the lack of consensus in previous literature is that institutional design affect women's appointments to prestigious committees. Although every legislature has prestigious committees, committees are not equally powerful across legislatures. In particular, in chambers where committees possess gatekeeping authority, members of prestigious committees have a disproportionate influence over legislative outcomes. Under such circumstances male legislators are more likely to bypass women for these powerful political appointments. Yet, where prestigious committees lack any real authority, we do not expect to find any gender disparities in the composition of prestigious committees.

To test our expectations, we combine data from an original expert survey fielded in 2016, chamber rules on committee powers, and individual-level data from over XX legislators, who belong to XX political parties, across 14 Latin America countries. Leveraging responses from our novel expert survey we account for important variations in committee prestige within individual chambers. Importantly, we distinguish between prestigious committees (those with jurisdiction over key policies) and powerful committees (those with gatekeeping powers). Accordingly, committee prestige varies substantially within legislative chambers, and committee powers vary across chambers. In drawing these important distinctions, our research makes major theoretical, measurement, and empirical contributions to the understanding of prestigious and powerful committees. In doing so, we provide the first cross-national analysis of how institutions structure men's and women's appoint-
ments to committees. Results from a Bayesian Hierarchical Logit Model indicate when committees lack gatekeeping powers, women are just as likely to be appointed to prestigious committees as are men. By contrast, when committees have strong gatekeeping authority -and thus demand expertisewomen are disadvantaged in the committee appointment process.

## 2 The Importance of Access to Prestigious Committee Assignments

Committees are central to legislative organization. Legislators sitting on a committee define the range of policy choices by drafting bills and introducing amendments to their colleagues' proposals. Although committee membership often provides legislators with influence over the policy-making process, not all committees are created equal. Within a chamber, some committees have more prestige than others because they have jurisdiction over key policies. Having a seat on a prestigious committee can improve the achievement of a legislator's policy goals and, as a result, the opportunities to advance her political career (Katz and Sala 1996). For instance, by holding a position in the committee overseeing government expenditures, a legislator can advise the chamber on an important number of legislation each year, gain visibility among peers and voters, and secure funds for her own policy projects. In sum, an assignment to a prestigious committee can be instrumental to a legislators' success.

To date there has been little agreement on whether female legislators have equal access to prestigious committee appointments. While a number of scholars have found little or no evidence of gender bias against women legislators (Friedman 1996, Dolan 1997, Brown et. al. 2002, Devlin and Elgie 2008, Kerevel and Atkeson 2015), by contrast, others have shown that female legislators are less likely than their male colleagues to sit in a prestigious committee (Baekgaard 2012, SchwindtBayer 2010, Thomas1994, Towns 2003). The generalizability of much published research on this issue is problematic because it relies on evidence from single-country studies. We underscore that
female presence in prestigious committees can vary cross-nationally which would explain the mixed empirical findings regarding gender disparities in committee assignments. Figure 1 illustrates this point clearly. Across nine national chamber of deputies in Latin American there were stark differences in the percentage of women sitting on the highly prestigious budget committee relative to the percentage of women in the chamber. In Panama and Chile, although women held between 8.5\% and $14.5 \%$ of the seats in the chamber, none of them sat on the budget committee. In Guatemala, Mexico, Peru, Colombia, and Argentina, women covered between 13.5\% and 37.5\% of the seats in the chamber, but with the exception of Colombia the proportion of women in the budget committee was considerably smaller in all countries. In contrast, in Uruguay and Costa Rica, the proportion of women in the budget committee was considerably larger than the proportion of women in the chamber. Overall, these cases support the view that while female legislators may have equal access to prestigious committee appointments in some chambers, they may not have equal access in other chambers.

The central aim of this paper is to identify under which institutional designs (if any) women will be marginalized in the committee system. In the next section we provide a comparative assessment of previous explanations for gendered outcomes in committee appointments.

## Previous Explanations for Committee Appointments: A Compar-

## ative Assessment

Previous work focuses primarily on how individual characteristics influence appointments. But can these theories help us understand women's access to prestigious committees' Specifically, do women and men have different policy priorities, political experiences, or display different levels of party loyalty'

Figure 1: Percentage of Women sitting on the Committee Overseeing the Budget and Percentage of Women in the Chamber.


### 2.1 Policy Priorities

The distributional theory argues that committees have power over specific policy jurisdictions to allow members to distribute particularistic benefits to their constituents (?). Hence, legislators selfselect into committees depending on their policy priorities and constituency characteristics (?). But, do women have different policy priorities'

Previous research indicates that women are more likely than their male colleagues to express concern for women's issues and view themselves as representing women (???), it would be natural for them to prefer to sit on committees dealing with gendered issues (?????). However, even though women might be more interested in social and women's issues than men, it does not explain why women do not sit in some of the most prestigious committees such as those dealing with the budget or general legislation committee. To explain this gendered pattern of access to prestigious committees we would expect to observe widespread differences in men's and women's policy priorities.

### 2.2 Incumbency or Political Experience

Another line of inquiry, also following the congressional politics literature, maintains that in general, legislators with seniority are more likely to receive prestigious committee assignments (??).

Incumbency may play an important part in women's marginalization from prestigious committees. In a study of the US Congress where committee preferences are known, ? find that Democrat women are assigned to their preferred committees only after they have gained seniority, while firstterm and senior Republican women are equally unlikely to receive a position in their preferred committee. Furthermore, focusing on the Mexican Chamber of Deputies where consecutive reelection is prohibited, ? show that women legislators are less likely to be appointed to economic committees but are not less likely to be appointed to other prestigious committees like Foreign Affairs and Defense committees, suggesting that the lack of incumbency "prevents the development of institutions that disadvantage newcomers within the legislature" (?, p. 990). Additional studies also suggest that women, particularly those elected right after the implementation of a electoral gender quota, are often relegated from certain committees because they lack decades of legislative experience (??). However, a few studies find that gender disparities in committee appointments persist even when accounting for legislators' previous experience (??).

### 2.3 Party Loyalty

Another thread of literature on committee appointments argues that committee assignments are doled out to enforce party discipline (Cox and McCubbins 1993, 2005). Party leaders may use coveted committee assignments to ensure party loyalty to the leadership and the party's policy platform. Legislators who prioritize the party's interests over their district or personal careers are more likely to be rewarded with prestigious committee assignments. Moreover, in some instances, party loyalty trumps legislative experience. In the U.S. Congress in the mid-1990s, for example, loyalty to the party leadership was a clear predictor of freshman committee assignments. Cox and McCubbins (1993, 172) explain that even for new congress members, without a legislative track record,
party leaders would "predict how loyal members will be and [reward] their anticipated loyalty" with committee assignments.

### 2.4 Evidence from Latin America

Relying on elite surveys conducted by the Parliamentary Elites of Latin America project, overseen by the University of Salamanca (USAL), we compare men and women across these three dimensions. To assess whether gender differences in policy priorities could explain women's access to prestigious committees we compare women's and men's level of concerns on four issues: economic stagnation, unemployment, education, and human rights/rights of minorities (Figure 1) ${ }^{1}$ Looking at female and male legislators' self-reported assessments of how problematic economic stagnation is, Figure 1 reveals that a slightly larger share of women than men find it very problematic. Similarly, a higher proportion of women than men are very concerned about the level of unemployment. In contrast, men, on average, find the state of education to be more problematic in their country than women, while women are more concerned about the state of human rights and the rights of minorities than men. Overall, although the gender differences that emerge are not substantial, they indicate that if anything, women are more likely to prioritize the economy and men are slightly more likely to prioritize education. Thus, if committee assignments are driven by legislators' policy priorities, men and women should have, at a minimum equal access to and representation in a broad range of committees with jurisdiction over the economy, budget appropriations, and among others.

Next, we assess if incumbency and political experience explain women's access to prestigious committees' To explore this explanation, Table 1 presents the distribution of previous political experience by gender for legislators in seven Latin American countries. This table shows that men have more experience in elected and appointed positions than do women, but women and men have similar levels of political party experience. Specifically, whereas $53 \%$ of men had previously held an elected position, only $43 \%$ of women had held an elected political post. This ten point gender

[^1]Figure 2: Legislators' Issue Priorities

gap in elected posts, is the largest difference in previous political experience observed in our sample. Similarly, there is a six point gender gap in appointed posts, with $43 \%$ of men and $36 \%$ of women having been previously appointed to a political post. By contrast, men and women have comparable levels of experience in party positions- $70 \%$ and $68 \%$ respectively.

Table 1: Previous Political Experience \& Gender

|  |  | Men | Women |
| ---: | ---: | ---: | ---: |
| Elected Position | No Experience | $47 \%$ | $57 \%$ |
|  | Experience | $53 \%$ | $43 \%$ |
| Appointed Position | No Experience | $57 \%$ | $64 \%$ |
|  | Experience | $43 \%$ | $36 \%$ |
| Party Position | No Experience | $30 \%$ | $32 \%$ |
|  | Experience | $70 \%$ | $68 \%$ |

To evaluate whether party loyalty or political ideology can provide insights into gendered patterns of committee appointments we turn to a final set of comparisons. Comparing women's and men's perceived ideological distance from their own political party, Figure 2 shows that the vast majority of legislators - both men and women - report they are ideologically close to their party.

Thus, to the extent that committee assignments are allocated to legislators who reflect the party's ideological center, we should not anticipate substantial gender differences in appointments.

Figure 3: Perceived Ideological Distance Between an Individual Legislator and her/his Party


Male and female legislators are also remarkably similar with respect to party loyalty. When asked, for example, "If there is a conflict between the interest of your district and the position of your party, how do you vote'" men and women were about equally likely to say they would choose their district over their party or to report that they would need to weigh the issue at hand (see Figure 3). Whereas about $65 \%$ of both male and female legislators said they would vote to represent their district, just under $20 \%$ said they would side with their party. It thus appears that gender differences in party loyalty alone, are insufficient to explain the observed gender patterns in powerful committee assignments.

Despite similar policy priorities over key issue areas, comparable ideological distances from political parties, and almost identical commitments to represent their districts and parties, the presence of female legislators in prestigious committees varies substantially across assemblies. This empirical pattern, along with mixed evidence supporting a number of explanations of why women do not obtain equitable committee appointments, motivate our interest in better understanding women's access to legislative power. If women are relegated to the least prestigious committee, they will face

Figure 4: Party Loyalty v. Interest of the District

and the position of your party, how do you vote?
a formidable barrier when attempting to either advance their own legislative agendas or to influence key legislation under consideration. This gendered distribution of power might also limit female legislators' ability to represent constituents in their district.

Although that these explanations can help us understand women's access to committee appointments within individual cases (CITES), they cannot explain variation in women's appointments across countries. To address this shortcoming in the literature we develop a new theory gendered committee appointments.

## 3 An Institutional Explanation of Gendered Appointments

Although scholars have examined in depth variation in committee system design (CITES), they have not considered how different committee rules may structure political appointments' and by extension women's access to legislative power. We argue that one reason existing theories of committee appointments (reviewed in the previous section) cannot explain cross-national variation in women's access to prestigious committees is that women's appointments are further structured by institu-
tional rules. Despite that every legislature has prestigious committees, committees are not equally powerful across legislatures. Instead, committee power varies as a function of gatekeeping authority (CITES). When committees are more powerful we argue that the informal appointment process is more likely to be influenced by perceived expertise and access to powerful committees is more competitive and contentious. Given societies' widespread tendencies to discount women's expertise, and women's penchant for avoiding conflictual and competitive environments, women will be less likely to obtain prestigious committee appointments when committees are endowed with gatekeeping power.

### 3.1 Gatekeeping Powers: Influence, Expertise, and Competition

Committee vary dramatically in the extent to which they privilege committee members. Whereas some committees are endowed with powerful gatekeeping authority (Calvo and Sagarzazu, 2011; Gilligan and Krehbiel, 1990; Cox and McCubbins, 2005), other committees have limited authority over the legislative agenda (Calvo and Chasquetti 2016; *cite brazil*). To begin with, when legislatures endow committees with gatekeeping authority, committee members can substantially shape policies under the committee's scope. As a matter of fact, committees with gatekeeping authority are considered powerful because they give committee members disproportionate influence over the legislative agenda (????). Committees can engage in both negative agenda control, by blocking bills from ever reaching the floor, and positive agenda control by determining which policies to put up for discussion. If members of the chamber want to consider legislation without the committees’ consent, they must approve a discharge petition to allow legislation to advance to the floor. This can be challenging, often requiring the support of a super-majority of the votes in the chamber. This high threshold makes it difficult to override a committee's decision, giving prestigious committees enormous control over policy outcomes.

Conversely, in other legislatures, committees lack gatekeeping authority so the ability of a committee member to shape policy is not much greater than the ability of an average legislator who can
simply propose a motion on the floor ${ }^{2}$ In committees with weak gatekeeping powers, discharge petitions require only a simple majority to advance legislation from the committee. This threshold which can be achieved without discharging copartisans due to the multiparty nature of these assemblies. ${ }^{3}$ In these chambers, committees only play an advisory role, exercising limited authority over the fate of legislative agenda. In such circumstances, the chamber floor can easily vote to advance legislation without the committee discretion.

In addition to endowing committee members with substantially more power, gatekeeping authorities create a demand for legislators to be policy experts and raise the stakes associated with committee appointments. According to the informational theory policy is complex and members of the chamber do not know how to achieve their preferred policy outcomes. As a result, the chamber creates committees that are representative of the chamber and that specialize in particular policy areas so that they inform the chamber on which legislation satisfies the policy preferences of the median legislator best (?). To incentivize committee members to become experts and accumulate informational advantages, committees are endowed with gatekeeping powers.

To begin with, although individual legislators have some input in the process, they do not make the final decision regarding which committee they will sit in, but instead are assigned to committees by party leaders or chamber authorities according to their "expertise". When a chamber endows committees with gatekeeping authority, a position in a prestigious committee is seen as extremely valuable because committee members will have more authority than rank and file members in the chamber. Members of these committees are seen as "experts" on subjects such as the budget or government expenditures - the jurisdiction of some prestigious committees.

Beyond the need for expertise, the appointment process to prestigious committees with gate-

[^2]keeping is characterized as far more contentious than the process to obtain a prestigious committee appointment in a chamber without gatekeeping authorities. This is because, when committees have gatekeeping powers members on the committee have a disproportionate influence over the fate of legislation. Not only do they decide if legislation will eventually advance to the chamber floor, but they have the ability to alter the content of the legislation through amendments during the committee process. In such systems, it is extremely difficult for rank-and-file members who are not on the committee to amend the legislation once it reaches the floor. As a result, committee systems with gatekeeping authority concentrate political power into the hands the select few who are chosen to sit on prestigious committees. In such circumstances, a government official from Colombia'a legislature with strong gatekeeping powers' explained: a few committees 'monopolize' the vast majority of the legislative work, thus creating first- and second-class legislators. Combined, these powers exacerbate the influence of committees with gatekeeping. As a result, appointments to prestigious committees are far more desirable than in systems with no gatekeeping power.

### 3.2 Women's Appointments to Prestigious Committees and the Critical Impact of Gatekeeping Authority

It is our contention that the institutional design of the committee system can constrain women's access to powerful committees through multiple channels. First, the need for perceived expertise can limit women's opportunities to be appointed to powerful committees because people'both party leaders and individual women themselves'are simply less likely to view women as experts. Second, due to the higher level of competition, women may be less likely to self promote and advocate for an appointment to prestigious committees.

To begin with, a large body of research demonstrates that across a range of issues, in a variety of settings, women are less likely to be seen as experts, and instead, women's skills and contributions are likely to be devalued as compared to men's (Fiske, Cuddy, and Glick 2007; Propp 1995; Thomas-Hunt and Phillips 2004). In politics, for example, female legislators are subject to negative
stereotypes about their ability to lead and to legislate (Alexander and Andersen 1993; Huddy and Terkildsen 1993; King and Matland 2003; Matland 1994). Gender stereotypes typically assume that women are less competent, especially when working in historically male domains such as politics (Fiske, Cuddy, and Glick 2007; Holman, Merolla, and Zechmeister 2011). Likewise, research on computer science shows that women's contributions to open-source software are more likely to be accepted than men's contributions, but only when their sex is unknown (Terrell et al. 2016). Yet, consistent with the boarder body of research documenting the devaluation of women's skills, when the sex of the contributor is known, women are less likely than men to have their contributions accepted. As a final illustration, comparable patterns were uncovered from a randomized experiment asking university professors to evaluate male and female job applications for a lab position (Moss-Racusin et al. 2012). Despite being presented with the exact same application, where only the candidate's name varied, scholars evaluating the male candidate viewed him as more hirable, deserving of a higher starting salary, and significantly more competent than those subjects evaluating the female candidate. Together, this research suggests that party leaders -those individuals responsible for making committee appointments- may be less likely to view women as qualified for prestigious committee appointments when there is a premium on expertise.

Not only are party leaders likely to discount women's expertise but also, female legislators themselves may be less willing to self-promote when committee appointments place a premium on expertise and are highly coveted. This is because, in sharp contrast to men who are likely to overestimate their expertise and qualifications (Beyer 1990; Dunning et al. 2003; Pallier 2003), women are less likely to view themselves as experts (Furnham 2001) and are socialized to be more modest about their accomplishments and capabilities (Diekman, Brown, Johnston, and Clark, 2010; Eagly et al., 2000). Research on men's and women's perceptions of their own political competence finds that whereas men are more likely to express confidence in skills they do not possess and overconfidence in skills they actually do possess, women are more likely to undervalue their skills and achievements (Lawless and Fox 2010). Evidence from elite surveys of potential candidates in the U.S. shows that
among equally qualified men and women, men are more than twice as likely than women to believe they are qualified to run for office (Lawless and Fox 2010). These findings are consistent with extensive research from psychology and education indicating women report lower self-assessments of their cognitive abilities and expertise than men of equal intelligence and qualifications (e.g., Dunning et al. 2003; Furnham 2001; Pallier 2003). These pervasive inclinations for women to discount their own expertise indicate that women may view themselves as less qualified for serving on committees requiring expertise.

Given these widespread tendencies to discount women's expertise, individual women may be less likely to seek out an appointment to prestigious committees when they require legislators to have a strong command over the policy jurisdiction and party leaders "who ultimately responsible for deciding committee appointments" may likewise be less likely to appoint women. By contrast, when committee appointments do not demand expertise, women are less likely to be disadvantaged in their appointments. To be clear, we are not arguing that devaluation of women's expertise and subsequent gender biases in committee appointments are intentional, but rather they are a product of implicit biases, due to recurrent exposure to entrenched social stereotypes characterizing women as less competent

Second, and equally important, when committees are endowed with gatekeeping powers the appointment process is more competitive and contentious. This characteristic of the committee appointment may limit women's access to prestigious committees because women are socialized avoid conflict and competitive environments (Miller, Danaher, and Forbes 1986; Croson and Gneezy 2009). Not surprisingly, research from political science indicates that women's propensity to avoid conflict influences their boarder patterns political engagement (e.g., Coff and Bolzendahl 2010; Lawless and Fox 2010; Schneider et al. 2015;) Schneider et al. (2015) demonstrate, for instance, that women's higher levels of conflict aversion can explain (at least in part) their gender gap in political ambition. Insights from previous literature on women's conflict avoidance thus imply that when the committee appointment process is more cutthroat women will be less likely to seek out
powerful appointments. To summarize our theory implies that when committees have strong gatekeeping powers, committee appointments are more likely to be structured by perceived expertise and a competitive and combative selection process. Given the widespread tendencies for people to devalue and diminish women's expertise, and women's tendencies to avoid conflict and competition, we argue that institutional context that emphasizes expertise and foster conflict give way to gender bias on prestigious committees. By contrast, when committees lack strong gatekeeping authority, expertise is far less important and the committee appointment process is less contentious. Under such circumstances, committee appointments are therefore less likely to be gendered. Together, these assumptions imply the following hypothesis:

Hypothesis 1: If committees are endowed with strong gatekeeping powers, women are less likely than men to be appointed to the most prestigious committee appointments.

### 3.3 Implications for Women's Appointments to Other Committees

A theoretical implication of our argument is that when expertise is a premium for determining committee appointments, other gender stereotypes about men's and women's ability to serve as an authority on a given policy domain should further influence committee appointments. Although, on average, men more likely to be viewed as experts than women, gender stereotypes about men's and women's issue competency lead to variation in the extent to which men and women are seen as adept to legislate on different issue areas. To begin with, whereas women are stereotyped as being more knowledgeable than men about stereotypically feminine policy issues areas (such as social issues, family, children, and healthcare) they are perceived as less competent than men in masculine policy areas such as military, national defense, and security (Holman et al. 2011). These stereotypes about issue competency may further influence party leaders' decisions when making appointments to less prestigious committees in systems that require expertise.

Furthermore, although men, on average, express overconfidence in their expertise compared to women, who express a lack of confidence, this characteristic may be domain specific. Indeed,
women tend to express higher levels of confidence when faced with stereotypically feminine subject areas (Pallier 2003). Thus, when committees require expertise, women may be willing to self-select onto committees with jurisdiction over feminine issue domains. In sum, gender biases will structure both individuals' perceptions about their own qualifications and expertise on a given issue area and party leaders' evaluations about who is best equipped to serve as a policy expert.

Finally, given that committees focused on social policy tend to be viewed as less prestigious and less coveted posts, there is less competition to obtain an appointment to these committees. As such, women who select into these committees can avoid the competition and conflict associated with obtaining a high-prestige appointment. Combined, the theoretical insights about gender bias over issue expertise and variation in the levels of competition for different committees imply the following hypotheses:

Hypothesis 2: If committees are endowed with strong gatekeeping powers, women are less likely than men to be appointed to committees with stereotypically masculine domains.

Hypothesis 3: If committees are endowed with strong gatekeeping powers, women are more likely than men to be appointed to committees with stereotypically feminine domains.

## 4 Analyzing Appointments to Prestigious Committees

To evaluate our argument, we confine our empirical analysis to Latin America. This allows us to study democracies with similar levels of economic development and cultural backgrounds, both of which have been found to affect the descriptive and substantive representation of women in politics (?). Additionally, the Latin American region provides substantial variation on relevant factors that may influence women's appointments to prestigious committees. Most importantly, the Latin American region offers variation in terms of committee gatekeeping powers across chambers. Moreover, despite major increases in women's numeric representation in legislatures across the region, there is substantial variation within the region during the period examined here. Women occupy close to forty percent of seats in some chambers (e.g. Argentina and Costa Rica), yet struggle to win more
than ten percent of seats in other chambers (e.g., Brazil, Chile, and Uruguay).
To study legislators' behavior and characteristics we rely on surveys conducted by the Parliamentary Elites of Latin America project, overseen by the University of Salamanca (USAL). The USAL project conducts confidential surveys of a representative sample of members of congress, stratifying by party without replacement. Interviews, moreover, are conducted face-to-face and the average response rate is $90 \%$. Using a total of 615 surveys of individual legislators, we map legislators' committee assignments and individual characteristics in seven Latin American assemblies: Argentina (2009-2011), Bolivia (2009-2014), Brazil (2010-2014), Chile (2010-2014), Costa Rica (2010-2014), Mexico (2009-2011), and Uruguay (2010-2015) $\uplus^{4}$

Our outcome variable, assignment to a prestigious committee, is estimated using a survey item that asks legislators to list their committee assignments. Specifically, if the legislator received at least one appointment to a prestigious committee the outcome variable is coded one and if the legislator was not appointed to such committee, coded zero. We define prestigious committees as those committees overseeing salient legislation such as the national budget. One of the central challenges associated with evaluating women's appointments to prestigious committees in a cross-national analysis is identifying and coding prestigious committees. Although a large body of research finds that women are less likely than men to be appointed to prestigious committees (Barnes 2016; Heath et al. 2005) this work largely adopts the same coding strategy for prestigious committees across different chambers. In practice, however, we know that committees systems vary drastically across countries. Foremost, the importance and prestige of different policy jurisdictions varies across countries, and some committees have overlapping jurisdictions. Committee systems further vary in their size' with the number of committees ranging from a low of six in Cost Rica to more than forth in Argentina. ${ }^{5}$

The substantial variation in committee systems across Latin America thus demands a countryspecific coding for prestigious committees. Yet, without country-specific knowledge it would be

[^3]difficult to disentangle competence and importance of committees in practice. To address this challenge we fielded an expert survey involving over 47 country experts across 17 Latin America countries. Ninety percent of the experts conducted interviews with national legislators in their country of expertise. We rely on these expert evaluations to identify prestigious committees (see Appendix for details).

To test an implication of the theory we have a second outcome variable, assignment to a committee on women's issues. This variable is also estimated using a survey item that asks legislators to list their committee assignments. We code if a committee deals with women's issues very narrowly: it is any committee that specifically deals with women, gender, youth, or children.

One of the main explanatory variables is a legislator's gender. Using an item from the USAL survey, we code female legislators as one and zero otherwise. Overall, the percentage of female legislators varies across chambers, from 38.5\% of female legislators in the Argentinean Lower House, to a low of $8.6 \%$ of women in the Brazilian Lower Chamber. Given the representative nature of the survey sample, the percentage of female legislators surveyed is very close to the percentage of female legislators serving in the chamber during that legislative period (see Table 2). This should ensure a representative sample of female and male legislators in our sample.

Table 2: Representativeness of Female Legislators in the Survey Sample by Country

| Country | Women in Chamber (\%) | Female Legislators Surveyed (\%) |
| ---: | :---: | :---: |
| Argentina | 38.5 | 37.14 |
| Bolivia | 22.3 | 20.61 |
| Brazil | 8.6 | 10.85 |
| Chile | 14.2 | 11.62 |
| Costa Rica | 36.8 | 37.5 |
| Mexico | 26.8 | 28.57 |
| Uruguay | 12.1 | 11.53 |

Of course, our concern is to evaluate the extent to which the appointment of a female legislator to a prestigious committee is systematically conditioned by the institutional design. To do so, we identify which chamber rules provide committees with gatekeeping powers and which ones do not.

As a result, whereas in Argentina, Chile, Costa Rica, and Mexico, committees have considerable power over bills under their purview, in Brazil, Bolivia, and Uruguay the floor can either consider an issue without a committee's opinion or override a committee's decision with a simple majority vote. Table 3 summarizes the rules for a discharge petition.

Table 3: Gatekeeping Authority: Can the Chamber Consider a Bill Without a Committee Report'

| Lower chamber | Discharge Petition | Coding |
| ---: | :---: | :---: |
| Argentina | $\frac{2}{3}$ or $\frac{3}{5}$ majority | Gatekeeping Authority |
| Bolivia | 15 days after a bill is assigned to a committee <br> any legislator can request that <br> the chamber considers the bill | Limited Gatekeeping Authority |
| Brazil | simple majority vote | No Gatekeeping Authority |
| Chile | Explicitly does not allow to <br> consider bill without committee report | Gatekeeping Authority |
| Costa Rica | $\frac{2}{3}$ majority | Gatekeeping Authority |
| Mexico | supermajority | Gatekeeping Authority |
| Uruguay | simple majority vote | Limited Gatekeeping Authority |

Extant research suggests, that political experience or seniority may impact the probability that a legislator is appointed to a prestigious committee (?). Thus, to better isolate the effect of our explanatory variables, we incorporate control variables that account for a legislator's political career. Here, a number of survey items allow us to identify whether a legislator has previously held an elected position (e.g. mayor, governor), an appointed position (e.g. posts as minister or secretary in the national or subnational executive branches), a position in the political party (e.g. president of the political party), or whether a legislator had previously been an elected member of the chamber.

Furthermore, because seats on committees are distributed among parties proportionally to the seats they control in the chamber, we account for the proportion of women in a party bloc. Our reasoning is that as the number of women in a legislative party increases, a woman may be more likely to receive an appointment to a prestigious committee. This variable was collected for 28 parties from the GEPPAL database created by the Inter-American Development Bank.

In sum, the outcome variable is a dichotomous measure of whether a legislator was appointed to
a prestigious committee, coded one, or was not appointed to such committee, coded zero. The main explanatory variable Gender takes the value of one if the legislator is female and the value of zero if the legislator is male. The explanatory variable Institutional Design takes the value of one if the committees have gatekeeping power and the value of zero if the committees do not have gatekeeping power.

## 5 Statistical Analysis and Findings

The data include 615 legislators, who belong to 28 legislative parties, in seven assemblies. The nature of the data is hierarchical because legislator $i=1, \cdots, N$ belongs to a political party $j=1, \cdots, J$ within an assembly in country $k=1, \cdots, K$. To model committee appointment and account for the different levels of aggregation, we use a Bayesian Hierarchical Logit Model in which the different levels are modeled as nested - legislators within parties within assemblies. Gender is modeled at the level of the legislator and Institutional Design, at the level of the assembly. Additionally, we include a cross-level interaction between Gender and Institutional Design to explicitly test our conditional hypothesis.

More formally, the Bayesian regression model with all the predictors can be written as,

$$
\begin{aligned}
Y_{i j k} \mid p_{i j k} & \sim \operatorname{Ber}\left(p_{i j k}\right) \\
\log \left(\frac{p_{i j k}}{1-p_{i j k}}\right) & =\alpha_{j k}+\beta_{k} \text { Gender }+\mathbf{X}_{i j k} \beta \\
\alpha_{j k} & =\lambda_{0}+\mathbf{Z}_{j k} \lambda+u_{0 j k} \\
\alpha_{k} & =\gamma_{0}+\gamma_{1} \text { Institutional } \text { Design }_{k}+v_{0 k} \\
\beta_{k} & =\delta_{0}+\delta_{1} \text { Institutional } \text { Design }_{k} \\
u_{0 j k} & \sim \mathcal{N}\left(0, \sigma_{u 0}^{2}\right) \\
v_{0 k} & \sim \mathcal{N}\left(0, \sigma_{u 0}^{2}\right)
\end{aligned}
$$

where $\alpha_{k}$ captures country specific intercepts and $\alpha_{j k}$ captures party specific intercepts, which are assumed to follow a normal distribution. To analyze the conditional hypothesis stating that the effect of Gender varies as a function of the Institutional Design, we set up a cross-level interaction captured by $\beta_{k}$. Finally, $\mathbf{X}$ and $\mathbf{Z}$ are matrices of individual and party level control variables respectively. We specify non-informative priors for the model parameters.

One of the advantages of implementing multilevel models under the Bayesian framework is that, even with only seven assemblies at the group level, Bayesian point estimates are less likely to be biased and, if they happen to be biased, the Bayesian model overestimates the variance for the coefficients of interest. ? suggests that this is why Bayesian models "put their hypotheses to more rigid tests".

To obtain estimates of all relevant parameters, we implement a Bayesian MCMC estimation procedure in JAGS. We fit two models. First, a model in which the outcome variable captures an appointment to a prestigious committee. Table 4 presents the medians of the posterior probability distribution of the parameters of interest, along with their corresponding $90 \%$ credible intervals. Second, a model in which the outcome variable captures an appointment to a women's issue committee. Table 5 presents the medians of the posterior probability distribution of the parameters of
interest, along with their corresponding $90 \%$ credible intervals. Rather than presenting the estimates from the model results, we proceed to discuss changes in probabilities (???).

### 5.1 Sitting on a Prestigious Committee

A female legislator, on average, has a 0.42 probability of being appointed to a prestigious committee if there are no gatekeeping powers. This probability drops to 0.28 when committees have gatekeeping powers. A male legislator, on the other hand, has a probability of 0.50 of being appointed to a prestigious committee when they do not have gatekeeping powers, and a probability of 0.51 when they have gatekeeping powers.

Additionally, Figure 6 presents the conditional first difference probability of appointment along with a $90 \%$ highest density intervals (HDI) (see ?). We observe that women are considerably less likely to be appointed to a prestigious committee than men when committees have gatekeeping powers than when they do not have gatekeeping powers. Specifically, a female legislator is half as likely to be appointed to a prestigious committee as a male legislator if the committee system has gatekeeping powers. We can observe that this difference is significantly different from zero because the $90 \%$ HDI does not include zero. Conversely, there is no evidence to suggest that women are less likely to be appointed to a prestigious committee than men when a committee does not have gatekeeping powers. Although we can observe that the probability is negative - suggesting women are less likely to be appointed to this type of committee - and that the HDI includes zero, indicating that their probability is not significantly different from zero.

Moving to the control variables, as expected, having held an appointed position in the executive branch or an elected position increases the likelihood of receiving a prestigious appointment. Conversely, we do not find evidence suggesting that having held a position in the party organization or having served as a national legislator impacts a legislator's committee assignment. Regarding the percentage of women in the legislative party, as the percentage of women increases, as expected, the likelihood that a woman will sit on a prestigious committee increases as well.

Figure 5: Predicted Probability of Appointment for Women and Men in Legislatures that Allocate Gatekeeping Power to Committees and Legislatures that do not Allocate Gatekeeping Powers to Committees. First Differences for Different Institutional Designs are Shown. 90\% HDI are included.


### 5.2 Sitting on a Women's Issue Committee

A female legislator has a 0.46 probability of being appointed to a women's committee if there are no gatekeeping powers. This probability slightly increase to 0.49 when committees have gatekeeping powers. Male legislators, on the other hand, have a probability of 0.32 of being appointed to a women's committee when they do not have gatekeeping powers, and a probability of only 0.15 when they do have gatekeeping powers.

Additionally, Figure 6 presents the conditional first difference probability of appointment along with a $90 \%$ highest density intervals (HDI). We observe that women are considerably more likely to be appointed to a women's committee than men when such committees have gatekeeping powers than when they do not have gatekeeping powers. Specifically, a woman is 0.28 more likely than men to be appointed to a women's committee if the committee system has gatekeeping powers. We

Table 4: Table of Results. Hierarchical Logit Model of Probability of Appointment to a Prestigious Committee.

|  | mean | sd | $5 \%$ | $95 \%$ |
| ---: | ---: | ---: | ---: | ---: |
| Institutional Design | 0.10 | 0.41 | -0.52 | 0.70 |
| Female | -0.39 | 0.33 | -0.95 | 0.10 |
| Female $\times$ Institutional Design | -0.58 | 0.55 | -1.40 | 0.27 |
| \% of Female Legislators in the Party | 0.03 | 0.04 | 0.01 | 0.05 |
| Held Appointed Positions | 0.45 | 0.25 | 0.23 | 0.64 |
| Held Elected Position | 0.17 | 0.12 | 0.01 | 0.35 |
| Held Party Position | -0.11 | 0.13 | -0.32 | 0.10 |
| Experience as National Legislator | 0.02 | 0.10 | -0.16 | 0.19 |
| $\beta_{\text {Brazil }}$ | -1.05 | 0.37 | -1.87 | -0.36 |
| $\beta_{\text {Argentina }}$ | -0.06 | 0.29 | -0.61 | 0.51 |
| $\beta_{\text {Uruguay }}$ | -0.49 | 0.39 | -1.29 | 0.21 |
| $\beta_{\text {Chile }}$ | -1.13 | 0.63 | -2.70 | -0.20 |
| $\beta_{\text {Mexico }}$ | -0.69 | 0.33 | -1.33 | -0.07 |
| $\beta_{\text {Bolivia }}$ | -0.40 | 0.27 | -0.93 | 0.12 |
| $\beta_{\text {CostaRica }}$ | -0.58 | 0.36 | -1.36 | 0.04 |
| $\alpha_{\text {Brazil }}$ | -0.46 | 0.30 | -1.07 | 0.14 |
| $\alpha_{\text {Argentina }}$ | -0.82 | 0.32 | -1.46 | -0.22 |
| $\alpha_{\text {Uruguay }}$ | -0.87 | 0.28 | -1.42 | -0.33 |
| $\alpha_{\text {Chile }}$ | -1.14 | 0.31 | -1.73 | -0.56 |
| $\alpha_{\text {Mexico }}$ | -0.07 | 0.32 | -0.69 | 0.52 |
| $\alpha_{\text {Bolivia }}$ | -0.98 | 0.29 | -1.56 | -0.40 |
| $\alpha_{\text {CostaRica }}$ | -1.16 | 0.30 | -1.72 | -0.56 |

can observe that this difference is significantly different from zero because the $90 \%$ HDI does not include zero.

In comparison, women are relatively less likely to be appointed to a women's committee than men when a committee does not have gatekeeping powers. A woman is 0.17 more likely than men to be assigned to a women's committee when committees do not have gatekeeping authority. We can observe than the probability is positive - suggesting women are more likely to be appointed to this type of committee -and that the HDI does not include zero, indicating that their probability is significantly different from zero. Furthermore, these two first differences are significantly different, meaning that, as expected, women are more likely than men to be appointed to these committees if they are endowed with gatekeeping powers.

Moving to the control variables, we do not find evidence suggesting that having held an appointed position, a position in the party organization, or having served as a national legislator impacts a legislator's committee assignment. Regarding the percentage of women in the legislative party, as the percentage of women increases, the likelihood that a female legislator will sit on a women's committee decreases. These findings are consistent with our reasoning.

Figure 6: Predicted Probability of Appointment for Women and Men in Legislatures that Allocate Gatekeeping Power to Committees and Legislatures that do not Allocate Gatekeeping Powers to Committees. First Differences for Different Institutional Designs are Shown. 90\% HDI are included.


Table 5: Table of Results. Hierarchical Logit Model of Probability of Appointment to a Women's Committee (Varying Intercepts, not shown)

|  | mean | sd | $5 \%$ | $95 \%$ |
| ---: | ---: | ---: | ---: | ---: |
| Institutional Design | -1.32 | 0.41 | -4.33 | 0.94 |
| Female | 1.26 | 0.33 | 0.43 | 1.94 |
| Female $\times$ Institutional Design | 0.32 | 0.55 | -0.61 | 1.34 |
| \% of Female Legislators in the Party | -0.03 | 0.01 | -0.05 | 0.01 |
| Held Appointed Positions | 0.26 | 0.21 | -0.10 | 0.61 |
| Held Elected Position | -0.03 | 0.22 | -0.40 | 0.31 |
| Held Party Position | -0.07 | 0.24 | -0.32 | 0.48 |
| Experience as National Legislator | 0.23 | 0.25 | -0.16 | 0.64 |

## 6 Additional Empirical Implications: Gatekeeping Powers and Perceived Expertise

An implication from our argument is that, if committees have gatekeeping powers and "expertise" plays a role in appointment decisions, then party leaders should draw on other shortcuts when making committee appointments. Doctors and other health care professionals should, for example, be more likely than their colleagues without health care backgrounds to be appointed to the healthcare committees. Similarly teachers and educators should be more likely to be appointed to the education committee. If committees do not have gatekeeping powers, on the other hand, we expect perceived experts may still be slightly more likely to be assigned to committees pertaining to their area of expertise than non-'experts' but in a smaller proportion that in assemblies with gatekeeping powers. As the literature contends, legislators sometimes have different policy priorities depending on their professional backgrounds so it is natural for them to want to sit on those committees, but in some settings they are more likely to be assigned to these committees due to information short cuts about expertise. To evaluate these empirical implications of our theory we assess the extent to which doctors and teachers are more likely than other professionals to be assigned to the healthcare and education committees respectively in legislatures with gatekeeping committees as compared to those systems without gatekeeping authority.

## 7 Conclusion

Almost 25 years have past since the adoption of the world's first legislative gender quota in Argentina. Quotas have since spread to over half of the countries in the Latin American region, resulting in major gains in women's numeric representation in national parliaments. In the early 1990's women held fewer than 10 percent of seats in Latin America's national legislatures. Today, women have more than doubled their seat share, with women holding upwards of 40 percent of seats in some chambers. Although women have made major inroads in terms of their access to decision-
making bodies, it appears they still lag behind in terms of their access to powerful positions within the legislature.

We find that women are less likely than men to be appointed to the most prestigious congressional committees only if legislative committees have strong gatekeeping authority. This evidence suggests that female legislators are not necessarily sidelined due to lack of political experience or seniority systems, but instead, due to gender stereotypes. Furthermore, women are more likely to be assigned to committees on women's issues when gatekeeping authority is present.

Future work will advance this project in two ways. First, we have recently conducted an original expert survey in order to develop a database containing information on the prestige of legislative committees in each country and the informal institutions, norms, and procedures in each legislature. We will use this original data to expand our analysis to five additional countries ( 12 countries in total). Furthermore, we plan to consider how other institutional features of legislatures, such as the procedures by which committees appointments are decided, facilitate or constrain the probability that women attain politically important committee appointments.

Second, we intend to examine the consequences of gender bias in committee appointments. A growing literature has analyzed legislation introduced by female legislators (?????). In a comparative study of U.S. state legislatures, Osborn (2012) shows that institutional partisanship via majority party control shapes how women create and pursue women's issues legislation. In a similar fashion, because committees endowed with gatekeeping powers shape the legislative agenda, we argue that receiving a prestigious committee assignment impacts women's ability to pursue their own policies. A woman sitting on a committee in charge of reviewing her own policy proposals is much more likely to see her proposals reach the floor than a woman (or even a man) who is not sitting on such committee. Conversely, if committees do not have gatekeeping powers, the ability of women to advance their policy proposals is not going to be conditioned by their committee appointments. Overall, we expect women sitting on prestigious committees with gatekeeping powers to be more successful than those serving in prestigious committees without gatekeeping powers.


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[^1]:    ${ }^{1}$ We include the following countries Argentina (2009-2011), Bolivia (2009-2014), Brazil (2010-2014), Chile (20102014), Costa Rica (2010-2014), Mexico (2009-2011), and Uruguay (2010-2015).

[^2]:    ${ }^{2}$ Executive decrees enacted by presidents in Brazil have to be approved by Congress to remain in effect. Reich (2002) shows that, because the committees in the lower chamber lack gatekeeping authority, roughly $70 \%$ of the presidential decrees were considered on the floor without a report from the committee. Furthermore, $65.4 \%$ of the decrees attracted at least one amendment proposed by a legislator on the floor before being approved. Thus, the average member can influence policy outcomes without having a position a committee if committees lack gatekeeping powers.
    ${ }^{3}$ Whereas the U.S. Congress requires an absolute majority to approve a discharge petition (and this fairly difficulty as it demands member of the majority to discharge copartisans), countries with weak gatekeeping powers only need a simple majority which can be achieved without discharging copartisans due to the multiparty nature of these assemblies.

[^3]:    ${ }^{4}$ We are working to include 5 more Latin American assemblies.
    ${ }^{5}$ The number of committee assignments an individual legislator receives, on average, can be of only one in Bolivia and Uruguay), two in Brazil and Costa Rica, three in Chile, and four in Argentina and Mexico. Chambers with the most number of committee assignments by legislator are also the ones with the highest number of committees.

