

Political Brokers: Partisans or Agents? Evidence from the Mexican Teacher's Union*

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Abstract: Political brokers mobilize voters all over the world, yet little is known about what motivates them to do so. This paper theorizes about two drivers of brokers' efforts: (1) incentives – monetary rewards or sanctions – and monitoring and (2) partisan attachment. We examine our theory using data on the Mexican National Educational Workers Union (SNTE), Latin America's largest union and a well-known political machine. Consistent with the role of teachers as brokers, we find that the vote share of parties supported by the SNTE machine is higher in polling stations located in schools. This effect is absent when teachers are asked to mobilize voters in support of a party for which they have no partisan attachment, and is uncorrelated with the union's monitoring capacity. This suggests that partisan attachment, rather than incentives and monitoring, explains the SNTE's effectiveness as a political machine.

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1 Introduction

In many developing countries, politicians and political parties rely on political brokers as crucial intermediaries between themselves and voters. Brokers are responsible for mobilizing voters through clientelistic and vote-buying strategies that are critical to electoral success. However, while recent work has documented the electoral impact of brokers (Larreguy, 2012; Rueda, 2015; Cantú, 2016; Larreguy, Marshall, and Querubin, 2016), as well as the different strategies they pursue to mobilize voters (e.g., see Auyero, 2000; Diaz-Cayeros, Estevez, and Magaloni, 2016; Mares and Young, 2016), we have little understanding of the drivers of brokers' efforts. This limits our ability to comprehend the politics of contexts in which clientelism plays an important role in shaping electoral outcomes.

This paper theorizes that there are two main drivers of brokers' efforts. First, parties often incentivize brokers with pecuniary rewards or sanctions that are conditional on brokers' observed mobilization efforts. The party–broker relationship is often subject to moral hazard: whenever brokers' electoral interests are not necessarily aligned with those of the party, brokers will have an incentive to shirk. Thus, parties must be able to monitor their brokers' mobilization performance in order to enforce their efforts, and either withhold rewards from or impose costly sanctions on brokers who shirk or reward those who effectively mobilize voters. This is particularly relevant, for example, in contexts with hired political brokers (Larreguy, 2012; Larreguy, Marshall, and Querubin, 2016) who, absent any monitoring, would exert little or no effort in mobilizing voters.

The second main driver of brokers' efforts may be that they are motivated to mobilize voters due to a *partisan attachment* originating from ideological ties or personal material interests in the success of the party, due, for example, to career concerns. Whenever the electoral interests of the party and the brokers are aligned, moral hazard is less of a problem and brokers should be motivated to exert effort even if there are no monitoring mechanisms in place. Understanding the ultimate drivers of political brokers is essential to comprehending the extent of clientelism across different political machines, parties, and other political

organizations – and how it should vary over time with changes in the political system.

This paper uses the Mexican National Educational Workers Union (SNTE), the largest union in Latin America, to highlight the implications of our theory. The SNTE is an ideal organization in which to study the motivation of brokers for several reasons. There is widespread anecdotal evidence that it operates as a political machine. Figures from the popular press suggest that its leadership uses more than 320,000 teachers (of the 1.4 million teachers who are affiliated with the SNTE) as political brokers to mobilize voters to support aligned candidates (Solano, 2009). Historically, the SNTE and its members have been associated with the Institutional Revolutionary Party (PRI). Under PRI governments and the SNTE leadership of Elba Esther Gordillo between 1989 and 2013, union members enjoyed a substantial improvement in salaries and employment conditions. This institutionalized alliance between the SNTE and the PRI gave the union (and, in particular, Gordillo) considerable power to distribute rents among teachers. Teachers thus became politically aligned with the PRI as well as subject to the control of the SNTE leadership, which exercised great discretionary power to allocate rents and monitor members' political activities. Since its efficacy as a political machine may thus originate from both the attachment of its members to parties aligned with the union and the control its leaders exerted over teachers via incentives and monitoring, the SNTE is an ideal organization to highlight the implications of our theory.

In order to empirically assess the extent to which brokers' success in the SNTE context is due to both partisan attachment and the capacity of the union's leadership to incentivize and monitor their efforts during elections, we develop a novel empirical strategy to estimate the electoral impact of the SNTE machine on electoral outcomes. To that end, we exploit two main sources of variation. First, we use variation over time in the alliances between the SNTE leadership and different parties for specific offices. While the SNTE leadership has historically supported the PRI, in 2005 it created its own party – the New Alliance Party (PANAL) – following Gordillo's exit from the PRI. Since then, the PANAL has put forward

its own candidates for congressional and presidential elections. However, for the presidential races – in which the PANAL stands no chance of success – it has unofficially forged alliances with other parties. Second, we also exploit variation in the location of polling stations – particularly whether they are located in schools – since this facilitates the role of teachers as political brokers in various ways. First, since teachers often serve as party representatives or election officials in the schools where they work, they can more closely monitor/influence their students’ parents’ voting decisions on election day. Second, research suggests that parents are more likely to respond to teachers’ political persuasion (even absent monitoring or coercion) when they vote in a place that they closely associate with their children’s teachers – and thus their authority.

We find that the SNTE machine has a significant impact on electoral outcomes. These results are robust to the inclusion of municipality or precinct fixed effects. Moreover, all our specifications include state-specific time controls to account for possible state-level institutional differences in polling station allocation. We also perform additional exercises to document that our estimates capture the role of teachers as political brokers and not other confounding characteristics of voters or polling stations located in schools.

Next, we explore the motivating forces of the teachers’ work as brokers that underlie the electoral effect of the SNTE that we estimate. Are unionized teachers effective brokers because SNTE leaders are able to monitor them? Do teachers mobilize parents to vote for parties supported by SNTE leaders because they are motivated to do so by partisan attachment?¹ While the qualitative accounts that we provide in Section 3 suggest that both motivating forces might be at play, there is no quantitative evidence assessing their relevance. To test the importance of monitoring, we follow Larreguy, Marshall, and Querubin (2016)

¹The notion of SNTE teachers’ partisan attachment to different parties varies over time. In 2000, teachers’ attachment to the PRI responded to both a retrospective alignment of their interests with those of the party’s policies and the fact that the PRI offered union members the possibility to pursue a political career. From 2006 onward, attachment to the PANAL was also driven by an ideological alignment with the party’s platform and career incentives (after this time, most SNTE teachers interested in a political career usually pursued it through PANAL). Finally, teachers’ partisan attachment to the PRI in 2012 was due to the historical alignment of interests rather than career concerns, as the party no longer offered the same possibilities for teachers to pursue a political career.

and exploit quasi-random variation in the number of polling stations at the precinct level. As explained in Section 6, an additional polling station facilitates the ability of SNTE leaders to use polling station-level electoral outcomes to monitor and reward teachers. However, we find no evidence that an additional polling station in a precinct affects our estimates of the SNTE's electoral impact, which suggests that, to the extent that we can measure it, monitoring is unlikely to explain teachers' effectiveness as SNTE political brokers.

To test the importance of partisan attachment, we exploit the identity of the party that SNTE leaders requested teachers to mobilize voters for. While in 2000 and 2012 SNTE leaders unofficially supported the PRI in the presidential election, in 2006 they unofficially supported the National Action Party (PAN). The PAN's political platform differs noticeably from that of the PRI, the party with which teachers have traditionally been affiliated. If the partisan attachment of SNTE-affiliated teachers is the underlying motive behind their efforts as brokers, we should find no electoral impact of the SNTE machine in 2006, and indeed we do not.²

Our main contribution is providing a conceptual distinction between two important drivers of brokers' efforts and suggesting an empirical approach to assessing their empirical relevance in the case of a machine where *a priori* both drivers could be at play. The SNTE is therefore an example of a case in which both of the two main sources of brokers' efforts might play a role, which allows us to propose an empirical strategy to test for their importance in that specific context. Naturally, our specific empirical findings for the SNTE should not apply to other types of political machines. Our theory precisely indicates that, in the case of political machines that rely on hired brokers with relatively weak partisan links, it is likely that short-term monetary rewards and monitoring will play a more substantial role. Nonetheless, partisan attachment as a driver of brokers' efforts should be an important explanatory variable when explaining the success of political machines that rely on brokers with historical attachment to the parties for which they work.

²Incidentally, this allows us to question the widely held belief that the SNTE played a critical role in the PAN's presidential victory in 2006.

Understanding the ultimate drivers of brokers' efforts is essential to appreciating the electoral impact of various political machines as well as their importance over time. For example, it may help explain the survival and persistent strength of political machines that are traditionally attached to particular parties, even in contexts where those parties lose incumbency. Despite gaining access to resources to incentivize political brokers, newly elected parties find it very hard to co-opt or gain their support if the brokers have traditionally been attached to other parties. Examples of such phenomenon include Argentina (Calvo and Murillo, 2004), Mexico (Larreguy, 2012), Indonesia, Korea and Taiwan (Slater and Wong, 2013).

2 Related Literature and Theoretical Argument

Our paper has links to various literatures. It is naturally related to the work on clientelism that studies how political machines and brokers mobilize and persuade voters via coercion or targeted benefits.³ One strand of this literature focuses on the relationship between brokers and voters. Some scholars study the various strategies used by brokers to mobilize voters including material incentives (e.g., money or favors (Auyero, 2000) and access to government programs (Diaz-Cayeros, Estevez, and Magaloni, 2016)) or violence and intimidation (Robinson and Torvik, 2009; Cruz, 2013; Mares and Young, 2016).

Others study the reasons why voters comply with brokers; some argue that they do so out of self-interest or partisan attachment (Calvo and Murillo, 2013), or due to reciprocity towards brokers (Finan and Schechter, 2012; Lawson and Greene, 2014). Finally, the studies by Gingerich and Medina (2013), Rueda (2015), and Smith and Bueno de Mesquita (2012) look at the monitoring mechanisms employed by brokers to overcome the secrecy of the ballot. While we present some qualitative evidence on the mechanisms teachers use to mobilize parents, the focus of our paper is not the broker–voter relationship. Rather, we complement

³Stokes, Dunning, Nazareno et al. (2013) and Kitschelt and Wilkinson (2007) provide a broad overview of clientelistic practices in developing countries.

this literature by focusing on the driving motives of brokers rather than those of voters.

Another strand of the literature on clientelism focuses on issues governing the relationship between parties and brokers. Notably, Stokes, Dunning, Nazareno et al. (2013) studies the adverse selection problems that parties face when hiring brokers, and Camp (2012) looks at the collective action problem among brokers. Larreguy (2012) and Larreguy, Marshall, and Querubin (2016), in turn, study agency problems between parties and brokers, and emphasize parties' use of electoral outcomes at low levels of aggregation – such as the polling station or precinct – to elicit brokers' efforts. Similarly, Szwarcberg (2012) shows that party leaders can use rally attendance to monitor brokers' efforts to mobilize voters. We argue that monitoring is one of the main drivers of brokers' efforts, particularly in the case of hired brokers with limited attachment to the party. An illustrative example from Mexico is the brokers for hire who mobilize voters to turn out on election day, whose rewards are tied to the electoral performance in the precincts in which they operate (Larreguy, Marshall, and Querubin, 2016). Another example is those who Holland and Palmer-Rubin (2015) refer to as *organizational brokers*, who trade the votes of the members of the interest associations they represent for concessions, and often renegotiate ties to political parties between election cycles.

However, brokers often have a long-standing relationship and political alignment with the party for which they work (Calvo and Murillo, 2004; Stokes, Dunning, Nazareno et al., 2013; Szwarcberg, 2015). We thus argue that brokers' inherent motivation to mobilize voters out of partisan attachment, even in the absence of monitoring, represents another important driver of their efforts. Recent work focuses on such contexts and studies voter mobilization by individuals whose incentives are aligned with those of the party, for example, if they want to pursue a political career of their own (Szwarcberg, 2015). Illustrative examples also come from Mexico, where the Cardenist Peasant Central (CCC) has traditionally been associated with the Party of the Democratic Revolution (PRD) (Palmer-Rubin, 2016), while the National Peasant Confederation (CNC) has traditionally been attached to the PRI (Larreguy, 2012).

Members of the CCC and CNC have often occupied important party positions, as well as elected offices, under the umbrella of their corresponding parties.

Finally, the literature on patronage has studied how the nature of the party–broker relationship is affected whenever brokers are (or have the prospect of becoming) public servants thanks to their relationship with the parties they work for, as is the case for SNTE-affiliated teachers. Parties can use discretion in the allocation of jobs in the bureaucracies they control to provide incentives to brokers *via* either promises of new or better jobs or threats of job loss. Moreover, whenever brokers are government employees, they enjoy direct access to government resources that, together with their day-to-day interaction with (and knowledge of) members of the community, facilitates their implementation of clientelistic strategies (Zarazaga, 2014; Oliveros, 2016).

As previously stated, our main theoretical contribution is to provide a conceptual distinction between the main drivers of brokers’ efforts. The existing literature either abstracts from these motives, or assumes that either partisan attachment or incentives and monitoring dominate, often in contexts in which both types of motives may play an important role. Importantly, we do not study whether incentives to brokers take the form of monetary payments, public employment, or coercion/sanctions, but rather emphasize that monitoring is essential for the enforcement of these incentives in the presence of moral hazard regardless of the form they take. Similarly, we do not study the specific reasons behind brokers’ attachment to a specific party, which can either be ideological or reflect career concerns tied to the party’s electoral performance.

These partisan linkages between brokers and parties often combine these two reasons and are the result of material benefits provided by the party over the long run, as illustrated by the case of SNTE teachers and the PRI. However, these long-term benefits are distinct from the short-term incentives offered to brokers for voter mobilization around elections – and for which monitoring plays a critical role. In sum, we argue that a thorough understanding of any given political machine’s effectiveness must assess the extent to which its brokers have been

historically attached to a particular party, as well its capacity to put in place enforcement mechanisms that rely on monitoring.

Finally, our paper is indirectly related to the literature on the political role of labor unions.⁴ We focus here on the drivers of brokers' efforts and use the SNTE only as an example. While our specific quantitative results for the SNTE may not apply to other unions, we believe our theory regarding the driving motives of brokers' efforts is broadly applicable. Moreover, most existing papers on the electoral role of unions focus on the political pressure that unions exert and the differential voting behavior of their members, rather than on their role as political machines that mobilize other (non-unionized) sectors of society.

3 Background

3.1 The SNTE as a Political Machine

The SNTE is the largest union in Latin America, with over 1.4 million members. Since it was founded in 1949, it has functioned under the corporatist control of the PRI (Chapman, 2012). In recent decades, its history has been tightly linked to the trajectory of Elba Esther Gordillo, who served as its main leader from 1989–2013, when she was imprisoned for embezzling USD 160 million. As described below, Gordillo was responsible for many of the wage and benefit gains for SNTE-affiliated teachers, as well as for the shifting political alignments of the union.

3.1.1 Political Alignments of the SNTE and Teachers' Partisan Attachment

Up to 1992, when the union's statutes were revised, it was compulsory for all SNTE teachers to be formally registered as PRI supporters (Cortina, 1989). The SNTE regularly mobilized its teachers during elections to gather support for the PRI, and the party became an important vehicle of political ascendancy for the union's leaders.⁵

⁴See Eaton and Chambers-Ju (2014), Levitsky (2003), and Murillo (2001) for the case of Latin America and Radcliff and Davis (2000), Feigenbaum (2013) for studies for more developed democracies.

⁵In 1982, for example, the SNTE had 25% of the seats in the Chamber of Deputies allocated to the PRI's popular organizations (Cortina, 1989).

Gordillo was very instrumental in cementing the strong alliance between the PRI and the SNTE. As we document in Section A.1.1 in the Appendix, most wage increases and improvements in working conditions for teachers took place under her leadership and PRI governments that helped cement teachers' loyalty to their union's leader and their partisan attachment to the PRI.

In 2005, however, the traditional alliance between the SNTE and the PRI suffered a rupture when Gordillo was expelled from the party after engaging in a political war with the future PRI presidential candidate, Roberto Madrazo. After leaving the PRI, Gordillo founded her own political party – the PANAL – to participate in the 2006 federal elections, and she steered the SNTE political machine towards her new party. Teachers were naturally aligned with the PANAL, not only out of loyalty to Gordillo, but also because the party's platform looked after their interests. The Mexican presidency was no longer a feasible goal for Gordillo, who shifted her focus (and that of the PANAL) in the federal election to the share of federal representatives and senators that is chosen through proportional representation.⁶ However, Gordillo saw a way to profit from the votes that the SNTE political machine could deliver in presidential elections: by selling SNTE votes to other parties' candidates.

Gordillo allegedly sold the support of the SNTE machine to the PAN candidate Felipe Calderón in 2006, and to the PRI candidate Enrique Peña Nieto in 2012. According to the media and political analysts, these alliances, which we document in detail in Section A.1.2 in the Appendix, played a critical role in the electoral outcome, particularly in 2006. However, these claims have not been backed by empirical evidence, and it is uncertain whether teachers were motivated to mobilize voters for the PAN, to which they had very little historical attachment. As a journalist told us during an interview, “there are probably less than 5 teachers in the country that identify themselves with the PAN.”

The shifting alliances of the SNTE leadership from the PRI towards parties such as the

⁶Mexican congressmen are chosen through a mixed system of plurality voting (PV) and proportional representation (PR). Of the 500 representatives, 300 are chosen through PV and 200 by PR. Out of 128 senators, 96 are elected by PV, and 32 through PR.

PAN, the platform of which significantly differs from that of the PRI and the PANAL, allow us to assess the importance of partisan attachment in political brokers' motivation to mobilize voters.

3.1.2 The SNTE's Control and Monitoring of Teachers

Since its formation, the SNTE leadership has exploited the far-reaching structure of the union in order to turn it into a political machine. As we describe in detail in Section A.1.3 in the Appendix, the lack of transparency in the teacher hiring process, and the discretion that the SNTE leadership enjoys over the allocation of thousands of jobs and other benefits, allow it to use coercion and monitoring to enforce teachers' efforts as political brokers. The union makes teachers' job security dependent on their success in working for the SNTE machine and delivering enough votes (Cantú, 2009; Rojas, 2012). Various strategies are allegedly used to monitor and enforce teachers' performance as brokers. For example, in the so-called 10 x 1 strategy, teachers are requested to provide copies of the voting credentials of ten parents, whose turnout is later monitored at the polling stations by the SNTE's affiliates (Cantú, 2009; Rojas, 2012). If the teachers in charge of mobilizing the parents at a particular polling station are unable to deliver a predetermined amount of votes, the SNTE investigates and punishes those who did not deliver (Del Valle, 2009; Coronel, 2012).

3.2 Teachers as Brokers

The role of teachers as political brokers is nicely summed up by Ornelas (2012), who cites a SNTE leader referring to teachers as "electoral plumbers." Effective political brokers need to be close to their community and identify which voters are more likely to respond to their influence (Auyero, 2000; Finan and Schechter, 2012; Zarazaga, 2014). Teachers do so in many different ways, both during the course of their jobs and within the community. As community leaders (Cantú, 2009), they exert informal authority and can influence the voting decisions of other citizens. Teachers are held in high regard by parents, who respect their opinions

and take cues from them regarding the candidates who best suit their interests. In addition, and unlike other types of public servants, teachers interact with parents on a regular basis in school meetings and community events. They also engage in broader, coordinated strategies of voter mobilization. Under Gordillo, the SNTE organized “brigades of political education” comprised of groups of 10 teachers who would use school meetings to instruct parents on how to vote (and who to vote for), distribute political promotional material on school grounds, and mobilize the parents of schoolchildren on election day (Loyo-Brambila, 2008).⁷

Beyond the political propaganda and persuasion teachers use to try to influence parents’ voting decisions, there is also evidence of more coercive and openly illegal practices. For example, the SNTE takes advantage of teachers’ access to parents’ residential addresses to target them for political purposes (Alianza Civica, 2009). Similarly, vehicles of the Mexican Public Education Secretary are used to transport parents to vote on election day, a practice known as *acarreo*, which is illegal in Mexico (Larreguy, Marshall, and Querubin, 2016). School directors also mobilize parents with threats that they will not enroll their children the following academic year if they do not turn out to vote for the indicated candidate (Llaven, 2012).

3.2.1 Why the Location of Polling Stations in Schools Matters

Teachers’ influence over parents, as well as their ability to engage in voter coercion, is enhanced whenever their students’ parents vote at the same school (Galán, 2012). A broad psychology literature documents that behavior and response to authority are context and situation specific (Ross, Nisbett, and Gladwell, 2011). Parents may be primed to respond to a teacher’s authority and persuasion when they vote in the location that they associate with the teacher’s influential role in the community. More recent work documents that polling

⁷The teachers also operate as political brokers outside of schools, by organizing door-to-door campaigns to promote their candidates. A common strategy is known as “4x4,” in which teachers mobilize members of the community to vote for the SNTE’s favored political party in the four local offices: governor, mayor, local councilman, and Chamber of Deputies. They also organize political events in which more standard clientelistic activities take place such as raffles, provision of free basic medical and dental services, and free haircuts (Alianza Civica, 2009).

station location affects voters' behavior. A study of the 2000 elections in Arizona by Berger, Meredith, and Wheeler (2008) found that parents who vote in schools were more likely to support an initiative to increase education spending.

Moreover, the allocation of polling stations to schools facilitates SNTE's ability to select teachers as party representatives, which further enhances their ability to influence voters. The electoral law establishes that political parties can register two party representatives and a substitute per polling station.⁸ PANAL has an advantage over other parties in its ability to appoint its own brokers as party representatives, thanks to the ubiquitous presence of SNTE teachers across the country, particularly when polling stations are situated in schools in localities where teachers live close by. This implies that, once selected as party representatives, teachers can operate more effectively as brokers when polling stations are placed in schools in localities where teachers have influence.

The allocation of polling stations to schools also allows SNTE to place teachers as polling stations officials to further enhance their ability to influence voters. Election officials are randomly selected in a series of lotteries conducted in every electoral district.⁹ If they accept the invitation to serve as officials, they must attend a training session that often takes place at the polling station location. When the training is conducted on school premises, school directors and teachers can identify parents who have been selected to act as election officials, and persuade them not to show up on election day (Franco, 2012; Rivera, 2012).

While the Mexican electoral law establishes that absent polling station officials should be replaced by other electors standing in the voting line, school directors and teachers often abuse their authority to act as replacements (Raphael, 2007), a practice associated with electoral fraud (Cantú, 2014). Importantly, polling station officials interact with voters during the voting process, which reinforces their authority and influence.¹⁰ The role of teachers as

⁸Their rights include setting up the polling station, denouncing irregular activities throughout election day, and presenting written notice of these incidents after the vote count.

⁹More details on the method of selecting election officials can be found in Section A.1.4 in the Appendix.

¹⁰They are responsible for asking voters for their voting credentials, checking it against the list of voters registered at the polling station, and marking their thumb with ink to signal they have voted to prevent double voting.

election officials further facilitates their ability to monitor parents' turnout decisions.

However, beyond their potential role as party representatives or election officials, teachers have easier access than other citizens to school premises, and the law does not prevent them from being present in schools on election day. This also facilitates their overall influence over parents. For example, electoral observers report teachers closely monitoring parents standing in line to vote and engaging in outright vote buying on school premises (Alianza Civica, 2009).

Due to the nature of the anticipated empirical strategy, a natural concern is that the allocation of polling stations to schools might be systematically manipulated by or correlated with other variables. However, the rules regarding the allocation of polling stations within precincts, which we explain in detail in Section A.1.5 in the Appendix, suggest this is not a major concern. Moreover, we always rely on a within-state-year variation by including state-year fixed effects in all specifications, which allows us to deal with most such concerns.

4 Empirical Strategy and Data Description

In this section we present an empirical strategy aimed at testing and measuring the electoral impact of the SNTE machine. Our goal is to provide evidence in Section 5 that SNTE-affiliated teachers do indeed operate as political brokers, and to quantify their electoral impact. Then, in Section 6, we use this measure to assess the relevance of monitoring, as well as partisan attachment as main drivers of broker's efforts.

4.1 Empirical Strategy

The empirical strategy to test and measure the electoral impact of the SNTE machine exploits two sources of variation: (1) the official and unofficial alliances that SNTE leaders have established with various parties for different races over time, which have determined which parties the SNTE machine has *de facto* supported and (2) the fact that locating polling

stations in schools makes it easier for SNTE-affiliated teachers to operate as political brokers.

Intuitively, our empirical strategy exploits how patterns of split-ticket voting for president and the Chamber of Deputies differentially follow the political alliances of the SNTE leadership in polling stations located in schools. For example, in the 2006 election, while PANAL (the party officially supported by SNTE leaders) put forward its own candidates for both offices, the SNTE leadership formed an unofficial alliance with the PAN's candidate for the presidential race. Thus, the SNTE machine *de facto* supported the PAN's (not the PANAL's) presidential candidate. Split-ticket voting consistent with unofficial SNTE alliances would entail voting for PANAL for the Chamber of Deputies, and PAN for president.

Denote *Gap within Official* as the difference in the vote shares of candidates from the party officially supported by SNTE leaders with and without the *de facto* support of the SNTE machine. Following the above example, in 2006 this corresponded to PANAL's vote share for the Chamber of Deputies race minus its vote share in the presidential race. A larger *Gap within Official* in polling stations located in schools is then consistent with teachers influencing parents to engage in split-ticket voting, reflecting the alliances of SNTE leaders, and provides a measure of the electoral impact of the SNTE machine on electoral outcomes.

The candidates who were *officially* supported by the SNTE leadership were affiliated with the PRI in 2000, and the PANAL in 2006 and 2012. For elections for representative to the Chamber of Deputies, the candidates officially supported by SNTE leaders always received the *de facto* support of its machine. For presidential elections, however, only the PRI candidate who was officially supported by SNTE leaders in 2000 was also *de facto* supported by its machine. In 2006 and 2012, however, SNTE leaders made unofficial alliances and its machine *de facto* supported the PAN and PRI presidential candidates, respectively. We define an indicator for candidates from parties that the SNTE machine *de facto* supported. The coding of the party officially supported by SNTE leaders and the *de facto* support of the SNTE machine is summarized as follows:

Year	2000		2006		2012	
Race	P	R	P	R	P	R
Party officially supported by SNTE leaders	PRI	PRI	PANAL	PANAL	PANAL	PANAL
<i>De facto</i> support of the SNTE machine	1	1	0	1	0	1

where P and R indicate president and representative to the Chamber of Deputies, respectively.

We then test and measure the electoral effect of the SNTE machine using a regression of the following form:

$$y_{pemsto} = \beta_0 + \beta_1 \cdot dsm_{to} + \beta_2 \cdot pss_{pemst} + \beta_3 \cdot dsm_{to} \cdot pss_{pemst} + \eta_{es} + \gamma_{st} + \epsilon_{pemsto}, \quad (1)$$

where y_{pemsto} is the vote share of the party officially supported by SNTE leaders in polling station p in precinct e in municipality m in state s in year t for office o , dsm_{to} is an indicator that the candidate running for office o in year t receives the *de facto* support of the SNTE machine, and pss_{pemst} indicates that the polling station is located in a school. In our most demanding specification we include precinct fixed effects, η_{es} .¹¹ We also control for state-year fixed effects, γ_{st} , to account for possible state-level institutional differences in polling station allocation.

Notice that *Gap within Official* corresponds to β_1 for polling stations not located in schools, and to $\beta_1 + \beta_3$ for polling stations located in schools. β_3 then captures the effect of the *de facto* support of the SNTE machine.¹²

4.2 Data Description

As an outcome variable, we use election data at the polling station level for the federal races for president and Chamber of Deputies for the years 2000, 2006, and 2012. The data come

¹¹We also report regressions with state and municipality fixed effects.

¹²The inclusion of the 2000 election is important such that dsm_{to} does not simply capture a difference between legislative and presidential elections. Moreover, it helps to estimate state-specific time trends that might correlate with both our dependent and independent variables.

from the “Elections in Mexico” website, and contained content from the Federal Electoral Institute (IFE) and various state electoral institutes.¹³

To identify whether a polling station was located in a school, we used data provided by the IFE in a Freedom of Information law request on the location of each polling station during the federal elections in 2000, 2006, and 2012.¹⁴

We also used several studies and newspaper articles to code the school sections where teachers object to federal leaders’ control of the SNTE, which we use in Section 5.2. We mainly obtained data on the local school sections under the control of either the CNTE or independent state teachers’ unions from Secretaría de Educación del Distrito Federal (2008), Santibañez and Jarillo (2008) and Simonnet (2012).

Finally, we also requested the geographic coordinates and opening year of all schools in Mexico from the Mexican Public Education Secretary via a Freedom of Information request. We use this information in Section 5.2 to compute the share of voters that is likely to vote in a polling station located in the school their children attend.

The descriptive statistics for our main dependent and independent variables of interest are reported in Table A.1 in the Appendix.

5 Results

5.1 How Big is the Electoral Impact of the SNTE Machine?

The regression results based on Equation (1) are reported in Table 1. Columns 1–3 include state, municipality, and precinct fixed effects, respectively. The positive and statistically significant estimates of β_3 indicate that candidates from parties *officially* supported by SNTE leaders enjoy a 2pp larger vote share whenever they are *de facto* supported by the SNTE machine. The point estimates are stable across the different specifications, which suggests

¹³<http://www.eleccionesenmexico.org.mx/>.

¹⁴The information was requested through <https://ciudadania.ife.org.mx/infomex/ActionInitSAILoginINFOMEX.do>.

that our estimates are not being driven by omitted variables at the municipal or precinct level. Moreover, once we include precinct fixed effects, the small and statistically insignificant estimate of β_2 suggests that whether the polling station is located in a school has no effect on candidates from parties that are not *officially* supported by SNTE leaders.

These findings provide evidence of the SNTE’s importance as a political machine, and suggest that our results do not simply reflect the underlying preferences of voters from polling stations located in schools. Rather, our results suggest that individuals voting in schools are more likely to support the candidates that the SNTE leadership wants them to support (and have instructed teachers to deliver votes for) than candidates from the party *officially* aligned with the union. Additionally, relative to the average electoral support enjoyed by the PANAL (4% of the votes), the estimated effect is sizable. Our estimates of the electoral impact of the SNTE machine explain roughly half of the PANAL’s vote share.

[Table 1 About Here]

5.2 Corroborating the Role of the SNTE Machine and Teachers as Political Brokers

In this section we report results from three additional exercises that show that our estimates in Table 1 indeed reflect the electoral role of the SNTE machine and, in particular, the work of teachers as political brokers in delivering the votes of their students’ parents. We describe each exercise more carefully in the Appendix but summarize the intuition and results in this section.

First, recall that in presidential elections, where the PANAL candidate has a negligible chance of winning the election, SNTE leaders make unofficial alliances with candidates from other parties to whom they direct the *de facto* support of their electoral machine. We use an empirical approach analogous to the one described by regression Equation (1) but where y_{pemsto} is instead the vote share of the party unofficially supported by SNTE leaders. In

Section A.3.1 in the Appendix, we show that the votes that the candidates of the parties officially supported by SNTE leaders lose when they do not receive the *de facto* support of the SNTE machine go to the candidates of the parties that SNTE leaders supported unofficially.

Second, to further show that our estimates capture the role of the SNTE machine, we exploit the fact that some school sections are under the control of dissident teacher unions. In Section A.3.2 in the Appendix, we show that in states where teachers are not under the control of SNTE leaders, *Gap within Official* exhibits no difference in polling stations located in schools.¹⁵

Third, in Section A.3.3 in the Appendix, we show that the location of polling stations in schools effectively captures the influence of SNTE teachers over the parents of their students, as opposed to other confounding characteristics of individuals who vote in schools. To that end, for each polling station we compute the fraction of precinct voters whose polling station is likely to be located in their children’s school. We then show that *Gap within Official* is higher in polling stations located in schools, but only if a large enough fraction of voters is likely to send their children to that school. This is consistent with the effect of the SNTE machine being driven by the teachers’ influence over the parents of their students.

Finally, in Section A.3.4 in the Appendix, we rule out the possibility that our results simply reflect differential strategic voting of those voting in schools, rather than the role of teachers as political brokers. In particular, we show that the differential patterns of split-ticket voting that we exploit for identification are not present for other small parties that are unrelated to the SNTE and stand a very small chance of winning the presidential election.

¹⁵Relatedly, while we cannot assess whether a polling station is located in a public or private school for every election year in our sample, we find that our estimates become slightly larger once we restrict our sample to polling stations located in schools *estimated* to be public (based on an imputation of the public school using information for the year 2000). This provides further evidence of the role of SNTE teachers as brokers since they are unlikely to exert any influence on parents in private schools.

6 What Motivates Teachers to Act as Brokers?

Table 1 and Appendix Tables A.2-A.4 document the robust electoral impact of the SNTE machine and the role of teachers as political brokers in delivering their students' parents' votes. In this section we explore the underlying forces that lead SNTE teachers to operate as effective political brokers: Is it because of SNTE leaders' capacity to monitor them? Or is it because of teachers' attachment to parties supported by SNTE leaders?

6.1 Testing for the Importance of Monitoring

We first assess the quantitative importance of monitoring on the electoral effect of the SNTE machine, a driver that may be relevant, as the qualitative evidence provided in Section 3.2 suggests. The recent theoretical literature shows that it is possible to monitor political brokers when electoral outcomes are observed at a low level of aggregation (Larreguy, Marshall, and Querubin, 2016; Rueda, 2015). Larreguy, Marshall, and Querubin (2016) further show that adding a polling station provides an additional signal about brokers' performance and facilitates their monitoring. The intuition is that parties are better able to separate brokers' efforts from aggregate electoral shocks when they see more signals about brokers' work.

[Figure 1 About Here]

Following Larreguy, Marshall, and Querubin (2016), we leverage exogenous variation in the presence of an additional polling station in an electoral precinct – and thus the capacity of the SNTE leadership to monitor teachers – that arises from Mexico's electoral rules. Specifically, as Figure 1 shows, once the registered electorate in a precinct exceeds 750 (or any such multiple), an additional polling station is added and voters are reallocated equally between all polling stations.¹⁶ We thus test whether the split of an electoral precinct into

¹⁶Each new polling station must be located in the same building or an adjacent building, and voters are divided alphabetically (by surname) between polling stations. The addition of a new polling station

an additional polling station leads to a larger effect of the SNTE machine. To do this, we interact our main regressors in Equation (1) with an indicator of polling station split in the following regression:

$$\begin{aligned}
y_{pemsto} = & \beta_0 + \beta_1 \cdot dsm_{to} + \beta_2 \cdot aps_{emst} + \beta_3 \cdot dsm_{to} \cdot aps_{emst} + \beta_4 \cdot pss_{pemst} + \beta_5 \cdot dsm_{to} \cdot pss_{pemst} \\
& + \beta_6 \cdot aps_{emst} \cdot pss_{pemst} + \beta_7 \cdot dsm_{to} \cdot aps_{emst} \cdot pss_{pemst} + \eta_{es} + \gamma_{st} + \sum_{i=1}^{10} \rho_{pemst}^i + \epsilon_{pemsto},
\end{aligned}
\tag{2}$$

in a sample restricted to +/- 20 voters around the threshold that determines the creation of each additional polling station, as in the baseline specification in Larreguy, Marshall, and Querubin (2016). aps_{emst} is an indicator that precinct e , in municipality m , in state s and election year t was split into an additional polling station, ρ_{pemst}^i for $i = 1, \dots, 10$ are indicators for whether the precinct is around threshold i , and the remaining variables follow the same definition as in Equation (1).¹⁷ The coefficient of interest is β_7 , which tests for the differential effect of the SNTE machine when there is an additional polling station in a precinct, and thus shows how such an effect varies with increased monitoring ability by the SNTE leadership.

Thanks to the inclusion of indicators that each precinct is around threshold i and restricting the sample to precincts close to a threshold, Equation (2) is effectively a regression discontinuity (RD) design that compares the electoral returns of polling stations in precincts that are barely above or below the threshold required to split precincts into more polling stations. This guarantees that precincts on either side of the threshold are comparable to each other, and only differ in the number of polling stations.

To illustrate the empirical validity of our test, in Appendix Table A.6, we report the

therefore does not affect the distance that voters must travel to vote. Given that surname does not predict voter behavior in Mexico (Cantú 2014), the assignment of voters to polling stations is exogenous with respect to our voting outcomes.

¹⁷Threshold $i = 1$ is at 750 registered voters, $i = 2$ at 1,500 registered voters, and so on until threshold $i = 10$ at 7,500 registered voters.

estimates for the effect of an additional polling station on overall turnout and the vote share of each of the three major Mexican parties for the legislative elections between 2000 and 2012. This essentially reproduces the results reported in Larreguy, Marshall, and Querubin (2016) that illustrate how an additional polling station translates into a higher vote share for the PRI and PAN, parties known to monitor hired brokers who mobilize voters on their behalf.

Before turning to the estimates of Equation (2), reported in Panel B of Table 2, we first provide estimates on the role of monitoring that abstract from whether the polling station is located in a school. We simply drop pss_{pemst} and its interactions from Equation (2), and test whether the increase in the vote share of parties with the *de facto* support of the SNTE machine is higher when the precinct has an additional polling station. This specification parallels that of Larreguy, Marshall, and Querubin (2016) and does not account for the fact that the SNTE machine had a much stronger presence and effectiveness in polling stations located in schools. Panel A shows the results of this specification. The estimates of β_2 and β_3 are small and statistically insignificant, which suggests that, on average, monitoring plays a limited role in incentivizing brokers who mobilize voters for the candidates with *de facto* SNTE leadership support.

However, these estimates may naturally mask variation in the presence and effectiveness of the SNTE's brokers in polling stations located in schools. To account for this important heterogeneity and effectively test whether an improved SNTE leadership monitoring capacity leads to a greater electoral effect of the SNTE machine, the estimates of Equation (2) are reported in Panel B of Table 2. The estimate of β_7 is close to zero and statistically insignificant. This is robust to the inclusion of municipality and precinct fixed effects. The absence of a differential effect of the SNTE machine across precincts with an additional polling station suggests that, to the extent that we can measure it, monitoring is unlikely to be the driving force behind teachers' effectiveness as brokers.

[Table 2 About Here]

6.2 Testing for the Importance of Partisan Attachment

Next, we test whether the partisan attachment of teachers with parties supported by SNTE leaders is an important motivation for them to exert effort as political brokers. As shown in Section 3.1.1, teachers have historically been aligned with the PRI and PANAL, but not with the PAN. Thus, if partisan attachment motivates teachers to operate as brokers, we should find no difference in *Gap within Official* in polling stations located in schools in 2006, when Gordillo unofficially offered the *de facto* support of the SNTE machine to the PAN's presidential candidate.

To test this, we first define a *No Partisan Attachment* indicator, npa_t , that takes a value of 1 in 2006, when the SNTE leadership offered unofficial support to a party with which teachers are not naturally aligned, and a value of 0 in 2000 and 2012, when the PRI was unofficially supported. We then interact our main regressors in Equation (1) with this indicator, estimating the following regression:

$$y_{pemsto} = \beta_0 + \beta_1 \cdot dsm_{to} + \beta_2 \cdot pss_{pemst} + \beta_3 \cdot dsm_{to} \cdot pss_{pemst} + \beta_4 \cdot dsm_{to} \cdot npa_t + \beta_5 \cdot pss_{pemst} \cdot npa_t + \beta_6 \cdot dsm_{to} \cdot pss_{pemst} \cdot npa_t + \eta_{es} + \gamma_{st} + \epsilon_{pemsto}. \quad (3)$$

If partisan attachment is the driving motivation of the teachers' work as brokers, we would expect $\beta_6 < 0$, suggesting a lower differential effect of the SNTE machine in polling stations in schools in 2006, when teachers were instructed to support a party to which they felt no attachment. The estimates are reported in Table 3.

The estimate of β_6 is negative and statistically significant, and fully offsets the estimate of β_3 , which captures the effect of the SNTE machine in 2000 and 2012, when teachers had an attachment to parties supported by the SNTE machine. The sum of the β_3 and β_6 coefficients is close to (and insignificantly different from) zero. This means that, in 2006, there was no significant difference in *Gap within Official* between polling stations located in schools and those not located in schools. The fact that split-ticket voting along the lines of

the alliance made by SNTE leaders in 2006 is not higher in polling stations located in schools suggests that teachers did not mobilize parents to vote for a party to which they felt no attachment. Taken together, the evidence in Tables 2 and 3 points to partisan attachment, but not monitoring, as the driving force behind teachers' efforts as brokers.

[Table 3 About Here]

7 Conclusion

While political brokers mobilize voters all over the world, little is known about what motivates them. In this article, we distinguish between two common drivers of brokers' effectiveness: (1) monitoring, essential to enforce broker's effort through both rewards and sanctions, and (2) partisan attachment. Bringing this theoretical insight to the data, we first test and measure the electoral impact of one of Mexico's most important political machines – the SNTE – and then assess the extent to which it is driven by the teachers' attachment to the parties supported by the union's leaders and by monitoring from the union's leadership.

The absence of an effect of the SNTE machine in 2006, when the union's leaders unofficially supported a party with which teachers were not aligned, suggests that partisan attachment plays a critical role in explaining the efficacy of the SNTE machine. However, we find that the monitoring capacity of the SNTE leadership, as captured by the existence of an additional polling station in an electoral precinct, does not seem to affect the machine's electoral impact.

Our empirical strategy and findings highlight the implications of our theory. Party organizations' ability to facilitate clientelistic exchanges depends on the extent to which they have access to rents and monitoring mechanisms to provide pecuniary incentives, and on whether they have historical attachments to a specific party. Understanding what drives political brokers enhances our understanding of the ability of organizations to mediate clientelistic exchanges, and how such mediation should vary over time with changes in the political

system.

While we use the SNTE only as a case study, our theory suggests that unions can have an important electoral role. This may be particularly relevant for the case of public sector unions that: have members who are traditionally aligned with particular political parties, interact with citizens on a regular basis, and are responsible for the delivery of essential public goods such as health and education. In many democracies, teachers have strong connections with politicians and political parties, and their ubiquitous presence and close interaction with citizens makes them ideal political brokers. Similarly, in many democracies it is common for teachers to be election officials and for polling stations to be located in schools. The combination of these institutional features opens the door for teachers to influence voters' choices through a variety of legal and illegal means. Some examples include India, and Thailand, where teachers have control over polling stations and are often engaged in clientelistic transactions (Beteille, 2009; Chattharakul, 2010). In Indonesia, Pierskalla and Sacks (2016) find an increase in the hiring of temporary teachers to help mobilize voters during election years.

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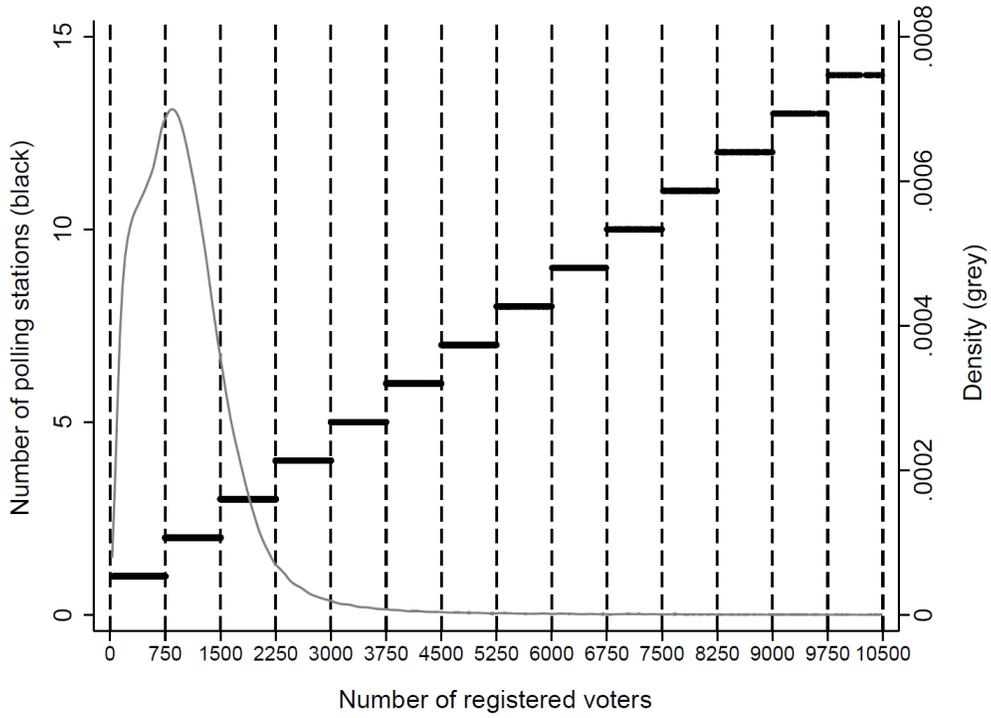


Figure 1: Number of Polling Stations as a Function of Registered Voters by Precinct

Table 1: The Effect of a Polling Station in a School and the *de facto* Support of the SNTE Machine on the Vote Share of Candidates of Parties Officially Supported by SNTE Leaders

Outcome: Vote share of candidates of parties officially supported by SNTE leaders			
	(1)	(2)	(3)
<i>De facto</i> support of the SNTE machine (β_1)	0.0174*** [0.0035]	0.0177*** [0.0034]	0.0181*** [0.0034]
Polling station in a school (β_2)	0.0016** [0.0007]	-0.0033*** [0.0011]	0.00054 [0.0052]
<i>De facto</i> support of the SNTE machine *	0.0153*** [0.0027]	0.0147*** [0.0025]	0.0141*** [0.0025]
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	669,244	669,244	669,244
R - squared	0.8213	0.8434	0.8707

Notes: In all specifications, the unit of observation is the polling station. We include state-year fixed effects, and standard errors are clustered at the state level. The outcome variable is the vote share of candidates of parties officially supported by the SNTE (the PRI in 2000, and the PANAL in 2006 and 2012). ** $p < 0.05$, *** $p < 0.01$.

Table 2: The Effect of an Additional Polling Station and the *de facto* Support of the SNTE Machine on the Vote Share of Candidates of Parties Officially Supported by SNTE Leaders (20 Registered-Voter Bandwidth)

Outcome: Vote share of candidates of parties officially supported by SNTE leaders			
	(1)	(2)	(3)
Panel A			
<i>De facto</i> support of the SNTE machine (β_1)	0.0243*** [0.0028]	0.0261*** [0.0029]	0.0281*** [0.0027]
Polling precinct split (β_2)	-0.0005 [0.0006]	0.0016 [0.0011]	-0.002 [0.0071]
<i>De facto</i> support of the SNTE machine * Polling precinct split (β_3)	0.0038 [0.0029]	0.00089 [0.0027]	-0.0024* [0.0012]
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	32,057	32,057	32,057
R - squared	0.8305	0.8841	0.9743
Panel B			
<i>De facto</i> support of the SNTE machine (β_1)	0.0162*** [0.004]	0.0193*** [0.0036]	0.0281*** [0.0028]
Polling precinct split (β_2)	-0.0013 [0.0008]	-0.00008 [0.0017]	-0.0052 [0.0071]
<i>De facto</i> support of the SNTE machine * Polling precinct split (β_3)	0.0036 [0.0045]	0.00087 [0.004]	-0.00087 [0.0013]
Polling station in a school (β_4)	0.0025** [0.0011]	-0.0028 [0.002]	0.0036 [0.0181]
<i>De facto</i> support of the SNTE machine * Polling station in a school (β_5)	0.0131*** [0.0037]	0.0109*** [0.0035]	-0.0001 [0.0023]
Polling station in a school * Polling precinct split (β_6)	0.0011 [0.0009]	0.0027 [0.0022]	0.0056 [0.0111]
<i>De facto</i> support of the SNTE machine * Polling station in a school * Polling precinct split (β_7)	0.00049 [0.0051]	0.00027 [0.0048]	-0.0025 [0.0022]
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	32,057	32,057	32,057
R - squared	0.8317	0.8844	0.9743

Notes: In all specifications, the unit of observation is the polling station. We include state-year fixed effects, and standard errors are clustered at the state level. The outcome variable is the vote share of candidates of parties officially supported by the SNTE (the PRI in 2000, and the PANAL in 2006 and 2012). Polling station split indicates that a precinct received an additional polling station. Indicators for precincts being located around each of the cutoffs that are multiples of 750 voters are omitted. ** $p < 0.05$, *** $p < 0.01$.

Table 3: The Effect of a Polling Station in a School and the *de facto* Support of the SNTE Machine on the Vote Shares of Candidates of Parties Officially Supported by SNTE Leaders by Attachment to the Party Unofficially Supported by SNTE Leaders

Vote share of candidates of parties officially supported by SNTE leaders			
	(1)	(2)	(3)
<i>De facto</i> support of the SNTE machine (β_1)	0.0048 [0.0047]	0.0054 [0.0045]	0.0059 [0.0047]
Polling station in a school (β_2)	0.00062 [0.0008]	-0.0042** [0.0016]	-0.00085 [0.0057]
<i>De facto</i> support of the SNTE machine * Polling station in a school (β_3)	0.0245*** [0.004]	0.0236*** [0.0037]	0.0229*** [0.0038]
<i>De facto</i> support of the SNTE machine * No partisan attachment (β_4)	0.0329*** [0.0056]	0.0324*** [0.0055]	0.0319*** [0.0059]
Polling station in a school * No partisan attachment (β_5)	0.0006 [0.0013]	0.00037 [0.0015]	-0.0012 [0.0018]
<i>De facto</i> support of the SNTE machine *	-0.031***	-0.0302***	-0.0294***
Polling station in a school * No partisan attachment (β_6)	[0.0055]	[0.0053]	[0.0055]
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	669,244	669,244	669,244
R - squared	0.8222	0.8443	0.8716

Notes: In all specifications, the unit of observation is the polling station. We include state-year fixed effects, and standard errors are clustered at the state level. The outcome variable is the vote share of candidates of parties officially supported by the SNTE (the PRI in 2000, and the PANAL in 2006 and 2012). “No ideological alignment” is an indicator for 2006, when the SNTE leadership unofficially supported the PAN. ** $p < 0.05$, *** $p < 0.01$.

Political Brokers: Partisans or Agents?
Evidence from the Mexican Teacher's Union

Online Supplementary Information

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A.1 The SNTE as a Political Machine: Additional Background

In this section we provide additional background information on the role of the SNTE as a political machine, as well as details from Mexican electoral law that are relevant to our empirical analysis and interpretation of our results.

A.1.1 Gordillo and Improvements in Teachers Conditions

Gordillo joined the PRI's ranks in 1970 and occupied several PRI positions, reaching the party's vice presidency in 2002 and becoming the head of the PRI faction in the Chamber of Deputies in 2003. In 1989, when she became the SNTE's president, teachers were underpaid compared to other professionals with similar educational levels. By 1994, teachers' salaries had doubled in real terms, a much larger increase than other comparable professionals experienced (Lopez-Acevedo, 2004). Between 1996 and 2002, Mexico was the Organisation for Economic Co-operation and Development (OECD) country in which teachers' wages increased the most in real terms (Guichard, 2008). These wage increases were possible due to negotiations with the union at the federal and state levels.

A.1.2 Shifting Political Alliances of the SNTE

In 2006 Gordillo allegedly sold the support of the SNTE machine to the PAN candidate, Felipe Calderón. According to analysts, the alliance between the PAN and the SNTE was essential for Calderón's victory. He won by a 0.58% margin (243,934 votes), which the SNTE machine could easily account for. The deal between Gordillo and the PAN was made public, and the candidate of the losing party – Andrés Manuel López Obrador from the Party of the Democratic Revolution (PRD) – challenged the result of the election in court. Recordings of Gordillo confirming the sale of the votes of the SNTE political machine to the PAN were used as evidence during the federal electoral court case. Gordillo benefitted from this

alliance: members of her inner circle were appointed to Calderón's cabinet. For instance, her son-in-law, Fernando Gonzalez, was appointed Undersecretary for Basic Education. Calderón explicitly acknowledged that he made an alliance with Gordillo during the 2006 campaign and agreed to keep key government positions under SNTE control (The Economist, 2007; Excelsior, 2011).

In 2012, Gordillo allegedly sold the votes of the SNTE machine in the presidential election to the PRI's candidate, Enrique Peña Nieto (Hernández and Durán, 2011). Days before the election, Artemio Ortiz, spokesperson of the Democratic Executive Committee from the National Education Workers Coordinator (CNTE) – a dissident caucus within the SNTE – released the existence of the *Ágora Plan* to the press. This was a highly complex strategy organized by the SNTE leadership to transport more than 3 million voters to polling stations on election day in support of the PRI's presidential candidate (Avilés, 2012; Proceso, 2012). The plan involved the use of more than 27,500 members of the SNTE machine and a total cost of over 151 million Mexican pesos (roughly USD 7.5 million). In fact, these accusations led Senator Ricardo Monreal Ávila from the PRD to propose a resolution in the Senate to exhort the Federal Electoral Institute (IFE) and the Specialized Prosecutor for the Attention of Federal Electoral Crimes (FEPADE) to investigate the *Ágora Plan* (Sistema de Información Legislativa, 2012). Dulce María Sauri, PRI national president from 1999 to 2002, stated that Gordillo supported Peña Nieto during the 2012 election. According to Sauri, Gordillo remained close to influential PRI political leaders despite her expulsion from the party in 2006 (Proceso, 2012). Moreover, Peña Nieto was the only presidential candidate to meet with the National Committee of Political Action, the SNTE's main political body. While the SNTE machine probably contributed to Peña Nieto's victory, there has been little empirical assessment of its electoral impact.

A.1.3 SNTE's Distribution of Rents

The SNTE is divided into 59 school sections across 32 states. Some states are divided into multiple sections, since in some cases federal and state school workers are grouped into different sections. Throughout most of its history, the union's federal leaders have monopolized the control over all sections. When the Agreement for the Modernization of Basic and Normal Education was signed in 1992, the SNTE's federal leaders became the sole intermediaries in negotiations regarding teachers' labor conditions, and gained the right to appoint or replace the leaders of the school sections. Currently the SNTE has discretion over the allocation of the majority of teaching jobs, in particular the vacancies generated by teachers' retirements. Since the inception of the Alliance for the Quality of Education in 2008, new teaching positions must be allocated by means of an open competitive process. However, vacancies, which account for roughly 70% of all available positions, are not subject to such a process. Reports from the popular press suggest that during 2014 at least 12,115 teacher posts were filled by SNTE leaders in a fully discretionary way (Wong, 2015). Moreover, the SNTE also has the capacity to distribute or withhold access to various benefits such as bonuses, loans at preferential rates, and housing, among others.

A.1.4 Selection of Election Officials

The process of selecting election officials consists of three lotteries. The first lottery is held on January of the election year and it draws a month of the year. Citizens born in that month or the following one are eligible to participate in the next lottery, which is held in March of the election year at each of the 300 electoral district offices. Based on the subset of the population selected in the first stage, the second lottery chooses a list of potential election officials in every district, representing at least 10% of the citizens living in each precinct. Drafted citizens are notified and invited to a training course held in April of the election year. If the citizen is contacted, he or she can either accept or decline the invitation. Out of those citizens who accept and attend the training, the most qualified ones are selected to

serve as polling station officials. The third and final lottery determines the task that each of the selected citizens will perform.

Seven officials are selected for each polling station: a president, a secretary, two vote tellers, and three substitutes. The president is responsible for overseeing the overall voting process, including maintaining order and guaranteeing the transparency of the process (and suspending the voting process, if needed). The president also oversees the tallying of the ballots (with the help of the secretary and vote tellers under the presence of party representatives), and must report the final outcome to the District Council and post the final results in a public, visible spot outside the polling station. The secretary is responsible for filling and submitting the various legal documents and forms required by the electoral law, verifying that voters show up in the register, recording any complaint submitted by party representatives, and discarding any unused ballots. Finally, vote tellers aid the president and secretary with the conduct of the election and are responsible for the counting and tallying of the ballots (Instituto Federal Electoral, 2014).

A.1.5 Allocation of Polling Stations to Schools

There are several restrictions regarding the composition of the board that allocates polling stations in each of Mexico's 300 federal districts, and thus, it is unlikely that board members can deliberately manipulate the allocation of polling stations to schools. For every federal election, a temporary district board is formed to administer the election in every district. Among their many responsibilities, the district boards are in charge of allocating polling stations within precincts where voters are located. The board consists of IFE officials and citizens with very limited past involvement with political parties.¹

However, while district boards may not deliberately manipulate the allocation of polling stations to favor specific parties, there may still be a bias towards schools in states where

¹District boards consist of a president, who is the president of the corresponding permanent district council, and six electoral councilors, who cannot have served as a party representative or run for office in the past three years or have been a party leader at the municipal, state, or federal level.

the SNTE’s federal leaders control the school sections. To allocate polling stations before every election, the district board members identify all places that satisfy the requirements of a polling station, and prioritize them according to the following ranking: school, public offices, public places, and private houses. Together with availability, an important constraint in allocating polling stations to schools is teachers’ willingness to collaborate with the IFE in setting up polling stations and training election officials. Anecdotal evidence suggests that teachers from school sections under the umbrella of the SNTE are relatively more likely to cooperate with the IFE, while teachers affiliated with dissident teachers’ unions are unwilling to collaborate, and may even prevent officials from setting up polling stations (Rodríguez, 2013). This evidence is also supported by figures that show a greater incidence of polling stations located in schools in states where school sections are largely controlled by the SNTE’s federal leaders. Thus, one concern is that having a polling station located in a school may confound the strength of the SNTE in that particular state. For this reason, we control for state-year fixed effects, γ_{st} , to account for possible state-level institutional differences in polling station allocation.

A.2 Descriptive Statistics

Table A.1: Summary Statistics

	Mean	Standard deviation
	(1)	(2)
Vote share of candidates of parties officially supported by SNTE leaders	0.031	0.0351
Vote share of candidates of parties unofficially supported by SNTE leaders	0.3955	0.1546
<i>De facto</i> support of the SNTE machine	0.6454	0.4784
Polling station in a school	0.6046	0.4889
Likelihood of polling station in own children’s school if polling station is located in school	0.0345	0.0847
Dissident school section	0.2497	0.322

Notes: The number of observations is 669,244 for all cases except “Vote share of candidates of parties officially supported by SNTE leaders,” for which the statistics are computed considering only 2006 and 2012 in order to better reflect the vote share that the SNTE delivered to the parties it officially supported.

A.3 Additional Results and Robustness Checks

In this section we describe in more detail the additional exercises and robustness tests reported in Section 5.2.

A.3.1 Do Parties Unofficially Supported by the SNTE Machine Get More Votes?

First, recall that in presidential elections, where the PANAL candidate has a negligible chance of winning the election, SNTE leaders made unofficial alliances with candidates from other parties, to which they directed the *de facto* support of their electoral machine. The votes that the candidates of the parties officially supported by SNTE leaders lose when they do not receive the *de facto* support of the SNTE machine should then go to the candidates of the parties that SNTE leaders unofficially supported and thus receive the *de facto* support of the SNTE machine. In particular, let *Gap within Unofficial* be the difference in the vote share of candidates from the party unofficially supported by SNTE leaders with and without the *de facto* support of the SNTE machine. For 2006 this corresponds to the PAN's vote share for president minus its vote share for the Chamber of Deputies. If teachers are acting as brokers who deliver votes according to the SNTE leaders' alliances, then *Gap within Unofficial* should be larger in polling stations located in schools. In 2000, SNTE leaders both officially and unofficially supported the PRI. In 2006, SNTE leaders unofficially supported the PAN, and in 2012 they unofficially backed the PRI. The coding of the party unofficially supported by SNTE leaders and the *de facto* support of the SNTE machine is summarized as follows:

Year	2000		2006		2012	
Race	P	R	P	R	P	R
Party unofficially supported by SNTE leaders	PRI	PRI	PAN	PAN	PRI	PRI
<i>De facto</i> support of SNTE machine	1	1	1	0	1	0

where P and R indicate president and representative to the Chamber of Deputies, respectively.

To test whether *Gap within Unofficial* is higher in polling stations located in schools, we can estimate the regression in Equation (1) but instead consider y_{pemsto} as the vote share of the party unofficially supported by the SNTE leadership.

The estimates are reported in Table A.2, which presents analogous specifications to those reported in Table 1. The estimate of β_3 is positive and statistically significant, suggesting that the *Gap within Unofficial* is higher in polling stations located in schools. Again, reassuringly, all point estimates are stable across the different specifications. Moreover, the magnitudes of the point estimates of β_3 in Tables 1 and A.2 are remarkably similar, which confirms that the votes of candidates from parties officially supported by SNTE leaders that are lost whenever the SNTE machine does not support them go almost entirely to the candidates from the parties with which SNTE leaders unofficially aligned and which the SNTE machine supported. In sum, the estimates in Tables 1 and A.2 show that patterns of split-ticket voting are more likely to follow the alliances of SNTE leaders and the *de facto* support of the SNTE political machine when polling stations are located in schools, and thus, teachers' effectiveness as brokers is enhanced.

A.3.2 Areas Under Dissident Teacher Unions

In recent decades, the SNTE's monopoly over the control of school sections has been challenged. In 1979, educational workers who disagreed with the practices of the federal leaders of the SNTE organized themselves under the umbrella of the CNTE to challenge their power (Cutz, 2009). Currently, the CNTE controls the sections of the states of Chiapas, the Federal District, Guerrero, Michoacán, and Oaxaca (Santibañez and Jarillo, 2008), and has a significant presence in the sections of the states of Chihuahua, Hidalgo, Morelos, Nuevo León, Puebla, Querétaro, Tlaxcala, and Zacatecas (Secretaría de Educación del Distrito Federal, 2008; Simonnet, 2012). Educational workers from the states of Baja California and Tabasco are also organized into independent teachers' unions (Simonnet, 2012).

We then exploit the erosion of the SNTE's power in several states to corroborate the

Table A.2: The Effect of a Polling Station in a School and the *de facto* Support of the SNTE Machine on the Vote Share of Candidates of Parties Unofficially Supported by SNTE Leaders

Outcome: Vote share of candidates of parties unofficially supported by SNTE leaders			
	(1)	(2)	(3)
<i>De facto</i> support of the SNTE machine (β_1)	-0.0014 [0.0043]	-0.0012 [0.0042]	-0.00095 [0.0043]
Polling station in a school (β_2)	0.0054 [0.0042]	-0.004 [0.0021]	-0.0063 [0.0042]
<i>De facto</i> support of the SNTE machine *	0.0148***	0.0145***	0.014***
Polling station in a school (β_3)	[0.004]	[0.0039]	[0.004]
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	669,244	669,244	669,244
R - squared	0.3284	0.4206	0.5149

Notes: In all specifications, the unit of observation is the polling station. We include state-year fixed effects, and standard errors are clustered at the state level. The outcome variable is the vote share of candidates of parties unofficially supported by the SNTE (the PRI in 2000 and 2012, and the PAN in 2006). ** $p < 0.05$, *** $p < 0.01$.

influence of its political machine on electoral outcomes. A potential concern of this exercise is that school sections in which the SNTE's control is stronger are also places where clientelistic practices are more frequent or coincide with the strongholds of specific parties. Figure A.1 shows the distribution of the SNTE's influence throughout the country; there is no clear correlation with places characterized by political clientelism or as strongholds of specific parties.

To show that our estimates capture the role of the SNTE machine, we then test whether our estimates are absent in dissident areas where the SNTE machine has a weaker presence. Specifically, we interact our main regressors in Equation (1) with an indicator of dissident area, estimating the following regression:

$$y_{pemsto} = \beta_0 + \beta_1 \cdot dsm_{to} + \beta_2 \cdot pss_{pemst} + \beta_3 \cdot dsm_{to} \cdot pss_{pemst} + \beta_4 \cdot dsm_{to} \cdot dis_{st} + \beta_5 \cdot pss_{pemst} \cdot dis_{st} + \beta_6 \cdot dsm_{to} \cdot pss_{pemst} \cdot dis_{st} + \eta_{es} + \gamma_{st} + \epsilon_{pemsto}, \quad (1)$$

where all variables are as in Equation (1) and dis_{st} is a variable between 0 and 1 that indicates

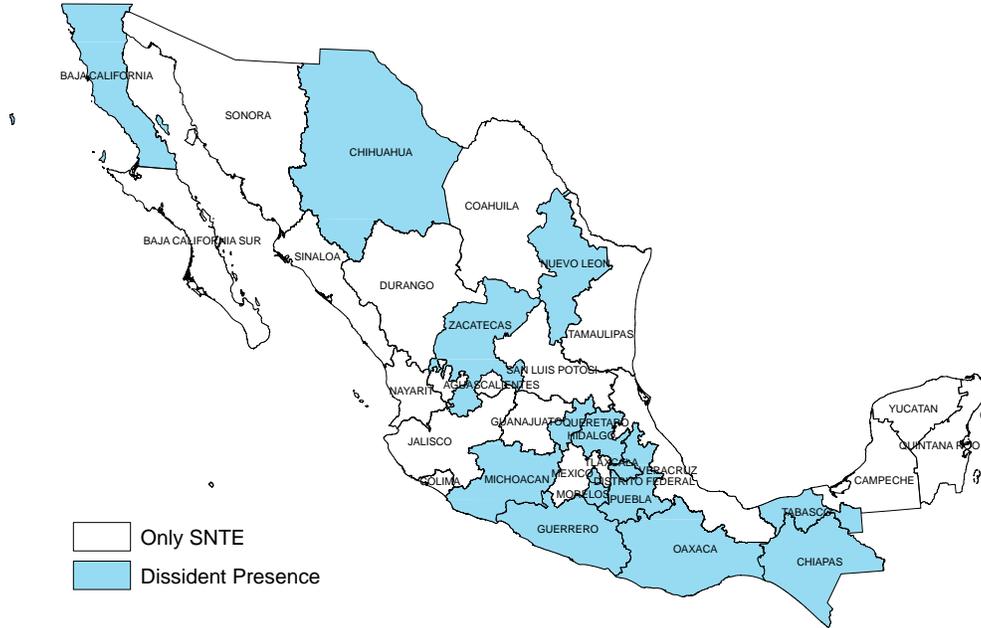


Figure A.1: Distribution of the Influence of the SNTE in México

the strength of dissident teachers’ unions in state s in year t . It takes a value of 0 if the state is fully under the control of the SNTE leadership and a value of 1 if the state is fully under the control of dissident teachers’ unions. We code a state as 0.5 if control is shared.

Table A.3 presents analogous specifications to those reported in Table 1. The results confirm that in states where teachers are not under SNTE control, *Gap within Official* exhibits no difference in polling stations located in schools. The β_6 coefficient on the triple interaction fully offsets that of β_3 , capturing the electoral effect of the SNTE machine on school sections under the control of the SNTE leadership. The sum of the β_3 and β_6 coefficients is effectively statistically indistinguishable from zero. These estimates thus indicate that the SNTE machine has no effect in states under the control of dissident unions.

A.3.3 Effect of Teachers on their Student’s Parents

In this section, we show that the location of polling stations in schools effectively captures the influence of SNTE-affiliated teachers over the parents of their students, as opposed to other confounding characteristics of individuals who vote in schools. Consider the case of a

Table A.3: The Effect of a Polling Station in a School and the *de facto* Support of the SNTE Machine on the Vote Share of Candidates of Parties Officially Supported by SNTE Leaders in Aligned and Dissident School Sections

Outcome: Vote share of candidates of parties officially supported by SNTE leaders			
	(1)	(2)	(3)
<i>De facto</i> support of the SNTE machine (β_1)	0.0146*** [0.005]	0.0148*** [0.0049]	0.0152*** [0.0049]
Polling station in a school (β_2)	0.0027*** [0.0006]	-0.0048*** [0.0008]	-0.00062 [0.0061]
<i>De facto</i> support of the SNTE machine * Polling station in a school (β_3)	0.0193*** [0.0036]	0.0189*** [0.0034]	0.0183*** [0.0031]
<i>De facto</i> support of the SNTE machine * Dissident school section (β_4)	0.0104 [0.0093]	0.0105 [0.0092]	0.0103 [0.0094]
Polling station in a school * Dissident school section (β_5)	-0.0052 [0.0033]	0.0053 [0.0031]	0.0043 [0.0145]
<i>De facto</i> support of the SNTE machine * Polling station in a school * Dissident school section (β_6)	-0.0163** [0.007]	-0.0166** [0.0068]	-0.0163** [0.0067]
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	669,244	669,244	669,244
R - squared	0.8215	0.8435	0.8707

Notes: In all specifications, the unit of observation is the polling station. We include state-year fixed effects, and standard errors are clustered at the state level. The outcome variable is the vote share of candidates of parties officially supported by the SNTE (the PRI in 2000, and the PANAL in 2006 and 2012). ** $p < 0.05$, *** $p < 0.01$.

polling station located in a school, but where voters send their children to a different school. These voters should not be influenced by teachers operating as election officials or party representatives at the polling station, since they are not very likely to interact with them except on election day. Moreover, these voters would not associate their polling station with the authority of their children’s teachers.

To explore this possibility we first compute, for each polling station, the fraction of precinct voters whose polling station is likely to be located in their children’s school. First for each locality in each precinct, we compute the distance from every school and every polling station. Then, using a 5 km radius, we assess: (1) whether there is a polling station within that area and (2) the number of schools n within this radius.² We then assume that the likelihood that the polling station is the school of the voters’ children is $1/n$ if the polling station is within the 5 km radius, and 0 otherwise. If there are no schools within the 5 km radius, we also assume that this likelihood is 0.³ Finally, for every polling station, we compute the registered voter-weighted average of such a likelihood for all localities assigned to the polling station, which we denote lps_{pemst} . We then interact our main regressors in Equation (1) with lps_{pemst} , estimating the following regression:

$$y_{pemsto} = \beta_0 + \beta_1 \cdot dsm_{to} + \beta_2 \cdot pss_{pemst} + \beta_3 \cdot lps_{pemst} + \beta_4 \cdot dsm_{to} \cdot pss_{pemst} + \beta_5 \cdot dsm_{to} \cdot lps_{pemst} + \eta_{es} + \gamma_{st} + \epsilon_{pemsto}, \quad (2)$$

where all variables follow the definition of Equation (1). Notice that β_4 captures the difference in *Gap within Official* in polling stations located in schools to which no voters send their children. β_5 , however, indicates how such an effect varies with the fraction of precinct voters whose polling station is likely to be located in their children’s school.

The estimates from Equation (2) are reported in Table A.4. The estimate of β_4 is close to zero and statistically insignificant, and thus indicates a lack of split-ticket voting consistent

²Our results are robust to alternative distances for the radius.

³There is no case in which neither a school nor a polling station is within a 5 km radius.

with the alliances of SNTE leaders, in polling stations to which voters do not send their children. On the contrary, the estimate of β_5 is positive and statistically significant. A one-standard-deviation increase in lps_{pemst} translates into an approximately 2pp effect. These estimates then support that the estimated effect of the SNTE machine is driven by the SNTE-affiliated teachers' influence over the parents of their students. These estimates therefore suggest that our results in Table 1 are unlikely to capture other confounding characteristics of polling stations located in schools, such as the fact that more-educated voters might vote in polling stations located in schools.⁴

Lastly, it is worth noting that our measure of the likelihood that parents vote in their children's school is naturally correlated with how rural precincts are since more schools are available in urban areas than in rural ones. Thus, one potential concern is that this measure simply confounds a rural–urban dimension. However, our results remain relatively unchanged when we restrict the analysis to either rural or urban precincts.⁵

A.3.4 Assessing Strategic Voting

In this section we address the possibility that our results reflect strategic voting, rather than the role of teachers as political brokers. The *level* effect of split-ticket voting may well reflect strategic behavior by voters who may not want to “waste” their vote on PANAL's presidential candidates due to their negligible chances of winning the election. However, while votes for PANAL's legislators are unlikely to help them to get elected via plurality, they help PANAL's legislators who can get elected via proportional representation (PR). However, for strategic voting to explain our results, it must occur differentially in polling stations located in schools, an argument that seems harder to rationalize. One possibility is that voters registered to vote in schools are more educated, and that more-educated voters are more likely to vote strategically. While this is theoretically possible, below we present

⁴See, for example, Section A.3.4 where we show that our results are unlikely to be driven by differential strategic voting by voters who vote in schools.

⁵Information on the rural vs. urban status of polling stations is not available for the year 2000, and thus in the exercise above we rely on an imputation based on the location of polling stations in 2006.

Table A.4: The Effect of the Likelihood of Polling Station in own Children’s School and the *de facto* Support of the SNTE Machine on the Vote Share of Candidates of Parties Officially Supported by SNTE Leaders

Outcome: Vote share of candidates of parties officially supported by SNTE leaders			
	(1)	(2)	(3)
<i>De facto</i> support of the SNTE machine (β_1)	0.0177*** [0.0034]	0.0178*** [0.0034]	0.0181*** [0.0034]
Polling station in a school (β_2)	0.0022*** [0.0008]	0.0021 [0.0013]	0.0162** [0.0059]
Likelihood of polling station in own children’s school (β_3)	-0.0047 [0.0062]	-0.0845*** [0.0101]	-0.3503*** [0.0604]
<i>De facto</i> support of the SNTE machine * Polling station in a school (β_4)	0.0026 [0.0025]	0.0021 [0.0023]	0.002 [0.0023]
<i>De facto</i> support of the SNTE machine * Likelihood of polling station in own children’s school (β_5)	0.2209*** [0.0166]	0.2239*** [0.0167]	0.2191*** [0.017]
Effect of one-standard-deviation increase in likelihood of polling station in own children’s school	0.0187	0.019	0.0186
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	669,244	669,244	669,244
R - squared	0.826	0.8457	0.8727

Notes: In all specifications, the unit of observation is the polling station. We include state-year fixed effects, and standard errors are clustered at the state level. The outcome variable is the vote share of candidates of parties officially supported by the SNTE (the PRI in 2000, and the PANAL in 2006 and 2012). ** $p < 0.05$, *** $p < 0.01$.

evidence that this is unlikely to be the case.

First, survey data do not suggest that more-educated voters are more likely to vote for PANAL. Moreover, the results presented in Table A.2 show that, in presidential races, the votes that PANAL loses in schools do not go to any of the other major parties that stand a chance of winning the election, but to the candidate unofficially supported by the SNTE. Second, an interpretation based on strategic voting is harder to reconcile with the heterogeneous effects on whether the state is under the control of a dissident teacher’s union (Table A.3) or the likelihood that parents vote in their children’s school (Table A.4). Strategic voting should be equally likely to occur irrespective of whether the SNTE controls the state, or whether parents vote in their children’s school rather than in a different school.

Finally, if strategic voting, rather than SNTE teachers’ support, drives our results, we should expect a similar differential pattern of split-ticket voting in schools for other smaller parties that also have no chance of winning the presidency. In order to test this, we consider the case of two social democratic parties – *Democracia Social (DS)* and *Alternativa Socialdemocrata (AS)* – that fielded their own candidates for the presidential and legislative elections in 2000 and 2006, respectively.⁶ These parties had no chance of winning the presidential race, but a more realistic chance of winning seats in the legislature via PR. For voters sympathetic to these parties, strategic voting would entail voting for them for the legislative race, but voting for their preferred major party in the presidential race. To test for this possibility, we estimate a regression of the form:

$$y_{pemsto} = \beta_0 + \beta_1 \cdot leg_{to} + \beta_2 \cdot pss_{pemst} + \beta_3 \cdot leg_{to} \cdot pss_{pemst} + \eta_{es} + \gamma_{st} + \epsilon_{pemsto} \quad (3)$$

where y_{pemsto} is the vote share for the candidates of social democratic parties in polling station p in precinct e in municipality m in state s in year t for office o , leg_{to} is an indicator for candidates running for the legislative office in election t , and pss_{pemst} indicates that the

⁶No other small party other than PANAL fielded a presidential candidate for the 2012 election, and thus we cannot conduct a similar placebo for this election year.

polling station is located in a school. Like in our baseline analysis, in our most demanding specifications we include precinct fixed effects, η_{es} , and state-year fixed effects, γ_{st} .

Our coefficient of interest in this case is β_3 , which shows the extent to which the differential vote share of social democratic parties for their legislative vs. presidential candidates is correlated with the polling station being located in a school. Reassuringly, the estimates of β_3 reported in Table A.5 are precisely estimated zeroes. Notice that the estimates of β_1 are positive, which suggests that patterns of split-ticket voting do in fact reflect a strategic component of voter behavior (i.e., voters are more likely to support social democratic parties' legislative candidates rather than their presidential candidates). However, unlike the case of the party supported *de facto* by the SNTE, this does not exhibit any variation across polling stations located in schools.

Table A.5: Placebo: Differential Strategic Voting for Polling Stations Located in Schools – Using the Vote Share for Social Democratic Parties in 2000 and 2006

Outcome: Vote share for candidates of social democratic parties			
	(1)	(2)	(3)
Legislative candidate (β_1)	0.0035*** [0.0008]	0.0035*** [0.0008]	0.0035*** [0.0008]
Polling station in a school (β_2)	-0.0024*** [0.0006]	-0.0008 [0.0004]	0.00022 [0.0003]
Legislative candidate *	0.00027 [0.0005]	0.00027 [0.0005]	0.00027 [0.0005]
Includes municipality fixed effects		X	
Includes precinct fixed effects			X
Observations	421,769	421,769	421,769
R - squared	0.2437	0.4531	0.6134

Notes: In all specifications, the unit of observation is the polling station. We include state-year fixed effects, and standard errors are clustered at the state level. The outcome variable is the vote share for Democracia Social (DS) in 2000 and Alternativa Socialdemocrata (AS) in 2006. ** $p < 0.05$, *** $p < 0.01$.

A.3.5 The Role of Monitoring

Table A.6: Effect of Split Polling Station on Voting Behavior by Polling Station, from Larreguy, Marshall, and Querubin (2016)

	Turnout (1)	PRI vote share (2)	PAN vote share (3)	PRD vote share (4)
Polling station split	0.0085*** (0.0012)	0.0045*** (0.0011)	0.0041** (0.0016)	0.0003 (0.0008)
Observations	27,697	27,697	27,697	27,697
Outcome mean	0.54	0.19	0.17	0.10
Outcome standard deviation	0.14	0.08	0.11	0.09

Notes: All specifications include district-year fixed effects, and are estimated using ordinary least squares. All results are for a 20-voter bandwidth. Block-bootstrapped standard errors are clustered by state (1,000 resamples). ** denotes $p < 0.05$, *** denotes $p < 0.01$.

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