

Essays on Political Representation and Accountability in Mexico

By

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For my mother and father, Eulalia and Miguel

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Chapter 1

Introduction

In this period of political uncertainty with citizens questioning the legitimacy of political elites in both the developing and developed world, the relationship between the mass public and their political representatives is of great importance. Yet there remain questions about the conditions that bring about higher quality representative government, particularly in developing democracies. This dissertation, a collection of three essays under the title of *Essays on Political Representation and Accountability in Mexico*, contributes to our understanding of how political and electoral institutions influence the behaviors of representatives and most importantly their relationship with their constituents. I focus on the case of Mexico, where the institutional feature of the ban on reelection provides useful leverage for investigating the relationship between constituents and representatives, with important insights for other developing democracies. In a series of three essays, I (1) investigate the electoral incentives for term-limited representatives to be responsive to local issues in their district, (2), evaluate the extent to which voters sanction their representative's parties for the votes they take in the legislature, and (3) explore the relationship between women's descriptive representation in the legislature and female political engagement.

In this introductory chapter, I situate the dissertation in the context of the evolution of Mexico's Chamber of Deputies, specifically the linkages that characterize political representation in the chamber, in the post-revolution era. The three essays of the dissertation focus on the Chamber of Deputies specifically and legislative bodies in general because it is these institutions that are meant to perform the primary function of representation in modern democracies. Moreover, the dynamics of legislative representation also provide insights into the broader relationship between

government and the mass public in Mexico. This chapter also provides an overview of the principal arguments and findings of the dissertation.

In the period immediately following the Revolution, the Mexican Congress was an arena for the representation of regional interests. However, this decentralized legislative representation should not be mistaken for a grassroots politics based on direct linkages between deputies and the mass public in their subnational constituencies. Rather, the principal electoral connection operating in legislative politics was the tie between local political machine bosses and their representatives in the Congress (Scott 1964, Garrido 1982). These subnational political forces and their associated legislative conflicts, not to mention their potential for fomenting armed conflict, led to reforms of the political structure of Mexico's legislative institutions (national and subnational). Along with the founding of the Partido Nacional Revolucionario (PNR, the predecessor to the PRI), another centralizing reform was the abolition of consecutive reelection of legislative posts in 1933. The aim (and effect) of this reform was for the party leadership to centralize control of the PNR and to move legislators' loyalties toward the national party leadership and away from local caudillos (Weldon 2004).

One of the pillars underpinning the single-party regime was the corporatist system, which integrated the mass public into sectoral organizations (labor unions, peasants, and popular associations) dependent and subordinate to the state. Under the corporatist arrangement, rank-and-file members received access to public services and benefits, sectoral leaders enforced restrictions on demand-making and mobilized the membership for electoral purposes. In return, sectoral leaders received guarantees relating to policy benefits for their groups and political representation via government posts (Collier and Collier 1991). This push toward the integration of mass organizations into the party (and state) structure under the Cárdenas government (1934-1940) was principally a means of establishing political control by the state over mass organizations rather than a mechanism of interest representation in government

(Bensusán and Middlebrook 2012, 336-338). The composition of the Chamber of Deputies changed from one organized along federal representation to sectoral representation (Godoy 2014). Along with the creation and formal recognition of the sectors, the candidate selection methods of the PRI in this period were reformed to replace primaries with sectoral quotas (Medina Peña 1993, 151).

The democratization movement in Mexico was consequential in multiple ways for the relationship between the governed and their government. First, it entailed the development of meaningful electoral competition and the end of one-party rule. Second, the corporatist system that served as the conduit between the mass public and legislative representation was supplanted by the emergence of representation linkages based in party politics. The decade following the defeat of the PRI in a presidential election in 2000 demonstrated the potential emergence of a stable party system marked by clear programmatic differentiation. This was typified most clearly in the 2006 presidential election where the contest was between the main parties of the left and right, with the more ideologically amorphous PRI sidelined to third.

The development of stable party-voter linkages could have been a major boost to the quality of democracy in Mexico. The empirical study of representation in comparative politics has placed great emphasis on the responsible party model as the normative standard (Dalton 1985; Kitschelt 2000; Luna and Zechmeister 2005). Under this model, high quality representation entails that parties are accountable to voters by committing to programmatic appeals. Therefore, cohesive legislative parties are key for accountability (Carey 2009). This ingredient is certainly present in the Mexican context, where there is high party discipline in legislative voting (Nacif 2002) and there are ideological cleavages that define those legislative blocs. At the same time, there was also a nascent programmatic component to the voting behavior of the mass public in the decade following the 2000 election. In 2006, perredista voters, on average, placed themselves on the left, priistas placed themselves to the right of

this group, and panistas were the more right-wing group (Moreno 2012, 588).

Despite these developments at the outset of electoral democracy in the country, the linkages between voters and parties have deteriorated sharply in the previous decade. The share of self-identified partisans in the mass public has declined. This has been paired with declining trust in political parties (Romero et al. 2018, 22-25). Moreover, diverging from the relative stability in the 2000s, the party system has fragmented considerably (Freidenberg and Aparicio 2016). The weakening of the party system has culminated in the ascension of Morena, a personalist party built around the linkage between Andrés Manuel López Obrador and the mass public, as the dominant partisan force in Congress. The decline of Mexico's stable party system mirrors dynamics throughout the world's developing democracies (Mainwaring and Zucco 2007). These recent trends cast doubt on the ability of a party-based model of political representation and accountability.

These developments provide the context for the three essays of the dissertation. With the deterioration of partisanship and party system fragmentation, can linkages independent of party politics mediate the relationship between representatives and the mass public? Chapter 2 provides insight on the relationship between legislators' career ambitions and responsiveness to constituents in their districts. This is in the context of high party discipline in the chamber but a resurgence of the importance of local electoral politics for legislators' careers. Are voters able to hold parties accountable for the roll call votes of their deputies? Chapter 3 suggests that voters are up to the task of engaging in retrospective punishment and reward, and that party branding or issue ownership plays an important role in this process. Finally, Chapter 4 explores an increasingly important and traditionally neglected aspect of legislative representation: the extent to which legislatures mirror the citizens they serve. Specifically, it argues that parties are highly influential in how the process toward greater representation of women in the chamber unfolds. Although each chapter is a

self-contained essay, they all address critical questions in Mexico’s evolving democracy and in doing so provide insight for understanding political representation and accountability in other developing democracies. The rest of this brief introduction outlines the main arguments, methods, and conclusions of the three essays.

1.1 Summary of Chapters

Chapter 2: “Progressive Ambition and Representation: The Case of Mexico”

Can legislators be responsive without reelection? While the reelection incentive is the basis of standard accounts of responsiveness, less is known about the electoral connection between representatives and their districts in contexts where legislators do not necessarily seek reelection or are limited from doing so. I approach this question from the perspective of progressive ambition, whereby legislators’ responsiveness is motivated by the desire to move on to other political posts. I argue that such ambitions can be activated by factors that structure political opportunities. Using the case of Mexico, I show how federalism and the staggered nature of the federal, state, and municipal electoral calendars affect legislators’ career opportunities and consequently the extent to which they represent their district’s local interests. I also test and find evidence for support of a mechanism for an electoral connection based on building personal reputation rather than party discipline.

Chapter 3: “Legislative Voting and Electoral Accountability: The Case of Mexico’s VAT Reform”

The ability of voters to punish representatives for policies associated with negative material outcomes is a cornerstone of democratic accountability. A legislator’s position-taking in roll call votes is central to the work of a representative. Are legislators and their parties held accountable for the consequences of unpopular roll calls? What conditions facilitate electoral sanction and reward by voters? I address these questions by examining both the collective (or partisan) and individual accountabil-

ity mechanisms. I use the case of Mexico's VAT reform in 2013, where legislators' votes can be tied to negative effects for those bearing the costs of reform. I find that voters affected by a VAT hike punish their incumbent parties. However, this effect is conditional on the position-taking of members of congress. Additionally, parties that offer clear alternatives to the negative consequences of reform can increase the electoral gains from voters' retrospection. These findings have important implications for understanding the dynamics of when both collective and individual accountability operate.

Chapter 4: "Female Officeholders and Women's Political Engagement: The Role of Parties"

The ability of women in office to inspire other women to enter politics can be an important process in undoing longstanding gender gaps in political representation. Previous research on this potential role model effect of female officeholders finds mixed results in terms of female candidacies across a wide range of contexts. Explanations for these mixed findings include that positive effects are conditional on the nature of women's incorporation in a given context, and also suggest female incumbents can lower the perceived need/utility of more women running. I take a wider view and test for role model effects across different levels of the candidate emergence process. In doing so, I put a spotlight on a potentially pivotal variable: the role of parties and their candidate selection processes in moderating role model effects. Through a case study of Mexico, I find evidence of engagement effects among women in the mass public as well as women seeking party nominations, but no evidence for role model effects at the candidate-level (either within or across districts) in congressional elections. Using data on the candidate nomination processes of the PAN, I find evidence that party decisions in candidate selection methods attenuate possible role model effects.

Chapter 2

Progressive Ambition and Representation: The Case of Mexico

2.1 Introduction

Does the lack of reelection entail the absence of representatives' responsiveness to their constituents? Critics of term limits have argued that such rules sever the link between representative and district by removing the reelection incentive (Cleary 2010). The desire to maintain office forms the basis of traditional explanations for legislators' behaviors as representatives for their district (Mayhew 1974, Fenno 1978). This perspective does not bode well for the quality of representation in the world's democracies where reelection is infrequent or institutionally limited. However, a growing literature has demonstrated that "progressive ambition" - the aspiration to attain future posts - can motivate legislators to be responsive to their district. Previous work provides some evidence that legislators who go on to pursue subnational posts are more likely to engage in behaviors such as pork barreling and bill submissions that target their future constituencies (Micozzi 2014a, Kerevel 2015). Yet, this work is limited theoretically, in not incorporating the role of political and electoral contexts in systematically influencing the behavioral consequences of career ambitions, as well as empirically, in its ability to make causal inferences about the relationship between career ambitions and political action. Extending prior research, I argue that the structure of electoral opportunities can activate the progressive career ambitions of legislators, leading legislators to increase their degree of responsiveness to their districts in order to build local electoral support, even in the absence of reelection.

I test this argument using the case of Mexico, where federal deputies are constitutionally barred from pursuing reelection after their term in office. This institutional arrangement means that every legislator must look to other offices, particularly at

the subnational level, if they aim to continue building a political career beyond their three-year term in the legislature. Therefore, combined with the federal structure of the Mexican political system, I can assume that legislators are progressively ambitious and subnational posts are valued components of political careers. Per my thesis, these career ambitions are activated by the local electoral opportunity structure, specifically whether a deputy faces the prospect of coming local elections. The staggered nature of federal and local elections means that deputies from different states face distinct electoral opportunities at different points in their legislative term. Thus, the electoral calendar provides exogenous variation in the electoral opportunities and therefore the activation of progressive ambitions. I argue that the presence of an upcoming local election ought to positively predict deputies' level of responsiveness to the interests of their constituents. In order to measure responsiveness to the district, I make use of an original data collection of the frequency of legislators' bills that pertain to local interests in the 62nd Legislature (2012-2015) of the Mexican Chamber of Deputies.

The core finding is that deputies from states with upcoming local elections, compared to those from states without approaching local elections, submit more district-targeted bills in the legislative year leading up to those elections. Moreover, through an analysis of legislators' party discipline measured using roll call votes, I find that deputies are less likely to vote along the party line in the year leading up to local elections. This evidence suggests that the electoral connection between progressively ambitious representatives and constituents is driven by efforts to build their personal reputation rather than serve their party's electoral prospects. Taken together, these results demonstrate that even in the absence of reelection, representatives can still be responsive to their constituents when career ambitions and electoral opportunities combine to incentivize district-oriented political behaviors.

In the remainder of the paper, I review research on political ambition and responsiveness of legislators to constituents. I then develop a hypothesis regarding the

relationship between electoral incentives and responsiveness in conditions where legislators will not seek reelection. Along with this main hypothesis, I also develop a test derived from the empirical implications of competing explanations for the mechanism motivating responsiveness: party discipline or personal vote. Finally, I discuss the data and methodology of the empirical analyses and present the results.

2.2 Political Ambition and Responsiveness

The structure of electoral incentives has long been held as the starting point for understanding the behavior of legislators. This is particularly the case for the issue of representation and the linkage between representatives and voters in the district. In U.S. politics, the desire for reelection amongst members of Congress drives them to engage in activities such as credit claiming, pork barreling, and maintaining contact with constituents that will enhance their electoral prospects in the district (Mayhew 1974, Fenno 1978). In this model of representation, elections are meant to serve as the time to hold representatives accountable for their behavior and performance while in office. Forward-looking and ambitious politicians will work to cultivate support in their districts to fight off potential challengers.

While this assumption of reelection goals has been the starting point for valuable insights in American politics, it is not an appropriate assumption in many other contexts. In developing a typology of political ambition, Schlesinger (1966, 10) differentiates “static ambition,” where “the politician seeks to make a long-run career out of a particular office,” with “progressive ambition,” where “the politician aspires to attain an office more important than the one he now seeks or is holding.” Comparative analyses of legislative behavior have found that the static ambition assumption has widely varying degrees of applicability to the career paths of legislators across the world (Morgenstern and Nacif 2002, Matland and Studlar 2004). Rather than static ambition, many politicians in the world’s democracies go on to seek other posts. For

example, around 83% of members of the lower house in the United States returned to office after their term (in 1996). In the same period, only 17% and 43% of legislators in Argentina and Brazil returned to office, respectively.¹ Samuels (2003) builds on Schlesinger's typology by expanding the definition of progressive ambition to incorporate a world where politicians move up and down the levels of government throughout their political careers, which characterizes the aforementioned cases of Argentina and Brazil. Rather than a strict hierarchy from local to national posts, sitting federal legislators may value and desire subnational offices as part of their long-term career goals.

Working from the progressive ambition framework, the lack of reelection does not necessarily entail a disconnect between representative and constituents, as the static ambition perspective would predict. Legislators who are progressively ambitious and aspire to attain a subnational post may be responsive to the constituents, not because they wish to secure reelection, but instead because they desire to build a base of support for election to their next post. In order to study the relationship between progressive ambition and responsiveness to the district it is necessary to identify legislators who are progressively ambitious. This is difficult in contexts such as Brazil and Argentina where it cannot be known beforehand whether legislators will try to keep their seat or pursue subnational posts, since they have the option of both. For this reason, I focus on the case of Mexico, which presents a useful case in that progressive ambition is forced upon politicians via the constitutional ban on reelection. This ban on direct reelection means that each office holder must look elsewhere if she wishes to continue her political career once the term is over. While cases with explicit term limits (such as Mexico) permit a clean test of the influence of the electoral opportunity structure on progressive ambition, findings from such analyses permit inferences about behavior in other democracies where rates of reelection are low and

¹Data is from p. 416 Table 14.1 of Morgenstern 2002.

politicians have both static and progressive career options.

The institution of no reelection within Mexican politics is argued to have significant implications for representation. The conventional wisdom on Mexican democracy is that limits on reelection have been detrimental to the development of governments and politicians that are responsive to their voters. From a practical point of view, the inability to stay in office past the three-year term (or six-year term for senators) limits the ability of deputies to invest in and develop the necessary resources and skills to act as effective legislators (Ugalde 2000). The ban on consecutive reelection has also been a source of leverage for political party leaders since they traditionally have control of nominating procedures for elected office. In order to gain elected office, politicians must first secure the nomination of their party and it is here that party leaders can exercise influence in their role as gatekeepers to elected office. This, along with party control of campaign resources, produces politicians who serve as agents to party leaders when formulating and voting on policy (Béjar Algazi and Waldman 2004, Langston 2007). In theory, this pattern holds little room for any influence from the district on legislator behavior. A more basic concern over the consequences of the ban on reelection is the argument that it severs the link between voters and their particular representative. Without the prospect of being able to hold onto their job for the next term (as well as the looming referendum on their performance it entails), politicians are unlikely to engage in activities that serve their electorate when reelection is simply not part of their career. The implication is that elections fail in their role as mechanisms of accountability and representation. In his book length examination of the (non-)role of elections in local government performance as a result of term limits, Matthew Cleary goes so far as to state, “the conclusion is inescapable: electoral competition does not make Mexican municipal governments more responsive to the interests of the citizens (2010, 188).”

As stated above, comparative scholars have recognized that reelection-based ac-

counts of representative behavior may not follow the career paths and behaviors of legislators in democracies outside the United States. While one conclusion from this may be that the ability of elections to motivate representation and accountability from elites is eliminated (as in the common portrayal of the Mexican case above), another interpretation is that a different model of career ambition and elite behavior is needed to explain a markedly different political context. Working from this second tack, scholars have increasingly looked to progressive ambition as an alternative motivation for legislators' behavior in office. From this perspective, rather than aspiring to hold onto their legislative seat for the foreseeable future of their career, legislators aspire to move on to another (often subnational) post once their current mandate is over.

This perspective of career ambition has been especially applicable to federal regimes with low rates of reelection. In Brazil, Samuels (2003) argues that federal legislators have low rates of reelection because their political careers are more focused on attaining positions at the local level, either through mayorships or governorships. Rather than long careers in the national legislature, Brazilian deputies' stints in office serve as opportunities to deliver pork to local interests and therefore build up their base of support at the local level. In Argentina, federal legislators who ultimately go on to run for municipal or provincial offices tailor their behavior while in the national legislature in anticipation for these future career moves. Compared to Argentine legislators who do not go on to run for local office, deputies with subnational ambitions draft more bills that target localities (Micozzi 2014a) and are more likely to engage in legislative cooperation (in the form of cosponsoring bills) with other aspiring subnational executives to signal the strength of their impending candidacy (Micozzi 2014b). Similarly in Mexico, Kerevel (2015) finds that legislators elected through single-member districts (SMDs) who intend to pursue local office in the future submit more budget amendments targeted to their constituency (as a form

of pork-barreling). Even in a country like Uruguay, where the party and electoral system are thought to diminish incentives for the development of personal reputations, legislators who go on to run for departmental executive office submit more bills targeting their districts (Chasquetti and Micozzi 2014).

While these studies have contributed significantly in developing our theoretical and empirical understanding of viable alternatives to the static ambition model, there remain significant limitations to current research on the topic. The work cited above has established a link between legislators' future career choices and their behavior in office. Yet, why do some legislators develop progressive career ambitions and therefore work to cultivate local electoral support in the first place? This paper makes a theoretical contribution in the study of progressive ambition by building on the link between career choices and legislative behavior to include the role of the local electoral context. Rather than taking a politician's desire for subnational office as the starting point, I examine the causal effect of local electoral opportunities in activating the link between career ambition and district-oriented legislative behavior. If the basic assumption of progressive ambition theory, that politicians focus their efforts in working to secure their next (often subnational) post, is correct, then these politicians should be particularly sensitive to the local electoral context. I argue that the local electoral opportunity structure influences the responsiveness of progressively ambitious politicians to the interests of their district. This argument leads to the following hypothesis about electoral incentives and responsiveness.

Hypothesis 1: The presence of local electoral opportunities motivates term-limited legislators to be responsive to the concerns of constituents.

There is also the question of the mechanism driving the behavior for this hypothesized relationship between electoral incentives and responsiveness. In the discussion above, the focus has been on the individual politician and her incentives to cultivate a personal reputation with the electorate through attention to local issues. The lit-

erature on representation has placed great attention on the ways in which politicians can benefit electorally by developing personal reputations distinct from those of their party (Fenno 1978, Cain et al. 1987, Carey and Shugart 1995). An alternative explanation for the relationship between elections and responsiveness is one based on the central role of parties. Rather than individual electoral motivations, the party and its membership, who wish to someday gain seats currently held by the party, deter shirking by officeholders. In this situation, incumbents act in the interest of their constituencies to improve the electoral prospects of the party-at-large (Alesina and Spear 1988). In his examination of term-limited Costa Rican legislators, Carey (1998) argues that behaviors such as bringing pork to the district are motivated by a desire to gain favor with the party leadership and future national executives. This, in turn, is expected to improve the electoral performance of the party in future elections.

A challenge for the research on progressive ambition (and for the study of political representation in general) is disentangling these different mechanisms that can both bring about legislative responsiveness. To distinguish between these theoretically distinct explanations, I examine the party discipline behavior of legislators. The central hypothesis of this paper is that local electoral opportunities motivate responsiveness from term-limited representatives. If this relationship is driven by loyal partisans working to improve the electoral prospects of their party, then one would expect that measures of a legislator's party discipline should also follow a similar pattern with respect to electoral opportunities. However, to the extent that party discipline is unrelated to or negatively associated with local electoral opportunities, then responsiveness is likely driven by incentives to build a personal reputation with constituents. Deputies who are working to cultivate their personal electoral base are unlikely to vote along the party line and in fact may be more inclined to defect if such a position is personally electorally advantageous (Carey 2009, Tavits 2009). This discussion suggests a hypothesis that can be tested with data from the Mexican case.

Hypothesis 2: [If deputies' responsiveness is motivated by efforts to aid their personal reputation rather than their party's electoral prospects], their likelihood of voting with the party line will be negatively associated with the presence of local electoral opportunities.

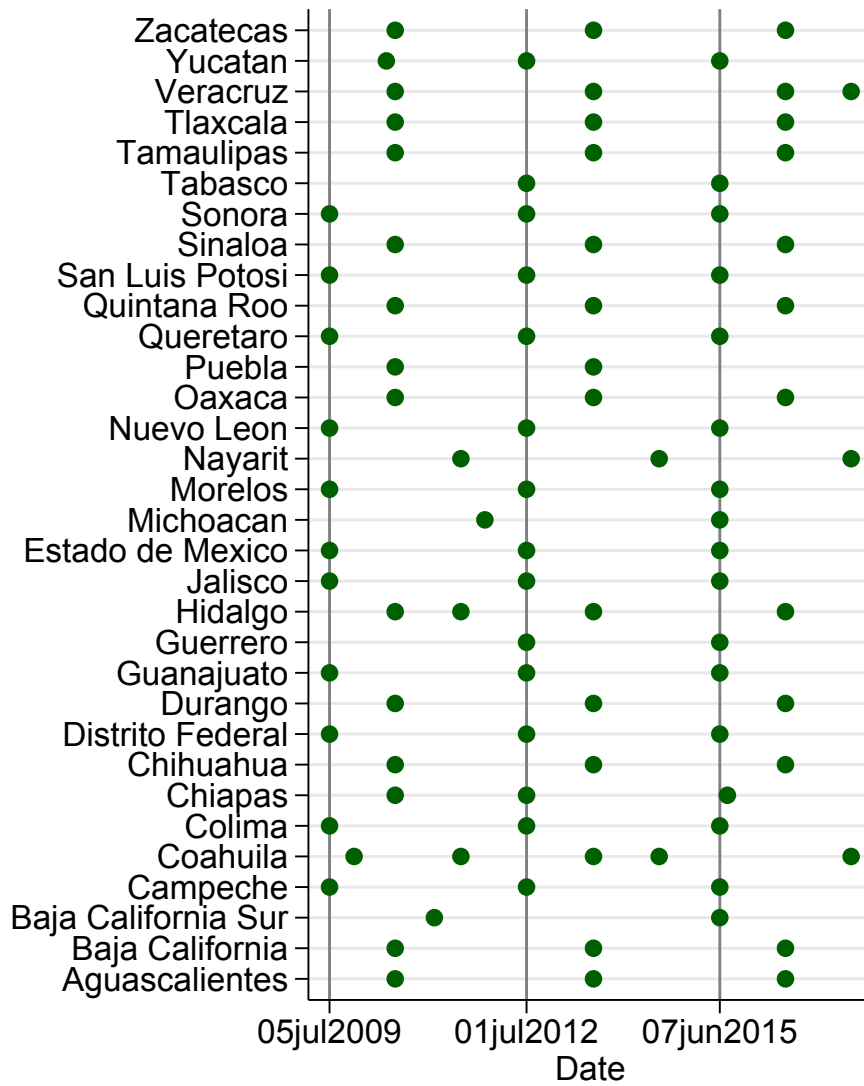
In addition to the theoretical contribution of this paper, there are also important empirical limitations to the current research on progressive ambition. Specifically, the way the independent variable of interest, career ambition, is commonly operationalized is problematic for causal identification. The standard practice is to code progressively ambitious representatives based on their next career moves. This generally means a legislator with progressive ambitions is one who ran for a subnational office during or immediately following their legislative mandate. This is a fairly intuitive coding scheme and it is also a practical choice. How is it possible to know what the personal ambitions of a legislator are unless they reveal those ambitions through their career moves? However, this scheme encounters two problems. First, from a measurement perspective, simply looking at candidacies surely does not reflect all legislators who maintained ambitions for subnational posts while in their legislative seat. Before candidacies, there are party primaries or nomination methods, and before that, ambitious legislators may ultimately forgo a subnational run altogether once other factors (such as anticipating a strong opponent) come into play. These legislators who ultimately are not candidates, however, may still behave in ways that try to shore up their local reputation in the anticipation for a potential campaign. A second problem is that in models of legislator behavior that try to examine the effect of progressive ambitions, the independent variable is based on an observed activity (running for local office) that happens after the behavior being explained.

2.3 Research Design

This paper addresses these limitations in two ways. First, I use data from the Mexican case, where an institutional feature (the ban on consecutive reelection) makes it possible to make plausible assumptions about Mexican politicians' immediate career ambitions. Unlike cases like Brazil, Argentina, and Uruguay mentioned above where reelection is possible, every Mexican federal legislator will be forced to look for another job as their term ends. In this case, progressive ambition is essentially exogenously applied to any politician interested in maintaining an electoral career. Therefore, I treat progressive ambition in this case as a common latent trait among all legislators. Secondly, and unlike other studies of progressive ambition in Mexico, I exploit the staggered nature of federal, state, and municipal electoral calendars as a source of exogenous variation in electoral opportunities. The presence of these electoral opportunities activates the latent progressive ambitions of term-limited legislators. To illustrate this point, Figure 2.1 shows that there is considerable variation across Mexico's political geography in the timing of elections. More importantly, one should note that all federal deputies and senators are elected at the same time. For example, the horizontal line at the 1st of July 2012 is the point when members of the 62nd Legislature were elected into office. Comparing each state delegation, it is apparent that federal legislators experience different electoral opportunity structures based on the point in time of their legislative term. For instance, deputies in Aguascalientes will have the opportunity to run for local offices after their first year in congress. At the same time, deputies in Jalisco will not have that opportunity until the end of their third year.

Previous research has shown that these subnational posts have become increasingly important in the careers of Mexican politicians (Béjar Algazi 2012). As elections have become more competitive since the period of PRI one-party dominance, Langston (2006) finds that the PRI has been forced to search for politicians popular

Figure 2.1: Timeline of Mexican Elections: 2009-2015



Note: Dots represent dates of local congressional and/or municipal elections held throughout the state.

with local voters when making senate candidate nominations. Looking at the career paths of federal deputies in the post-democratic-transition period, Langston and Aparicio (2008) find that many politicians begin their careers in municipal and state arenas, and then go on to return to these localities after their legislative term. Studying a broader range of Mexican political elites, Camp (2010, 32-39) finds that the share of prominent national politicians holding office who were mayors has steadily increased from 6% during the De la Madrid administration (1982-1988) to 21% under the Calderón administration (2006-2012). In the same time period, the share of national politicians who were state legislators rose from 12% to 35%. Camp goes on to underscore the growing importance of having been a mayor in the career paths of governors, which are among the nation's most prominent political positions. In the period between the De la Madrid and Calderón administrations, the share of governors who were mayors has risen from 31% to 71%.

The value of subnational elected office is also apparent to federal legislators serving in the Chamber of Deputies. Kerevel (2015) finds that the percentage of immediate positions sought or obtained by federal deputies after leaving office that were mayorships or local deputy seats increased from 19.3% to 41.6% from the 57th (1997-2000) to the 60th (2006-2009) legislatures, respectively. These posts are valuable enough to term-limited deputies that they are willing to campaign for local office after only a year into their federal term. For example, one can look at the case of Baja California, which Figure 2.1 shows had statewide elections in 2013. In that year, three sitting federal deputies from that state, Fernando Castro Trenti, Gilberto Hirata Chico, and Benjamín Castillo Valdez stood as candidates for governor, mayor, and local deputy, respectively. This does not take into account federal deputies from Baja California who may have sought local posts but failed to secure their party's nomination. This case, along with the empirical evidence cited above, demonstrates that Mexican federal deputies have good reason to be mindful of local electoral opportunities,

especially the timing of these opportunities in the context of their single term.

My empirical strategy of using the staggered federal and local electoral calendars draws from diverse studies that treat the timing of elections as an exogenous variable to explain political behavior. This is particularly notable in research on the political business cycle, which posits that government's spending patterns are conditioned by the electoral calendar (Alesina et al. 1997). In Mexico, Rosas and Langston (2011) leveraged the same features of the electoral calendar noted above to estimate the causal influence of governors on their co-partisan deputies in the national legislature. Similarly, Berliner and Erlich (2015) exploit variation in the timing of elections and the lengths of the proceeding lame duck periods in order to assess the relationship between electoral competition and Mexican states' adoption of access to information laws.

Building on the progressive ambition literature, I examine if and how the desire for subnational office influences the extent to which a legislator's activities are oriented toward serving her district. I expect that term-limited legislators who face the coming prospect of being able to run for local offices in their district are more likely to engage in activities that serve district interests than legislators who do not have the same upcoming opportunity. It is important to note that, unlike previous analyses of legislator behavior (including the Mexican case) that use the legislator's term as the unit of analysis, I exploit the meaningful variation across time that can accurately reflect the changing electoral opportunity structure.

2.3.1 Dependent Variables

In order to examine the effects of the local electoral opportunity structure on the responsiveness of federal deputies to district interests, it is necessary to define the measurement strategy for such a behavior. In other words, how can I measure responsiveness to the interests of the district in the context of the Mexican congress? In

the American politics literature, where scholars have placed greater focus on dyadic representation than in the field of comparative politics, the standard approach is to use the voting record of representatives and measure the extent to which this behavior reflects the ideological preferences of their district (Clinton 2006, Bartels 2008). However, the applicability of this approach to the Mexican context is limited by features of the political system. As stated earlier, the combination of a ban on consecutive reelection and party control of campaign resources and nomination procedures has resulted in party discipline that is comparatively high (Nacif 2002, Carey 2009) for the region. As a result, roll call voting and policy initiatives are areas of legislative behavior dictated primarily by the national party (Béjar Algazi 2006).

While voting is an important aspect of a legislator's ability to represent her district, it is not the only means by which she can serve the interests of the district and ultimately increase her own reputation in the district. Representation is a multidimensional concept (Pitkin 1967) and representatives' behaviors toward that end will also vary. Aside from the legislator's role as a voter on the chamber floor, scholars of representation have also paid substantial attention to activities such as constituency service, pork-barreling, and communication with the district. These behaviors offer an avenue for legislators to develop a base of support that is independent of their partisan affiliation, referred to as "the personal vote" (Cain et al. 1987).

One such activity available to legislators is the bill submission process (Schiller 1995). In Mexico, there are two types of bills federal deputies can submit: *iniciativas* (initiatives) and *proposiciones con punto de acuerdo* (propositions). As Kerevel (2010, 699) notes, "initiatives are formal bills and involve substantive legislation, such as Constitutional reform, proposing a new law, or reforming an existing law. Propositions are not actual legislation, but are pronouncements made by individual legislators on political, cultural, economic and social matters." The key difference is that while the development and content of initiatives is largely the purview of the

national parties (as noted above), propositions offer legislators the ability to engage in credit-claiming or position taking. As I will demonstrate below, these propositions are often used to request federal funding go to particular projects or that federal resources (often particular agencies) be directed toward solving some local concern. In his study of legislative behavior in Mexico's mixed-member electoral system, Kerevel (2010) treats the number of initiatives and propositions submitted by deputies as measures of activity directed towards national and parochial concerns respectively. He finds that deputies elected in single-member districts (SMD) submit more propositions whereas deputies elected in proportional representation (PR) districts submit more initiatives. This is in line with the expectation in the mixed-member system literature that SMD representatives will work to favor local interests while PR legislators will serve the parties that placed them on the ballot list. The use of bill submission activity in this and other studies as a measure of legislator's national or parochial orientation provides a firm foundation for developing a measure of responsiveness to district interests based on proposition submission.

With this motivation, I wrote a Python script to scrape the propositions submitted by federal deputies in the 62nd Legislature (2012-2015) available online in the *Gaceta Parlamentaria*, the congressional record. For each proposition, I am able to record the author (or co-authors) of the bill, the date on which it was submitted, and a brief description of the bill. From these descriptions, I then coded bills for whether they targeted local interests. This was done by going through each bill's description and coding whether a bill relates to the state or municipalities in the deputy's district. In the simple case, this means that a municipality or state is specifically referenced in the description. For example, a deputy can call on a federal agency to lower electricity rates for their state. It is important to note that the locality or geographic area referenced in the bill must be in the deputy's district or state. There are many cases of deputies submitting bills concerning issues in other areas of the country. For

example, following the mass disappearance of students from the Ayotzinapa teachers' college in the fall of 2014, numerous deputies from outside Guerrero submitted bills calling on federal and state authorities to investigate the matter. Unless the deputy is from Guerrero, such a bill is not coded as locally-targeted. In a more complicated case, the description refers to a program or initiative that would directly benefit the deputy's district. Examples of this second case include propositions to protect local crops or industries from foreign competition, developing government programs to benefit local industries, and establishing special committees that deal with industries important to the state or district. Yet, simply because a bill targets a specific industry does not mean it is considered locally-targeted. In many cases, legislators will submit bills that concern industries that are difficult to clearly associate with their district, or often any area. For example, a bill may request a federal agency develop programs to regulate used car sales. While it is possible that such a bill may reference an idiosyncratic local issue, without a clear association to a geographic area, I code such bills as not locally-targeted.

In order to demonstrate the validity of using locally-targeted propositions as a measure of responsiveness to the district's interests, I provide some examples of propositions that were coded as locally-targeted. The following are descriptions of a few of the local propositions included in the analyses that follow:

- María Teresa Jiménez Esquivel (PAN) of Aguascalientes' 2nd district presented a "proposition which requests the Attorney General of the Republic to use its power of jurisdiction to investigate the alleged criminal acts in the disappearance in similar fashion of women in Aguascalientes."
- Salvador Ortiz García (PRI) of Michoacán's 12th district presented a "proposition which exhorts the Secretariat of Public Education to revise and update the annual stipends granted to students at the Universidad Michoacana de San Nicolás de Hidalgo."

- Javier Filiberto Guevara González (PRI) of Puebla’s 14th district presented a “proposition which exhorts INEGI to revise and in some cases modify the indices of social development referred to in articles 34 and 35 of the Law of Fiscal Coordination since their application has resulted in disadvantaging several municipalities of Puebla.”
- Heriberto Manuel Galindo Quiñones (PRI), a PR representative from Sinaloa (a major producer and exporter of tomatoes), presented a “proposition pertaining to the termination of the Agreement on Mexican Tomato Imports to the United States; and the creation of a special committee to assist, support, and defend the local producers of the fruit, particularly those focused on exporting.”

Using this coding scheme, out of 2,959 instances in which a deputy authored (or coauthored) a proposition, 645 of those instances were locally-targeted propositions.² With these entries I can generate counts of the number of locally-targeted propositions a deputy submits at different points in time of their term. In the analyses below, I use the legislator-legislative year as the unit of analysis. Therefore, the dependent variable is the count of locally-targeted propositions a deputy presents in a given legislative year.³

In order to test the auxiliary hypothesis concerning legislators’ party discipline, I gathered roll call data for all recorded votes taken in Mexico’s lower house in the 2012-2015 legislative term from the *Gaceta Parlamentaria*.⁴ Following previous analyses of party discipline in the Mexican context, I measure discipline using a party unity score for an individual legislator (Díaz Rebolledo 2005, Weldon 2008, Kerevel 2010). It is the number of times the legislator voted the same position as the majority of

²Deputies can also cosponsor propositions. For these analyses however, I only focus on whether a deputy is listed as being one of the bills presenters.

³In the Chamber of Deputies, there are three legislative years with two ordinary periods each (Fall 2012-Spring 2013, Fall 2013-Spring 2014, Fall 2014-Spring 2015). With the deputy- legislative year as the unit of analysis, the count of locally targeted bills in the data ranges from 0 to 11, with a median value of 0 and a mean of .41.

⁴<http://gaceta.diputados.gob.mx/>

her party, divided by the total number of actual votes taken.⁵ Simply stated, it measures how frequently the deputy votes along the party line. Again, since the level of analysis is the deputy-year, the party unity score is calculated for votes taken in a given legislative year.

2.3.2 Independent Variables

The primary independent variable of interest is whether a deputy faces the prospect of local elections in her state at the end of the legislative year. I use this simple indicator variable as the independent variable for several reasons. First, since statewide elections in this period are held during the summer, the legislative year preceding that summer provides a natural length of time that also corresponds with the manner in which the legislative schedule is organized (with two periods, fall and spring, for each year). Second, it provides a simple comparison between deputies from states where there are statewide elections in the summer and those where there are no upcoming elections, for a given legislative year. Finally, I do not utilize a more continuous measure such as months or weeks from a local election because this would not be in line with the reality of Mexican politics, where deputies who wish to campaign for another post (or contest a primary for a candidacy) must request a leave of absence from the chamber and therefore would not be able to submit locally-targeted propositions during points of the spring legislative period.

In a context where legislators are limited to one term and subnational posts are valuable components of political careers, I expect that the opportunity of a coming local election will motivate progressively ambitious deputies to engage in behaviors that can increase their appeal to voters back in the district. One means by which they can accomplish this is through submission of propositions that signal the deputy's

⁵Absences were excluded from the calculation. Abstentions were considered as voting against the party's position, except in cases where a party's position was abstention. I also exclude any roll call votes in which there were no dissenting votes from the calculation of party unity scores since many votes are noncontroversial and their inclusion artificially inflates the extent of party unity.

responsiveness to local concerns and interests. Therefore, I expect a coming election to increase the number of locally-targeted propositions.

I also include other variables to control for factors that have been found to influence legislative behavior in Mexico. The first is the deputy's mode of election (either through SMD or PR), since this has been found to influence the type of bills deputies submit. SMD deputies are more likely to submit propositions and PR deputies are more likely to submit initiatives (Kerevel 2010). Another important variable is the influence of a co-partisan governor in the deputy's state. Specifically, I code whether a deputy has a co-partisan governor whose term outlasts that of the deputy. Previous work has shown that this type of governor can influence the voting patterns of the state's delegation of deputies, because such a governor can provide deputies with resources for campaigns or provide positions in the state bureaucracy after their term (Langston 2010, Rosas and Langston 2011). I expect that, to the extent that deputies are using locally-targeted bills as a means of building their electoral support in the district, co-partisan governors should have a negative effect on the number of propositions they submit. The reason for this is that a co-partisan governor who will be around after the deputy's term ends provides the legislator with opportunities to advance their political career outside of appealing to district interest and cultivating local electoral support. Specifically, governors can offer career paths in the state bureaucracy and state party where the governor is the de facto leader. With these possible non-electoral career paths, deputies may place less focus on building personal electoral support through their bill submission.

I also control for partisanship by including a set of party indicator variables (for the PAN, PRD, and PVEM) as well as a minor party indicator (which includes PT, PANAL, and Movimiento Ciudadano). The PRI are the reference category since they are the party in government during the 62nd legislature. I also include an indicator of whether a deputy switched parties during their term and whether the deputy is an

alternate.⁶ Finally, the models include an indicator for the deputy's gender, with a value of zero for male and one for female. Previous research has found that women are more active than men in legislatures (Anzia and Berry 2011, Kerevel and Atkeson 2013). Moreover, in the Mexican Chamber of Deputies, women are found to submit more initiatives (Bárcena Juárez 2017). Therefore, I expect that women submit more locally-targeted propositions on average.

2.4 Explaining Locally-Targeted Bill Submission

Since I am interested in the effect of a coming election at the end of the legislative year, the unit of analysis is the deputy-legislative year. I pool the three years in the data together into a single model. Specifically, I first fit a negative binomial regression since the dependent variable is a count with overdispersion.⁷ In order to account for intragroup correlation of observations at the deputy level, standard errors are clustered by deputy.⁸ Since there are multiple years pooled in the model, I also include legislative year indicator variables with the first year as the reference category. This is to account for year specific factors that may affect all legislators.

Table 2.1 shows the results of the mixed effects negative binomial model in column (1).⁹ The effect of a coming local election is in the expected direction (positive) and statistically significant at the .05 level. Among the other variables, PAN, PRD, and minor party affiliation are also significant positive predictors of the number of

⁶Each deputy is elected along with an alternate who steps in if the deputy temporarily or permanently steps out of office. Since office holders must temporarily step down while they campaign for another office, there are many alternates who come in during the spring legislative period and serve briefly. I include only deputies who served in more than one ordinary period.

⁷The conditional variance is over 2.5 times greater than the mean, violating the necessary assumption in order to fit a poisson model. The model presented in Table 2.1 was estimated using the nbreg command in STATA 14.2.

⁸As an alternative to fitting a model with clustered standard errors, I also ran a mixed effects negative binomial model with deputies as the second level grouping. The results of this model, available upon request, are substantively identical to the model reported in Table 2.1.

⁹Table 2.3 in the appendix shows the results of negative binomial regressions for each legislative year individually.

Table 2.1: Count Models Predicting the Number of Locally-Targeted Propositions

	(1) Neg. Binomial	(2) Poisson FE
Coming Local Election=1	0.757* (0.135)	0.658* (0.131)
Mode of Election (PR=1)	-0.0184 (0.156)	
Co-Partisan Governor	-0.329* (0.151)	
PAN	0.627* (0.197)	
PRD	0.374+ (0.204)	
PVEM	-0.278 (0.356)	
Other Minor Party	0.766* (0.292)	
Party Switcher	0.477+ (0.279)	
Alternate	-0.293 (0.373)	
Gender (Female=1)	0.0500 (0.152)	
Leg. Year 2013-14	0.210 (0.140)	0.229+ (0.133)
Leg. Year 2014-15	-0.299* (0.122)	-0.146 (0.135)
Constant	-1.417* (0.181)	
Inalpha	0.879* (0.118)	
Observations	1522	712

Robust standard errors in parentheses clustered by deputy.

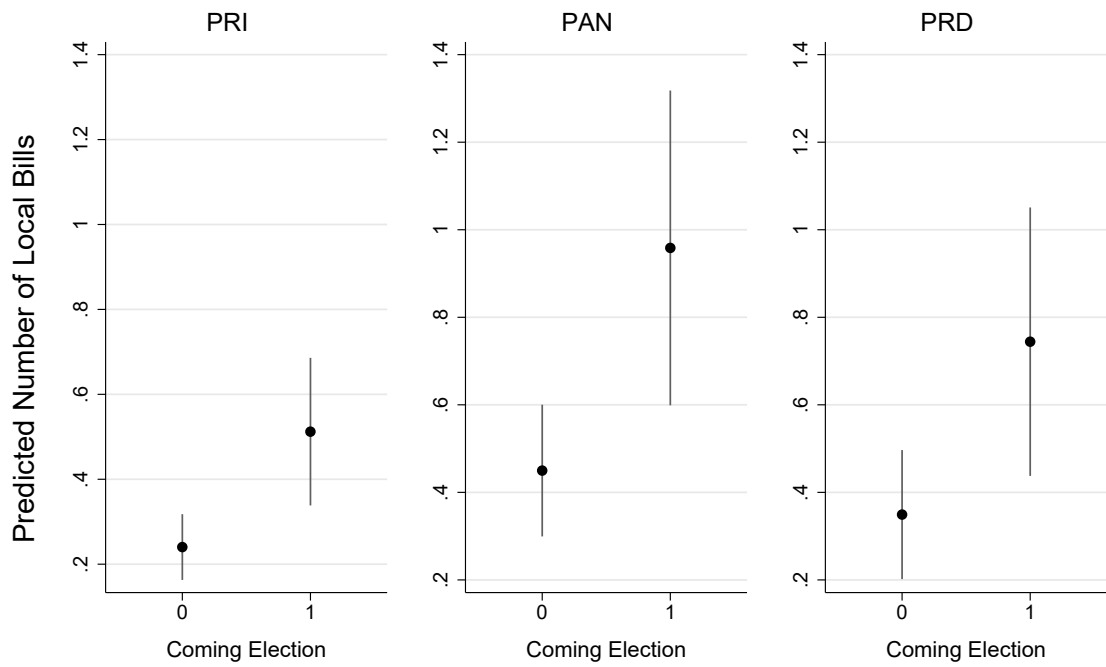
+ $p < 0.10$, * $p < 0.05$

locally-targeted propositions a deputy presents. The interpretation of these effects of partisanship are intuitive to the extent that opposition partisans are more willing to put pressure on executive agencies under a PRI government to address a local matter and they must also resort to such propositions because they have less access to those agency resources given their role as opposition parties. The effect of a co-partisan governor is also negative and statistically significant, providing some support for the expectation that deputies with co-partisan governors have access to resources that can further their political careers that are independent of their local electoral support. Among the null results, the finding for electoral mandate (SMD vs PR) stands out. This suggests that the local electoral opportunity structure rather than the mode of election is what motivates deputies' responsiveness to the district. Finally, there is also no substantive difference between men and women in the average number of locally-targeted bills they submit.¹⁰

In order to interpret the substantive significance of local electoral opportunities, Figure 2.2 plots predicted counts of locally-targeted propositions for deputies facing different electoral prospects for each of the three major parties in the legislature. All other variables are held at their median, meaning these predictions reflect deputies who were elected via single member districts, do not have a co-partisan governor whose term outlasts the deputy's, are not party switchers or alternates, and are male. Substantively, an approaching local election at the end of the legislative year will lead to a .27 increase in the predicted count for PRI deputies, a .51 increase in the predicted count for PAN deputies, and a .4 increase for PRD deputies. These effects are substantively significant in light of the distribution of the number of locally-targeted propositions across the deputy-year observations in the data, with 76.5%

¹⁰Previous research had found that women submit more (programmatically-oriented) initiatives (Bárcena Juárez 2017) as well as maintain broad portfolios in their policy-making agendas (Schwindt-Bayer 2010). Combined with the null result here regarding a more particularistic behavior, this suggests that female legislators in Mexico engage in programmatic position-taking without being less responsive to local issues.

Figure 2.2: Predicted Number of Locally-Targeted Propositions for Deputies of Major Parties



All other variables at their median values.

having values of zero and 14.7% submitting one for the year.¹¹

As a check of the robustness of the results of the model in column (1), I also include in Table 2.1 the results of a poisson regression with deputy fixed effects. I opt for this model since the negative binomial with fixed effects produces inconsistent estimates caused by the incidental parameters problem (Cameron and Trivedi 1998, 280-282). The deputy fixed effects control for any time-invariant factors that may influence a deputy's propensity to submit locally-targeted bills. For this reason, the control variables in column (1) drop out. They are factors that only vary between deputies and not within a deputy in the panel data. The results in column (2) demonstrate that the positive relationship between a coming local election and local bill submission is robust to a fixed effects specification.

2.4.1 Local Electoral Opportunities and Party Discipline

To further unpack the effect of career ambitions and electoral opportunities on legislative responsiveness, I also examine their possible influence on legislators' party discipline. So far, I have argued that legislators are more responsive to district interests in the lead up to local elections in an effort to build local electoral support. This explanation is rooted in the notion that deputies are working to cultivate a personal reputation that is independent of their party. An alternative explanation of the mechanism connecting electoral opportunities and responsiveness is one in which loyal partisans engage in behaviors responsive to the district to advance the electoral prospects of the party. To adjudicate between these different explanations, Table 2.2 summarizes the results of OLS models of a legislator's party unity score (i.e. how often they vote with their party).

The results in column (1) are broadly consistent with conventional theoretical expectations regarding party unity. PR representatives are more likely to vote the party

¹¹The mean of locally-targeted propositions submitted in a legislative year was .41.

Table 2.2: Models of Party Unity Voting

	(1)	(2)
	OLS	OLS FE
Coming Local Election=1	-0.356 ⁺ (0.210)	-0.408 ⁺ (0.213)
Mode of Election (PR=1)	1.273* (0.426)	
Co-Partisan Governor	-0.0395 (0.389)	
PAN	-5.640* (0.239)	
PRD	-15.18* (0.776)	
PVEM	0.867 ⁺ (0.465)	
Other Minor Party	-11.14* (1.350)	
Alternate	0.451 (0.906)	
Party Switcher	-4.764* (1.525)	
Gender (Female=1)	-0.394 (0.412)	
Leg. Year 2013-14	-1.474* (0.210)	-1.517* (0.208)
Leg. Year 2014-15	-0.0722 (0.220)	-0.102 (0.222)
Constant	98.09* (0.314)	92.98* (0.145)
R-squared	0.592	0.0466
Number of Deputies	522	522
Observations	1517	1517

Robust standard errors in parentheses.

⁺ $p < 0.10$, * $p < 0.05$

line. Opposition Deputies (PAN and PRD) are less likely to vote with their parties than deputies from the party in government. Deputies who switch parties during their term are also less likely to vote with their parties. As for the relationship of interest, a coming local election is associated with a decrease in a deputy's propensity to vote the party line, although this coefficient estimate is only marginally statistically significant. While the substantive size of the effect may seem small in comparison to the dependent variable's range of values (42 to 100 in the data), a more appropriate comparison would be the magnitude of other substantively important variables in the model. For example, the effect of a coming local election is roughly a third of the magnitude of the effect of a deputy being elected from the PR tier. The distinction between PR and SMD has received substantial attention in the literature on party unity (Haspel et al. 1998, Thames 2001, Thames 2005, Ferrara 2004, Olivella and Tavits 2014) and is therefore a useful benchmark for the substantive importance of the effect size. Column (2) reports the results of a model including deputy fixed effects. The conclusions of the simple OLS model are robust to controlling for time-invariant factors across deputies.

Taken together, the results summarized in this section provide support for Hypothesis 1. The presence of local electoral opportunities motivates term-limited legislators to be responsive to the concerns of constituents. This is supported by the robust positive relationship between a legislator having a local election in their state at the end of the legislative year and the number of locally-targeted bills they submit in that legislative year. These bills, focused on issues of importance to constituents, are aimed at building local electoral support for the deputy. Furthermore, the analysis of legislator's roll call voting supports Hypothesis 2, which sheds light on the mechanism driving responsiveness. Rather than locally-targeted bill submission being carried out by loyal partisans hoping to improve their party's standing with voters in the district, a coming local election is associated with greater defection from the party line.

This evidence is consistent with the notion that deputies are seeking to build their personal reputation rather than support the party brand. Moreover, the combined empirical findings are consistent with comparative research linking strong local ties and individual support bases with maverick voting behavior in the legislature (Tavits 2009).

2.5 Conclusion

This paper has demonstrated that local electoral opportunities play an important role in activating the progressive ambitions of deputies in a way that makes them more responsive to their district's interests. In cases where Mexican deputies face the prospect of a statewide election at the end of the legislative year, they submit more locally-targeted propositions than deputies from states without local elections at the end of the legislative year. This demonstrates that the presence of local electoral opportunities activates the progressive ambition inherent in term-limited representatives. Moreover, local electoral opportunities are also associated with greater defection from the party line in deputies' roll call votes, suggesting the mechanism is one of personal vote cultivation rather than party discipline. This paper also provides a stepping stone for further research on the ways in which local electoral contexts can influence the degree of responsiveness of federal representatives to local matters. Mexico's recent constitutional reform allowing for reelection raises many questions. One possible implication is that the legislative behavior characterized in this paper may be unlinked from the local electoral cycle as deputies as well as senators will be able to seek out the opportunity to stay in the current posts. Adding to legislators' considerations about pursuing static or progressive career moves is the likelihood that they may now have to face an incumbent (either in the general election or the primary), compared to the previous state of affairs where every race was for an open seat. These new dynamics provide ample research opportunities.

This paper has shown that contrary to the conventional wisdom that the ban on reelection severs the link between representative and constituency, there is some connection provided through the progressive ambition of legislators. Local electoral opportunities, which arise at different times for different deputies, motivate legislators to represent local interests in the prospects of future electoral rewards. Also contrary to previous research, parties are not the sole drivers of legislators' political behavior. By examining the case of Mexico, with its ban on immediate reelection, this paper provides insight into the causal effects of local electoral contexts on the district-oriented behaviors of legislators across many of the world's democracies where rates of reelection are low and subnational offices are valuable.

2.6 Appendix

Table 2.3: Models of the Number of Locally-Targeted Propositions for Each Legislative Year

	(1)	(2)	(3)
	2012-13	2013-14	2014-15
Coming Local Election=1	0.971* (0.173)	1.045+ (0.563)	0.334 (0.238)
Mode of Election (PR=1)	-0.0517 (0.188)	-0.209 (0.260)	0.218 (0.251)
Co-Partisan Governor	-0.448* (0.193)	-0.479+ (0.265)	-0.0102 (0.260)
PAN	0.225 (0.225)	0.625* (0.309)	1.272* (0.318)
PRD	0.223 (0.240)	-0.0337 (0.326)	1.232* (0.312)
PVEM	-0.758+ (0.455)	-0.501 (0.542)	0.797+ (0.482)
Other Minor Party	-0.0861 (0.363)	0.606 (0.432)	1.852* (0.440)
Party Switcher	0.522 (0.407)	0.440 (0.486)	0.417 (0.467)
Alternate	-0.998 (0.670)	0.533 (0.570)	-1.799 (1.104)
Gender (Female=1)	-0.0695 (0.181)	0.0482 (0.241)	0.176 (0.233)
Constant	-1.175* (0.207)	-1.020* (0.256)	-2.299* (0.329)
Inalpha	0.0372 (0.258)	1.192* (0.189)	0.979* (0.196)
Observations	511	505	506
Pseudo R^2	0.049	0.025	0.064

Standard errors in parentheses.

+ $p < 0.10$, * $p < 0.05$

Table 2.4: Descriptive Statistics

	mean	sd	min	max	count
Number of Locally-Targeted Bills	0.41	1.00	0	11	1522
Party Unity Voting	92.30	8.14	42	100	1517
Coming Local Election	0.34	0.47	0	1	1522
Co-Partisan Governor	0.39	0.49	0	1	1522
PAN	0.23	0.42	0	1	1522
PRD	0.20	0.40	0	1	1522
PVEM	0.07	0.25	0	1	1522
Other Minor Party	0.09	0.28	0	1	1522
Alternate	0.04	0.19	0	1	1522
Party Switcher	0.05	0.23	0	1	1522
Gender (Female=1)	0.37	0.48	0	1	1522
Leg. Year 2013-14	0.33	0.47	0	1	1522
Leg. Year 2014-15	0.33	0.47	0	1	1522

Chapter 3

Legislative Voting and Electoral Accountability: The Case of Mexico's VAT Reform

3.1 Introduction

A critical component of theories of electoral accountability is that voters will sanction their representatives when they fail to act in constituents' interest. This is theorized to take different forms: collective (or partisan) accountability which entails voters punishing/rewarding parties based on their overall policy brands and individual accountability which entails voters responding to the position taking of individual legislators (Carey 2009). While both forms of accountability are normatively important and significant across most electoral systems, the empirical work connecting roll call votes (the most salient form of position taking in legislatures) to electoral accountability has focused mostly on individual accountability (Canes-Wrone et al. 2002, Nyhan et al. 2012, Rogers 2017) and has eschewed an integrated analysis of the two mechanisms of accountability. In this paper, I investigate the dynamics of electoral accountability with attention to both forms. Do voters punish or reward parties for the roll call votes of their deputies? In addressing this question, I test for both mechanisms of accountability and provide insight into the conditions that strengthen or attenuate these forms of accountability.

I examine the connection between legislative voting and electoral accountability using the case of Mexico's recent fiscal reform which resulted in changes to the nation's value-added tax (VAT) rate. The uneven effects of this reform, which resulted in a VAT hike for certain regions, provide useful leverage in identifying areas adversely affected by a roll call vote in the congress. Utilizing a difference-in-difference research design, I provide causal estimates of the effects of the VAT reform on the vote shares of parties overall (collective accountability) as well as by individual deputies'

districts. The results show that both forms of accountability are present in this case. Moreover, the intensity of any electoral sanction/reward effect is contingent on party brands and their proximity to the reform as well as the individual positions taken by deputies. In the first section, I discuss models of accountability and the factors that condition them and apply these insights to explain accountability behavior with respect to Mexico's VAT reform. I then describe the data and empirical strategy used to estimate the effect of reform votes as well as discuss alternative estimation strategies. After discussing the results of the different models of accountability, I provide multiple robustness checks for the relationship between VAT hike incidence and electoral accountability. Finally, I discuss the implications of these findings for the comparative study of accountability.

3.2 Theories of Electoral Accountability

The threat of electoral sanction is the linchpin in theoretical accounts of how elected officials are deterred from deviating from the preferred positions of their constituents (Ferejohn 1986). For legislators, these positions most clearly present themselves in terms of roll call votes. There is evidence that legislators are punished at the ballot box for unpopular votes (Clark 1996, Nyhan et al. 2012) and positions out of sync with their constituents (Canes-Wrone et al. 2012), although this electoral sanctioning is found to be contingent on the characteristics of the vote and the institutional context (Bovitz, and Carson 2006, Guisinger 2009, Vivyan and Wagner 2012, Rogers 2017). While these studies focus on the electoral costs in terms of individual accountability (i.e., the roll call's effect on an individual legislator's reelection), electoral sanction also operates in terms of collective accountability. This refers to voters holding a party accountable for the policies its members collectively undertake and advocate. Since these collective actions are the aggregation of individual legislators' positions, it is important to ask how a roll call vote by a legislator affects the electoral

fortunes of their party.

The distinction between collective (or partisan) accountability and individual accountability is particularly important in the comparative politics literature where there is ample variation across countries in terms of which form is theorized to predominate (Shugart and Carey 1995, Carey 2009). Generally, a candidate's (re)election likelihood is a function of both their personal and their party's reputation (Cox and McCubbins 1993). Both of these components are influenced by legislators' actions in office, namely their votes on legislation. However, the empirical literature on roll call votes and electoral accountability cited above has focused on operationalizing accountability in terms of the costs (or gains) for incumbents based on their individual votes, rather than the effect of those roll call votes on their party's brand (e.g., collective accountability). These previous studies are limited by the use of the incumbent and their electoral fortunes as the unit of analysis, which forces the focus on individual accountability. Moreover, for most policies it is difficult to characterize the incidence of a roll call's effects such that we can separate those bearing costs and those benefiting, and thus connect those identified groups to support or sanction of parties and legislators.

To what extent is electoral sanction/reward motivated by party brand and how much is motivated by the individual actions of representatives? Despite the empirical limitations of previous work, it is of theoretical importance to understand how the two forms of accountability operate simultaneously. Normatively, both are seen as useful mechanisms of popular control of government, but the empirical literature is silent on how they work in tandem. I argue that the importance of either factor (party brand or individual legislators' position-taking) is dependent on the electoral context. An important conditioning factor is what happens after the policy change triggered by the roll call, specifically the campaign strategies pursued by parties and politicians. Parties can work to develop ownership over an issue in a way that is

electorally advantageous (Petrocik 1996). Previous research has shown that the content of campaign appeals can influence the extent to which voters engage in economic voting (Vavreck 2009, Hart 2013). These findings for retrospective voting can also be applied to instances where voters mobilize around issues impacted by specific roll calls. Therefore, in instances where the party has developed clear ownership over an issue, it is possible that we should see a more predominant role for electoral accountability based on party brands. Conversely, where parties stake unclear associations or attenuate the party's association with a policy, then the individual positions of legislators should be more consequential for electoral accountability.

In this paper I use the case of legislative voting in Mexico. This is a particularly important case for parsing out the different forms of accountability: collective and individual. This distinction is of particular relevance for the Mexican case. In the period of study, Mexico had the unique institution of a constitutional ban on consecutive reelection.¹ This means that at the end of the legislative term, no individual incumbents will be on the ballot. However, their party or coalition will be. In such an institutional context, the conventional perspective on electoral accountability is one where term-limited elected officials are kept in line by their parties to facilitate the election of future generations of party members in the district (Alesina and Spear 1988). Since voters will have the ability to sanction the former official's party at the next election, parties have an incentive to induce their members to satisfy constituent demands. This raises the question of whether an individual legislator's roll call is electorally consequential. Do voters respond to the individual votes of their deputies in congress when deciding whether to vote for their party in the next election? In other words, does individual accountability play a role in elections or are electoral sanction and reward largely based on partisan reputations? Moreover, can parties influence this electoral sanctioning and reward behavior in how they address

¹The constitution was reformed in 2014 to allow for a limited number of consecutive terms. Federal legislators elected in the 2018 election were the first to be eligible for reelection.

the policies produced by individual roll calls (i.e. the party brands around policies)? To answer these questions, I exploit a 2013 tax reform that affected an identifiable geographic area of the country to evaluate the extent of electoral sanctioning.

3.3 The Politics of Mexico's Fiscal Reform

The reform of the nation's VAT serves as an important case for studying electoral accountability for both normative and empirical reasons. On a normative level, questions of taxation and who bears the costs of government services are central to politics and important cases for studying legislative accountability. This is evident in the political debates surrounding attempts to reform the VAT rate(s), which have cut across regional and ideological cleavages. Since its introduction in 1980, Mexico's VAT has included a different (reduced) rate for the border areas in the north and south of the country. The original purposes of a differential rate were to provide relief from increased distribution costs for peripheral areas resulting from the distance to central supply centers as well as to narrow the gap in price competition between goods in the Mexican side and those of neighboring foreign cities (Fuentes Flores et al. 2016, 63). This component of the VAT system in Mexico has added a regional dimension to debates about reforming or adjusting tax rates.

Along with the geographic component created from using different rates, discourse over VAT policy has also fallen along ideological cleavages. On one side, conservative elements such as the previous PAN administrations have tried to reform the VAT as part of a larger project to decrease the government's reliance on petroleum as a source of revenue.² In practice, this has included attempts to remove exemptions in the VAT for food and medicine. Naturally, these attempts have been opposed by lawmakers on the left, as the cost of any expansion of the VAT would fall heavily on lower income groups given the regressive nature of the consumption tax. The

²Decreasing the government's reliance on oil revenue also relates directly to larger conservative goals of privatizing the state-owned oil sector.

combined regional and ideological cleavages have made sweeping reforms to the VAT difficult. For example, the Calderón administration had to settle for a modest one percent increase (for both the border zone and rest of the country) in 2010 (Gutiérrez 2013).

This serves as the backdrop of the legislative vote on fiscal reform that I use to test for electoral accountability. In the fall of 2013, the Mexican Chamber of Deputies passed a reform of the tax system that was part of the broader structural reform packages of the PRI government of Enrique Peña Nieto. A salient part of this reform was a change in the nation's VAT rate. Following the rationale of the previous PAN administrations, the broader fiscal reforms were intended to reduce the government's reliance on oil revenues in exchange for greater reliance on taxation. With respect to the VAT, the reform would increase the rate in the border zone and bring it in line with the rest of the country. Besides the need to increase revenues, the administration justified the rate increase in the border areas on the basis that a) these areas have a higher average income than the rest of the country and therefore a reduced VAT at an aggregate level imposes a regressive effect, b) the border areas had sufficiently developed infrastructure to make distance from central supply centers no longer an issue, c) producers and businesses rather than consumers were the main beneficiaries of the lower rate considering that prices in the border region were higher than the rest of the country, and d) the differential rate creates distortions in economic activity as people seek to avoid the higher rate in the rest of the country (Gobierno de la República 2013).³ The opposition to the reform consisted of both conservative and leftist elements in the congress. On the right, there were concerns about the inflationary and overall economic effects for the border areas, especially for the PAN which draws a lot of electoral support from the northern border. On the left, there was opposition to the larger project of decreasing the state's reliance on oil revenue (coupled with

³Though, it should be noted that these arguments gloss over the significant economic disparities between the northern and southern border areas, which were treated the same for the purposes of the reform.

reforms aimed at privatizing the energy sector) and expanding a regressive tax on consumption. For the most part, voting on the VAT reform bill followed party lines with the governing coalition of the PRI, PVEM, and PANAL supporting the reform, the PAN, PT, and MC voting against, and the only substantial intraparty division being in the PRD where members split 57 to 35, for and against.⁴

Aside from the substantive importance of the policy domain, Mexico's VAT reform serves as a useful case for testing models of electoral accountability. Previous research has shown that a heightened salience of a roll call vote is a necessary ingredient for electoral accountability (Bovitz, and Carson 2006, Rogers 2017). The VAT reform was a highly salient event especially for the directly affected areas. Following the vote, social media campaigns were started calling for the Baja California peninsula (where the entire region was covered by the preferred rate) to separate from the rest of nation.⁵ The reform has since become a perennial campaign issue. In the 2015 federal elections, a television ad for the PAN included the following appeal: "If I told you there existed candidates for deputy that...would fight to lower the taxes at the border like they were before the PRI voted to raise them...we're talking about the candidates for deputy of the PAN. Vote for the PAN deputies in Sonora." Even today, years after the implementation of the reform in 2014, candidates for governor in the border states continue to campaign on pressuring for returning to reduced rates.⁶ These anecdotal accounts demonstrate that the VAT reform garnered substantial media coverage and attention, building up the salience of the roll call.

The reform also had significant economic effects that, in turn, influenced public opinion in the matter. Supporters for reform cited relatively short inflationary periods resulting from previous hikes in the VAT (Aportela Rodríguez and Werner Wainfeld

⁴Aside from the PRD, there were only five legislators who voted against the majority of their party: four from the PRI and one from the PVEM. The overall breakdown of the vote was 291 in favor, 178 against, and one abstention.

⁵<https://www.sdpnoticias.com/columnas/2014/04/25/baja-california-y-el-berrinche-por-el-16-de-iva>.

⁶<https://elorbe.com/portada/2018/02/06/es-injusto-que-la-frontera-sur-pague-iva-era-propone-que-la-zee-inicie-operaciones-este-ano.html>.

2002), which facilitated expansions in government revenue (Tijerina-Guajardo and Pagán 2000). However, a study of the economic effects of the VAT increase in the border areas shows that there was a prolonged surge in inflation throughout 2014, as well as indirect effects on costs of living including food prices. Moreover, there were indications that consumers were traveling over the border more frequently to purchase goods in neighboring foreign cities (Fuentes Flores et al. 2016). These economic effects also translated into broader public opinion. In a nationally representative survey fielded in July and August of 2014, of six different reforms passed by the Peña Nieto administration up to that point, the fiscal reform had the largest share (53%) of respondents reporting that the reform would hurt them and their families as well as the smallest share (21%) reporting that the reform would benefit them and their families (Parametría 2014).

Important features of Mexico's VAT system also facilitate empirically testing for electoral accountability of legislators' roll call votes. Since the aim of this analysis is to examine whether voters punish legislators or their parties for roll call votes that are against voters' preferences, it is necessary to understand what outcome voters in a given district or area preferred. In the studies of electoral accountability cited above, such measures are frequently estimated from large scale surveys of voters' attitudes toward specific pieces of legislation. I am unaware of any surveys that asked about specific provisions of the VAT reform, much less surveys with the necessary coverage to generate estimates of district opinion. Instead, I exploit the uneven consequences of the reform across the nation's areas. As noted above, a peculiar feature of Mexico's VAT is that, since its introduction in 1980, it also included a zone in the northern and southern borders with a reduced rate. This zone encompasses any area within 20 kilometers of the border with the United States and Guatemala, as well as the entirety of the states of Baja California, Baja California Sur, Quintana Roo, and

partial areas of the state of Sonora.⁷ The 2013 reform raised the reduced rate in the border areas from 11% to the 16% rate paid throughout the rest of the country. This variation in the consequences of the reform (an approximately 45% increase in the VAT rate for those in the border zone and the same rate as before for those in the rest of the nation) allows me to identify constituencies that would engage in electoral sanctioning from an unpopular vote in congress.⁸

Returning to the theories of electoral accountability addressed earlier, a simple retrospective model of voter behavior would predict that negative economic shocks for constituents should result in negative effects in the electoral fortunes of incumbent parties.

H1a General Retrospection: voters in the border zone should punish incumbent parties for the reform as they bear the cost of the VAT hike.

However, the positions taken by individual representatives should be consequential as well. Rather than a uniform sanctioning effect, the electoral impact of the VAT increase should be contingent on the district deputy's position in supporting the fiscal reform or not.

H1b Targeted Retrospection: voters in the border zone should punish incumbent parties for the VAT hike, but this effect should be concentrated among deputies and parties that voted for the reform.

Beyond the simple retrospective voting effects of the reform, this study is interested in the distinction between collective and individual accountability. Relating to the first, I examine the effects on party vote shares as a result of the tax hike's incidence. By examining each party separately, I can assess the qualitative differences between the party brands and their effects on electoral accountability.

H2 Collective Accountability: voters in the border zone should punish (or reward) parties that more closely develop a party brand around the policy pro-

⁷See Figures 3.1 and 3.2 in the appendix for a visual representation of the border zone.

⁸I am assuming that, all things equal, voters would have a preference to not pay higher taxes.

duced by the reform.

Specifically, this would suggest the PAN to be closely connected to voters' electoral behavior as a result of the VAT reform (in this case benefiting from its opposition). As stated above, the PAN campaigned on its opposition to the VAT hike. It was also the only party to clearly state in its party platform for the subsequent election that it would reverse the reform. These actions lead to a clear party brand for the PAN on the VAT reform, which contrasts with the relative silence on the issue on the part of the PRD and its coalition members as well as the PRI and PVEM governing coalition.

Finally, in the absence of clear party brands relating to the VAT reform, the individual positions taken by party members should be consequential for the sanctioning (and reward) behavior of voters in the district.

H3 Individual Accountability: voter sanctioning (and reward) should be contingent on the individual positions taken by deputies in the reform effort, and this distinction should be stronger for parties with obfuscated brands regarding reform.

Here, I will leverage the variation both between parties and individual deputies in their positions in the VAT reform bill. A particularly useful source of variation for testing this hypothesis is the limited number of PRI and PVEM defecting votes.

3.4 Empirical Strategy and Data

As stated above, the main feature of using the case of the 2013 VAT reform vote to study electoral accountability is the ability to identify areas that bore the cost of the reform. This makes it possible to compare the electoral behavior of these areas with the rest of the country and test for electoral sanctioning and reward for the votes of representatives. However, as the previous discussion of the VAT would indicate, there are many economic, social, and political differences between the border regions

and the rest of the nation. Therefore, a straightforward cross-sectional comparison of the incumbent party's vote share would be misguided. Any valid research design that attempts to make any causal inferences about the electoral effects of the VAT change must take these differences into account.

The research design I utilize is a difference-in-difference (DD) approach that makes comparisons between the changes in incumbent party support between the 2012 and 2015 federal legislative elections in border and non-border areas.⁹ This design has several advantages. First, the panel structure of the data allows me to control for time-invariant differences between border and non-border areas. Second, it allows me to address the issue of electoral precincts that overlap with the 20-kilometer threshold. Rather than operationalizing treatment (VAT increase) as a dummy variable, a regression DD facilitates the study of policies where there is variation in treatment intensity (Angrist and Pischke 2009). In this case, treatment intensity would be the proportion of an electoral precinct covered by the preferential tax zone. Another advantage is that this design would allow me to incorporate the non-conforming areas in the main analysis.¹⁰ Finally, a regression DD facilitates the analysis of subsamples that are crucial for the theoretical motivations of the paper (e.g. districts where deputies voted for and against the reform as well as splitting the samples by party control of districts). In the case of an alternative regression discontinuity design, these non-pooled analyses would lead to concerns over a reduced number of cases around the cutoff.

An alternative research design for studying the electoral effects of the tax reform is a regression discontinuity (RD) design. This case seems well suited for an RD design since it has three necessary components, a running variable (distance from the border), a cutoff (20 kilometers), and a treatment that is assigned completely based

⁹Note that the VAT reform vote in congress and the implementation of the changes each took place between elections.

¹⁰By non-conforming areas, I mean areas that do not conform to the 20km rule that decides preferred and default VAT rates (whole states or municipalities that benefit from the preferred rate).

on whether the score exceeds the cutoff (VAT increase from a formerly preferential rate) (Skovron and Titiunik 2015). For this reason, Davis (2011) uses an RD design to provide evidence of a distortion in economic activity toward the preferential tax zone.¹¹

However, there are two drawbacks to the RD design in this case. First, the preferential tax zone also includes a few areas that are partially outside of the 20-kilometer band. These include the entirety of the states of Baja California, Baja California Sur, Quintana Roo, and a few municipalities in Sonora. Davis (2011) addresses the issue of areas not conforming to the 20-kilometer rule by excluding them from the main analysis and including them in a separate non-RD analysis.

A second, and more consequential, drawback of using the RD design in this case is that the outcome of interest should be measured at the same level at which the treatment is assigned (or lower and one can simply aggregate the data to the appropriate level). In this case, the outcome of interest is the electoral behavior of citizens living within and outside of the preferential tax zone. Moreover, the treatment (VAT rate and its subsequent rise post-reform) is assigned at the level of individuals and businesses. Yet, the lowest level of disaggregation of electoral results is at the precinct level, where precinct boundaries can (and do) overlap with the 20-kilometer boundary. Davis (2011) faces a similar issue since his data on economic activity (the outcome of interest) is only available at the municipal level. To address this issue, he creates a locality-level dataset (localities being smaller geographic units than municipalities) by allocating economic activity to localities according to their proportion of the municipality population. He notes that this assumption makes for a conservative test since it will cause the magnitude of the (economic) distortion to be understated. I decide against using a similar approach to mitigate against the possibility that a null result

¹¹Davis' (2011) study is important for this paper since it provides evidence that there are clear economic benefits for the border zone area because of the reduced VAT rate. Therefore, a reform to raise that rate to the level of the rest of the nation would have economic costs for the region and would be expected to motivate electoral behavior.

is due to the conservative test (type II error). Also, from a practical perspective, Davis (2011) could easily allocate measures of value added, total sales, and numbers of workers, but it is unclear to me how I would similarly allocate electoral support for the incumbent party.

To reiterate, I estimate the effect of changes in the value added tax (VAT) rate stemming from deputies' votes in a reform package in 2013 using a difference-in-difference design. I leverage the existence of a border zone¹² that formerly had a reduced VAT rate compared to the rest of the nation, which saw no change in the tax rate from the previous period. Specifically, I estimate the following model:

$$Y_{it} = \delta_t + \gamma_i + \beta IVA_i \times Post_{2013} + X_{it} + \varepsilon_{it} \quad (3.1)$$

Where Y_{it} is vote share of the single member district (SMD) incumbent party in precinct i in election year t . Year and precinct fixed effects, δ_t and γ_i , net out overall trends and time-invariant differences across precincts, respectively. The parameter of interest is the coefficient on the interaction term (β), where IVA is the percentage of the precinct covered by the border zone, which had the reduced value added tax (VAT or IVA in Spanish) rate, and $Post_{2013}$ is an indicator equal to one for precincts in the post-tax reform period. X_{it} is a set of time-varying controls, which includes a set of dummies indicating the incumbent party of the SMD at election year t (these are not included in the party-specific analyses) as well as the log of the number of registered voters in the precinct (in the 100s) to control for changes in population between elections. ε_{it} captures residual differences across precincts and years.

The data I use are primarily precinct-level electoral results for Mexico's legislative elections taken directly from the National Electoral Institute's (Instituto Nacional

¹²The border zone is any area within 20 kilometers of the US or Guatemalan border, the entire states of Baja California, Baja California Sur, and Quintana Roo, as well as a select few whole municipalities in the state of Sonora. See the maps in the appendix for a visualization of the border zone.

Electoral, or INE) website.¹³ The outcome of interest is the vote share of the legislative incumbent party. While this is a straightforward quantity in the abstract, features of the Mexican system complicate matters. Specifically, parties frequently run in coalitions. The complicating factors are that, in a given election, parties will run in coalitions in some districts and not in others as well as run in coalitions in one election year but not the other. In order to simplify the analysis of incumbent party vote shares, I pool together the vote shares of the PRI and PVEM in all districts and across all elections. These parties did run in coalition for each election but not across every district. Similarly, I also treat the PRD, PT, and MC as one coalition in all cases. These parties ran in coalition in all districts in 2012, but only the PT and MC ran together in some districts in 2015, and the PRD and PT ran in coalition in some districts in 2009.

Another issue with the data was matching precincts from one election year to another. INE periodically combines precincts when they have too few registered voters and more frequently divides old precincts into several new ones when they have grown too large in population. To maintain the panel structure of the data I merged precincts such that they would remain comparable in their boundaries from one election to another.

3.5 Results

Column 1 of Table 3.1 shows that that there is an overall negative effect on incumbent party vote share from a precinct being in the border zone in the post-tax reform (“post treatment”) period. Substantively, there is a drop in incumbent party vote share by .035 in a dependent variable that can range from 0 to 1, has a mean of .36 and a standard deviation of .16. Columns (2) and (3) subset the data by districts where deputies voted for the reform and those in which the deputy did

¹³<http://siceef.ine.mx/atlas.html>.

not, respectively. These results demonstrate that the sanctioning effect observed in column 1 is driven by districts where the deputy voted for the reform. It is in these sets of districts where there is a substantively and statistically significant negative effect on the incumbent party's vote share from a precinct's coverage in the border zone in the post-reform period. Moreover, in the set of districts where deputies did not vote in favor of the VAT reform, there is a statistically null effect for border zone precincts in the post-reform period, though the sign of the coefficient is negative. As the analyses below will demonstrate, that null effect hides substantial variation across parties in the retrospective behavior of voters in the border areas.

Table 3.1: Taxation and Retrospective Voting

	(1)	(2)	(3)
	Overall	Deputy Vote for Reform	Deputy Did Not Vote for Reform
Border zone x Post-reform period	-0.0353*** (0.00224)	-0.0587*** (0.00386)	-0.000909 (0.00313)
2015 Indicator	0.0536*** (0.000705)	0.0581*** (0.00104)	0.0395*** (0.00173)
PRI-PVEM incumbent	0.0473*** (0.00133)	0.0358*** (0.00263)	0.0447*** (0.00222)
PRD-PT-MC incumbent	-0.111*** (0.00221)	-0.146*** (0.00423)	-0.0812*** (0.00292)
Log(No. of Registered Voters)	0.0436*** (0.00770)	0.0521*** (0.0105)	0.0326** (0.0112)
Constant	0.227*** (0.0173)	0.231*** (0.0235)	0.231*** (0.0258)
R-squared	0.169	0.208	0.0950
Number of Precincts	64678	41106	23352
Observations	128174	81410	46324

OLS estimations with precinct fixed effects. The unit of analysis is the precinct year. PAN is the reference category for district incumbent dummies. Standard errors (clustered at the precinct level) in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Moving to the question of collective accountability, Table 3.2 shows the analysis broken down by party, with each model using the full sample. That is, it demonstrates the results of models with the party/coalition's share of the vote in the precinct as the dependent variable regardless of the party's incumbent status. Thus, it is meant to summarize the effects of the VAT reform's incidence on the party's support generally.¹⁴ The results show that the PAN experienced a positive boost in electoral support in precincts affected by the tax hike. This is consistent with the expectations of the collective accountability hypothesis. There is no statistically significant effect on the vote shares of the PRI-PVEM coalition in affected precincts. To the extent the party brand had an association with the reform, it was one which was downplayed by the party in subsequent elections. Interestingly, the PRD and its coalition partners experienced a general decline in vote share in affected precincts.

Table 3.3 breaks down the analysis by party, but with additional emphasis on individual deputies' districts. In these models, the dependent variable is the vote share of the respective party/coalition for the set of districts where the party/coalition was the incumbent in 2015. The first takeaway from these results is shown in column 1. The PAN, which had no members voting for the reform, received a boost in support in the border zone in the post-reform period. A precinct experiencing the VAT rate increase is associated with a 4.6 percentage point increase in the PAN's vote share. The results in columns 2 and 3 also provide strong evidence that the electoral ramifications for the PRI and PVEM are conditional on the position taken by the parties' deputy in the district. The negative effect for the PRI-PVEM vote share is driven by precincts in districts where the deputy voted for the reform. In the few districts where PRI and PVEM deputies did not vote in favor, there is a gain in PRI-PVEM vote share among border areas in the post-reform period, though the gain in vote share is not as large as that of the PAN.

¹⁴In interpreting these results, it is important to note that Mexico's electoral institutions provide strong incentive for parties to run candidates in every district, regardless of how unlikely they are to win.

Table 3.2: Taxation and Party Voting

	(1) PAN share	(2) PRI-PVEM share	(3) PRD-PT-MC share
Border zone x Post-reform period	0.0148*** (0.00130)	0.00324 (0.00192)	-0.0788*** (0.00122)
2015 Indicator	-0.0543*** (0.000497)	-0.0165*** (0.000562)	0.144*** (0.000629)
PRI-PVEM incumbent	0.0151*** (0.000812)	-0.0445*** (0.00101)	0.0233*** (0.000889)
PRD-PT-MC incumbent	0.00438*** (0.00111)	-0.0295*** (0.00147)	0.0685*** (0.00173)
Log(No. of Registered Voters)	0.00749 (0.00401)	0.0656*** (0.00530)	-0.00114 (0.00576)
Constant	0.229*** (0.00900)	0.276*** (0.0119)	0.0251 (0.0129)
R-squared	0.185	0.0474	0.520
Number of Precincts	64678	64678	64678
Observations	128174	128174	128174

OLS estimations with precinct fixed effects. The unit of analysis is the precinct year.

Standard errors (clustered at the precinct level) in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3.3: Taxation and Retrospective Voting by Party

	(1)	(2)	(3)	(4)
	PAN share	PRI-PVEM share with deputy supporting reform	PRI-PVEM share with deputy not supporting reform	PRD-PT-MC share
Border zone x Post-reform period	0.0458*** (0.00240)	-0.0206*** (0.00325)	0.0152* (0.00608)	-0.0173* (0.00707)
2015 Indicator	-0.0676*** (0.00104)	-0.0142*** (0.000803)	-0.0782*** (0.00287)	0.201*** (0.00155)
Log(No. of Registered Voters)	0.0289** (0.00891)	0.0738*** (0.00882)	0.130*** (0.0253)	0.0954*** (0.0128)
Constant	0.322*** (0.0208)	0.273*** (0.0195)	0.178*** (0.0528)	-0.135*** (0.0297)
R-squared	0.288	0.0130	0.211	0.658
Number of Precincts	10806	35302	3201	9345
Observations	21532	69896	6378	18414

OLS estimations with precinct fixed effects. The unit of analysis is the precinct year. Standard errors (clustered at the precinct level) in parentheses. Each model includes only precincts from districts where the party is the incumbent SMD seat holder at the 2015 election.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Finally, there is a negative effect for the PRD-PT-MC vote share. Unlike the PAN, the PRD was divided in how deputies voted for the reform, but the results in column 4 only include districts where the coalition's deputy did not vote for the reform.¹⁵ According to these results, a precinct's inclusion in the border zone is associated with a decline in the vote share of the PRD, PT, and MC in the post-reform election. Analyzing the results for the PRD and its coalition members may be complicated from the fact that 2015 election is noteworthy for the rise of Morena, a new party on the scene that was made up of former perredistas, petistas, and members the MC and replaced the PRD as the largest party on the left.

3.6 Discussion

The results above bear out three important points about legislative voting and electoral accountability. First, the general pattern in Column 1 of Table 3.1 demonstrates that voters do punish incumbent parties for the negative effects of policies produced in the legislature. In this case, voters who bore the cost of an increase to their VAT rate punish incumbent parties in subsequent elections. Beyond this baseline, the electoral ramifications of changes in the economic situation of voters is also dependent on two critical and normatively important distinctions. The results broken down by party in Table 3.3 along with those in Columns 2 and 3 of Table 3.1 show that the positions taken by deputies are consequential for voters' retrospective behavior. The extent to which voters punish parties for unpopular policies is not simply a function of how the policy impacts them personally, but also the positions of their representatives with respect to those policies. This is evident in the different effects based on whether a precinct is in a district with PRI-PVEM deputies who voted for the reform and those who did not. The individual positions of deputies and voters' responses to these actions have important implications for the overall accountability

¹⁵It is not possible to estimate a separate regression with a subset of those voting for the reform since there are no such deputies representing border zone areas, dropping out the parameter of interest entirely.

of parties in future elections.

The results also point to the importance of party-level dynamics in conditioning the electoral implications of unpopular roll calls. The party that clearly benefited electorally from the effects of the reform was the PAN. This is in line with the expectation that parties that politicize an issue, increasing the connection among the electorate between the party's brand and the policy produced by the roll call, and positioning themselves as the clear alternative can benefit electorally from the unpopular policy. The PAN was the party that was most clear and unified in its opposition to the reform and subsequently made clear appeals to electorate to reverse the reform. As noted earlier, the issue was addressed in the party's television campaign advertisements. Moreover, the PAN was the only major party to offer a clear position on the VAT reform in its 2015 party platform.¹⁶ In the list of the party's proposed policies is included "promote initiatives that overturn negative aspects of the fiscal reform approved by legislators from the PRI, PRD, and PVEM in 2013; among others, reestablish the different rate of the VAT in the border regions (PAN 2015, 15)." The case of the PAN in 2015 demonstrates that rhetoric and campaign strategies pursued by parties are consequential for the electoral sanctioning behavior of voters and the direction in which their votes swing.

One puzzling finding with respect to theoretical expectations is the results for the PRD and its coalition members in Tables 3.2 and 3.3. While the effect in Table 3.2, which shows a negative overall effect for the party throughout the affected regions, can at least partly be explained by the fact that the party leadership of the PRD was among the faction working with the Peña Nieto administration to pass reform. However, the results in Table 3.3 are counter to the theoretical expectations since, as stated above, that sample in column 4 represents only districts where PRD-PT-MC deputies voted against the reform. Therefore, any considerations about the individual

¹⁶The PVEM and Morena both mention the VAT but neither offers any potential changes to the tax.

positions taken by PRD-PT-MC deputies is overrun by the general negative effect on the party. There are multiple factors that should make one cautious about placing great weight on the comparisons and findings for the PRD-PT-MC. Foremost of these is the ascendance of Morena as an offshoot of the party and its subsequent siphoning of the PRD's base of partisans and elected officials is likely to distort the relationships observed for the PRD.

3.7 Robustness

The key identification assumption of the difference-in-difference design is that a precinct that experiences a change in VAT rate should maintain the same difference (in support for the incumbent party) to an unaffected control precinct had it not experienced the VAT hike. While it is impossible to observe if this would have been the case (since we are only able to observe the world where border zones experience a VAT increase), I am able to draw on available data to test whether affected and unaffected precincts had previously followed common trends prior to the policy intervention. Since I am working with electoral data, there is a readily available panel of observations from regular intervals from which to draw. Specifically, I perform a placebo test that mirrors the analysis in Table 3.1 but instead uses observations from the 2012 and 2009 elections. Rather than a dummy for post-reform election year and its interaction with the percent of the precinct covered by the border zone, I substitute a dummy for the 2009 election year and its dummy with border zone variable. To the extent that the coefficient on the interaction variable is null, then this would suggest that the border zone precincts and the rest of the country followed common trends prior to the intervention. Table 3.4 shows the results of this model. The coefficient on the variable of interest is positively signed and not statistically significant. This finding increases confidence in the causal relationship between VAT rate changes and voter behavior.

Table 3.4: Taxation and Retrospective Voting Placebo Test

	(1)
Border zone x Pre-reform period	0.00115 (0.00207)
2009 Indicator	0.122*** (0.000937)
PRI-PVEM incumbent	0.168*** (0.00151)
PRD-PT-MC incumbent	-0.0457*** (0.00204)
Log(No. of Registered Voters)	0.0402*** (0.00632)
Constant	0.149*** (0.0142)
R-squared	0.275
Number of Precincts	64736
Observations	129307

OLS estimations with precinct fixed effects. The unit of analysis is the precinct year. PAN is the reference category for district incumbent dummies. Standard errors (clustered at the precinct level) in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

To further test the robustness of the relationship between VAT rate policy and election outcomes, I include an analysis that controls for possible effects from crime. In the context of the nation's persistent problems of insecurity, recent scholarship has connected insecurity to citizens' electoral behavior (Bateson 2012, Trelles and Carreras 2012, Ley 2017). Importantly for this study, insecurity is a time-varying variable and may confound the results here if the change in the rate of crime is substantially different in the border regions. Table 3.5 demonstrates that the main results are robust to the inclusion of a variable measuring the municipal-level homicide rate for the year leading up to the election (per 1,000 persons). Interestingly, the effect of the homicide rate according to the results is positive for the incumbent party, although the effect is substantively small and not statistically significant. Franco Vivanco et al. (2015), who also utilize precinct-level results, examine the effect of insecurity on the presidential vote in the 2012 Mexican elections. They find that there is not necessarily an incumbent-based sanctioning but more so sanctioning against the PRI, which may explain the result here. Nevertheless, the result of the VAT rate effect is robust.

3.8 Conclusion

This paper has demonstrated that legislators roll calls votes are electorally consequential. Voters do what democracy tasks them with and hold parties accountable for the actions of representatives. Specifically, they sanction incumbent parties when representatives' roll calls result in negative shocks to their material well-being. However, there is not merely simple retrospection. Representatives and parties can influence the extent and direction of their constituents' retrospective votes based on their positions at the time of the roll call as well as in their responses to unpopular roll calls.

Table 3.5: Controlling for Municipal-Level Insecurity

	(1)
Border zone x Post-reform period	-0.0327*** (0.00245)
2015 Indicator	0.0516*** (0.000858)
PRI-PVEM incumbent	0.0477*** (0.00160)
PRD-PT-MC incumbent	-0.103*** (0.00259)
Log(No. of Registered Voters)	0.0493*** (0.00779)
Homicide rate (per 1,000 persons)	0.00398 (0.00246)
Constant	0.212*** (0.0176)
R-squared	0.153
Number of Precincts	62518
Observations	119609

OLS estimations with precinct fixed effects. The unit of analysis is the precinct year. PAN is the reference category for district incumbent dummies. Standard errors (clustered at the precinct level) in parentheses.

* p < 0.05, ** p < 0.01, *** p < 0.001

3.9 Appendix

Figure 3.1: Northern Border Zone

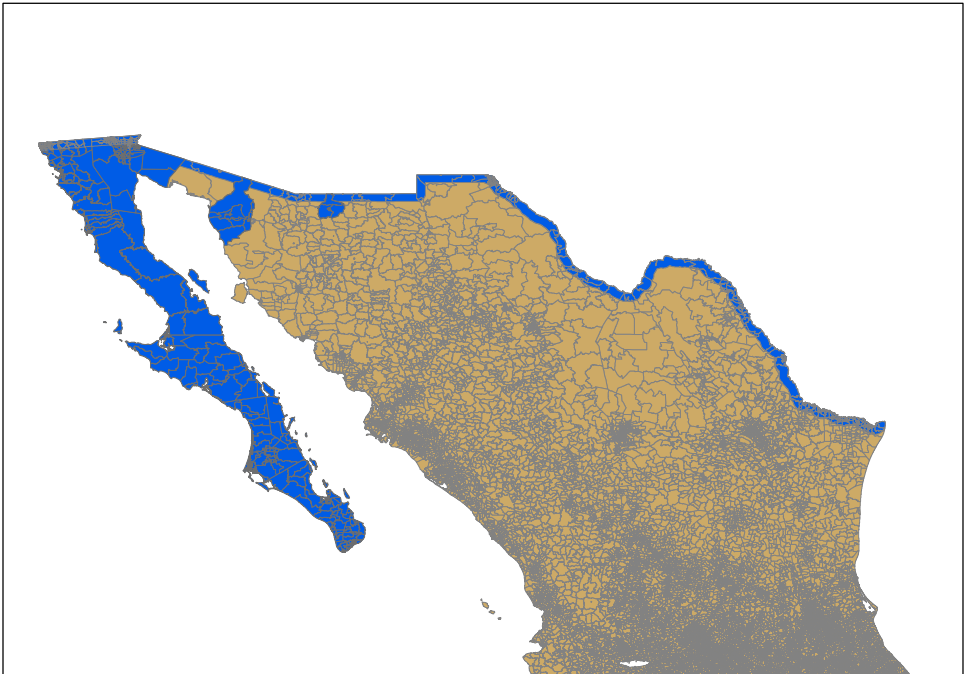
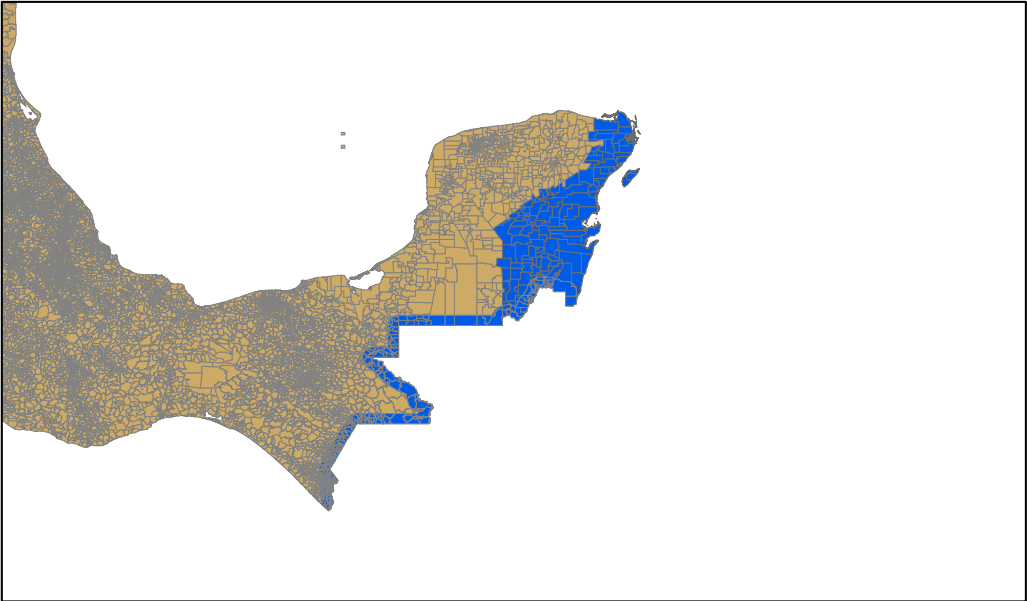


Figure 3.2: Southern Border Zone



Chapter 4

Female Officeholders and Women's Political Engagement: The Role of Parties

4.1 Introduction

Can female officeholders inspire other women to enter politics? The potential for women in office to serve as a catalyst for the political engagement of other women is important considering the gender gap in political representation that characterizes politics across the world. Previous research on this process, commonly referred to as a role model effect, finds mixed results across a diverse set of contexts. This paper makes two contributions. First, I propose that researchers take into account the larger candidate emergence process when testing for role model effects, rather than focusing on the final stage of candidacies. Second, I argue that political parties, especially in their choices over candidate selection methods, can exert considerable influence in the gender composition of candidates and thus influence the potential for observing role model effects at the candidate level.

This paper is organized into two parts. First, I provide a rationale for taking a larger view of candidate emergence when testing for role model effects. Using the case of Mexican legislative elections, I find no evidence for role model effects at the level of candidacies, but I do find evidence for role model effects from female officeholders at earlier stages of the candidate emergence process (among the mass public and aspirants for parties' nominations). In the second part of the paper, I develop a theoretical justification for how the gendered consequences of candidate selection methods interact with parties' strategic considerations about which methods to use, resulting in party influence that can attenuate any role model effects. Again, using data from Mexican parties, I show that parties' choices at this stage can wash out any effects of female officeholders on female aspirants for office. These findings have

important implications for future research on role model effects.

4.2 Women's Representation and Role Model Effects

A key dimension of political representation is the extent to which a governing body resembles or mirrors the citizens it is tasked with representing (Pitkin 1967). This concept of descriptive representation is particularly important for legislative institutions, which serve as the primary representative body of government. Yet, a widespread feature of legislatures across the world is the under-representation of women in office. These deficits in descriptive representation are argued to have significant implications for the substantive representation of women (Phillips 1995, Mansbridge 1999). Moreover, unequal representation in deliberative bodies along gender lines is associated with diminished legitimacy for the institution (Schwindt-Bayer and Mishler 2005) as well as for its policy decisions (Clayton et al. 2019).

Given the importance of descriptive representation for a political system, researchers have focused on the factors that impede (or improve) the numerical representation of women in government. Research in the U.S. and U.K. contexts finds that women fair as well as men in comparable elections (Norris et al. 1992, Seltzer et al. 1997). However, a negative bias for female candidates among voters has been found in other contexts (Schwindt-Bayer et al. 2010, Langston and Aparicio 2011), especially in systems with electoral rules that facilitate such biases in voting behavior (Batista Pereira 2015). Nevertheless, the disparities in whether men and women run for office are an important contributor to the overall inequalities in descriptive representation across the world. Scholars have thus focused their attention to the question of female candidacy for office, as the lower frequency of women running for office is found to be a driver of women's under-representation among officeholders (Lawless and Fox 2010).

This focus on the disparities in candidacies has been paralleled by developments

in the policy-making sphere towards the implementation of gender quotas for parties' lists of candidates. These quotas are meant to fast-track the process of opening the political sphere to traditionally excluded groups (Tripp and Kang 2008). They do so by correcting for the strongest determinant of whether a member of such groups (in this case women) wins office: whether they run for office. The expansion of women in office that has been brought about by such policies, as well as in non-quota systems, has raised the question of their potential symbolic effects. The concept of symbolic representation refers to the emotional or affective response for constituents from the descriptive characteristics of the representative (Pitkin 1967, 100). A woman winning political office is theorized to influence the political engagement (specifically, the office-seeking behavior) of other women through these symbolic effects as well as other practical means such as influencing candidate recruitment. This has great normative implications as the potential for symbolic effects on women's political attitudes and engagement entails a virtuous cycle of women winning political office in unequal contexts. A sizable body of research has developed around the empirical testing of such symbolic effects from female politicians.

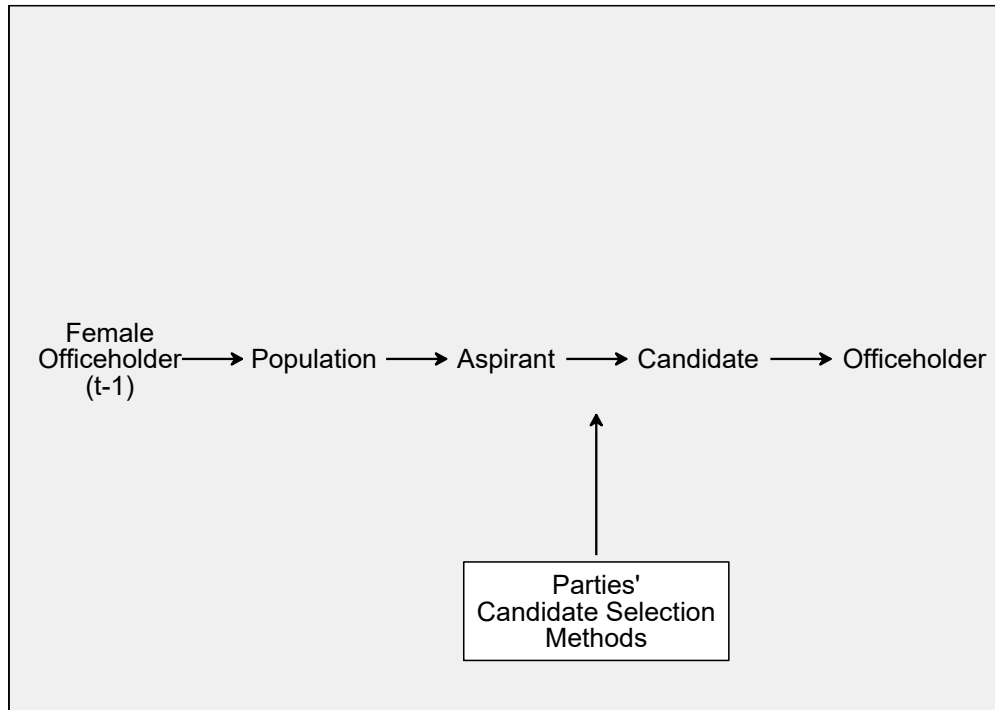
Previous work has identified significant gaps in political ambition and engagement between men and women in their early lives that result in gender gaps in the composition of those who run for office (Dolan et al. 2007, Fox and Lawless 2014). Therefore, much attention has been placed on the effects of female officeholders on the political engagement of their constituents and especially among adolescents. On this front, studies find a positive link between the presence of female politicians and the political interest of women, including adolescents (Campbell and Wolbrecht 2006). There is comparative research in support of the hypothesis that female officeholders influence women's political participation (Wolbrecht and Campbell 2007, Desposato and Norrander 2009). However, there are also mixed or null results (Lawless 2004, Dolan 2006) as well as arguments in favor of conditional effects based on party congruence

between politician and citizen (Reingold and Harrell 2010) as well as the political competitiveness of seats (Atkeson 2003). Moreover there are questions about the generalizability of these effects for all regions of the world (Liu 2018). Evidence of backlash effects (worsening political engagement from female politicians) is found in contexts where strong quotas may generate negative stigmas for female politicians (Clayton 2015, Kerevel and Atkeson 2017).

The logic of symbolic benefits can apply to the level of office-seeking, a particularly intense form of political engagement. Along with the symbolic mechanism, female officeholders may be in a position to improve the political recruitment of women. Despite the theorized relationship, previous research on the role model effect of female officeholders on other women's decision to run for office finds mixed results. Moreover, these mixed results come from a variety of political contexts. Studies from a unique policy experiment in India that randomized assignment of gender quotas find evidence for persistent positive effects on the likelihood that women stand for and win public office in constituencies with female officeholders (Beaman et al. 2009; Bhavnani 2009). However, in a study of Indian state legislatures, Bhalotra et al. (2018) find that positive effects in subsequent elections are driven by female incumbents and there is in fact a reduction in the entry of new female candidates. In a different context, Broockman (2014) finds no positive effects from women winning nearby state legislative seats on women's political engagement (measured as turnout and running for office). Moreover, any positive effect in the number of women candidates and probability of women winning office in subsequent elections seems driven solely by female incumbents. In a study of Swiss local elections Gilardi (2015) finds that the presence of female officeholders is positively associated with the number of women who subsequently run for office in neighboring districts. This effect is especially strong in the period following women's political enfranchisement and diminishes over time.

Authors have attempted to provide system-level explanations for these mixed

Figure 4.1: Role Model Effects and Candidate Emergence



results. One potential explanation is that positive effects are conditional on the level of women’s incorporation into the political life of a given context. Gilardi’s (2015) work grapples directly with this question by suggesting that the symbolic importance of a female officeholder is particularly pronounced at early stages of women’s political inclusion and becomes negligible once some sufficient level of political inclusion is achieved. This may explain why no effects are found in the US context. However, the contrasting findings from the same context of India (Beaman et al. 2009; Bhavnani 2009; Bhalotra et al. 2018), where the societal-level political inclusion of women is low, cast doubt on this potential explanation. Another potential explanation is that female incumbents can lower the perceived need/utility of more women running, or perhaps deter female newcomers. As the analysis of the Mexican case will highlight below, this incumbency explanation may also be insufficient.

This paper makes a theoretical contribution to the study of role model effects by

placing a spotlight on the role of parties. Previous work that has found no support for role model effects at the level of candidacies fails to account for the many stages of the candidate emergence process. Figure 4.1 demonstrates the stages of the candidate emergence process and how role model effects from female officeholders are theorized to take hold. At the start, there is a female officeholder who wins office in the previous period. This would result in increases in the political engagement of women in the general population. At the next stage, women activated by the role model effect become more likely to seek the nomination of parties for elected office. Subsequently, parties make selections based on the pool of aspirants (or pre-candidates) for the general election. Between the aspirant and candidate stage, parties exercise a tremendous amount of influence in their ability to shape the composition of nominees for public office. Finally, a greater share of women candidates is expected to lead to more women officeholders.¹

There are three important takeaways from the process illustrated by this figure. First, candidate emergence entails multiple stages, any of which can serve as a bottleneck for female newcomers. Second, this has implications for the ability of researchers to observe role model effects, which begin at an earlier stage of the pipeline and may eventually lead to candidacies. If studies operationalize the presence of role model effects from female officeholders in terms of changes in the composition of candidates, this may ignore changes in political engagement earlier in the process. Third, parties can exercise a substantial amount of influence between the aspirant and candidate stages, particularly in their candidate selection methods, that may serve as a potential bottleneck for any role model effects.

The process outlined in Figure 4.1 also underscores the other main contribution of this paper for the empirical study of role model effects. Lawless and Fox (2010)

¹As Lawless and Fox (2010) argue, the deficit in women's representation is due in larger part to deficits in the number of women candidates than deficits in electoral performance compared to men. Langston and Aparicio (2011) find similar patterns in the case of Mexican legislative elections, the focus of this paper.

analyzed gender dynamics at different stages of the candidate emergence process to identify the decision to run as the most important factor in women's underrepresentation in the United States. I adapt this framework for testing for and understanding role model effects. I propose future research eschew making conclusions about the strength and nature of role model effects from a test at a single stage (and especially at the final stages of the process as in the previous work on female candidacies cited above). Instead, I argue that researchers should take into account tests of the relationship between female officeholders and women's political engagement throughout the process of candidate emergence. This approach has three advantages. First, it provides a more comprehensive assessment of role model effects in a given political system. A narrow empirical null result at the level of candidacies may lead to the erroneous conclusion that female officeholders do not provide an inspiration for women to enter politics when there is such a relationship at earlier stages. Second, this approach can aide researchers in identifying the factors that may attenuate potential role model effects (as this paper will demonstrate with candidate selection methods and the Mexican case). Finally, a comprehensive approach will encourage the integration of the large body of research on symbolic representation and mass behavior and attitudes (referenced above) with research on political ambition and nomination-seeking.

In the following section, I test for role model effects from female officeholders at different stages of the candidate emergence process in Mexican legislative elections. First, I find no evidence of role model effects at the level of candidacies. However, unlike previous research, I do not conclude that there is no overall effect, but instead examine earlier stages of the candidate emergence process. This leads to my second set of empirical results. I demonstrate that there is evidence for role model effects at the level of the mass public and (focusing on one of the major parties) at the stage of pre-candidacies (those who are seeking a party's nomination for office).

4.3 Observing Role Model Effects in Mexican Legislative Elections

To demonstrate the importance of political parties for role model effects, I focus on the case of Mexico's Chamber of Deputies. This is a particularly useful and critical case for examining role model effects for three reasons. First, strict term limits mean that at each legislative election there are no incumbents running for the same seat. Previous studies examining the causal effect of female officeholders on the future electoral prospects of women in a district have been unable to disentangle the effects of office holding and personal incumbency advantage (Bhavnani, 2009; Broockman, 2014), or indicate the effects are solely driven by incumbency with a negative effect on newcomers (Bhalotra et al. 2018). Since Mexican deputies were constitutionally barred from seeking immediate reelection in the period under study, any observed effect of a woman winning office at time $t-1$ on the likelihood of women running in the district at time t can be attributed solely to female office holding and not personal incumbency advantage. Moreover, term limits also serve to remove an institutional barrier to the proliferation of female candidates and officeholders (Schwindt-Bayer 2005). Without the impediment of an incumbent running for reelection, women inspired to run for office should face one less institutional barrier. Second, over the previous two decades, Mexico has adopted increasingly strict gender quotas for legislative candidacies (Baldez 2004). This creates conditions where it may be in the interest of parties to facilitate role model effects (with engagement beginning in the mass public and extending to the candidate level). Third, despite the rapid expansion of women's numerical representation in the federal legislature, they remain significantly underrepresented in local and executive posts. Therefore, there is little evidence that Mexican society has achieved a necessary level of women's political inclusion such that one would not expect role model effects. For these reasons, Mexico is a case where one should expect to observe role model effects. And to the extent that there are no such observable effects, it is incumbent on researchers to understand

why this would not be the case in an otherwise accommodating test of the theory.

I first test for potential role model effects at the level of candidacies in legislative elections. The dependent variable is the share of female candidates in a district.² The main independent variables of interest are an indicator for whether a woman won in the district at election $t-1$ and the share of female winners in neighboring electoral districts at election $t-1$. Districts are neighbors if they share a border. Therefore if a district is bordered by five other districts, I take the the total number of women candidates in those five districts and divide that number by the total number of all candidates in those five districts in the previous election. This second variable is meant to capture any potential spatial effects, which have been the focus of much of the previous work in role model effects on office-seeking behavior (Broockman 2014; Gilardi 2015). Together these variables are meant to test for any role model effects both within and across districts (via spatial diffusion). The data consists largely of electoral returns and candidate lists made available by the National Electoral Institute (INE) of Mexico. I use data from the 2006, 2009, 2012, and 2015 congressional elections since these featured the same single-member electoral district boundaries. Using the candidate lists provided by INE, I coded the gender for each of the 7,482 candidates in these four elections based on their name. Since there are 300 single member districts, the total number of district races at time t that can be influenced by an election at time $t-1$ is 900.

I utilize two widely used estimation methods for time-series cross-sectional data: a district fixed effects model, and Beck and Katz's (1995) OLS with panel-corrected standard errors. I also control for the partisan affiliation of the district winner at the previous election (PAN as the reference category) and election year dummies. These election year dummies are particularly important in controlling for the effect of gender

²It should be noted that given Mexico's mixed electoral system, which distributes votes in the proportional representation (PR) tier based on votes in the single member districts (SMDs), parties and coalitions have an incentive to and do field candidates in every congressional district so as to maximize the number of votes for the larger PR tier districts.

Table 4.1: Models of the Percent of Female Candidates in a District (2009-2015)

	(1)	(2)	(3)
	% Women	% Women	% Women
% Women (t-1)	0.176 (0.269)	0.109 (0.282)	
% Women among Neighbor Winners (t-1)	0.0750 (0.0549)	-0.0129 (0.0268)	0.0141 (0.0387)
Woman District Winner (t-1)	-1.480 (1.626)	-1.524 (1.641)	-7.892*** (1.811)
PRD and Left	1.221 (1.808)	-0.265 (1.615)	1.990 (2.938)
PRI-PVEM	5.832* (2.663)	0.766 (1.116)	3.043 (2.109)
year=2012		10.12*** (0.532)	9.801*** (1.653)
year=2015		17.65*** (3.328)	18.82*** (1.713)
Constant	30.44** (9.317)	28.07*** (8.166)	30.66*** (1.741)
Observations	900	900	900
R^2	0.052	0.143	0.240

For models (1) and (2), Prais-Winsten regression coefficients with panel corrected standard errors in parentheses. For model (3), district dummies are not reported.

quotas that were strengthened between each election. Table 4.1 reports the results of these different models. In no case is there a significant positive effect from a female officeholder on the percent of candidates who are women in the next election. In the fixed effects model, the coefficient for having a woman win in the previous election is in fact negative and statistically significant, but the statistical significance does not appear robust across models. The sign on the coefficient for the spatial role model effect also flips across models. It is clear from these results that there is at least no statistically positive effect from female officeholders (either within districts or from neighboring districts) on the share of female candidates in a district.³

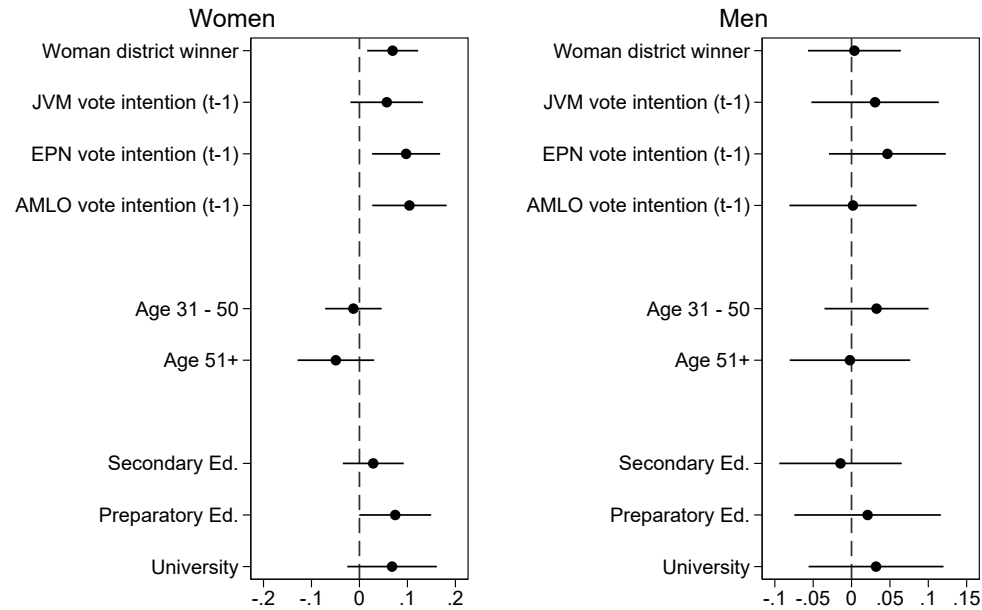
While I do not observe a role model effect at the level of candidacies, this does not mean there is no effect from female officeholders operating at other stages of the candidate emergence process. I now test for role model effects at the level of the mass public. To do so, I use survey data from the 2012 Mexico Panel Study which surveyed respondents prior to and after the 2012 federal elections.⁴ The dependent variable of interest here is post-election interest in politics as measured from a survey item asking “How much interest do you have in politics: a lot, some, a little, or none?” Responses are coded to range from 0 (none) to 1 (a lot). The main independent variable is an indicator for whether a woman won in the district in the 2012 legislative elections. The panel structure of the data allows me to control for pre-election interest in politics as well as a series of demographic variables as well as the respondent’s pre-election vote choice (with not voting as the reference category). To examine the gender-specific impact theorized by the role model effects literature, I estimate separate models for men and women.⁵

³Count models with the number of female candidates (rather than the share) as the dependent variable and controlling for the total number of candidates produce similar results.

⁴Senior Project Personnel for the Mexico 2012 Panel Study include (in alphabetical order): Jorge Domínguez, Kenneth Greene, Chappell Lawson, and Alejandro Moreno. Funding for the study was provided by the Centro de Estudios Sociales y de Opinión Pública de la Cámara de Diputados (CESOP) and the Secretaría de Gobernación; fieldwork was conducted by DATA OPM, under the direction of Pablo Parás.

⁵An alternative strategy would be to pool both men and women together and include an interaction term between gender and the indicator for a woman winning in the district. I opt for sub-setting the data in this

Figure 4.2: Models of Post-Election Political Engagement by Gender



Source: Mexico Panel Study, 2012. Notes: Points represent coefficients for models of post-election political interest. Solid lines indicate 95% confidence interval. Each model controls for lagged political interest (coefficient not plotted).

The results of these models of post-election political engagement presented in Figure 4.2 demonstrate that there is a positive and statistically significant role model effect.⁶ Having a woman win the legislative district has a positive effect on the self-reported political interest of Mexican women, controlling for pre-election political interest, demographic variables, and pre-election political preferences. There is no such effect in the model of post-election political engagement of Mexican men. This provides evidence that female officeholders do have a positive effect on the political engagement of women at the earliest stage of the candidate emergence process (political activation among the mass public). Do these role model effects carry on to the next stage of the process, when women seek the nomination of parties for elected office? I address this question in the following section.

way, which is equivalent to a fully interacted model.

⁶Table 4.3 in the appendix summarizes the estimates and fit statistics for these models.

Studying the dynamics of candidate emergence at the level of pre-candidacies, when aspirants for office seek the nomination of parties, is made difficult in the comparative context by the tendency of parties to obscure what can be very contentious intra-party contests, prompting scholars to refer to this as ‘the black box’ (Kenny and Verge 2016). In this section, I focus on the aspirants for office of one party, the Partido Acción Nacional (PAN), in the lead-up to the 2015 federal elections. From party documents, I collected data about the method of selection and the list of pre-candidates for each of the single member districts.⁷ As with the candidate-level analyses, I coded the number of women and the number of men for each district where the PAN held a primary to select candidates.⁸ These counts for each district serve as the dependent variables for the aspirant-level analyses below. Mirroring the candidate-level analyses, the independent variables of interest are an indicator for whether a woman won in the district at election $t-1$ and the share of female winners in neighboring electoral districts at election $t-1$. To the extent that there are role model effects on the likelihood that a woman seeks a party’s nomination, I expect to find positive effects for these variables. I also control for the electoral value of the district by including an indicator for whether the district is a safe PAN seat. A district is categorized as being a safe PAN seat in 2015 if the party won the seat in the 2006, 2009, and 2012 elections.

I estimate two poisson regression models. One for the count of female pre-candidates in a district and another for the count of male pre-candidates. Table 4.2 summarizes the results of these models.⁹ The first column demonstrates that there is evidence for role model effects at the level of aspirants for office. Having a

⁷Documents from the party’s Electoral Organizing Committee are available at <http://www.pan.org.mx/estrados-electronicos-coe-archivo/>.

⁸I do not have data on districts where the party simply designated a candidate, since there is no self-nomination by pre-candidates in those cases.

⁹The reason the two models have a differing number of observations is because the PAN reserved some primaries for only female pre-candidates in 2015. The results here are robust to including an indicator for this reserved primary system in the model for the number of female pre-candidates.

Table 4.2: Poisson Model of Number of Pre-Candidates in a District

	(1)	(2)
	No. of Women	No. of Men
Woman District Winner 2012	0.489** (0.169)	0.0886 (0.164)
% Women among Neighbor Winners 2012	0.634 (0.348)	0.252 (0.300)
Safe PAN District	0.560* (0.280)	0.471* (0.215)
Constant	-0.740*** (0.161)	0.230 (0.131)
Observations	224	142
Pseudo R^2	0.023	0.012

Standard errors in parentheses

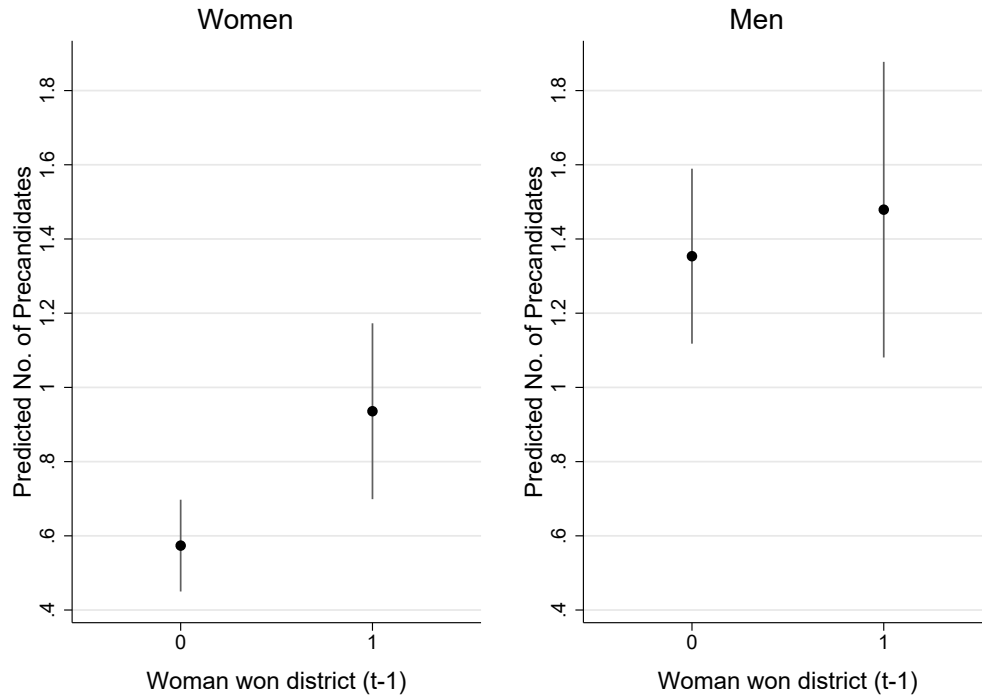
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

woman win the district in the previous election as well as an increase in the share of women who won in neighboring districts leads to a higher count in the number of female pre-candidates. This association is statistically significant for the former and marginally so for the latter. As expected, there is no such effect for the number of male pre-candidates. Safe districts draw a higher number of aspirants for office among both genders.

To provide an interpretation of the substantive significance of these effects, Figure 4.3 plots the predicted number of pre-candidates as a function of whether a woman won the district previously. There are two takeaways from this graph. First, the role model effect among women is substantively meaningful. A district where a woman won previously has an expected pre-candidate count of .94 compared to a predicted count of .57 for a district with a male winner in the last election.¹⁰ For reference, the average number of women pre-candidates in a district is around .7. Second, the figure

¹⁰Holding the share of neighboring women winners ($t-1$) at its mean value and the safe PAN indicator at its mode of zero.

Figure 4.3: Role Model Effects on Aspirants for PAN Nomination



demonstrates a persistent gap in political ambition between men and women, even when considering the role model effect. This is in line with previous work showing that gaps in women’s descriptive representation begin with gaps in ambition for seeking office (Lawless and Fox 2010). This also underscores the importance of role model effects for chipping away at this gap in political ambition.

The preceding series of empirical results demonstrate that null findings at the candidate level do not preclude overall role model effects in a political system. Using the case of Mexico, I demonstrated that role model effects are observable at earlier stages of the candidate emergence process (in the mass public, and among aspirants for party nominations). As Figure 4.1 at the start of the paper illustrates, I argue that political parties, in their influence over the candidate selection process, play an important role in whether role model effects are observable at the final and crucial stages of the candidate emergence process (when citizens stand for public office in a

general election). In the second part of this paper, I draw on the literature on parties and develop an explanation for why candidate selection methods play an important role in obscuring the presence of role model effects in Mexican legislative elections. Using data on the PAN's 2015 selection methods, I find support for this explanation.

4.4 Candidate Selection Methods

To develop an explanation for the mixed results in the behavioral literature on role model effects, I draw on the institutional research on the effects of political parties on women's descriptive representation. Scholars have looked to a variety of party characteristics that can directly influence the gender composition of their candidacies (Caul 1999; Kunovich and Paxton 2005), such as party ideology (Funk et al. 2017), candidate quota adoption (Caul 2001), candidate recruitment (Sanbonmatsu 2002), and the bureaucratization of candidate selection (Bjarnegård and Zetterberg 2016). I focus here on candidate selection methods, since they are the most visible means by which parties exert influence in the composition of nominees for office. As Kenny and Verge (2016) note, candidate selection is central to the question of how political parties facilitate or block women's access to political office.

Research in this area has demonstrated that there are gendered consequences from parties' candidate selection procedures. In Latin America, Hinojosa (2012) shows that certain selection methods are better suited for producing women candidates than others. Specifically, selection methods that are exclusive and centralized by the party leadership are more likely to produce female nominees than inclusive and decentralized selection methods. In practice, an exclusive-centralized method often takes the form of a central party committee designating candidacies nationally. An inclusive-decentralized method often entails a primary held at the level of the electoral unit for the general election. The reason for the gendered outcomes of these methods, Hinojosa argues (2012, 44-52), is that exclusive and centralized methods avoid the problem

of self-nomination and neutralize power monopolies. Traditional power monopolies tend to favor political insiders and therefore exclude many women. The problem of self-nomination refers to the underlying gap in the likelihood of seeking elected office between men and women. These obstacles for female aspirants are present in open and decentralized selection methods such as primaries.

Additionally, these selection methods are not decided at random by parties. Leadership must take into account their own desire to select candidates suited for the electoral and political environment of the general election as well as party members' and activists' desire to exercise local influence over candidacies. Previous work has found that the major Mexican parties make strategic choices about their candidate selection methods in response to the electoral environment (Langston 2006; Wuhs 2006, 2008). Research on the PAN, the party on which the aspirant-level analyses focused, finds that the party's membership has traditionally favored decentralized primaries with voting open only to party members and activists. This has resulted in patterns where the party tends to favor using closed primaries in its strongest areas with the greatest concentration of members and activists (Bruhn and Wuhs 2016). A similar pattern holds for the PRD, the main leftist party up until the 2015 elections. The PRI has also favored more decentralized methods, such as state-level conventions or allowing governors to choose candidates, in more competitive areas (Langston 2006).

Crucial for this paper's focus on the role of parties in facilitating or attenuating the political engagement effects from female officeholders is how parties' strategic considerations interact with the gendered consequences of selection methods addressed above. If the type of selection method that parties employ in their strongest districts tends to be more open and decentralized, then these are precisely the types of methods that disfavor the emergence of female candidates. The selection method choices of the party can then greatly reshape of the composition of candidates for office from the original pool of aspirants for the party's nomination.

To illustrate this dynamic, I focus on the candidate selection methods of the PAN in 2015. The party used four different methods for selecting candidates across the 300 SMDs: Closed primaries (election by members), designation, closed primaries reserved for female pre-candidates, and open primaries.¹¹ The share of women nominees to come out of each selection method was 18%, 60.5%, 94%, and 50% respectively.¹² This pattern is in line with previous work showing that designation is more conducive for female candidates compared to primaries. Although women seem to perform better than prior research would expect in open primaries, this selection method was only used in 4 districts in 2015, so one should be cautious to conclude that PANista women fare well in open legislative primaries.

Having established that the PAN's candidate selection methods had clear consequences for the likely gender of the nominee, such that traditional (non-reserved) primaries disfavor women and designation favors women, I now show how this maps onto electoral competition resulting in a disruption of role model effects. Figure 4.4 presents the predicted probabilities from a multinomial logit model of the candidate selection method used by the PAN in 2015, as a function of the party's share of the district vote in the previous election.¹³ This is the sole predictor in the model. This figure shows that in districts where the PAN fared best in 2012, the party is more likely to utilize selection methods that disfavor women (such as closed primaries). Conversely, the party is much more likely to use selection methods that favor women in districts where the party has performed very poorly in the past (such as designation).¹⁴ The relationship between the use of reserved primaries (which was a new

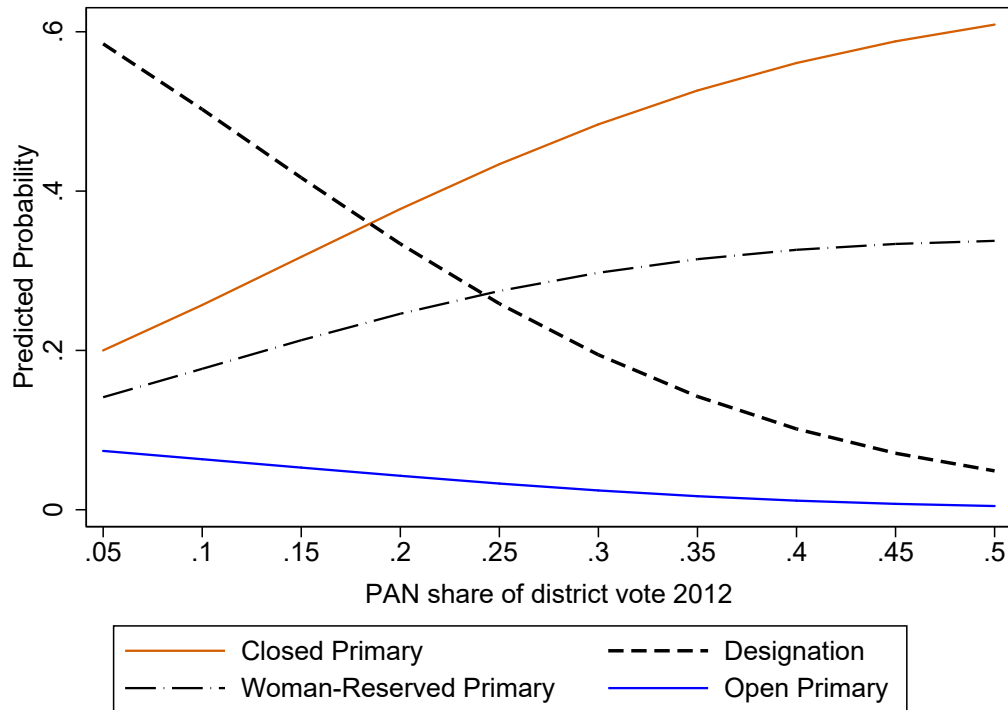
¹¹The breakdown of how frequently each method was used across the 300 single member districts is as follows: Closed primary - 138, designation - 76, woman-reserved primary - 82, open primary - 4.

¹²The reason the share is only 94% percent for primaries reserved for women is that in cases when no pre-candidate emerges in a primary the party simply designates a candidate, which can be man. In both the reserved and non-reserved primaries, there are instances when no pre-candidate emerges in districts where the party is nearly guaranteed to lose.

¹³Table 4.5 summarizes the estimates for the model used to plot Figure 4.4.

¹⁴Figure 4.5 in the appendix plots the distribution of the PAN's electoral performance in 2012 across the single member districts. One should note that given Mexico's multiparty system, parties rarely receive more than 50% of a district's votes. The first-place party in a district typically wins with a plurality considerably

Figure 4.4: PAN Electoral Performance in 2012 and Party Selection Method in 2015



method employed in 2015) and previous PAN share is flatter than the associations between closed primaries/designation and PAN vote share. Moreover, as the aspirant-level analyses in the previous section demonstrated, both men and women are much more likely to seek out nominations in areas where the party performs well rather than serve as sacrificial lambs. These empirical patterns taken together, the gendered effects of selection methods and the party’s preference to utilize methods disfavoring women in its most valuable districts, result in a substantial dampening of any role model effects immediately prior to the candidate stage. While women may have been activated by the inspiration of a female officeholder at earlier stages of the candidate emergence process (as I found above), parties’ choices about selection methods serve as a significant bottleneck and wash out any such pattern at the candidate level. Ultimately, these choices by party leadership serve to obfuscate patterns in the political

below the 50% mark.

behavior of women in the party's grassroots.

4.5 Discussion

This paper has demonstrated that in order to provide a full assessment of the presence of role model effects in a political system, researchers should examine the larger candidate emergence process. Mixed results in tests for role model effects from female officeholders should avoid a narrow focus on the candidate level for two reasons. First, this may lead to the erroneous conclusion that female officeholders do not provide an inspiration for women to enter politics in a given political system. It may simply mean that this effect is not observable at the final stage of candidacies in the pipeline starting from the general population and ending with party nominees for office. Second, a broader examination of the candidate emergence process may help researchers pinpoint where in the different stages of candidate emergence is there no evidence for role model effects. This can help identify reasons for why a role model effect is attenuated in a given context. This point leads to the second contribution of the paper, which is to place a spotlight on parties and how they may facilitate or attenuate role model effects. As I have argued and shown using the case of Mexico and the PAN, party decisions, especially with respect to candidate selection, can greatly influence the makeup of candidates for office. This has the potential of obscuring any role model effects. Researchers who find null results (or positive results for that matter) should consider the potential influence of parties in creating the conditions for or against role model effects from female officeholders.

4.6 Appendix

Table 4.3: OLS Models of Post-Election Political Interest

	(1)	(2)
	Women	Men
Political Interest (t-1)	0.275*** (0.0462)	0.252*** (0.0477)
Woman district winner	0.0692* (0.0271)	0.00373 (0.0308)
JVM vote intention (t-1)	0.0570 (0.0385)	0.0307 (0.0422)
EPN vote intention (t-1)	0.0973** (0.0361)	0.0467 (0.0387)
AMLO vote intention (t-1)	0.104** (0.0395)	0.00189 (0.0421)
Age 31 - 50	-0.0126 (0.0300)	0.0325 (0.0345)
Age 51+	-0.0492 (0.0407)	-0.00209 (0.0400)
Secondary Ed.	0.0288 (0.0323)	-0.0144 (0.0406)
Preparatory Ed.	0.0747 (0.0382)	0.0210 (0.0485)
University	0.0680 (0.0475)	0.0319 (0.0447)
Constant	0.196*** (0.0436)	0.288*** (0.0527)
Observations	495	388
R^2	0.138	0.102

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.4: Descriptive Statistics for 2012 Panel Data of Mass Public

	mean	sd	min	max	count
Political Interest	0.43	0.30	0	1	889
Political Interest (t-1)	0.44	0.32	0	1	1281
Woman district winner	0.30	0.46	0	1	1288
JVM vote intention (t-1)	0.21	0.41	0	1	1288
EPN vote intention (t-1)	0.32	0.47	0	1	1288
AMLO vote intention (t-1)	0.22	0.41	0	1	1288
age_group==Age 30 and under	0.33	0.47	0	1	1288
age_group==Age 31 - 50	0.42	0.49	0	1	1288
age_group==Age 51+	0.24	0.43	0	1	1288
edr==None or Primary Ed.	0.32	0.47	0	1	1287
edr==Secondary Ed.	0.31	0.46	0	1	1287
edr==Preparatory Ed.	0.21	0.40	0	1	1287
edr==University	0.16	0.37	0	1	1287
Woman	0.52	0.50	0	1	1288

Table 4.5: Multinomial Logit of PAN Selection Method in 2012

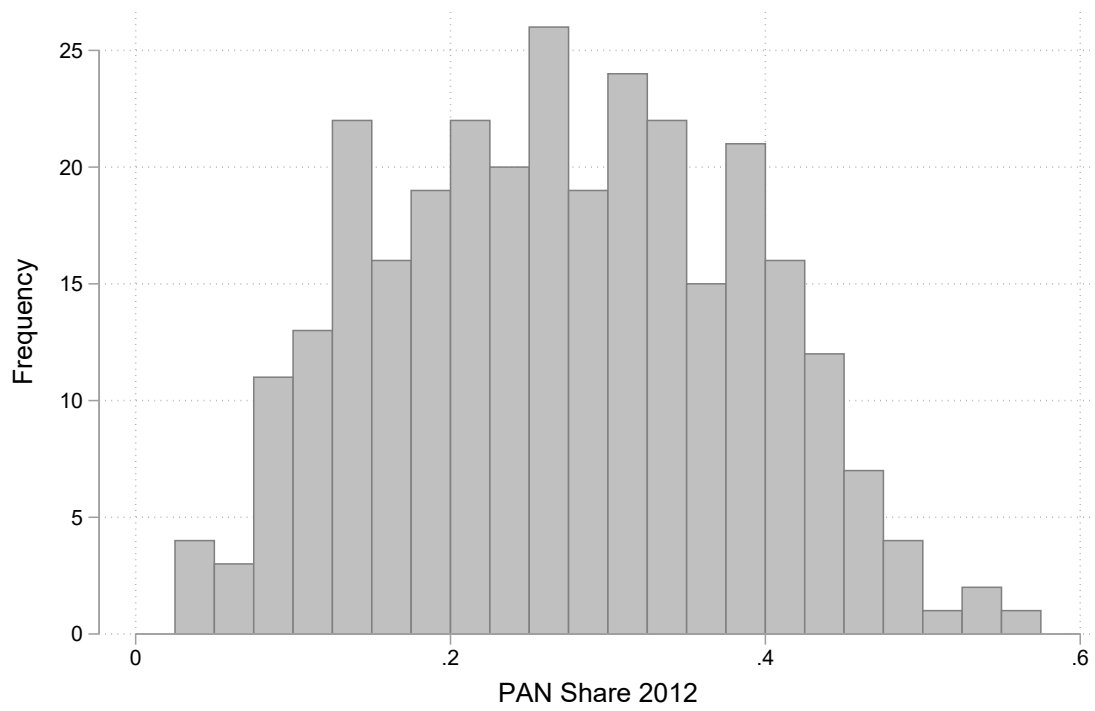
	method
Designation	
PAN Share 2012	-6.643* (2.798)
Constant	1.107 (0.711)
Woman.Reserved.Primary	
PAN Share 2012	-1.764 (1.287)
Constant	-0.0184 (0.443)
Open.Primary	
PAN Share 2012	3.962* (1.920)
Constant	-4.801*** (1.103)
Observations	300

Standard errors in parentheses

Closed Primary is the reference category.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 4.5: Distribution of PAN Performance in 2012



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