The Effect of Party Geographic Scope on Government Outcomes: Evidence from Peruvian Municipalities*

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October 2017

Abstract

In many developing countries, sub-national parties have emerged as dominant forces in local elections. The literature has raised concerns that these may hinder governance by increasing regional populism, eroding accountability, or worsening political selection. This paper provides the first estimates of the causal effect of the local ruling party's geographic scope on policy outcomes. Using a regression discontinuity design and rich data from Peruvian municipalities, we find that party geographic scope has little effect on local government outcomes, such as budget size and expenditure allocation. In addition, national parties fail to improve politician selection and accountability, as their mayors are more experienced but are not better educated or less corrupt. Our findings suggest that the lack of differences in government outcomes may be explained by intense political competition and voters switching support between party types. Overall, our results challenge the view that sub-national parties are detrimental to local governance.

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1 Introduction

In recent years, there has been an emerging trend towards the 'denationalization' of local politics as nation-wide parties have been displaced by those with a regional or local scope. This widespread pattern has been observed in both the developed and developing world. National parties in Europe are facing increased competition from regional and independent lists (Reiser and Holtmann, 2008). India has recently experienced a rise of strong regional parties (Ziegfeld, 2016), while sub-national parties proliferate throughout the Andean region of Latin America (Sabatini, 2003; Seawright, 2012). This transformation is viewed as an unintended consequence of decentralization reforms which increased power of sub-national governments (Chhibber and Kollman, 1998; Bardhan, 2002; Brancati, 2008; Harbers, 2010; Dargent and Munoz, 2011).

Given this context, a question arises of whether regional and local parties can better serve their constituents. On the one hand, sub-national parties may have a deeper understanding of local preferences and therefore better address local needs.[1] On the other hand, the literature has consistently argued that these may hinder governance by increasing regional populism, eroding accountability, and worsening political selection (Sabatini, 2003; Gibson, 2005). Furthermore, Riker (1964) claimed that national parties played a crucial role in motivating local politicians to internalize the spillover effects of their policies in a decentralized context.[2] The potential negative implications of sub-national party rule highlight the need for an empirical study of the effect of the ruling party's geographic scope on local outcomes. Such evidence would also shed light on the understudied consequences of the denationalization of local politics.[3]

[1] A similar argument has been made in favor of decentralization and the existing empirical evidence tends to support this claim (Faguet, 2004).

[2] Extending Riker's argument, absence of national parties in a decentralized environment could lead to an overproduction of negative externalities, e.g., pollution (Lipscomb and Mobarak, 2017).

[3] For instance, Hopkin (2003) called for more studies on the consequences of the rise of non-statewide parties and

In this paper, we provide the first estimates for the effect of party geographic scope on local government outcomes.[4] We do so by studying Peruvian district municipalities in the post-decentralization period (2002 onwards). The Peruvian local context is well-suited for our study as it is one of the best examples of economic decentralization accompanied by a dramatic de-nationalization of local politics: the share of national-party mayors dropped from 100% in the 1980s to 30% in the present. Moreover, the country boasts several levels of sub-national parties (regional, provincial and district political movements), allowing for a detailed study of the effects of party geographic scope. Finally, Peru possesses rich administrative data on municipalities, parties, and candidates.

Our empirical strategy uses a sharp regression discontinuity design. Identification is obtained by comparing municipalities where a candidate affiliated to a party of certain type barely won the local election versus those in which the candidate barely lost. This quasi-experimental strategy addresses relevant concerns regarding omitted variable bias and allows us to interpret our findings as causal effects.

Contrary to the literature's expectations, our results show that party geographic scope does not lead to different policy outcomes. We find no evidence of significant effects of national-party rule on measures of municipal government size such as total revenue, local tax revenue, total spending, and public investment. A similar result holds for local spending patterns and investment performance, measures over which mayors have substantial discretion. In particular, there are no sizable or significant effects on expenditure allocation, including the percentage of the budget spent on administrative duties, education, health and social services.

nudges scholars to research the 'territorial dimension' of party politics.

[4]By party geographic scope, we mean the extent of a country's territory where a party presents candidates for office and where its interests lie.

These results are not due to misspecification. First, these hold for different polynomials of the running variable. Second, our results are robust to the inclusion of covariates such as population, socio-economic indicators and past realizations of the outcome variable.

Our findings do not stem from a lack of statistical power. Our coefficients are small in magnitude. In most cases, these imply an effect of less than 0.1 standard deviations and the average absolute standardized treatment effect for all of outcome variables is around 0.055 standard deviations. Moreover, the lack of effects is confirmed by a novel permutation test proposed by Canay and Kamat (2016). This test evaluates discontinuities in the distribution of outcomes and has more power than mean comparison tests.

One concern is that our results could be masking significant heterogeneity across different types of sub-national parties. For example, it could be that regional parties differ from their national counterparts but local parties (provincial and district political organizations) cancel out this effect. To address this, we repeat our analysis by comparing regional parties, the most prevalent type of sub-national parties, to all other political organizations. We carry out the same exercise for local parties. As with the case of national-party rule, we fail to reject the hypothesis that different types of sub-national parties lead to different local outcomes.

Next, we examine the effect of party geographic scope on outcomes in neighboring districts. Spillovers may occur if mayors from national parties are indeed better able to internalize the effects of their policies on nearby jurisdictions (Riker, 1964). However, we find that, for most outcomes, there is no evidence of sizable spillovers. If anything, the results provide some support for negative spillovers from national-party mayors. For example, we observe that they tend to invest fewer resources in transportation in their own municipality (although this effect is not statistically significant) and, as a result, neighboring districts increase their transportation expenditures.

What could explain our null results, both in terms of local and spillover effects? We examine three potential explanations: (i) elected politicians in marginal elections share the same characteristics across party types, (ii) parties of different geographic scope provide similar levels of accountability and (iii) high levels of political competition lead to policy convergence.

The evidence on political selection is mixed. Consistent with the career incentive hypothesis, national parties attract more experienced candidates. In particular, their mayors are, on average, 1.3 years older and have 2.8 more years of total public sector experience. However, national-party mayors are not better educated, nor less likely to have a sentence before assuming office. Thus, national-party mayors do not strictly dominate their sub-national counterparts.

With respect to accountability, we find no evidence that national party-mayors differ from their sub-national peers as a whole. They have similar levels of corruption complaints filed against them and similar probabilities of being recalled before their terms end. However, there appears to be some heterogeneity across sub-national parties. Specifically, we find that regional-party mayors tend to be the most accountable out of all party types as they have a lower number of corruption complaints. Taken together, these results are noteworthy as these contrast with the literature's expectation that national parties provide greater incentives for accountability (e.g., Sabatini, 2003).

For the political competition analysis, we first looked at the effect of party geographic scope on the local political landscape. We find robust evidence of voter switching between national and regional parties. A national party victory significantly increases the vote share of regional movements in the next election. This increase comes at the expense of an almost 30% standard deviation drop in the vote share of national parties. Conversely, a regional-party victory increases the vote share of national parties and decreases that of regional parties, while not affecting the share of local parties. This phenomenon of incumbent party-type disadvantage is consistent with previous

evidence on incumbency disadvantage in developing countries (Klašnja and Titiunik, 2017).

This switching voting pattern motivates further analysis on whether political competition between national and regional parties could be driving the null results. For this purpose, we split the sample of districts into areas with historically high and low levels of political competition. We use two proxies of political competition commonly used in the literature, mean margin of victory and mean effective number of parties. To focus on the comparison between national and regional parties, we limit our sample to close elections among these two party types. We find that, in municipalities with levels of political competition above the median, national-party mayors tend to behave surprisingly similar to their regional-party counterparts. The average absolute standardized treatment effect for our economic outcomes is between 5.3 % and 5.8 % of a standard deviation. Moreover, in those municipalities, the switching voting pattern is particularly strong. On the contrary, in municipalities with low electoral competition, the difference in performance between national and regional parties is larger. The average absolute standardized treatment effect in these municipalities was found to be between 12.6% and 14.3% of a standard deviation. A simulation exercise with 1,000 random sample splits gives an empirical two-sided p-value of between 0.033 and 0.078 for these effects. In addition, the switching pattern is either less pronounced or disappears altogether, depending on the measure of political competition.

Taken together, our findings suggest that the recent proliferation of sub-national parties may not have the anticipated detrimental effect on local governance. Our exploration of the mechanisms indicates that potential differences across parties of different geographic scope may be smoothened by high levels of political competition and the electoral incentives offered by voters in those contexts.[5]

[5]Alternative explanations can also play a role. For example, it could be that there are no major differences in relevant unobservable politician characteristics or preferences. However, the magnitude of the differences between

The rest of the paper is divided as follows. In the next section, we provide an overview of the literature on national parties and the effect of party attributes on local outcomes. In Section 3, we summarize the key aspects of the Peruvian context. Section 4 discusses data sources while Section 5 lays out the empirical strategy. Section 6 presents the main results, including the effect on neighboring districts and on political outcomes. Section 7 explores the mechanisms behind the main results. Finally, Section 8 provides some concluding remarks.

2 Literature Review

National parties are thought to contribute to better local outcomes. The literature has consistently argued that these offer stronger career incentives, face higher reputation costs and internalize the nation-wide effects of their policies. Hence, national parties should lead to lower local populism, higher levels of accountability, and better politician selection.

Riker (1964) famously suggested that the strength of national parties reinforces economic decentralization by aligning politicians' incentives and preventing regional populism. A regional or local focus can lead to negative externalities. Lipscomb and Mobarak (2017) provides indirect evidence on this by showing that a mismatch in party affiliations between mayors in neighboring districts in Brazil is associated with an increase in pollution of the shared river by the upstream municipality. Enikolopov and Zhuravskaya (2007) found empirical support for the general benefits of a national-party based system at the cross-country level. In particular, strength of national parties is associated with better central government quality and higher levels of national economic growth.

The argument that national parties outperform their sub-national counterparts extends to con-

high and low politically competitive municipalities point to political competition being one of the main drivers of the results.

texts where parties are not particularly cohesive and well-established political organizations. In his study on the denationalization of local politics in the Andean Region, Sabatini (2003) states that even though sub-national parties may better represent local interests, they have "weakened governability and national-level democratic accountability" (Sabatini, 2003,138).

Our paper complements the above literature in several key respects. First, it provides the first micro-level estimates of the effect of party geographic scope on local outcomes in a recently decentralized country. Second, contrary to the literature's expectations, we show that national and sub-national parties tend to have similar performance across a wide range of outcomes. Finally, we show that these differences are particularly small in a highly competitive political environment. This suggests that the role of national parties may not be as important insofar parties face stiff competition.

Our findings also contribute to the literature on how various political party attributes affect local economic policies and outcomes. Most of this literature focuses on ideological differences. Using the case of U.S. cities, Ferreira and Gyourko (2009) finds little differences between Democrat and Republican mayors in terms of government size and budget allocation. Gerber and Hopkins (2011) show that the lack of stronger effects at the local level can be due to limited discretionary authority.[6] The effects of ideology and partisanship have also been explored in other political contexts. For example, Pettersson-Lidbom (2008) finds that partisanship has economically significant effects in Swedish local governments: left wing parties spend and tax more than their right-wing counterparts. Folke (2014) shows that, despite small representation in local councils, green and nationalist parties in Sweden are able to shift the environmental and immigration policies in their jurisdictions.

[6]At the more aggregate level of U.S. states, Reed (2006) documents that a Democrat majority in the U.S. state legislature leads to an increase in the tax burden and the size of government. Beland (2015) finds that the party affiliation of the governor has an effect on labor market outcomes. However, Leigh (2008) found no significant differences between Democrat and Republican governors.

Perhaps surprisingly, Meyersson (2014) documents that Islamic-party rule in Turkey has a positive impact on female education enrollment.

Recent work has also studied non-ideological party attributes. Primo and Snyder Jr (2010) found that states with stronger party organizations have lower spending per capita. Using the case of Colombian municipalities, Galindo-Silva (2015) finds that new parties, defined as those that had never won an election in a given municipality, increase public spending and tax revenue relative to traditional, older, parties. In a related study, Gamalerio (2016) compares party-affiliated mayors with those running under independent lists and their impact on fiscal outcomes in Italian municipalities. He finds that party-affiliated mayors run smaller deficits than independents, especially among small municipalities not subject to constraining fiscal rules. These results are different from those of Koethenbuerger (2012) who finds that party-affiliated and party-independent municipal council members in Germany have similar levels of pork-barrel spending.[7]

Our paper complements these studies by providing the first systematic evidence on an important yet understudied party attribute: geographic scope. In contrast to Gamalerio (2016) and Koethenbuerger (2012), we compare national parties with their sub-national counterparts rather than party-affiliated candidates with independents.[8] Moreover, our context allows multiple comparisons between parties with various degrees of geographic scope (i.e. national versus sub-national, regional versus others, local versus others). Finally, we study a developing country with similar character-

[7] A less related line of research looks at the effects of politicians' individual characteristics on various government outcomes. For instance, several studies have looked into the importance of gender. Chattopadhyay and Duflo (2004) document that female politicians in India tend to invest in infrastructure that is more relevant to their gender. Ferreira and Gyourko (2014) find no policy differences between male and female U.S. mayors. In the context of Brazil, Brollo and Troiano (2016) show that female mayors tend to be less corrupt but also have lower re-election probabilities. Note that these findings are unlikely to affect our estimates as we do not find differences in candidate's gender across party types (these results are available upon request). Alesina et al. (2015) find that young politicians tend to engage in higher levels of spending and attract more federal and regional transfers. Although we do observe age differences across party types, these do not lead to the spending patterns predicted by Alesina et al. (2015).

[8] In our context, only district-level local political organizations, which account for only 3% of candidates during our period of analysis, could be categorized as independent candidates.

istics to others that have experienced party system denationalization and where one would expect the consequences of this process to be most salient (Seawright, 2012).

3 Context

3.1 Peruvian Local Governments

This paper focuses on district municipalities, the lowest tier of autonomous sub-national government in Peru.[9] Municipal government is composed of the mayoral office and a municipal council. The mayor is the main administrative authority. Among other duties, mayors are in charge of designing and implementing the municipal budget and development plans. The municipal council is the legislative branch. Council members known as "regidores" can propose amendments to the budget and are in charge of approving local laws.

Mayors are elected for a four-year term using simple majority rule. Local council seats are allocated based on the number of votes obtained by each mayoral candidate. The mayor's party receives at least a simple majority in the council independent of the vote share won. Voting is mandatory and penalties apply for failing to cast a ballot. Municipal elections are organized an overseen by several central government offices, such as the National Electoral Processes Office (ONPE) and the National Jury of Elections (JNE). Throughout almost all the period of analysis, there were no term limits, so mayor were able run for reelection indefinitely. This changed in 2015 when the Peruvian Congress forbade the immediate reelection of regional presidents and municipal mayors. However, it should be noted that a mayor's term can end in their second or third year due

[9]The two other levels are regional governments and provincial municipalities. At the time of the last local election, there were 25 regional government, 196 provinces, and 1,646 district municipalities.

to a recall vote.[10]

Municipalities had a subsidiary role during most of the country's history. That role changed in early 2002 when the country engaged in a decentralization process. Municipalities received additional competences. Their budgets increased due to higher central government transfers.[11] Local governments also receive a percentage of corporate tax revenues and royalties from extractive companies operating in their region. This source of revenue increased dramatically in mid 2000s driven by a commodity boom. Due to these resources, municipalities now play a key role in local development, particularly in public investment. Currently, municipalities represent more than 20% of the government budget and around 40% of national public investment.

3.2 Political Parties in Municipal Elections

In Peru, political parties participating in municipal elections are classified according to their geographical scope into national and sub-national parties. The latter can be further split into regional, provincial and district political organizations.[12] National parties can participate in all elections: national, including presidential and parliamentary elections, regional and local. In contrast, sub-national parties can only present candidates in their locality, i.e., in their region, province or district.

There are differences in entry costs across party types. To be recognized, national parties need to collect a minimum number of voter signatures based on the turnout in the last national election.[13]

[10]Recalls, which can be initiated by the local population, can take place during the second and third years of the mayor's term.

[11]The main transfer scheme is the Municipal Compensation Fund (FONCOMUN). This redistributes a percentage of sales tax revenues to municipalities.

[12]The 2003 Law of Political Parties identifies and defines these types but uses a slightly different nomenclature. Organizations with national scope are simply called 'political parties', while organizations with regional or provincial/district scope are called 'regional movements' and 'local political organizations', respectively. For simplicity, we group these last two groups under the banner of sub-national parties. See Table A1 for a list of national parties and alliances that include national parties.

[13]The Law of Political Parties set this number at 3% of votes cast, but it has recently been reduced to 1% or around 160,000.

In addition, they must have party committees in at least one third of the country's provinces located in at least two thirds of the country's regions. Sub-national parties also need to obtain voter signatures but the number is significantly smaller, since it is based on the turnout in their jurisdiction.[14] Similarly, they need to establish committees only in the region, province or district in which they operate.

The relative dominance of national parties has changed drastically over time. In the years after the return to democracy in 1980, the political landscape was dominated by three traditional national parties. These were the center-right "Partido Popular Cristiano" (PPC), the centrist "Accion Popular" (AP) and the center-left "Alianza Popular Revolucionaria Americana" (APRA). However, their control of national and local politics started to change in the early 1990s. At that time, the country was undergoing a severe economic and security crisis. The AP and APRA presidencies of the 1980s were not able to contain the threat posed by terrorist organizations Shining Path and MRTA. Moreover, in the last two years of the APRA government, the economy shrunk by around by 20%. This situation, together with a series of corruption scandals, contributed to a loss of confidence in traditional parties.

New national parties emerged. In most cases, they were the product of a single political leader.[15] At the regional and local level, sub-national parties started to displace national organizations and are now the dominant force in local politics. For instance, in the early 1980s, almost all mayors belonged to national parties. By 2002, the share of mayors from national parties dropped to around 60%. In the last municipal elections in 2014, that share was only 30%.

[14] For example, in 2002, parties needed signatures equivalent to 2.5% of turnout.

[15] In 1990, Alberto Fujimori was elected president running under his own party. Other important politicians like Javier Perez de Cuellar, who was the runner-up in the 1995 elections, and Alejandro Toledo, who became president in 2001, followed a similar path.

4 Data

The empirical analysis combines several sources of information that relate to electoral results, local policies, local performance and politician's quality at the local level. Data on electoral results cover four municipal elections in the years 2002, 2006, 2010 and 2014. These data were provided by the National Jury of Elections (JNE) and contain information on electoral population, turnout, candidates' vote share, political party affiliation and corresponding political party type (i.e., national, regional, provincial, district or alliance), among other information.[16] We use this information to construct our treatment and running variables.

We use data from annual municipal accounts to obtain information on local policy outcomes such as local revenue and spending, investment, local tax collection, and budget allocation. The data, provided by the Ministry of Economics and Finance (MEF) include both budgeted and actual expenditures at the account level. It also provide the source of funding for each expenditure. The accounts are prepared by local governments and sent to the MEF for national accounting and auditing. The data spans from 1998 to 2015. This means that, for the last electoral cycle, data are only available for the first year of the mayor's mandate. However, our results are robust to the exclusion of this last cycle.

We also construct indicators of government performance and accountability. First, we use implementation rates of the public investment budget, i.e., share of the investment budget actually spent. Finally, we use data from the Peruvian Anti-Corruption Office to construct an indicator of whether a mayor has been accused of corruption.

As measures of politician's quality, we use several characteristics such as age, education level

[16] We define as sub-national parties political organizations classified by the JNE as having a regional or local (provincial/district) scope. We define an alliance among national parties as a national party. The same holds for alliances among sub-national parties.

and previous public sector experience. These data come from candidates' curriculum vitae. Information is self-reported but there are sizable penalties for misrepresentation.[17] Data is available for all elections except the 2002 electoral process.[18]

We complement this dataset with information on sociodemographic characteristics, such as population, poverty rates, and access to public services from the 2007 Population Census.

Table 1 presents summary statistics of our main variables.[19] In our sample, the share of national party mayors is around 46%, followed by regional party mayors with almost 40%. On average, 7 parties take part in each election, the winning margin is around 9%, and turnout is almost 85%. The average mayor is 44 years old and has 6 years of public service. An average municipality implements only 74% of its investment budget, spends 35% of its total budget on administrative duties, 17% on health related expenditures and around 12.5% on education.

5 Empirical Strategy

5.1 Baseline Specification

The aim of our empirical analysis is to identify the effect of the local ruling party's geographic scope on local outcomes. The primary identification challenge is that municipalities electing mayors from national parties may be systematically different from municipalities choosing sub-national parties, and vice versa. Such unobserved heterogeneity can potentially confound the naive OLS estimates.

To address this concern, this paper uses a sharp regression discontinuity design (RDD). Our running variable is the winning margin WM_{pit} of party type p in municipality i and electoral pe-

[17] For example, a candidate can be potentially excluded from the electoral contest.

[18] Candidates were only mandated to submit a curriculum vitae from 2006 onward.

[19] The sample excludes municipalities in which the election results were nullified and a secondary election had to take place the year after.

riod t. This variable is equal to the vote share of the most popular candidate of party type p minus the vote share of the most popular candidate of any other party type. By definition, a municipality is treated (i.e., has a mayor from a party type p) if $WM_{pit} > 0$.[20]

The RD estimand for the effect of having a mayor of party type p is defined as:

$$\tau_p^{RD} = \lim_{WM_{pit} \downarrow 0} E[Y_{it}|WM_{pit} > 0] - \lim_{WM_{pit} \uparrow 0} E[Y_{it}|WM_{pit} < 0] \quad (1)$$

where Y_{it} is the observed outcome.

To estimate τ_p^{RD}, we use local polynomial regressions. We implement this procedure using the robust bias-corrected estimator with a data-driven bandwidth selector proposed by Calonico et al. (2014b).[21] Following Calonico et al. (2014a), for each estimation instance, we report a conventional estimate of τ_p^{RD} and conventional standard errors but present the robust bias-corrected p-value levels.

5.2 Robustness and Validity Checks

The validity of the sharp RDD relies on the assumption that the conditional expectation of the outcomes, $E(Y(0)|X)$ and $E(Y(1)|X)$, are continuous in X. This continuity assumption could be violated, for instance, if mayors have *precise* control over the vote share they obtain when running for re-election or if there are confounding treatments whose assignment also depends on the same threshold. We discuss the validity of this assumption in Appendix using a conventional McCrary (2008) test and checking for balance of covariates. We find that there are no discontinuities in

[20] In case of a tie, elections are decided by a coin toss. In our sample, this scenario is very rare. For example, there only 10 cases in which a top national party had the same vote share as the top sub-national party. We account for these by assigning a negligible winning margin of 0.0001. Results are robust to the exclusion of these observations.

[21] We apply this estimator using the STATA package *rdrobust*.

the density of municipalities and that past realizations of relevant outcomes as well as municipal characteristics are balanced around the cut-off.[22]

An important concern is that we may find null results due to lack of statistical power. We address this issue in two ways. First, to increase the precision of our estimates, we include past outcomes as covariates.[23] Second, we use a novel permutation test proposed by Canay and Kamat (2016). This test evaluates the continuity of the *distribution* of a variable at the cut-off using permutations of a fixed, small number of observations. It is more powerful than commonly used tests based on the difference of means. Following the authors, we use a rule-of-thumb formula to determine the number of observations taken from both sides of the cut-off and report the corresponding p-values for both separate and joint distributions of outcome variables.

6 Main Results

6.1 Effects on Local Policy Outcomes

Table 2 presents the effects of national, regional and local-party rule on two set of indicators: measures of budget size and spending patterns.

The results in Panel A of Table 2 and Figure A2 portray a clear outlook. Having a mayor from a national party does not have a significant effect on local government outcomes (Column 1). First, there is no significant effect on per capita municipal revenue, spending, local tax collection or public investment. The coefficients are also small in magnitude. For all measures, the impact of a national-party rule is less than 10% of a standard deviation. A similar pattern is observed when

[22] For the case of national versus sub-national parties, we only find a significant difference at the 10% for 1 of 12 variables. However, even this small difference is not confirmed by a permutation test.

[23] The theoretical justification for this exercise can be found in Calonico et al. (2016).

we examine the effect of different types of sub-national parties. Mayors affiliated with regional and local parties also do not produce significant changes in the aforementioned measures (Columns 3 and 5). Again, with one exception, the magnitudes tend to be smaller than 0.1 standard deviations.

Given the importance of central government transfers, the lack of effects may be reflecting mayors inability to alter their budget size. To examine this issue, we explore the effect of party geographic scope on investment implementation rates and on budget allocation (including the percentage of total expenditures allocated to administrative duties, education, health, and transport), policy measures over which mayors have significant discretion.[24] The results are shown in Panel B of Table 2. Again, we find small and insignificant effects for all party types. With respect to investment implementation, the coefficient for national-party rule is equivalent to less than 0.02 standard deviations. Second, we analyze the impact on expenditure allocation. We also find very few significant effects across municipal tasks and party types.[25]

To present more evidence on the lack of sizable differences, we calculate the average absolute standardized treatment effect.[26] The results are shown in the lower part of Table 2. For all policy outcomes, the average effect of national-party rule is 0.055 standard deviations. If we exclude the measures in Panel A, the effect remains at a similar level. For the case of regional parties, smaller effects are obtained. However, for local parties, the magnitudes are bigger. This may be due to the fact that there are not many marginal elections involving local parties.

[24]Investment implementation rates are used to measure municipal performance under a central government run performance plan for local governments. For examples of academic use of this measure, see Loayza et al. (2014) and Pique (2015).

[25]One exception is the negative effect of ruling national parties on transportation spending which becomes statistically significant in other specifications (see Table A3).

[26]This is obtained by averaging the absolute value of each individual treatment effect divided by the standard deviation of its respective outcome variable.

6.2 Effects on Neighboring Districts

It has been hypothesized that national parties may be more able to internalize the spillover effects of local policies, such as road building or construction of health centers, on nearby jurisdictions (Enikolopov and Zhuravskaya, 2007). If this hypothesis holds, it may be possible that national-party rule affects outcomes in the vicinity of a municipality.

We examine the possibility of geographical spillovers in Table 3. In particular, we estimate the effect of party geographic scope on average outcomes of neighboring districts. The results indicate that national-party rule has no significant effects on outcomes in neighboring districts. Again, the coefficients are also small in magnitude. The average absolute standardized treatment effect for national-party rule is less than 0.07 standard deviations.

The only outcome for which the effect is statistically significant is the percentage of the budget allocated to transportation expenditures. The estimate indicates that national-party rule *increases* the share of the budget for transportation in neighboring municipalities by 0.21 standard deviations. This finding suggests that, if anything, municipalities may be less able to rely on their neighbor's transportation spending when a national party is in power in the latter. Hence, we find no evidence that national parties better internalize the spillover effects. The results for regional and local parties tend to confirm this view.[27]

[27] One may worry that regional and local parties are able to internalize the spillover effects because their geographic scope may also be larger than a district. The most restrictive test of whether narrow geographic scope creates negative spillovers is to estimate the effect of a district-level party rule on policy outcomes in neighboring municipalities. We carry out this analysis and none of the coefficients was statistically significant. Results are available upon request.

6.3 Robustness Checks

The main concern with our analysis is that the lack of significant effects might be due to insufficient statistical power. However, initial evidence points to this not being the case as the magnitudes of the effects are small.

To further check the validity of our null results, we carry out a series of additional tests. First, we assess whether the results in Table 2 hold under different specifications. The estimates for the effect of national-party rule are shown in Table A3.[28] The results are robust to changes in the order of the local regression polynomial and the inclusion of additional covariates. In particular, we control for past realizations of the outcome variable, as well as other covariates such as human development index, life expectancy, % with high school diplomas, average years of education, and family income per capita. As suggested by Calonico et al. (2016) and Lee and Lemieux (2010), the inclusion of relevant covariates can substantially reduce the variance of the RD estimator. Adding controls to our baseline specification tightens our confidence intervals and reduces our standard errors for local budget size outcomes by around 50%.[29] With the exception of transportation expenditures, all of our effects remain statistically insignificant.

Second, the non-significant results hold when using a permutation test proposed by Canay and Kamat (2016) (column 5 of Table A3). This test evaluates the null hypothesis of no significant discontinuity in the outcome distribution, and is more powerful than mean comparison tests.

Finally, it could be that the national-party definition may be too broad and include organizations that, in practice, have a more local scope.[30] This would bias our estimates towards zero. To examine

[28] The corresponding results for regional-party rule and local-party rule are shown in Tables A4 and A5. The analysis that follows also holds for these party types.

[29] At a 95% level of confidence, we would be able to reject effects of national-party rule on local budget size outcomes of between 0.066 to 0.081 standard deviations.

[30] For example, it is possible that a party collects signatures from various regions and registers itself as a national

this explanation, we replicate the baseline analysis with a narrower definition of national party. In particular, we focus on "traditional" national parties, i.e., large national parties with a long history in Peruvian politics. These parties include the "Partido Popular Cristiano" (PPC), "Accion Popular" (AP), "Alianza Popular Revolucionaria Americana" (APRA), and "Unidad Nacional", an electoral coalition of the PPC and other right-wing parties. In the period of analysis, these obtained around 20% of all mayoral positions. The results, shown in Table A6, are similar to our baseline findings as there are no significant effects on local government outcomes.[31]

7 Mechanisms

What could explain our null results, both in terms of local and spillover effects? There could be several reasons for policy convergence. First, contrary to the literature's expectation, national parties may not offer better career prospects to politicians. This would lead to similar candidate characteristics across party types which, in turn, could translate to similar behavior. Second, both national and sub-national parties may fail to serve the broader public interests and capture resources (Bardhan and Mookherjee, 2000). In this case, we would not observe differences in policy choices nor on accountability between party types. Third, policies can converge due to political competition (Downs, 1957; Persson and Tabellini, 2002). Competing parties will offer similar policies to attract voters and win the election. This result holds even with ideological politicians as long as there is commitment or reelection incentives.[32] In the next three subsections, we examine these potential explanations.

party in order to run candidates at the national level. However, it might draw most of its support from a specific region.

[31] A possible exception could be investment implementation. While the permutation test rejects the null hypothesis at the 5% significance level, the RD estimates are not significant and robust to different specifications.

[32] Other models such as citizen-candidate and principal-agent models also have equilibria with policy convergence (Osborne and Slivinski, 1996; Besley and Coate, 1997; Besley, 2006).

7.1 Politician Selection

One of the arguments in favor of parties of greater geographical scope is that they provide stronger career incentives and, thus, attract more able candidates (Enikolopov and Zhuravskaya, 2007). To examine differences in politician selection across party types, we carry out the same RD analysis using a set of observable characteristics of the elected mayors as dependent variables.

Panel A of Table 4 presents the results. Overall, we find several differences in political selection across party types. First, national-party mayors appear to be more experienced. In particular, they are about 1.3 years older and have 2.8 more years of public service than their sub-national counterparts. Both estimates are statistically significant and large in magnitude. This finding is consistent with the arguments in the literature. However, while they are more experienced, national party mayors are not better educated relative to their counterparts.

Regarding sub-national parties, there appears to be significant heterogeneity across party types. First, the quality of local-party mayors tends to be quite low. These mayors are substantially older - about 4 years older, on average. However, their higher age does not translate into greater public sector experience. Moreover, they are 21.7% less likely to have completed tertiary education and 17.8% more likely to have a pre-election civil or criminal sentence, though this last effect is statistically not significant. Second, the quality of regional-party mayors is harder to evaluate. On the one hand, they are 2.5 years younger and have 2.1 fewer years of public sector experience relative to their counterparts (significant at 1% and 5% levels, respectively). However, regional-party mayors are 10% more likely to have completed tertiary education and 5.8% less likely to have a sentence in their CV. Therefore, regional parties appear to attract better candidates relative to their local rivals, but their comparison to national parties is less clear.

To sum up, we find evidence that national and regional parties tend to recruit mayors of higher quality relative to their local counterparts. The evidence regarding the relative quality of national versus sub-national parties as a whole is mixed.

7.2 Accountability

Since reputation costs for national parties are higher, their mayors are often thought to be more accountable (Gibson, 2005). To provide evidence on this, we explore the effect of party geographic scope on the number of corruption complaints filed against mayors in the 2011-2014 electoral term.[33] In addition, we also analyze the effect on whether the mayor is recalled before the term ends, as recall voting is a commonly used accountability mechanism in Peru.

The results are shown in Panel B of Table 4. We find no evidence that national-party rule lead to greater accountability. If anything, the estimates point to the effect on corruption complaints being slightly positive. Moreover, there is evidence that regional-party mayors are more accountable. In particular, these have 0.4 corruption complaints less than politicians from other parties in marginal elections. Finally, we find no significant effects on the probability that the mayor is recalled.

Taken together, the results cast doubt on the claim that national parties provide greater accountability. Hence, it is possible that our null results could be driven by party geographic scope not having the expected effect on accountability.

[33]Data for previous terms are not available as the information was collected as part of a recent effort to compile cases filed at decentralized offices.

7.3 Political Competition and Electoral Incentives

Parties in a competitive environment should converge towards the policy of the median voter. Therefore, it is possible that our result is driven by strong competition between party types.

We start our analysis by looking at the effect on indicators of the local political landscape. Panel C of Table 4 presents the results. We observe that there are no significant effects on turnout and number of parties in the next local election. However, a national-party victory in the current election has a negative, significant effect of more than 8 p.p. on the total vote share of national parties in the following election. Those votes migrate to regional parties whose vote share increases by more than 9 p.p. These changes are meaningful as these are almost equivalent to the average margin of victory in local elections. The corollary of this result is the effect of a regional-party victory on future vote shares. When a regional party wins the current election, the future vote share of national parties increases by 9.3 p.p. while that of regional parties decreases by 8.6 p.p. No significant variations are observed in the vote share of local parties.

This voting pattern motivates an analysis on whether strong political competition between national and regional parties leads to policy convergence. To provide suggestive evidence on this, we divide the sample into two parts based on commonly used indicators of political competition and carry out an RD analysis in each sub-sample. We first split the sample depending on whether the average municipal margin of victory across the 2002-2014 period is above or below the median. We then do the same for the effective number of parties, i.e. the inverse of the Herfindahl–Hirschman Index for party vote shares. To focus on the comparison between national and regional parties, we use the winning margin between national and regional parties as a running variable and restrict the analysis to marginal elections between these party types (For details, see Section A2 of the

Appendix).

The results are shown in Table 5. Our findings suggest that political competition may be driving our null results. We find that, in municipalities with levels of political competition above the median, national-party mayors tend to behave surprisingly similar to their regional-party counterparts. For instance, with the exception of local tax revenue, the effects of national-party rule on budget size indicators are less than 3% of a standard deviation. Relatively small effects are also observed for measures of budget allocation. The average absolute standardized treatment effect for all outcomes is between 5.3% and 5.8% of a standard deviation. To check the relative magnitude of these effects, we carry out a simulation exercise in which we randomly split the sample in half 1000 times and compute the same statistic in the corresponding sub-samples. The average absolute standardized treatment effect for highly competitive municipalities falls in the bottom 15% of the simulated distribution.

The above results contrast with those in municipalities with low average levels of political competition. For example, in columns (1) and (3) respectively, 9 and 6 out of 11 estimates exceed 10% of a standard deviation, which contrasts to the only 3 out of 22 estimates which satisfy this restriction in high competition municipalities. The average absolute standardized treatment effect in these municipalities was found to be between 12.6% and 14.3% of a standard deviation. These values are in top 10% and top 5% of the simulated distribution, respectively.

In addition, the results in Panel C of Table 5 provide suggestive evidence that the heterogeneous effects can be related to the voting pattern. In particular, we find that, in highly competitive municipalities, the drop in the total future vote share of national parties after a national-party victory is between 13.7 p.p. and 16 p.p. On the other hand, in low competition municipalities, the switching patter is either less pronounced or disappears entirely, depending on the indicator of political

competition.

Taken together, the above analysis points to political competition playing an important role in the observed null effect of party geographic scope. Potential differences in politician selection or political preferences across party types may be smoothened by high levels of political competition and electoral incentives.

8 Conclusion

This paper examines whether the geographic scope of a party matters for local government outcomes. We use the case of Peruvian district municipalities and a credible regression discontinuity design.

Our main finding is that national-party rule does not have a significant effect on measures of local budget size and its allocation. In addition, we find that there is no heterogeneity in this null result across sub-national party types. These results are robust to several empirical concerns, and do not seem to be driven by low statistical power. In addition, we find that there are no negative spillover effects of sub-national party rule on neighboring districts.

We find evidence that our null result may be driven by high levels of political competition between national and regional parties. In highly competitive municipalities, national and regional-party mayors behave in a similar manner. In those areas, voter switching across elections is strong. On the contrary, in low competition municipalities, the difference in outcomes between the two party types is substantial and the switching voting pattern is weaker or disappears altogether.

Our results suggest that national-party rule need not lead to different outcomes. These challenge the view that the displacement of national parties, fueled in part by decentralization reforms,

is detrimental for local governance. In addition, these weaken the economic case for providing subsidies to national parties. These subsidies are usually justified by the belief that national parties may lead to better policies and governance. Our findings suggest that such benefits might only exist in jurisdictions with low levels of political competition.

There are some caveats when interpreting our results. First, our analysis focuses on the geographic dimension of party attributes and does not necessarily imply that parties with strong capabilities have a weak impact on governance. Second, this study uses a developing country context and the effects may be different in developed countries. Finally, our estimates are not informative of the effect of national-party rule on central government outcomes, long-term variables, or on unobserved aspects of local policies.

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Tables and Figures

Table 1: Summary Statistics

Variables	Nr. Obs.	Mean	S.D.	Min	Max
Mayor is from a national party	6,460	0.462	0.499	0	1
Mayor is from a regional party	6,460	0.398	0.490	0	1
Mayor is from a local party	6,460	0.110	0.313	0	1
Winning margin of a national party candidate	5,926	-1.897	19.66	-97.65	66.32
Winning margin of a regional party candidate	4,997	-0.527	19.27	-64.48	97.65
Winning margin of a local party candidate	2,392	-9.168	18.11	-66.32	57.30
Log of municipal revenue p.c.	6,452	6.707	0.916	4.072	11.26
Log of local tax revenue p.c.	6,452	1.450	1.504	0	8.051
Log of municipal spending p.c.	6,452	6.436	0.858	3.916	10.72
Log of municipal investment p.c.	6,452	5.879	1.094	1.726	10.55
Investment execution rate %	6,452	73.69	16.49	1.027	100
Administrative spending, %	6,451	35.20	13.86	3.561	96.65
Agriculture spending, %	6,451	5.444	8.578	0	85.65
Education spending, %	6,451	12.49	12.03	0	93.30
Health spending, %	6,451	16.84	14.68	0	92.49
Social services spending, %	6,451	10.15	7.875	0.124	82.47
Transportation spending, %	6,451	12.91	11.12	0	89.72
Turnout	6,460	84.56	5.952	17.11	98.81
Number of Parties	6,460	7.217	2.830	2	20
Margin of Victory	6,460	9.197	8.738	0	97.65
Vote Share of National Parties	6,460	48.83	28.00	0	100
Vote Share of Regional Parties	6,460	36.96	30.63	0	100
Vote Share of Local Parties	6,460	9.812	17.81	0	100
Mayor Recalled	4,842	0.182	0.386	0	1
Mayor's Age	4,808	44.34	8.802	21.43	82.50
Mayor Has University Degree	4,792	0.368	0.482	0	1
Mayor Completed Tertiary Education	4,792	0.567	0.495	0	1
Mayor's Years of Public Service	3,198	6.295	8.777	0	65.42
Mayor's Number of Corruption Complaints	1,605	0.719	1.611	0	28
Mayor Has a Sentence	3,198	0.074	0.261	0	1
Human development index, 2003	6,439	0.278	0.095	0.088	0.699
Life expectancy, 2003	6,439	67.41	3.737	53.33	74.01
% with high school diplomas, 2003	6,439	44.65	22.71	0.132	99.93
Average years of education, 2003	6,439	6.024	2.104	1.907	13.94
Family income per capita, 2003	6,439	269.5	137.8	76.45	1219

Notes: Monetary variables, such as revenue or investment per capita, are measured in Nuevos Soles (PEN).

Table 2: Effect of Party Geographic Scope on Government Outcomes

	Type of Party in Power						Dep. Var.	
	National		Regional		Local			
	RD Estimate	N	RD Estimate	N	RD Estimate	N	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. Local Budget Size								
Log of municipal revenue p.c.	0.048	5,919	0.022	4,994	-0.011	2,387	6.707	0.916
	(0.068)		(0.072)		(0.110)			
Log of local tax revenue p.c.	-0.065	5,919	-0.031	4,994	0.287	2,387	1.450	1.504
	(0.096)		(0.110)		(0.199)			
Log of municipal spending p.c.	0.050	5,919	0.019	4,994	-0.015	2,387	6.436	0.858
	(0.063)		(0.067)		(0.102)			
Log of municipal investment p.c.	0.053	5,919	0.049	4,994	-0.027	2,387	5.879	1.094
	(0.076)		(0.086)		(0.123)			
B. Spending Patterns								
% of investment budget implemented	0.334	5,919	0.340	4,994	-1.205	2,387	73.69	16.49
	(1.135)		(1.369)		(1.825)			
Administrative spending, %	0.644	5,918	-0.741	4,993	0.345	2,386	35.20	13.86
	(0.947)		(1.148)		(1.558)			
Agriculture spending, %	0.784	5,918	0.278	4,993	-1.448	2,386	5.444	8.578
	(0.696)		(0.807)		(0.880)			
Education spending, %	0.155	5,918	0.477	4,993	-0.472	2,386	12.49	12.03
	(0.903)		(0.993)		(1.221)			
Health spending, %	-0.481	5,918	0.053	4,993	-0.575	2,386	16.84	14.68
	(1.071)		(1.226)		(1.322)			
Social services spending, %	0.605	5,918	-0.605	4,993	-1.106	2,386	10.15	7.875
	(0.564)		(0.552)		(1.030)			
Transportation spending, %	-1.374	5,918	0.617	4,993	2.342	2,386	12.91	11.12
	(0.872)		(1.032)		(1.392)			
Average Standardized Effect (jointly for A and B)	0.055		0.036		0.086			
Average Standardized Effect (jointly for B)	0.058		0.040		0.099			

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. The table reports conventional RD estimates, calculated based on a 1st order polynomial and no baseline covariates, and significance levels based on robust standard errors following Calonico et al. (2014b). Column 1 corresponds to the effect of national-party rule versus sub-national party rule. Columns 3 and 5 refer to the effect of regional and local-party rule versus all other parties, respectively. Columns 7 and 8 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.

Table 3: Effect of Party Geographic Scope on Neighboring Districts' Outcomes

	Type of Party in Power						Dep. Var.	
	National		Regional		Local			
	RD Estimate (1)	N (2)	RD Estimate (3)	N (4)	RD Estimate (5)	N (6)	Mean (7)	SD (8)
A. Economic Spillovers								
Log of municipal revenue p.c.,	0.015	5,903	0.035	4,976	0.020	2,384	6.824	0.842
averaged across neighboring districts	(0.064)		(0.067)		(0.096)			
Log of local tax revenue p.c.,	-0.119	5,903	0.027	4,976	0.142	2,384	1.840	1.446
—"—	(0.092)		(0.104)		(0.185)			
Log of municipal spending p.c.,	0.017	5,903	0.036	4,976	0.003	2,384	6.543	0.769
—"—	(0.059)		(0.063)		(0.088)			
Log of municipal investment p.c.,	0.008	5,903	0.057	4,976	0.009	2,384	6.056	0.957
—"—	(0.072)		(0.075)		(0.107)			
B. Spillovers on Spending Patterns								
% of investment budget implemented,	0.112	5,903	0.111	4,976	-1.292	2,384	73.55	10.03
averaged across neighboring districts	(0.726)		(0.807)		(1.087)			
Administrative spending, %,	0.500	5,903	-0.396	4,976	-0.236	2,384	34.90	8.600
—"—	(0.656)		(0.723)		(1.057)			
Agriculture spending, %,	0.176	5,903	-0.048	4,976	-0.087	2,384	5.446	5.525
—"—	(0.425)		(0.504)		(0.528)			
Education spending, %,	-0.687	5,903	0.172	4,976	1.183	2,384	12.62	7.022
—"—	(0.514)		(0.582)		(0.792)			
Health spending, %,	-0.901	5,903	1.224	4,976	0.183	2,384	16.74	9.065
—"—	(0.630)		(0.718)		(0.853)			
Social services spending, %,	0.429	5,903	-0.912**	4,976	0.277	2,384	10.24	5.847
—"—	(0.460)		(0.428)		(0.770)			
Transportation spending, %,	1.273**	5,903	-1.080**	4,976	-0.850	2,384	12.99	6.149
—"—	(0.515)		(0.590)		(0.676)			
Average Standardized Effect (jointly for A and B)	0.065		0.066		0.062			
Average Standardized Effect (jointly for B)	0.083		0.080		0.078			

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. The table reports conventional RD estimates, calculated based on a 1st order polynomial and no baseline covariates, and significance levels based on robust standard errors following Calonico et al. (2014b). Outcome variables are averages across neighboring districts, excluding districts which are provincial capitals. Column 1 corresponds to the effect of national-party rule versus sub-national party rule. Columns 3 and 5 refer to the effect of regional and local-party rule versus all other parties, respectively. Columns 7 and 8 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.

Table 4: Effect of Party Geographic Scope on Politician Selection, Accountability, Political Landscape and Voting Behavior

	Type of Party in Power						Dep. Var.	
	National		Regional		Local			
	RD Estimate	N	RD Estimate	N	RD Estimate	N	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. Politician Selection								
Mayor's Age	1.279*	4,354	-2.465***	4,102	4.026**	1,071	44.34	8.802
	(0.751)		(0.826)		(1.864)			
Mayor Completed Tertiary Education	-0.052	4,339	0.100**	4,087	-0.217*	1,063	0.567	0.495
	(0.044)		(0.048)		(0.119)			
Mayor's Years of Public Service	2.788**	2,858	-2.080**	2,794	-0.226	537	6.295	8.777
	(1.147)		(1.092)		(2.305)			
Mayor Has a Sentence	0.023	2,858	-0.058**	2,794	0.178	537	0.074	0.261
	(0.030)		(0.030)		(0.110)			
B. Accountability								
Mayor's Number of Corruption Complaints	0.102	1,479	-0.407*	1,435	0.763	319	0.719	1.611
	(0.215)		(0.248)		(0.617)			
Mayor Recalled	-0.044	4,527	0.043	3,617	0.013	2,173	0.182	0.386
	(0.034)		(0.038)		(0.050)			
C. Political Landscape and Voting Behavior								
Vote Share of National Parties in the Next Election	-8.082***	4,441	9.354***	3,548	-2.171	2,168	44.69	28.47
	(2.249)		(2.734)		(3.313)			
Vote Share of Regional Parties in the Next Election	9.187***	4,441	-8.563***	3,548	-1.404	2,168	46.45	29.60
	(2.410)		(2.690)		(2.940)			
Vote Share of Local Parties in the Next Election	-1.567	4,441	-0.466	3,548	2.246	2,168	5.065	13.44
	(1.120)		(1.083)		(2.794)			
Turnout in the Next Election	-0.126	4,441	-0.228	3,548	0.382	2,168	85.80	4.792
	(0.436)		(0.468)		(0.525)			
Number of Parties in the Next Election	-0.082	4,441	-0.417	3,548	0.619	2,168	6.923	2.733
	(0.245)		(0.234)		(0.420)			

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. The table reports conventional RD estimates, calculated based on a 1st order polynomial and no baseline covariates, and significance levels based on robust standard errors following Calonico et al. (2014b). Column 1 corresponds to the effect of national-party rule versus sub-national party rule. Columns 3 and 5 refer to the effect of regional and local-party rule versus all other parties, respectively. Columns 7 and 8 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.

Table 5: Effects of National vs Regional Party Rule by Degree of Political Competition

	1 = National Party is in Power; 0 = Regional Party is in Power			
	Mean margin of victory greater than median	Mean margin of victory lower than median	Mean effective # of parties lower than median	Mean effective # of parties greater than median
	(1)	(2)	(3)	(4)
A. Local Budget Size				
Log of municipal revenue p.c.	-0.145	0.006	-0.079	0.021
	(0.151)	(0.102)	(0.132)	(0.109)
Log of local tax revenue p.c.	-0.024	0.117	-0.186	0.173
	(0.177)	(0.154)	(0.160)	(0.169)
Log of municipal spending p.c.	-0.098	0.013	-0.055	0.024
	(0.142)	(0.094)	(0.125)	(0.101)
Log of municipal investment p.c.	-0.153	0.007	-0.097	0.014
	(0.180)	(0.118)	(0.152)	(0.131)
B. Spending Patterns				
% of investment budget implemented	2.126	-0.257	2.175	-0.543
	(2.528)	(1.872)	(2.204)	(1.925)
Administrative spending, %	1.810	0.876	3.050	0.600
	(2.199)	(1.724)	(2.128)	(1.665)
Agriculture spending, %	1.368	-0.152	-0.155	0.840
	(1.486)	(1.192)	(1.425)	(1.175)
Education spending, %	-0.868	-0.904	-0.046	-1.604
	(1.988)	(1.338)	(1.831)	(1.594)
Health spending, %	-3.374	0.837	-2.345	0.769
	(2.337)	(1.533)	(2.010)	(1.726)
Social services spending, %	1.877*	1.285	1.311	0.497
	(1.068)	(1.007)	(0.948)	(1.101)
Transportation spending, %	-1.557	-0.944	-3.532*	0.234
	(1.677)	(1.427)	(2.060)	(1.539)
C. Electoral Punishment				
Vote Share of National Parties in the Next Election	0.278	-16.004***	-7.507*	-13.784***
	(4.693)	(3.431)	(3.998)	(3.646)
Vote Share of Regional Parties in the Next Election	1.146	12.734***	7.874*	11.485***
	(4.427)	(3.107)	(4.201)	(3.777)
Average Standardized Effect (jointly for vars in A and B)	0.143	0.053	0.126	0.058
Simulation p-value (1,000 Random Splits)	0.033	0.932	0.078	0.879
Average Standardized Effect (jointly for vars in B)	0.156	0.067	0.140	0.063
Simulation p-value (1,000 Random Splits)	0.016	0.809	0.055	0.845
Observations	2,443	2,523	2,422	2,544

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. Each cell contains an RD estimate obtained by using the margin between national and regional parties as a running variable and excluding all elections for which a top local party gained more votes than the top national party or the top regional party. The table reports these RD estimates, calculated based on a 1st order polynomial and no baseline covariates, and significance levels based on robust standard errors following Calonico et al. (2014b).

APPENDIX

A1 RDD diagnostics

Following Lee and Lemieux (2010), we check the validity of the RD design in two ways. First, we perform a conventional McCrary (2008) test to look for discontinuities in the density of the running variable around the cut-off. This could be indicative of vote manipulation or electoral fraud.[34] Second, we explore the effect of party geographic scope on pseudo outcomes which should not be affected by the treatment.

Figure A1 presents the results of the McCrary (2008) test. There are no substantial jumps in the density for neither party type and the differences are not significant.[35] The results concur with the lack of qualitative evidence on electoral fraud. For instance, only 70 incidents were reported during the 2009 municipal elections for over 1,800 municipalities.[36] There is no indication that either incident was directly related to a particular party type.

Table A2 displays the effects of party geographic scope on placebo outcomes. In particular, we focus on lagged values of our main outcomes and local socio-economic characteristics. Consistent with a valid identification assumption, we observe a smooth relation between almost all pseudo outcomes and the assignment variables for all party types. Only 2 out of 36 estimates are significant at the 10% level and none at the 5% level. Moreover, the permutation test by Canay and Kamat (2016) does not reject the hypothesis that the outcomes are jointly continuous around the winning margin threshold, except for 2 out of 36 outcomes.

Taken together, the above results suggest that the central identifying assumption of the RDD holds in our setting.

[34] For instance, while studying US House Elections from 1926 to 1996, Snyder (2005) find that incumbents were systematically more likely to be on the winning side of the cut-off in close races. Similarly, Enikolopov et al. (2013) document non-trivial amount of electoral fraud in Russian parliamentary elections in favor of the incumbent party.

[35] Additionally, we ran the McCrary (2008) test for 200 placebo cut-offs from -50% to +50% with 0.5% increments excluding zero. Using this method, we show that the t-stats found for the true 0% cut-off are not large relative to the placebo distribution of possible coefficients, confirming results of the conventional McCrary (2008) method.

[36] http://archive.peruthisweek.com/news-10778-politics-election-fraud-reported-peru

A2 Pairwise Comparison of National and Regional Parties

One potential drawback of our baseline approach is that it compares one party type to the rest and does not allow for a comparison between two party types only. For instance, we may ask whether the effect of national-party mayors on some outcome is driven primarily by close elections between national and regional or between national and local parties. Similarly, it could be that a lack of effects masks substantial heterogeneity across multiple pairs of party types.

In our main analysis, we address this issue by reporting three sets of results: national party mayors versus the rest, regional party mayors versus the rest, and local party mayors versus the rest. If party type p_1 is better than party type p_2 and worse than p_3 according to some outcome, then, by transitivity, this difference in performance will likely be revealed in the sets of results for the party types p_2 and p_3. Conversely, if all three sets of results show no significant or economically meaningful differences, then it is unlikely that they are present in pairwise comparisons between party types. For the political competition analysis, we also adopt an alternative method of comparing national and regional parties pairwise which we describe below.

Define a winning margin between the most voted party of type p and the most voted party of type j in municipality i during election t as WM_{pjit}. Thus, a mayor of party type p wins a given election if and only if $WM_{pjit} > 0$ for all $j \neq p$.[37] For a given party type p, we estimate:

$$\tau_{pj}^{RD} = \lim_{WM_{pjit} \downarrow 0} E[Y_{it} | WM_{pjit} > 0, WM_{jkit} > 0] - \lim_{WM_{pjit} \uparrow 0} E[Y_{it} | WM_{pjit} < 0, WM_{pkit} > 0], \forall k \neq p, j \tag{2}$$

Under this set-up, we will identify the effect of having a mayor of party type p over one of party type j in municipalities where the two most voted party types are p and j. Insofar as the standard regression discontinuity design assumptions hold along this dimension, τ_{pj}^{RD} will estimate a causal impact of electing a mayor of party type p relative to electing a mayor of party type j.

Note that this set-up is akin to the regression discontinuity design with multiple forcing variables (Imbens and Zajonc, 2011; Wong et al., 2013) in which treatment is assigned whenever two variables jointly cross a certain threshold. As shown by Wong et al. (2013), equation (1) then identifies a weighted sum of two effects: the effect of party type p_1 winning against party type p_2

[37] Note that this object is different from WM_{pit} defined above as it compares vote shares of different party types in a pairwise manner. In fact, $WM_{pit} = \min\{WM_{pjit}\}, \forall j \neq p$.

and the effect of party type p_1 winning against p_3.[38] In the case of national parties, it consists of a weighted average of the effect in marginal elections between national and regional parties and that in marginal elections between national and local parties. Thus, our approach in Equation 2 is similar to the approach in Wong et al. (2013) which focuses only on one of the running variables.

[38]Note that the estimation procedure in Section 5.1 collapses a two-dimensional RDD into one dimension by defining $WM_{pit} = \min\{WM_{pjit}\}, \forall j \neq p$. This approach is identical to the centering approach of analyzing a regression discontinuity with multiple forcing variables described in Wong et al. (2013) and used, for example, by Hinnerich and Pettersson-Lidbom (2014).

Figure A1: Estimated Density Function of Assignment Variables.

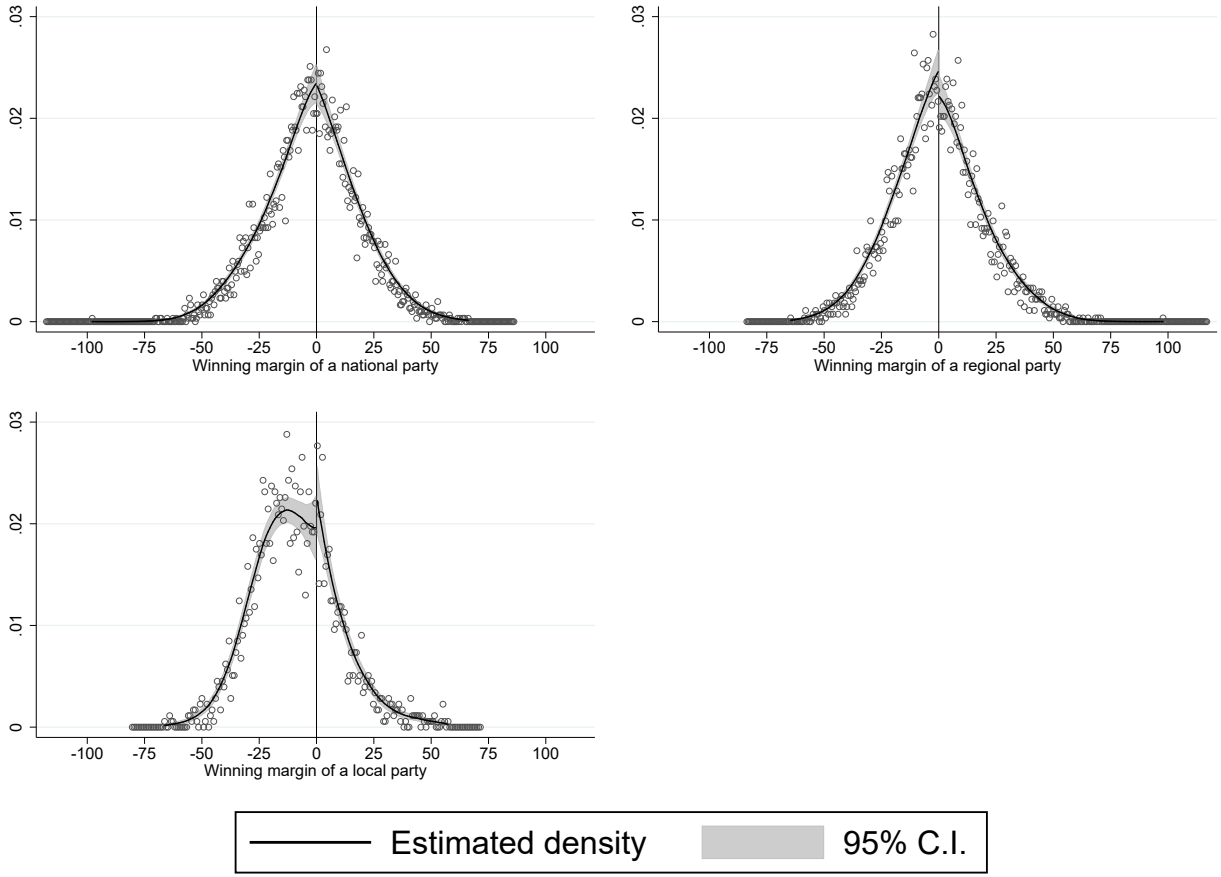

Figure A2: Relationship between National Party Rule and Indicators of Government Size.

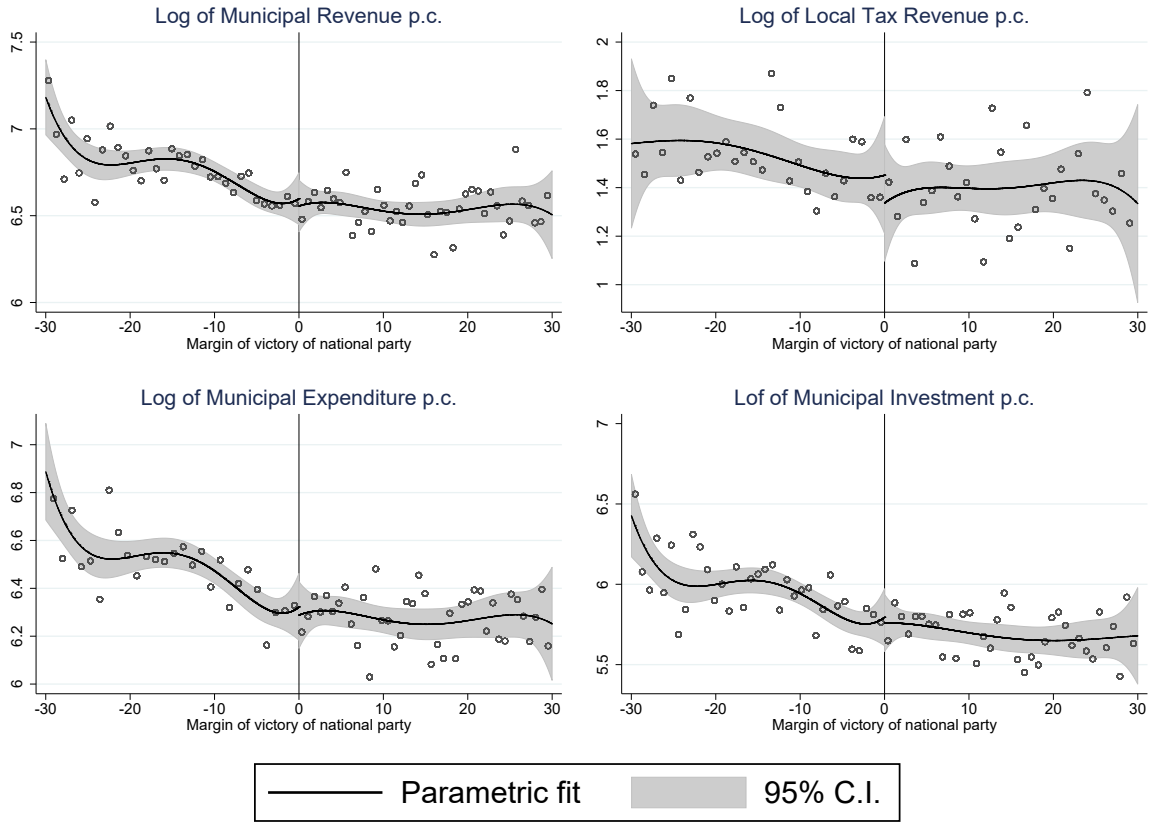

Table A1: List of National Parties and Alliances of National Parties with at least One Mayoral Victory

Nr.	Name of National Party or Alliance of National Parties	Nr of Mayors
1	ACCION POPULAR	329
2	AGRUPACION INDEPENDIENTE SI CUMPLE	20
3	AGRUPACION INDEPENDIENTE UNION POR EL..	35
4	ALIANZA ELECTORAL UNIDAD NACIONAL	203
5	ALIANZA ELECTORAL VAMOS VECINO	4
6	ALIANZA PARA EL PROGRESO	262
7	ALIANZA PERU POSIBLE	3
8	ALIANZA POPULAR	4
9	ALIANZA REGIONAL ANCASH	17
10	CAMBIO RADICAL	7
11	CON FUERZA PERU	6
12	COORDINADORA NACIONAL DE INDEPENDIENTES	3
13	DEMOCRACIA DIRECTA	15
14	DESPERTAR NACIONAL	1
15	EL FRENTE AMPLIO POR JUSTICIA, VIDA Y LIBERTAD	2
16	FONAVISTAS DEL PERU	2
17	FRENTE AMPLIO REGIONAL	12
18	FRENTE INDEPENDIENTE MORALIZADOR	21
19	FRENTE POPULAR AGRICOLA FIA DEL PERU	4
20	FRENTE POPULAR DEMOCRATICO	2
21	FUERZA 2011	52
22	FUERZA DEMOCRATICA	86
23	FUERZA NACIONAL	2
24	FUERZA POPULAR	75
25	MOVIMIENTO AMPLIO PAIS UNIDO - MAPU	5
26	MOVIMIENTO NUEVA IZQUIERDA	46
27	PARTIDO APRISTA PERUANO	606
28	PARTIDO DEMOCRATICO SOMOS PERU	324
29	PARTIDO HUMANISTA PERUANO	17
30	PARTIDO JUSTICIA NACIONAL	1
31	PARTIDO MOVIMIENTO HUMANISTA PERUANO	1
32	PARTIDO NACIONALISTA PERUANO	76
33	PARTIDO POLITICO NACIONAL PRIMERO PERU	14
34	PARTIDO POPULAR CRISTIANO - PPC	14
35	PARTIDO POPULAR CRISTIANO - PPC - UNIDAD NACIONAL	30
36	PARTIDO POR LA DEMOCRACIA SOCIAL - COMPROMISO PERU	1
37	PARTIDO RECONSTRUCCION DEMOCRATICA	15
38	PARTIDO RENACIMIENTO ANDINO	37
39	PARTIDO SOCIALISTA	9
40	PERU PATRIA SEGURA	4
41	PERU POSIBLE	250
42	PROGRESEMOS PERU	2
43	RENOVACION NACIONAL	1
44	RESTAURACION NACIONAL	86
45	RESURGIMIENTO PERUANO	1
46	SIEMPRE UNIDOS	47
47	SOLIDARIDAD NACIONAL	25
48	TODOS POR EL PERU	1
49	UNION POR EL PERU	201
50	VAMOS PERU	6

Table A2: Balance on Covariates and Falsification Tests

	Type of Party in Power						Dep. Var.	
	National Party Rule		Regional Party Rule		Local Party Rule			
	RD Estimate	Permutation p-value	RD Estimate	Permutation p-value	RD Estimate	Permutation p-value	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A. Economic Development								
Human development index, 2003	-0.009	0.656	0.002	0.664	0.007	0.793	0.278	0.095
	(0.007)		(0.007)		(0.013)			
Life expectancy, 2003	-0.105	0.967	-0.012	0.903	-0.337	0.908	67.41	3.737
	(0.280)		(0.310)		(0.488)			
% with high school diplomas, 2003	-2.004	0.397	0.409	0.484	2.728	0.382	44.65	22.71
	(1.539)		(1.812)		(3.018)			
Years of education, 2003	-0.202	0.140	0.015	0.740	0.245	0.307	6.024	2.104
	(0.157)		(0.165)		(0.290)			
Family income per capita, 2003	-9.595	0.680	1.592	0.367	3.075	0.893	269.5	137.8
	(9.617)		(9.168)		(17.235)			
H_0: Outcomes are Jointly Balanced		0.782		0.665		0.665		
B. Public Finance								
Log of municipal revenue p.c. in t-1	0.086	0.796	-0.006	0.714	0.006	0.561	6.100	1.095
	(0.079)		(0.077)		(0.113)			
Log of local tax revenue p.c. in t-1	-0.166*	0.684	0.037	0.921	0.204	0.969	1.347	1.366
	(0.096)		(0.103)		(0.180)			
Log of municipal spending p.c. in t-1	0.082	1.000	-0.014	0.512	0.025	0.835	5.870	1.029
	(0.073)		(0.071)		(0.105)			
Log of municipal investment p.c. in t-1	0.131	0.676	-0.044	0.861	0.030	0.657	5.271	1.247
	(0.089)		(0.087)		(0.125)			
H_0: Outcomes are Jointly Balanced		0.657		0.539		0.411		
C. Electoral system								
Turnout in t	-0.206	0.889	0.475	0.775	0.265	0.695	84.56	5.952
	(0.462)		(0.473)		(0.767)			
Number of Parties in t	-0.286	0.774	-0.094	0.026	0.706*	0.051	7.217	2.830
	(0.211)		(0.219)		(0.391)			
HHI of Parties in t	50.479	0.852	58.917	0.159	-117.47	0.426	2421	882.5
	(54.898)		(63.715)		(95.70)			
H_0: Outcomes are Jointly Balanced		0.936		0.104		0.116		

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. Columns 1, 3, 5, and 7 report conventional RD estimates calculated based on a 1st order polynomial and no baseline covariates, with significance levels based on robust standard errors following Calonico et al. (2014b). Column 1 corresponds to the effect of national-party rule versus sub-national party rule. Columns 3 and 7 refer to the effect of regional and local-party rule versus all other parties, respectively. Columns 2, 4, and 6 display the p-values for the Canay and Kamat (2016) permutation test which evaluates whether the distribution of an outcome (or several outcomes jointly) changes around the threshold. Columns 8 and 9 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.

Table A3: Effect of National-Party Rule on Government Outcomes under Different Specifications

	RD Estimates				Permutation	Observations		Dep. Var.	
					p-value	Total	Effective	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Polynomial order	1st	2nd	1st	2nd		1st	1st		
Baseline Covariates	No	No	Yes	Yes		No	No		
A. Local Budget Size									
Log of municipal revenue p.c.	0.048	0.051	-0.012	-0.002	0.820	5,919	3,285	6.707	0.916
	(0.068)	(0.082)	(0.036)	(0.045)					
Log of local tax revenue p.c.	-0.065	-0.104	0.076	0.088	0.762	5,919	3,571	1.450	1.504
	(0.096)	(0.133)	(0.051)	(0.058)					
Log of municipal spending p.c.	0.050	0.045	-0.007	0.001	0.483	5,919	3,246	6.436	0.858
	(0.063)	(0.077)	(0.032)	(0.041)					
Log of municipal investment p.c.	0.053	0.058	-0.025	-0.026	0.466	5,919	3,411	5.879	1.094
	(0.076)	(0.090)	(0.045)	(0.061)					
B. Spending Patterns									
% of investment budget implemented	0.334	0.243	0.183	0.237	0.947	5,919	3,651	73.69	16.49
	(1.135)	(1.388)	(1.147)	(1.724)					
Administrative spending, %	0.644	0.670	1.209	1.412	0.998	5,918	3,457	35.20	13.86
	(0.947)	(1.180)	(0.910)	(1.167)					
Agriculture spending, %	0.784	0.702	0.678	0.563	0.967	5,918	3,221	5.444	8.578
	(0.696)	(0.844)	(0.641)	(0.790)					
Education spending, %	0.155	0.628	0.150	0.496	0.992	5,918	2,885	12.49	12.03
	(0.903)	(1.196)	(0.878)	(1.085)					
Health spending, %	-0.481	-0.481	-0.745	-1.026	0.800	5,918	2,925	16.84	14.68
	(1.071)	(1.274)	(1.035)	(1.272)					
Social services spending, %	0.605	0.717	0.340	0.386	0.244	5,918	3,687	10.15	7.875
	(0.564)	(0.683)	(0.528)	(0.649)					
Transportation spending, %	-1.374	-1.490	-1.749*	-1.894*	0.405	5,918	3,109	12.91	11.12
	(0.872)	(1.077)	(0.836)	(1.019)					
Average Standardized Effect (jointly for A and B)	0.055	0.062	0.049	0.054					
Average Standardized Effect (jointly for B)	0.058	0.065	0.063	0.073					

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. Significance levels are calculated based on robust standard errors following Calonico et al. (2014b). Column 1 corresponds to the effect of national-party rule under our baseline specification. Column 2 to 4 report conventional RD estimates under a 2nd order polynomial with no covariates, a 1st order polynomial with covariates and a 2nd order polynomial with covariates, respectively. Covariates include past value of the outcome, as well as 2003 values of human development index, life expectancy, % with high school diplomas, average years of education, and family income per capita. Column 5 presents the p-value from the permutation test as in Canay and Kamat (2016), with a null hypothesis of no discontinuous change in the outcome distribution around the cut-off. Column 7 displays the number of observations chosen by the bandwidth-selection algorithm in Column 1. Columns 8 and 9 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.

Table A4: Effect of Regional-Party Rule on Government Outcomes under Different Specifications

	RD Estimates				Permutation	Observations		Dep. Var.	
					p-value	Total	Effective	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Polynomial order	1st	2nd	1st	2nd		1st	1st		
Baseline Covariates	No	No	Yes	Yes		No	No		
A. Local Budget Size									
Log of municipal revenue p.c.	0.022	0.051	0.020	0.023	0.628	4,994	2,729	6.707	0.916
	(0.072)	(0.099)	(0.046)	(0.054)					
Log of local tax revenue p.c.	-0.031	-0.071	-0.070	-0.091	0.960	4,994	2,625	1.450	1.504
	(0.110)	(0.135)	(0.050)	(0.060)					
Log of municipal spending p.c.	0.019	0.056	0.020	0.027	0.647	4,994	2,739	6.436	0.858
	(0.067)	(0.093)	(0.042)	(0.051)					
Log of municipal investment p.c.	0.049	0.097	0.063	0.082	0.478	4,994	2,633	5.879	1.094
	(0.086)	(0.115)	(0.060)	(0.075)					
B. Spending Patterns									
% of investment budget implemented	0.340	0.580	0.631	1.066	0.854	4,994	2,856	73.69	16.49
	(1.369)	(1.640)	(1.324)	(1.931)					
Administrative spending, %	-0.741	-0.070	-1.267	-1.047	0.990	4,993	2,782	35.20	13.86
	(1.148)	(1.595)	(1.063)	(1.384)					
Agriculture spending, %	0.278	0.779	0.092	0.466	0.395	4,993	3,052	5.444	8.578
	(0.807)	(1.167)	(0.762)	(1.046)					
Education spending, %	0.477	-0.372	0.246	-0.454	0.358	4,993	2,735	12.49	12.03
	(0.993)	(1.407)	(1.013)	(1.324)					
Health spending, %	0.053	0.049	0.260	0.273	0.692	4,993	2,664	16.84	14.68
	(1.226)	(1.519)	(1.184)	(1.469)					
Social services spending, %	-0.605	-2.073**	-0.303	-0.882	0.146	4,993	3,250	10.15	7.875
	(0.552)	(0.892)	(0.509)	(0.729)					
Transportation spending, %	0.617	0.884	0.801	0.955	0.553	4,993	2,575	12.91	11.12
	(1.032)	(1.321)	(0.976)	(1.225)					
Average Standardized Effect (jointly for A and B)	0.036	0.069	0.040	0.058					
Average Standardized Effect (jointly for B)	0.040	0.073	0.041	0.064					

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. Significance levels are calculated based on robust standard errors following Calonico et al. (2014b). Column 1 corresponds to the effect of regional-party rule under our baseline specification. Column 2 to 4 report conventional RD estimates under a 2nd order polynomial with no covariates, a 1st order polynomial with covariates and a 2nd order polynomial with covariates, respectively. Covariates include past value of the outcome, as well as 2003 values of human development index, life expectancy, % with high school diplomas, average years of education, and family income per capita. Column 5 presents the p-value from the permutation test as in Canay and Kamat (2016), with a null hypothesis of no discontinuous change in the outcome distribution around the cut-off. Column 7 displays the number of observations chosen by the bandwidth-selection algorithm in Column 1. Columns 8 and 9 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.

Table A5: Effect of Local-Party Rule on Government Outcomes under Different Specifications

	RD Estimates				Permutation	Observations		Dep. Var.	
					p-value	Total	Effective	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Polynomial order	1st	2nd	1st	2nd		1st	1st		
Baseline Covariates	No	No	Yes	Yes		No	No		
A. Local Budget Size									
Log of municipal revenue p.c.	-0.011	-0.000	-0.010	-0.090	0.498	2,387	1,225	6.707	0.916
	(0.110)	(0.159)	(0.053)	(0.088)					
Log of local tax revenue p.c.	0.287	0.346	0.015	-0.002	0.713	2,387	955	1.450	1.504
	(0.199)	(0.244)	(0.108)	(0.139)					
Log of municipal spending p.c.	-0.015	0.003	-0.054	-0.106	0.815	2,387	1,265	6.436	0.858
	(0.102)	(0.151)	(0.054)	(0.081)					
Log of municipal investment p.c.	-0.027	-0.031	-0.072	-0.131	0.773	2,387	1,368	5.879	1.094
	(0.123)	(0.184)	(0.076)	(0.115)					
B. Spending Patterns									
% of investment budget implemented	-1.205	-1.244	-1.826	-1.524	0.845	2,387	1,204	73.69	16.49
	(1.825)	(2.284)	(1.719)	(2.225)					
Administrative spending, %	0.345	-0.715	-0.034	-0.701	0.734	2,386	1,133	35.20	13.86
	(1.558)	(2.106)	(1.526)	(1.930)					
Agriculture spending, %	-1.448	-1.395	-0.767	-0.732	0.578	2,386	990	5.444	8.578
	(0.880)	(1.111)	(0.759)	(0.906)					
Education spending, %	-0.472	-0.248	-0.968	-0.849	0.054	2,386	995	12.49	12.03
	(1.221)	(1.501)	(1.149)	(1.313)					
Health spending, %	-0.575	0.089	-0.484	0.684	0.383	2,386	1,133	16.84	14.68
	(1.322)	(1.822)	(1.144)	(1.780)					
Social services spending, %	-1.106	-1.232	-0.579	-0.504	0.859	2,386	1,127	10.15	7.875
	(1.030)	(1.330)	(0.885)	(1.088)					
Transportation spending, %	2.342	2.184	2.716*	2.721	0.084	2,386	953	12.91	11.12
	(1.392)	(1.738)	(1.307)	(1.615)					
Average Standardized Effect (jointly for A and B)	0.086	0.085	0.071	0.091					
Average Standardized Effect (jointly for B)	0.099	0.096	0.091	0.093					

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. Significance levels are calculated based on robust standard errors following Calonico et al. (2014b). Column 1 corresponds to the effect of local-party rule under our baseline specification. Column 2 to 4 report conventional RD estimates under a 2nd order polynomial with no covariates, a 1st order polynomial with covariates and a 2nd order polynomial with covariates, respectively. Covariates include past value of the outcome, as well as 2003 values of human development index, life expectancy, % with high school diplomas, average years of education, and family income per capita. Column 5 presents the p-value from the permutation test as in Canay and Kamat (2016), with a null hypothesis of no discontinuous change in the outcome distribution around the cut-off. Column 7 displays the number of observations chosen by the bandwidth-selection algorithm in Column 1. Columns 8 and 9 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.

Table A6: Effect of Traditional-Party Rule on Government Outcomes under Different Specifications

	RD Estimates				Permutation	Observations		Dep. Var.	
					p-value	Total	Effective	Mean	SD
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Polynomial order	1st	2nd	1st	2nd		1st	1st		
Baseline Covariates	No	No	Yes	Yes		No	No		
A. Local Budget Size									
Log of municipal revenue p.c.	0.036	0.029	-0.030	-0.040	0.258	5,108	2,080	6.707	0.916
	(0.085)	(0.097)	(0.049)	(0.054)					
Log of local tax revenue p.c.	-0.173	-0.187	0.047	0.039	0.415	5,108	1,908	1.450	1.504
	(0.149)	(0.184)	(0.061)	(0.070)					
Log of municipal spending p.c.	0.045	0.038	-0.010	-0.019	0.384	5,108	2,159	6.436	0.858
	(0.078)	(0.088)	(0.047)	(0.052)					
Log of municipal investment p.c.	0.083	0.085	-0.017	-0.047	0.264	5,108	2,275	5.879	1.094
	(0.096)	(0.113)	(0.067)	(0.079)					
B. Spending Patterns									
% of investment budget implemented	1.912	1.980	1.527	1.402	0.037	5,107	1,905	73.69	16.49
	(1.472)	(1.810)	(1.386)	(1.774)					
Administrative spending, %	0.043	0.139	0.509	0.690	0.611	5,107	1,756	35.20	13.86
	(1.333)	(1.403)	(1.285)	(1.409)					
Agriculture spending, %	0.979	0.923	0.726	0.691	0.806	5,107	2,155	5.444	8.578
	(0.792)	(0.869)	(0.696)	(0.766)					
Education spending, %	1.131	1.436	0.809	1.034	0.650	5,107	1,717	12.49	12.03
	(0.990)	(1.174)	(0.905)	(1.094)					
Health spending, %	0.231	-1.162	0.457	-0.846	0.849	5,107	2,260	16.84	14.68
	(1.145)	(1.592)	(0.963)	(1.478)					
Social services spending, %	-0.333	-0.263	0.125	0.307	0.390	5,107	1,913	10.15	7.875
	(0.752)	(0.887)	(0.647)	(0.780)					
Transportation spending, %	-0.516	-0.548	-0.625	-0.834	0.189	5,107	2,032	12.91	11.12
	(1.017)	(1.254)	(0.949)	(1.083)					
Average Standardized Effect (jointly for A and B)	0.065	0.072	0.043	0.055					
Average Standardized Effect (jointly for B)	0.062	0.074	0.055	0.068					

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in brackets are calculated using a heteroskedasticity–robust nearest neighbor variance estimator with the minimum number of neighbors equal to three. Significance levels are calculated based on robust standard errors following Calonico et al. (2014b). Column 1 corresponds to the effect of traditional-party rule under our baseline specification. Column 2 to 4 report conventional RD estimates under a 2nd order polynomial with no covariates, a 1st order polynomial with covariates and a 2nd order polynomial with covariates, respectively. Covariates include past value of the outcome, as well as 2003 values of human development index, life expectancy, % with high school diplomas, average years of education, and family income per capita. Column 5 presents the p-value from the permutation test as in Canay and Kamat (2016), with a null hypothesis of no discontinuous change in the outcome distribution around the cut-off. Column 7 displays the number of observations chosen by the bandwidth-selection algorithm in Column 1. Columns 8 and 9 report the mean and standard deviation for the outcome variable based on all municipality-years in our sample, as in Table 1.