



Regular Article

National or sub-national parties: Does party geographic scope matter?☆

Alexey Makarin^{a,d,*}, Ricardo Piqué^b, Fernando Aragón^c^a Einaudi Institute for Economics and Finance (EIEF), Via Sallustiana 62, Rome, RM, 00187, Italy^b Ryerson University, Department of Economics, 350 Victoria St., Toronto, Ontario, M5B 2K3, Canada^c Simon Fraser University, Department of Economics, Burnaby, British Columbia, V5A 1S6, Canada^d Centre for Economic Policy Research (CEPR), 33 Great Sutton Street, London, EC1V 0DX, United Kingdom

ARTICLE INFO

Keywords:

National parties
Regression discontinuity
Political party system
Peru
Local governance

ABSTRACT

In many developing countries, local elections are increasingly dominated by political parties with a local or regional scope. This paper examines whether the geographic scope of a ruling party (national vs. sub-national) affects local policy outcomes. This party dimension can be important due to differences in parties' ability to select and discipline politicians, coordinate with other government institutions, or internalize geographical spillovers. Using a regression discontinuity design and data from Peruvian municipalities, we find that a party's geographic scope has negligible effects on most observable policy outcomes. We also document a small impact on the mayor's education and municipal accountability. The lack of stronger effects appears to reflect policy convergence driven by political competition. Overall, our results challenge the view that sub-national-party rule is detrimental to local governance.

1. Introduction

In recent years, there has been an emerging trend towards denationalization of local politics: in many countries, national parties are being displaced by those with a regional or local scope.¹ For instance, European national parties 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 of local politics raises the question of whether the geographic scope of a ruling party (national vs. sub-national) affects local policies and governance (Sabatini, 2003; Enikolopov and Zhuravskaya, 2007).

The existing political economy literature suggests several possible reasons for this party dimension to matter. One argument is that, by running in elections in several jurisdictions and government levels, national parties can provide more attractive career paths than local and regional parties. They may also be able to offer additional resources that increase one's probability of winning, such as campaign funding or party name recognition. Career concerns and additional resources can create dynamic incentives and improve parties' ability to discipline and select politicians (Hall and Van Houweling, 1995; Besley, 2006). National parties could also exploit economies of scale and invest more in policy design, candidate selection, and training. Similarly, if parties allow for intra-party transfers and bargaining (as in Alesina and Spear (1988)), then parties with a broader network of members may have the

* A previous version of this paper was circulated under the title "National Parties and Local Development: Evidence from Peruvian Municipalities." We are grateful to the Editor, two anonymous referees, Lori Beaman, Filipe Campante, Jordan Gans-Morse, Georgy Egorov, Ruben Enikolopov, Timothy Feddersen, Kirabo Jackson, Seema Jayachandran, Vishal Kamat, Matt Notowidigdo, Nicola Persico, Michael Poyker, Nancy Qian, and Jason Seawright. We also thank seminar participants at Brock University, College of the Holy Cross, Northwestern University, and Wilfrid Laurier University, and attendees at the 2016 APSA Meeting, the LSE-Stanford-Universidad de los Andes Conference on Long Range Development in Latin America, NASMES 2017, SIOE 2017, SSHRC Workshop "Commodities, Wellbeing, and Institutions," and the 2017 Toronto Political Behavior Workshop for their helpful comments. Finally, we are thankful to Bruno Barletti and Javier Piqué; Luis Bernal and Franco Maldonado at the Peruvian Ministry of Economy and Finance; Jose Hugo Eyzaguirre, and Jose Carlos Hurtado at the National Jury of Elections and Vladimir Zavala at the Office of the Public Prosecutor Specialized in Corruption Crimes for their help in accessing and collecting the data.

* Corresponding author. Einaudi Institute for Economics and Finance (EIEF), Via Sallustiana 62, Rome, RM, 00187, Italy.

E-mail addresses: alexey.makarin@eief.it (A. Makarin), rpique@ryerson.ca (R. Piqué), faragons@sfu.ca (F. Aragón).

¹ This rise of sub-national parties is viewed as an unintended consequence of decentralization reforms which increased the power of sub-national governments (Chhibber and Kollman, 1998; Bardhan, 2002; Brancati, 2008; Harbers, 2010a; Dargent and Munoz, 2011).

advantage to coordinate inter-jurisdictional projects or access central government's resources, such as budgetary transfers or technical support. Finally, national parties may be better at internalizing geographic spillovers and preventing regional populism (Riker, 1964).

In this paper, we provide the first estimates of the causal impact of party geographic scope on local government outcomes. We do so by studying Peruvian district municipalities in the post-decentralization period (2002 onwards). The Peruvian local context is well-suited for this study as it is an emblematic example of economic decentralization accompanied by a dramatic denationalization of local politics: the share of national-party mayors dropped from 100% in the 1980s to 30% by 2014. Moreover, the country boasts several levels of sub-national parties (regional, provincial, and district political movements), allowing for a detailed study of party geographic scope. Finally, there are no strong ideological differences across most parties in Peru (Carpio et al., 2018; Dalton, 2008), particularly in relation to local politics. Hence, our estimates would not be confounded by party ideology.

We obtain causal estimates of the impact of party geographic scope by comparing municipalities where a national-party mayoral candidate barely won over a sub-national-party candidate versus those in which the national-party candidate barely lost. This quasi-experimental strategy addresses relevant concerns regarding omitted variable bias and allows us to interpret our findings as causal effects (Lee, 2008).

The main contribution of this paper is to show that the geographic scope of a ruling party has, in fact, *negligible* effects on observable policy outcomes. First, we find no effects on municipal revenues, including local tax collection, which is indicative of no change in local state capacity. Second, there are no effects on public investment performance, measured as the total municipal investment and an implementation rate of the public investment budget (i.e., the percentage of the investment budget actually spent). The public investment implementation rate is a key measure of municipal performance used to evaluate local governments. In addition, we find negligible effects on the share of bureaucratic expenditures and the percentage of the budget allocated to sectors with high social returns, such as education and health, and areas with positive spillovers on neighboring municipalities like transportation. A similar pattern of results holds for public service provision and other municipal performance goals set by the central government.

We also find no effects on indicators of accountability, such as corruption sentences and mayoral recall, and mixed evidence on political selection: national-party mayors are slightly more experienced, but not better educated. Overall, we find little evidence that national parties are better at selecting and disciplining politicians who then operate local governments more efficiently.

Our findings do not appear to stem from lack of statistical power nor model misspecification. First, regardless of statistical significance, the magnitudes of the coefficients are small. In most cases, they imply an effect of around 0.05 standard deviations. The magnitudes are similar to the null effects observed in some studies of party ideology and politician's gender (Ferreira and Gyourko, 2009, 2014),² while our 95% confidence intervals exclude the coefficients associated with similar party attributes (Galindo-Silva, 2015). Second, we confirm the lack of sizable effects using a novel permutation test proposed by Canay and Kamat (2018). This test evaluates discontinuities in the distribution of outcomes and has more power than standard mean comparison tests. Finally, our results are robust to using different polynomials of the running variable, and to including a rich set of relevant covariates, such as population, socio-economic indicators, and past realizations of the outcome variable.

² In general, however, the results on the effects of politicians' ideology and gender are mixed. Some papers find null results while others, such as Brollo and Troiano (2016) and Caughey et al. (2017), find significant differences. We discuss the literature in more detail in Section 1.

Our null results could be masking significant heterogeneity across different types of sub-national parties. For example, policy outcomes of region-level parties may be systematically different than national parties, but their effect could be attenuated when bundled together with locality-level parties. To address this concern, we examine the impact of regional and local-party rule separately and find the negligible effects of these party types on policy outcomes.

We hypothesize that similarities in policy outcomes may reflect policy convergence due to electoral competition. Consistent with this interpretation, we provide suggestive evidence that in municipalities with high average levels of political competition, party type does not affect policy outcomes. In contrast, in municipalities with low average levels of political competition, there are significant differences in policies implemented by national and sub-national parties.

Literature review. This paper relates to the literature on the determinants of policy divergence in sub-national politics. Our paper contributes to this literature by studying a yet neglected dimension: a party's geographic scope.

Several studies, mostly from developed countries, examine the role of party ideology. The results have been mixed. For instance, Ferreira and Gyourko (2009) and Leigh (2008) find negligible policy differences between Democrat and Republican mayors and governors.³ In contrast, Caughey et al. (2017) document that electing Democratic governors and state legislators has led to more liberal policies, while de Benedictis-Kessner and Warshaw (2016) find that Democratic mayors spend more than their Republican counterparts. Moreover, Beland (2015) shows evidence that the governor's party affiliation may affect labor market outcomes.⁴ Elsewhere, there is evidence that ideology can have a substantial effect. In Sweden, Pettersson-Lidbom (2008) and Folke (2014) find that party ideology (left, right, green, and nationalist parties) affect public spending as well as environmental and immigration policies of local governments.⁵ Meyersson (2014) documents a positive effect of Islamic-party rule on education enrollment in Turkey, while Nellis et al. (2016) find that members of India's Congress party reduced religious rioting.

Recent work has started to examine the role of non-ideological party attributes such as strength of party organization (Primo and Snyder Jr, 2010), party age (Galindo-Silva, 2015), and the importance of independent candidates (Koethenbuerger, 2012; Gamalerio, 2020). These studies suggest that these party attributes may matter for local policies. Most closely to our paper, Gamalerio (2020) finds that party-affiliated mayors in Italy run smaller deficits than independents, while Palguta (2019) shows that the presence of local civic initiatives in local Czech legislatures can affect municipal procurement policy.⁶

We complement previous findings by studying a different non-ideological attribute: party geographic scope. Due to the advantages of the Peruvian context, our analysis is able to nest parties with several levels of geographic scope, such as national parties, regional movements, and municipal political organizations. This allows us to provide the first causal estimates of whether various degrees of party geographic scope

³ This is not due to the non-ideological nature of municipal politics—as shown by Tausanovitch and Warshaw (2014), policies implemented by U.S. local governments follow the ideological positions of their citizens on national issues.

⁴ More recently, Dippel (2019) shows that the unfunded pension benefits grow faster under Democratic mayors.

⁵ Freier and Odendahl (2015) show that changes in the distribution of bargaining power across parties affects tax policies in Bavarian municipalities. In Spain, Solé-Ollé and Viladecans-Marsal (2013), show that left-wing parties convert less rural land for urban uses relative to right-wing parties.

⁶ Local independent leaders and civic initiatives may be comparable to local district organizations in our paper, but not to regional movements and local provincial organizations.

matter for local governance.⁷ Surprisingly, and in contrast to most theoretical arguments in the literature (Enikolopov and Zhuravskaya, 2007), we find that a ruling party's geographic scope has negligible effects on local policy outcomes and accountability.

Another explanation of policy divergence focuses on politicians' personal attributes. For instance, using political reservations in India, Chattopadhyay and Duflo (2004) and Pande (2003) find that gender and caste can affect spending on local infrastructure and transfers.⁸ Similarly, Brollo and Troiano (2016) find that, in Brazil, female mayors tend to be less corrupt, while Gilardi (2015) finds that the election of female politicians increased future female representation in Switzerland. Other studies have examined personal attributes such as age (Alesina et al., 2019), business experience (Beach and Jones, 2016; Szakonyi, 2018), ethnicity (Franck and Rainer, 2012) and race (Broockman, 2013; Logan, 2018), socioeconomic background (Hayo and Neumeier, 2014), tenure (Coviello and Gagliarducci, 2017), and children's gender (Washington, 2008).

Our paper also relates to the literature (mostly from political science) examining the process of 'denationalization' of electoral politics (i.e., the raise of sub-national parties), and, more broadly, the importance of taking into account the 'territorial dimension' of electoral politics (Hopkin, 2003; Caramani, 1996; Jones and Mainwaring, 2003). Several studies focus on understanding the causes of nationalization of party systems, such as fiscal decentralization, institutional reforms, and social cleavages (Caramani, 2004; Morgenstern et al., 2009; Harbers, 2010b; Gunay, 2015). Other work examines the effect of nationalization on government quality and the overall importance of having a strong national party system (Enikolopov and Zhuravskaya, 2007; Lago-Peñas and Lago-Peñas, 2009; Castañeda-Angarita, 2013; Hicken et al., 2016). The main limitation of these studies is that they exploit cross-country differences. This feature reduces their ability to examine the mechanisms at play and to address potential endogeneity of the degree of party system nationalization. Our paper contributes to this literature by providing the first causal micro-level estimates of the effect of sub-national-party rule on local government outcomes.

The rest of the paper is divided as follows. In the next section, we summarize the key aspects of the Peruvian context. Section 3 presents an analytical framework and offers empirical predictions. Section 4 discusses data sources and lays out the empirical strategy. Section 5 presents the results. Finally, Section 6 provides concluding remarks.

2. Context

Peruvian local governments. This paper uses data from the 1646 district municipalities in Peru, the lowest tier of autonomous sub-

national government in the country.⁹ Municipal government is composed of a 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 a 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 in Peru is mandatory for citizens and penalties apply for failing to cast a ballot. Municipal elections are organized and 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 our analysis, there were no term limits, so mayors were able to 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 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 substantially increased due to higher central government transfers.¹¹ Local governments also started to keep a higher 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 the national public investment.

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 present candidates only in their own locality, i.e., their region, province or district, respectively.

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

⁷ Local independent politicians and local civil initiatives studied by Gamalerio (2020) and Palguta (2019), respectively, may be comparable only to a small sub-set of sub-national parties that we study. The results in Gamalerio (2020) are closer to ours in that the author studies party control of the local executive power. Palguta (2019) explores the effect of having marginal representation in the local legislative branch. In addition, contexts are significantly different. Our developing country setting translates into differences in outcomes studied and may lead to different results.

⁸ Evidence from India also suggests that political reservations for women in local councils led to improvements in adolescent girls' career aspirations (Beaman et al., 2012), neonatal health outcomes (Bhalotra and Clots-Figueras, 2014), rates of female entrepreneurship (Ghani et al., 2014), and to a rising willingness of women to report violence against them (Iyer et al., 2012). These reservations also led to an increase in the number of women running for office and winning even after the reservations no longer applied (Beaman et al., 2009; Bhavnani, 2009). In contrast, Dunning and Nilekani (2013) document a weak effect of caste quotas on transfers to minorities due to the large presence of multi-caste political parties.

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

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), which redistributes a percentage of sales tax revenues to local governments. Municipalities can also collect property taxes but cannot alter the tax rate. Moreover, their ability to incur debt is limited.

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 A.1 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.

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. 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 “Acción 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.¹⁵ This situation, together with a series of corruption scandals, contributed to the loss of confidence in traditional parties.

New national parties emerged. In most cases, they were the product of a single political leader.¹⁶ 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 our data, in 2014, that share was only 30%.

3. Analytical framework

Why would a party’s geographic scope matter for government outcomes? In this section, we present some theoretical arguments for why this party dimension should affect policy outcomes. We highlight three possible mechanisms: (i) National parties may be able to offer better career prospects to politicians; these future rewards can improve a party’s ability to create dynamic incentives and select politicians; (ii) National parties could exploit economies of scale in policy design and lobbying, and facilitate intra-party coordination; (iii) Politicians in national parties may internalize the spillover effects of their policies on other regions and municipalities.

Our choice of these mechanisms is not intended to be representative of the extant literature. They only help us illustrate why this party dimension might matter and guide us in the empirical analysis. We expand on these arguments below and provide hypotheses for the effect of party geographic scope on specific government outcomes.

Dynamic incentives and political selection. National parties run elections in several jurisdictions, not only in a specific region or locality, as sub-national parties do. Moreover, national parties are the only ones allowed to participate in national, “high-exposure,” elections, such as presidential and congressional elections. These factors create the potential for national parties to offer better career opportunities for professional politicians: as a member of a national party, a politician can run for higher office (without needing to switch parties) and benefit from a potentially greater party name recognition.

In a standard principal-agent model with career concerns, these features represent a higher value of future benefits and, thus, a greater ability of the principal (i.e., the party) to create dynamic incentives for the agent (i.e., the politician) as well as to improve political selection. The differences in accountability and selection could, in turn, lead to

differences in policy outcomes.¹⁷

To illustrate this point, we adapt Besley (2006)’s model of electoral accountability to analyze the effect of better career opportunities on politicians’ incentives and selection. Consider two type of elections: local and national. A politician receives “ego rents” E_L or E_N for holding a local or national office, respectively. We assume that a national office provides greater benefits to a politician (i.e., $E_N > E_L$).¹⁸ The politician is in charge of implementing a local policy $e \in \{0, 1\}$. The party gets payoff Δ if $e = 1$ and 0 otherwise. There are two types of politicians $q \in \{G, B\}$. A type G politician always implements the party’s preferred policy $e = 1$. In contrast, a type B politician can obtain a private benefit r if she implements $e = 0$.¹⁹ The party can observe the policy implemented but cannot observe the politician’s type.

Timing is as follows. A politician decides to join a local or a national party. Joining a national party costs the politician a very small amount $\epsilon > 0$. Politicians affiliated with a local party can only run in the local election. However, if the politician belongs to a national party, she could be nominated to represent the party in a national election after her term in local office. To simplify exposition, we assume that the party can credibly commit to nominate the politician for national election in case of good local performance. We also assume a one-term limit for local elections and only one party running in all elections, so the party’s nominee wins for sure.

Let us start with the case of relatively large “ego rents” from national office (i.e., $E_N > r$). A type B politician affiliated with a local party will always implement her preferred policy, $e = 0$. In contrast, in a national party, the same politician will choose a different policy, $e = 1$. By doing so, the politician can obtain the nomination for the national election and achieve a total payoff of $E_L + E_N$. In contrast, implementing $e = 0$ would produce a lower payoff of $E_L + r$. Note that, as long as ϵ is sufficiently small, both types of politicians (G and B) will want to join the national party. In this case of pure moral hazard, a national party can use its access to future, more attractive, elections to create dynamic incentives and discipline the politician.

If “ego rents” from holding national office are relatively small ($E_N < r$), the party can no longer use these dynamic incentives. However, it can still affect policy outcomes through political selection. Note that in this case, a type B politician would obtain a maximum payoff of $E_L + r - \epsilon$ by joining a national party and $E_L + r$ by joining a local party. Thus, we obtain a separating equilibrium in which politicians sort by type. In particular, only type G politicians will join a national party while B politicians will prefer a local party.

Economies of scale and intra-party coordination. National parties operate in multiple regions and multiple tiers of government. Their larger scale means that if there are sizeable fixed-cost investments that all party mayors can benefit from (e.g., a bureaucratic innovation, a

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

¹⁵ 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%.

¹⁶ In 1990, Alberto Fujimori was elected president running under his own party brand. 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.

¹⁷ Several studies suggest that political career concerns might affect economic and policy outcomes. For instance, Li and Zhou (2005) argue that promotion incentives among Chinese provincial leaders lead to faster economic performance. Benton (2019) finds that vertical partisan alignment (between central and state parties) increased fiscal discipline in Mexican states. These findings echo a large literature studying the importance of career concerns on the performance of firm’s managers (see for instance Gibbons and Murphy (1992) and Chevalier and Ellison (1999)). There is evidence that quality of politicians may also matter. For example, Jones and Olken (2005); Besley et al. (2011); Mercier (2016); Martinez-Bravo (2017) find that politician’s characteristics, such as education or immigration background, affect economic growth, democracy level, and local public good provision. However, Carnes and Lupu (2016) find no evidence that education is associated with better, or different, policy outcomes.

¹⁸ Our argument emphasizes gains from future elections as a way to generate dynamic incentives. Similar results could be obtained if we assumed instead that the likelihood of winning local elections is greater inside a national party than in a sub-national party. This could happen, for instance, if national parties enjoy greater name recognition among voters, or if they can provide politicians with greater campaign funds or canvassing support.

¹⁹ This private benefit is called “dissonance rent” in Besley’s specification.

Table 1
Summary statistics.

Variables	No. obs.	Mean	S.D.
Mayor is from a national party (%)	6460	46.2	49.9
Mayor is from a regional party (%)	6460	39.8	49.0
Mayor is from a local party (%)	6460	11.0	31.3
Winning margin of a national party (p.p.)	5926	−1.897	19.66
Winning margin of a regional party (p.p.)	4997	−0.527	19.27
Winning margin of a local party (p.p.)	2392	−9.168	18.11
Log of municipal revenue p.c.	6452	6.707	0.916
Log of local tax revenue p.c.	6452	1.450	1.504
Log of municipal spending p.c.	6452	6.436	0.858
Log of municipal investment p.c.	6452	5.879	1.094
Investment execution rate (%)	6452	73.69	16.49
Administrative spending (%)	6451	35.20	13.86
Education spending (%)	6451	12.49	12.03
Health spending (%)	6451	16.84	14.68
Social services spending (%)	6451	10.15	7.875
Transportation spending (%)	6451	12.91	11.12
Turnout (%)	6460	84.56	5.952
Number of parties	6460	7.217	2.830
Margin of victory (p.p.)	6460	9.197	8.738
Vote share of national parties (p.p.)	6460	48.83	28.00
Vote share of regional parties (p.p.)	6460	36.96	30.63
Vote share of local parties (p.p.)	6460	9.812	17.81
Mayor subject to recall (%)	4842	18.2	38.6
Mayor's age	4808	44.34	8.802
Mayor has university degree (%)	4792	36.8	48.2
Mayor completed tertiary education (%)	4792	56.7	49.5
Mayor's years of public service	3198	6.295	8.777
Mayor's no. of corruption complaints	1605	0.719	1.611
Mayor has a sentence (%)	3198	7.4	26.1
Human development index, 2003	6439	0.278	0.095
Life expectancy (years), 2003	6439	67.41	3.737
% with high school diplomas, 2003	6439	44.65	22.71
Average years of education, 2003	6439	6.024	2.104
Family income p.c., 2003	6439	269.5	137.8

Notes: Monetary variables, such as revenue or investment per capita, are measured in Nuevos Soles (PEN). S.D. = standard deviation, p.c. = per capita, p.p. = percentage points.

blueprint for a standardized investment project, centralized training for politicians, etc.), national parties should be more likely to incur such investments.²⁰ Then, one would expect national-party mayors to be more efficient and be able to lower administrative expenditures in favor of investments in sectors with high social returns such as education, health, and transport.

National parties could also be better suited to coordinate across multiple jurisdictions and government levels. This could happen, for instance, if parties facilitate transfers (monetary or non-monetary) across party members, as in *Alesina and Spear (1988)*. In that case, mayors from national parties could be more able to implement projects that require inter-jurisdictional coordination (such as regional road construction) or lobby additional resources from upper levels of government, such as faster approval of investment projects or more generous grants.

This last point relates to a large literature on partisan alignment. This literature finds empirical evidence suggesting that partisan alignment between levels of government translates into greater intergov-

ernmental transfers.²¹ Similarly, several studies document an effect of partisan alignment on local policies, such as fiscal restraint (*Jones et al., 2000; Benton, 2019*). This mechanism naturally favors national and, to a lesser extent, regional parties since local parties by definition cannot have partisan alignment with the upper levels of government.

Internalization of spillovers. The party's geographic scope could also affect the degree to which its members internalize spillovers of their actions on other jurisdictions. This hypothesis is widely discussed in the literature on decentralization and federalism (*Riker, 1964; Enikolopov and Zhuravskaya, 2007*). The key idea is that party members might put some weight on the collective party's performance (due to intra-party transfers or party disciplining). In that case, politicians affiliated with a party with a wider geographical scope would be more likely to take into account the effects of their policies on voters in other places (which would affect the performance of fellow party members). If

²⁰ To our knowledge, this argument has not been explored in the previous literature on party geographic scope.

²¹ The positive effect of partisan alignment on intergovernmental transfers has been documented in several countries and across different levels of government. For example, studies have documented this effect for federal-state alignment in India (*Arulampalam et al., 2009*) and the U.S. (*Larcinese et al., 2006; Albouy, 2013*), central-municipal alignment in Brazil (*Brollo and Nannicini, 2012*) and Italy (*Bracco et al., 2015*), regional-municipal alignment in Spain (*Curto-Grau et al., 2018*) and Norway (*Fiva and Halse, 2016*), and across all three layers of government (municipal-regional and municipal-national) in Spain (*Solé-Ollé and Sorribas-Navarro, 2008*).

Table 2
Balance on covariates and falsification tests.

	National Party Rule		Dep. Var.	
	RD Estimate (1)	Permutation p-value (2)	Mean (3)	S.D. (4)
A. Socio-economic Characteristics (2003)				
Human development index	−0.009 (0.007)	0.230	0.28	0.10
Life expectancy	−0.105 (0.302)	0.972	67.4	3.74
% with high school diplomas	−1.999 (1.658)	0.329	44.7	22.7
Years of education	−0.200 (0.166)	0.175	6.02	2.10
Family income per capita	−9.483 (10.461)	0.473	269.5	137.8
H_0 : Outcomes are Jointly Balanced		0.472		
B. Public Finance (previous term)				
Log of municipal revenue p.c.	0.085 (0.079)	0.950	6.10	1.10
Log of local tax revenue p.c.	−0.167 (0.104)	0.592	1.35	1.37
Log of municipal spending p.c.	0.081 (0.073)	0.886	5.87	1.03
Log of municipal investment p.c.	0.131 (0.089)	0.950	5.27	1.25
H_0 : Outcomes are Jointly Balanced		0.635		
C. Electoral Outcomes (current election)				
Turnout	−0.207 (0.486)	0.924	84.6	5.95
Number of candidates	−0.286 (0.222)	0.249	7.22	2.83
Vote share concentration index	50.333 (56.501)	0.350	2421	883
H_0 : Outcomes are Jointly Balanced		0.517		
D. National Party (N.P.) Presence (current election)				
Vote share of N.P.s	−1.007 (1.022)	0.859	49.4	27.8
Vote share of N.P.s (excluding most popular)	−1.502 (1.244)	0.969	23.5	19.5
Number of competitive N.P.s (excluding most popular, within 5% of running variable value)	−0.040 (0.073)	0.888	0.09	0.78
H_0 : Outcomes are Jointly Balanced		0.963		

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in parentheses are clustered at the municipality level. Column 1 reports the conventional RD estimates for the effect of national-party rule, calculated based on a 1st order polynomial with no baseline covariates, and the bias-corrected significance levels following Calonico et al. (2014b). Columns 2 displays the p-values for the Canay and Kamat (2018) permutation test. Columns 3 and 4 report the mean and standard deviation for the outcome variable based on all municipality-electoral terms in our sample, as in Table 1. No. obs. = 5980 in Panel A, 5892 in Panel B, and 5926 in Panels C and D.

this argument holds, one would expect that parties with a broader geographical scope, such as national parties, would have different spending patterns than more local organizations.²²

Some empirical evidence support this hypothesis. For instance, Müller (2013) finds that, in Germany, sub-national branches of national parties do not want to distance themselves too much from the national party platform. In the Peruvian context, Carpio et al. (2018) show that,

relative to regional parties, national parties assign a relatively lower weight to local issues.

Summary of empirical predictions and outcome selection. The following outcomes we examine in our empirical analysis in Section 5 are drawn from the above framework and the corresponding empirical predictions.

First, we study budget size measures, such as total revenue and local tax revenue. Since Peruvian municipalities depend on central government transfers, an effect on total revenue can capture differences in parties' political alignment with the center or their ability to lobby upper levels of government in general. In addition, as the rates of local property tax (the primary local source of municipal income) are set at the national level, local tax revenues depend, to a great extent, on local

²² One might argue that this effect should be stronger for local vs. non-local party comparisons than for the national vs. subnational party comparisons. The reason is that most externalities from municipal-level decisions likely do not extend beyond that municipality's region and, thus, would be fully internalized by both regional and national parties. We provide estimates of the local vs. non-local comparisons in Table A.6 in the Online Appendix and show that they are qualitatively similar to our national vs. sub-national estimates.

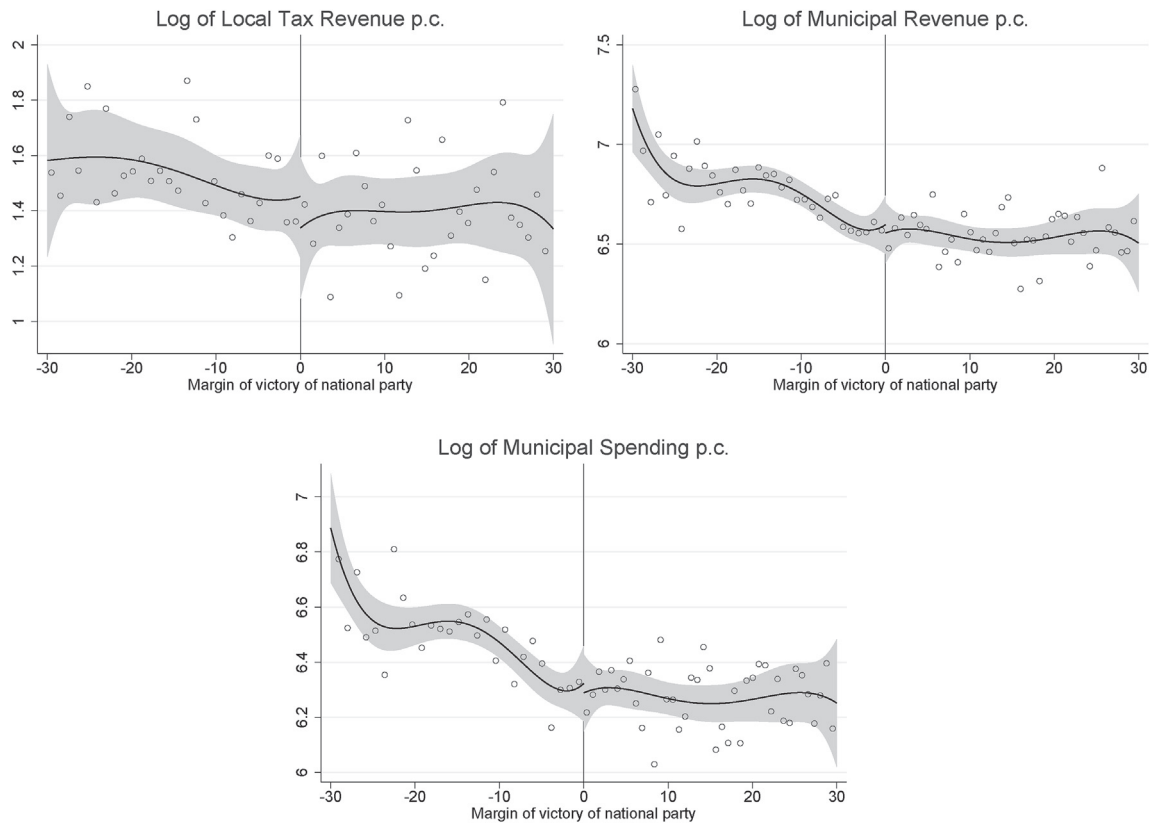


Fig. 1. Effect of national-party rule on budget size.

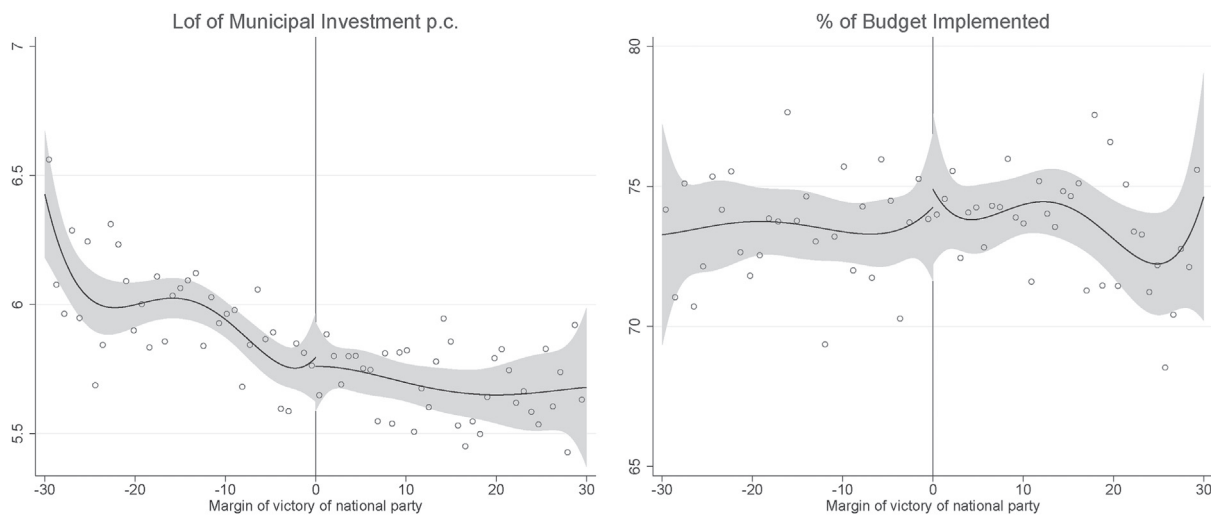


Fig. 2. Effect of National-Party Rule on Public Investment Performance. Notes: Plots include a fourth order polynomial on each side of the cutoff and 95% confidence intervals (in grey) calculated using standard errors clustered at the municipality level.

state capacity and tax collection effort (Aragon, 2013).²³ Hence, we expect national-party mayors to increase local tax revenues by reducing tax avoidance. We acknowledge that budget size indicators typically capture differences in ideology. In our context, we do not expect our estimates to be confounded by party ideology as there are no strong ideological differences across most parties in Peru (Carpio et al., 2018; Dalton, 2008), particularly regarding local politics. Moreover, in Peru,

there are no local income or sales taxes, and local governments have limited capacity to accumulate debts.

Second, we examine indicators of public investment performance. In particular, we use the public investment implementation rate, equivalent to the percentage of the investment budget actually spent. This is a key local government performance indicator in Peru. It is used by the central government to evaluate municipalities and has been linked to

²³ This is particularly true in a context with limited state capacity and high levels of informal economic activity.

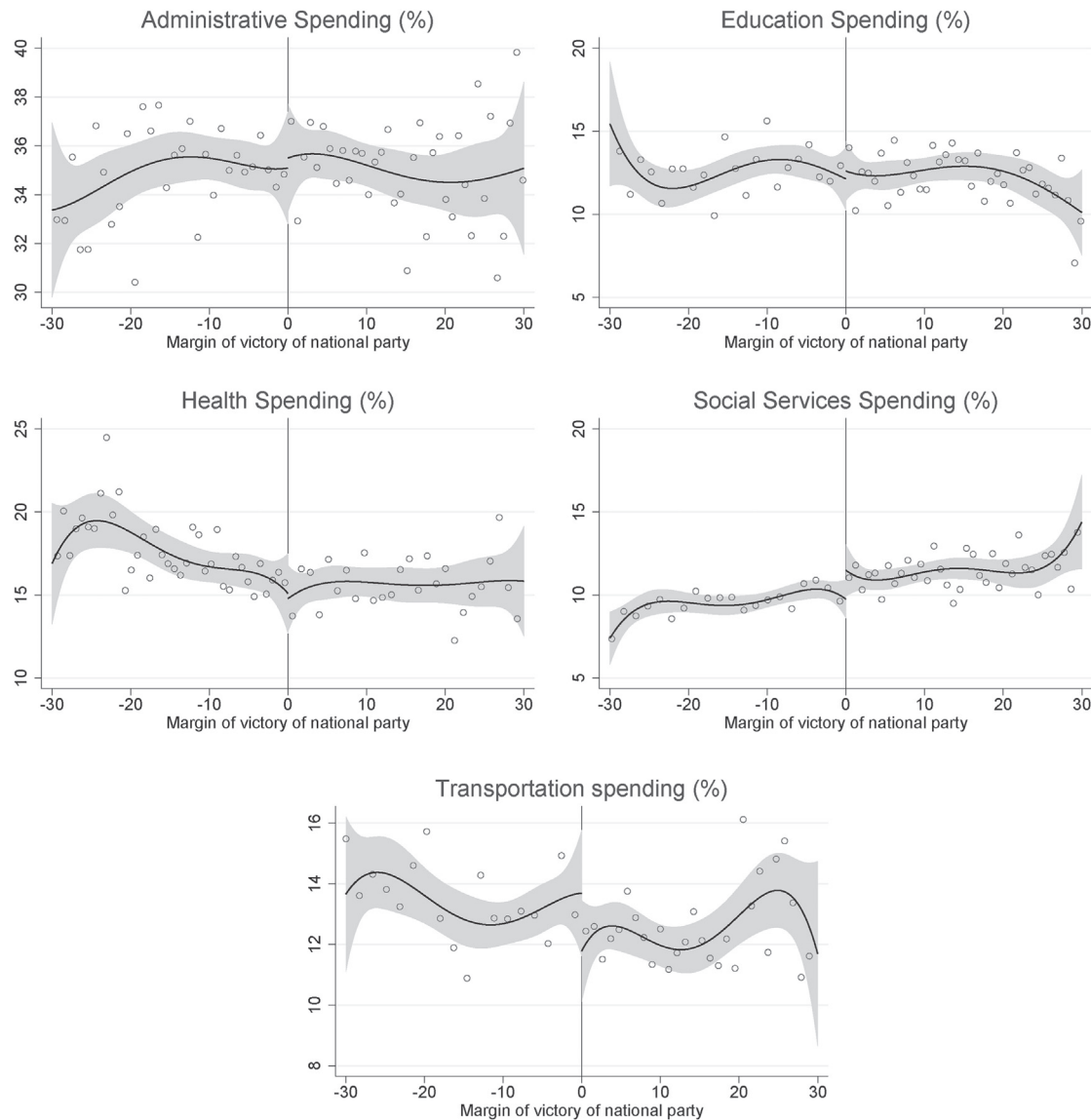


Fig. 3. Effect of National-Party Rule on Budget Allocation. *Notes:* Plots include a forth order polynomial on each side of the cutoff and 95% confidence intervals (in grey) calculated using standard errors clustered at the municipality level.

state capacity and politician performance (Loayza et al., 2014; Pique, 2019).²⁴ We expect national-party mayors to be more efficient when implementing their budgeted investment projects and achieve higher implementation rates.²⁵

Finally, we study how mayors allocate their budgets across expenditure areas. Our theoretical arguments predict that national-party mayors will run a more efficient municipal bureaucracy. Hence, we explore the effect on the share of the budget allocated to administrative expenditures, which we expect to be negative. National-party mayors should re-allocate these funds towards investment in sectors with high

social returns, in particular those with positive spillovers in neighboring municipalities. Hence, we analyze the share of the budget in education, health, social services, and transportation expenditures.²⁶

4. Empirical analysis

4.1. Data

The empirical analysis combines several sources of information that relate to electoral results, local policies, economic performance of municipalities, and politician attributes 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 shares, political party affiliation, and the corresponding political party type (i.e., national, regional, provincial, district or

²⁴ A critical role of local governments is to spend central government transfers in the implementation of basic infrastructure. However, municipalities are typically unsuccessful in implementing all their budgeted investment projects due to limited capacity and poor planning, among other factors. In our sample, around 30% of the investment budget is left unspent.

²⁵ In addition, we study the effect on other related voter welfare outcomes such as public service coverage and achievement of municipal performance goals related to, among other objectives, poverty alleviation. However, given that these data have limited availability, we only use these outcomes as a robustness exercise.

²⁶ As before, we acknowledge that budget allocation can depend on party ideology, but this concern is not particularly important in the context of Peruvian local politics.

Table 3
Effect of national-party rule on policy outcomes.

	RD Estimate (1)	Dep. Var.		RD Estimate/S.D. (4)
		Mean (2)	S.D. (3)	
A. Local Budget Size				
Log of local tax revenue p.c.	0.048(0.068)	6.71	0.92	0.052
Log of municipal revenue p.c.	−0.064(0.104)	1.45	1.50	0.043
Log of municipal spending p.c.	0.050(0.064)	6.44	0.86	0.058
B. Public Investment				
Log of municipal investment p.c.	0.053(0.077)	5.88	1.09	0.048
% of investment budget implemented	0.332(1.136)	73.7	16.5	0.020
C. Spending Patterns				
Administrative spending, %	0.645(0.974)	35.2	13.9	0.047
Education spending, %	0.157(0.884)	12.5	12	0.013
Health spending, %	−0.498(1.060)	16.8	14.7	0.034
Social services spending, %	0.608(0.573)	10.2	7.9	0.077
Transportation spending, %	−1.378(0.864)	12.9	11.1	0.124

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in parentheses are clustered at the municipality level. The table reports the conventional RD estimates, calculated based on a 1st order polynomial and the bias-corrected significance levels following [Calonico et al. \(2014b\)](#). Columns 2 and 3 report the mean and standard deviation for the outcome variable as in [Table 1](#). Column 4 reports the estimate in column 1 as a fraction of the standard deviation reported in column 3. N = 5919 for Panels A and B, and N = 5918 for Panel C.

alliance), among other information.²⁷ We use this information to construct our treatment and running variables.

We use data from the annual municipal accounts to obtain information on local policy outcomes, such as local revenue and spending, investment, local tax collection, and budget allocation. These data, provided by the Ministry of Economy and Finance (MEF) include both budgeted and actual expenditures at the account level. They 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 span from 1998 through 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 excluding this last cycle.

We also construct indicators of government performance and accountability. First, we use implementation rates of the public investment budget, i.e., the share of the investment budget actually spent. Second, we use data from the Peruvian Anti-Corruption Office on corruption sentences against mayors. To check the robustness of our results on government quality, we use data on the achievement of municipal performance goals set by the central government under the Municipal Incentives Plan and data on public service provision from the 2007 Population Census.

For our analysis of politician selection, we use several politicians' attributes such as age, education level, and public sector job experience. These data come from candidates' curriculum vitae. The CV information is self-reported but there are sizable penalties for misrepresentation.²⁸ Data are available for all elections except for the 2002 electoral process.²⁹ We complement this dataset with information on sociodemographic characteristics of the district, such as population and past access to public services.

²⁷ 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.

²⁸ For example, a candidate can be potentially excluded from the electoral contest.

²⁹ Candidates were only mandated to submit a curriculum vitae from 2006 onward.

[Table 1](#) presents the summary statistics of our main variables.³⁰ In our sample, the share of national party mayors is around 46%, followed by the 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.

[Table A.2](#) breaks down the summary statistics by a ruling party's geographic scope and displays the results of an F-test for the equality of means. The stark differences in characteristics across municipalities with different ruling party types make the issue of causality even more pressing and highlight the need for a credible identification strategy, such as the regression discontinuity design.

4.2. Empirical strategy

Our empirical analysis aims to identify the effect of a ruling party's geographic scope on local outcomes discussed earlier in [Section 3](#). 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.³¹ Such observed or unobserved heterogeneity can potentially confound the naive OLS estimates.

To address this concern, this paper uses a sharp regression discontinuity design (RDD). Following the classic RDD framework in close elections by [Lee \(2008\)](#), in our main analysis, we define the running variable as the winning margin WM_{it} of a national party in municipality i and electoral period t . This variable is equal to the vote share of the most popular candidate of a national party minus the vote share of the most popular candidate of a sub-national (i.e., local or regional) party. By definition, a municipality is treated (i.e., has elected a mayor from a national party) if $WM_{it} > 0$.

³⁰ The sample excludes municipalities in which the election results were nullified and a secondary election had to take place the year after.

³¹ As shown in [Table A.2](#), this is indeed the case in our context.

Table 4
Effect of national-party rule on policy outcomes: Approximating two-party race.

	National vs. sub-national party Diff. in vote share of 2nd and 3rd party (in percentage points)		
	<1% (1)	<5% (2)	<10% (3)
A. Local Budget Size			
Log of local tax revenue p.c.	−0.060 (0.150)	−0.038 (0.182)	−0.026 (0.270)
Log of municipal revenue p.c.	0.087 (0.085)	0.123 (0.098)	−0.101 (0.172)
Log of municipal spending p.c.	0.080 (0.080)	0.057 (0.104)	−0.127 (0.160)
B. Public Investment			
Municipal investment	0.081 (0.099)	−0.001 (0.137)	−0.191 (0.199)
% of investment budget implemented	−0.045 (1.506)	−2.193 (2.250)	−0.770 (3.075)
C. Spending Patterns			
Administrative spending, %	1.045 (1.269)	1.790 (1.751)	0.967 (2.219)
Education spending, %	−0.443 (1.092)	−1.330 (1.403)	−1.283 (1.677)
Health spending, %	0.089 (1.407)	0.800 (1.657)	2.159 (2.008)
Social services spending, %	0.589 (0.787)	1.183 (1.082)	0.883 (1.290)
Transportation spending, %	−1.796 (1.125)	−1.968 (1.490)	−1.464 (1.945)
No. observations	2624	2035	1380

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in parenthesis are clustered at the municipality level. Table reports the conventional RD estimates, calculated based on a 1st order polynomial with no baseline covariates, and the bias-corrected significance levels following Calonico et al. (2014b). The sample is restricted to include elections in which the top two candidates belong to different party types (national and sub-national), and there is a large enough difference in vote share between the second and third parties (1, 5 or 10 percentage points).

The RD estimand for the effect of having a national-party mayor is defined as:

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

where Y_{it} is the observed outcome associated with the mayoral term after an election held at t . That is, the estimand is the difference in expected outcomes between municipalities in which a national party barely won and municipalities in which a sub-national party barely won. Under the assumption of no precise control of the winning margin by parties of certain type, one can treat the outcomes in close elections as local randomized experiments and, thus, treat τ^{RD} as the causal effect of a national party coming to power (Lee and Lemieux, 2010).³² As robustness checks, we will repeat our previous analysis to compare regional movements to all other party types and local political organizations to all other party types.

To estimate τ^{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).³³ Following Calonico et al. (2014a), in all tables, we report the conventional

estimates of τ^{RD} with conventional standard errors, but present robust bias-corrected p-value levels (per definitions in Calonico et al., 2014b). To account for autocorrelation within municipalities across time, we adjust the inference for clusters at the municipality level.

The validity of our design relies on the assumption that the conditional expectation of the potential outcomes, $E[Y(0)|X]$ and $E[Y(1)|X]$, are continuous in X . This continuity assumption could be violated if mayors had precise control over the vote share they obtain when running for re-election or if there were confounding treatments whose assignment also depended on the same threshold. We examine the validity of this assumption using a conventional test by McCrary (2008) and by checking for balance of covariates.

Figure A1 presents the results of the McCrary (2008) test. There is no sizable nor significant jump in the density of the national party winning margin at the treatment cut-off.³⁴ Moreover, as Table 2 shows, we find that past realizations of relevant outcomes as well as municipal characteristics are balanced.³⁵ Moreover, the permutation test by Canay and Kamat (2018) does not reject the hypothesis that the distribution of outcomes are jointly or individually continuous around the winning margin threshold.

³² In the limit, in case of a tie, election outcome is literally random and is decided by a coin toss. Note that, 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 this technicality by assigning a negligible winning margin of 0.0001 if the national party wins and −0.0001 if the sub-national party wins. Results are robust to excluding these observations.

³³ We apply this estimator using the STATA package *rdrobust*.

³⁴ 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 1800 municipalities (<http://archive.peruthisweek.com/news-10778-politics-election-fraud-reported-peru>). There is no indication that either incident was directly related to a particular party type.

³⁵ Similar results are obtained when we repeat our balance tests for the case of regional and local-party rule, as shown in Table A.3.

Table 5
National-party rule, politicians' attributes, accountability, and electoral outcomes.

	RD Estimate	N	Dep. Var.	
			Mean	SD
	(1)	(2)	(3)	(4)
A. Politician Selection				
Mayor's Age	1.260*(0.754)	4354	44.34	8.802
Mayor's Years of Public Service	2.783***(1.134)	2858	6.295	8.777
Mayor Completed Tertiary Education	−0.052(0.044)	4339	0.567	0.495
Mayor Has a Pre-term Sentence	0.023(0.030)	2858	0.074	0.261
B. Accountability				
Mayor Engaged in Corruption During the Term	0.013(0.012)	5926	0.028	0.165
Mayor Recalled During the Term	−0.044(0.034)	4527	0.182	0.386
C. Political Landscape and Voting Behavior				
Vote Share of National Parties in the Next Election	−8.073*** (2.278)	4441	48.48	28.05
Vote Share of Regional Parties in the Next Election	9.156*** (2.445)	4441	46.45	29.60
Vote Share of Local Parties in the Next Election	−1.582(1.179)	4441	5.065	13.44
Turnout in the Next Election	−0.126(0.450)	4441	85.80	4.792
Number of Parties in the Next Election	−0.083(0.257)	4441	6.923	2.733

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in parentheses are clustered at the municipality level. The table reports the conventional RD estimates, calculated based on a 1st order polynomial with no baseline covariates, and the bias-corrected significance levels following Calónico et al. (2014b). Columns 3 and 4 report the mean and standard deviation for the outcome variable based on all municipality-electoral terms in our sample, as in Table 1.

5. Results

5.1. Effects on policy outcomes

As discussed in Section 3, we expect national and sub-national parties to differ in policies they implement. In particular, they should be more efficient in terms of local tax collection and public investment, have a lower share of bureaucratic expenditures and spend more on areas that have positive spillovers on other municipalities, such as transportation.

We start by depicting the relationship between the margin of victory of a national party (our running variable) and indicators of policy outcomes, including local tax revenue, public investment performance, and budget allocation across areas (see Figs. 1–3). In these RD plots, the effect of national-party rule would appear as a jump around the treatment cutoff (margin of victory equal to 0). We observe, however, no evidence of a significant effect in any of the outcomes we study.

Table 3 examines these results more formally. Column 1 presents the RD estimates obtained using the estimator proposed by Calónico et al. (2014b). In order to facilitate the interpretation of the magnitude of these estimates, column 4 shows the relative size of the estimated coefficient in terms of standard deviations.

Our main finding is that, contrary to our empirical predictions, the effects of party geographic scope are statistically insignificant and relatively small. In most cases, the estimated effects are less than 0.05 standard deviations (see column 5).³⁶ This holds for most outcomes for which we expect geographic scope to be particularly relevant. We observe small changes in local tax revenue per capita, share of the investment budget implemented, and the share of administrative expenditures equivalent to 0.052, 0.02, and 0.047 standard deviations, respectively. The only exceptions are the budget shares of social services and transportation. The effects represent changes of between 0.6 and 1.4 percentage points in the budget share.³⁷

Our findings are robust to alternative specifications such as higher degree polynomials of the assignment variable and the inclusion of

covariates (see Table A.4). These also hold when focusing only on subsets of national parties such as left-wing, right wing, or 'traditional' parties³⁸ (see Table A.5). Finally, we obtain similar results when comparing regional-party rule and local-party rule to the other party types pooled together (see Table A.6) and when making pairwise comparisons between party types (Table A.7).

We interpret these findings as causal evidence that the geographic scope of a ruling party has a limited impact on policy outcomes. Our results are restricted only to observable policy dimensions where we expect differences in outcomes, such as budget size, public investment, and budget shares. Thus, we cannot assess other relevant dimensions, like the quality of public goods or the type of beneficiaries. However, our findings weaken the argument that de-nationalization of local politics (i.e., the rise to power of sub-national parties) would lead to significant policy shifts.

There are three major concerns regarding the validity of our results and interpretation: the mayors' potential inability to alter local policies, low statistical power, and systematic differences across local elections due to the presence of multiple candidates. Below, we explain each of these issues and discuss their empirical relevance.

Mayor's inability to affect local policies. The first concern is that our null results mechanically reflect the mayor's inability to alter local policies, as in Gerber and Hopkins (2011). Given the reliance of municipalities on central government transfers and low fiscal capacity, this issue is particularly relevant for indicators of budget size. However, this factor is less likely to explain the lack of sizable effects on outcomes over which mayors have significant discretion, such as public investment performance and budget allocation (Panels B and C of Table 3).

To further explore this issue, we evaluate the effect of national-party rule on two additional sets of outcomes over which municipalities have discretion (see Table A.8 in the Appendix). The first set of outcomes relates to the achievement of goals set by a central-government program called the "Municipal Incentives Plan". This program links addi-

³⁸ We define "traditional" national parties as large parties with a long history in Peruvian politics. These parties include the "Partido Popular Cristiano" (PPC), "Acción 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. This specification addresses concerns that our baseline definition of a national party may be too broad and include organizations that, in practice, have a more local scope.

³⁶ The average effect of all outcomes is 0.052 standard deviations.

³⁷ These last estimates are comparable to findings by Ferreira and Gyourko (2009) and Ferreira and Gyourko (2014). In their study of the effect of having a Democrat or female mayor in U.S. cities, they also document statistically insignificant effects on budget shares. Their estimated effects imply changes in budget share ranging from 0.2 to 1.2 percentage points.

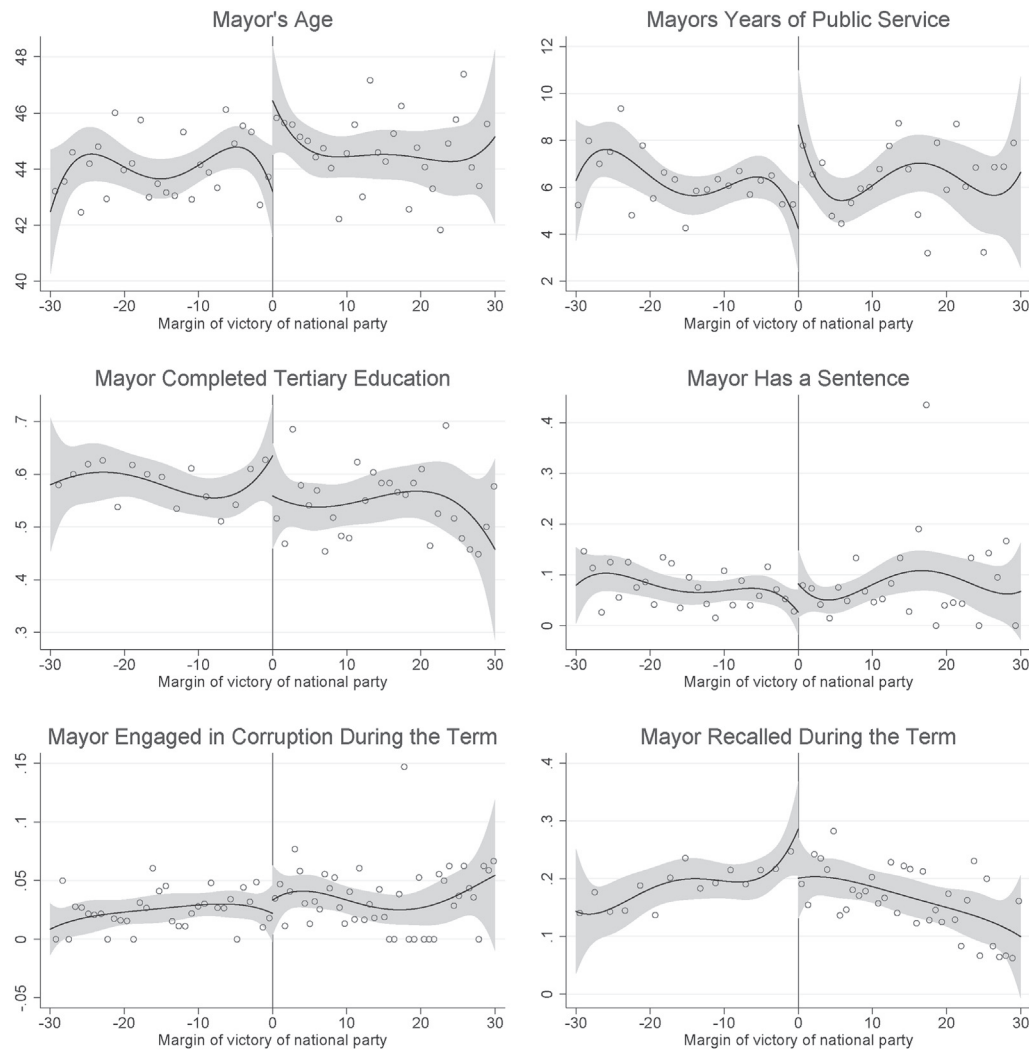


Fig. 4. Relationship between Margin of Victory of National Party and Politicians' Attributes and Accountability. *Notes:* This figure graphically illustrates the regression discontinuity results in Panels A and B of Table 5. 95% confidence intervals (in grey) are calculated using standard errors that are clustered at the municipality level.

tional monetary transfers to achieving specific goals, such as improving the provision of basic infrastructure and poverty alleviation programs. We replicate the score used by the central government to measure municipalities' performance, and also identify the share of goals achieved.³⁹ The second set of outcomes are measures of coverage of public services such as water, sewage, and electricity.⁴⁰ Provision of these services falls within the direct remit of local governments. Based on our analytical framework, we would expect national-party mayors to be better at achieving these performance goals and improving the coverage of public services. However, for both sets of outcomes, the estimated effects are statistically insignificant and inconsistent in their sign.

Low statistical power. The second concern is that the lack of significant effects is due to insufficient statistical power. Thus, we may tend to under-reject and find null results even though the true effects are different than zero. This issue becomes apparent, for example, in the case of budget size. The point estimates suggest differences between national and sub-national parties of around 4–6%. The 95% confidence intervals

are, however, quite wide. These wide confidence intervals mean that we cannot reject the zero null hypothesis, but also we cannot rule out sizable effects, such as an increase of local revenues of 10%.⁴¹

We address this issue in two ways. First, as noted above, we check the robustness of our results to adding relevant covariates, such as lagged values of the outcome variables, past human development index, life expectancy, schooling, and household income (see columns 3 and 4 of Table A.4). Adding relevant covariates substantially increases the precision of the RD estimator and reduces concerns of low statistical power (Calónico et al., 2019; Lee and Lemieux, 2010). In our case, the estimated standard errors decrease significantly (by almost 50% in some cases). For example, for indicators of local budget size, the relative coefficients size decreases from around 0.07 standard deviations in our baseline regression to almost 0.03 standard deviations when including covariates. Accordingly, the confidence intervals narrow down and we can rule out movements of more than 8% in revenues and expenditure. Since our estimates are small, they remain statistically insignificant.

³⁹ The Municipal Incentives Plan started in 2010. Hence, we carry out the analysis only on majors elected for the 2011–2014 term.

⁴⁰ This information is drawn from the 2007 Census. Hence, we perform the analysis based only on those majors that served in the 2003–2006 term.

⁴¹ As a comparison, using the Colombian case, Galindo-Silva (2015) find a much larger and statistically significant effect of new parties on local budget size of around 25%.

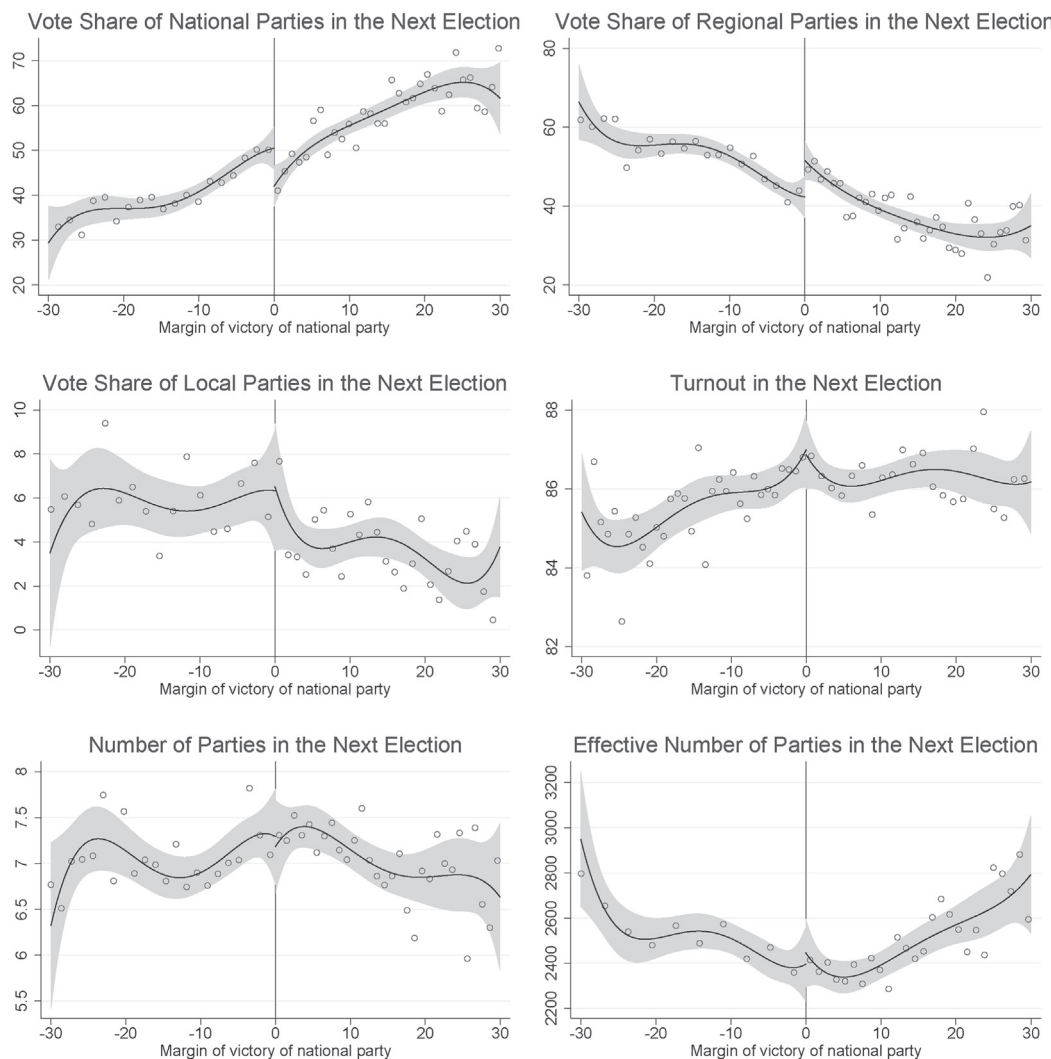


Fig. 5. Relationship between Margin of Victory of National Party and Future Electoral Outcomes. *Notes:* This figure graphically illustrates the regression discontinuity results in Panel C of Table 5. 95% confidence intervals (in grey) are calculated using standard errors that are clustered at the municipality level.

Second, we use a novel permutation test proposed by Canay and Kamat (2018). This test evaluates the null hypothesis of no significant discontinuity in the outcome distribution, and is more powerful than standard mean comparison tests. Following Canay and Kamat (2018), we use the 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 the outcome variables. Our null results hold using this alternative test (see column 5 of Table A.4).

Multiple candidates. The third concern arises due to the presence of multiple candidates in local elections.⁴²

In a multi-candidate setting, there is potential for additional systematic differences between treated and comparison groups. To illustrate this problem, consider the following example with two types of municipalities that are observed with equal frequency. Type A municipalities have three mayoral candidates competing: two from national parties and one from a sub-national party. Type B municipalities also have three candidates, but only one comes from a national party and the other two from sub-national parties. Assume that, in both cases, candidates obtain equal vote shares, and thus the winning margin is 0, and the winner is selected at random. In this setting, national-party

mayors are more likely to be drawn from type A municipalities. Since type A and B municipalities may differ in terms of the relative political power of national vis-a-vis sub-national parties, this issue may bias our estimates.

To assuage this concern, we first provide additional balance checks in Panel D of Table 2. Apart from there being no systematic differences between municipalities in terms of past socioeconomic characteristics, public accounts, and electoral outcomes, we find that municipalities are comparable in the relative power of national parties. In particular, there are no significant differences in the vote share of all national parties, the vote share of national parties excluding the most popular party (i.e., the party that enters in the calculation of the running variable), and the number of competitive national parties (i.e., those which are close enough to the winning candidate). We acknowledge, however, that we cannot rule out other unobservable differences.

To further address this concern, we restrict the sample to focus our analysis on cases that more closely resemble a two-party race.⁴³ That is, we replicate our baseline results restricting the sample only to elections in which the top two candidates (the winner and the runner-up) belong to parties of different geographic scope: national and sub-national. Fur-

⁴² We thank an anonymous referee for pointing out this potential concern.

⁴³ Ideally, we would like to use a sample of two-party races. Unfortunately, these races are very rare, so this approach is not feasible.

thermore, we restrict the sample to cases in which the vote share of the third party is sufficiently below the runner-up (by 1, 5, or 10 percentage points). We present our results in Table 4.⁴⁴ In all cases, we obtain similar statistically insignificant results as in our baseline specification, with coefficients of similar magnitude.

5.2. Politicians' Attributes and Accountability

As discussed in Section 3, one of the arguments in favor of parties with greater geographic scope is that they provide stronger career incentives and face higher reputation costs. These features could give them an advantage over smaller parties in improving politician selection and accountability (Gibson, 2005; Enikolopov and Zhuravskaya, 2007). In this section, we examine these two possibilities using data on politician attributes as well as two measures of their post-election accountability.

Differences in Politician's Attributes We examine potential differences in politician selection across party types using proxies of politicians' characteristics, such as age, education, experience, and the presence of a pre-term judicial sentence.⁴⁵

Before carrying out our RD analysis on these outcomes and studying differences at the threshold, we check if there are differences in politician attributes in our entire sample of mayors. The averages for national and sub-national party mayors are shown in Table A.9 in the Appendix. Slight differences appear between the two party types. National-party mayors are, on average, 0.57 years older and have 0.1 more years of public sector experience, but are 3 p.p. less likely to have tertiary education.⁴⁶ These differences are more pronounced if we consider only mayors that were elected in close elections. While these comparisons are informative on their own, the RD analysis allows for a more rigorous estimation with optimally selected bandwidths and not discarding data away from the cut-off.

As displayed in Panel A in Table 5 and Fig. 4, the RD analysis shows that a national-party win leads to more experienced local mayors. Specifically, national-party mayors are 1.2 years older and have 2.8 more years of public service than their sub-national counterparts. However, the levels of education attainment and pre-term sentences are similar.⁴⁷

Effect of National-Party Rule on Accountability In addition to studying differences in pre-election politician selection across party types, we also check for potential differences in parties' ability to discipline politicians after the election is over. Specifically, using the RD framework, we look at the effect of national-party rule on two accountability measures: an indicator of whether the mayor engaged in corruption (and was later sentenced for it) during the electoral term and whether the mayor was recalled before the end of her term. This last

variable is used due to recall voting being a commonly used accountability mechanism in Peru.

As displayed in Panel B in Table 5 and Fig. 4, we find no significant on corruption sentences and on the likelihood that the mayor is subject to a recall during the term. These results speak against one of our theoretical predictions that national parties would lead to greater accountability due to higher reputation costs.

The above results cast doubt on the claim that national parties provide greater accountability, but suggest that they may be selecting more competent politicians. These differences in attributes, however, do not translate into differences in policy outcomes. What could explain this result? We examine a possible explanation in the next subsection.

5.3. The role of political competition

A victory by a sub-national party may change voter behavior in subsequent elections. Panel C of Table 5 and Fig. 5 present the effects of a party's geographic scope on local political landscape. We observe that there are no significant effects on turnout and the number of parties in the next local election. However, a national-party victory in the current election has a *negative* and highly statistically 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.⁴⁸

This voting pattern motivates an analysis on whether strong political competition between national and regional parties smoothes the differences in mayoral attributes, and leads to policy convergence. To provide suggestive evidence for this explanation, we divide the sample into two parts based on the 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 margin of victory in the *previous elections* in this municipality is above or below the median.⁴⁹ We then do the same for the effective number of parties, i.e., the inverse of the Herfindahl–Hirschman Index for the party vote shares. To focus on the comparison between the national and regional parties, for which we observe a switching pattern, we use the winning margin between the national and regional parties as a running variable and restrict the analysis to marginal elections between these party types (for details, see Section A.1 of the Appendix).

Table 6 shows the results of this analysis. In order to facilitate the comparison of several outcomes, we report the effect on each variable as well as the average standardized effect for all outcomes in Panels A, B, and C (i.e., the average of the absolute value of each effect divided by the standard deviation of its corresponding outcome). To perform statistical inference, we simulate the distribution of the average standardized effect using 1000 random equal splits of the sample and compute simulated p-values.

Our findings suggest that political competition may indeed be driving our null results on economic policy. In particular, we find that, in municipalities with high levels of political competition (columns 2 and 4), the policy differences between mayors from national and regional parties is quite small: less than 2 percent for most budget outcomes and, on average, around 0.06 to 0.07 standard deviations. With a p-value of around 0.7, the average standardized effect is also statistically

⁴⁴ Note that our sample size drops from around 5900 in our baseline specification to 2600 and even 1380 in our stricter sample restriction.

⁴⁵ Measures of education are commonly used as a proxy for politician's quality or valence in the political economy literature (see for instance (De Paola and Scoppa, 2011; Mercier, 2016; Geys, 2017; Martinez-Bravo, 2017; Daniele, 2019)). We acknowledge, however, that education is an imperfect proxy of quality and that educated leaders need not necessarily lead to improvements in voter welfare (e.g., see Carnes and Lupu, 2016). Due to data limitations, we cannot use other proxies such as measures of politicians' cognitive abilities or wages.

⁴⁶ Note that these differences in politician selection are part of the national-party rule treatment. Our identification assumption is that municipalities on both sides of the treatment cut-off have similar characteristics, not that parties of different geographic scope select similar politicians.

⁴⁷ The effect of regional-party rule is mixed (see columns 1 and 2 of Table A.10). A local party win leads to substantially older mayors (about 4 years older, on average). However, their higher age does not translate into greater public sector experience (see columns 3–4 of Table A.10).

⁴⁸ 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. (see columns 1–2 of Panel C of Table A.10). No significant variations are observed in the vote share of local parties (see columns 3–4 of Panel C of Table A.10).

⁴⁹ Note that we are using the margin of victory and not the difference between the highest voted national party and the highest voted regional or local party. In addition, note that there can be close elections between national and regional parties in districts which, on average, are not very competitive.

Table 6
Effects of National vs Regional-Party Rule by Intensity of Political Competition.

	Effective No. Parties		Margin of Victory	
	Below median (1)	Above median (2)	Above median (3)	Below median (4)
A. Local Budget Size				
Log of local tax revenue p.c.	−0.060 (0.195)	0.267 (0.209)	0.071 (0.175)	0.189 (0.211)
Log of municipal revenue p.c.	−0.105 (0.108)	0.004 (0.101)	−0.123 (0.110)	−0.004 (0.118)
Log of municipal spending p.c.	−0.069 (0.102)	−0.004 (0.094)	−0.161* (0.108)	0.033 (0.110)
B. Public Investment				
Log of municipal investment p.c.	−0.115 (0.125)	−0.015 (0.112)	−0.203* (0.128)	0.027 (0.135)
% of investment budget implemented	1.943 (2.382)	−0.460 (2.240)	−1.512 (2.480)	2.145 (2.360)
C. Spending Patterns				
Administrative spending, %	4.881** (2.334)	−1.789 (1.867)	2.891 (1.953)	−0.136 (1.961)
Education spending, %	−1.355 (1.862)	−0.955 (1.768)	−0.835 (1.933)	−1.403 (1.745)
Health spending, %	−1.474 (2.137)	0.437 (1.882)	−2.179 (2.105)	0.995 (2.101)
Social services spending, %	1.367 (1.037)	0.306 (0.789)	0.625 (0.850)	0.887 (0.976)
Transportation spending, %	−3.375* (1.990)	1.659 (1.686)	−1.279 (1.522)	0.276 (1.837)
D. Electoral Punishment				
Vote Share of National Parties in the Next Election	−5.514 (4.922)	−13.124*** (3.730)	−6.560 (3.566)	−14.228*** (4.430)
Vote Share of Regional Parties in the Next Election	5.920 (5.070)	11.277*** (3.603)	6.470 (3.956)	11.283** (4.242)
Average standardized effect (A, B, and C)	0.148	0.067	0.130	0.068
Simulation p-value	0.020	0.751	0.055	0.733
No. Observations	1761	1869	1792	1838

Notes: * denotes significance at 10%, ** significance at 5% and *** significance at 1%. Standard errors in parentheses are clustered at the municipality level. Each column reports RD estimates obtained by using the margin of victory 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 regional party. The table reports the conventional RD estimates, calculated based on a 1st order polynomial with no covariates, and the bias-corrected significance levels following [Calonico et al. \(2014b\)](#).

indistinguishable from the effects obtained after random splits.

In contrast, in municipalities with low levels of political competition (columns 1 and 3), the differences are more sizable: the average standardized effect ranges from 0.13 to 0.15. This is almost twice the magnitude of the effect than for more competitive municipalities. In four instances in columns 1 and 3, the national-party effects start being statistically significant. The simulation p-values are also much smaller, ranging from 0.02 to 0.06. This makes it unlikely that the difference in magnitudes by political competition is due to random chance.

In addition, the results in Panel D of [Table 6](#) provide suggestive evidence that the heterogeneous effects can be related to the switching 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 13.1 and 14.2 percentage points. On the other hand, in low-competition municipalities, the switching pattern is much less pronounced and is not statistically significant.

We interpret these findings as suggestive evidence that political competition plays an important role in explaining the lack of stronger effects of party geographic scope. The results suggest that the recent proliferation of sub-national parties may not have the anticipated detrimental effect on local governance. Instead, 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.⁵⁰

6. Conclusion

This paper estimates whether the geographic scope of a ruling party matters for local government outcomes in the context of a developing country. We use the case of Peruvian district municipalities and a quasi-experimental regression discontinuity design.

Our main finding is that party geographic scope does not have a statistically significant, nor economically sizable, impact on observable policies, such as budget size, public spending, and proxies of governance quality. We also do not find sizable effects on measures of polit-

⁵⁰ These results are suggestive but may not be causal. Municipalities with stronger political competition may also possess other characteristics not always observable to an econometrician. For instance, the lack of electoral competition could be associated with lower overall interest of the population in political matters and, as a result, lack of political accountability, which itself could lead to swings in mayoral performance and priorities. Identifying the causal effects of electoral competition is a complex task (see, e.g., [Shaukat, 2019](#)) and lies beyond the scope of this paper.

ical accountability, albeit the evidence for indicators of political selection is mixed. These results are robust to several empirical concerns, and do not seem to stem from low statistical power or model misspecification.

We find suggestive evidence that our results may reflect policy convergence due to political competition. We show that in highly competitive municipalities, national and regional-party mayors behave in a similar manner. On the contrary, in low competition municipalities, the difference in outcomes between the two party types is substantial.

Our results suggest that national-party rule does not lead to different outcomes. This finding weakens the argument that the ‘denationalization’ of local politics, fueled in part by decentralization reforms, is detrimental for local governance. Our results also weaken the economic case for subsidizing national parties, which is usually based on the belief that national parties may lead to better policies and governance.

There are some limitations when interpreting our results. First, our analysis focuses on parties’ geographic dimension. However, this dimension can also be related to other economic and logistical differences between national and sub-national parties that are unique to the Peruvian case. This issue is relevant for the external validity of our results. Second, while we address the concern of low statistical power in various ways, the null results could still mask small but economically meaningful effects that may be statistically detectable with more data. Finally, our estimates are not informative of the effect of the national-party rule on central government outcomes, long-term variables, or on unobserved aspects of local policies. Thus, more research is needed to understand the broad implications of the ‘denationalization’ of political parties.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jdevec.2020.102516>.

References

- Albouy, D., 2013. Partisan representation in congress and the geographic distribution of federal funds. *Rev. Econ. Stat.* 95 (1), 127–141.
- Alesina, A., Cassidy, T., Troiano, U., 2019. Old and young politicians. *Economica* 86 (344), 689–727.
- Alesina, A., Spear, S., 1988. An overlapping generation model of electoral competition. *J. Publ. Econ.* 37.
- Aragon, F.M., 2013. Local spending, transfers, and costly tax collection. *Natl. Tax J.* 66 (2), 343.
- Arulampalam, W., Dasgupta, S., Dhillon, A., Dutta, B., 2009. Electoral goals and center-state transfers: a theoretical model and empirical evidence from India. *J. Dev. Econ.* 88 (1), 103–119.
- Bardhan, P., 2002. Decentralization of governance and development. *J. Econ. Perspect.* 185–205.
- Beach, B., Jones, D.B., 2016. Business as usual: politicians with business experience, government finances, and policy outcomes. *J. Econ. Behav. Organ.* 131, 292–307.
- Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., Topalova, P., 2009. Powerful women: does exposure reduce bias? *Q. J. Econ.* 124 (4), 1497–1540.
- Beaman, L., Duflo, E., Pande, R., Topalova, P., 2012. Female leadership raises aspirations and educational attainment for girls: a policy experiment in India. *Science* 335 (6068), 582–586.
- Beland, L.-P., 2015. Political parties and labor-market outcomes: evidence from US states. *Am. Econ. J. Appl. Econ.* 7 (4), 198–220.
- Benton, A.L., 2019. Party leader or party reputation concerns? how vertical partisan alignment reins in subnational fiscal profligacy. *J. Polit.* 81 (1), 201–214.
- Besley, T., 2006. *Principled Agents?: the Political Economy of Good Government*. Oxford University Press on Demand.
- Besley, T., Montalvo, J.G., Reynal-Querol, M., 2011. Do educated leaders matter? *Econ. J.* 121 (554), F205–F227.
- Bhalotra, S., Clots-Figueras, I., 2014. Health and the political agency of women. *Am. Econ. J. Econ. Pol.* 6 (2), 164–197.
- Bhavnani, R.R., 2009. Do electoral quotas work after they are withdrawn? Evidence from a natural experiment in India. *Am. Polit. Sci. Rev.* 103 (1), 23–35.
- Bracco, E., Lockwood, B., Porcelli, F., Redoano, M., 2015. Intergovernmental grants as signals and the alignment effect: theory and evidence. *J. Publ. Econ.* 123, 78–91.
- Brancati, D., 2008. The origins and strengths of regional parties. *Br. J. Polit. Sci.* 38 (1), 135–159.
- Brollo, F., Nannicini, T., 2012. Tying your enemy’s hands in close races: the politics of federal transfers in Brazil. *Am. Polit. Sci. Rev.* 106 (4), 742–761.
- Brollo, F., Troiano, U., 2016. What happens when a woman wins an election? Evidence from close races in Brazil. *J. Dev. Econ.* 122, 28–45.
- Broockman, D.E., 2013. Black politicians are more intrinsically motivated to advance blacks’ interests: a field experiment manipulating political incentives. *Am. J. Polit. Sci.* 57 (3), 521–536.
- Calonico, S., Cattaneo, M.D., Farrell, M.H., Titiunik, R., 2019. Regression discontinuity designs using covariates. *Rev. Econ. Stat.* 101 (3), 442–451.
- Calonico, S., Cattaneo, M.D., Titiunik, R., 2014a. Robust data-driven inference in the regression-discontinuity design. *STATA J.* 14 (4), 909–946.
- Calonico, S., Cattaneo, M.D., Titiunik, R., 2014b. Robust nonparametric confidence intervals for regression-discontinuity designs. *Econometrica* 82 (6), 2295–2326.
- Canay, I.A., Kamat, V., 2018. Approximate permutation tests and induced order statistics in the regression discontinuity design. *Rev. Econ. Stud.* 85 (3), 1577–1608.
- Caramani, D., 1996. The nationalisation of electoral politics: a conceptual reconstruction and review of the literature. *W. Eur. Polit.* 19 (2), 205–224.
- Caramani, D., 2004. *The Nationalization of Politics: the Formation of National Electorates and Party Systems in Western Europe*. Cambridge University Press.
- Carnes, N., Lupu, N., 2016. What good is a college degree? education and leader quality reconsidered. *J. Polit.* 78 (1), 35–49.
- Carpio, M.A., Cordova, B., Larreguy, H., Weaver, J.A., 2018. Understanding the General Equilibrium Effects of Compulsory Voting on Policy: Evidence from Peru.
- Castañeda-Angarita, N., 2013. Party system nationalization, presidential coalitions, and government spending. *Elect. Stud.* 32 (4), 783–794.
- Caughey, D., Xu, Y., Warshaw, C., 2017. Incremental democracy: the policy effects of partisan control of state government. *J. Polit.* 79 (4), 1342–1358.
- Chattopadhyay, R., Duflo, E., 2004. Women as policy makers: evidence from a randomized policy experiment in India. *Econometrica* 72 (5), 1409–1443.
- Chevalier, J., Ellison, G., 1999. Career concerns of mutual fund managers. *Q. J. Econ.* 114 (2), 389–432.
- Chhibber, P., Kollman, K., 1998. Party Aggregation and the number of parties in India and the United States. *Am. Polit. Sci. Rev.* 92 (2), 329–342.
- Coviello, D., Gagliarducci, S., 2017. Tenure in office and public procurement. *Am. Econ. J. Econ. Pol.* 9 (3), 59–105.
- Curto-Grau, M., Solé-Ollé, A., Sorribas-Navarro, P., 2018. Does electoral competition curb party favoritism? *Am. Econ. J. Appl. Econ.* 10 (4), 378–407.
- Dalton, R.J., 2008. The quantity and the quality of party systems: party system polarization, its measurement, and its consequences. *Comp. Polit. Stud.* 41 (7), 899–920.
- Daniele, G., 2019. Strike one to educate one hundred: organized crime, political selection and politicians’ ability. *J. Econ. Behav. Organ.* 159, 650–662.
- Dargent, E., Munoz, P., 2011. Democracy against parties? Party system deinstitutionalization in Colombia. *J. Polit. Lat. Am.* 3 (2), 43–71.
- de Benedictis-Kessner, J., Warshaw, C., 2016. Mayoral partisanship and municipal fiscal policy. *J. Polit.* 78 (4), 1124–1138.
- De Paola, M., Scoppa, V., 2011. Political competition and politician quality: evidence from Italian municipalities. *Publ. Choice* 148 (3–4), 547–559.
- Dippel, C., 2019. *Political Parties Do Matter in US Cities...For Their Unfunded Pensions*. National Bureau of Economic Research Working Paper.
- Dunning, T., Nilekani, J., 2013. Ethnic quotas and political mobilization: caste, parties, and distribution in indian village councils. *Am. Polit. Sci. Rev.* 107 (1), 35–56.
- Enikolopov, R., Zhuravskaya, E., 2007. Decentralization and political institutions. *J. Publ. Econ.* 91 (11), 2261–2290.
- Ferreira, F., Gyourko, J., 2009. Do political parties matter? Evidence from US cities. *Q. J. Econ.* 124 (1), 399–422.
- Ferreira, F., Gyourko, J., 2014. Does gender matter for political leadership? The case of U.S. Mayors. *J. Publ. Econ.* 112, 24–39.
- Fiva, J.H., Halse, A.H., 2016. Local favoritism in at-large proportional representation systems. *J. Publ. Econ.* 143, 15–26.
- Folke, O., 2014. Shades of Brown and green: party effects in proportional election systems. *J. Eur. Econ. Assoc.* 12 (5), 1361–1395.
- Franck, R., Rainer, I., 2012. Does the leader’s ethnicity matter? ethnic favoritism, education, and health in sub-saharan africa. *Am. Polit. Sci. Rev.* 106 (2), 294–325.
- Freier, R., Odendahl, C., 2015. Do parties matter? estimating the effect of political power in multi-party systems. *Eur. Econ. Rev.* 80, 310–328.
- Galindo-Silva, H., 2015. New parties and policy outcomes: evidence from Colombian local governments. *J. Publ. Econ.* 126, 86–103.
- Gamalerio, M., 2020. Do national political parties matter? evidence from Italian municipalities. *Eur. J. Polit. Econ.* 101862.
- Gerber, E.R., Hopkins, D.J., 2011. When mayors matter: estimating the impact of mayoral partisanship on city policy. *Am. J. Polit. Sci.* 55 (2), 326–339.
- Geys, B., 2017. Political dynasties, electoral institutions and politicians’ human capital. *Econ. J.* 127 (605), F474–F494.
- Ghani, E., Kerr, W.R., O’Connell, S.D., 2014. Political reservations and women’s entrepreneurship in India. *J. Dev. Econ.* 108, 138–153.
- Gibbons, R., Murphy, K.J., 1992. Optimal incentive contracts in the presence of career concerns: theory and evidence. *J. Polit. Econ.* 100 (3), 468–505.
- Gibson, E.L., 2005. Boundary control: subnational authoritarianism in democratic countries. *World Polit.* 58 (1), 101–132.
- Gilardi, F., 2015. The temporary importance of role models for women’s political representation. *Am. J. Polit. Sci.* 59 (4), 957–970.
- Gunay, I., 2015. *International Trade and Political Independence: Evidence from Catalonia*. Ph. D. thesis. University of Michigan.
- Hall, R.L., Van Houweling, R.P., 1995. Avarice and ambition in congress: representatives’ decisions to run or retire from the us house. *Am. Polit. Sci. Rev.* 89 (1), 121–136.

- Harbers, I., 2010a. Decentralization and the development of nationalized party systems in new democracies: evidence from Latin America. *Comp. Polit. Stud.* 43 (5), 606–627.
- Harbers, I., 2010b. Decentralization and the development of nationalized party systems in new democracies: evidence from Latin America. *Comp. Polit. Stud.* 43 (5), 606–627.
- Hayo, B., Neumeier, F., 2014. Political leaders' socioeconomic background and fiscal performance in Germany. *Eur. J. Polit. Econ.* 34, 184–205.
- Hicken, A., Kollman, K., Simmons, J.W., 2016. Party system nationalization and the provision of public health services. *Pol. Sci. Res. Method.* 4 (3), 573–594.
- Hopkin, J., 2003. Political decentralization, electoral change and party organizational adaptation: a framework for analysis. *Eur. Urban Reg. Stud.* 10 (3), 227–237.
- Iyer, L., Mani, A., Mishra, P., Topalova, P., 2012. The power of political voice: women's political representation and crime in India. *Am. Econ. J. Appl. Econ.* 4 (4), 165–193.
- Jones, B.F., Olken, B.A., 2005. Do leaders matter? national leadership and growth since world war ii. *Q. J. Econ.* 120 (3), 835–864.
- Jones, M.P., Mainwaring, S., 2003. The nationalization of parties and party systems: an empirical measure and an application to the Americas. *Party Polit.* 9 (2), 139–166.
- Jones, M.P., Sanguinetti, P., Tommasi, M., 2000. Politics, institutions, and fiscal performance in a federal system: an analysis of the Argentine provinces. *J. Dev. Econ.* 61 (2), 305–333.
- Koethenburger, M., 2012. Do Political Parties Curb Pork-Barrel Spending? Municipality-Level Evidence from Germany. Available at: <http://bit.ly/2Gys7Bu>.
- Lago-Peñas, I., Lago-Peñas, S., 2009. Does the nationalization of party systems affect the composition of public spending? *Econ. Govern.* 10 (1), 85–98.
- Larcinese, V., Rizzo, L., Testa, C., 2006. Allocating the US federal budget to the states: the impact of the president. *J. Polit.* 68 (2), 447–456.
- Lee, D.S., 2008. Randomized experiments from non-random selection in US house elections. *J. Econom.* 142 (2), 675–697.
- Lee, D.S., Lemieux, T., 2010. Regression discontinuity designs in economics. *J. Econ. Lit.* 48, 281–355.
- Leigh, A., 2008. Estimating the impact of gubernatorial partisanship on policy settings and economic outcomes: a regression discontinuity approach. *Eur. J. Polit. Econ.* 24 (1), 256–268.
- Li, H., Zhou, L.-A., 2005. Political turnover and economic performance: the incentive role of personnel control in China. *J. Publ. Econ.* 89 (9–10), 1743–1762.
- Loayza, N.V., Rigolini, J., Calvo-González, O., 2014. More than you can handle: decentralization and spending ability of Peruvian municipalities. *Econ. Polit.* 26 (1), 56–78.
- Logan, T.D., 2018. Do Black Politicians Matter? Technical Report. National Bureau of Economic Research.
- Martinez-Bravo, M., 2017. The local political economy effects of school construction in Indonesia. *Am. Econ. J. Appl. Econ.* 9 (2), 256–289.
- McCrary, J., 2008. Manipulation of the running variable in the regression discontinuity design: a density test. *J. Econom.* 142 (2), 698–714.
- Mercier, M., 2016. The return of the prodigy son: do return migrants make better leaders? *J. Dev. Econ.* 122, 76–91.
- Meyersson, E., 2014. Islamic rule and the empowerment of the poor and pious. *Econometrica* 82 (1), 229–269.
- Morgenstern, S., Swindle, S.M., Castagnola, A., 2009. Party nationalization and institutions. *J. Polit.* 71 (4), 1322–1341.
- Müller, J., 2013. On a short leash? sub-national party positions between regional context and national party unity. *J. Elections, Public Opin. Parties* 23 (2), 177–199.
- Nellis, G., Weaver, M., Rosenzweig, S., et al., 2016. Do parties matter for ethnic violence? evidence from India. *Quart. J. Pol. Sci.* 11 (3), 249–277.
- Palguta, J., 2019. Political representation and public contracting: evidence from municipal legislatures. *Eur. Econ. Rev.* 118, 411–431.
- Pande, R., 2003. Can mandated political representation increase policy influence for disadvantaged minorities? Theory and evidence from India. *Am. Econ. Rev.* 93 (4), 1132–1151.
- Petersson-Lidbom, P., 2008. Do parties matter for economic outcomes? A regression-discontinuity approach. *J. Eur. Econ. Assoc.* 6 (5), 1037–1056.
- Pique, R., 2019. Higher pay, worse outcomes? the impact of mayoral wages on local government quality in Peru. *J. Publ. Econ.* 173, 1–20.
- Primo, D.M., Snyder Jr., J.M., 2010. Party strength, the personal vote, and government spending. *Am. J. Polit. Sci.* 54 (2), 354–370.
- Reiser, M., Holtmann, E., 2008. Farewell to the Party Model. Springer.
- Riker, W.H., 1964. Federalism: Origin, Operation, Significance. (Boston: Little, Brown).
- Sabatini, C., 2003. Decentralization and political parties. *J. Democr.* 14 (2), 138–150.
- Seawright, J., 2012. Party-System Collapse: the Roots of Crisis in Peru and Venezuela. Stanford University Press.
- Shaukat, M., 2019. Too Close to Call: Electoral Competition and Politician Behavior in India.
- Solé-Ollé, A., Sorribas-Navarro, P., 2008. The effects of partisan alignment on the allocation of intergovernmental transfers. differences-in-differences estimates for Spain. *J. Publ. Econ.* 92 (12), 2302–2319.
- Solé-Ollé, A., Viladecans-Marsal, E., 2013. Do political parties matter for local land use policies? *J. Urban Econ.* 78, 42–56.
- Szakonyi, D., 2018. Businesspeople in elected office: identifying private benefits from firm-level returns. *Am. Polit. Sci. Rev.* 112 (2), 322–338.
- Tausanovitch, C., Warshaw, C., 2014. Representation in municipal government. *Am. Polit. Sci. Rev.* 108 (3), 605–641.
- Washington, E.L., 2008. Female socialization: how daughters affect their legislator fathers' voting on women's issues. *Am. Econ. Rev.* 98 (1), 311–332.
- Ziegfeld, A., 2016. Why Regional Parties? Cambridge University Press.