Modular Parties
Making Clientelism Work in Volatile Systems

Lucas M. Novaes
University of California, Berkeley*

February 22, 2015

Abstract

If clientelistic exchanges require an organization of brokers and clients that cannot be built overnight, how do weakly-institutionalized parties make clientelism work in electorally volatile party systems? In this article I argue that parties do not have to build patron-client linkages from the ground up when local notables have already established them. If parties incorporate local bosses into their organizations, the parties will forge local connections and have access to local notables to broker votes. However, the relationship between parties and local authorities only works as long as parties have access to state resources. When this flow is curtailed, such as when subnational candidates lose elections, the vertical bonds between parties and local authorities are severed. When power changes hands, a new incumbent will form alliances with local notables. I test this model in Brazil, and I show that when gubernatorial candidates win close elections, their parties are able to field more mayoral candidates and subsequently gain more seats in Congress. The same pattern holds on a smaller scale when congressional candidates win their elections. The model helps to explain why clientelistic party systems are stable when parties are not.

Preliminary draft prepared for the
“Brokering Votes: Clientelism in Comparative Perspective” Conference
Comments are welcome
1 Introduction

Clientelistic parties win elections through distribution of resources, but merely having resources is not enough. Since exchanges between patrons and clients require private interactions, non-programmatic parties also need a network of voters to distribute goods and create mechanisms to ensure that voters will pay for the goods they receive with political support (Stokes et al., 2013; Hicken, 2011, 291). Because of these requirements, it would seem that parties can not make clientelism start operating overnight. Or, as Kitschelt & Kselman (2013) put it, “Politicians […] especially in democracies where the very existence of party organizations is in doubt from one electoral cycle to the next, will generally not have had the time to create [clientelistic] networks, and will not be able to credibly commit to the provision of continuing benefits over a series of exchanges.”

If limited electoral volatility characterizes institutionalized party systems (Mainwaring & Scully, 1995), many countries in Africa (Mozaffar & Scarritt, 2005; Ferree, 2010), Asia (Hicken & Kuhonta, 2011), Latin America (Mainwaring & Scully, 1995; Roberts & Wibbels, 1999; Zucco, 2010), and even in Europe (Powell & Tucker, 2014) have party systems that cannot be defined as such. How can these fragile parties make clientelism work?

In this article I try to elucidate the puzzle of how makeshift parties make clientelism work. I argue that parties do not necessarily have to build patron–client networks from the ground up. Local authorities – community chiefs, union leaders, religious leaders, and prospective local politicians – have extensive and specific knowledge of their communities, and also have individual ties with numerous individuals, making them natural brokers. Parties can reach out to local notables who have historically built patron–client connections and make use of their local networks to dispense goods, and also use them as brokers.

Therefore, some clientelistic parties are made up of two semi-autonomous tiers: one on top, responsible for acquiring state resources and acting at the level of subnational or national politics; and one tier at the bottom brokering votes for the stratum above and
running local politics. Parties thrive when they are able to group several local modules. When a party gain access to state coffers, the number of local modules the party will be able to sustain will rise. Short-term electoral success achieved by subnational politicians, such as gubernatorial and congressional candidates, is a harbinger for the party as a whole – not necessarily because voters start supporting other candidates from the same party because of electoral coattails, but because winning a particular race may mean the party will have more resources to field more local candidates. In turn, more brokers will generate more votes for party candidates in the upper tier. The vertical relationship between these two levels exists as long as the top sends state resources downstream to local representatives, or as long as local notables broker votes. When the top tier fail to send resources, the party is dismantled.

When one party disintegrates it will not lead to system-wide crisis, because another party will take its place in enlisting a larger number of local modules. To test these hypotheses, I analyze the Brazilian case, where elections are fair, but parties fragile and clientelism rampant. Using a regression discontinuity design, I show that local party presence varies dramatically after gubernatorial elections. A party that wins the governor’s seat is able to place some 50% more mayoral candidates than the runner-up party. Using mediation analysis, I uncover a relationship showing that this variation in party presence is associated with an improved performance in future congressional elections. Contrary to most scholarship on the subject, I present evidence that the direct effect of governors on congressional elections is negligible, if not negative. A similar pattern holds for individual congressional candidates, whose ability to place allies in their strongholds is conditioned on their own electoral success. And whenever candidates place a local broker as candidate, they improve future electoral prospects for them and for other party members.

The paper offers a new understanding of clientelistic party organization. At the same time that individual parties may present makeshift structures, together these parties may
promote an electorally volatile, yet sustainable, regime. The party type I introduce rapidly adapts to short-term electoral changes, and in this dimension the modular party is efficient. This efficiency, however, may hamper building of a party that channels voters’ preferences to subnational and national policy. Not only the party–voter linkages are mediated by brokers, party–brokers connections are usually short and inconstant, making politicians on upper levels less accountable.

2 Modular Party Organization

Resources do not automatically translate into votes. Even when a party has goods to distribute, it has to find suitable clients, and make sure clients will hold their end of the bargain at the polling station. Achieving electoral success requires access to a network of patrons, brokers and clients. However, such networks “are generally the result of long, hard organizing efforts” (Kitschelt & Kselman, 2013, 6). If clientelism is a complex operation, how is it that clientelism as an electoral strategy is widespread in political systems with weakly-institutionalized parties?

All explanations of how clientelism works agree that patrons need intermediaries to scale up operations. Scholars also concur that brokers need time and continued effort to learn voters’ preferences, earn their trust, and monitor their behavior. According to the monitoring interpretation (Brusco et al., 2004; Stokes, 2005; Gans-Morse et al., 2014), voters support a patron because they believe or fear that the patron’s agents are privy to political proclivities and ballot choice even after the election, and will punish opportunists. The sociological account notes that clientelism is a reciprocal and hierarchical relationship, where patrons and clients are connected through “traditional ties of deference” (Scott, 1969, 1146), which are maintained with material inducements and through intermediaries (Foster, 1963; Scott, 1972). Rodrigo Zarazaga (2014), criticizing both accounts as incomplete, notes that brokers need time to make the exchange work. Voters support a patron
only after the patron’s broker has acquired a reputation with these voters of delivering goods.

If political parties were responsible for building and maintaining patron–client linkages, they would have to build an organization able to cope with short-term electoral losses. Otherwise, investments in clientelistic infrastructure could rapidly dissipate after parties temporarily lost access to resources. If clientelism takes time to mature, and access to resources to make exchanges is uncertain, the whole strategy of building patron-client linkages would prove unfeasible for parties experiencing electoral volatility.

In some rare cases parties have been able to build organizations that withstand downturns. The Institutional Revolutionary Party (PRI) in Mexico and the Peronist Party (PJ) in Argentina, who have had organic ties with labor sectors for decades (Collier & Collier 2002), faced an adapt-or-perish dilemma during the economic crisis of the 1980s. Formal labor was in decline and could no longer guarantee electoral majorities (Gibson 1997; Levitsky 2003a). However, historical connections to popular sectors proved key to adapting their electoral strategy to clientelism. Particularly in the case of the PJ, leaders could adapt the existing union organization to distribute state resources (Levitsky 2003b, 17). Not only the PJ has a loyal electoral labor base, it also has durable linkages to popular sectors. Today both PJ and PRI are examples of dominant clientelistic machines with solid organizations, but they are outlier cases. Aside from other few exceptions, current parties in Latin America rarely have strong organizations with exclusive constituencies. Other labor-based parties in the region perished in the neoliberal era (Roberts 2014) and traditional “catch-all” parties have never laid foundations conducive to long-term investments in any type of party–voter linkage, and to remain electorally competitive these parties depend on a continuous influx of state resources.

Examples of parties with organic ties in popular sectors are even scarcer in sub-Saharan Africa. Van de Walle (2007, 53) notes that “[e]ven allegedly strong political par-

---

1 The PT in Brazil was created during the neoliberal adjustment of the 1980s.
ties [in Africa] were in fact often loose coalitions of regional elites”. Ethnicity may play an important role in how parties operate clientelism in the African region, as sharing ethnicity with politicians may be an efficient cue for voters to distinguish which candidate is more likely to dispense resources (Chandra 2007), but there are many democracies in Africa whose parties are not mobilized along ethnic lines (Koter 2013), and ethnic identification is not sufficient to guarantee political support (Dunning & Harrison 2010). Even if in some cases ethnicity, privileged access to the state, labor mobilization, or connections to the indigenous population (as is the case of the MAS in Bolivia (Madrid 2008)) explains patron–client linkages, there are many other parties that do not fit any of these models. Not only in these regions but also in Asia and Eastern Europe do parties lack the necessary organization to implement and maintain linkages over time, and these cases merit further analysis.

The main argument of this article is that most parties in recent democracies do not forge patron–client linkages. Instead, these parties hire, bribe, or incorporate local authorities who have built patron–client networks and use these individuals as political brokers. Party success and failure is a factor of the number of local notables a party can hire to broker votes. Patrons and parties may acquire resources to buy votes, and connect them to decentralized transmission lines built over time by numerous local authorities. Voters have links to these brokers, which in the perspective of individuals are patrons themselves, but brokers are either loosely or not attached at all to a party.

In particular, parties can incorporate local notables by nominating them as party candidates at the local level, formally extending the party reach. The vertical relationship between party and local notables does not, however, need to work through ideological or programmatic affinities. In fact, local authorities will be in a better position to bargain if they are free to trade with any potential party, and maintain their clientele insulated from partisanship (or at least hide information about voters from the party. See Camp (2012)). Parties do not need money only to maintain local branches; commanding local politicians
Party Receives Resources \[\rightarrow\] Party Increases Local Presence Incorporating Local Notables \[\rightarrow\] Improved Party Performance

**Figure 1:** Causal Mechanism

to broker votes also requires resources (Szwarcberg, 2012; Koter, 2013; Larreguy Arbesú, 2013; De Kadt & Larreguy Arbesú, 2014; Gingerich, 2014; Novaes, 2014). When higher-ups lose control of state resources, the number of local politicians a party will be able to manage will shrink. Accordingly, when a party can control more resources, a party will inflate.

Parties do not build patron–client linkages, therefore, because there are networks already standing by for them to activate. Figure 1 illustrates the causal mechanism I propose in this article. When candidates in the upper tiers of the party pyramid win an election, *ceteris paribus* the amount of resources the party control increases. With additional resources, the party will be in a better position to field local candidates, thus effectively increasing the number of brokers working for its candidates on the top. Finally, with a larger team of brokers, the party will reach out to a higher number of individuals, and receive additional votes, brokered by their newly-appointed local representatives. Unfortunately for the party, if it was to lose access to resources, its ability to deploy brokers would be reduced, and electoral performance would suffer.

### 3 Brazilian Politics: Stable Regime with Makeshift Parties

Political parties in Brazil may be decentralized and lacking programmatic content, and candidates individualistic and prone to switching parties (Mainwaring, 1999; Desposato, 2006), but party politicians are experts in making clientelism work. If we analyze par-
ties in Brazil not in terms of institutionalization[^2], but according to the role parties play in helping politicians achieve political goals (Aldrich 1995), Brazilian parties are efficient. Parties are organized into different tiers, each responsible for a task: upper tiers are responsible for acquiring resources and for arranging who competes at the lower tiers. The base of the party is composed of local politicians (mayoral and council candidates) responsible for distributing resources to voters and making sure the exchange yields votes. When the upper tier gains access to a bigger purse, politicians at the top reach out to a larger number of local authorities. This increases party presence and the number of agents brokering votes for the party. When parties lose, they simply detach from these local notables and from the localities under the notables’ influence.

Brazil has a notoriously fragmented party system, yet Brazilian democracy is solid and elections are fair (Hidalgo, 2010). Although 28 parties held seats in Congress in 2014, presidents and party leaders are able to push agendas forward (Figueiredo & Limongi, 2000). However, only 60% of the 513 deputies in 2014 were in Congress in the previous legislature, and of those that continued in office 16% had switched parties during their previous term. Leaders and the executive maintain discipline in Congress in a system where partisan programmatic commitments play only a small role. Congressional control is guaranteed with the distribution of discretionary funds and budgetary allowances (Pereira & Mueller, 2004; Lyne, 2008), if not outright bribes (Pereira et al., 2008).

The pattern of fragmentation, partisan disloyalty, and electoral volatility is present in all electoral races save the presidential elections. Only two parties (the Worker’s Party (PT) and the Brazilian Social-Democratic Party (PSDB)) have activists and (limited) programmatic appeal (Samuels & Zucco, 2014), and these are the only two parties that have fielded competitive presidential candidates in the last 20 years. Some 60% of all politicians have switched parties at least once (Novaes, 2014). Parties field mayoral candidates in only a fraction of all Brazilian municipalities. The PT, despite being the most organized

[^2]: That is, electoral stability, roots in society, legitimacy in society, organizational autonomy from leaders (Mainwaring & Torcal, 2006).
party (Hunter, 2010), in 2012 placed candidates in only about 33% of all the country’s municipalities. Not only is party presence fragmented, it is also inconstant. Figure 2 shows that of all winning parties in the 2008 mayoral elections, 42% decided not to field a candidate in the next election. Of parties that came in second in these elections, 60% decided not to field a candidate in 2012.

The case of the the Worker’s Democratic Party (PDT) in the state of Rio de Janeiro is emblematic of how rapidly parties dwindle and how fast they are replaced. After years

3The Brazilian Democratic Movement Party (PMDB) has the largest local presence, covering 40% of the country.

4Novaes (2014) shows that the winning parties began to have higher re-nomination rates only after the introduction of stricter party-switching laws. Before 2008, there was no causal effect of winning mayoral election on subsequent party presence.

Figure 2: Discontinuous party presence in Brazilian municipal elections. Black indicates parties that despite winning the 2008 mayoral election did not field a mayoral candidate in the subsequent 2012 election.
of competing for and gaining access to the state’s governorship, and successively forming Rio’s largest legislative front in the National Congress, in the early 2000s the PDT disintegrated at all levels. Of the 92 Rio de Janeiro municipalities, in 2000 the PDT fielded 74 mayoral candidates, electing half, more than any other party on both accounts. In 2002, a tug-of-war between the sitting governor and the party’s historical leader culminated in the departure of the governor from the party. In 2004, the PDT fielded only 28 mayoral candidates, electing four. The dismantling of the state network of mayoral candidates cost the PDT most of their legislative base. Of all the party’s mayoral candidates in 2000, 80% switched parties, most of them to the PMDB, who in 2004 saw the number of mayoral candidates surge from 38 to 75. And from two deputies in 1998, in 2010 the PMDB elected ten deputies, more than any other party in Rio. Most of this reversal of fortunes followed the election of the wife of the former PDT governor in 2002, who switched to the PMDB seven months into her tenure.

Most of the subnational volatility in Brazil, not only in terms of votes, but also in party presence, comes from the results of gubernatorial elections. Governors have long been credited as among the most important figures in the Brazilian federal system (Abrucio, 1998). Although budgetary reforms cut most of the state resources governors had at their disposal (Samuels, 2003), governors still have control of pork-barrel funds, hiring and firing, and other fiscal resources (Samuels, 2000; Garman et al., 2001; Gingerich, 2014). What is more, governors have party resources that enable them to control party nominations, lists, and the distribution of campaign money. When a party candidate wins the gubernatorial election, a party has leverage to impose local allies as local mayoral candidates, prevent other parties in the governor’s government coalition from placing contestants in party strongholds, and also to attract local politicians to join the governor’s party (Desposato & Scheiner, 2008).5

5Party presence can also be measured as presence in local coalitions, or as having municipal candidates in council (see Zucco, 2010). I choose to define party presence as fielding a mayoral candidate, instead of presence in the local coalition, since fielding mayoral candidates requires de facto local party organization.
Critically, placing allies as mayoral candidates turns party presence into votes, as these local candidates will in time act as party brokers. If two years after the mayoral election the party manages to win the gubernatorial election, the odds of maintaining presence in municipalities where the party holds the executive increase from 58% to 70% (for parties that are unsuccessful or do not attempt to win the bid for governor, 55% renominate mayoral candidates where they are in office). When parties have a sitting governor and two years later field a mayoral candidate, on average parties receive 20.3% of all valid votes for federal Congress in that municipality, 70% more than the municipalities where the party does not field a mayoral candidate. 6

The left-side plot in Figure 3 shows how party presence and state congress seats vary depending on the party’s position in the gubernatorial race. The relationship shown in the figure is illustrative only, as parties in Brazil are dissimilar. Even different state branches of the same party have little in common. But the pattern is suggestive of the argument: the better the position the party has at the subnational level, the greater party presence. And when parties have a wider network of local politicians, the performance of their congressional candidates will be better.

Although governors are important for overall party success in states, individual congressional candidates still have to fight to place brokers in strongholds, as these candidates compete against other party and coalition members within lists. Also, many parties do not have the centralizing figure of a governor candidate to organize party presence or an organization capable of fielding a gubernatorial candidate. In these cases, candidates end up acting almost autonomously of any collective party strategy. Still, the pattern is similar, and individual candidates need resources to contract brokers. Gaining a congressional seat is associated with a much larger probability of placing a party mayoral candidate in a stronghold – here measured as a municipality where the candidate had the best

6These averages do not imply a causal relationship. For the state congress, parties receive on average 14.4% of valid votes at the municipality level when fielding a mayoral candidate, an average 71% higher than in municipalities without party presence.
Figure 3: Party presence as a function of electoral results. Strongholds are municipalities in which the candidate has previously run in its local election.

performance as measured by vote share – and also with a much larger party vote share in a future election, as Figure 3 shows. The plots omit, however, a number of factors that might influence how parties organize presence and how presence affects performance.

Former deputy Almeida Lima (PMDB) blamed his inability to hire local brokers for the defeat of his re-election bid. Claiming incipient support in Sergipe’s municipalities, he lamented that “[local] support does not come for free,” and his refusal to use unaccounted campaign money to hire local politicians cost him the race. Not even pork barreling was enough to gain local support: “You send R$1.2 million ($500,000) for building a school, a local market, a sports court, a square, but the mayor did not support me, nor did the vice-mayor. Then, when they counted the ballots I received a mere eight votes, while other candidates who brought nothing to the municipality, but had mayoral support, received 700 votes.” Another defeated candidate, Domingos Dutra (Solidariedade Party) complained that after switching to a different party, all the support he received in the former vanished: “in municipalities, […] intermediaries are what gives you votes. It is the councilor, the pastor, the priest, the union leader, the mayor, the former mayor. Parading alongside these brokers [cabos eleitorais], sound trucks and campaign pamphlets
is worth a lot.\

4 Empirical Strategy

I claim that party access to resources, stemming from electoral results, affects the ability to hire brokers, which translates into greater local party presence. More brokers means more votes. In the causal chain, local presence is the mechanism or mediator in the pathway for receiving votes in other elections. Borrowing from Pearl (2012), Figure 4 illustrates the full causal model. The effect of party presence (Z) on party performance (Y) is the product of parameters $\beta\gamma$. The direct effect resources (X) have on Y is represented by parameter $\alpha$. The average treatment effect of X on Y is the sum of these two effects, or $\tau = \alpha + \beta\gamma$.

Although scholars have attempted to estimate parameters with linear structural equations models (LSEM) (Baron & Kenny, 1986; MacKinnon, 2008), such estimations usually involve strong and unfalsifiable assumptions\(^8\) Even in experimental settings where

\[
\begin{align*}
Y &= i_1 + \tau X + \epsilon_1, \\
Z &= i_2 + \beta X + \epsilon_2, \\
Y &= i_3 + \alpha X + \gamma Z + \epsilon_3
\end{align*}
\]


\(8\)The framework for LSEM consists of three equations (MacKinnon, 2008):
treatment $X$ and mediation $Z$ may be manipulated, the average causal mediated effect (ACME) cannot be estimated without relying on other strong and untestable assumptions, which include more than standard exogeneity (Bullock et al., 2010; Pearl, 2012; Imai et al., 2011). In this section I present my empirical strategy, which involves estimating the causal effect of $X$ on $Z$ and describing the association of $Z$ on $Y$ with a non-parametric mediation analysis.

I test two sources of variation on electoral results: gubernatorial and individual state congress elections. Figure 5 shows the timing of elections in Brazil (and also the period of analysis). Party presence is always measured in municipal elections that take place two years after state elections. The dependent variable, future electoral performance, is always measured in relation to the election that took place four years before.

### 4.1 Regression Discontinuity: The Effect of Winning a Race on Party Presence

Parameters $\beta$ and $\tau$ can be accurately estimated in observational studies only if $X$ varies as if random. To isolate the causal effect of resources on party presence and the average treatment effect on party performance, I use a regression discontinuity design to obtain the estimates $\hat{\beta}$ and $\hat{\tau}$. RDDs have been used extensively in social sciences in the past decade (Thistlethwaite & Campbell, 1960; Lee, 2008), and as long as treatment and control groups present balance on pre-treatment covariates; i.e., treatment assignment is uncorrelated to subjects’ characteristics, RDDs are natural experiments (Dunning, 2012).

Close elections provide an element of randomness in the generation of winning and losing...
|----------|----------|-------------------|------|------|------|------|------|------|------|------|------|

**Figure 5:** Timing of Brazilian elections and collection of data

- **Party Increases Presence with Mayoral Candidates** (% Municipalities in State with Mayoral Candidate)
- **More Seats in Congress** (% Seats taken in National Congress)

![Graph](image)

**Figure 6:** Operationalization: Gubernatorial candidates

Candidates, as if they had been allocated to their treatment status through a coin flip. In such cases, treatment and control, or bare winners and bare losers, should differ in no covariates, only on treatment assignment.

The party whose candidate gains access to the governor’s office or wins a seat in Congress increases the amount of resources under party control. However the two designs differ in their substantive implications. As discussed in the previous section, governors are the most important subnational authority in Brazil, and likely to affect the whole party state apparatus. Thus, the gubernatorial design will measure how winning the governor’s seat affect overall party presence in that state. The congressional design aims to understand how candidates individually organize their own future campaigns. Since most parties do not field a gubernatorial candidate, analyzing individual candidates allows testing the theoretical implications for most competitive parties in Brazil.

Although regression discontinuities have been extensively used in Brazil, to the best
of my knowledge they have not yet been employed to measure gubernatorial races, since the number of close races is still relatively small. In total, only 18 of all races since 1998 have had candidates that won or lost by a margin smaller than 5% of all valid votes. The small study group size burdens the design, since it reduces statistical power, increasing the chance of accepting the null hypothesis – not only for treatment effects, but also for covariate balance. I show the balance of governor covariates in the appendix, and also conduct a number of robustness checks. I also present local average treatment effects for different study group sizes, reducing concerns over the choice of bands. Figure 6 shows the operationalization of the design for governors. Governor incumbency is decided as-if random in a close race. In turn, a larger amount of resources will enable the party to enlist a larger number of mayoral candidates, $Z$. I calculate presence for all parties with a gubernatorial candidate by summing all mayoral candidates, and dividing that sum by the total number of municipalities in the state. Local presence is a proxy for presence of local brokers. These local brokers will generate more votes for congressional candidates, increasing the amount of seats the party captures in the subsequent state elections four years after treatment assignment.

Legislative elections in Brazil follow proportional electoral rules, requiring a different regression discontinuity setup. Following Boas et al. (2014); Arvate et al. (2014); Firpo et al. (2014), I calculate bare winners and bare losers within state lists. That is, the margin of victory is the distance (in total valid votes in the state) between a winning candidate and the first candidate in the same list that did not win a seat. Likewise, margin of defeat is the distance between a losing candidate and the last candidate in the list that won a seat in Congress\textsuperscript{11} The forcing variable is the vote margin (measured in vote share of valid votes) in the state\textsuperscript{12}.

\textsuperscript{11}Note that this procedure eliminates all parties in coalitions that did not get even one seat. Accordingly, the study group includes parties that received at least one seat.

\textsuperscript{12}Boas et al. (2014) use an “inflated” vote margin as the forcing variable to better capture the value of a single vote in a federal system with malapportionment and heterogeneous state populations. In the appendix I present the results using inflated margin as a robustness check.
I calculate the effect of winning legislative races in strongholds. The classification of a stronghold is straightforward. First, for every candidate, I rank his or her past performance in all municipalities according to the vote share the candidate received. That is, of all the municipalities from which the candidate received votes in the most recent election prior to the election assigning treatment status, in which one did the candidate have the greatest vote share? Thus, I define the top-ranked municipality in the past as the candidate’s stronghold. The procedure avoids post-treatment bias, as all candidates who participated in a previous election “receive” a stronghold. Substantively, it is reasonable that the candidate will pay attention to the municipality where she received most votes, and play a part in its local politics.

The variable $Z$ in this design is party presence in the candidate’s stronghold; i.e., the candidate’s party placing a mayoral candidate in the stronghold two years after the legislative election. As the alternate specification, I use maintenance of party presence, which captures whether the stronghold had a mayoral candidate; that is, whether the party kept fielding a candidate after the legislative election. The hypothesis is that the likelihood of maintaining party presence is higher in strongholds of victorious candidates.

4.2 Mediation Analysis: How Is Party Presence Associated with Party Performance?

The second part of the empirical approach attempts to show how increased party presence is associated with more votes for party candidates for Congress, and to separate this association from the ATE. Unfortunately for the design, there is no source of random variation on proportion of municipalities with party presence, and even if there was, we would still not be estimating the ACME. Although it is not possible to claim causality, since the error of party presence is likely to be correlated with party performance, I attempt to show a robust association between party presence and congressional performance comparing similar groups. I also restrict the study group to include bare winners.
and bare losers only, thus allowing estimations to be recovered from the regression discontinuity design, and also ensuring that units under analysis are similar to each other – at least in their pre-treatment covariates. Mediation analysis is conducted using the mediation software developed by Imai et al. (2010a).

The dependent variable $Y$ for the governor design is proportion of seats in the state congress the party captures four years after the gubernatorial election. For the individual candidate design, $Y$ is the vote share for state congress that the party obtains in the stronghold in the next election.

5 Results

Governors are crucial to the state’s party organization. The plots in Figure 8 contrast cases where parties won the gubernatorial runoff election with cases where they lost the runoff election. Each plot has a 45° line. Parties above the diagonal increased party presence after the gubernatorial election. As we can see, not only are there few cases above the line on the plot showing losing parties (right plot), but the distance to the line,
a difference-in-differences measure, is large and negative for most parties below the line. Also, no losing party managed to field mayoral candidates in more than 50% of the possible municipalities. Finally, most losing cases above the line are from the PT, which held the national executive during the entire period pictured in the figure, and whose subnational performance was likely to be affected by national politics.

![Graph showing party presence and the gubernatorial race](image)

**Figure 8: Party Presence and the Gubernatorial Race.** Plot only includes parties that reached the gubernatorial runoff election during 2002–2010.

The pattern of increased party presence in municipalities does not translate into increased congressional presence. Figure 9 presents the difference in differences of winning an election for the same group of parties, and there is no apparent association between winning the race for governor and how parties elect deputies to the state congress. In the next subsection I employ regression discontinuity designs to uncover whether winning the governor’s race causes an effect on party presence and on congressional performance; that is, whether either \( \hat{\beta} \) or \( \hat{\tau} \) are statistically different than zero.
5.1 The Effect on Party Presence and on Congressional Seats

The estimates of the (local) effect of governors winning the race on party presence two years later are shown in Figure 10. The plot on the left depicts the visual representation of the discontinuity, and the right plot shows the point estimate and confidence interval of the effect. Results show a significant and substantial effect. Parties who win the gubernatorial race subsequently place between 15 and 20 percent more mayoral candidates than losing parties. This means that winning parties place 45% to 60% more mayoral candidates than losing parties, which on average place mayoral candidates in 33% of all possible municipalities.

Party presence on strongholds also increases when individual candidates win. Figure 11 shows a 10–15 percent causal effect on the probability of fielding a party candidate in a stronghold, which corresponds to 35–53% of the mean presence in strongholds.

---

Figure 9: Party Presence and the Gubernatorial Race. Plot only includes parties that reached the gubernatorial runoff election during 2002–2010.

---

14 The graphical presentation of regression discontinuities follows the recommended guidelines suggested by Bueno & Tuñón (2015).
Figure 10: The Effect of Winning Gubernatorial Election on Party Presence. The figure on the left shows the graphical representation of the discontinuity, with each dot representing candidates. The solid line shows the LOWESS estimation, and the shaded area identifies 95% confidence intervals. The figure on the right shows the LATE and confidence intervals at different distances between winning and losing candidates. Distance refers to the absolute distance between winning gubernatorial candidate (treated unit) and losing candidate (control unit). LATE are estimated incrementally starting at the 1% distance up to the 15% distance in 1% increments. Estimations includes only races decided in the second round.

5.2 Mediation Analysis

The mediation analysis for governors shows that electing a governor has no direct association with future seats in congress, or if there is any association, it is negative. The mediated association, however, is large. As the regression discontinuity has shown, winning the race increases party presence by 20 percentage points. The value of $\hat{\gamma}$ is 0.52, which means that there is a strong correlation between party presence and seats in congress. The product of these two estimates means that on average electing a governor is associated with 10 percent more seats. On average, a party whose gubernatorial candidate went for the runoff election places deputies in 17% of state congress seats; thus the increase in party presence caused by placing a governor is associated with 59% more seats.

The mediated association for individual deputies is more modest; approximately 10% of the ATE of winning the race on votes ($\hat{\tau} = 0.067$). Part of the relatively small association is because winning elections increases the probability of a mayoral candidate in the
Figure 11: The Effect of Winning a Congressional Seat on Party Presence at Stronghold. The figure on the left shows the graphical representation of the discontinuity, with each dot representing average vote share in the congressional election for each 0.1 percentile. The solid line shows the LOWESS estimation, and the shaded area identifies 95% confidence intervals. The graph on the right shows the LATE and (robust) confidence intervals at different distances between winning and losing candidates. Distance refers to the absolute distance between the candidates that won vs. the candidate who was the first not elected in the same list, or the the distance between a candidate that lost vs. the candidate who was the last elected in the list. LATE are estimated incrementally starting at the 0.05% vote share distance up to the 1.5% vote share distance in 0.05% vote share increments.

Figure 12: Results: Gubernatorial candidates: Includes only gubernatorial candidates that went to runoff election, and whose absolute distance to losing (winning) candidate was less than 5 percentage points. Study group size is 18. Values in parentheses are standard errors, and intervals in brackets are the 95% CI. The average mediated correlation of $\hat{\gamma}\hat{\beta}$ is 0.103, which lies in the bootstrapped 95% confidence interval [0.033, 0.202]. $\hat{\mu} = 0.041, [-0.043, 0.117]$
Figure 13: Results: State congress candidates: Includes only gubernatorial candidates that went to runoff election, and whose absolute distance to losing (winning) candidate was less than 0.1 percentage points. Study group size is 562. Values in parentheses are standard errors, and intervals in brackets are 95% CI. The average mediated correlation of $\hat{\gamma} \hat{\beta}$ is 0.007, which lies in the bootstrapped 95% confidence interval [0.0012, 0.014]. $\hat{r} = 0.047$, [0.02143, 0.07093]

stronghold by only 10 percentage points. Nevertheless, having a mayoral candidate is associated with 0.05 percentage points greater vote share, or 52% of the average vote share parties receive in their congressional candidate’s strongholds.

6 Conclusion

This paper has examined how some parties organize clientelism in electorally volatile systems. Because of the organizational requirements of carrying out clientelism, makeshift parties would have difficulty investing in patron–client linkages themselves, since these links require constant upkeep. Instead of building their own linkages, parties have adopted a modular organization to quickly adapt to their changing fortunes. Parties leave the task of mobilizing supporters and monitoring clients to local notables. Local authorities, on the other hand, depend on the resources parties can funnel to them.

The size of a party and its electoral success therefore depend first on the amount of resources the party controls, and then on the number of local notables the party can hire with these resources. Analyzing Brazilian parties, I show that short-term electoral failure of the upper tiers of a party could lead to its disintegration. Subnational authorities, like
governors, are important because they are able to increase the number of local candidates the party fields. In the case of the PDT in Rio de Janeiro, as in many other places besides Brazil, when the top echelon of the pyramid no longer had access to resources, the party below broke down. Nevertheless, the clientelistic political system survived.

The modular party is efficient, since it reduces the transaction costs of adaptation. The same local modular unit that had been helping a losing party may be accommodated by the winning party. This arrangement allows local notables to keep their status as local patrons (as long as they switch parties), and preserve the inflow of goods to clients with minimal disruption.

The modular party is not, however, a type of party that promotes candidate accountability. More than a calculus of core vs. swing voters, legislators might be interested in sending resources to the local authority who can help them the most. In such cases, voter preferences are only indirectly a factor explaining how legislators act. Local notables may even prevent parties from building direct linkages to voters, as such direct party–voter linkages may undermine brokers’ gains.

References


Arvate, Paulo, Barbosa, Klenio de Souza, & Fuzitani, Eric. 2014. Campaign donation and government contracts in Brazilian states.

Baron, Reuben M, & Kenny, David A. 1986. The moderator–mediator variable distinction


Bueno, Natalia S, & Tuñón, Guadalupe. 2015. Graphical Presentation of Regression Discontinuity Results. *Available at SSRN 2549841*.


Thistlethwaite, Donald L, & Campbell, Donald T. 1960. Regression-discontinuity analysis: An alternative to the ex post facto experiment. *Journal of Educational Psychology*, 51(6), 309.


Zucco, César. 2010. Stability without roots: party system institutionalization in Brazil. *Available at SSRN 2002359*. 
Appendix

Summary statistics

Soon.

Balance tests

Soon.

Figure 14: Histogram of state congress candidates. Includes only candidates from multi-party lists. Histogram truncated at |3%| for presentation.
Figure 15: The Effect of Winning a Congressional Seat on Maintaining Party Presence in Stronghold.

The figure on the left shows a graphical representation of the discontinuity, with each dot representing average vote share in the congressional election for each 0.1 percentile. The solid line shows a LOWESS estimation, and the shaded area the 95% confidence intervals. The figure on the right shows the LATE and (robust) confidence intervals at different distances between winning and losing candidates. Distance refers to the absolute distance between winning gubernatorial candidate (treated unit) and losing candidate (control unit). LATE are estimated incrementally starting at the 0.005% vote share distance up to the 1.5% vote share distance in 0.005% vote share increments.

Figure 15 measures the effect of a state congress candidate winning and keeping a mayoral candidate; i.e., if the candidate’s party had a candidate in the stronghold, what is the probability of fielding a mayoral candidate again two years after the legislative election? Results are similar to party presence: winning the seat increases the probability of fielding a mayoral candidate again in 10 percentage points.

Figures 16 and 17 show the estimates using inflated margin, as proposed in Boas et al. (2014).
**Figure 16: The Effect of Winning a Congressional Seat on Maintaining Party Presence in the Stronghold.** The figure on the left shows the graphical representation of the discontinuity, with each dot representing average vote share in the congressional election for each 0.1 percentile. The solid line shows a LOWESS estimation, and the shaded area the 95% confidence intervals. The figure on the right shows the LATE and (robust) confidence intervals at different distances between winning and losing candidates. Distance refers to the absolute distance between winning gubernatorial candidate (treated unit) and losing candidate (control unit). LATE is estimated incrementally starting at the 0.005% vote share distance up to the 1.5% vote share distance in 0.005% vote share increments.
Figure 17: The Effect of Winning a Congressional Seat on Maintaining Party Presence in the Stronghold. The figure on the left shows the graphical representation of the discontinuity, with each dot representing average vote share in the congressional election for each 0.1 percentile. The solid line shows a LOWESS estimation, and the shaded area the 95% confidence intervals. The figure on the right shows the LATE and (robust) confidence intervals at different distances between winning and losing candidates. Distance refers to the absolute distance between winning gubernatorial candidate (treated unit) and losing candidate (control unit). LATE is estimated incrementally starting at the 0.005% vote share distance up to the 1.5% vote share distance in 0.005% vote share increments.
Sensitivity Analysis

Figure 18: Sensitivity analysis - governors

Figure 19: Sensitivity analysis - state
**Table 1:** Mediation analysis: Gubernatorial candidates

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACME</td>
<td>0.1029</td>
<td>0.0383</td>
<td>0.1783</td>
</tr>
<tr>
<td>ADE</td>
<td>-0.0615</td>
<td>-0.1339</td>
<td>0.0182</td>
</tr>
<tr>
<td>Total Effect</td>
<td>0.0414</td>
<td>-0.0308</td>
<td>0.1299</td>
</tr>
</tbody>
</table>

*Notes:* Estimates calculated using mediation software, with nonparametric bootstrapped confidence intervals (Imai et al., 2010a,b). Governor election result is the treatment, party presence in stronghold is mediator, party vote share ($t+4$) is the dependent variable. Study group includes only candidates whose absolute distance is smaller than 5% vote share. Group size is 18 units.

**Table 2:** Mediation analysis: Gubernatorial candidates - *Full Sample*

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACME</td>
<td>0.0989</td>
<td>0.08542</td>
<td>0.11135</td>
</tr>
<tr>
<td>ADE</td>
<td>0.0149</td>
<td>-0.00384</td>
<td>0.02986</td>
</tr>
<tr>
<td>Total Effect</td>
<td>0.1137</td>
<td>0.09179</td>
<td>0.13712</td>
</tr>
</tbody>
</table>

*Notes:* Estimates calculated using mediation software, with nonparametric bootstrapped confidence intervals (Imai et al., 2010a,b). Governor election result is the treatment, party presence in stronghold is mediator, party vote share ($t+4$) is the dependent variable. Group size is 1410 units.

**Table 3:** Mediation analysis: State congress candidates

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACME</td>
<td>0.00691</td>
<td>0.00115</td>
<td>0.01352</td>
</tr>
<tr>
<td>ADE</td>
<td>0.03996</td>
<td>0.01504</td>
<td>0.06401</td>
</tr>
<tr>
<td>Total Effect</td>
<td>0.04686</td>
<td>0.02143</td>
<td>0.07093</td>
</tr>
</tbody>
</table>

*Notes:* Estimates calculated using mediation software, with nonparametric bootstrapped confidence intervals (Imai et al., 2010a,b). State congress election result is the treatment, party presence in stronghold is mediator, party vote share ($t+4$) is the dependent variable. Study group includes only candidates whose absolute distance is smaller than 0.1% vote share. Group size is 562 units.
### Table 4: Mediation analysis: State congress candidates - Full Sample

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACME</td>
<td>0.01059</td>
<td>0.00874</td>
<td>0.01279</td>
</tr>
<tr>
<td>ADE</td>
<td>0.08122</td>
<td>0.07085</td>
<td>0.09146</td>
</tr>
<tr>
<td>Total Effect</td>
<td>0.09181</td>
<td>0.08060</td>
<td>0.10240</td>
</tr>
</tbody>
</table>

Notes: Estimates calculated using mediation software, with nonparametric bootstrapped confidence intervals (Imai et al. [2010a,b]). State congress election result is the treatment, party presence in stronghold is mediator, party vote share \((t+4)\) is the dependent variable. Study group size is 4789 units.