New Parties and Policy Outcomes: Theory and Evidence from Colombian Local Governments

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Abstract

In many democracies, increasing political competition has changed the traditional party system and brought new parties into the political arena. This study examines whether the presence of politicians from new parties affects the size of government (measured by public spending and tax revenue). The study focuses on Colombian municipalities, where new parties have been numerous and successful in recent years. Regression discontinuity estimates show that public spending and tax revenue are significantly higher in municipalities governed by a mayor from a new party. Using information about local politics and the features of the new parties, I argue that this result can be explained by the fact that mayors from new parties are less known to voters than politicians from traditional parties. *Journal of Economic Literature* Classification Numbers: H72, D72

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1   Introduction

During the last two decades in both developing and established democracies, new political parties have increased in popularity and power.[1] These parties differ along many dimensions, such as their degree of personalism and their ideological views. However, what is common is their lack (or absence) of experience in government. If this lack of experience implies, as some authors have argued (see for example Grynaviski, 2006, 2010, Aldrich and Grynaviski, 2010), that voters have less information about the members of these parties, and if this information allows citizens to hold politicians accountable (see Fiorina, 1980, Cox and McCubbins, 2005, Besley, 2006, Aldrich, 2011), then one would expect new parties to have an effect on policy outcomes.

In this paper I study the impact of the presence in power of politicians from new parties on the size of government and other policy outcomes. In spite of its relevance, to my knowledge this question has not yet been addressed in the empirical literature. Since in many countries increasing political competition has brought new parties into the political arena, understanding the policy consequences of new parties might improve the understanding of the effect of increasing political competition (see Lizzeri and Persico, 2005, Acemoglu and Robinson, 2006, Besley et al., 2005, 2010).

This study focuses on Colombian local governments, where the presence in power of new parties has been strong in recent years. The Colombian case is attractive because of the quantity, heterogeneity and success of these parties and, most importantly, because new parties are particularly easy to identify. These parties are essentially political movements created within months of an election and without any experience in power in the municipalities and period studied. The opponents of these new movements are two very old political parties: the Colombian Liberal Party (left-wing) and Colombian Conservative Party (right-wing). These two parties, which were founded in 1848 and 1849 respectively, have split the bulk of power in power in every municipality for more than a century. Only recently, partly as a result of new laws favouring political competition, have these two traditional parties started to lose significant power (around the 41% of all local elections).

This study begins by proposing a theoretical framework based on a career-concern model. The main prediction of the model is that when a government is led by a politician from a new party, the size of government (spending and taxes) is higher. The argument is the following. Once in office, and irrespectively of his political party, a politician concerned about his career faces the following trade-off: on the one hand, a bigger government allows for the extraction of larger political rents, but on the other hand, it will be interpreted by voters as a signal of dishonesty, decreasing his chances of future reappointment and future political rents. In the solution of this trade-off, voters' ex-ante uncertainty about the politician's honesty is crucial: more uncertainty

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[1]For a detailed discussion of the recent rise in importance of non-traditional parties, see Meguid (2008) for Western Europe, Tavits (2007) for Eastern Europe, and Bejarano et al. (2006) for Latin America.

means that the actions of the politician are less informative. As a result, increasing the size of government has a smaller electoral cost. Since we expect that the uncertainty about the honesty of politicians belonging to a new party will be higher, my model implies that relative to a politician from an old party, a politician from a new party will choose higher levels of spending and taxes when he is in power.

This model is consistent with the qualitative literature on the role of political parties in Colombian local governments and with the empirical findings from the second part of the paper. This evidence consists of a comparison of fiscal outcomes in municipalities with governments controlled by new parties and municipalities with governments controlled by old parties from 1997 to 2011. New parties are defined as parties that had never won an election in a municipality, while the Liberals and Conservatives are defined as the old parties. To isolate the causal impact of governments on new parties, I employ a regression discontinuity (RD) design that compares municipalities where candidates from new parties barely won an election to municipalities where candidates from new parties barely lost. The RD estimates show that public spending is significantly higher in municipalities where a mayor from a new party is in power, and that this difference is due to a corresponding difference in local taxes, for which local authorities are directly responsible. In addition, analysis using information on local politics and on the characteristics of new parties suggest that it is a party's newness that plausibly explains the difference. More specifically, in order to capture the degree of knowledge that voters have about the parties, I compute the number of years that have passed since the party's first participation in an election. I find that the effect of a new party on spending is larger for parties that have never participated in any municipal election and decreases with the party's age.

To shed further light on the plausibility of my explanation, I also consider other mechanisms that could explain why new parties spend more. First, I examine whether the ideology of new parties is a factor explaining why they spend more. I find that the size of government is larger in municipalities governed by new parties, regardless of whether the opposition party is left-wing (Liberal). Second, I examine the possibility that new parties spend more because they have a smaller majority on a municipal council. I find the same results regardless of whether the winner holds a majority on the local council. Finally, using measures of transparency at municipal levels, I find that local governments led by new parties do not take more measure in order to improve the transparency of their actions than those led by old parties.

This study contributes to an increasing literature that empirically examines the role of partisan affiliation in determining policy outcomes. Several studies have examined this question at either state or national levels. For example, Besley and Case (2003) use a fixed effects framework to show that, for U.S. state legislatures, a higher fraction of Democrat party seats is associated with significantly higher state spending. Lee et al. (2004) use a regression discontinuity design and find that partisan affiliation explains a very large proportion of the variation in the U.S. congressional voting behavior. At the municipal level, the evidence is inconclusive: while Pettersson-Lidbom (2008) finds

that marginally elected left-wing local governments impose significantly higher taxes and spend more than their right-wing counterparts in Sweden, for the U.S. Ferreira and Gyourko (2009) fail to find any differences in the size of government under marginally elected Democrat and Republican mayors. None of these papers analyze the impact of new or inexperienced political parties on policy outcomes.

Since new parties can be characterized as weak party organizations, this study is also related to Primo and Snyder (2010) in examining the link between party strength and public finance outcomes. Although Primo and Snyder focus on a different level of governance (U.S. states) and use a different methodology (difference-in-differences estimation), I also find that weak parties increase the size of government. My argument is, however, different: in their model, a party is weak if its internal structure and role in candidate nominations is not well defined. In my model, a weak party is a political organization whose label is not very informative. My argument is therefore close to the literature on party labels as "brand names" (Snyder and Ting, 2002; Grynaviski, 2006, 2010). In particular, it is consistent with the finding that less informative party labels lead to more extreme policy outcomes (Snyder and Ting, 2002). However, in contrast with Snyder and Ting (2002), and consistent with Grynaviski (2006, 2010), I argue that the informational value of party labels mostly depends on a party's past behavior in office, as opposed to the capacity of the parties to restrict access to their label. However, none of these papers discuss new parties. Additionally, they all propose general spatial models of party competition, whereas I use a political career-concerns framework (Holmstrom, 1999, Dewatripont et al., 1999, Persson and Tabellini, 2000).

This study is also related to the literature of multiparty competition with free entry. Palfrey (1984), Osborne (2000) and Callander (2005) propose spatial models of electoral competition where two dominant parties, competing simultaneously with each other, face the possibility that third parties enter the competition after they have chosen their policy positions. They are all interested in the equilibrium policy outcomes. In particular, they find that when third parties enter and win, the policies that they choose are either moderate (Osborne) or extreme (Callander). In all these models the third parties can be interpreted as new parties relative to the established two-party system; however, since the voters have the same information about all the parties, their notion of third party is fundamentally different than mine.

Finally, as previously noted, this study contributes to the literature on the impact of political competition on policy outcomes (Lizzeri and Persico, 2005, Acemoglu and Robinson, 2006, Besley et al., 2005, 2010). Lizzeri and Persico (2005) find that a high degree of political competition (defined as the number of parties participating in an electoral competition) may reduce welfare by channelling resources into targeted transfers rather than general-interest public goods. Acemoglu and Robinson (2006) model political competition as the inverse of the expected cost of replacement of the incumbent, and find that political competition affects no monotonically institutional development by intensifying political instability and affecting the incentive for incumbents to implement growth-enhancing reforms. Besley et al. (2005, 2010) measure

political competition by the dominance of U.S. Republicans or Democrats, and find that higher political competition is associated with more pro-growth policies; they also test this prediction using panel data for U.S. states. Since a high degree of political competition (whatever the definition of political competition is) makes it more likely that new parties will compete and win, this study contributes to the literature by proposing a new drawback to political competition: new parties are less known to voters, which may cause an overprovision of public goods when they are in power by allowing these governments to extract large political rents without being punished in subsequent elections.

The outline of the paper is as follows. Section 2 describes the career-concern model of political-incumbent policy choice. Section 3 describes the political and economical context of Colombian local governments. Section 4 discusses the data and empirical strategy. Section 5 presents the empirical results. Section 6 concludes.

2 Theory

2.1 Model

I present a model of career concerns where a politician in office tries to persuade voters that he is honest by making some policy decisions that affect voters' beliefs about the quality of his government.[2] Consider a two-period economy. In each period t, a politician in power must decide public spending and the tax rate, denoted by g_t and x_t, respectively. Between periods there is an election in which voters choose between the incumbent and a challenger. Each period the winning politician faces a balanced budget constraint[3]

$$g_t + r = \eta(x_t y + T) \tag{1}$$

where $r > 0$ is a fixed parameter that can be interpreted as a fixed cost or the prior obligations that must be met, y denotes the taxable revenue assumed to be constant and equal to one, T are the transfers from the central government,[4] and $\eta \in [0,1]$ is a parameter that measures the level of honesty or integrity of the government.

The parameter η will be crucial to the analysis: it is the proportion of revenue not extracted as political rents during the period the politician is in power. I assume that

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[2]The literature contains many career-concerns models of political incumbency; see Besley (2006) for a review. Mine is built on Persson and Tabellini (2000, Ch. 4.5).

[3]It is reasonable to assume a balanced budget constraint for Colombian municipalities. Although some municipalities are allowed to run deficits, Colombian legislation (Law 358 of 1997) allows the central government to effectively limit the debt burden of municipalities according to their past performance, their own revenue, and to the implementation of a fiscal adjustment plan. These measures have proven to be very effective from 2000 onward (for instance, from 2000 to 2008, regional and local authorities averaged a fiscal surplus of 0.3% of GDP; see DAF (2009)).

[4]I assumed $T > 0$ if $x_t > 0$ and $T = 0$ if $x_t = 0$. This assumption helps to guarantee an interior solution and is consistent with the capacity of the Colombian central government to punish municipalities with poor performance in collecting their own resources. See footnote 3

it is determined randomly by nature,[5] following a uniform distribution between $\frac{1}{\xi} - \frac{1}{2\psi}$ and $\frac{1}{\xi} + \frac{1}{2\psi}$. The parameter ψ can be interpreted as a measure of how precise the information about η is.[6] This parameter is what distinguishes politicians belonging to new and old parties. Crucially, I assume that old and new parties have different ψ.[7] In particular, I make the following assumption:

ASSUMPTION 1. *The precision of the information that voters have about η (as captured by the parameter ψ) is lower when the government is led by a politician from a new party*

A possible justification is as follows. By definition, new parties have never been in power. On the other hand, the political colleagues, bureaucracy and interest groups close to mayors from an old party are more known to voters: these parties have been in power before, for many years, and these structures usually persist. Since governments' honesty depends on these structures, then it is clear that when an old party is in power, relative to a new party, voters have more precise information about their level of honesty.[8]

Voters' one-period utility is quasi-linear, given by

$$w(g_t, x_t) = (1 - x_t) + H(g_t) \tag{2}$$

where H is a strictly concave, increasing function satisfying $\lim_{x \to 0} H'(x) = +\infty$ and representing the utility from consumption of public goods. For a given η, replacing (1) in (2), we get

$$w(g_t; \eta) = 1 - (g_t + r)\eta^{-1} + T + H(g_t) \tag{3}$$

It follows from (3) that for a given g_t, voters prefer a politician with high η. The utility of a politician leading a government with honesty parameter η is given by

$$v(g_t; \eta) = w(g_t; \eta) + R + (g_t + r)(1 - \eta)\eta^{-1} \tag{4}$$

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[5]In Colombia, most of the corruption is done through the so-called "serrucho" (jigsaw) or "mordida" (bite). It corresponds to a percentage of the public good expenditures which is kept by members of the government in order to expedite or influence the licensing process. Usually this percentage is the outcome of bargaining between members of the government and contractors. For an empirical assessment of the most popular forms of corruption in Colombia see Transparencia por Colombia (2008, 2010, 2012).

[6]Note that $var(\eta) = \frac{1}{12\psi^2}$; thus, a bigger ψ implies a lower $var(\eta)$.

[7]I assume that new and old parties do not differ about ξ. This, however, is without a loss of generality, since, as discussed at the end of this section, public spending does not depend on ξ.

[8] This assumption is especially true in Colombia. There are three main reasons: (i) the shared control that Liberals and Conservatives had of almost all the elected positions and public offices for more than a century, (ii) the candidate selection mechanism employed by these parties, usually based on the number and strength of the candidates' connections (see Pizarro, 2002, 2006), and (iii) their bureaucracy, usually composed of people from their own party (or "family") (see Gutierrez and Ramirez, 2002). The assumption is also consistent with the recognized correlation between the presence in power of politicians from new parties and the presence in the region of interest groups other than those associated with the traditional parties, mostly paramilitaries (see Gutierrez, 2007, Valencia, 2007, Acemoglu et al., 2010).

where $w(g_t, \eta)$ is his utility as citizen, R is his utility from being in office, and

$$(g_t + r)(1 - \eta)\eta^{-1} = (1 - \eta)(x_t + T) \tag{5}$$

are the rents he gets while in office. If the politician is not elected, his utility simply coincides with the utility of voters.

The timing of the game is as follows:

1. The politician in power at time $t = 1$ chooses a policy $g_1 \in \mathbb{R}_+$.

2. η is realized and observed by the politician, and the taxes x_t are residually determined so as to satisfy the government budget constraint.

3. Voters observe x_1, their own utility but neither η nor g_t.

4. Elections take place, and each voter either supports the incumbent or the contender. If the incumbent loses, an opponent is appointed with an honesty parameter η' drawn at random from a uniform distribution between $\frac{1}{\xi} - \frac{1}{2\psi'}$ and $\frac{1}{\xi} + \frac{1}{2\psi'}$.

5. The politician in power at time $t = 2$ (the incumbent or a newly elected politician) chooses a policy $g_2 \in \mathbb{R}_+$. Payoffs are realized.

Two important assumptions here are that the politician does not know η when setting policy in period 1, and that g_1 is not directly observed by the voters. A possible justification for the first one is that η could depend on the qualities of the members of the government, or on demands from interest groups. It is reasonable to assume that the incumbent does not have perfect information about this.[9] With respect to the second assumption, voters may not know exactly when the public goods are provided, or their final characteristics.[10]

2.2 Analysis of the Model

As a solution concept I focus on a subgame perfect equilibrium (SPE). I proceed by backward induction. For details and derivations, I refer to the Appendix. At $t = 2$, the

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[9]This assumption also simplifies the analysis, as there is no possibility of signaling. This is also assumed in Holmstrom (1999), Persson and Tabellini (2000, Ch. 4.5), Ashworth (2005) and Ashworth and Bueno de Mesquita (2008).

[10] In addition to these assumptions, to guarantee the uniqueness of the equilibrium, it must be that

$$\kappa(x) = -\frac{xH''(x)}{H'(x)} \geq 1 \text{ for all } x \geq 0 \tag{6}$$

This assumption basically states that the coefficient of relative risk aversion of the voters relative to the consumption of the public good is greater than 1. See more about this assumption in Esteban and Ray (2001), who also introduce it.

politician in power solves a static problem: he maximizes his utility (4) and chooses

$$g_2^* = H'^{-1}(1) \qquad \text{and} \qquad x_2^* = \eta^{-1}\left(H'^{-1}(1) + r\right) - T \tag{7}$$

I now move to period 1. The politician chooses spending without knowing η, in order to maximize his two-period utility. At the time of the election, the voters know x_1 and make a conjecture about spending, denoted by $\tilde{g}_1$. Hence, using (1), they form an estimate of the incumbent's honesty, $\tilde{\eta}$, given by

$$\tilde{\eta} = \frac{\tilde{g}_1 + r}{x_1 + T} \tag{8}$$

Note that $\tilde{g}_1$ does not depend on η because voters know that spending is chosen by the politician before observing η. In equilibrium, voters' expectations are correct: $\tilde{g}_1$ coincides with the actual spending level chosen by the politician.

The voters' behavior can be described as follows: from (3) and (7), note that voters' utility in the second period is increasing in η. Then, the incumbent is re-elected only if his estimated honesty exceeds his opponent's expected honesty.[11] If his opponent's honesty is η', he is re-elected if

$$\tilde{\eta} > E[\eta'] = \frac{1}{\xi} \tag{9}$$

One can now compute the probability of winning the election as perceived by the incumbent at the beginning of period 1. By assumption, he does not yet know his own η. The incumbent sets g_1, knowing that x_1 is residually determined from (1). Combining (1) with (8), (9) is equivalent to

$$\eta > \frac{g_1 + r}{\xi(\tilde{g}_1 + r)} \tag{10}$$

From the point of view of the incumbent politician, the probability of winning the election is the probability that this inequality is satisfied. Under the assumption that the distribution of η is uniform, this probability is given by

$$Pr\left(\tilde{\eta} > \frac{1}{\xi}\right) = \frac{1}{2} + \psi\left(\frac{1}{\xi} - \frac{g_1 + r}{\xi(\tilde{g}_1 + r)}\right) \tag{11}$$

The expression in (11) is crucial for the analysis: it shows that a variation of g_1 has a differential effect on the probability of incumbent reelection depending on ψ. Specifically, it shows that the smaller ψ is, the more sensitive this probability is to changes in g_1.

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[11]Note that the fact that only the expected value of η (and not its variance) is what matters when deciding whether or not to re-elect the incumbent (i.e., newness of the parties does not *directly* influence voters' decisions) explains why candidates from new parties have a positive probability of being re-elected. A question that this model does not address is why candidates from new parties are elected for the first time.

At $t = 1$, given $\tilde{g}_1$, a politician with an honesty parameter η solves the problem

$$\max_{g_1 \geq 0} E[v(g_1; \eta)] + Pr\left(\tilde{\eta} > \frac{1}{\xi}\right) E[v(g_2^*; \eta)] + \left(1 - Pr\left(\tilde{\eta} > \frac{1}{\xi}\right)\right) E[w(g_2^*; \eta')] \quad (12)$$

subject to (1), (7) and (11), where η' is the honesty parameter of the opponent.

It is clear from (11) and (12) that the politician faces the following trade-off. He can choose a high level of spending, which implies high taxes and large political rents but a lower probability of re-election and the corresponding future political rents, through a decrease in voters' perception of his honesty. Alternatively, he can choose lower spending today, in the hope of winning re-election and gaining larger future political rents. The solution to this trade-off, and the corresponding equilibrium, is given by (12), where the voters' estimate of g_1, $\tilde{g}_1$ coincides with this solution. It is possible to show (see proposition 1 below) that this solution is implicitly given by

$$H'(g_1^*) - 1 - \left(R + \left(H'^{-1}(1) + r\right)(\xi - 1)\right) \left(\frac{\psi}{\xi(g_1^* + r)}\right) = 0 \quad (13)$$

where we have used the equilibrium condition $\tilde{g}_1 = g_1^*$. It is easy to see in (13) that $H'(g_1^*) - 1 > 0$, or equivalently, $g_1^* < H'^{-1}(1) = g_2^*$. This relation shows how politicians solve the aforementioned trade-off: they will choose lower levels of spending and taxes relative to what they would choose if their political future was not an issue. This first result is stated in the following proposition.

PROPOSITION 1. *In the unique SPE equilibrium of the game described above, spending in the first period is given by (13), and spending in the second period is given by (7).*

Proof. See Appendix. $\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\square$

The following corollary will be crucial in relating the size of government chosen by the politician in the first period with his political party.

COROLLARY 1. *A decrease in ψ increases the size of government chosen by the politician in the first period.*

Corollary 1 states that the information that voters have about the honesty of politicians is crucial. The mechanism is the following: less precise information (lower ψ) means that the actions of the politicians in power in period 1 are less informative, which decreases the politician's incentives to please the voters. This results in greater levels of spending in period 1. The important point about this corollary is that it allows us to establish the impact of the presence of a politician from a new party in power: given that, by Assumption 1, for these politicians the information that voters have about their qualities is less precise, they choose in the first period higher levels of spending and taxes relative to what a politician from an old party would have chosen.

Since new parties often have anti-corruption platforms, readers may wonder whether Corollary 1 still holds if we assume that politicians from new parties are seen by voters as more honest on average (i.e., they have higher ξ). As shown in the proof of Proposition 1, g_1^* in reality does not depend on the level of honesty of the incumbent, ξ, but only that of the challenger. Thus, even if we assume that politicians from new parties are ex ante more honest,[12] we would still have that new parties spend more than old parties.

Related to this last point note that from equation (5) the level of rents captured by politicians depends on η (a primitive of our analysis) and on government's size (which is determined in equilibrium). In particular, note that if we assume that new and old parties mayors have the same ξ, the model implies that new parties mayors would capture more rents since they spend more. However, if new party mayors have a lower ξ, expected rents in municipalities run by new party mayors might actually be lower.[13]

In the rest of the paper I test the prediction that in municipalities governed by a new party, spending and taxes are higher than in municipalities governed by an old party. In addition, I perform robustness checks to confirm that the difference is due to the political party of the incumbent, and I try to verify that this difference depends on the level of information that voters have about their mayors, as stated by Corollary 1. I start with a description of the context, and then I present the data, the specification and the empirical results.

3   Context: Colombian Local Governments

The study of Colombian local governments is appealing for three main reasons: their homogeneity relative to the institutional rules and prerogatives, their high level of operational independence, and the existence of numerous and heterogeneous new political parties successfully competing against two well-defined traditional parties.

Colombian municipalities are the smallest and most fundamental administrative units in the country. As of June 2012, there are 1,103 municipalities in Colombia. They are governed by a mayor, who is elected by popular vote for a period of four years.[14] While immediate re-election is not possible, officials usually run for re-election in the same post in the future, or for election to other posts in later years.[15] Thus,

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[12]As I argue in Section 5.3., this seems to be the case for Colombia, at least relative to the traditional forms of corruption.

[13]To see this note that in equilibrium the expected rents captured by the incumbent are given by $(\xi - 1)(g_1^* + r)$, where g_1^* is given by (13). As shown in the proof of Proposition 1, in the strict sense, g_1^* is not a function of ξ, but of the average level of ex ante honesty of the challenger. Thus if ξ is sufficient close to 1, i.e., if voters ex ante think that an incumbent from a new party is sufficiently honest, then even if he spend more that a incumbent from an old party, expected rents captured by new party governments can be similar or even lower than those captured by old party governments.

[14]Mayors were elected initially for a period of two years (from 1988 to 1993), subsequently increased to three (from 1994 to 1997) and, since 2004, to four-year terms.

[15]According to my calculations, more than 30% of the mayors elected for the period 1997-2000 run

I expect that the model in Section 2 is a good approximation of policy making by Colombian mayors.[16] At the time of the mayoral election, voters also elect a local council, whose function is to approve some of the mayor's proposals, including the city's budget. Several commentators have argued that councils have now a limited role in Colombia and that mayors can easily pass their proposals.[17] The rules that govern elections and the duties of these elected officials are set in national law and apply uniformly across all municipalities.

Colombian local governments are characterized by a relatively high level of operational independence. This independence is the result of a process of economic decentralization, which started in the late '80s, reached its peak with the 1991 constitutional reform and was completed in the late '90s. This process can be divided in two stages: first, a stage of restructuring of tax structures, which allowed municipalities to define tariff rates and exemption mechanisms (see Echavarria et al., 2002, Faguet and Sanchez, 2008, 2009),[18] and second, a stage of expansion of the responsibilities assigned to municipalities regarding the provision of public services and social investment, made possible by an increase in transfers from the central government to municipalities (see Echavarria et al., 2002, Faguet and Sanchez, 2008, 2009).[19] The aggregate effect of these fiscal reforms was a large increase in the political authority and operational independence of municipal governments, which was accompanied by a huge rise in the resources they controlled. In the period considered in this paper (1997-2011), Colombian municipalities funded their expenditures (investment and current spending) partly with resources collected by the central government and transferred to them and with royalties from the extraction of natural resources (around 60% of municipalities' revenues) and partly with local taxes (around 40% of municipalities' revenues). The

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for reelection in same post for the periods 2003-2007 or 2007-2011, and this percentage is certainty much higher if we include other posts (as municipal councils, department or provincial assemblies, governorships, and seats in the Congress).

[16]See Moreno and Escobar-Lemmon (2008) for evidence of individualistic career concerns in Colombia during the period 1958-2002. See Drazen and Eslava (2010) for a re-election concerns model used to explain the existence of political budget cycles in Colombian municipalities.

[17]According to *Transparencia por Colombia*, Transparency International's chapter in Colombia, the mayor is almost the only focus of attention of voters, and the only source of local political leadership (see Transparencia por Colombia, 2007). A similar thesis is defended by Gutierrez (2010).

[18]Today, Colombian municipalities are autonomous in defining and collecting five types of taxes: industry, commerce and advertising tax, unified property tax, tax on automotive vehicles, urban demarcation tax and surplus value tax. Additionally, they can collect a surcharge on gasoline (see DNP-DDTS, 2005). Although there are limits defined by law, municipalities have significant flexibility in setting tax rates.

[19]Part of these resources is earmarked by the central government to be spent on education and health. The determination of the transferred funds and the percentage earmarked is complex, and involves two different sources: (i) "municipal participation", which uses municipal population adjusted for poverty level, unmet basic needs, own-source fiscal contribution and administrative efficiency indicators; and (ii) "situado fiscal", based partly on equal allocations to all departments and municipalities and partly on a per capita formula. At least the 20% of these resources can be freely allocated by municipalities (see Echavarria et al., 2002).

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largest municipalities are allowed to run deficits, although this is heavily controlled by central authorities. Municipalities are completely autonomous in how to use revenues from local taxes, and in how to spend an important percentage of resources transferred from the central government.

The third and most interesting feature of Colombian local politics is the existence of a large quantity of ephemeral and very successful new political parties competing against two very old and powerful traditional parties. This phenomenon has been explained as the result of two reforms that occurred simultaneously to the process of economic decentralization described in the previous paragraph: the introduction of direct popular election for mayors, and an important reduction to the costs of creating new parties.[20] With respect to the first reform, since mayors were previously appointed and dismissed by the president, popular elections made local politicians less dependent on traditional parties (see Duque, 2006; Gutierrez, 2007; Dargent and Munoz, 2011). The second reform allowed different kinds of associations or movements, and even independent candidates, to participate in elections and receive partial public funding (see Pizarro, 2006; Duque, 2006, 2010; Gutierrez, 2007; Rubio, 2010; Dargent and Munoz, 2011).

The Colombian party system is one of the oldest and most institutionalized in Latin America (see Mainwaring and Scully, 1995). It has been dominated by two parties, the Liberal and Conservative parties, funded in 1848 and 1849 respectively, and which maintained the monopoly of power at all levels of government for more than a century. As as example of this, in 1958, as a mechanism to end the partisan violence that ravaged the country for more than a decade, Liberals and Conservatives signed a pact, known as the National Front, which guaranteed equal shares of elected positions and public officers for four presidential terms. Although this pact expired in 1974, some authors have argued that it had important consequences for the current Colombian political system and its party structure. First, it allowed traditional parties to enhance their bases of support and to exclude local independent politicians (see Archer and Shugart, 1997; Pizarro, 1997; Bejarano and Pizarro, 2005; Gutierrez, 2007; Dargent and Munoz, 2011). Second, it weakened inter-party competition and encouraged intra-party competition and regional factionalism, which made irrelevant, at least at the local level, the classic left-versus-right conflict (see Boudon, 2000; Pizarro, 2002, 2006; Gutierrez, 2002; Bejarano and Pizarro, 2005; Roland and Zapata, 2005; Botero et al., 2011).

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[20]According to the law applicable to the period studied (Article 108 of the 1991 Constitution and Article 3 of Law of 1994), Colombian political actors are defined as those parties, political movements, social movements, or significant groups of citizens able to participate in elections through endorsement, the creation of a party or movement recognized by the National Electoral Council, or payment of a registration fee. The National Electoral Council grants legal status to those political parties or movements that can prove their existence with at least 50,000 signatures, or that obtained at least this same number of votes in the last elections, or that attained representation in the National Congress. This new legislation has been accused of being particularly responsible for having "opened the floodgates" for new political forces (see Pizarro (2006))

It was in this context that the reforms mentioned before were implemented. The popular elections for local authorities, the reduction of the costs of creating new parties, the greater operational independence of the municipalities and a party system with high levels of intra-party competition were accompanied by a spectacular increase in political competition. Relatively small parties and movements constituted credible third-party options. This change did not imply, however, a complete collapse of the traditional party system: the Liberals and Conservatives continued winning an important percentage of the posts at all levels of government (more than the 50% for the period studied), and their collective reputation did not change dramatically (see Garcia, 2000; Gutierrez, 2002; Pachón, 2002; Hoyos, 2007). What did seem to happen instead was that new and independent people were able to run in elections, and politicians belonging to the traditional parties but ranking low in their national hierarchies decided to become independent candidates under new party labels (see Taylor, 1995; Gutierrez and Davila, 2000; Giraldo, 2003; Bejarano and Pizarro, 2005; Gutierrez, 2006a, 2007).[21]

One important consequence of this rapid transformation of the party system is that the traditional party labels lost their (already weak) ideological content (see Pizarro, 2002; Bejarano and Pizarro, 2005, Roland and Zapata, 2005; Duque, 2006; Gutierrez, 2007). Additionally, in part as a consequence of a series of corruption scandals affecting prominent figures of the traditional parties (see Gutierrez and Ramirez, 2004; Gutierrez, 2006b, 2007), the qualities of the politicians, already one of the main concern of voters, started to be associated with the distinction between traditional and new parties. While politicians running under new party labels emphasized their independence from the traditional (and corrupt) bureaucratic structures (see Gutierrez, 2003; Gutierrez and Ramirez, 2004; Gutierrez, 2006b, 2007), politicians running under traditional party labels emphasized their connections and experience in past (and, in some cases, honest) governments (see Gutierrez, 2003, 2006a, 2007; Pizarro, 2006). This does not imply that politicians running under traditional party labels were always associated with corrupt governments (although it was often the case), and politicians from new parties were *a priori* considered as honest. However, as stated in Section 2, what seems to be clear is that while traditional party labels provided relatively reliable information about this quality (given the well known reputation of their past governments), new party labels, insofar as they informed only about the independence of the candidates from the traditional structures, did not.

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[21]There is a debate about the true level of independence of the politicians that belonged to a traditional party and then run under different party labels. In this respect I agree with Gutierrez and Ramirez (2004) when they say that these politicians all shared a "very diffuse identity [...] a sense of independence, and access to resources independent of the centre of the party, all of which distances them from the traditional world of party dissidents" (see Gutierrez and Ramirez, 2004, p. 237; see also Gutierrez and Davila, 2000).

4 Data and Empirical Strategy

4.1 Data

The analysis uses data on fiscal and electoral outcomes in Colombian municipalities. The electoral outcomes were obtained from the Colombian Electoral Agency and correspond to the period 1997 to 2007. I focus on mayoral elections. Four sets of elections took place during this period, in 1997, 2000, 2003 and 2007. Although mayoral elections were first implemented in Colombia in 1988,[22] the electoral data covering the period from 1988 to 1997 has important limitations: for instance, it is not possible to identify, for an important number of municipalities,[23] the candidates participating in each election, their political party, and the number or percentage of votes that each candidate obtained. This is why my analysis starts in 1997. This, however, does not imply a significant loss: the participation and success of non-traditional parties is not very prevalent before the 1997 election.[24]

For every municipality and election year (between 1997 and 2007) for which there is available data, I compiled the number of votes received by each candidate and the name of the political party or movement each candidate belongs to. In total, I have data for 3,891 elections. I then identified the elections in which a candidate from a new party won and a candidate from an old party placed second, and those in which a candidate from a new party placed second and a candidate from an old party won. This happened in 1,515 elections, which corresponds to 39% of elections. It is on these elections that I focus the analysis.[25]

It is important to discuss the criterium that I use to distinguish new from traditional parties. Although not very homogeneous internally,[26] the Liberals and Conservatives have relatively solid and unitary structures, and are affiliated with bureaucracies and

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[22]Since then, nine elections have taken place: 1988, 1990, 1992, 1994, 1997, 2000, 2003, 2007 and 2011.

[23]The complete information is available only for the capitals of the departments and "Ciudades Zonificadas" (with borough mayors), which represent less than the 10% of municipalities.

[24]According to my calculations, for the elections occurred between 1988 and 1994, only 17 parties other than the two traditional parties won at least once in any municipality. These victories constituted less than the 15% of all the elections that occurred during this period.

[25]In the rest of the elections, the first two positions were occupied either by two candidates from old parties (36%) or by two candidates from new parties (17%). There were also elections with only one candidate participated (2%), or where at least one of the first two positions was occupied by a candidate from a coalition formed by new and old parties (6%).

[26]During the period I focus on, the Conservative party had some known factions, which were recognized as its constituent parts. Following Roll (2002), Pachón (2002) and Hoyos (2007) (who got the information directly from the Conservative party registers), the political movements that I classified as factions are: Movimiento Humbertista, Conservatismo Independiente, Movimiento de Salvacion Nacional, Movimiento Nacional Conservador, Movimiento Fuerza Progresista, Nueva Fuerza Democratica, Movimiento Unionista, Movimiento Progresismo Democratico, Vamos Colombia. In addition to this list of factions, I classified as factions all the coalitions between these factions and the Conservative party.

interest groups that are relatively well-known to voters. I classify these two parties as old.[27] New parties are numerous and successful. In the 1997-2007 period, 247 different non-traditional parties participated in elections in at least one municipality (and ended 1st or 2nd), and 164 new parties won at least one election. New parties won 1,456 elections, which amounts to 37% of the total number of elections. Additionally, the origin of these parties is very diverse, with 159 being local political movements (participating in only one municipality). Among the new parties, it is not possible to identify a party that was much more successful than the others. No party won more than 10% of the elections won by new parties; 27 different parties have won between the 1% and 10%[28] These parties also have no experience in government, confirming that their classification as new is appropriate. In the 1997-2007 period, around 12% of the non-traditional parties had won before in the same municipality, representing around 5% of the total elections won by a non-traditional party. Since it is difficult to say whether these experienced non-traditional parties are new to voters, I eliminate observations with one of them winning or finishing second. The results are, however, robust to their inclusion.

To summarize, throughout my study I define a party participating in a given municipal election as *new* if *it is not one of the two traditional parties and if the party has never won an election in that municipality.*

I merge this electoral data with municipal-level public finance variables. In particular, I focus on capital expenditure (investment) and local taxes. Detailed data is available starting in 1993 from the Colombian National Planning Department (DNP).[29] This data corresponds with the figures in the financial report each municipality files annually with local and national agencies tasked with monitoring public finances (*Contralorias Municipales* and *Contraloria General de la Republica*). This data is available at some relevant disaggregated level. For this study, it is relevant to know that total spending is divided into two categories: current expenditure, composed mainly of purchases of supplies and payments of salaries to government employees, and capital expenditure, which corresponds to investment in urban infrastructure, education, health and housing projects. In the 1997-2011 period, current expenditure and capital expenditure corresponded to 19% and 81% of the total spending, respectively. Total

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[27]There are also cases of coalitions that include one of the two old parties and one or more new parties. Since for these cases I cannot identify clearly whether they are new or old parties, I eliminate these observations, which account for about 6% of all the observations.

[28]As previously noted, new parties victories in municipal elections have been continuously increasing. Although for the period studied no new party won more elections than any of the two traditional parties, this situation changed in the last election (the 2011 election, not included in the sample because the data for public finances has not been produced yet). In this election, and for the fist time in history, a new party (the Partido de la U) won the majority of municipal elections (24% versus 18% and 17% for the traditional parties).

[29]This data is available for the period 1993-2011; it can be consulted here http://www.dnp.gov.co/Programas/DesarrolloTerritorial/FinanzasP%C3%BAblicasTerritoriales/EjecucionesPresupuestales.aspx

revenue is divided into current and capital revenue, corresponding to 41% and 59% of the total, respectively. Within the category of current revenue, local taxes correspond to the 75% of the total.[30] Capital revenue is mainly composed of transfers from the central government (74%) and royalties from the extraction of natural resources (20%).[31] I express all variables in thousands of 2008 pesos, and use the CPI as deflator.[32] I use the information corresponding to the terms in which the mayors were in office[33] and compute the averages over these terms. In case of missing values, I use only the information available to calculate the average.[34] Moreover, I do not use information for municipalities that do not report total spending.

Finally, the sources of other variables used as controls and to examine whether the sample is balanced are listed in the note to Table I.

4.2   Empirical Strategy and Identification

I use a regression discontinuity design (RDD) to study the impact of new parties on policy outcomes in Colombia's municipal mayor elections. This design addresses the potential endogeneity between new party mayors and policy outcomes. Regression discontinuity design relies on the existence of a dichotomous treatment variable that is a deterministic function of a single continuous covariate. If individuals pass some threshold level of the variable, they are assigned to the treatment group; otherwise, they are assigned to the control group. Elections are an ideal situation for its use because candidates are only elected if their margin of victory (for example between the candidates who got the two highest number of votes) passes the zero threshold. I compare municipalities in which a politician from a new party barely defeats a politician from a traditional party, to those municipalities where a politician from a new party barely lost. If the final vote share includes a continuous density, then the results of a closely contested election can be taken as random. Then, the comparison of these municipalities with respect to a particular outcome measures the causal effect of the presence of a politician from a new party on this outcome.

I implement the RDD strategy by restricting the sample to the elections where one of the first- and second-place candidates is from a new party, and the other is from an old party.

As in the standard literature on RDD (see Imbens and Lemieux, 2008, Lee and

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[30] The other part includes charges for services provided by the municipality, and fines.

[31] A small part of the capital revenue (6%) comes from donations, gains on sale of municipal property, and municipal enterprises' profits.

[32] The CPI is provided by the Colombian National Administrative Department of Statistics.

[33] That is, 1998-2000 for the mayors elected in 1997, 2001-2003 for the mayors elected in 2000, 2004-2007 for the mayors elected in 2003, and 2008-2011 for the mayors elected in 2007.

[34] For example, if for some municipality, for the 1997-2000 period, I only have information for 2000, I use this value as the average of this period. If I do not have information for any year during this period, I eliminate the observation.

Lemieux, 2010, Ferreira and Gyourko, 2009, 2011), I consider the following model:

$$S_{c,t} = \beta_0 + \beta_1 Nwin_{c,t} + P(margvic_{c,t} * \beta) + \beta_X X_{c,t} + \epsilon_{c,t} \tag{14}$$

where $S_{c,t}$ is the policy outcome of interest in municipality c in the term immediately following election t, $Nwin_{c,t}$ is a dummy that takes on a value of one if a candidate from a new party won the mayoral race in election t in municipality c, $P(\cdot)$ is a kth-order polynomial in the vote share,[35] $margvic_{c,t}$ is the margin of victory in election t in municipality c, defined as the difference between the percentage of votes received by the winner and the percentage of votes received by the second-place candidate,[36] β are the respective vote-share coefficients, and $\epsilon_{c,t}$ is the stochastic error term. Some specifications also include $X_{c,t}$, a set of controls including city population and year and region fixed effects, which are not necessary for identication, but their inclusion improve the precision of the estimates.

Identification requires that all relevant factors other than treatment vary smoothly at the threshold between a new party victory and a new party loss. That is, letting S_1 and S_0 denote potential outcomes under a new party victory and new party loss, respectively, and $margvic$ denote the new party margin of victory, identification requires that $E[S_1|margvic]$ and $E[S_0|margvic]$ are continuous at the new party win-loss threshold. This assumption is needed for municipalities where a new party barely wins to be an appropriate counterfactual for municipalities where a new party barely loses.

To assess the plausibility of this assumption, Table I compares municipal spending, revenue, transfers, deficit, political, economic, demographic, institutional, geographic and crime and conflict characteristics in municipalities where a new party barely lost to those in municipalities where it barely won. Size-of-government characteristics include all the components of spending, revenue and deficit in the term before the new party mayor was in office. As political characteristics, I consider dummies for the party of the mayoral incumbent and the number of candidates. Demographic characteristics are population, the proportion of urban to rural population and population density. Economic characteristics include the percentage of the population with unsatisfied basic needs and institutional characteristics are the total number of courts, bank branches, hospitals and schools. Geographic characteristics are the percentage of municipalities belonging to the main Colombian geographic zones. Sources for these variables are listed in the note to Table I.

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[35]As in standard literature, if k=3, $P(\cdot)$ has the form:

$$P(margvic_{c,t} * \beta) = \beta_2 margvic_{c,t} + \beta_3 margvic_{c,t}^2 + \beta_4 margvic_{c,t}^3$$
$$+\beta_5 margvic_{c,t} * Nwin_{c,t} + \beta_6 margvic_{c,t}^2 * Nwin_{c,t} + \beta_7 margvic_{c,t}^3 * Nwin_{c,t}$$

I consider different values of k, which correspond to different bandwidths (see Lee and Lemieux, 2010).

[36]As in Ferreira and Gyourko (2009, 2011), I use margin of victory instead of vote share in order to facilitate comparison across elections, as in general there are more than two candidates in each election.

Column (1) of Table I reports the mean value for each variable in municipalities where a new party barely won, column (2) does the same for municipalities where a new party barely lost, and column (3) reports the t-statistics on the difference in means. The sample is limited to elections with a vote spread between the winner and the runner-up of five percentage points or less. In no case is there a statistically significant difference between municipalities where a new party lost and municipalities where a new party won. Moreover, I run the local linear regression specification using each of the baseline characteristics as the dependent variable. The coefficient $Nwin$ is reported in column (4) and the standard errors are reported in column (5). In no case are the coefficients,, estimated by local linear regression statistically different from zero. Overall, this evidence strongly suggests that municipalities where a new party barely loses are a valid control group for municipalities where they barely win.

Finally, identification also requires the absence of selective sorting around the new party win-loss threshold, i.e., that the results of a closely contested election can be taken as random. Visual inspection of the density function of the margin of victory (Figure I) suggests that there is no discontinuity of the function at the threshold. A more formal test is given by McCrary's test (see McCrary, 2008). With a log difference in the height of the density function at the threshold equal to -0.128, and an standard error of 0.101 (see Figure II), I confirm that there is no discontinuity in the density at the normalized threshold.

5   Results

Panels (a)-(d) in Figure III plot capital expenditure (investment) and current expenditure against the margin of victory for the new party. A negative margin indicates a new party loss. Each dark point represents the average value of the outcome in vote spread bins of width 0.25. The solid line plots predicted values from a local linear regression, with separate vote spread trends estimated on either side of the new party win-loss threshold. The bandwidth is chosen using the Imbens-Kalyanaraman bandwidth selection rule (see Imbens and Kalyanaraman, 2009). The dependent variables in panels (a) and (c) are the values in the term before the mayor is in office.[37] The dependent variables in panels (b) and (d) are the values in the term during which the mayor is in office. Panel (b) shows that during the term of office there is a marked discontinuity at the threshold between a new party loss and a new party victory. Per capita investment is higher in municipalities governed by new party mayors than in those governed by a mayor from an old party. As will be shown below, the difference is statistically significative. For current spending (panel (d)), the effect is less clear. Panels (a) and (c) show that in the period before the mayor was in office, the values were similar (or statistically insignificant different) in municipalities where the new party barely won as compared to those where they barely lost, supporting the

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[37]For all variables I compute the logarithm of the per capita values.

plausible exogeneity of close elections.

This graphical analysis shows that capital spending is higher in municipalities governed by mayors from new parties. I examine this result in more detail by reporting the estimates given by equation (14) in Table II. Columns (1) and (2) report estimates when a linear functional form is used for the RD polynomial, for the entire sample, with and without controls. Besides capital and current spending, I also include total spending. My estimate indicates that in municipalities where a new party mayor takes office, capital spending (investment) is around 10 percentage points higher than in municipalities where the mayor is from an old party. Total spending is also higher (around 8 percentage points), and current spending, although with a positive sign, is not statistically significant.

Linear regressions will not necessarily provide an unbiased estimate of the magnitude of the discontinuity if the true underlying functional form is not linear. Columns (3) through (8) explore robustness to specifying the RD using a variety of functional forms. These columns estimate the specification using quadratic, cubic and quartic RD polynomials, respectively. I observe that for investment the impact is robust to all the specifications, with the coefficients statistically significant at either the 1% or 5% level. For total spending I also find that all the coefficients are statistically significant (at either the 5% or 10% level), and for current spending are all statistically insignificant. For total and capital expenditure the coefficients tend to increase somewhat in magnitude when higher order polynomials are used.

Although Table II provides robust evidence that public spending is higher when a new party is in power, it does not guarantee that the difference reflects local governments' decisions. Municipal expenditures are partly funded with resources collected by the central government and transferred to local governments, and by royalties from the extraction of natural resources (mainly oil, gas, and coal). Thus, it is possible that the observed difference in spending depends on these resources, over which local politicians do not have any control. To verify that higher spending by a new party government is mainly due to local politicians' decisions, I examine how the main sources of funds of municipalities (local taxes, central government transfers and royalties) are affected by the presence of a mayor from a new party. I present the results in panels F and H of Figure IV and in Panel A of Table III. Panel (b) of Figure IV shows that local taxes are higher when a mayor from a new party is in office; for capital revenue I do not observe any significant discontinuity. Panel A of Table III verifies this graphical evidence by using the same specification as in Table II. It also includes total revenue. We observe that local taxes of which the mayor is directly responsible are around 30% higher when a new party is in power, with a corresponding (but less statistically significant) increase in total revenue. In contrast, the estimated coefficients for capital revenue are small and statistically insignificant.

Finally, I examine the possibility that new parties run higher deficits. Panel B of Table III shows that the deficit of the municipalities is not affected by the presence of a new party in power (the estimated coefficients are all small and statistically insignif-

icant). This is possibly due to the fact that Colombian local politicians face strong external constraints on debt issuance. Thus, I conclude that local taxes are the main source of funding for the higher spending, and that municipalities governed by new parties are responsible for this difference.

5.1 Additional Measures of Party Newness

Although all the political organizations that I classify as new have not won before in the respective municipality, some of them have participated before in a municipality's previous elections, or in elections in another municipality. It is reasonable to expect that voters have more information about the members of these new parties. As a result, I expect the mayors of new parties that have participated in previous elections to spend less when compared to mayors from new parties that have just entered the political competition.

To test this prediction, in this section I introduce four additional measures of party newness, all related to the participation of new parties in past elections. The first measure is a dummy variable equal to one if the new party has never participated before in the *same* municipality. The second measure is a dummy variable equal to one if the new party has never participated before in *any* municipality. The third and fourth are variables that measure the number of years since the first participation of the party in the same and any municipality.[38]

Tables IV-VII report estimates on the size of government of these four measures of past participation. The dependent variable in all columns is capital spending. For comparison purposes, columns (1), (3) and (5) of all Tables report the baseline RD regression result from columns (1), (3) and (5) of Table II. Column (2) of Tables IV and V examines the effect of the first two measures, the dummy variables that distinguish between municipalities with close elections where a new party has never participated before in the same or any election and a new party with at least one participation in the past. New parties that have never participated before in any municipality are present in around 56% of the elections where new and old parties received the two highest vote shares, and new parties that have never participated before in the same municipality but that have participated before in other municipalities are present in around 38% of the same kind of elections. The specification includes the same terms as the baseline RD specification in equation (14), but now also interacts $Nwin$, $margic$, and $margvic \times Nwin$ with the first participation dummies. Columns (4) and (6) examine the robustness of the result using a variety of functional forms. As expected, the coefficient of the interaction term is positive and statistically significant at either the 5% or 10% level in almost all specifications. Additionally, the estimates indicate that the effect of close new party victories on capital spending is large for parties that

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[38]For elections between 1988 and 1994, the data does not allow for the identification of all participating parties. However, as I argued in Section 4.1, this does not imply a significant loss, since the participation and success of non-traditional parties were not significant before the 1997 elections.

have never participated before in any election in the same municipality, and extremely large for parties that have never participated before in any election in any municipality.

Tables VI and VII examine the effect of the second and third measures, the number of years since the first participation of the new party in the same and in any municipality. For the elections where new and old parties received the two highest vote shares, the average age of the new parties is 2.9 years. The specification is the same as in Tables IV and V, but instead of a participation dummy variable, it interacts $Nwin$, $margic$, and $margvic \times Nwin$ with the years-since-last-participation variable. The estimates are also as expected. The coefficient of the interaction term has the expected sign (negative) and is statistically significant at either the 5% or 10% level in all specifications. Thus, a given increase in the newness of the party yields more public spending when a new party is in power. If more years since the first participation implies that the party is better known by the voters, then this finding provides additional evidence on the plausibility of the hypothesis proposed in Section 2.

5.2 New Parties and Municipal Transparency

In this section I use data on municipal transparency to analyze whether there are significant differences between municipalities governed by mayors from traditional and new parties. As a measure of transparency, I use the *Municipal Transparency Index* (MTI), constructed by *Transparencia por Colombia*, the local chapter of *Transparency International*. This index evaluates whether the actions taken by the municipal authorities improved the access to information by voters, the efficacy of punishment for the faults of public servants, and the controls established in order to pursue the municipal goals.[39] The index ranges from 1 to 100, with greater values indicating greater levels of transparency. Table VIII reports the estimated effect of having a mayor from a new party on this measure of municipal transparency. The dependent variable in all columns is the MTI, and the specification includes the same terms as the baseline specification in equation (14). The estimated effect is not significant at either, 5% or 1% level, in all specifications.

Since we expect mayors extracting higher rents to have weaker incentives to be transparent, the MTI index can be thought of as a proxy of political rents. According to this interpretation, my empirical analysis suggests that on average new party mayors do not extract higher rents. As discussed at the end of Section 2, this finding is coherent with the model if we assume that ξ for new party mayors is lower. This seems to be a reasonable assumption. As noted in Section 3, new parties were created as a response to a series of corruption scandals affecting prominent figures of the

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[39] The data and a more detailed description of this index (in spanish *Indice the Transparencia Municipal* (ITM)) can be consulted at http://www.transparenciacolombia.org.co/. This measure has an important limitation: it only exists for a limited number of municipalities. For the periods 2004-2007 and 2008-2011 there is data for 254 and 148 municipalities, respectively. Thus, the empirical results in this section should be taken with some caution.

traditional parties. Gutierrez (2007, p. 404) shows for instance how in the nineties these corruption scandals reached unprecedented levels, and occurred at all levels of government (from municipal deputies to the president of the republic). In addition, he details how most of candidates running under new party labels took advantage of this situation by denouncing the politicians from the two traditional parties as representatives of an old and corrupt way of doing politics, and emphasized their independence from the traditional political machines (see Gutierrez (2007, p. 405)). In particular, he shows how these candidates emphasized that they did not have the disposition, skills or connections required to this kind of practices (see Gutierrez (2007, p. 402)). Thus, if candidates from new parties are expected to be more honest, and assuming that mayors extracting higher rents have weaker incentives to be transparent, then, consistently with the of model of Section 2, there should not be a significant difference in the actions taken by the municipal authorities in order to increase the transparency of their governments.

5.3 Other Mechanisms

Finally, to shed further light on the plausibility of the model, in this section I check whether other mechanisms could explain why new parties spend more.

First, I investigate whether my result arises because new parties are mainly from one side of the political spectrum. Assessing the ideology of new parties is a daunting task. One possibility to obtain information about a new party's ideology is to look at the ideology of the main competitor. Although this information is indirect because it does not say whether a new party is challenging a traditional party from the left or the right, it can inform about whether new party ideology plays a role in the increase in public expenditures in case new parties are challenging *both* traditional parties from one of these sides. I therefore introduce a dummy variable that takes a value of one if there is a close election between a new party and the Liberal party (the traditional center-left party). Liberals were present in 60% of the elections where new and old parties received the two highest vote shares. Column (2) of Table IX examines this specification. The dependent variable is capital spending, and the coefficients are estimated using a linear functional form from equation (14). Specifically, the specification includes the same terms as the baseline RD specification in equation (14), but now also interacts $Nwin$, $margic$, and $margvic \times Nwin$ with a Liberal party opponent dummy. For comparison purposes, column (1) of Table IX reports the baseline result from column (2) of Table II. I observe that the estimated effect of a new party mayor taking office, relative to a non-new party mayor taking office, is large and statistically significant regardless of whether the opponent is from the Liberal party.

Related with the possible effect of ideology on spending, I also provide evidence that the two traditional parties do not significantly differ, at least when looking at fiscal outcomes. Column (4) of Table IX examines close elections where the Liberal and Conservative parties received the two highest vote shares. The new-party-win dummy

variable in the RD specification is replaced by a Liberal-win dummy. As expected given the results in column (2), the estimated effect is statistically insignificant. This suggests that when looking at fiscal outcomes, the main divide in Colombian politics is between new and traditional parties, not between the two traditional parties. Most importantly, this could provide additional evidence that ideology does not seem to have much effect on municipal government spending, and is consistent with the hypothesis that local battles are probably fought over competence or corruption.

Finally, I examine the possibility that new parties spend more because they have a smaller majority on municipal councils. Column (3) of Table IX examines a specification that distinguishes between whether the mayor's party holds a majority on the local council, which occurred in 51% of the cases in my sample. I do not observe any statistically significant difference. This finding is consistent with the hypothesis that it is the mayor's party (and not the local council or the relative strength of the mayor's party in the local council) that is mainly responsible for the city's budget. This finding also helps me to exclude a possible alternative explanation based on the weakness of the new parties in local councils and their need to form coalitions to pass their budget.[40]

6   Conclusion

This study examined how the presence of politicians from new parties affects public finance outcomes. The study focuses on Colombian municipalities, where new parties have recently been competing against two well-defined old parties. Regression discontinuity estimates show that the size of government (measured in terms of public spending and tax revenue) is higher in municipalities governed by a mayor from a new party. Additionally, analyses using information about local politics and the features of the new parties show that it is the newness of these parties that plausibly causes the difference. As a possible mechanism, the study also proposes a career-concerns model where more *ex ante* uncertainty about the honesty of the incumbent reduces the electoral cost of increasing the size of government. Since it is expected that voters have less knowledge about members of new parties than members of traditional parties, this could explain why new party mayors spend relatively more.

Several opportunities exist for future research. First, it has not been discussed how the larger governments chosen by politicians from new parties affect social and economic outcomes. One could also examine the effect of new parties on a wider set of policy outcome variables than the size of government, including new parties' effects on long-run policy outcomes. Finally, there is the question of why new parties are formed and, more generally, how to explain the stability (and change) of party systems.

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[40]An explanation of why public spending is higher in coalition governments, and some empirical evidence for 50 democracies, can be found in Persson et al. (2007).

Appendix

Proof of proposition 1. In period 2 the incumbent solves the problem:

$$\max_{g_2} 1 - (g_t + r)\eta^{-1} + T + H(g_2) + R + (g_t + r)(1 - \eta)\eta^{-1} \tag{15}$$

subject to $g_2 \geq 0$ and $(g_t + r)\eta^{-1} - T = x_2 \geq 0$. Let λ_g and λ_x be the Lagrange multipliers of these restrictions; then the first-order condition (sufficient since $H'' < 0$) of (15) is given by

$$H'(g_2^*) - 1 + \lambda_g + \lambda_x \eta^{-1} = 0 \tag{16}$$

with $\lambda_g \geq 0$, $\lambda_x \geq 0$, $\lambda_g g_2 = 0$ and $\lambda_x((g_t + r)\eta^{-1} - T) = 0$. Note that if $\lambda_g > 0$, then $g_2^* = 0$. This is not possible since $\lim_{x \to 0} H'(x) = +\infty$. If $\lambda_x > 0$, we have that $(g_2^* + r)\eta^{-1} - T = 0$. Since $T = 0$ if $x_2 = 0$, this implies that $(g_2^* + r)\eta^{-1} = 0$, which is also impossible. Then $\lambda_g = 0$ and $\lambda_x = 0$, which by (16) implies (7), where we assume that T and r are such that $H'^{-1}(1) + r - T \geq 0$.

The probability that the incumbent is reelected is given by

$$Pr\left(\tilde{\eta} > \frac{1}{\xi'}\right) = \frac{1}{2} + \psi\left(\frac{1}{\xi} - \frac{g_1 + r}{\xi'(\tilde{g}_1 + r)}\right) \tag{17}$$

where ξ' is the expected level of honesty of the challenger (note that if $\xi = \xi'$, (11) and (17) are the same). In period 1 the incumbent solves

$$\max_{g_1 \geq 0} E[v(g_1; \eta)] + Pr\left(\tilde{\eta} > \frac{1}{\xi'}\right) E[v(g_2^*; \eta)] + \left(1 - Pr\left(\tilde{\eta} > \frac{1}{\xi'}\right)\right) E[w(g_2^*; \eta')] \tag{18}$$

subject to (1), (7) and (17), and also to $(g_t + r)\eta^{-1} - T = x_1 \geq 0$. Since g_2^* does not depend on η, we can write

$$\begin{aligned} E[w(g_2^*; \eta')] &= 1 - E\left[\frac{1}{\eta'}\right](g_2^* + r) + T + H(g_2^*) \\ &= 1 - \xi'(g_2^* + r) + T + H(g_2^*) \end{aligned} \tag{19}$$

Additionally, for $t = 1, 2$,

$$\begin{aligned} E[v(g_t; \eta)] &= E[w(g_t; \eta)] + R + (\xi - 1)(g_t + r) \\ &= 1 - \xi(g_t + r) + T + H(g_t) + R + (\xi - 1)(g_t + r) \\ &= 1 + T + H(g_t) + R - g_t - r \end{aligned} \tag{20}$$

Let us define $A = R + (\xi' - 1)(g_2^* + r)$, then by replacing (19), (20) and (11) in (12) we get

$$\max_{g_1} 1 + T + H(g_1) + R - g_1 - r + A\left(\frac{1}{2} + \psi\left(\frac{1}{\xi} - \frac{g_1 + r}{\xi'(\tilde{g}_1 + r)}\right)\right) + E[w(g_2^*; \eta')] \tag{21}$$

24

subject to $g_1 \geq 0$ and $\xi(g_1+r)-T = x_1 \geq 0$. Let λ_g and λ_x be the Lagrange multipliers of these restrictions; then the first-order condition of (21) is

$$H'(g_1^*) - 1 - \frac{A\psi}{\xi'(\tilde{g}_1 + r)} + \lambda_g + \lambda_x\xi = 0 \tag{22}$$

with $\lambda_g \geq 0$, $\lambda_x \geq 0$, $\lambda_g g_1 = 0$ and $\lambda_x(\xi(g_1 + r) - T) = 0$. Again we can note that $\lambda_g > 0$ is impossible since $\lim_{x\to 0} H'(x) = +\infty$, and that $\lambda_x > 0$ is also impossible since it would imply that $T = 0$, which does not satisfy $\xi(g_1 + r) - T = 0$ since by assumption $\xi > 1$ and $r > 0$. Then $\lambda_g = 0$ and $\lambda_x = 0$, and in equilibrium, $g_1^* = \tilde{g}_1$. Now I show that this equilibrium exists and is unique. Replace $g_1^* = \tilde{g}_1$ in (22), and define the function

$$f(x) = H'(x) - 1 - \frac{A\psi}{\xi'(x + r)} \tag{23}$$

I need to show that there exists an $x^* > 0$ such that $f(x^*) = 0$ (by (22) and (23) true in any equilibrium) and that this x^* is unique. The proof of the existence is straightforward. First observe in (23) that $\lim_{x\to 0} f(x) = +\infty$ and that $f(x)$ is continuous. This implies that it is sufficient to have an $x' > 0$ such that $f(x') \leq 0$. Choose $x' = H'^{-1}(1) > 0$. Replacing this value in (23) we get

$$\begin{aligned} f\left(H'^{-1}(1)\right) &= H'\left(H'^{-1}(1)\right) - 1 - \frac{A\psi}{\xi'\left(H'^{-1}(1) + r\right)} \\ &= -\frac{A\psi}{\xi'\left(H'^{-1}(1) + r\right)} \\ &< 0 \end{aligned} \tag{24}$$

So from (24) there exists at least one $x > 0$ such that $f(x) = 0$.

For the unicity, we proceed by contradiction. Suppose that there exist at least two numbers $a > 0$ and $b > 0$ such that $f(a) = f(b) = 0$ and $a \neq b$. Without a loss of generality, suppose that $a < b < y$, where y is any other number such that $f(y) = 0$. Since $\lim_{x\to 0} f(x) = +\infty > 0$ and $f(x)$ is continuous, there must be a neighbourhood of a, N_a, such that $f'(x) < 0$ for all $x \in N_a$, and a neighbourhood of b, N_b such that $f'(x) > 0$ for all $x \in N_b$. Since $b \in N_b$, this implies that $f'(b) > 0$. Differentiating $f(x)$ in (23) we get

$$f'(x) = H''(x) + \frac{A\psi}{\xi'(x + r)^2} \tag{25}$$

and since $f'(b) > 0$, by (25) we must have that

$$H''(b) + \frac{A\psi}{\xi'(b + r)^2} > 0 \tag{26}$$

Multiplying and dividing the first term of (26) by b and $\frac{1}{H'(b)}$, and using the definition of κ in (6), (26) is equivalent to

$$-\kappa(b)\frac{H'(b)}{b} + \frac{A\psi}{\xi'(b + r)^2} > 0 \tag{27}$$

25

Additionally, since by assumption $f(b) = 0$, by (23) we have $A\psi = \xi'(b+r)(H'(b)-1)$. Thus replacing $A\psi$ in (27) and rearranging we get

$$
\begin{aligned}
-\kappa(b)\frac{H'(b)}{b} + \frac{H'(b)-1}{b+r} &= -\kappa(b)\frac{H'(b)}{b} + \frac{H'(b)}{b+r} - \frac{1}{b+r} \\
&= -H'(b)\left(\frac{\kappa(b)}{b} - \frac{1}{b+r}\right) - \frac{1}{b+r} \\
&> 0
\end{aligned}
\tag{28}
$$

Since by assumption $r > 0$, $b \geq 0$ and $H'(x) > 0$ for all x, (28) can only be satisfied if the expression in parentheses is less than zero. If this is the case, then

$$
\kappa(b) < \frac{b}{b+r} < 1
\tag{29}
$$

But (29) contradicts (6), true for all x, particularly for $x = b$. Thus we cannot have $a \neq b$ such that $f(a) = f(b) = 0$. The solution has to be unique. $\qquad\square$

Proof of corollary 1. We are interested in seeing how g_1^* changes with respect to the parameter ψ. We use the implicit function theorem. Let's define the function

$$
h(\psi, x) = f(x) = H'(x) - 1 - \frac{A\psi}{\xi'(x+r)}
\tag{30}
$$

Differentiating $h(\psi, x)$ in (30) with respect to x, we have that

$$
\frac{\partial h}{\partial x} = f'(x) = H''(x) + \frac{A\psi}{\xi'(x+r)^2}
\tag{31}
$$

Additionally, we know that in equilibrium $h(\psi, g_1^*) = f(g_1^*) = 0$. As we saw before, this implies that $A\psi = \xi'(g_1^*+r)(H'(g_1^*)-1)$. Replacing this expression in (31), multiplying and dividing the first term by g_1^* and $\frac{1}{H'(g_1^*)}$, using again the definition of κ in (6), and rearranging, we have that in equilibrium,

$$
\begin{aligned}
\frac{\partial h}{\partial g_1^*} &= H''(g_1^*) + \frac{A\psi}{\xi'(g_1^*+r)^2} \\
&= -\kappa(g_1^*)\frac{H'(g_1^*)}{g_1^*} + \frac{H'(g_1^*)}{g_1^*+r} - \frac{1}{g_1^*+r} \\
&= -H'(g_1^*)\left(\frac{\kappa(g_1^*)}{g_1^*} - \frac{1}{g_1^*+r}\right) - \frac{1}{g_1^*+r} \\
&< 0
\end{aligned}
\tag{32}
$$

where in the inequality, as in the proof of the proposition 1, we used (6) (that $\kappa(g_1^*) \geq 1$) to show that the term in parentheses in (32) is greater than zero. Additionally, differentiating $h(\psi, x)$ in (30) with respect to ψ, we have that that in equilibrium,

$$
\frac{\partial h}{\partial \psi} = -\frac{A}{\xi'(g_1^*+r)} < 0
\tag{33}
$$

26

By combining (32) and (33) and using the implicit function theorem, we have that

$$\frac{\partial g_1^*}{\partial \psi} = -\frac{\frac{\partial h}{\partial \psi^i}}{\frac{\partial h}{\partial g_1^*}} < 0$$

$\square$

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Figure I: Density function of the margin of victory
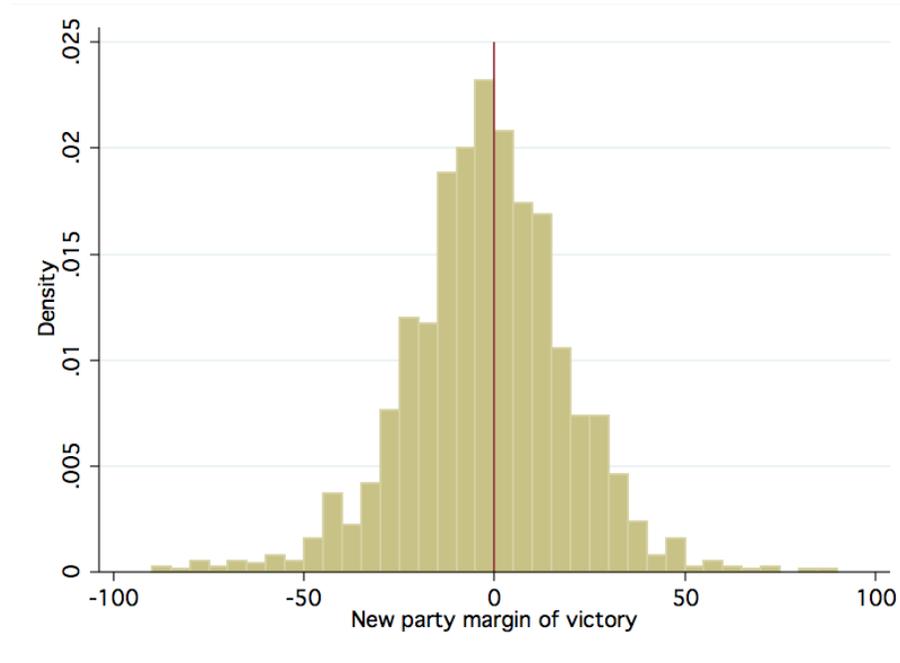
Notes: Density function of the margin of victory between new and old party candidates (bin width = 5%).

Figure II: McCrary's test
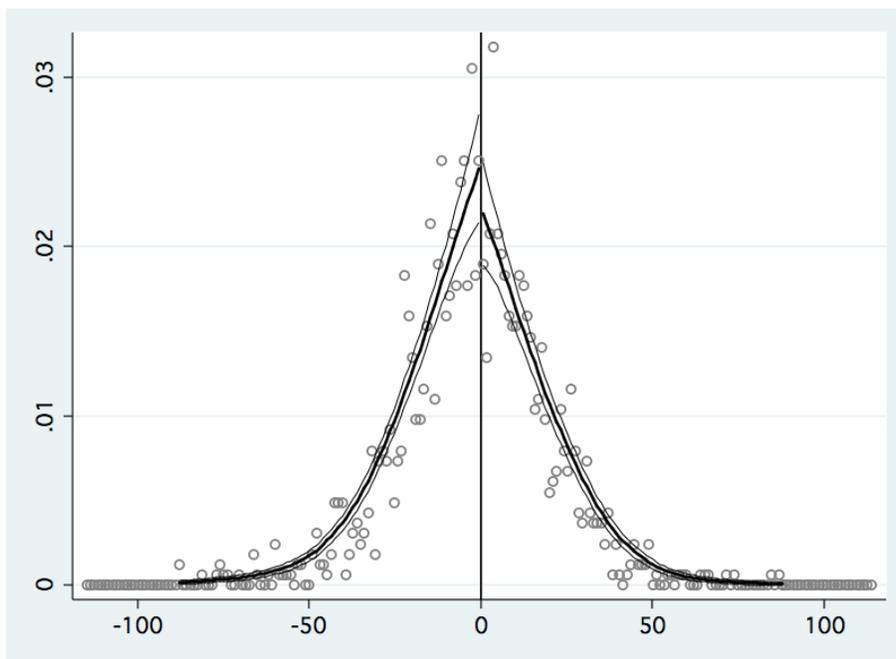
Notes: Finely-gridded histogram smoothed using local linear regression, separately on either side of the cutoff of the density function of the margin of victory between new and old party candidates (McCrary, 2008)

Figure III: Close new parties victories and spending
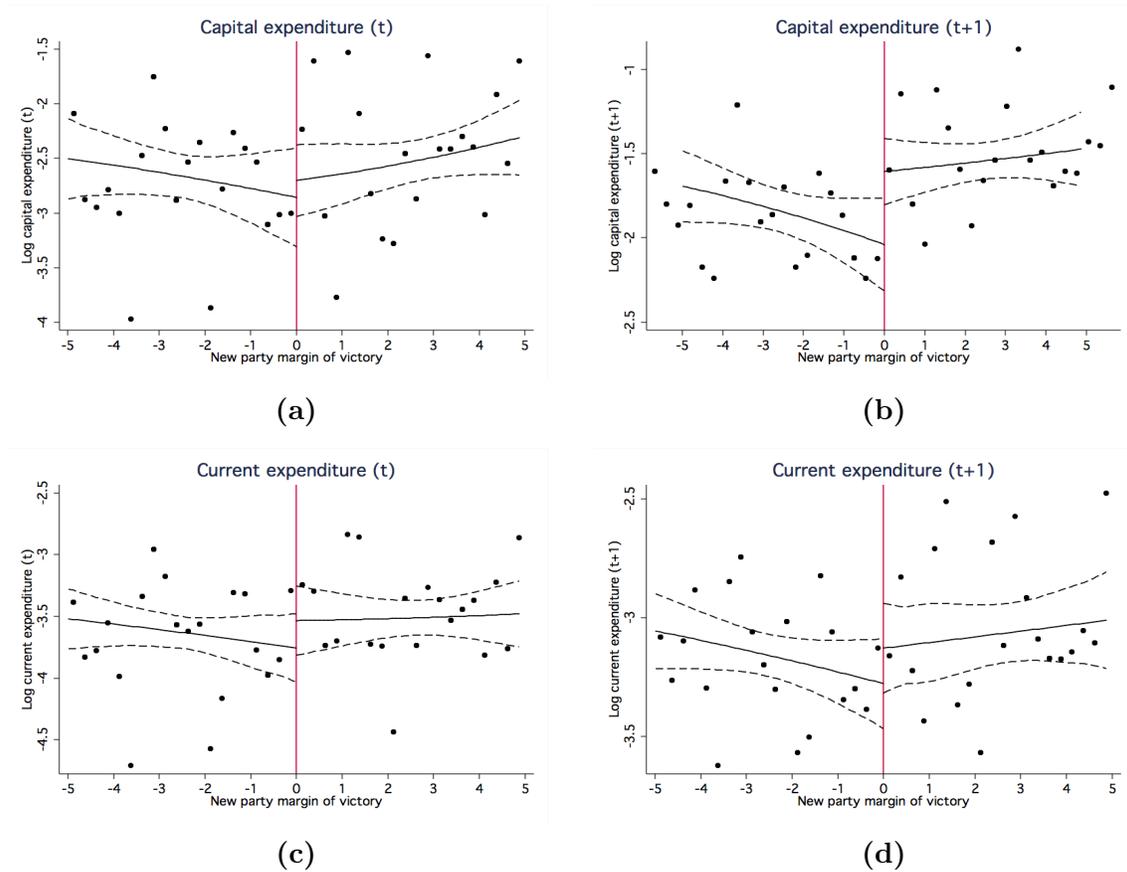
(a)

(b)

(c)

(d)

Notes: This figure plots municipal public finances against the new party margin of victory, with a negative margin indicating a new party loss. The solid line plots predicted values from a local linear regression, with separate vote spread trends estimated on either side of the new party win-loss threshold. The bandwidth is chosen using the Imbens-Kalyanaraman bandwidth selection rule (Imbens and Kalyanaraman, 2009), as implemented in the Stata ado file named rdob.ado (available on Imbens' website).

Figure IV: Close new parties victories and revenue
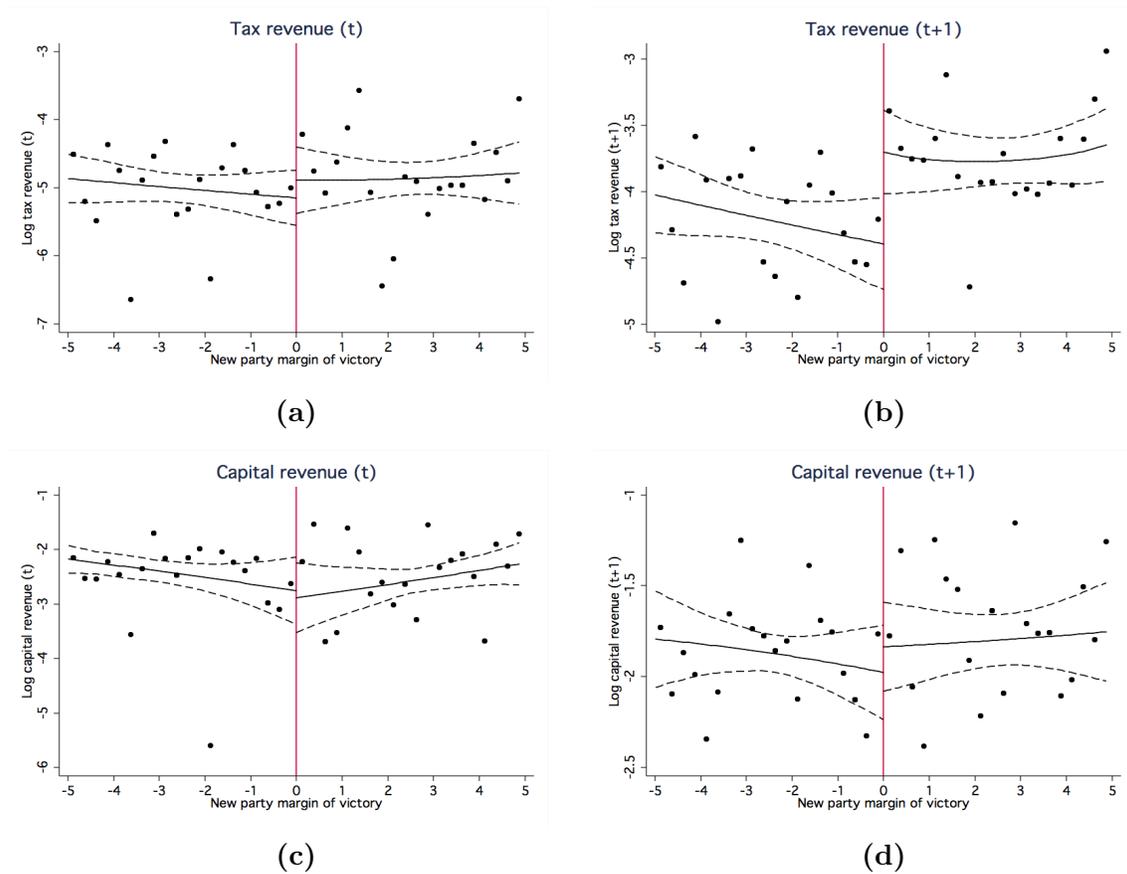
(a)

(b)

(c)

(d)

Notes: This figure plots municipal public finances against the new party margin of victory, with a negative margin indicating a new party loss. The solid line plots predicted values from a local linear regression, with separate vote spread trends estimated on either side of the new party win-loss threshold. The bandwidth is chosen using the Imbens-Kalyanaraman bandwidth selection rule (Imbens and Kalyanaraman, 2009), as implemented in the Stata ado file named rdob.ado (available on Imbens' website).

Table I: Baseline characteristics

| | 5% vote spread | | T-stat on | | SE on |
	New party won	New party lost	means difference	RD estimate	RD estimate
	(1)	(2)	(3)	(4)	(5)
Public finance					
Log total expenditure per capita (t-1)	-2.171	-2.301	1.069	0.031	0.096
Log current expenditure per capita (t-1)	-3.511	-3.632	1.235	0.115	0.110
Log capital expenditure per capita (t-1)	-2.512	-2.667	1.106	0.010	0.120
Log total revenue per capita (t-1)	-2.172	-2.281	0.932	0.012	0.110
Log tax revenue per capita (t-1)	-4.857	-5.014	0.995	0.219	0.189
Log capital revenue per capita (t-1)	-2.558	-2.460	-0.591	-0.044	0.198
Total decit per capita (t-1)	0.005	0.002	0.504	0.010	0.009
Election charactersitics					
Year of the election	2003.759	2003.716	0.119	-0.000	0.000
New party incumbent	0.342	0.295	0.906	0.071	0.106
Liberal party incumbent	0.342	0.392	-0.949	-0.142	0.108
# candidates	4.146	4.091	0.256	-0.155	0.476
Demographic characteristics					
Population (t-1)	33883.032	36004.139	-0.163	29806.248	21190.385
% urban/rural (t-1)	1.874	2.112	-0.456	1.160	1.112
Population density (t-1)	115.155	105.511	0.287	132.142	101.929
Economic characteristics					
% unsatisfied basic needs (1993-2005)	48.825	49.547	-0.320	1.572	6.207
Institutional characteristics					
Total courts (1997)	3.150	3.267	-0.102	2.700	2.051
Total bank branches (1997)	1.692	1.873	-0.301	1.108	1.003
otal hospitals (1997)	0.842	0.896	-0.193	0.510	0.472
Total schools (1997)	10.938	12.628	-0.426	7.017	6.860
Total community organizations (1997)	150.686	139.178	0.413	88.362	60.686
Conflict and Crime					
Annual homicide rate per 10000 inhab. (t-1)	0.535	0.517	0.312	0.041	0.105
Forced displaced rate per 10000 inhab. (t-1)	2.609	2.533	0.160	1.624	1.015
Presence of Guerrilla (t-1)	0.551	0.534	0.302	0.107	0.109
Presence of Paramilitares (t-1)	0.304	0.290	0.279	-0.027	0.100
Geographic characteristics					
Surface area km2	694.748	1053.526	-1.687	-472.120	468.163
% municipalities in the atlantic coast	0.171	0.199	-0.655	-0.114	0.075
% municipalities in the pacific coast	0.165	0.125	1.027	0.063	0.111
% municipalities in the central region	0.139	0.205	-1.574	0.086	0.087
% municipalities in the eastern region	0.361	0.335	0.488	-0.054	0.106
% municipalities in the amazon region	0.038	0.040	-0.085	-0.016	0.047
% municipalities in Antioquia	0.120	0.097	0.695	0.025	0.040

Notes: Data on municipal public finance are from the National Planning Department (DNP). Electoral data are from the Electoral Agency. Data on population, proportion of urban to rural population, population density and proportion of people with Unsatisfied Basic Needs (used as a proxy for poverty) are from the National Administrative Department of Statistics (DANE). Data on the number of courts, bank branches, hospitals, schools and community organization are from a non-profit civil foundation, the Social Foundation (Fundacion Social). Data on homicides are from the National Police and data on conflict are from the Conflict Analysis Resource Center (CERAC). Data on forced migrant households are from the Presidential Agency for Social Action (Accion Social). Data on surface area are from the Colombian Federation of Municipalities. Column (3) reports the t-statistic on the difference in means between municipalities where a new party won and where it barely lost. Column (4) reports the coefficient on new party win ($Nwin$) from equation (14) when the respective characteristic is used as the dependent variable, and column (5) reports the RD standard errors.

Table II: Close New Party Election and Spending

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Total spending	0.077*	0.095***	0.073	0.103**	0.116*	0.129**	0.119*	0.108*
	(0.041)	(0.032)	(0.048)	(0.041)	(0.061)	(0.055)	(0.069)	(0.057)
R-squared	0.752	0.822	0.752	0.822	0.752	0.823	0.752	0.823
Observations	1504	1501	1504	1501	1504	1501	1504	1501
Capital spending	0.093**	0.114***	0.105*	0.141***	0.143**	0.159***	0.137*	0.126**
	(0.043)	(0.033)	(0.053)	(0.044)	(0.066)	(0.058)	(0.079)	(0.063)
R-squared	0.755	0.828	0.755	0.828	0.756	0.828	0.756	0.828
Observations	1504	1501	1504	1501	1504	1501	1504	1501
Current spending	0.025	0.030	-0.011	-0.001	0.027	0.032	0.033	0.022
	(0.044)	(0.039)	(0.049)	(0.043)	(0.066)	(0.064)	(0.071)	(0.060)
R-squared	0.622	0.694	0.622	0.694	0.623	0.695	0.623	0.695
Observations	1504	1501	1504	1501	1504	1501	1504	1501
Covariates	no	yes	no	yes	no	yes	no	yes
Polynomial	linear	linear	quadratic	quadratic	cubic	cubic	quartic	quartic

Notes: All columns report the coefficient on new party win ($Nwin$) from equation (14) when the respective characteristic is used as the dependent variable. Controls include population, proportion of urban population, percentage of households with unsatisfied basic needs, a dummy variable for an incumbent from another new party, the number of candidates in the election, surface area, population density, annual homicide rate, dummy variables for the presence of guerrilla and paramilitary forces, as well as fixed effects for department and year. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table III: Close New Party Election and Revenue

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Revenue								
Total revenue	0.043	0.054*	0.038	0.057	0.075	0.071	0.120*	0.086
	(0.038)	(0.028)	(0.046)	(0.038)	(0.058)	(0.046)	(0.070)	(0.054)
R-squared	0.742	0.832	0.742	0.833	0.742	0.833	0.743	0.833
Observations	1482	1480	1482	1480	1482	1480	1482	1480
Tax revenue	0.309***	0.266***	0.298***	0.236***	0.233**	0.211**	0.214**	0.196**
	(0.077)	(0.064)	(0.088)	(0.072)	(0.095)	(0.085)	(0.107)	(0.090)
R-squared	0.595	0.720	0.596	0.720	0.596	0.720	0.597	0.720
Observations	1500	1497	1500	1497	1500	1497	1500	1497
Capital revenue	0.040	0.066	0.061	0.101*	0.082	0.093	0.063	0.045
	(0.053)	(0.042)	(0.067)	(0.058)	(0.079)	(0.065)	(0.094)	(0.072)
R-squared	0.601	0.687	0.602	0.687	0.602	0.688	0.602	0.688
Observations	1497	1494	1497	1494	1497	1494	1497	1494
Panel B: Deficit								
Total deficit	0.004	0.004	0.003	0.003	-0.002	-0.003	0.000	-0.000
	(0.004)	(0.005)	(0.005)	(0.005)	(0.008)	(0.008)	(0.007)	(0.007)
R-squared	0.043	0.051	0.043	0.052	0.045	0.054	0.045	0.054
Observations	1389	1387	1389	1387	1389	1387	1389	1387
Covariates	no	yes	no	yes	no	yes	no	yes
Polynomial	linear	linear	quadratic	quadratic	cubic	cubic	quartic	quartic

Notes: All columns report the coefficient on new party win ($Nwin$) from equation (14) when the respective characteristic is used as the dependent variable. Controls include population, proportion of urban population, percentage of households with unsatisfied basic needs, a dummy variable for an incumbent from another new party, the number of candidates in the election, surface area, population density, annual homicide rate, dummy variables for the presence of guerrilla and paramilitary forces, as well as fixed effects for department and year. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table IV: Effect of first participation in same municipality

	Linear		Quadratic		Cubic	
	(1)	(2)	(3)	(4)	(5)	(6)
New party win	0.114***	-0.107	0.141***	-0.111	0.159***	-0.220
	(0.033)	(0.093)	(0.044)	(0.109)	(0.058)	(0.161)
Nwin × dummy 1st participation		0.233**		0.266**		0.394**
		(0.102)		(0.120)		(0.169)
R-squared	0.828	0.829	0.828	0.829	0.828	0.829
Observations	1501	1501	1501	1501	1501	1501
First participation effect		0.127***		0.155***		0.174***
		(0.034)		(0.047)		(0.061)

Notes: The dependent variable in all columns is capital spending. New party win is a dummy equal to one if a new party candidate won the election ($Nwin$). First participation is a dummy equal to one if the new party participated for the first time in any election occurred in the same municipality. Columns (1), (3) and (5) report the baseline RD regression result from columns (1), (3) and (5) of Table II. Columns (2), (4) and (6) include interactions between the margin of victory terms and the first participation dummy. All columns included fixed effects for department and year, as well as baseline controls. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table V: Effect of first participation in any municipality

	Linear		Quadratic		Cubic	
	(1)	(2)	(3)	(4)	(5)	(6)
New party win	0.114***	0.026	0.141***	0.072	0.159***	0.067
	(0.033)	(0.040)	(0.044)	(0.049)	(0.058)	(0.063)
Nwin × dummy 1st participation		0.160***		0.142*		0.167
		(0.058)		(0.078)		(0.102)
R-squared	0.828	0.829	0.828	0.830	0.828	0.831
Observations	1501	1501	1501	1501	1501	1501
First participation effect		0.186***		0.214***		0.234***
		(0.046)		(0.064)		(0.085)

Notes: The dependent variable in all columns is capital spending. New party win is a dummy equal to one if a new party candidate won the election ($Nwin$). First participation is a dummy equal to one if the new party participated for the first time in any election. Columns (1), (3) and (5) report the baseline RD regression result from columns (1), (3) and (5) of Table II. Columns (2), (4) and (6) include interactions between the margin of victory terms and the first participation dummy. All columns included fixed effects for department and year, as well as baseline controls. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table VI: Effect of years since first participation in same municipality

	Linear		Quadratic		Cubic	
	(1)	(2)	(3)	(4)	(5)	(6)
New party win	0.114***	0.111***	0.141***	0.142***	0.159***	0.148**
	(0.033)	(0.032)	(0.044)	(0.045)	(0.058)	(0.059)
Nwin × years since 1st partic		-0.057***		-0.050*		-0.097***
		(0.019)		(0.026)		(0.035)
R-squared	0.828	0.828	0.828	0.829	0.828	0.829
Observations	1501	1496	1501	1496	1501	1496

Notes: The dependent variable in all columns is capital spending. New party win is a dummy equal to one if a new party candidate won the election ($Nwin$). Years since first participation is a continuous variable measuring the number of years since the first participation of the new party in any election occurred in the same municipality. Columns (1), (3) and (5) report the baseline RD regression result from columns (1), (3) and (5) of Table II. Columns (2), (4) and (6) include interactions between the margin of victory terms and the years since the first participation variable. All columns included fixed effects for department and year, as well as baseline controls. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table VII: Effect of years since first participation in any municipality

	Linear		Quadratic		Cubic	
	(1)	(2)	(3)	(4)	(5)	(6)
New party win	0.114***	0.113***	0.141***	0.154***	0.159***	0.147***
	(0.033)	(0.032)	(0.044)	(0.043)	(0.058)	(0.055)
Nwin × years since 1st partic		-0.025***		-0.016*		-0.027**
		(0.008)		(0.010)		(0.013)
R-squared	0.828	0.829	0.828	0.830	0.828	0.831
Observations	1501	1501	1501	1501	1501	1501

Notes: The dependent variable in all columns is capital spending. New party win is a dummy equal to one if a new party candidate won the election ($Nwin$). Years since first participation is a continuous variable measuring the number of years since the first participation of the new party in any election. Columns (1), (3) and (5) report the baseline RD regression result from columns (1), (3) and (5) of Table II. Columns (2), (4) and (6) include interactions between the margin of victory terms and the years since the first participation variable. All columns included fixed effects for department and year, as well as baseline controls. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table VIII: Close New Party Election and Municipal Transparency Index

	(1)	(2)	(3)	(4)	(5)	(6)
Transparency Index	3.074	4.528*	-0.774	-0.366	1.386	2.091
	(2.961)	(2.397)	(3.197)	(2.817)	(3.608)	(3.034)
R-squared	0.305	0.429	0.326	0.451	0.332	0.455
Observations	216	215	216	215	216	215
Covariates	no	yes	no	yes	no	yes
Polynomial	linear	linear	quadratic	quadratic	cubic	cubic

Notes: All columns report the coefficient on new party win ($Nwin$) from equation (14) when the Municipal Transparency Index (MTI) is used as the dependent variable. All columns included fixed effects for department and year. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table IX: Other Mechanisms

| | Elections involving new parties | | | Alternative sample |
	Baseline	New vs Liberal	Majority in Council	Liberal vs Conservative
	(1)	(2)	(3)	(4)
New party win	0.114***	0.139***	0.094**	
	(0.033)	(0.047)	(0.037)	
Nwin × Liberal opponent		-0.044		
		(0.059)		
Nwin × majority in Council			0.078	
			(0.069)	
Liberal win				-0.038
				(0.057)
R-squared	0.828	0.829	0.829	0.868
Observations	1501	1501	1501	464
Liberal opponent effect		0.095**		
		(0.042)		
New party majority effect			0.172***	
			(0.056)	

Notes: The dependent variable in all columns is capital spending. New party win is a dummy equal to one if a new party candidate won the election (*Nwin*). Liberal win is a dummy equal to one if a Liberal candidate won the election, Liberal opponent is a dummy equal to one if the new party candidate faced a Liberal opponent, majority in council is a dummy equal to one if the party controlling the mayorship holds a majority in the local council. All columns are estimated using a linear functional form from equation (14). All columns included fixed effects for department and year, as well as baseline controls. Column (2) also includes interactions between the margin of victory terms and the Liberal opponent dummy, and Column (3) includes interactions between the margin of victory terms and the Majority in council dummy. Columns (1) through (3) limit the sample to municipalities where a new party candidate was the winner or runner-up and Column (4) limits the sample to municipalities where Liberal and Conservative candidates received the two highest vote shares. Robust standard errors clustered by year×department are reported in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%.