Do national political parties matter? Evidence from Italian municipalities*

Matteo Gamalerio
Institut d'Economia de Barcelona, University of Barcelona

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Abstract

Recently several countries have experienced a drop in popularity of national political parties, accompanied by the success of independent movements (e.g. "Civic Lists" in Italy). I exploit the success of "Civic Lists" in Italian municipalities and use them as a comparison group for party-affiliated politicians, to test whether national parties affect fiscal discipline. Using a Regression Discontinuity Design (RDD), I show that party-affiliated mayors are more fiscally responsible: they run lower deficits, accumulate less debt and reduce expenditures. The effect is significant only for municipalities not constrained by fiscal rules. This suggests that national parties act as a substitute for fiscal rules in constraining politicians. Besides, I provide evidence that the discipline of party-affiliated politicians is linked to better career prospects: party-affiliated mayors have a higher probability of being re-elected and better chances of being promoted to higher levels of government. Alternative stories find less support in the data.

Keywords: party affiliation, independent politicians, fiscal discipline, fiscal rules, local government finance, RDD.

JEL Classification: D72, H70, H72.

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1 Introduction

In recent years many countries have seen a decline in the popularity of national political parties, which are perceived as distant from the needs of voters. This decline in popularity is particularly evident in local politics, with the emergence of independent local political organizations without links to national parties, which are now able to compete and to nominate candidates. Examples of independent local politicians can be found in both developed countries (e.g. Germany, as described by Koethenbuerger, 2012) and developing countries (e.g. Peru, as described by Aragon et al. 2019), and the success of these local political organizations can be particularly strong in countries where the value of national parties' brand has been negatively hit by corruption scandals (Daniele, Galletta, and Geys, 2018).

The success of these independent organizations raises questions about the importance and the role of national political parties. In regards to this, the main argument that can be found in the literature (Riker, 1964; Enikolopov and Zhuravskaya, 2007; Persson and Zhuravskaya, 2016; Ponce-Rodriguez et al., 2018) is that national parties can discipline politicians by affecting their career prospects. However - despite the importance of this topic - only a few studies (Koethenbuerger, 2012; Folke, 2014; Aragon et al. 2019) have tried to compare the behavior of party-affiliated politicians with that of independents, as a test for the disciplining role of national parties. The general evidence from this literature, which is mainly focused on fiscal policies, is that party-affiliated politicians do not behave differently from independent ones, raising doubts about the ability of national parties to discipline politicians. However, some of these studies (Koethenbuerger, 2012; Folke, 2014) are more focused on the behavior of local councilors, whose limited power, if compared to local governments, may explain the lack of difference between party-affiliated politicians and independents. Also, as in the case of Aragon et al. (2019), local governments are very often subject to fiscal rules that constrain their capacity to collect taxes and incur debt.

In this paper, I take advantage of the success of Italian local independent movements ("Civic Lists") which, after a huge corruption scandal ("Clean Hands") negatively hit the national parties system (Daniele, Galletta, and Geys, 2018) in the period 1992-1994, and after the introduction of the direct election of the mayor in 1993, have been able to elect a vast number of mayors completely independent of national parties. As we can see in Figure

1, the percentage of mayors affiliated to national political parties has declined significantly in recent years in Italian municipalities.[1] This offers an interesting framework that can be used to test whether national political parties can discipline politicians by affecting their career concerns. I also exploit the fact that, from 2001, Italian municipalities below 5000 inhabitants were not subject to fiscal rules, which have been effective in limiting the capacity of municipal governments to run deficits and accumulate debt (Grembi et al., 2016).

The focus is on municipal budget outcomes, with special attention to fiscal discipline, which represents a local outcome with national relevance, given that fiscally undisciplined local governments generate negative externalities for the rest of the country. This is typically the case in decentralized countries in which local governments, largely financed through grants from higher levels of government, may not entirely internalize the cost of spending, with clear incentives for over-spending[2]. Thus, given the lack of incentives from national parties, we should expect independent mayors to be less fiscally responsible, as their interests may not be aligned with national interests. On the other hand, national parties may have an important role in disciplining local politicians, aligning local and national interests.

The main measure of fiscal discipline used in this paper is the average deficit run by the mayor, divided by total average municipal revenues (i.e. deficit as a fraction of total revenues available). As a second measure, I use the accumulated debt over the term, which is equal to the sum of yearly deficits/surpluses over the five years of the term, as a fraction of total average revenues. To solve endogeneity issues and to isolate the causal effect of national parties on budget outcomes, I employ a Regression Discontinuity Design (RDD), which compares municipalities in which mayors affiliated to national parties barely won with municipalities where they barely lost. The dataset is composed of mixed electoral competitions between party-affiliated and independent mayors for the Italian municipalities with a population below 15,000 inhabitants[3] and electoral mandates between 2000 and 2012.

The main results show that party-affiliated mayors are more fiscally responsible. In

[1] In Figure 1, I am using the sample of municipalities below 15000. The reason is, as described in more detail below, all the regression analysis in this paper uses this sample of municipalities.

[2] This is what in the literature has been defined the "common pool" phenomenon (e.g., Persson and Tabellini, 1994, 2000), or the "1/n law" (Weingast et al. 1981).

[3] The choice for this threshold is because municipalities below and above 15,000 inhabitants have different electoral rules. Besides that, the percentage of independent mayors in the cities above 15,000 inhabitants is very small (Bracco et al., 2015).

particular, on average party-affiliated mayors run deficits as a fraction of total revenues which are between 1.1 and 1.7 % points lower, compared to those of independents. The effect is substantial from an economic point of view and it is comparable to the effect of fiscal rules estimated by Grembi et al. (2016) for Italian municipalities. Party-affiliated mayors also tend to accumulate less debt during the entire legislative term compared to independents, with a relative reduction of debt as a fraction of total revenues of around 8.5 % points. The lower deficits of party-affiliated mayors are obtained by reducing capital expenditures by approximately 21 %, while local taxes are reduced by approximately 8 %. These results suggest that party-affiliated mayors reduce deficits and accumulate less debt by cutting expenditures more than taxes.

A series of heterogeneity mechanisms are then analyzed to understand which are the channels driving the main results. First, I show that the effect on the deficit is statistically significant only for municipalities below 5000 inhabitants, which since 2001 are not subject to fiscal rules (Grembi et al., 2016). These rules, launched in 1999 under the name "Domestic Stability Pact" (DSP), were introduced by the Italian government to impose limits on municipal debts and deficits. The central government removed the rules in 2001 for municipalities with less than 5000 inhabitants.[4] The results show that party-affiliated mayors reduce the deficit by around 1.5 % points in the municipalities that are exempt from the fiscal rules, while the effect is not statistically different from zero for municipalities above the 5000 threshold. This suggests that national parties are a substitute in constraining local politicians where fiscal rules do not apply.

Then, I provide empirical evidence that political parties can discipline politicians by affecting their career concerns (Riker, 1964; Enikolopov and Zhuravskaya, 2007; Ponce-Rodriguez et al., 2018). More in detail, I show that party-affiliated mayors have a higher probability of being re-elected for a second term and of being promoted to higher levels of government. I also show that these differences in career perspectives can be connected to the differences in fiscal discipline. Specifically, I show that national political parties can discipline local politicians by affecting their career prospects in two ways. First, exploiting the fact that in Italy a mayor can be elected only for two consecutive terms (De Benedetto and De Paola, 2018),

[4]The explanation for this exemption was to avoid to impose onerous rules on municipalities disadvantaged by economies of scale.

I show that the effect of national parties on the deficit is statistically significant only for mayors who can be re-elected for a second term. I also demonstrate that when independents run higher deficits, this occurs when they have won a second term. This evidence indicates that the higher deficits run by independent mayors are due to re-election incentives, and it is consistent with the literature that connects deficits to re-election incentives (see Aghion and Bolton, 1990) or to politicians' pandering to voters (see Maskin and Tirole, 2004). Besides, this evidence, in connection with the result that party-affiliated mayors have higher probabilities of re-election, suggests that party-affiliated mayors run lower deficits because they have an electoral advantage, represented by the financial and non-financial support from the national party, which can be used to win municipal elections.

Second, I show that, among the mayors promoted to higher levels of government, there are no differences in terms of fiscal discipline between party-affiliated and independent first citizens, and that even independent mayors reduce the deficit if they have higher chances of being promoted. This evidence suggests that national parties use politicians' aspirations for promotion as a disciplining tool, which can affect both party-affiliated and independent mayors. The intuition is that, while independent politicians can run at municipal level on their own, they must go through national political parties if they want to be promoted to higher levels of government. Thus, all the mayors who want to be promoted must keep the deficit low, even independent ones. Besides, this evidence, in connection with the fact that party-affiliated mayors have a higher probability of being promoted to higher levels of government, provides a further explanation of why party-affiliated mayors run lower deficits, compared to independent ones.

Finally, I also provide empirical evidence that seems to exclude that the main results are driven by other potential alternative mechanisms: 1) I show that the results are driven neither by the political orientation of the national parties (Pettersson-Lidbom,2008; Ferreira and Gyourko, 2009) nor by their alignment with the central government (Brollo and Nannicini, 2012; Bracco et al. 2015); 2) I demonstrate that the main results of this paper are not driven by the presence of Mafia-style criminal organizations (Acconcia, Corsetti, and Simonelli, 2014; Galletta, 2017; Di Cataldo and Mastrorocco, 2019); 3) I exclude that the main results are driven by different levels of unobserved political ability between party-affiliated and independent mayors (Ferraz and Finan, 2011); 4) I provide evidence that unions of

municipalities do not represent a confounding factors for my estimates.

This study contributes to two main lines of research. First, it is related to the literature on the role of national parties at the local level and how these can discipline local politicians by affecting their career perspectives (Riker, 1964; Enikolopov and Zhuravskaya; 2007; Primo and Snyder, 2010; Persson and Zhuravskaya, 2016; Ponce-Rodriguez et al., 2018). In this literature, recent papers have analyzed the differences in terms of fiscal policies between party-affiliated and independent local politicians. The general evidence from this literature is that there are no differences in terms of fiscal policies, and specifically in terms of fiscal discipline. However, as already explained above, this can be explained by the role of fiscal rules (Galindo-Silva, 2015; Aragon et al., 2019), which constraint different types of politicians to behave in similar ways, or by the fact that some studies have analyzed the behavior of local councilors rather than the behavior of local governments (Koethenbuerger, 2012; Folke, 2014). This paper contributes to this literature by showing that, where fiscal rules do not apply, municipal governments manged by party-affiliated mayors are more fiscally disciplined than municipal governments led by independent mayors. It also shows that this different behavior in terms of fiscal discipline can be connected to differences in terms of career perspectives.[5]

Second, this paper, providing evidence that national political parties may have an important role in reducing the deficits run by local governments, contributes also to the literature on the political economy of fiscal deficits (Alesina and Perotti, 1999; Neyapti, 2010; Eslava, 2011; Oto-Peralías, Romero-Ávila, and Usabiaga, 2013; Alesina and Passalacqua, 2015).[6]

[5]Cioffi, Messina and Tommasino (2012) have already tried to compare the behavior of party-affiliated and independent local politicians using data on Italian municipalities. In my analysis, I use a different empirical strategy (RDD rather than GMM) and I provide evidence on the deficit and accumulated debt, while their focus is on political budget cycles in expenditures.

[6]The paper is also connected to two other lines of research in the political economy literature. First, it is related to all the studies that have used RDD to analyze the behavior of local politicians. From this point of view, different topics have been covered: 1) the partisanship effect at the local level (Pettersson-Lidbom,2008; Ferreira and Gyourko, 2009); 2) the alignment effect between local and national governments (Brollo and Nannicini, 2012; Bracco et al. 2015); 3) the role of gender in local politics (Gagliarducci and Paserman, 2012; Brollo and Troiano, 2016); 4) the role of dynastic politicians (Daniele and Vertier, 2018). Second, this paper is also connected to the literature of political budget cycles at the local level (Akhmedov and Zhuravskaya 2004; Baleiras and da Silva Costa, 2004; Drazen and Eslava, 2010; Alesina and Paradisi, 2017; Revelli, 2019), as the deficits run by independent mayors is due to re-election incentives.

2 Institutional Setting

2.1 Italian municipalities

The focus of the paper is on fiscal discipline, which is a local outcome with national relevance. This is true in decentralized countries with multiple levels of government like Italy. More specifically, local fiscal discipline can have a national relevance for two reasons: 1) the aggregated total deficit of a decentralized country is the sum of the deficits of all levels of government. Thus, municipalities generate negative externalities if they increase their deficit beyond reasonable levels; 2) if a local government issues a big amount of debt that it cannot repay, the central government may have to rescue it. For these two reasons, in recent years, many countries have introduced fiscal rules to discipline local governments (Gamalerio, 2019; Grembi et al., 2016).

The Italian government introduced fiscal rules in 1999, following the European Stability and Growth Pact (SGP). The "Domestic Stability Pact" (DSP) set a deficit reduction target for all Italian municipalities. Grembi et al. (2016) have shown that the DSP has been effective in reducing the deficits run by municipal governments. In 2001, the central government removed the rules for municipalities with less than 5000 inhabitants that did not enjoy the same economies of scale as larger municipalities.[7] The threshold was then moved to 1000 inhabitants in 2013. The 2001 withdrawal of fiscal rules for small municipalities introduced a useful set up that can be exploited to compare the fiscal behavior of party-affiliated and independent mayors.

This paper uses data from Italian municipalities, which today are approximately 8000. Municipalities oversee many services, including municipal police, infrastructure, transport, welfare, housing, environmental services (e.g. garbage collection) and public utilities (e.g. water supply). Municipalities are in charge of 10% of total public expenditures and they get around 20% of their revenues from local taxes, while the remainder comes from discretionary grants from higher levels of government.[8] Among local taxes, the property tax and the sur-

[7] At the end of 2004, the Italian Government initially reintroduced fiscal rules for municipalities below 5000 starting from the year 2005 (see Budget Law number 311/2004). The law moved the threshold to 3000 inhabitants. However, this re-introduction was then canceled by Law number 88/2005, and the threshold was kept at 5000 inhabitants. The same threshold has been confirmed by the subsequent Budget Law 266/2005 and by the Law 51/2006.

[8] Grants come from provinces, regions and the central state. It is important to stress that the level of

charge on the personal income tax are the most important. The property tax was introduced in 1993 by Legislative Decree 504/1992, while the surcharge on the personal income tax was introduced in 1999.

Finally, this paper studies the fiscal behavior of Italian mayors who, following the introduction of Law 81 in 1993, have started to enjoy a high degree of power and discretion within the municipal context. Mayors are directly elected by voters and can select the executive officers. If the municipal council wants to dismiss the mayor, new elections must be held. In municipalities below 15,000 inhabitants, mayors are elected using a single round plurality rule, while a runoff system is in place in cities above the threshold. Mayors are elected for a term of five years and a maximum of two consecutive terms, i.e. they face a term limit if re-elected (De Benedetto and De Paola, 2018).

2.2 Party-affiliated vs. Independent mayors

In the original sample, around 74% of the mayors are independent and 26% are affiliated to national political parties. Independent mayors are supported by local independent organizations called "Civic Lists". These are local parties that are autonomous from national parties or national coalitions. Civic Lists have names that refer to the local environment or are associated with the name of the mayoral candidate (e.g. Insieme per Bologna; Lista Rossi Sindaco). They are generally formed in one specific municipality and do not pursue electoral competitions in other cities or at higher levels of politics. While there were some independent councilors in Italian municipalities before 1993, the success of local independent movements ("Civic Lists") started with the introduction of the direct election of the mayor in 1993, and after a huge corruption scandal ("Clean Hands") negatively affected the brand of national parties (Daniele, Galletta, and Geys, 2018) in the years 1992-1994. Starting from this period, Civic Lists have been able to elect not only councilors but also a considerable number of mayors. This proliferation of independents politicians constitutes an interesting natural experiment of whether national political parties have a role in disciplining local politicians.

fiscal dependence on grants from higher levels of government has been historically heterogeneous between the North and the South of Italy. For example, in 2000 municipalities in the North could finance 70% of their budget using local taxes and revenues, while in the South grants covered 60-70% of total expenditures (Bordignon et al., 2019). It is also important to stress that, following the financial crisis in 2008 and the crisis linked to increased weight of the Italian public debt, the central government has considerably cut grants to local governments.

As described in the next section, the main variable of interest used in this paper is a dummy variable equal to 1 for mayors affiliated to national parties and 0 for independents. To build this variable, I have classified as national political parties those mayors supported by lists with a name that makes a direct reference to national political coalitions or national political parties.[9] A description of the different classifications can be found in Table A1, which distinguishes between mayors supported by Centre-left and Centre-right national coalitions or parties, and mayors supported by local parties (i.e. independents). This classification is consistent with the one used by Bracco et al. (2015). It is worth to mention that the information about political affiliation is self-reported by the mayors. Thus, for some cases, this information may be misreported. In particular, for electoral reasons, we may expect some mayors to hide their affiliation with a national party or coalition. Thus, it is possible that the treatment variable is measured with a measurement error and that the estimates reported below are characterized by an attenuation bias. Hence, the analysis below may be underestimating the size of the deficit run by independent mayors, compared to those run by mayors affiliated to national political parties.

3 Empirical Strategy

I use regression discontinuity design (RDD) to estimate the impact on budget outcomes of party-affiliated mayors, compared to independents. Municipalities that elect party-affiliated mayors are likely to be different from municipalities with independent mayors. Thus, a simple regression by OLS comparing these two groups of municipalities will probably generate biased estimates due to endogeneity issues. For example, voters that select different types of mayors might have different unobservable preferences for fiscal policies. An RDD strategy developed using only mixed electoral competitions, in which party-affiliated candidates compete against independent candidates, represents a solution to these issues. In particular, it is plausible to

[9]For example, labels such as "Cen-Des Ls. Civiche" (i.e. Italian for "Centre-right Civic Lists") have been classified as national political parties. The reason for this classification is that this type of label, despite containing the name Civic Lists, makes reference to a national political coalition and it suggests that the mayor is supported by national political parties. Also, this classification is consistent with the one used by Bracco et al. (2015). Finally, I have also manually checked all the doubtful cases with ambiguous names (e.g. "Progetto Democratico") and cleaned them accordingly to the results of the manual research. This manual research has been implemented using the web-pages of the two main Italian newspapers (i.e. "Corriere della Sera" and "La Repubblica") and the web-page of an independent association called Openpolis.

assume that in mixed races decided by a narrow margin, the election outcomes are determined by random shocks and not by systematic municipal characteristics that could be correlated with fiscal policies. Thus, under certain conditions, municipalities where party-affiliated candidates barely lost can be used as a counterfactual for municipalities where they barely won.

More specifically, following the recent developments introduced by Calonico, Cattaneo and Titiunik (2014a, 2014b) and Gelman and Imbens (2019), an RDD strategy would require estimation by local linear regression (LLR) of a model such as:

$$Y_{it} = \rho_0 + \rho_1 MV_{it} + \delta_0 NP_{it} + \delta_1 NP_{it} * MV_{it} + \lambda_t + \gamma_r + \varepsilon_{it} \quad (1)$$

where λ_t are term fixed effects, γ_r region fixed effects and the dependent variable Y_{it} is represented by different budget outcomes measured in municipality i at time t. The treatment is captured by the dummy variable NP_{it}, which is 1 for mayors affiliated to national parties and 0 for independents. The assignment to treatment is uniquely determined by the margin of victory MV_{it}, which is calculated as the difference between the vote share of the candidate from a national party minus the vote share of the independent. At the threshold, $MV_{it} = 0$ the affiliation status of the mayor sharply changes from 0 to 1, such that we have that $NP_{it} = 1$ and $MV_{it} > 0$ in municipalities in which the candidate from a national party won and $NP_{it} = 0$ and $MV_{it} < 0$ in the opposite cases. The main assumption required for this identification to work is that all relevant factors besides treatment change smoothly at the zero threshold $MV_{it} = 0$. This is tested below.

To implement RDD-LLR, Model 1 is estimated on the sub-sample of municipalities in the interval $MV_{it} \in [-h, +h]$, where the optimal bandwidth h is calculated following Calonico, Cattaneo, and Titiunik (2014a, 2014b). In this setting, the coefficient of interest is $\widehat{\delta_0}$, which identifies the average treatment effect (ATE) of mayors affiliated to national parties at the zero threshold $MV_{it} = 0$.

4 Results

4.1 Sample, descriptive statistics and balance tests

This study uses data on all the mayors of Italian municipalities. The dataset contains information about the personal characteristics of the local politicians, the socio-economic characteristics of the municipalities, and the balance sheets of the municipalities. The data on the personal characteristics of the local politicians comes from the Italian Ministry of Domestic Affairs and it is available for the years 1993-2018, while the data on the socio-economic characteristics of the municipalities is provided by the Italian Statistical Office and it has been collected in occasion of the General Census, which is run every 10 years. The data on municipalities' balance sheet is taken from the Aida PA dataset (Bureau van Dijk) and it is available for the period 2000-2015. A description of all the variables included in the dataset and of the sources used can be found in Table A2.

The sample is limited to municipalities from Ordinary Statute Regions with a population below 15,000 inhabitants elected between 2000 and 2012. There are five reasons behind this choice: 1) municipalities with a population below 15,000 have an electoral law which is different from that of cities above the threshold. This creates different electoral incentives in terms of coalitions, presence of national political parties and number of candidates; 2) the percentage of independent candidates is small in municipalities above the threshold. In particular, below the threshold around 74% of mayors are independents and 26% party-affiliated, while above 15,000 inhabitants only around 5% of the mayors are not affiliated to national parties (see Bracco et al., 2015). This makes municipalities below the threshold of 15,000 people more suitable for the type of empirical exercise developed in this study; 3) I keep electoral terms for which I do not have missing values in the past value of the main dependent variable (i.e. average deficit from the previous term) or at least the value for the first year of the term. This is because the past values of the deficit are used to check that party-affiliated mayors are not elected in municipalities characterized by different initial values of the dependent variable. For those electoral terms for which I do not observe the value of the deficit from the previous term, I replace the missing value with the value of the dependent variable in the first year of the term.[10] Besides, I drop all the legislative terms for

[10]In Italy municipal elections are usually held in late Spring so that during electoral years it is possible to

which I do not observe any value of the dependent variable for the years 2-5 of the electoral term; 4) I keep electoral terms during which municipalities below 5000 are not constrained by fiscal rules. This allows to compare the results for municipalities not constrained by fiscal rules (i.e. municipalities below 5000 inhabitants) with the results for municipalities constrained by fiscal rules (i.e. municipalities above 5000 inhabitants); 5) municipalities in Special Statute Regions (i.e. Sardegna, Sicilia, Friuli Venezia Giulia, Trentino-Alto Adige, Valle d'Aosta) are excluded because different fiscal rules apply in these Regions.

In the initial sample, there are 12,306 electoral competitions and 5944 municipalities for which I have a complete set of values for the relevant municipal and mayoral characteristics. To implement the RDD strategy, I restrict the sample to mixed electoral races in which, irrespective of the total number of competitors, a candidate from a national party runs against an independent. More specifically, a mixed electoral competition is defined as a race in which there is at least one candidate affiliated to a national party and one independent among the competitors that finished in the first two positions at the election. This leaves me with a sample of 2832 mixed electoral competitions and 2252 municipalities. Table 1 reports the summary statistics for these 2832 mixed electoral competitions, distinguishing whether the elected mayor is from a national party or is an independent.

The main assumption of the RDD strategy is that pre-determined covariates should not exhibit discontinuities at the zero threshold $MV_{it} = 0$. To test for this, I run Model 1 using as dependent variables municipal and mayoral characteristics and the value of the deficit from the previous electoral term. The results are reported in Panels A, B, and C of Table 2. As we can see from Table 2, all the pre-determined characteristics are balanced at the zero threshold $MV_{it} = 0$. Besides, as we will see below, a big part of the analysis is developed using only municipalities below the 5000 threshold (i.e. municipalities not constrained by fiscal rules). For this reason, in Appendix Table A3, I repeat the same balance tests only for municipalities below 5000 inhabitants. As we can see, even for municipalities below this threshold all the covariates are balanced at the zero threshold $MV_{it} = 0$.

Finally, the other crucial assumption of the RDD strategy is that voters should not be

have two different mayors. Thus the value of the dependent variable in the first year of the term is decided by two overlapping mayors, and, from a certain point of view, it can be seen as the initial fiscal situation that the new mayor inherits from the old one, even though in the second part of the first year the new mayor can change the situation.

able to manipulate the forcing variable MV_{it} close to the zero threshold. If voters were perfectly able to choose between an affiliated and an independent candidate in a close race, this would indicate that the electoral outcome is not determined by random factors. This would raise doubts about the identification strategy. To test the validity of this assumption, I inspect the histogram of the margin of victory MV_{it}, which is reported in Figure 2 for all municipalities, and in Figure 3 for municipalities below 5000 only. As we can see in Figures 2 and 3, there are no spikes at the two sides of the zero threshold $MV_{it} = 0$. These results are also formally confirmed by the McCrary (2008) tests described by Figures 4 and 5, which show that there is no discontinuity in the density of MV_{it} around the threshold. In fact, in both Figures 4 and 5, I cannot reject the null assumption of continuity of the density of the running variable at the zero threshold $MV_{it} = 0$.

4.2 The effect of national parties on fiscal discipline

To estimate the impact on fiscal discipline of party-affiliated mayors in comparison to independent ones, I run Model 1 on the main dependent variable, which is the deficit run by the mayor as a fraction of total revenues. This allows estimation of the average effect of party-affiliated mayors on fiscal discipline over an entire legislative term. The main results are described by Table 3, in which I report the following different specifications: 1) a local linear regression (RDD-LLR) using the optimal bandwidth h calculated following Calonico, Cattaneo, and Titiunik (2014a, 2014b) without covariates in column (1) and with covariates in column (2); 2) a local linear regression (RDD-LLR) with covariates using half ($h/2$) of the optimal bandwidth in column (3); 3) RDD regressions using the double of the optimal bandwidth h and quadratic and cubic control functions in the margin of victory in columns (4) and (5). This allows investigation of how much the estimates are sensitive to the choice of the bandwidth and of the control function.

The picture that emerges from Table 3 is that party-affiliated mayors are more fiscally responsible compared to independents. Looking at the results of the linear specification using the optimal bandwidth h without covariates (column 1), we can see that on average party-affiliated mayors run a deficit as a fraction of total revenues which is around 1.1% points lower compared to that of independents. The estimated effect is robust to the choice of different bandwidths and control functions, and it does not change if I add the control variables. This

effect is comparable to the effect of fiscal rules estimated by Grembi et al. (2016) for Italian municipalities. The same result is visualized in Figure 6.

The main consequence of the baseline result in Table 3 is that party-affiliated mayors tend to accumulate less debt during the entire legislative term[11]. As we can see from Table 4 (column 1, Panel A), the debt as a fraction of total revenues accumulated by party-affiliated mayors is 8.5% points lower compared to that of independents.[12]

Finally, to evaluate how fiscal discipline is achieved by party-affiliated mayors I run model (1) on a series of budget outcomes: 1) capital and current expenditures (Table 4, Panel A, columns 2 and 3); 2) total transfers received by higher levels of government (Table 4, Panel B, column 1); 3) fiscal revenues from all the local taxes managed by the mayor (Table 4, Panel B, column 2); 4) fiscal revenues from the property and the income taxes, which represent the main fiscal tools managed by mayors (Table 4, Panel B, columns 3). For all variables, I report an RDD-LLR specification using the optimal bandwidth h calculated following Calonico, Cattaneo, and Titiunik (2014a, 2014b) with covariates. In particular, in Table 4, I use the optimal CCT bandwidth calculated for the deficit, as the goal of this table is to understand how the deficit is composed.[13] All variables are in logarithms and measured at per capita level and in 2010 prices.

The results in Table 4 show that for all these budget outcomes the sign of the coefficients is negative, indicating that in general party-affiliated mayors run lower budgets. However, the coefficients are statistically significant at the standard levels only for capital expenditures, total local taxes and property, and income taxes. The magnitude of the effect for capital expenditures is in absolute value greater than that for taxes, a result that suggests that party-affiliated mayors reduce the deficit and accumulate less debt by cutting expenditures more than taxes. Party-Affiliated mayors reduce capital expenditures by approximately 21% and local taxes by around 8%.[14]

[11] In this paper, the accumulated debt over the term is calculated as a fraction of average total revenues over the term = $(\sum_{t=1}^{5}(\text{total expenditures}_t\text{-total revenues}_t)/(\overline{\text{total revenues}})$.

[12] In column 1 of Table 4, the number of observations is smaller because I am keeping only the legislative terms without missing values in the yearly observations of the deficit and electoral mandates not affected by early interruptions (i.e. mandates that last for all the 5 years). This allows me to calculate the accumulated debt in the same way for all the mayors. I get similar results if I repeat the exercise with all the original electoral mandates.

[13] Results do not change if I use the specific optimal bandwidths calculate for each budget outcome.

[14] In Table 4, I use a linear polynomial and the optimal bandwidth calculated using the Calonico, Cattaneo,

4.3 The role of fiscal rules

Fiscal rules were introduced in Italy in 1999. In 2001, the central government removed the rules for municipalities with less than 5000 inhabitants. This allows running two separated RDD-LLR exercises: one for municipalities with less than 5000 inhabitants, which are exempted from the rules, and one for municipalities with more than 5000 inhabitants.[15] The results are reported in Panel A of Table 5 and in Figure 7 for municipalities below 5000, and in Panel B of Table 5 and in Figure 8 for municipalities above the threshold.

In both Panels of Table 5, besides reporting the same specifications already used in Table 3, I add column (3), in which I control for the individual characteristics of the mayors. This is because fiscal rules do not represent the only policy changing at the 5000 threshold: at the same threshold, there is an increase in the wage paid to the mayor. In practice, the results of Gagliarducci and Nannicini (2013) show that this wage increase affects the selection of politicians, and in particular the level of education of mayors. For this reason, I added a specification in which I control for the potential different selection of mayors across the 5000 threshold, which may affect fiscal discipline.

The estimated coefficients reported in Panels A and B of Table 5 clearly show that the effect on deficit is statistically significant and substantial from an economic point of view only for municipalities not constrained by fiscal rules. In particular, the effect of party-affiliated mayors on deficit in municipalities below 5000 is equal to a reduction that goes from 1.5 % points to 2.4 % points, depending on the specification used.[16] On the other hand, the coefficients estimated for municipalities above the 5000 threshold are small and never statistically different from zero. Interestingly, the effect on the deficit for municipalities with a population below 5000 inhabitants is comparable in magnitude to the effect of fiscal rules estimated by Grembi et al. (2016) for Italian municipalities. This suggests that, where fiscal

and Titiunik (2014a, 2014b) optimal bandwidth h selector. In Tables A4 and A5, I show that the results are unchanged if I use a quadratic or a cubic polynomial and the double of the optimal bandwidth.

[15]The sample used in Panel A of Table 5 has been obtained dropping the year 2000 before collapsing the data at the electoral term level. This choice is because municipalities below 5000 inhabitants were still affected by fiscal rules in 2000.

[16]As described above, at the end of 2004, the Italian government initially reintroduced fiscal rules for municipalities below 5000 starting from the year 2005, but then this re-introduction was canceled during 2005. Besides, the fiscal rules applied in the years 2005-2006, differently from the other years, imposed a target based on the level of expenditures rather than on the balance of the budget (see Gamalerio, 2019). For these reasons, Table A6 repeats the analysis dropping the years 2005-2006 before collapsing the data at the electoral term level. As we can see, the results are unchanged.

rules do not apply, national parties act as a substitute for them in constraining politicians.

Finally, as we can see from both Panels of Table 5, controlling for the individual characteristics of the mayors in column (3) does not affect the estimated coefficients. This result suggests that the selection of politicians determined by the wage increase is not playing any role in this context. To further exclude the potential confounding effect of the wage increase, in Table A7, I repeat the analysis using information coming from the years 2000, 2013, 2014, and 2015. In fact, during these years, fiscal rules applied also for municipalities with less than 5000 inhabitants. The results in Table A7 show that the differences between party-affiliated and independent mayors disappeared during those years, further reinforcing the idea that, in places and years where fiscal rules do not apply, national political parties behave as a substitute in disciplining politicians.[17]

4.4 The role of career incentives

In this section, I provide empirical evidence of the mechanisms through which national political parties can discipline politicians. As indicated by the literature (Riker, 1964; Enikolopov and Zhuravskaya, 2007; Ponce-Rodriguez et al., 2018), political parties can discipline politicians by affecting their career prospects, which, in the context studied in this paper, can happen in two ways. First, political parties have financial and non-financial resources that they can use to help their candidates at municipal elections. Second, political parties have the power to candidate politicians at higher levels of government.[18] Hence, the first goal of this section is to investigate whether party-affiliated politicians have different career perspectives, compared to independent ones. The second goal of this section is to connect these different career perspectives with the differences in fiscal discipline.

I start by providing evidence about the differences in career perspectives between party-affiliated mayors and independents. These differences may emerge in two ways. First, in

[17] In Table A8, I run an additional robustness check, in which I replace the regional fixed effects with the provincial fixed effects. As explained above, Regions are a higher level of government and are less numerous compared to provinces. Specifically, today, in Italy, there are 20 Regions and 110 Provinces. Controlling for provincial fixed effects leaves the results unchanged. Finally, controlling for municipality fixed effects is not possible because more than 60 % of the municipalities in the mixed electoral competitions sample have only one observation.

[18] In Italy, there are four levels of government, which starting from the lower are municipalities, provinces, regions, and national level. Besides these, Italian politicians can also be elected to the European parliament. Thus, there are different ways through which a mayor can be promoted to higher levels of government.

municipal elections, party-affiliated mayors may receive financial and non-financial support from the national party. Hence, party-affiliated mayors may have a higher probability of re-running as mayoral candidates and of being re-elected for a second term. Second, while nothing prevents an independent from running for office at higher levels of government, candidates for provincial, regional, national, and European levels of government are selected by political parties. Thus, party-affiliated mayors should have better connections and exhibit a higher probability of promotion.

These intuitions are confirmed by the descriptive statistics in Table 1. Mayors affiliated to national political parties have a higher probability of re-election for a second term. More in detail, 53.7 % of party-affiliated mayors are re-elected for a second term and just 47.5 % of independents. These results are not driven by a different probability of running for a second term. In terms of promotion to higher levels of government, party-affiliated mayors have a higher probability of being a candidate at the provincial level, compared to independents (15 % vs. 11.4 %). A similar difference emerges if we consider all the levels of government above the municipal level together (provincial, regional, and national). In this case, the percentage of promoted mayors is 27.6 % for party-affiliated mayors and 21.8 % for independents. These differences observed in the descriptive statistics may be driven by other unobservable factors. For this reason, in Panels A and B of Table 6, I apply the RDD analysis to the different variables capturing the career prospects of mayors. As the differences in terms of fiscal discipline can be found only in municipalities not affected by fiscal rules, the analysis is split between municipalities below 5000 inhabitants (i.e. municipalities not constrained by fiscal rules) and municipalities between 5000 and 15,000 (i.e. those affected by fiscal rules). The results for municipalities below 5000 are reported in Panel A of Table 6, while those for municipalities above 5000 are in Panel B of Table 6. In both panels, I report two specifications for each dependent variable: one with the optimal bandwidth without municipal covariates, and one with the same interval and controlling for municipal covariates.

The estimated coefficients in Panel A of Table 6 indicate that party-affiliated mayors elected in towns not affected by fiscal rules have better career prospects, compared to independent mayors. Specifically: 1) the results in columns (3)-(4) indicate that party-affiliated mayors have a higher probability of being re-elected for a second term. This difference in probability is more than 18 % points; 2) the differences in re-election probability are not

driven by differences in the probability of being the mayoral candidate for a second time (columns (1)-(2)); 3) party-affiliated mayors, compared to independents, have a probability of being candidate at the provincial level of government which is between 8.5 and 12 % points higher (columns (5)-(6)). This result is sensible, as the provincial level of government is the level immediately above municipalities; 4) columns (7)-(8) show that party-affiliated mayors have in general a higher probability of being a candidate at higher levels of government, although the results in these columns are not precisely estimated. The same differences in terms of career perspectives cannot be found in municipalities above 5000, as all the coefficients reported in Panel B of Table 6 are small and not statistically different from zero. This could be explained by the fact that, in municipalities affected by fiscal rules, national political parties may not need to use career incentives to discipline local politicians. Hence, where fiscal rules apply, the differences in terms of career perspectives between independent and party-affiliated mayors disappear.[19]

The second goal of this section is to connect the different career perspectives with the differences in fiscal discipline. Tables 7 and 8 contain estimated coefficients for municipalities below 5000. In Table 7, I investigate if the higher deficits run by independent mayors are due to potential re-election incentives. More in detail, in this exercise I exploit the fact that in Italy a mayor can only be elected for two consecutive terms, i.e. second term mayors are term-limited (De Benedetto and De Paola, 2018). This allows me to evaluate whether the higher deficits run by independent mayors are due to re-election incentives. I run two separate RDD empirical exercises: one for first-term mayors and one for second term ones (i.e. term-limited mayors). In columns (1)-(2), I report the specification with the optimal bandwidth and without covariates, while in columns (3)-(4), I check the robustness of the results adding the control variables. In all columns, I use the optimal CCT bandwidth calculated for the main regressions on deficit for municipalities below 5000 (see Panel A of Table 5), as the goal of the exercise here is to understand which type of mayors (i.e. first term or second term) is driving the main results in Panel A of Table 5. In addition, in columns (1)-(2), I report the estimated intercept, which captures the average deficit run by independent mayors at the at the zero threshold $MV_{it} = 0$. This estimated intercept, together with the coefficient of

[19] In Table 6, I use a linear polynomial and the optimal bandwidth calculated following Calonico, Cattaneo, and Titiunik (2014a, 2014b). Tables A9 and A10 show that the results are the same if I use a quadratic or a cubic polynomial and the double of the optimal bandwidth.

interest $\widehat{\delta_0}$, enables me to understand how the behavior of party-affiliated and independent mayors changes across the two sub-samples.[20]

The estimated coefficients show that the effect is statistically significant only for first-term mayors. More in detail, first-term party-affiliated mayors run deficits which are between 1.5 and 1.7 % points lower than those run by independents. On the other hand, the estimated coefficients for second-term party-affiliated mayors are not statistically different from zero, with a magnitude that is decisively reduced once the covariates are added to the model. Also, the estimated intercept in columns (1)-(2) clearly shows that independent mayors run higher deficits when they are not term-limited. This suggests that the higher deficits run by independent mayors are due to re-election incentives, a piece of evidence that is consistent with the literature that connects deficits to re-election incentives (see Aghion and Bolton, 1990) or to politicians' pandering to voters (see Maskin and Tirole, 2004).

To provide further evidence on this point, I implement an additional empirical exercise in which I distinguish between first-term mayors who are re-elected for a second term and first-term mayors who are not re-elected. The results are reported in columns (1)-(4) of Panel A of Table 8. As re-election is an outcome for the national party treatment, to reduce endogeneity concerns, I also repeat the exercise using the predicted probability of being re-elected, rather than the observed re-election status (Ferraz and Finan, 2011). This predicted probability is obtained regressing the re-election status on pre-determined municipal and mayoral characteristics[21]. The estimates obtained by splitting the sample using the predicted probability are reported in columns (5)-(6) of Panel A of Table 8. As for Table 7, in Table 8, I report the estimated intercept for the regressions without covariates. The results of Panel A of Table 8 indicate that the higher deficits produced by independent mayors are run by those mayors who have been successful in being re-elected for a second term, and thus by mayors affected by re-election incentives. This evidence, in connection with the results reported in Panel A of Table 6, suggests that party-affiliated mayors, compared to independents, run

[20]It would make less sense to report the estimated intercept in columns (3)-(4) of Table 7, given that the inclusion of covariates and fixed effects makes its interpretation less clear.

[21]More in detail, I have regressed by logit the re-election dummy variable on the following variables: the margin of victory at municipal election, population, elderly index, income, dummy variable for national party, age, dummy variable for graduate mayor, past political experience, past professional background, region and term FE effects. The predicted probability has been then transformed in a dummy variable equal to one when the predicted probability is higher than 0.5. This has been used to run the regressions in columns (5)-(6) of Panel A of Table 8. This estimation procedure correctly predicted 65.73 % of the cases.

lower deficits because they have an electoral advantage due to their affiliation. This advantage can be explained by the fact that party-affiliated mayors can receive the support of national parties during the electoral campaign, which enable them to have more resources at their disposal. As said above, this support represents the first mechanism through which national parties can discipline local politicians.

In Panel B of Table 8, I provide evidence of the second mechanism through which national parties can discipline local politicians, which is the connection between promotion to higher levels of government and the fiscal behavior of party-affiliated and independent mayors. As described by Panel A of Table 6, party-affiliated mayors have a higher probability of being promoted at the provincial level. For this reason, I study the effect of national parties on fiscal discipline distinguishing between mayors candidate at the provincial level, and mayors not promoted at the provincial level. The results of this exercise are reported in columns (1)-(4) of Panel B of Table 8. As promotion to higher levels of government is a dependent variable for national party treatment, I also use the predicted probability of being a candidate at provincial level rather than the actual observed one. The results of this second exercise can be found in coulumns (5)-(6) of Panel B of Table 8.[22]

Both exercises in Panel B of Table 8 indicate that the higher deficits produced by independent mayors are run by those mayors who have a low probability of being a candidate at the provincial level. In fact, among the mayors who have been promoted at the provincial level, there are no differences in terms of fiscal discipline between party-affiliated and independent first citizens, and even independent mayors reduce the deficit run if they have higher chances of being promoted at the provincial level. This last evidence suggests that national parties can use promotion to higher levels of government as a disciplining device, which can potentially affect both party-affiliated and independent mayors. The intuition of this result is that, while independent politicians can contest municipal elections on their

[22]More in detail, I have regressed by logit promotion to provincial level on the following variables: the margin of victory at municipal election, population, elderly index, income, dummy variable for national party, dummy variable for term-limited mayor, age, dummy variable for graduate mayor, past political experience, past professional background, region and term FE effects. The predicted probability has been then transformed in a dummy variable equal to one when the predicted probability is higher than 0.1. In this case, I have used a lower threshold (0.1 rather than 0.5), because a small proportion of mayors are promoted to higher levels of government. For example, the threshold 0.5 for the predicted probability of being a candidate at the provincial level is above the 95th percentile of the distribution. This has been used to run the regressions in columns (5)-(6) of Panel B of Table 8. This estimation procedure correctly predicted 65.47 % of the cases.

own, they must go through national political parties if they want to be a candidate at higher levels of government. Thus, all the mayors who want to be a candidate at the provincial level must keep the deficit low, even independent ones. Finally, this result, in connection with the evidence that party-affiliated mayors have a higher probability of being promoted at the provincial level (Panel A of Table 6), provides a further explanation of why party-affiliated mayors run lower deficits, compared to independent ones.[23]

4.5 Other potential mechanisms and robustness checks

In this section, I investigate the role of other potential mechanisms and I provide additional robustness checks. More in detail, this section describes the following robustness checks: 1) I show that the results are not driven by the political orientation of the mayors, nor by the alignment with the central government; 2) I exclude the role of Mafia-style criminal organizations; 3) I argue that the results are not driven by unobserved political ability; 4) I investigate the potential confounding role of unions of municipalities; 5) I provide evidence that suggests that the results of this paper are not limited to mixed electoral competitions.

Centre-left vs. centre-right. In this paragraph, I investigate if both party-affiliated mayors from center-left and center-right national parties have a role in disciplining politicians (Pettersson-Lidbom,2008; Ferreira and Gyourko, 2009).[24] This exercise is implemented to exclude that the main results of the paper are due to a particular political orientation of the mayor. To implement this exercise, I run model (1) on two different samples: 1) a sample of mixed electoral competitions between center-right party-affiliated mayors and independent ones; 2) a sample of mixed electoral competitions between center-left party-affiliated mayors and independent ones. The results of these two exercises are reported in Panel A of Table

[23]The interpretation given in this paper of the results found in the data is that a higher probability of future promotion affects the fiscal discipline of the mayors. In theory, following a reverse causality logic, the results could be interpreted the other way around: the level of fiscal discipline of the local politician today is subsequently rewarded by the national parties with a promotion tomorrow. However, the intuition here is that the two interpretations are in the end the same and that it is difficult to distinguish them in the data. What we are observing in the data is a virtuous cycle of continuous feedback between the local politicians and the national parties. On one hand, the national party can discipline the local politicians increasing the chances of future promotion if the politicians behave responsibly. On the other hand, the local politicians know that behaving responsibly can increase their chances of future promotion.

[24]In Italy, in the years between 1993 and 2013, it was possible to identify two big political coalitions: one, on the center-right, was the coalition driven by Silvio Berlusconi. The other, on the center-left, was the coalition driven by the heirs of the past Italian Communist Party.

A11. In particular, columns (1) and (3) make reference to the comparison between center-right party-affiliated mayors and independents, while columns (2) and (4) look at the other comparison. In columns (1)-(2) I use the optimal bandwidth, while in columns (3)-(4) half of the optimal bandwidth.

As we can see, both center-left and center-right party-affiliated mayors reduce the average deficit compared to independents. In particular, center-right party-affiliated mayors tend to reduce the deficit by between 1.6% and 1.8 % points, depending on the bandwidth used, while the effect for center-left mayors is between 1.6 % and 3.8 % points.[25] These estimated coefficients indicate that the main results are mostly driven by a national political parties' effect, rather than the political orientation of the mayor.

Aligned vs. non-aligned mayors. The same logic can be applied to cases of party-affiliated mayors that are politically aligned with the central government at the national level, compared to those that are not. This is because there is a literature (Bracco et al., 2015; Brollo and Nannicini, 2012) that shows that alignment with the central government affects the incentives and resources of local politicians. To implement this exercise, I run model (1) on two different samples: 1) a sample of mixed electoral competitions between non-aligned party-affiliated mayors and independents; 2) a sample of mixed electoral competitions between aligned party-affiliated mayors and independents. The results are reported in Panel B of Table A11. In particular, columns (1) and (3) make reference to the comparison between non-aligned party-affiliated mayors and independents, while columns (2) and (4) look at the other comparison. In columns (1)-(2), I use the optimal bandwidth, while in columns (3)-(4) half of the optimal bandwidth. Both non-aligned and aligned party-affiliated mayors reduce the average deficit compared to independents. The estimated effect for non-aligned party-affiliated mayors is between 1.1% and 3.1 % points, depending on the bandwidth used, while the effect for aligned party-affiliated mayors is between 1.1 % and 1.9 % points.[26] As

[25]The coefficient in column (3) of Panel A of Table A11, even tough is similar in magnitude to the coefficient in column (1) of Panel A of Table A11, is not precisely estimated. The imprecise estimation could be due to the fact that a lower number of observations is used in column (3).

[26]The coefficient in column (1) of Panel B of Table A11, even tough is similar in magnitude to the coefficient in column (2) of Panel B of Table A11, is not precisely estimated. This imprecise estimation could be due to the fact that a lower number of observations is used in column (1). In addition, when I use half of the optimal bandwidth, I get coefficients which are bigger in absolute value and statistically different from zero. Given that in RDD analysis there is a trade-off between bias and efficiency (i.e. lower bias with a smaller

for the previous section, these estimated coefficients also show that the main results of the paper are due to a national political party effect.

The role of Mafia-style criminal organizations. I provide here empirical evidence which is useful for excluding the possibility that the main results of this paper are driven by Mafia-style criminal organizations, given the evidence in the literature which shows that criminal organizations have an effect on fiscal policies (Acconcia, Corsetti, and Simonelli, 2014; Galletta, 2017; Di Cataldo and Mastrorocco, 2019). In particular, it may be that independent mayors are more easily captured by criminal organizations, compared to party-affiliated ones. This may affect fiscal discipline.

To exclude this possibility, I run two separate RDD exercises, in which I compare the fiscal behavior of party-affiliated mayors with that of independents in two different contexts: 1) municipalities characterized by a low presence of criminal organizations; 2) municipalities characterized by a high presence of criminal organizations. To distinguish between these two environments, I use a Mafia index built by Calderoni (2011), which quantifies the presence of Mafia-style criminal organizations in Italian provinces. The results of this exercise are reported in Table A12. In particular, columns (1) and (3) make reference to municipalities with a value of the Mafia index below the median (i.e. low presence of criminal organizations), while columns (2) and (4) look at municipalities with a value above the median (i.e. high presence of criminal organizations). In columns (1)-(2) I use the optimal bandwidth, while in columns (3)-(4) half of the optimal bandwidth.

The estimated coefficients in Table A12 suggest that the main results of this paper are not driven by Mafia-style criminal organizations. Party-Affiliated mayors, compared to independents, tend to run lower deficits in both municipalities with a low presence of criminal organizations and municipalities with a high presence of criminal organizations.

The role of unobserved political ability. As observed in Table 2, party-affiliated mayors and independents tend to have the same level of past political experience. However, this does not exclude that they may have a different level of unobserved political ability.

I argue that the estimated coefficients reported in Panel A of Table 8 provide evidence that unobserved political ability is not one of the main drivers of the results of this paper. As

bandwidth at the cost of lower efficiency, given the smaller number of observations), we can trust that the coefficients obtained with half of the optimal bandwidth are closer in magnitude to the true effect.

argued by Ferraz and Finan (2011), mayors who were able to be re-elected for a second term should be characterized by the same level of unobserved political ability. Thus, the results of Panel A of Table 8, which show that the higher deficits produced by independents are run by mayors who were re-elected for a second term, demonstrate that unobserved political ability is not one of the drivers of the results of this paper. This is because party-affiliated and independent mayors re-elected for a second term should be characterized by the same level of unobserved political ability.

The role of unions of municipalities. In Italy, many small municipalities provide public services through unions of municipalities. These unions of municipalities, which are normally formed to reduce the costs of the provision of local public services, could represent a confounding factor for the estimates reported in this paper. To exclude this possibility, I have collected data from the Italian Ministry of Domestic Affairs, which indicates which municipalities were part of a union during the period studied. I use this information as both an independent and a dependent variable, to rule out a potential confounding effect of unions of municipalities on fiscal discipline. Table A13 reports the results of this analysis. In Panel A, I report the results obtained using the entire sample of municipalities below 15,000 inhabitants, while, in Panel B, I keep only municipalities below 5000 inhabitants. Columns (1)-(2) of both Panels investigate how controlling for a dummy variable equal to 1 for municipalities in a union affects the baseline effect of party-affiliated mayors on fiscal discipline, while column (3) checks whether party-affiliated mayors have a different probability of being elected in municipalities that participate to a union of municipalities. The evidence in Table A13 suggests that the main results of this paper are not driven by the potential effect of unions of municipalities on fiscal discipline.

External validity of the estimates. The main limitation of the empirical analysis described in this paper is that the estimates have been obtained using the sub-sample of mixed electoral competitions between a candidate from a national party and an independent candidate. The use of a smaller sub-sample could raise doubts about the external validity of the estimated coefficients. To provide evidence against this concern, in Table A14, I have repeated the analysis using the entire sample of municipalities below 5000 inhabitants for the years between 2001 and 2012 (i.e. the period during which fiscal rules did not apply for municipalities below

5000 inhabitants). The analysis has been implemented distinguishing between first-term mayors and second term first citizens (i.e. term-limited mayors), controlling for municipal and mayoral covariates, for municipal and year fixed effects, and running the model by OLS.

Table A14 shows that this OLS analysis produces results that are consistent with the RDD analysis described above: party-affiliated mayors run lower deficits compared to independent mayors only when they can be re-elected for a second term, while there are no differences between party-affiliated and independent mayors when the mayor is term-limited. This evidence suggests that the main results of this paper, even though there is no guarantee that they could be generalized to municipalities with more than 5000 inhabitants, could potentially apply to a sample bigger than the sample of mixed electoral competitions used in the RDD analysis.

5 Conclusion

In this paper, I exploit the proliferation in Italian municipalities of local independent movements ("Civic Lists") to make a comparison between mayors affiliated to national parties and independents. This framework is used to test whether political parties can discipline politicians by affecting their career prospects.

The results show that party-affiliated mayors are more fiscally responsible. Mayors affiliated to national parties run deficits as a fraction of total revenues which are between 1.1% and 1.7 % points lower. Besides that, party-affiliated mayors accumulate less debt during the legislative mandate, with a reduction of debt as a fraction of total revenues of about 8.5 % points. The results show that the lower deficits are generated by cutting capital expenditures by approximately 21% and by reducing local taxes by 8%. This indicates that mayors affiliated to national parties cut deficits and accumulate less debt by reducing expenditures more than taxes.

A heterogeneity analysis is then implemented to study which channels are driving the main results. First, the effect on deficit is statistically significant only for municipalities not constrained by fiscal rules (Grembi et al., 2016): party-affiliated mayors reduce the deficit by around 1.5 % points in municipalities exempted by the fiscal rules, while the effect is not different from zero in municipalities constrained by fiscal rules. This suggests that, where

fiscal rules do not apply, national parties act as a substitute for fiscal rules in constraining local politicians. Second, the results indicate that political parties discipline politicians by affecting their career prospects (Riker, 1964; Enikolopov and Zhuravskaya, 2007; Ponce-Rodriguez et al., 2018). This is done in two ways: 1) party-affiliated mayors have a higher re-election probability, compared to independents; and 2) party-affiliated mayors are more likely to be promoted to higher levels of government.

Then, this paper provides evidence that the differences in career prospects between party-affiliated and independent mayors are linked to the differences in fiscal behavior. In particular: 1) the effect of national parties on deficit is significant only for mayors eligible for re-election; 2) the higher deficits run by independents are produced by mayors who have been successfully re-elected. These two results are consistent with the literature on the correlation between deficits and re-election incentives (see Aghion and Bolton, 1990) or with the literature that explains how to politicians pander to voters (see Maskin and Tirole, 2004); 3) mayors promoted to higher levels of government run lower deficits, even if they are independents. This evidence suggests that national parties use politicians' ambition for promotion as a disciplining tool, which can affect both party-affiliated and independent mayors.

Finally, I rule out the following alternative stories: 1) the results are not driven by the political orientation nor by alignment with the central government; 2) the main results are not driven by Mafia-style criminal organizations; 3) I exclude that the main results are driven by unobserved political ability; 4) I show that unions of municipalities do not represent a confounding factors for my estimates.

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Table 1: Descriptive statistics:
Party-affiliated vs. Independent

	(1) *Party-Affiliated*	(2) obs	(3) *Independent*	(4) obs	(5) p-value
Budget outcomes					
deficit	0.013	1441	0.018	1391	0.029
past deficit	0.014	1441	0.016	1391	0.173
accumulated debt	0.056	1441	0.069	1391	0.007
capital expenditures	484.850	1441	478.969	1391	0.814
current expenditures	784.135	1441	783.224	1391	0.007
property and income taxes	285.514	1441	292.860	1391	0.207
potal taxes	415.046	1441	425.518	1391	0.166
potal transfers	482.263	1441	480.948	1391	0.957
Political career outcomes					
re-run	0.672	677	0.656	635	0.555
re-elected	0.537	677	0.475	635	0.024
candidate provincial level	0.150	1441	0.114	1391	0.004
candidate provincial, regional and national level	0.276	1441	0.218	1391	0.001
Mayoral characteristics					
term limit	0.259	1441	0.273	1391	0.387
political experience	7.244	1441	7.184	1391	0.785
skill job	0.236	1441	0.234	1391	0.921
unemployed	0.108	1441	0.143	1391	0.005
postgraduate	0.418	1441	0.423	1391	0.782
age	49.749	1441	50.948	1391	0.001
female	0.121	1441	0.109	1391	0.341
# candidates	2.800	1441	2.804	1391	0.916
# council seats	9.897	1441	9.670	1391	0.001
Municipal characteristics					
daily newspapers	77.335	1422	81.223	1364	0.002
mafia index	4.804	1441	5.210	1391	0.349
% foreign	0.076	1419	0.071	1372	0.004
longitude	12.075	1419	11.561	1372	0.000
latitude	43.519	1419	43.739	1372	0.011
altitude	299.143	1419	300.858	1372	0.856
area	35.180	1419	30.730	1372	0.001
income	13529.28	1441	13612.19	1391	0.448
# firms	0.078	1441	0.077	1391	0.043
elderly index	1.686	1441	1.653	1391	0.461
population	4688.753	1441	4325.874	1391	0.004
union	0.121	1441	0.135	1391	0.275
Votes shares at national elections					
centre-right 2001	45.764	1401	47.586	1357	0.000
centre-left 2001	36.479	1401	34.608	1357	0.000
centre-right 2018	38.069	1398	39.768	1355	0.000
centre-left 2018	19.383	1398	18.219	1355	0.000
five stars movement 2018	27.180	1399	26.654	1355	0.177

Notes. Municipalities below 15000. Electoral terms between 2000 and 2012. *Party-Affiliated* = 1 for a Mayor affiliated to a national political party, *Independent* = 1 for a Mayor not affiliated to a national political party. Columns (1) and (3) report the mean values for the two samples; *obs* is the number of observations; *p-value* is the p-value of the difference between the means of the two samples.

Table 2: Discontinuities in municipal and mayoral characteristics, RDD estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Municipal characteristics + past deficit								
	population	elderly index	# firms	income	% college	past deficit	centre-left	centre-right
National Party	0.036	-0.141	-0.000	-0.025	0.001	-0.001	0.572	-0.161
	(0.092)	(0.103)	(0.002)	(0.021)	(0.002)	(0.006)	(0.966)	(1.136)
Bandwidth	11.58	10.98	15.40	17.20	16.43	20.16	13.35	16.50
Observations	1,138	1,093	1,423	1,545	1,492	1,719	1,251	1,466
Panel B: Municipal characteristics								
	area	altitude	latitude	longitude	% foreign	newspapers	mafia index	# candidates
National Party	-0.130	-41.712	-0.006	0.487	0.001	-3.311	-0.202	0.001
	(0.088)	(27.727)	(0.245)	(0.299)	(0.005)	(3.697)	(1.273)	(0.105)
Bandwidth	18.26	11.86	15.88	14.52	13.52	13.21	17.06	12.99
Observations	1,602	1,151	1,443	1,348	1,275	1,248	1,537	1,250
Panel C: Mayoral characteristics								
	female	age	postgraduate	skill job	unemployed	term limit	political experience	# seats
National Party	0.005	-0.030	-0.026	-0.054	-0.022	-0.002	0.952	0.112
	(0.033)	(0.023)	(0.057)	(0.041)	(0.033)	(0.041)	(0.602)	(0.197)
Bandwidth	16.25	13.32	13.06	20.16	17.23	11.97	15.19	11.83
Observations	1,488	1,274	1,255	1,719	1,548	1,166	1,400	1,156

Notes. All municipalities below 15000 inhabitants. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. All specifications include a linear control for the margin of victory of a national party on each side of the discontinuity and the optimal bandwidth. Term FE included in all columns. Definition dependent variables Panel A: pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of population > 65 over population < 14; firms = number of firms per capita at municipal level; income = log of income per capita; % college = percentage of population with a college degree; past deficit = previous electoral term average deficit as a fraction of total revenues; centre-left = votes shares taken by centre-left political parties at municipal level during 2001 national elections; centre-right = votes shares taken by centre-right political parties at municipal level during 2001 national elections. Definition dependent variables Panel B: area = log of municipal area in square kilometers; altitude = altitude of the municipality; latitude = latitude of the municipality; longitude = longitude of the municipality; % foreign = percentage of foreign population living in the municipality; newspapers = number of of non-sport daily newspapers sold for every 1000 people; mafia index = index for the presence of Mafia-style criminal organizations at the provincial level; # candidates = number of candidates at the municipal level. Definition dependent variables Panel C: female = 1 if mayor is a woman; age = log of age of mayor; postgraduate = 1 if mayor has a college degree; skill job = 1 if mayor worked in a high skilled occupation in the past; unemployed = 1 if mayor is unemployed; term limit = 1 if mayor is at the second term (i.e. mayor is term-limited); political experience = years of past political experience of the mayor at any level of politics; #seats = number of seats in the council for the mayor's coalition. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 3: The effect of national party on fiscal discipline, RDD estimates

	(1)	(2)	(3)	(4)	(5)
Outcome: Average deficit as a fraction of total revenues					
Control Function	Linear	Linear	Linear	Quadratic	Cubic
Bandwidth	h	h	$h/2$	$2h$	$2h$
Covariates	No	Yes	Yes	Yes	Yes
National Party	-0.011**	-0.012**	-0.017**	-0.013**	-0.016**
	(0.005)	(0.150)	(0.226)	(0.098)	(0.098)
Outcome mean	0.019	0.019	0.021	0.016	0.016
Bandwidth	9.762	9.762	4.881	19.52	19.52
Observations	991	991	488	1,692	1,692

Notes. All municipalities below 15000 inhabitants. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in all columns except column (1). Covariates included in columns (2)-(5): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 4: The effect of national party on debt, expenditures and revenues, RDD estimates

	(1)	(2)	(3)
	Panel A: Debt and Expenditures		
Control Function	Linear	Linear	Linear
Bandwidth	h	h	h
Covariates	Yes	Yes	Yes
Outcome	Accumulated debt	Capital expenditures	Current expenditures
National Party	-0.085**	-0.206**	-0.031
	(0.034)	(0.086)	(0.030)
Bandwidth	9.762	9.762	9.762
Observations	640	991	991
	Panel B: Revenues		
Control Function	Linear	Linear	Linear
Bandwidth	h	h	h
Covariates	Yes	Yes	Yes
Outcome	Total transfers	Total taxes	Property and income taxes
National Party	-0.081	-0.079**	-0.093**
	(0.071)	(0.039)	(0.043)
Bandwidth	9.762	9.762	9.762
Observations	991	991	991

Notes. All municipalities below 15000 inhabitants. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in all columns. Definition dependent variables Panel A: Accumulated debt = summation of yearly deficits/surpluses produced during the electoral term as a fraction of total revenues; Capital expenditures = log of capital expenditures per capita; Current expenditures = log of current expenditures per capita. Definition dependent variables Panel B: Total transfers = log of current + capital transfers from higher levels of government; Total taxes = log of total municipal taxes raised by the mayor; Property and income taxes = log of property + income taxes raised by the mayor. Covariates included in columns (1)-(3): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 5: The effect of national party on fiscal discipline, RDD estimates: The role of fiscal rules

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: Average deficit as a fraction of total revenues						
Control Function	Linear	Linear	Linear	Linear	Quadratic	Cubic
Bandwidth	h	h	h	$h/2$	$2h$	$2h$
Municipal covariates	No	Yes	Yes	Yes	Yes	Yes
Mayoral covariates	No	No	Yes	No	No	No
Panel A: municipalities below 5000 inhabitants						
National Party	-0.015**	-0.016***	-0.016***	-0.024***	-0.016**	-0.017*
	(0.006)	(0.006)	(0.006)	(0.009)	(0.006)	(0.009)
Outcome mean	0.021	0.021	0.021	0.024	0.019	0.019
Bandwidth	13.56	13.56	13.56	6.781	27.12	27.12
Observations	796	796	796	424	1,251	1,251
Panel B: municipalities above 5000 inhabitants						
National Party	-0.003	0.003	0.004	-0.001	-0.001	-0.006
	(0.007)	(0.007)	(0.008)	(0.011)	(0.007)	(0.009)
Outcome mean	0.012	0.012	0.012	0.011	0.011	0.011
Bandwidth	7.141	7.141	7.141	3.570	14.28	14.28
Observations	280	280	280	140	512	512

Notes. Municipalities below 5000 inhabitants (i.e. municipalities not constrained by fiscal rules) in Panel A, municipalities between 5000 and 15000 inhabitants (i.e. municipalities constrained by fiscal rules) in Panel B. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in all columns except column (1). Municipal covariates included in columns (2)-(6): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Mayoral covariates included in column (3): female = 1 if mayor is a woman; age = log of age of mayor; postgraduate = 1 if mayor has a college degree; skill job = 1 if mayor worked in a high skilled occupation in the past; unemployed = 1 if mayor is unemployed; term limit = 1 if mayor is at the second term (i.e. mayor is term-limited); political experience = years of past political experience of the mayor at any level of politics. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 6: The effect of national party on political career, RDD estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Outcome	=1 if mayor re-run	=1 if mayor re-run	=1 if mayor re-elected	=1 if mayor re-elected	=1 candidate provincial level	=1 candidate provincial level	=1 candidate higher level	=1 candidate higher level
Control Function	Linear	Linear	Linear	Linear	Linear	Linear	Linear	Linear
Bandwidth	h	h	h	h	h	h	h	h
Municipal covariates	No	Yes	No	Yes	No	Yes	No	Yes
Panel A: municipalities below 5000 inhabitants								
National Party	0.045	0.046	0.181*	0.205**	0.120**	0.085*	0.077	0.046
	(0.087)	(0.089)	(0.095)	(0.099)	(0.047)	(0.044)	(0.049)	(0.048)
Outcome mean	0.640	0.640	0.432	0.432	0.102	0.102	0.179	0.179
Bandwidth	13.96	13.96	11.80	11.80	13.77	13.77	17.86	17.86
Observations	450	450	396	396	808	808	990	990
Panel A: municipalities above 5000 inhabitants								
National Party	-0.036	-0.048	0.044	-0.019	0.034	0.002	-0.001	-0.025
	(0.133)	(0.148)	(0.142)	(0.153)	(0.057)	(0.058)	(0.072)	(0.071)
Outcome mean	0.768	0.768	0.432	0.432	0.145	0.145	0.274	0.274
Bandwidth	11.07	11.07	9.457	9.457	16.03	16.03	15.37	15.37
Observations	194	194	168	168	559	559	540	540

Notes. Municipalities below 5000 inhabitants (i.e. municipalities not constrained by fiscal rules) in Panel A, municipalities between 5000 and 15000 inhabitants (i.e. municipalities constrained by fiscal rules) in Panel B. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Dependent variable in columns (1)-(2): =1 if mayor re-runs for a second term in the same municipality. Dependent variable in columns (3)-(4): =1 if mayor re-elected for a second term in the same municipality. Dependent variable in columns (5)-(6): =1 if mayor candidate at the provincial level of government at any point in time after being elected mayor. Dependent variable in columns (7)-(8): =1 if mayor candidate at provincial, regional or national levels of government at any point in time after being elected mayor. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Term and Region FE included in columns (2), (4), (6) and (8). Municipal covariates included in columns (2), (4), (6) and (8): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 7: The role of term limits
Municipalities below 5000

	(1)	(2)	(3)	(4)
Outcome: Average deficit as a fraction of total revenues				
Control Function	Linear	Linear	Linear	Linear
Bandwidth	h	h	h	h
Covariates	No	No	Yes	Yes
Sample	Term limit		Term limit	
	No	Yes	No	Yes
National Party	-0.015**	-0.014	-0.017***	-0.004
	(0.007)	(0.010)	(0.006)	(0.009)
Intercept	0.030***	0.011**	-	-
s.e. intercept	(0.006)	(0.004)		
Bandwidth	13.56	13.56	13.56	13.56
Observations	668	128	668	128

Notes. Municipalities below 5000 (i.e. municipalities not constrained by fiscal rules). Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Description of sample: Term Limit: No = mixed electoral competition between a first-term party-affiliated mayor vs. a first-term independent mayor (i.e. mayors who can re-run for a second term); Yes = mixed electoral competition between a second term party-affiliated mayor vs. a second term independent mayor (i.e. term-limited mayors). Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in columns (3)-(4). Municipal covariates included in columns (3)-(4): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table 8: The role of re-election and promotion at higher level of government
Municipalities below 5000

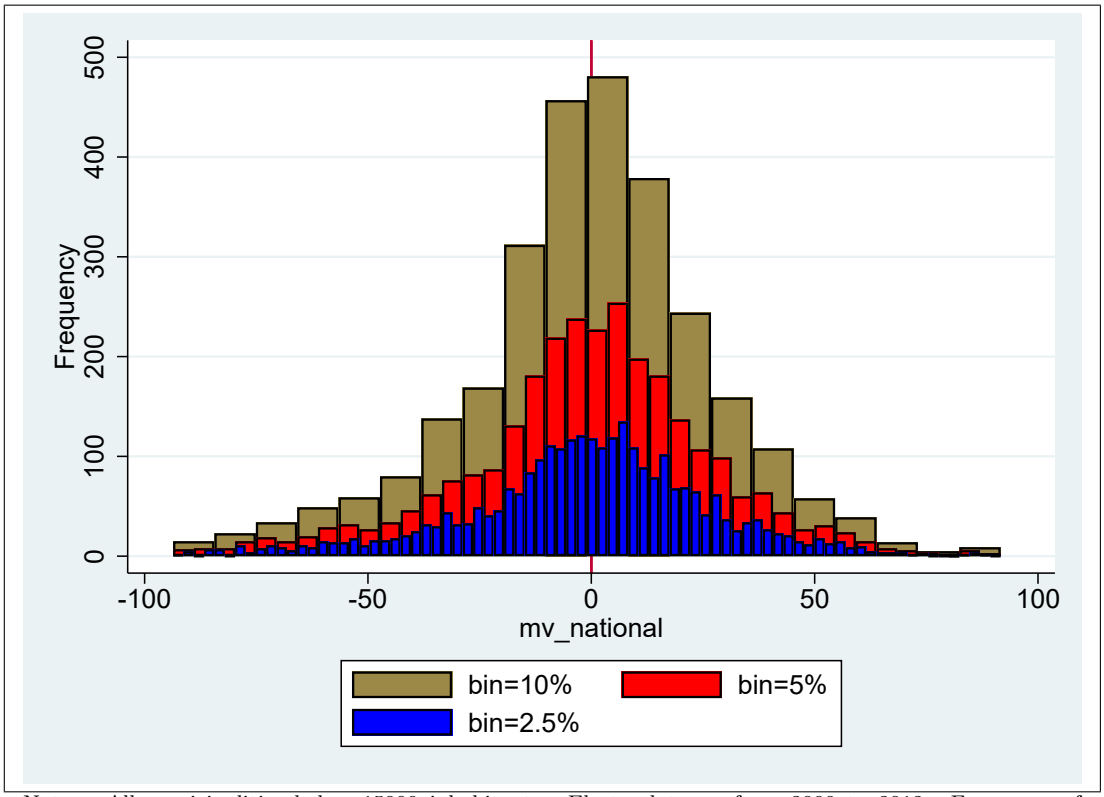
	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: Average deficit as a fraction of total revenues						
Control Function	Linear	Linear	Linear	Linear	Linear	Linear
Bandwidth	h	h	h	h	h	h
Covariates	No	No	Yes	Yes	No	No
Panel A: re-election						
Sample	Mayor re-elected		Mayor re-elected		Mayor re-elected *predicted*	
	No	Yes	No	Yes	No	Yes
National Party	-0.009	-0.033*	-0.006	-0.036**	-0.006	-0.033*
	(0.009)	(0.018)	(0.009)	(0.017)	(0.009)	(0.019)
Intercept	0.024***	0.045**	-	-	0.025***	0.042**
s.e. intercept	(0.007)	(0.018)			(0.007)	(0.018)
Bandwidth	13.56	13.56	13.56	13.56	13.56	13.56
Observations	237	201	237	201	235	203
Panel B Outcome: Average deficit as a fraction of total revenues						
Sample	candidate provincial level		candidate provincial level		candidate provincial level *predicted*	
	No	Yes	No	Yes	No	Yes
National Party	-0.017**	0.009	-0.017***	-0.001	-0.020**	-0.005
	(0.007)	(0.010)	(0.006)	(0.010)	(0.010)	(0.005)
Intercept	0.030***	0.004	-	-	0.039***	0.013***
s.e. intercept	(0.006)	(0.008)			(0.008)	(0.004)
Bandwidth	13.56	13.56	13.56	13.56	13.56	13.56
Observations	699	97	699	97	439	357

Notes. Municipalities below 5000 (i.e. municipalities not constrained by fiscal rules). Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Description of sample: Panel A: mayor re-elected: No = mayor not re-elected for a second term in the same municipality; Yes = mayor re-elected for a second term in the same municipality. In columns (1)-(4), I am using the observed re-election status, while in columns (5)-(6) the predicted re-election status, as estimated in the data through a logit model. Panel B: candidate provincial level: No = mayor not candidate at provincial level; Yes = mayor candidate at provincial level. In columns (1)-(4), I am using the observed candidacy status, while in columns (5)-(6) the predicted candidacy status, as estimated in the data through a logit model. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in columns (3)-(4). Municipal covariates included in columns (3)-(4): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Figure 1: Percentage of party-affiliated mayors in Italian municipalities

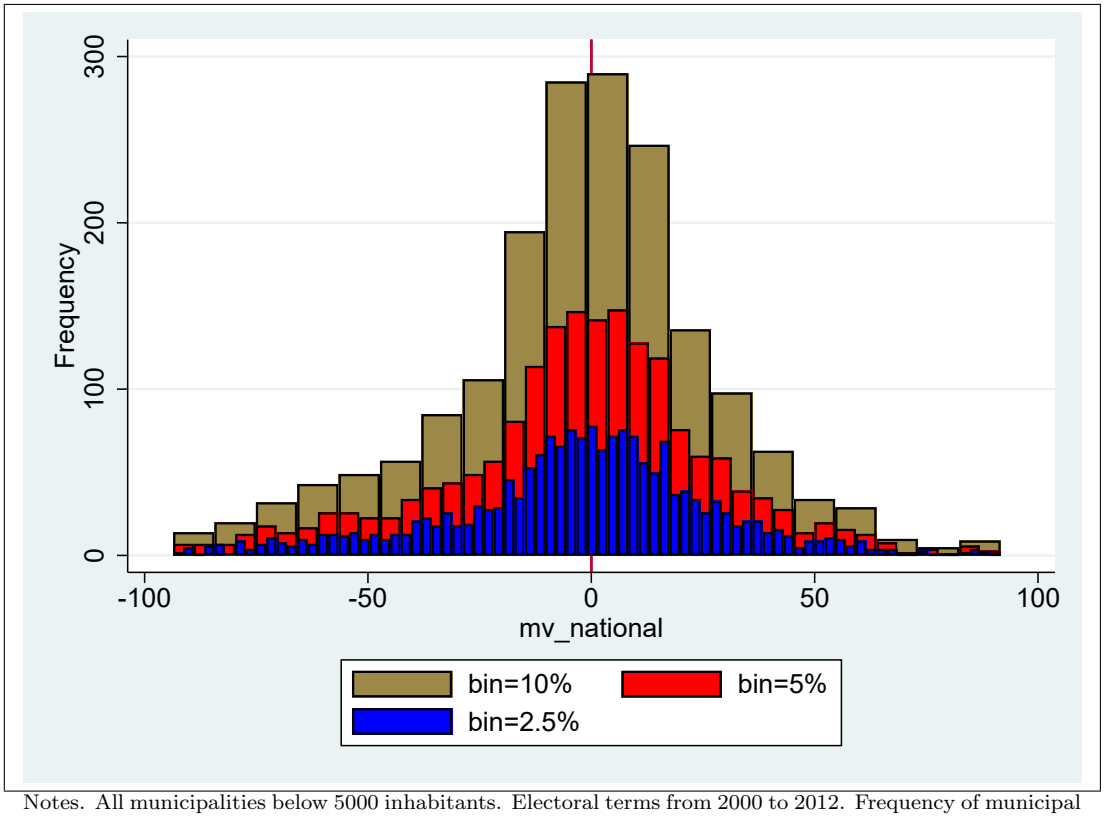
Notes. All municipalities below 15000 inhabitants. Years from 1996 to 2014. Horizontal axis: years. Vertical axis: % of mayors who are affiliated to national political parties.

Figure 2: Frequency margin of victory



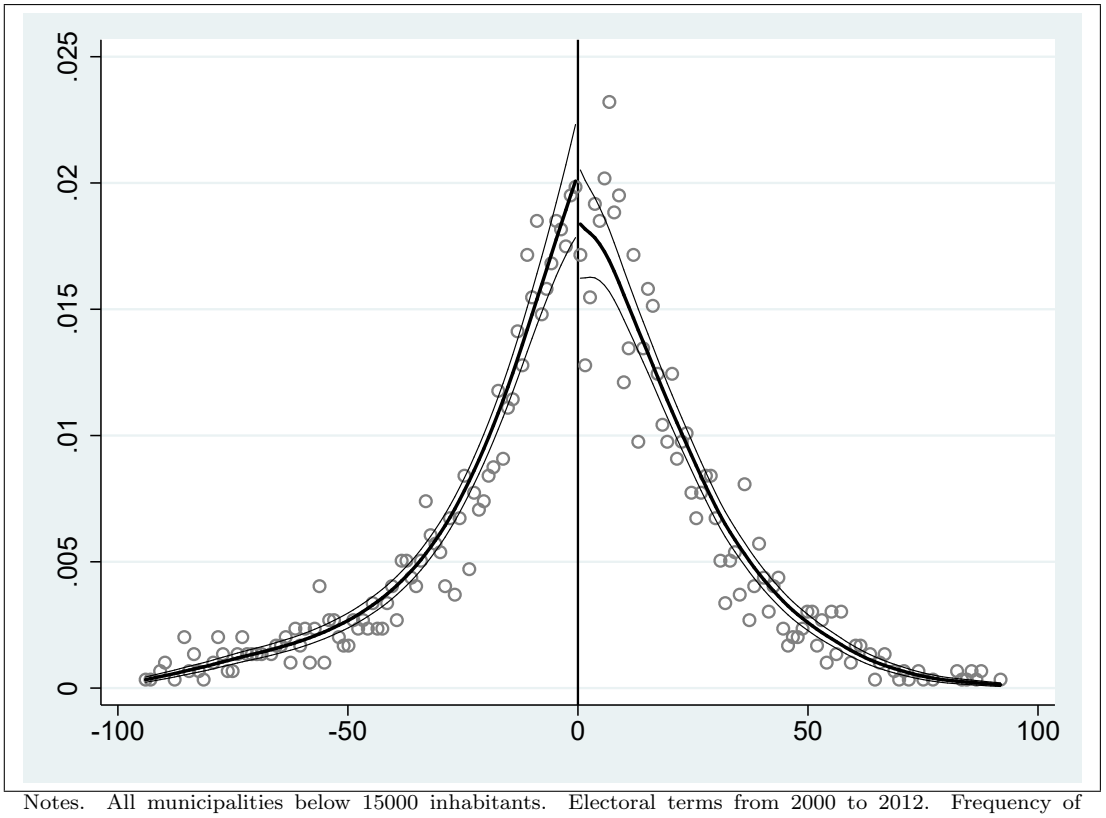
Notes. All municipalities below 15000 inhabitants. Electoral terms from 2000 to 2012. Frequency of municipal elections between 2000 and 2012. $MV_{it} > 0$ when the winning candidate is from a national party, $MV_{it} < 0$ when the winning candidate is independent.

Figure 3: Frequency margin of victory
Municipalities below 5000



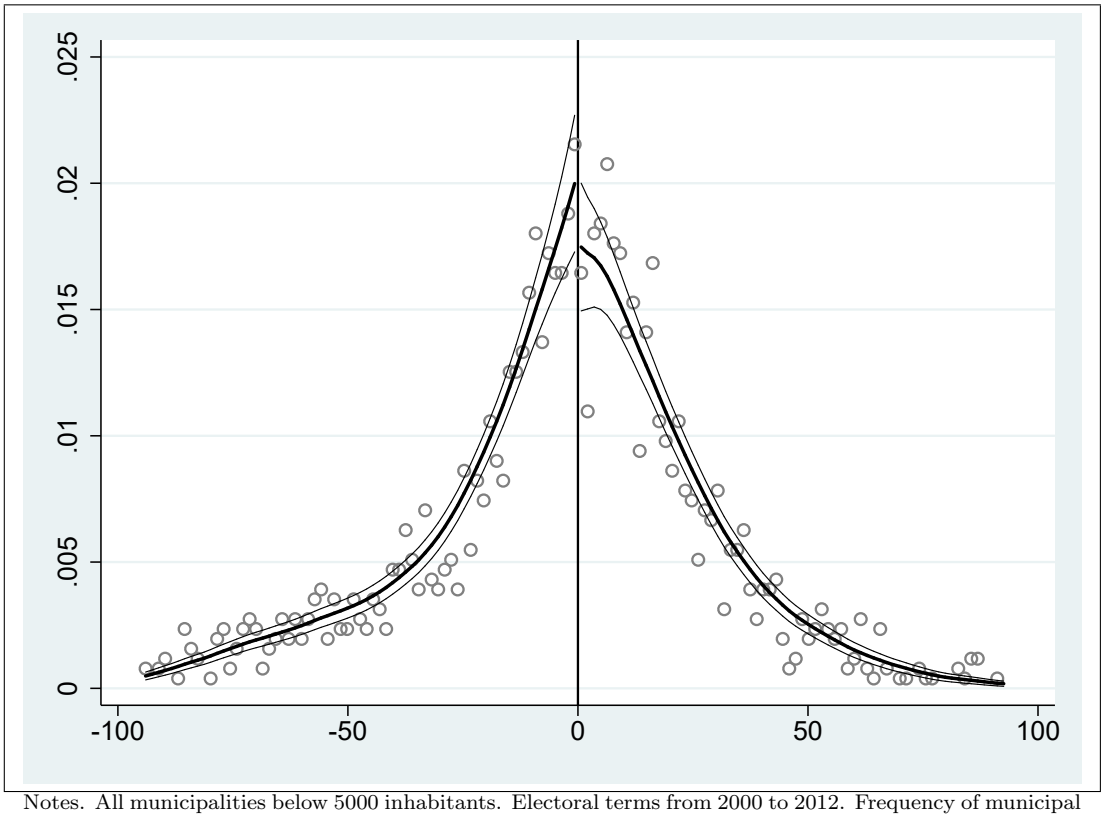
Notes. All municipalities below 5000 inhabitants. Electoral terms from 2000 to 2012. Frequency of municipal elections between 2000 and 2012. $MV_{it} > 0$ when the winning candidate is from a national party, $MV_{it} < 0$ when the winning candidate is independent.

Figure 4: McCrary (2008) Test



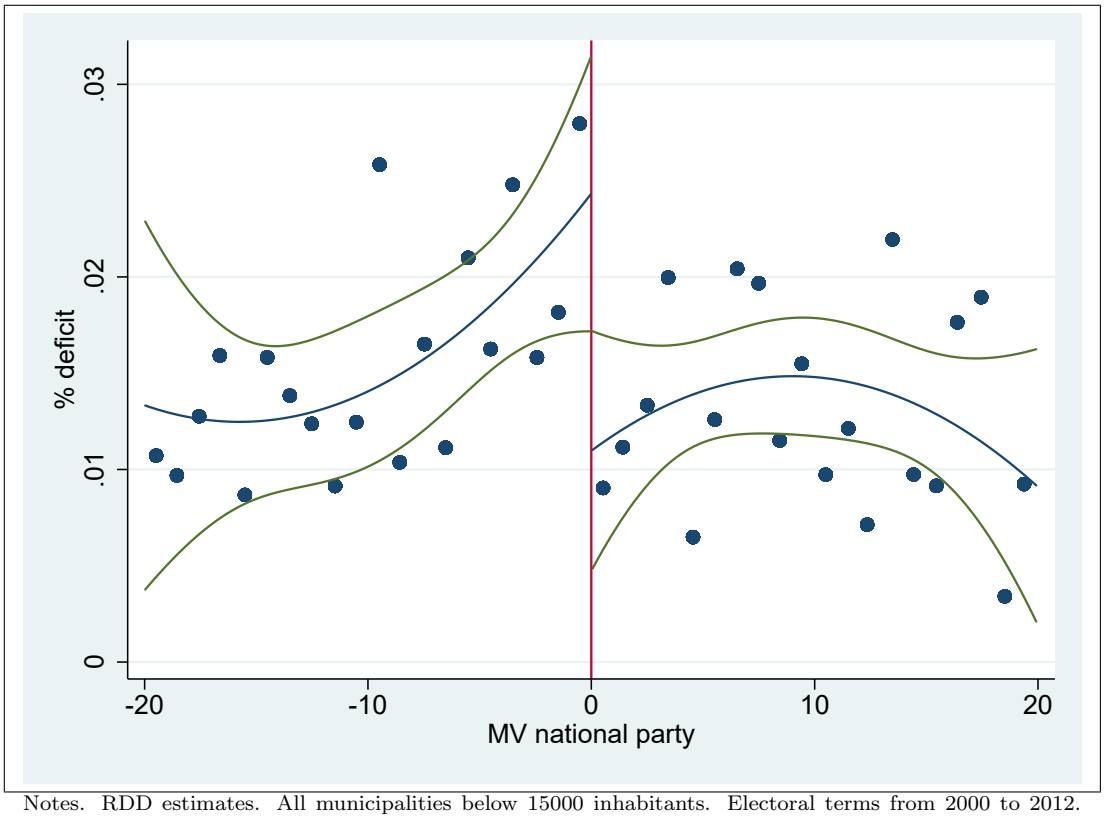
Notes. All municipalities below 15000 inhabitants. Electoral terms from 2000 to 2012. Frequency of municipal elections between 2000 and 2012. $MV_{it} > 0$ when the winning candidate is from a national party, $MV_{it} < 0$ when the winning candidate is independent. Discontinuity estimate: point estimate -0.096, standard error 0.086 and t-statistic -1.122.

Figure 5: McCrary (2008) Test
Municipalities below 5000



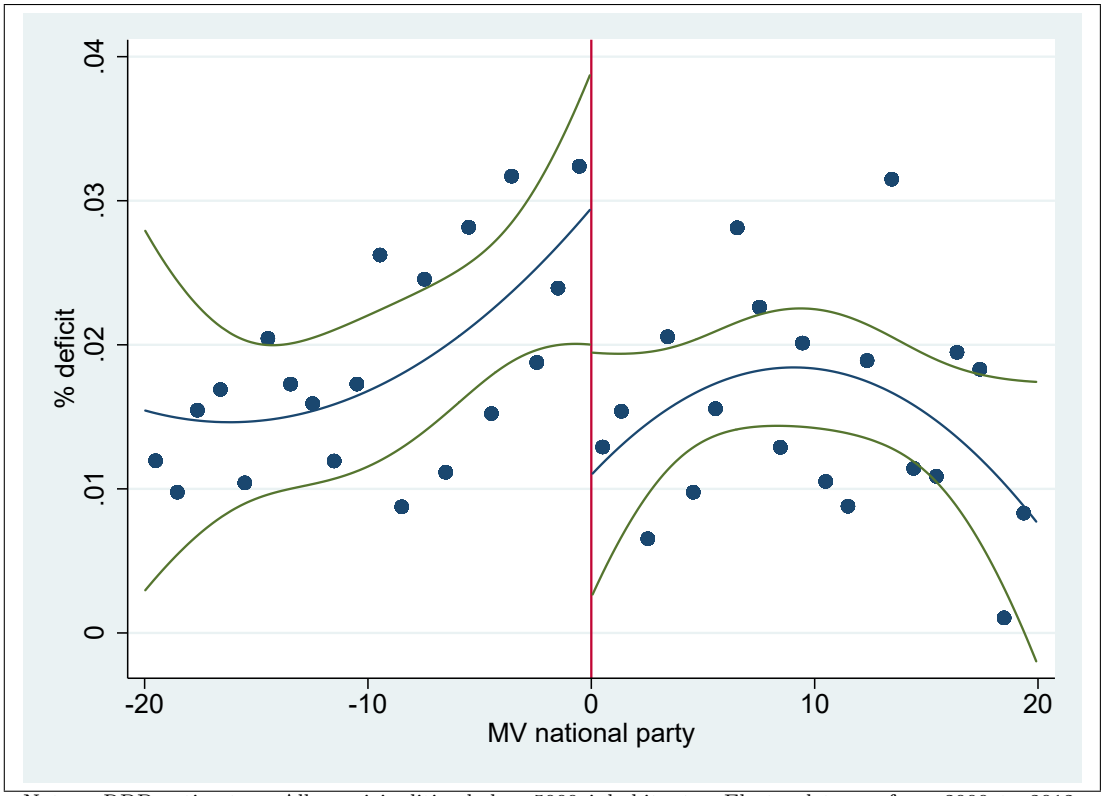
Notes. All municipalities below 5000 inhabitants. Electoral terms from 2000 to 2012. Frequency of municipal elections between 2000 and 2012. $MV_{it} > 0$ when the winning candidate is from a national party, $MV_{it} < 0$ when the winning candidate is independent. Discontinuity estimate: point estimate -0.149, standard error 0.107 and t-statistic -1.396.

Figure 6: The effect of national party on fiscal discipline



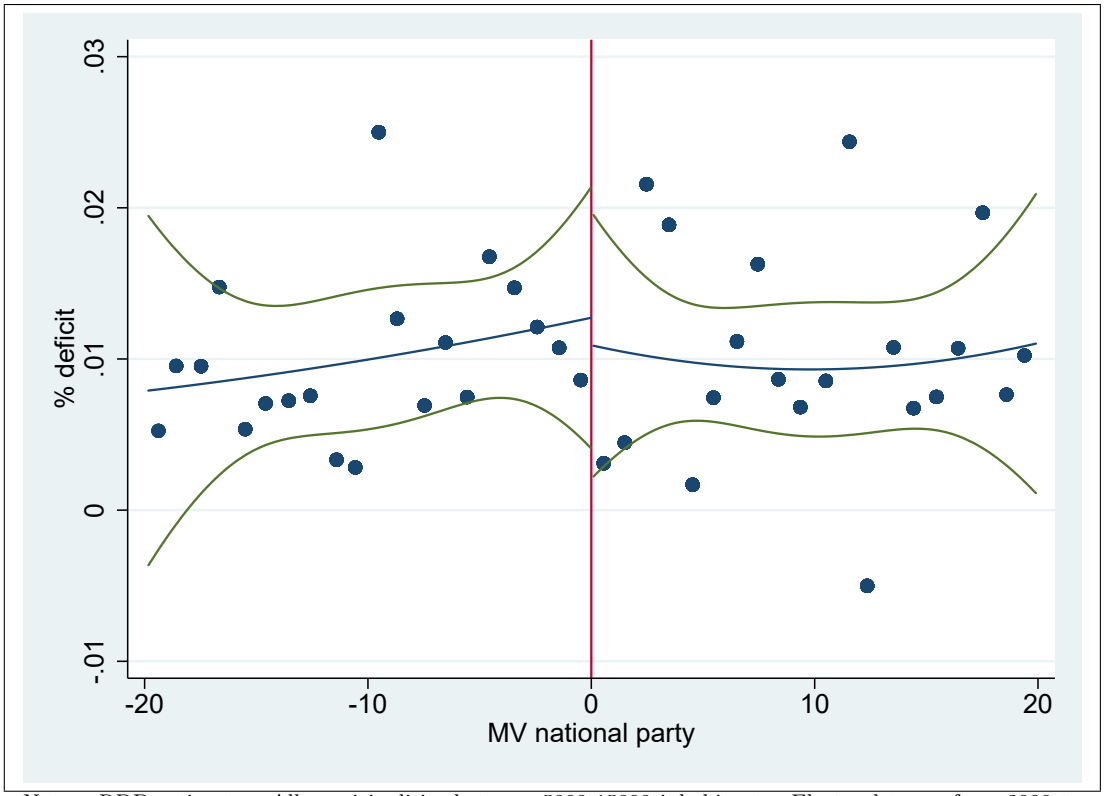
Notes. RDD estimates. All municipalities below 15000 inhabitants. Electoral terms from 2000 to 2012. Horizontal axis: margin of victory in mixed electoral competitions between party-affiliated mayors and independent ones. Vertical axis: average deficit as a fraction of total municipal revenues. Scatter points are averaged over bins of 1 % of the margin of victory. The central blue line represents a split second-order polynomial of the outcome variable in the margin of victory, fitted separately on each side of the threshold. The green lines represent the 95 percent confidence interval.

Figure 7: The effect of national party on fiscal discipline
Municipalities below 5000



Notes. RDD estimates. All municipalities below 5000 inhabitants. Electoral terms from 2000 to 2012. Horizontal axis: margin of victory in mixed electoral competitions between party-affiliated mayors and independent ones. Vertical axis: average deficit as a fraction of total municipal revenues. Scatter points are averaged over bins of 1 % of the margin of victory. The central blue line represents a split second-order polynomial of the outcome variable in the margin of victory, fitted separately on each side of the threshold. The green lines represent the 95 percent confidence interval.

Figure 8: The effect of national party on fiscal discipline
Municipalities above 5000



Notes. RDD estimates. All municipalities between 5000-15000 inhabitants. Electoral terms from 2000 to 2012. Horizontal axis: margin of victory in mixed electoral competitions between party-affiliated mayors and independent ones. Vertical axis: average deficit as a fraction of total municipal revenues. Scatter points are averaged over bins of 1 % of the margin of victory. The central blue line represents a split second-order polynomial of the outcome variable in the margin of victory, fitted separately on each side of the threshold. The green lines represent the 95 percent confidence interval.

Appendix

The Appendix provides the following additional results and robustness checks, which are described in the paper:

- Table A1: Party labels: Party-affiliated vs. Independent mayors
- Table A2: Variables definition and sources
- Table A3: Discontinuities in municipal and mayoral characteristics, RDD estimates, municipalities below 5000
- Table A4: The effect of national party on debt, expenditures and revenues, RDD estimates, Quadratic polynomial
- Table A5: The effect of national party on debt, expenditures and revenues, RDD estimates, Cubic polynomial
- Table A6: Drop years 2005-2006, RDD estimates, Municipalities below 5000
- Table A7: Municipalities below 5000 affected by fiscal rules
- Table A8: Control for provincial fixed effects, RDD estimates, Municipalities below 5000
- Table A9: The effect of national party on political career, RDD estimates, Quadratic polynomial
- Table A10: The effect of national party on political career, RDD estimates, Cubic polynomial
- Table A11: The role of political orientation and alignment, RDD estimates, Municipalities below 5000

- Table A12: The role of criminal organizations, RDD estimates, Municipalities below 5000
- Table A13: The role of municipalities unions, RDD estimates
- Table A14: OLS analysis, all municipalities below 5000

Table A1: Party labels: Party-affiliated vs. Independent mayors

Center-left	N.	Center-right	N.	Independents	N.
A.P. UDEUR	1	ALLEANZA NAZIONALE	10	ALLEANZA	2
CEN-SIN(CONTR.UFF.)	31	AN - P.SEGNI	1	ALLEANZA DEMOCRATICA	1
CEN-SIN(LS.CIVICHE)	516	CASA DELLE LIBERTA'	27	CITTADINI	1
CIVICA MARGHERITA	1	CCD	1	CIVITAS	1
DEMOCRATICI SINISTRA	22	CDL	5	CON LA GENTE	1
DL.LA MARGHERITA	13	CEN-DES(CONTR.UFF.)	47	CRESCERE	1
DS	2	CEN-DES(LS.CIVICHE)	179	DEMOCR.PROGRESSO	1
L'ULIVO	26	CENTRO	61	DEMOCRATICI POPOLARI	1
L'ULIVO — PARTITO DEMOCRATICO	1	DESTRA	1	IMPEGNO CIVICO	1
L'UNIONE	11	FORZA ITALIA	14	IND	16
LA MARG.	1	IL POPOLO DELLA LIBERTA'	30	INSIEME	16
LA MARGHERITA	6	IL POPOLO DELLA LIBERTA' - ALTRI	6	LA CITTA' APERTA	1
MARGHERITA	3	IL POPOLO DELLA LIBERTA' - LEGA NORD	124	LISTA CIVICA	1327
P.POPOLARE ITALIANO	2	LEGA LOMB-LEGA NORD	1	LISTA CONVENZIONALE	1
PARTITO DEMOCRATICO	47	LEGA NORD	124	LISTE CIVICHE	1
PARTITO DEMOCRATICO - CIVICA	3	LEGA NORD-ALTRE	17	ORIZZONTI NUOVI	1
PARTITO SOCIALISTA	2	LEGA NORD-CIVICHE	43	PATTO	1
PDS	2	LEGA PADANA LOMBARDIA - ALTRI	1	PATTO CITTA'	1
PPI (POP)	3	LG.NORD-LG.VENETA	3	PRIMAVERA	1
RIFONDAZIONE COMUNISTA	2	NO EURO	1	PROGETTO DEMOCRATICO	1
SDI	2	NUOVO PSI	1	RIN.DEMOCRATICO	1
SEL	1	P.PER LA LIBERTA'	2	RINNOVAMENTO	3
SINISTRA	13	PARTITO DELLA LIBERTA'	1	SOLIDARIETA'	2
SINISTRA DEMOCRATICA	1	PDL	5	UDR	1
U.D.EUR	2	PDL - UNIONE DI CENTRO	4	UN.POP.	2
UNITI NELL'ULIVO	2	UDC	10	UNIONE CIVICA	2
VERDI	1	UNIONE DI CENTRO	5	UNIONE DEMOCRATICA	1
				UNITI	1
				UNITI PER CAMBIARE	1
Total	717		724		1391

Notes. Municipalities below 15000. Mixed electoral competitions between mayors affiliated to national political parties and independent mayors. Years between 2000 and 2012. Center-left = mayors supported by a center-left national coalition or party; Centre-right = mayors supported by a center-right national coalition or party; Independents = mayors supported by local independent parties (i.e. Civic Lists).

Table A2: Variables definition and sources

Variable	Definition	Sources
	Budget outcomes	
deficit	average deficit as a fraction of total revenues	Aida PA (Bureau van Dijk)
past deficit	deficit from previous term as a fraction of total revenues	
accumulated debt	accumulated debt over the electoral term as a fraction of total revenues	
capital expenditures	capital expenditures at municipal level	
current expenditures	current expenditures at municipal level	
property and Income taxes	property + income taxes raised by the mayor	
total taxes	total municipal taxes raised by the mayor	
total transfers	current + capital transfers from higher levels of government	
	Political career outcomes	
re-run	=1 if mayor re-runs for a second term	Italian Ministry of Domestic
re-elected	=1 if mayor re-elected for a second term	Affairs (*anagrafe amministratori locali),*
candidate provincial level	=1 if mayor candidate at provincial level at any point in time after being elected mayor	Openpolis, Italian Parliament, European Parliament
candidate provincial, regional and national level	=1 if mayor candidate at provincial, regional, national levels at any point in time after being elected mayor	
	Mayoral characteristics	
term limit	= 1 if mayor is at the second term (i.e. mayor is term-limited)	Italian Ministry of Domestic
skill job	= 1 if mayor worked in a high skilled occupation in the past	Affairs (*anagrafe amministratori locali)*
postgraduate	= 1 if mayor has a college degree	
unemployed	= 1 if mayor is unemployed	
age	age of mayor	
female	= 1 if mayor is a woman	
# candidates	# candidates at municipal elections	
# council seats	# seats in the council for the mayor's coalition	
political experience	years opast political experience of mayor at any level of politics	Italian Ministry of Domestic Affairs (*anagrafe amministratori locali)* Openpolis, Italian Parliament, European Parliament
	Municipal characteristics	
daily newspapers	# non-sport daily newspapers sold for every 1000 inhabitants	Italian Statistical Office (ISTAT)
% foreign	% foreign population living in the municipality	
longitude	longitude of the municipality	
latitude	latitude of the municipality	
altitude	altitude of the municipality	
area	municipal area in square kilometers	
income	income per capita	
% college	% population with a college degree	
# firms	# firms per capita at municipal level	
elderly index	ratio of population > 65 over population < 14	
population	municipal population at the beginning of electoral term	
union	=1 for municipalities which participate to an union	Aida Pa (Bureau van Dijk)
mafia index	index for the presence of Mafia at provincial level	Calderoni (2011)
	Votes shares at national elections	
centre-right 2001	% taken by centre-right parties at municipal level (2001 national elections)	Italian Ministry of Domestic
centre-left 2001	% taken by centre-left parties at municipal level (2001 national elections)	Affairs (*archibvio storico elezioni)*
centre-right 2018	% taken by centre-right parties at municipal level (2018 national elections)	
centre-left 2018	% taken by centre-left parties at municipal level (2018 national elections)	
five Stars Movement 2018	% taken by Five Stars Movement at municipal level (2018 national elections)	

Table A3: Discontinuities in municipal and mayoral characteristics, RDD estimates
Municipalities below 5000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Municipal characteristics + past deficit								
	population	elderly index	# firms	income	% college	past deficit	centre-left	centre-right
National Party	-0.065	-0.193	0.003	-0.027	-0.002	-0.001	-0.988	-0.715
	(0.092)	(0.162)	(0.003)	(0.029)	(0.003)	(0.009)	(1.376)	(1.737)
Bandwidth	11.49	9.774	14.78	15.51	18.28	20.89	12.51	12.92
Observations	702	609	855	888	999	1,092	739	749
Panel B: Municipal characteristics								
	area	altitude	latitude	longitude	% foreign	newspapers	mafia index	# candidates
National Party	-0.038	-29.136	0.011	0.574	0.005	-4.059	0.269	-0.135
	(0.115)	(35.308)	(0.337)	(0.392)	(0.007)	(4.819)	(1.710)	(0.120)
Bandwidth	15.90	13.70	14.43	13.21	13.31	13.23	18.43	13.13
Observations	893	796	829	777	782	767	1,005	781
Panel C: Mayoral characteristics								
	female	age	postgraduate	skill job	unemployed	term limit	political experience	# seats
National Party	0.058	-0.022	-0.017	0.049	0.009	0.048	1.094	-0.111
	(0.037)	(0.029)	(0.064)	(0.058)	(0.043)	(0.047)	(0.759)	(0.207)
Bandwidth	19.74	15.21	16.09	15.25	18.70	10.87	15.75	13.11
Observations	1,056	870	914	872	1,020	669	898	780

Notes. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. All specifications include a linear control for the margin of victory of a national party on each side of the discontinuity and the optimal bandwidth. Term FE included in all columns. All municipalities below 5000 inhabitants. Electoral terms between 2000 and 2012. Definition dependent variables Panel A: pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of population > 65 over population < 14; firms = number of firms per capita at municipal level; income = log of income per capita; % college = percentage of population with a college degree; past deficit = previous electoral term average deficit as a fraction of total revenues; centre-left = votes shares taken by centre-left political parties at municipal level during 2001 national elections; centre-right = votes shares taken by centre-right political parties at municipal level during 2001 national elections. Definition dependent variables Panel B: area = log of municipal area in square kilometers; altitude = altitude of the municipality; latitude = latitude of the municipality; longitude = longitude of the municipality; % foreign = percentage of foreign population living in the municipality; newspapers = number of of non-sport daily newspapers sold for every 1000 people; mafia index = index for the presence of Mafia-style criminal organizations at the provincial level; # candidates = number of candidates at the municipal level. Definition dependent variables Panel C: female = 1 if mayor is a woman; age = log of age of mayor; postgraduate = 1 if mayor has a college degree; skill job = 1 if mayor worked in a high skilled occupation in the past; unemployed = 1 if mayor is unemployed; term limit = 1 if mayor is at the second term (i.e. mayor is term-limited); political experience = years of past political experience of the mayor at any level of politics; #seats = number of seats in the council for the mayor's coalition. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A4: The effect of national party on debt, expenditures and revenues, RDD estimates
Quadratic polynomial

	(1)	(2)	(3)
	Panel A: Debt and Expenditures		
Control Function	Quadratic	Quadratic	Quadratic
Bandwidth	$2h$	$2h$	$2h$
Covariates	Yes	Yes	Yes
Outcome	Accumulated debt	Capital expenditures	Current expenditures
National Party	-0.087**	-0.210**	-0.033
	(0.036)	(0.091)	(0.033)
Bandwidth	19.52	19.52	19.52
Observations	1,092	1,692	1,692
	Panel B: Revenues		
Control Function	Quadratic	Quadratic	Quadratic
Bandwidth	$2h$	$2h$	$2h$
Covariates	Yes	Yes	Yes
Outcome	Total transfers	Total taxes	Property and income taxes
National Party	-0.048	-0.082*	-0.093**
	(0.074)	(0.043)	(0.047)
Bandwidth	19.52	19.52	19.52
Observations	1,692	1,692	1,692

Notes. All municipalities below 15000 inhabitants. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in all columns. Definition dependent variables Panel A: Accumulated debt = summation of yearly deficits/surpluses produced during the electoral term as a fraction of total revenues; Capital expenditures = log of capital expenditures per capita; Current expenditures = log of current expenditures per capita. Definition dependent variables Panel B: Total transfers = log of current + capital transfers from higher levels of government; Total taxes = log of total municipal taxes raised by the mayor; Property and income taxes = log of property + income taxes raised by the mayor. Covariates included in columns (1)-(3): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A5: The effect of national party on debt, expenditures and revenues, RDD estimates
Cubic polynomial

	(1)	(2)	(3)
	Panel A: Debt and Expenditures		
Control Function	Cubic	Cubic	Cubic
Bandwidth	$2h$	$2h$	$2h$
Covariates	Yes	Yes	Yes
Outcome	Accumulated debt	Capital expenditures	Current expenditures
National Party	-0.124**	-0.304**	-0.055
	(0.051)	(0.120)	(0.043)
Bandwidth	19.52	19.52	19.52
Observations	1,092	1,692	1,692
	Panel B: Revenues		
Control Function	Cubic	Cubic	Cubic
Bandwidth	$2h$	$2h$	$2h$
Covariates	Yes	Yes	Yes
Outcome	Total transfers	Total taxes	Property and income taxes
National Party	-0.132	-0.148***	-0.154**
	(0.096)	(0.056)	(0.063)
Bandwidth	19.52	19.52	19.52
Observations	1,692	1,692	1,692

Notes. All municipalities below 15000 inhabitants. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in all columns. Definition dependent variables Panel A: Accumulated debt = summation of yearly deficits/surpluses produced during the electoral term as a fraction of total revenues; Capital expenditures = log of capital expenditures per capita; Current expenditures = log of current expenditures per capita. Definition dependent variables Panel B: Total transfers = log of current + capital transfers from higher levels of government; Total taxes = log of total municipal taxes raised by the mayor; Property and income taxes = log of property + income taxes raised by the mayor. Covariates included in columns (1)-(3): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A6: Drop years 2005-2006
Municipalities below 5000

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: Average deficit as a fraction of total revenues						
Control Function	Linear	Linear	Linear	Linear	Quadratic	Cubic
Bandwidth	h	h	h	$h/2$	$2h$	$2h$
Municipal covariates	No	Yes	Yes	Yes	Yes	Yes
Mayoral covariates	No	No	Yes	No	No	No
National Party	-0.017**	-0.016***	-0.016***	-0.027***	-0.016**	-0.025***
	(0.007)	(0.006)	(0.006)	(0.009)	(0.007)	(0.009)
Outcome mean	0.021	0.021	0.021	0.025	0.019	0.019
Bandwidth	13.34	13.34	13.34	6.671	26.68	26.68
Observations	790	790	790	418	1,240	1,240

Notes. Municipalities below 5000 inhabitants (i.e. municipalities not constrained by fiscal rules). Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Regional and term FE included in all columns except column (1). Municipal covariates included in columns (2)-(6): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Mayoral covariates included in column (3): female = 1 if mayor is a woman; age = log of age of mayor; postgraduate = 1 if mayor has a college degree; skill job = 1 if mayor worked in a high skilled occupation in the past; unemployed = 1 if mayor is unemployed; term limit = 1 if mayor is at the second term (i.e. mayor is term-limited); political experience = years of past political experience of the mayor at any level of politics. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A7: Municipalities below 5000 affected by fiscal rules

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: Average deficit as a fraction of total revenues						
Control Function	Linear	Linear	Linear	Linear	Quadratic	Cubic
Bandwidth	h	h	h	$h/2$	$2h$	$2h$
Municipal covariates	No	Yes	Yes	Yes	Yes	Yes
Mayoral covariates	No	No	Yes	No	No	No
National Party	0.002	0.002	0.001	-0.000	0.002	-0.000
	(0.011)	(0.010)	(0.011)	(0.015)	(0.011)	(0.017)
Outcome mean	0.003	0.003	0.005	0.004	0.001	0.001
Bandwidth	21.66	21.66	21.66	10.83	43.32	43.32
Observations	1,075	1,075	963	615	1,573	1,573

Notes. Municipalities below 5000 inhabitants. Data averaged at electoral term level using observations from years 2000, 2013, 2014, and 2015 (i.e. years during which municipalities below 5000 are constrained by fiscal rules). Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Regional and term FE included in all columns except column (1). Municipal covariates included in columns (2)-(6): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Mayoral covariates included in column (3): female = 1 if mayor is a woman; age = log of age of mayor; postgraduate = 1 if mayor has a college degree; skill job = 1 if mayor worked in a high skilled occupation in the past; unemployed = 1 if mayor is unemployed; term limit = 1 if mayor is at the second term (i.e. mayor is term-limited); political experience = years of past political experience of the mayor at any level of politics. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A8: Control for provincial fixed effects
Municipalities below 5000

	(1)	(2)	(3)	(4)	(5)	(6)
Outcome: Average deficit as a fraction of total revenues						
Control Function	Linear	Linear	Linear	Linear	Quadratic	Cubic
Bandwidth	h	h	h	$h/2$	$2h$	$2h$
Municipal covariates	No	Yes	Yes	Yes	Yes	Yes
Mayoral covariates	No	No	Yes	No	No	No
National Party	-0.015**	-0.014**	-0.014**	-0.020**	-0.014**	-0.016*
	(0.006)	(0.006)	(0.005)	(0.009)	(0.006)	(0.009)
Outcome mean	0.021	0.021	0.021	0.024	0.019	0.019
Bandwidth	13.56	13.56	13.56	6.781	27.12	27.12
Observations	796	796	796	424	1,251	1,251

Notes. Municipalities below 5000 inhabitants (i.e. municipalities not constrained by fiscal rules). Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Provincial and term FE included in all columns except column (1). Municipal covariates included in columns (2)-(6): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Mayoral covariates included in column (3): female = 1 if mayor is a woman; age = log of age of mayor; postgraduate = 1 if mayor has a college degree; skill job = 1 if mayor worked in a high skilled occupation in the past; unemployed = 1 if mayor is unemployed; term limit = 1 if mayor is at the second term (i.e. mayor is term-limited); political experience = years of past political experience of the mayor at any level of politics. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A9: The effect of national party on political career, RDD estimates
Quadratic polynomial

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Outcome	=1 if mayor re-run	=1 if mayor re-run	=1 if mayor re-elected	=1 if mayor re-elected	=1 candidate provincial level	=1 candidate provincial level	=1 candidate higher level	=1 candidate higher level
Control Function	Quadratic	Quadratic	Quadratic	Quadratic	Quadratic	Quadratic	Quadratic	Quadratic
Bandwidth	$2h$	$2h$	$2h$	$2h$	$2h$	$2h$	$2h$	$2h$
Municipal covariates	No	Yes	No	Yes	No	Yes	No	Yes
Panel A: municipalities below 5000 inhabitants								
National Party	0.073	0.043	0.207**	0.186*	0.137***	0.101**	0.092*	0.055
	(0.095)	(0.094)	(0.102)	(0.104)	(0.050)	(0.047)	(0.054)	(0.052)
Outcome mean	0.603	0.603	0.439	0.439	0.105	0.105	0.184	0.184
Bandwidth	27.92	27.92	23.60	23.60	27.55	27.55	35.71	35.71
Observations	656	656	615	615	1,256	1,256	1,416	1,416
Panel A: municipalities above 5000 inhabitants								
National Party	-0.076	-0.141	0.037	-0.047	0.007	-0.019	-0.012	-0.038
	(0.145)	(0.155)	(0.152)	(0.153)	(0.062)	(0.061)	(0.078)	(0.077)
Outcome mean	0.778	0.778	0.476	0.476	0.120	0.120	0.260	0.260
Bandwidth	22.14	22.14	18.91	18.91	32.06	32.06	30.73	30.73
Observations	326	326	297	297	849	849	830	830

Notes. Municipalities below 5000 inhabitants (i.e. municipalities not constrained by fiscal rules) in Panel A, municipalities between 5000 and 15000 inhabitants (i.e. municipalities constrained by fiscal rules) in Panel B. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Dependent variable in columns (1)-(2): =1 if mayor re-runs for a second term in the same municipality. Dependent variable in columns (3)-(4): =1 if mayor re-elected for a second term in the same municipality. Dependent variable in columns (5)-(6): =1 if mayor candidate at the provincial level of government at any point in time after being elected mayor. Dependent variable in columns (7)-(8): =1 if mayor candidate at provincial, regional or national levels of government at any point in time after being elected mayor. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Term and Region FE included in columns (2), (4), (6) and (8). Municipal covariates included in columns (2), (4), (6) and (8): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A10: The effect of national party on political career, RDD estimates
Cubic polynomial

Outcome	(1) =1 if mayor re-run	(2) =1 if mayor re-run	(3) =1 if mayor re-elected	(4) =1 if mayor re-elected	(5) =1 candidate provincial level	(6) =1 candidate provincial level	(7) =1 candidate higher level	(8) =1 candidate higher level
Control Function	Cubic	Cubic	Cubic	Cubic	Cubic	Cubic	Cubic	Cubic
Bandwidth	$2h$	$2h$	$2h$	$2h$	$2h$	$2h$	$2h$	$2h$
Municipal covariates	No	Yes	No	Yes	No	Yes	No	Yes
Panel A: municipalities below 5000 inhabitants								
National Party	0.193	0.171	0.225*	0.197	0.220***	0.188***	0.105	0.069
	(0.122)	(0.120)	(0.134)	(0.135)	(0.069)	(0.063)	(0.073)	(0.071)
Outcome mean	0.603	0.603	0.439	0.439	0.105	0.105	0.184	0.184
Bandwidth	27.92	27.92	23.60	23.60	27.55	27.55	35.71	35.71
Observations	656	656	615	615	1,256	1,256	1,416	1,416
Panel A: municipalities above 5000 inhabitants								
National Party	-0.074	-0.138	0.050	-0.078	0.045	-0.000	-0.037	-0.098
	(0.192)	(0.208)	(0.202)	(0.202)	(0.084)	(0.082)	(0.105)	(0.099)
Outcome mean	0.778	0.778	0.476	0.476	0.120	0.120	0.260	0.260
Bandwidth	22.14	22.14	18.91	18.91	32.06	32.06	30.73	30.73
Observations	326	326	297	297	849	849	830	830

Notes. Municipalities below 5000 inhabitants (i.e. municipalities not constrained by fiscal rules) in Panel A, municipalities between 5000 and 15000 inhabitants (i.e. municipalities constrained by fiscal rules) in Panel B. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Dependent variable in columns (1)-(2): =1 if mayor re-runs for a second term in the same municipality. Dependent variable in columns (3)-(4): =1 if mayor re-elected for a second term in the same municipality. Dependent variable in columns (5)-(6): =1 if mayor candidate at the provincial level of government at any point in time after being elected mayor. Dependent variable in columns (7)-(8): =1 if mayor candidate at provincial, regional or national levels of government at any point in time after being elected mayor. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Term and Region FE included in columns (2), (4), (6) and (8). Municipal covariates included in columns (2), (4), (6) and (8): pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A11: The role of political orientation and alignment
Municipalities below 5000

	(1)	(2)	(3)	(4)
Outcome: Average deficit as a fraction of total revenues				
Control Function	Linear	Linear	Linear	Linear
Bandwidth	h	h	$h/2$	$h/2$
Covariates	Yes	Yes	Yes	Yes
Panel A: political orientation				
Sample	Center-left Party		Center-left Party	
	No	Yes	No	Yes
National Party	-0.016**	-0.016**	-0.018	-0.038***
	(0.008)	(0.007)	(0.014)	(0.012)
Outcome mean	0.025	0.015	0.029	0.017
Bandwidth	13.56	13.56	6.781	6.781
Observations	448	348	235	189
Panel B: alignment				
Sample	Aligned Party		Aligned Party	
	No	Yes	No	Yes
National Party	-0.011	-0.011*	-0.031**	-0.019**
	(0.009)	(0.006)	(0.015)	(0.008)
Outcome mean	0.019	0.018	0.021	0.020
Bandwidth	13.56	13.56	6.781	6.781
Observations	523	661	286	356

Notes. Municipalities below 5000 (i.e. municipalities not constrained by fiscal rules). Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Description of sample: Panel A: Left Party: No = mixed electoral competition between a right-wing party-affiliated mayor vs. an independent mayor; Yes = mixed electoral competition between a left-wing party-affiliated mayor vs. an independent mayor. Panel B: Aligned Party: No = mixed electoral competition between a party-affiliated mayor who is not aligned with central government vs. an independent mayor; Yes = mixed electoral competition between a party-affiliated mayor who is aligned with central government vs. an independent mayor. Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in all columns. Municipal covariates included in all columns: pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A12: The role of criminal organizations:
Municipalities below 5000

	(1)	(2)	(3)	(4)
Outcome: Average deficit as a fraction of total revenues				
Control Function	Linear	Linear	Linear	Linear
Bandwidth	h	h	$h/2$	$h/2$
Covariates	Yes	Yes	Yes	Yes
Sample	Mafia index>median		Mafia index>median	
	No	Yes	No	Yes
National Party	-0.020***	-0.012	-0.017*	-0.028**
	(0.007)	(0.008)	(0.009)	(0.013)
Outcome mean	0.024	0.018	0.028	0.021
Bandwidth	13.56	13.56	6.781	6.781
Observations	350	446	183	241

Notes. Municipalities below 5000 (i.e. municipalities not constrained by fiscal rules). Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Description of sample: Mafia index>median = No if a municipality is located in a province with a low presence of Mafia-style criminal organizations. Mafia index>median = Yes if a municipality is located in a province with a high presence of Mafia-style criminal organizations. The mafia index comes from Calderoni (2011). Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Region and term FE included in all columns. Municipal covariates included in all columns: pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A13: The role of municipalities unions, RDD estimates

	(1)	(2)	(3)
Outcome	Average deficit as a fraction of total revenues		=1 if municipality is part of an union
Control Function	Linear	Linear	Linear
Bandwidth	h	h	h
Municipal covariates	No	No	No
Panel A: municipalities below 15000 inhabitants			
National Party	-0.011**	-0.011**	0.018
	(0.005)	(0.005)	(0.035)
Union		-0.008***	
		(0.003)	
Outcome mean	0.019	0.019	0.112
Bandwidth	9.762	9.762	12.47
Observations	991	991	1,220
Panel B: municipalities below 5000 inhabitants			
National Party	-0.015**	-0.015**	0.056
	(0.006)	(0.006)	(0.037)
Union		-0.003	
		(0.003)	
Outcome mean	0.021	0.021	0.087
Bandwidth	13.56	13.56	13.36
Observations	796	796	791

Notes. Municipalities below 15000 inhabitants in Panel A, municipalities below 5000 inhabitants in Panel B. Electoral terms between 2000 and 2012. Estimation by RDD-LLR using the Calonico, Cattaneo, and Titiunik (2014a, 2014b) optimal bandwidth h selector. Treatment variables: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party; Union is a dummy variable =1 for municipalities which participate to an union of municipalities. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.

Table A14: OLS analysis, all municipalities below 5000

	(1)	(2)	(3)
Outcome	*Average deficit as a fraction of total revenues*		
Year fixed effects	Yes	Yes	Yes
Municipal fixed effects	Yes	Yes	Yes
Municipal covariates	Yes	Yes	Yes
Mayoral covariates	Yes	Yes	Yes
Sample	All municipalities	First term mayors	Second term mayors
National Party	0.001	-0.005*	0.004
	(0.004)	(0.003)	(0.005)
Outcome mean	0.019	0.019	0.019
Observations	47,873	34,027	13,846

Notes. Municipalities below 5000 inhabitants. Electoral terms between 2000 and 2012. Estimation by OLS. Sample: Column (1): all municipalities; column (2): first term mayors (i.e. mayors who can be re-elected for a second term); column 3: second term mayors (i.e. mayors who are term limited). Treatment variable: *National Party* is a dummy variable =1 if the mayor is affiliated to a national political party. Municipal and year fixed effects in all columns. Municipal covariates included in all columns: pop = log of municipal population at the beginning of the electoral term; elderly index = ratio of municipal population above 65; income = log of income per capita. Mayoral covariates included in all columns: female = 1 if mayor is a woman; age = log of age of mayor; postgraduate = 1 if mayor has a college degree; skill job = 1 if mayor worked in a high skilled occupation in the past; unemployed = 1 if mayor is unemployed; term limit = 1 if mayor is at the second term (i.e. mayor is term-limited); political experience = years of past political experience of the mayor at any level of politics. Robust standard errors clustered at the municipality level are in parentheses. Significance at the 10% level is represented by *, at the 5% level by **, and at the 1% level by ***.