How Family Undermines Accountability: Evidence from Italy

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Abstract

The concept of electoral accountability is foundational to democratic systems. But can family ties undermine this core mechanism? While previous research has shown how factors like electoral competition, polarization, and access to information shape accountability, it has often overlooked the impact of politicians' connections and familial ties. We argue that politicians embedded in large family networks benefit from unconditional electoral support from their relatives, reducing their incentive to perform well in office. Employing a two-way fixed effects model and a regression discontinuity design in Italian municipal elections from 2000 to 2020, we find that having a mayor from a large family leads to poorer economic performance; nonetheless, despite this underperformance, such mayors do not face negative electoral consequences. These findings reveal how family ties can alter politicians' incentives to perform and undermine accountability in democratic systems.

1 Introduction

Across the globe, families play a foundational role in political life (Alesina and Giuliano 2011). In many democracies, the household often acts as the primary unit of political socialization, shaping individuals' values, identities, and political preferences from an early age (Niemi and Jennings 1991). Electoral choices frequently reflect patterns of loyalty, obligation, or trust rooted in kinship (Key Jr 1949, Tatalovich 1975). Previous literature established that relying on family networks is an equilibrium strategy for both candidates and voters, with politicians from sizable and central families usually obtaining higher vote shares due to the support of their relatives (Cruz et al. 2017, Ravanilla et al. 2022).

Unlike other forms of political support, family-based backing is often unconditional, rooted in loyalty and shared identity rather than performance or policy alignment (Banfield 1958, Granovetter 1973). But does such unconditional support change politicians' incentives to perform once in office? If yes, does kin-based support insulate politicians from electoral accountability?

In this article, we propose that politicians' incentives to perform well are shaped by the size of their family network. When surrounded by a large and loyal network of relatives, politicians enjoy a reliable voting bloc that reduces their dependence on broader public support. This dynamic weakens the accountability mechanism that should discipline poor performance. Since politicians from large families know their family members will support them unconditionally, they face less risk of electoral punishment and have weaker incentives to perform well in office.

To test the intuition, we study the case of Italian mayors elected between the years 2000 and 2020. Exploiting a novel dataset of phone directories, we build a within-municipality last name distribution for the entire country. We then use the proportion of individuals who share a mayor's last name in the municipal phone directory as a proxy for the size of their family network. The median value of the variable is 0.8%, indicating that family ties are generally limited. However, the upper tail of the distribution reveals

cases in which mayors share their last name with up to 20% of residents listed in the phone directory, suggesting the presence of extremely dense family networks and the potential for kin-based vote blocs in some municipalities.

We find that mayors embedded in larger family networks exhibit significantly worse economic performance. To detect the effect, we implement two analyses. We start by modeling the relationship between economic performance and the mayor's family size, measured as the proportion of residents who share the mayor's last name, using a TWFE model. We measure economic performance using three key indicators: the municipality's ability to attract EU funds, the average debt repaid during the term, and the average debt accumulated during the term. The results show that mayors from larger families attract fewer EU funds, repay less debt, and accumulate more debt. The effect is concentrated in the upper tail of the distribution, strengthening when the mayor's share of relatives exceeds the 95th percentile of the distribution.

One concern with this approach is that a mayor's success depends on many observable and unobservable features of a municipality, which may also affect local economic performance. To address this concern and better isolate the effect of family ties, we implement a Politician-Characteristic Regression Discontinuity (PCRD) design. The PCRD leverages close elections to compare municipalities where a large-family candidate[1] barely wins to those where a large-family candidate barely loses, providing causal estimates of family networks' impact. The results consistently show that larger family networks reduce mayors' performance, although the effect for debt accumulation is close to zero.

In a fully accountable system, poor performance should reduce a politician's chance of reelection. We therefore test whether a mayor's family size affects their probability of reelection. The results show that mayors from larger families are not less likely to be reelected despite poor performance, suggesting that kin-based loyalty insulates them from electoral punishment.

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[1]The definition of "small" and "large" requires a judgment call on the threshold after which a family is considered "large". More details on this choice are in Section 4.

But what explains the unconditional electoral support that candidates receive from their relatives?

We propose two non-mutually exclusive mechanisms. First, a valence-based advantage: voters may feel a personal connection and loyalty to their relatives, which can lead them to vote based on familial ties rather than solely on performance. Second, a clientelistic channel: large family networks may facilitate reciprocal exchanges, where politicians reward family members with targeted benefits in return for political loyalty. To evaluate the clientelistic channel, we combine geocoded data on the addresses of mayors' relatives with granular records on municipal spending for local street improvements. We find no evidence that mayors from large families systematically direct more public resources to areas where their relatives live, suggesting that while family-based loyalty plays a central role in weakening accountability, it is not necessarily maintained through targeted distributive favoritism.

This paper contributes to three strands of literature. First, this paper contributes to the growing literature on family networks and political dynasties. Most existing research conceptualizes political dynasties as cases in which candidates are directly related to individuals who previously held elected office - typically focusing on intergenerational transmission of political capital and name recognition (Feinstein 2010, Geys 2017, George and Ponattu 2019). These studies have enriched our understanding of political dynasties and elite persistence, focusing primarily on whether family ties facilitate entry into politics (Dal Bó et al. 2009, Folke et al. 2021, Fiva and Smith 2018). By contrast, rather than focusing on legacy or lineage to previous politicians, we emphasize how family density creates a form of electoral insulation and facilitates a different incentive structure - one that weakens accountability by reducing dependence on broader voter approval.

Second, this work contributes to the literature that studies the effect of politicians' connections to different members of civil society. Scholars have focused on the relations of local politicians with religious authorities (Pulejo 2022), local firms (Amore and Bennedsen 2013, Bertrand et al. 2018), and upper-level politicians (Brassiolo et al. 2020).

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Among the various relationships that influence politicians, family ties stand out as the most enduring and personal. Previous studies on the impact of family in politics have mostly focused on the electoral side of this connection, proving that candidates for public office are disproportionately drawn from more central families (Cruz et al. 2017, Ravanilla et al. 2022). Our results complement this work by showing how family connections can shape politicians' performance incentives once in office.

Finally, this paper contributes to the literature on electoral accountability in democratic systems (Dahl and Polyarchy 1971, Chappell Jr and Keech 1985, O'Donnell 1998). More recent work shows how accountability can be weakened even in advanced democracies through factors like polarization, institutional design, or machine politics (Schiff et al. 2025, Iyengar et al. 2019, Pierson and Schickler 2020, Graham and Svolik 2020, Trounstine 2006). Yet this literature has largely overlooked the role of social connections and bloc of votes in shaping the incentives politicians face. We contribute to the literature by adding a novel perspective on the elements that can undermine electoral accountability in democratic systems.

The remainder of the paper is organized as follows. Section 2 presents the theoretical framework, outlining how kinship ties may distort electoral accountability through both valence-based support and clientelistic mechanisms. Section 3 describes the institutional context of Italian municipal politics. Section 4 introduces the data sources and construction of the main variables. Section 5 outlines the empirical strategy, combining a two-way fixed effects model with a regression discontinuity design. Section 6 presents the main results on the relationship between family ties and economic performance. Section 7 examines how family networks shape reelection probabilities, while Section 8 investigates whether mayors engage in clientelistic behavior by allocating resources to their relatives. Section 9 concludes by discussing the broader implications for democratic accountability and avenues for future research.

2 Family Ties and Electoral Support

2.1 Effort, Performance and Kinship

A long-standing tradition in political science emphasizes that politicians exert effort in office to maximize their chances of reelection (Downs 1957, Barro 1973, Chappell Jr and Keech 1985). The assumption underlying most models of electoral accountability is that voters condition their support on the politician's observed performance. In turn, this performance-sensitive electoral mechanism incentivizes incumbents to exert effort and deliver competent governance.

However, in many settings, reelection does not depend solely on performance or competence. Politicians may also enjoy non-performance-based support due to personal connections (Finan and Schechter 2012), partisan identity (Achen and Bartels 2017), or social networks (Cruz et al. 2017). In this study, we focus on one particularly unconditional source of support: kinship ties. Families, unlike most political coalitions, are stable over time and rooted in obligation, trust, and loyalty (Banfield 1958, Ravanilla et al. 2022). Families can act as electoral machines - what the literature has described as vote blocs (Grimmer et al. 2025) - delivering turnout, loyalty, and electoral support in ways that differ fundamentally from performance-based political support.

Similar patterns of group-based voting behavior have been documented in a range of contexts, including ethnic (Chandra 2007), religious (Ravanilla 2024), and criminal groups (Trudeau 2024). In each case, shared identity or affiliation can lead to coordinated electoral support. Families may operate in a comparable fashion, delivering votes collectively. However, unlike these other forms of group alignment, family ties are uniquely personal, offering a source of electoral support that is more stable and unconditional.

We then argue that a politician's probability of reelection can be decomposed into two components. One is performance-based, which reflects the share of voters who evaluate the incumbent based on observable outcomes like fiscal responsibility, debt reduction, or effective use of public funds. The other is performance-insensitive, composed

of voters who offer support regardless of how the politician performs. In our setting, this second component consists of relatives and kin who vote out of loyalty rather than evaluation.
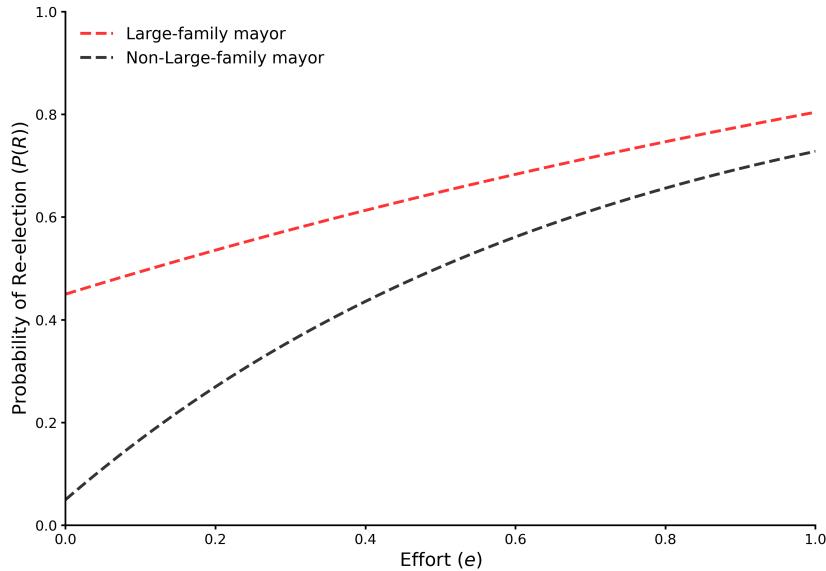
The central insight of our framework is that this kin-based vote bloc reduces the electoral returns to effort. Politicians embedded in large family networks know that part of their reelection chances is effectively guaranteed. The greater the share of loyal votes a politician can count on (i.e. their family vote bloc), the less they need to exert effort to attract additional support from the broader electorate. In other words, the marginal benefit of good performance declines as the size of the loyal vote bloc increases.

This framework leads to two testable hypotheses. First, mayors embedded in large family networks will, on average, perform worse in office, repaying less debt, attracting fewer EU funds, and accumulating more liabilities, because they face weaker incentives to exert effort. Second, these same mayors will be no less likely to be reelected despite their underperformance, as kin-based support insulates them from the accountability pressures that typically discipline politicians in democratic settings.

To illustrate the expected relationship between family ties, politicians' effort, and the probability of reelection, consider the stylized example in Figure 1. Large-family politicians enjoy a higher intercept because they start with more guaranteed votes, but the marginal benefit of exerting effort is lower since the bloc of votes coming from the relatives is already secured, and any additional effort yields fewer new votes at the margin. Moreover, persuading non-relatives - who may distrust or resent the dominance of large families - can be more difficult. This results in a flatter slope. Conversely, non-large-family politicians have no baseline advantage and must rely entirely on performance, producing a lower intercept but a steeper slope. The figure visualizes this trade-off: politicians with extensive family ties are less incentivized to exert high effort yet maintain comparable reelection prospects because their loyal vote bloc insulates them from poor performance.

A key assumption underlying our theoretical framework is that the quality of politi-

Figure 1: Stylized Relationship Between Performance and Reelection

Notes: The plot illustrates the predicted relationship between politicians' effort and the prob-
ability of reelection under different family ties assumptions. The red dashed line represents
large-family politicians. The black dashed line shows non-large-family politicians.
The figure is illustrative and not based on estimated coefficients; numerical values are not meant
to convey empirical magnitudes.

cians from large and non-large families is held constant. In principle, one could expect
that if family networks make electoral entry easier, the average competence of large-
family politicians might be lower, and performance would then reflect both effort and
quality. However, there are reasons to believe that quality differences should be limited
in our setting. First, as shown by Landa and Duell (2015), voters' social identities can
reduce the salience of candidate competence in shaping accountability. Second, within-
family competition over who will run for office may operate similarly to party primaries,
where selection pressures favor more qualified and electorally viable candidates despite
the presence of internal loyalty networks (Hirano et al. 2014).

In Section 8 we explicitly test this possibility and find no evidence that large-family
mayors differ in observable indicators of quality—such as education, occupational back-
ground, managerial experience, or technical skills—suggesting that our results are not
driven by adverse selection but rather by differences in incentives once in office.

2.2 Sources of Loyal Support: Valence and Clientelism

What accounts for the electoral strength of candidates from large families? Our theoretical framework assumes that families provide a bloc of loyal votes, which allows large-family politicians to exert less effort while maintaining a stable probability of re-election. In this section, we explore what underlies this bloc of support. We identify two non-rival explanations: (i) a form of valence advantage rooted in family-based trust and affinity, and (ii) clientelistic dynamics facilitated by dense kin networks.

The first source of support is what we term a kin-based valence advantage. In electoral theory, valence typically refers to voters' perceptions of a candidate's general competence, trustworthiness, or connection to the community, irrespective of specific policy positions (Stokes 1963, Evrenk et al. 2018). A valence advantage can shield incumbents from being punished for underperformance once in office (Stone and Simas 2010).

We argue that candidates from large families enjoy a similar effect. Voters may feel a personal connection and sense of loyalty toward their relatives, leading them to vote out of familial obligation rather than retrospective evaluations of performance.

A second channel is clientelism. Dense family networks make it easier for politicians to distribute targeted benefits and credibly commit to reciprocal exchanges. In this context, relatives serve as trustworthy brokers who can mobilize votes in exchange for favors (Ravanilla et al. 2022).

Evidence from other contexts supports this interpretation. For example, Fafchamps and Labonne (2017) shows that in the Philippines, relatives of politicians are more likely to hold well-paying jobs during the politician's term. In Italy, while national law prohibits the direct appointment of family members to municipal positions, there is evidence that local firms hire politicians' relatives in exchange for political favors (Gagliarducci and Manacorda 2020). These arrangements suggest that kin-based support can be sustained not only by loyalty but also by material incentives.

Both mechanisms, valence and clientelism, provide plausible explanations for why large-family politicians have a strong and loyal electoral base. While we remain agnostic

about which of the two mechanisms dominates, in Section 8 we test for specific evidence of clientelistic behavior.

3 Italian Mayors and Mayoral Elections

Italy can be considered a perfect laboratory to test our theory. First, Italians strongly rely on their family members, rationally choosing not to trust anyone outside their family (Alesina and Giuliano 2014, Crocetti and Meeus 2014) and expecting not to be trusted by non-family members (Banfield 1958, Alesina and Giuliano 2011).

Second, Italian municipalities are responsible for a wide set of services, from primary schooling to local police, waste management, public roads and infrastructure, social services, and security. Municipal governments are responsible for the procurement of goods and services and the executive power is highly concentrated (Bellodi et al. 2023).

Each Italian municipality is headed by a mayor, who serves as both the political and administrative leader of the local government. In municipalities with fewer than 15,000 inhabitants, the mayor is directly elected by plurality: the candidate who receives the most votes is declared the winner. The mayor's mandate lasts five years and, during the period under study, could be renewed once[2].

The mayor governs alongside two institutional bodies: the *Consiglio* (municipal council) and the *Giunta* (executive committee). The *Consiglio* holds legislative authority. Its members are elected at the same time as the mayor, and the list associated with the winning mayoral candidate is automatically awarded two-thirds of the council seats. This electoral rule typically grants the mayor an overwhelming majority in the council.

The *Giunta*, which holds executive power, is entirely appointed by the mayor. Its members may be drawn from the council or selected from outside, giving the mayor significant discretion over executive appointments.

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[2]An exception exists for municipalities with fewer than 3,000 inhabitants, where mayors have been allowed to serve up to three consecutive terms since 2014. As of 2024, this exception has been extended to all municipalities with fewer than 5,000 inhabitants, effectively removing term limits for them.

4 Data

4.1 Last Names and Families

We limit our analysis to municipalities with fewer than 5,000 inhabitants. We do so for two reasons. First, family ties are more likely to exert a meaningful influence in small communities. Second, several institutional rules - such as council size, number of assessors, and electoral procedures - change discretely at this population threshold (Bonfatti and Forni 2019). We collected, for each municipality, the full entries from phone directories from ancestry.com to build the distribution of last names. Each entry contains the first and last names of the person of interest. This dataset allows us to be confident of having consistently mapped the distribution of each last name for all the municipalities with less than 5,000 inhabitants, equal to 70% of Italian municipalities that together comprise roughly 10 million residents. [3]. The main independent variable of the paper is a proxy for the size of family ties of the mayor, measured as the share of entries in the phone directory in a given municipality with the same last name as the mayor.

In Italy, last names are traditionally passed down from fathers to children. As noted by Geys (2017), this cultural and legal tradition introduces two sources of potential measurement error. First, relying on last names captures only patrilineal connections, missing maternal relatives and their descendants, leading to type-1 errors. This makes our measure conservative: the true extent of family-based political support is likely even greater than what we observe. A potential confound could be that certain last names are correlated with socioeconomic status or ability. Yet, Geys (2017) find no evidence supporting this concern. Second, individuals may share the same last name without being biologically related, leading to type-2 errors. However, because our study focuses on small municipalities, the probability that a shared last name reflects kinship is relatively high. To further address this concern, we construct a weighted version of our measure that gives greater weight to mayors with uncommon last names in their locality (see

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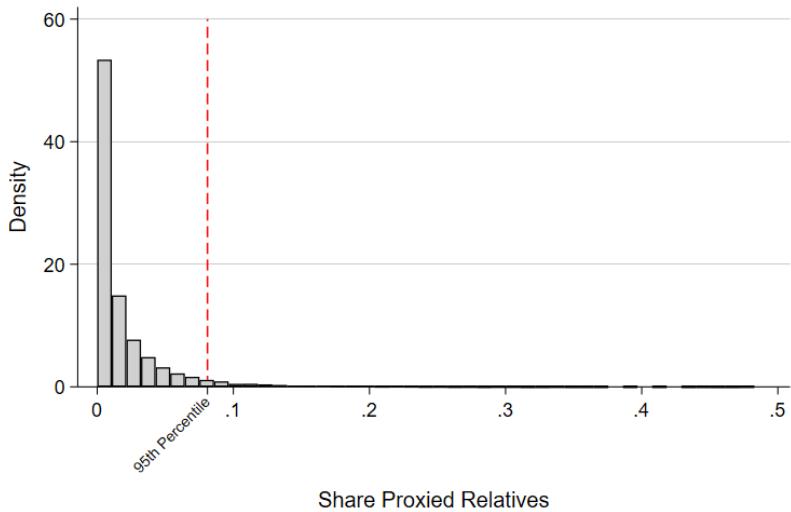
[3]The website ancestry.com does not allow users to obtain more than 5,000 observations per search.

Section A.1.1).

We adopt a measurement strategy in line with prior work (Mirenda et al. 2022, Gagliarducci and Manacorda 2020, Vitale 2023)[4] using the share of individuals in the phone directory who share the mayor's last name as a proxy for family presence within the municipality.

The median value of the variable is 0.8%, indicating that family networks are generally limited. However, the upper tail of the distribution reveals cases in which mayors share their last name with up to 20% of residents listed in the phone directory, suggesting the presence of extremely dense family networks in some municipalities. The main analysis will concentrate on this particular segment of the distribution. Figure 2 shows the distribution of the variable.

Figure 2: Last Name Distribution

Notes: The measuring variable is specified as the title of the x-axis.

To operationalize our main treatment variable for the regression discontinuity design, we define a binary indicator for whether a candidate comes from a "large family." This implies defining a cutoff of relatives above which we classify a candidate as a candi-

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[4]Mirenda et al. (2022) classified firms as affiliated with the Calabrian mafia if at least one director had a last name matching those in official clan registries. Gagliarducci and Manacorda (2020) relied on the first three letters of fiscal codes and birthplace to infer family ties, an approach less precise than ours, which uses full last names. Similarly, Vitale (2023) applied the same method as ours to trace kinship ties within Catholic dioceses.

date from a "large" family. Let s_i represent the share of inhabitants sharing the last name with the mayor in municipality i, we define Large-Family Candidate $= \mathbb{1}(s_i > x)$, with x being a specific cutoff. In our preferred specification, we define this cutoff at the 95th percentile of the distribution of the share of relatives (8.1%). We identify 2,602 large-family candidates and 1,656 large-family mayors. Figure A.2 in the Appendix shows the percentage of mayors classified as large-family mayors, by population size. Section A.3.1 shows the results described in the paper using different cutoffs to define the dummy.

4.2 Measures of Local Government Performance

4.2.1 European Cohesion Funds

We construct a novel measure of the economic performance of local governments, assembling a dataset of 78,857 EU Cohesion Funds projects between 2007 and 2021, for a total value of close to 20.7 billion euros.

The European Cohesion Funds are financial instruments aimed at promoting economic, social, and territorial cohesion within the European Union. Their main goal is to reduce disparities in development levels across different regions and foster sustainable development throughout the EU. These funds play a crucial role in supporting infrastructure projects, job creation, competitiveness, environmental sustainability, and innovation[5]. The implementation of these programs involves subnational authorities, including municipalities, which play a key role in executing the projects. Funds are allocated to specific initiatives through calls for proposals managed by regional authorities or designated managing authorities. Municipalities can apply for funding for projects that align with the EU objectives, such as infrastructure improvements, urban development, environmental sustainability, and social inclusion.

Being awarded European Cohesion Funds can be considered a good measure of the performance of a local mayor or government for two reasons. First, securing European

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[5]The Cohesion Fund supports member states with a Gross National Income (GNI) per inhabitant below 90% of the EU average, typically investing in transport infrastructure and environmental projects.

Cohesion Funds often requires navigating complex application processes, meeting stringent criteria, and adhering to rigorous reporting standards. A local government that successfully obtains these funds demonstrates strong, effective governance, administrative capabilities, and the ability to manage large-scale projects. Second, securing external funding is an indication of a local government's ability to leverage additional resources beyond local and national budgets. It shows that the mayor and their administration can attract investment and funding to supplement local resources. For these reasons, the ability to obtain EU funds can be interpreted as a meaningful proxy for the mayor's productive effort.

A map of the funding for these projects is in the Appendix, Figure A.3. The program focuses on strengthening economic and social cohesion by addressing imbalances between regions. It is not surprising, then, that most projects are allocated to Southern regions. The inclusion of municipal or provincial fixed effects in the main analysis addresses this potential concern.

4.2.2 Balance Sheets' Measures

We present two measures of local government economic performance derived from municipal balance sheets: the accumulation and repayment of residual liabilities. Together, these indicators capture the fiscal quality and sustainability of the administration.

Italian municipalities are granted large autonomy, they manage around 8% of total public expenditure (over 55 billion) and have full control of a wide range of essential public services. Spending is financed by municipal fiscal revenues (87%) plus transfers from the central government (13%), while borrowing is allowed only to finance investment expenditures and is subject to strict quantitative limits[6]. Fiscal revenues come from two main sources: local taxes, among which the most relevant is the property tax, and local fees - e.g. building permits, traffic fines. One of the main responsibilities of mayors

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[6]The central government also allows municipalities to undertake new debt to refinance existing debt or to refund previously emitted bonds, provided that this allows them to achieve debt service savings and that the new funds are still used to finance investment spending (Law 311/2004).

is to propose the annual provisional budget and final budget to the municipal council, which approves them with a majority rule. The mayor enjoys a substantial amount of executive power and discretion over tax collection, tax rates, and budget allocations (Vannutelli 2023, p.24)[7].

Our first measure of local government performance is debt accumulation. The variable is computed as the ratio between current and initial liabilities. Our second measure is debt repayment, defined as the ratio between disposed and accumulated liabilities in each year. Each mayor is associated with the mean debt repayment and debt accumulated during the five years of his term. A good fiscal performance is associated with low levels of debt accumulation and high levels of debt repayment (Bellodi et al. 2023).

4.3   Family-based Clientelism

To test whether family ties facilitate clientelistic behavior, we examine whether public resources are disproportionately directed toward areas where politicians' relatives reside. We obtained information on the residential addresses of mayoral candidates' relatives using the online version of Italy's *White Pages*[8]. Specifically, we searched for individuals sharing the same last name as the most-voted large-family candidate. While not all relatives are publicly listed, this method provides valuable insight into whether public spending decisions, particularly street-level procurement investments, correlate with the residential locations of a mayor's extended family.

We collected data on the residential addresses of 16,573 relatives of 2,044 large-family candidates. We then matched these addresses to official procurement data from the Italian National Anti-Corruption Authority (ANAC)[9], which includes more than 6 million

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[7]From 1999 onwards, all Italian sub-national entities were subject to the so-called "Domestic Stability Pact" (DSP), the national counterpart of the European Union's Stability and Growth Pact, adopted in 1997. The pact prescribes a set of fiscal rules that has undergone several changes over time, but which generally requires municipalities to limit the growth of their so-called fiscal gap - defined as the deficit, net of transfers, and debt service - below a given threshold.

[8]The *White Pages* are traditional telephone directories that include residential addresses. Data are available at https://www.paginebianche.it/.

[9]Datasets available at: dati.anticorruzione.it/opendata.

contracts awarded by Italian municipalities between 2007 and 2022. Specifically, we searched for the presence of each relative's street name in the project descriptions contained in the procurement records. This allowed us to examine procurement activity on streets where candidates' relatives reside, comparing areas where the candidate narrowly won versus narrowly lost. Rather than focusing on elected mayors, we center our analysis on the most-voted large-family candidate in each municipality. This choice is crucial to ensure comparability. By construction, large-family mayors have more relatives in the municipality; thus, any measure of total funds directed to relatives' addresses would mechanically be higher, irrespective of intent. Focusing instead on the same set of addresses - those linked to the most-voted large-family candidate - allows us to compare how much funding these addresses receive depending on whether the candidate narrowly won or lost the election.

4.4   Additional Data

We obtained data on all municipal elections, mayoral candidates, and their party affiliations from the Historical Electoral Archive of the Ministry of the Interior (1989-2020). We, then, used the Database on Local Administrators for other information on mayors (e.g., job, gender, and level of education), local councilors, and members of the executive committee (1998-2020). Budget data and socioeconomic control variables for all Italian municipalities from 2000 to 2021 have been collected from the repository of *ISTAT*, the Italian national statistic agency.

We also collected mayors' curricula vitae from official municipal transparency portals, as required by the 2013 Decreto Trasparenza (Legislative Decree 33/2013), which obliges public administrations to publish biographical and professional information on officeholders. To address inconsistencies in compliance across municipalities, we complemented this collection with direct requests via certified electronic mail (PEC). This effort resulted in a dataset of roughly 1,500 CVs, covering about 2,300 mayoral terms between 2000 and 2021, from which we extracted detailed measures of education, occu-

pational background, managerial experience, and technical skills for use in our analysis in Section 6.4 (see Appendix A.2 for details and examples).

Summary statistics - mean and standard deviation - for the variables used throughout the paper are in the Appendix, Table A.1.

5   Empirical Strategy

We adopt two empirical strategies to assess whether politicians from large families perform worse. First, we use a panel-data, two-way fixed effects approach on the full sample of municipal elections held since 2000. Specifically, we run:

$$\text{EconomicPerformance}_{i,t} = \beta(\text{ShareRelatives})_{i,t} + X'_{i,t-1} + \phi_i + \tau_t + \epsilon_{i,t}, \qquad (1)$$

$\text{ShareRelatives}_{i,t}$ represents the share of people in the municipality sharing the last name with the mayor. We further control for a set of time-varying municipal and mayoral controls[10]. All the regressions include municipality and term fixed effects. We also test an additional specification where the main independent variable is a dummy for being above the 95th percentile[11] of the distribution of the share of relatives.

However, the success of a mayor depends on many observable and unobservable features of a municipality, which may in turn affect economic performance as well. To address this issue, we employ a Politician-Characteristic Regression Discontinuity (PCRD) design. PCRD is a close-election Regression Discontinuity Design (Imbens and Lemieux 2008, Lee and Lemieux 2010), isolating the effects of a characteristic of the winning can-

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[10]Namely, the sex of the mayor, age of the mayor, a dummy for the mayor being a native candidate, education of the mayor, and white-collar mayor. We also include the lagged values of debt accumulation, debt repayment, and EU funds per capita to account for the dynamic nature of municipal finances. The inclusion of these lagged terms controls for path dependence and ensures that our estimates capture the independent effect of our key explanatory variables. Additionally, the Wooldridge test for serial correlation (Wooldridge 2010) indicates significant first-order autocorrelation in EU funds per capita and debt accumulation, justifying the inclusion of their lagged term. While the test does not detect strong autocorrelation in debt repayment, we retain their lagged values due to its strong predictive power in fixed-effects regressions, ensuring a more robust specification.

[11]8.1% of proxied relatives.

didate – here, the size of their family network. Our regression equations have the form:

$$\text{EconomicPerformance}_{i,t} = \beta\,\text{Large-FamilyMayor}_{i,t} + \gamma f(\text{Margin})_{i,t} +$$

$$+\lambda(\text{Large-FamilyMayor} \cdot \text{Margin})_{i,t} + \theta Z'_{i,t-1} + \psi X'_{i,t-1} + \tau_t + \phi_p + \epsilon_{i,t}, \tag{2}$$

The parameter of interest is β, namely the effect of electing a mayor from a large family on the economic performance variables by municipality i over term t. Given the PCRD setup, the coefficient $\hat{\beta}$ measures this effect at the cutoff of 0 margin of victory of the most voted large-family candidate ($\text{Margin}_{i,t}$), thus comparing municipalities where she narrowly won with those where she narrowly lost. Equation (2) has province (ϕ_p) and election-year fixed effects (τ_t), so to compare municipalities close to the cutoff within the same province, holding elections in the same year.

The vectors $Z_{i,t-1}$ and $X_{i,t-1}$ contain pre-election characteristics of the mayor and the municipality[12], respectively. Finally, $f(\text{Margin}_{i,t})$ is a polynomial in the margin of victory of the most voted large-family candidate, also interacted with the indicator for she winning the election (Large-FamilyMayor$_{i,t}$).

A crucial component of this empirical strategy is the dummy Large-FamilyMayor$_{i,t}$. In other words, the cutoff of relatives above which we classify a candidate as a "large" family candidate. In our preferred specification, we define this cutoff at the 95th percentile of the distribution of the share of relatives (8.1%). Section A.3.1 contains results using different cutoffs to define the dummy, based on the share of relatives.

Before presenting the results, we ensure that our analysis addresses the threats to internal validity. The threats can be classified into two groups: standard threats to RDD, and possible effects of compensating differentials (Marshall 2022). The main assumption is that municipalities where a family candidate slightly won against a non-family candidate are comparable to municipalities where a large-family candidate slightly lost against a non-large-family candidate. To assess whether this is likely to hold, Figure A.4 presents the results from estimating Equation (2) using as outcomes several geographic

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[12]Population, mayor's age, gender, a dummy equal to one if the mayor is native, latitude, longitude.

and socioeconomic characteristics of municipalities measured prior to the election. Reassuringly, none of the RDD coefficients is significant, indicating that municipalities just above the cutoff are indeed comparable to those just below.

On top of this, we also test for an additional identifying condition that is specific to PCRD designs (Marshall 2022)[13]. We perform the same RDD on a battery of mayor-specific variables. The idea is that if we are capturing the compensating effects of other mayors' characteristics, we should observe a jump at the cutoff. Fortunately, this is not the case. We focus on five characteristics of the mayor observed in the dataset: sex, age, education, white-collar job, and a dummy for being a dynastic candidate. Figure A.5 displays the results of estimating Equation (2) using as an outcome each of the five mayoral attributes mentioned. The list of mayor-specific variables is of course not exhaustive and other compensating differentials could emerge, but excluding a joint effect of coming from a large family and any of the five characteristics considered is encouraging.

As a final preliminary test, we are also showing that the margin of victory of the best-performing large-family candidate shows no significant jump around 0, as confirmed by the formal test proposed by McCrary (2008), displayed in Figure A.6.

The analysis is implemented using the Stata package `rdrobust` (Calonico et al. 2017) with the default options: linear polynomial approximation and size of the bandwidth around the cutoff determined through the data-driven approach of Calonico et al. (2014), with a triangular kernel. Robust, bias-corrected standard errors are clustered at the municipality level. In the appendix, we show that the results are robust to different specifications of the default options of the package.

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[13]Marshall (2022) critique of RDD close elections estimations arises from the fact that these types of RD close-elections estimators identify the effect of the specific characteristic of interest and all compensating differentials, candidate-level characteristics that ensure elections remain close between candidates who differ in the characteristic of interest.

6 Family Ties and Performance

6.1 Two-Way Fixed Effects Model

Table 1 shows the result of the model from Equation (1). We use the logarithm of EU funds per capita, debt repayment, and debt accumulated as the dependent variables. Across all three outcomes, we find patterns consistent with our theoretical expectations. Municipalities where the mayor has a higher share of relatives tend to attract fewer EU funds, exhibit lower levels of debt repayment, and accumulate more debt, though not all coefficients reach conventional levels of statistical significance. The results are particularly pronounced when focusing on the upper tail of the distribution - mayors above the 95th percentile in family share - further reinforcing the idea that concentrated family networks are associated with worse economic governance.

Table 1: Share of Relatives and Economic Performance

	EU Funds p.c. (Log)		Debt Repayment		Debt Accumulated	
Share Relatives of Mayor	-0.57		-1.28***		0.50	
	(1.30)		(0.47)		(0.32)	
Share Relatives of Mayor > 95th Percentile		-0.30*		-0.15**		0.09*
		(0.18)		(0.07)		(0.05)
Observations	11,743	11,743	12,739	12,739	13,035	13,035
Fixed Effects	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. OLS estimates from Equation (1). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, education of the mayor, white-collar mayor, native mayor, dynastic mayor, lagged dependent variable, % high-school graduate,% agriculture, average age, year FE, and municipality FE. The full table of results can be found in Table A.2.

Table A.3 in Appendix shows that the results are similar when using the top decile rather than the top 5 percent to define large-family mayors. The estimated effects range in magnitude from roughly one-tenth to nearly half of a standard deviation in the outcome variables (see Table A.1).

6.2 Close-Election RD Design

Table 2 shows the main results from estimating Equation (2). Odd-numbered columns show baseline specifications without controls or fixed effects, while even-numbered columns incorporate a full set of covariates, including mayor and municipality characteristics, as well as fixed effects at the year and province levels. Figure A.7 in the Appendix visually displays the RDD results.

Across specifications, large-family mayors attract significantly less EU funds per capita and exhibit lower levels of debt repayment. The coefficient on EU funds per capita ranges from −0.61 to −1.14 log points, equivalent to roughly 20−40% of a standard deviation in the outcome variable. The effect on debt repayment is similarly negative, approximately 30% of a standard deviation. By contrast, the effect on debt accumulated is small in magnitude and statistically insignificant across all specifications.

We provide two explanations for this null result. First, the RD likely provides a lower bound estimate of the effect of a large-family mayor on economic performance, and this applies to all outcome variables considered. Indeed, candidates who barely win might face relatively higher electoral accountability pressures. Large-family mayors in close races may therefore exert more effort than those who win comfortably, attenuating our estimated effects. Second, while debt accumulation is a commonly used and well-established indicator of fiscal performance, it may be a less precise measure of the specific dimension we aim to capture - namely, the mayor's effort. Moreover, it is not self-evident that all voters perceive higher debt levels as undesirable, especially if they are linked to visible or politically popular projects.

Table 2: Large-Family Mayors and Economic Performance

	EU Funds p.c. (Log)		Debt Repayment		Debt Accumulated	
Large-Family Mayor	-1.14**	-0.61*	-0.42*	-0.42*	-0.00	-0.06
	(0.51)	(0.36)	(0.26)	(0.24)	(0.08)	(0.07)
Observations	1,302	1,273	1,327	1,309	1,336	1,318
Effective Obs. (Left)	478	377	409	366	386	374
Effective Obs. (Right)	436	348	381	352	372	357
Bandwidth	.28	.19	.2	.17	.21	.2
Fixed Effects	NO	YES	NO	YES	NO	YES
Controls	NO	YES	NO	YES	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

6.3 Robustness Checks

In this section, we discuss a battery of robustness tests aimed at reinforcing the causal interpretation of the estimates in Table 2.

First, Figures A.8 to A.10 in Section A.3.1 show the main results using different cut-offs to transform the continuous variable ShareRelatives into a dummy. One concern of our analysis comes from the arbitrary nature of the cutoff to define a Large-family Mayor. The figures use five different cutoffs ranging from 7% to 11%. Results show that the negative effect on economic performance seems to appear after 7% of the share of relatives of the mayor, recalling that the 95th percentile we employ is at 8.1 %.

Second, we test the robustness of the results to the use of a weighted version of the last names in our dataset. In short, this entails moving from a binary to a continuous measure, whereby individuals are assigned a weight that decreases with the frequency of that last name among the population as a whole. More details on how this alternative measure is computed are in the Appendix, Section A.1.1, while examples of the most frequent and infrequent last names are in Table A.4. Reassuringly, repeating our RDD, giving more weight to candidates with less frequent last names, does not change dramatically our coefficients of interest, as shown in Table A.5. This finding increases our

confidence in identifying the effect of proper family ties rather than generic common last names.

Standard RD robustness checks are now discussed. First, we re-estimate the RDD regressions, but using debt repayment and log EU funds in the term prior to the election of a large-family mayor as outcomes. The aim of this test is to verify that large-family mayors do not happen to systematically win close elections in towns where debt repayment and log EU funds are systematically lower. Table A.6 in the Appendix shows that this is not the case in all the specifications, corroborating the idea that our main results gauge the effects of electing a large-family mayor, rather than simply picking up the continuation of existing patterns, with the exception of a specification for EU funds. Second, Table A.7 performs the estimation of Equation (2) with a second-degree polynomial. Coefficients are comparable to the ones shown in the main analysis. Results are thus robust to the degree of the fitting. Third, Figure A.11 - A.13 show coefficients of 15 regressions using bandwidths ranging from 12 to 27[14]. Results show that the effects we find are not sensitive to the bandwidth used. Fourth, Figure A.14 - A.16 uses different placebo cutoffs, ranging from -15% to 15%. Fifth, Figures A.17 - A.19 perform jackknife estimations. The results show that the estimates of the treatment effects remain similar regardless of which regions (left panel) or which election year (right panel) are excluded from the sample.

Last, in Table A.8 we restrict the sample to races where the winning large-family mayor faced a candidate with fewer than 0.8% relatives in the municipality, the median value in our data. The results remain consistent, confirming that our findings are not driven by narrow differences in family size between candidates. As an additional robustness check, we use alternative measures of municipal performance from OpenCivitas[15], focusing on environmental indicators such as waste production and recycling. These variables are widely used in the literature as proxies for administrative performance,

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[14]The optimal bandwidth of the main table oscillates between 17 and 28, as estimated through the procedure of Calonico et al. (2014)

[15]Data available at www.opencivitas.it.

since mayors play a key role in managing local sanitation services and promoting environmental sustainability (Bordignon et al. 2024, Lockwood et al. 2022). They also have the advantage of being highly visible to citizens, as waste collection and recycling are among the most directly observable dimensions of municipal performance. We do not include these indicators in the main analysis, however, because data coverage in Open-Civitas is limited to a smaller subset of years (2016-2021). Table A.9 shows that municipalities governed by large-family mayors produce significantly more waste per capita and exhibit lower recycling rates, reinforcing our main finding that these mayors perform worse in office across a broader range of performance outcomes.

6.4 Alternative Explanations

We posit that the decrease in economic performance shown in Table 2 is due to the less effort exerted by the sitting large-family mayor. In this section, we evaluate alternative explanations.

The main potential alternative explanation for our findings is adverse selection (Fearon 1999). That is, rather than large-family mayors underperforming due to weakened incentives (moral hazard), one might argue that these mayors are simply of lower underlying quality to begin with. In this view, the loyal family vote bloc would allow lower-quality individuals to win office despite lacking competence or a professional background.

To test this possibility, we examine six proxies for mayoral quality. We begin with two conventional indicators: whether the mayor is highly educated - i.e., holds a university degree[16] - and whether they held a white-collar occupation prior to election. We then add four additional measures of mayoral quality based on the information extracted from mayors' curricula vitae using a structured coding protocol[17]. These capture: (i) experience with the municipality, an indicator equal to one if the mayor had previously

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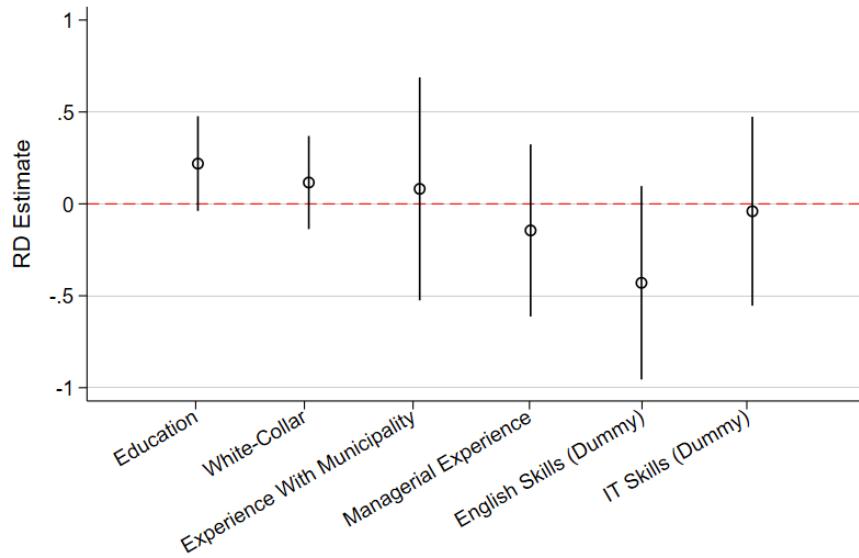
[16]We do not use the absence of a high school diploma as a proxy for low education, as fewer than 10% of mayors in our sample lack one, limiting variation.

[17]We thank Simone Paci for complementing the set of CVs we collected

worked or studied in fields directly relevant for local governance (e.g., public law, or public administration); (ii) managerial experience, equal to one if the CV explicitly reports supervision or coordination of personnel; (iii) english skills, a dummy equal to one if the CV mentions any level of English proficiency; and (iv) IT skills, a dummy equal to one if the CV reports computer or informatics proficiency. More details on the construction of these variables, as well as examples of coded CVs, are provided in Appendix A.2. Our proxies differ from other direct measures of administrative competence among Italian mayors, such as the structured interviews conducted by Carreri (2021), in that they are derived from background and curriculum vitae information rather than survey-based assessments of managerial practices, allowing us to extend measurement to a larger set of municipalities.

Figure 3 presents RDD estimates of the effect of being a large-family mayor on these quality outcomes. Across all specifications, we find no statistically significant relationship between large-family status and mayoral quality. Point estimates are small in magnitude and consistently not significant. These results suggest that large-family mayors do not seem to be systematically less qualified or professionally experienced than their counterparts.

Figure 3: Large-Family Mayors and Quality

Notes: RDD estimates were obtained using the same framework of Equation (2) using the specification with only FEs. The dependent variables are standardized to enhance the comparability of coefficients' magnitudes. The outcome variable of each model is listed on the x-axis. "Education" is an indicator for a candidate holding any post-high school educational title. Vertical bars are 95% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level.

Another possible interpretation of our results is that large-family mayors are not less incentivized, but instead deliberately choose to perform worse as a result of a change in the tax burden on their family and network (Paci 2023). To investigate this, we examine whether large-family mayors collect systematically higher or lower levels of municipal tax revenue. Table A.10 in the Appendix reports the results from an RDD framework using total tax revenues per capita as the outcome variable. Across specifications, we find no statistically significant difference in tax collection between large-family and other mayors.

7   Family Ties and Reelection Probability

The underlying assumption of our theory is that large-family mayors can count on unconditional electoral support from their relatives. In this section, we dig deeper into this mechanism and study the electoral advantage that large-family mayors have compared

to their peers. First, we run a TWFE estimation using the vote share of mayoral candidates as the dependent variable and their share of relatives as the main explanatory variable. Table A.11 in the Appendix presents the results. The positive correlation between the size of family ties and the vote share of the candidate is evident and significant.

We then run Equation (2) using the probability of reelection as the main dependent variable[18]. Table 3 presents the results. Both specifications - with and without controls - show coefficients that are small in magnitude and statistically indistinguishable from zero. That is, mayors from large families are not more likely to be electorally punished than other mayors.

These results align closely with the central prediction of our theoretical framework. If a portion of a mayor's electoral support is effectively "guaranteed" through family loyalty, then reelection may depend less on performance. Specifically, a null effect of family size on reelection probabilities might suggest that mayors adjust their effort optimally given their baseline support, and those from larger family networks can afford to exert less effort while maintaining the same probability of reelection as their peers. This suggests that electoral accountability mechanisms may be weakened when mayors can rely on family-based support, despite their documented under-performance in office.

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[18]We condition on the subset of mayors who are eligible to run for a subsequent term, i.e., those not subject to term limits.

Table 3: Large-Family Mayors and Re-Election Probability

	Mayor Reelected	
Large-Family Mayor	0.02	-0.02
	(0.08)	(0.08)
Observations	1,632	1,501
Effective Obs. (Left)	568	475
Effective Obs. (Right)	548	478
Bandwidth	.22	.19
Fixed Effects	NO	YES
Controls	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

8   Family Ties and Clientelism

A core component of our theoretical framework is the idea that candidates from large families benefit from a bloc of loyal votes that shields them from electoral accountability. In Section 2.2, we proposed two complementary mechanisms underlying this unconditional support: a kin-based valence advantage and clientelism. In this section, we explore empirical evidence consistent with the second mechanism, examining whether mayors from large families systematically target public resources to the benefit of their relatives[19].

To do so, we leverage a novel dataset combining geocoded addresses of relatives - identified through the phone directory - and granular information on the allocation of municipal funds for local street improvements. The intuition is straightforward: if large-family mayors are engaging in clientelistic behavior, one would expect public funds to disproportionately benefit areas where their relatives reside. This is because kin networks can facilitate reciprocal exchanges, where loyalty at the ballot box is rewarded

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[19]We do not focus on more straightforward channels of favoritism - such as the allocation of municipal contracts to firms owned by relatives - because Italian legislation regarding family connections of mayors is particularly stringent (Legislative Decree No. 267/2000).

through targeted benefits. The logic is consistent with prior work on family-based political patronage, which has shown that kinship can serve as a reliable enforcement mechanism for clientelistic exchanges (Fafchamps and Labonne 2017, Gagliarducci and Manacorda 2020).

Table 4 presents the results of an RDD analysis where the outcome variable is the log amount of money per capita allocated to streets where the relatives of the most voted family candidate live. The results provide no evidence of such targeting. In both specifications - with and without fixed effects and controls - the estimated effects are small and statistically insignificant. This suggests that, at least along this dimension of distributive behavior, large-family mayors do not appear to systematically favor their relatives once in office.

While this does not rule out clientelism as a mechanism in other forms, these findings lend support to our use of the term *unconditional* to describe the support received by large-family politicians. The lack of evidence for targeted benefits to relatives hints, indeed, towards a form of valence-based support that is not contingent on clientelistic rewards as the main driver of electoral support.

Table 4: Large-Family Mayors and Clientelistic Behaviour

	Funds for Relatives' Streets p.c. (Log)	
Large-Family Mayor	-0.01	-0.45
	(0.61)	(0.47)
Observations	942	926
Effective Obs. (Left)	289	266
Effective Obs. (Right)	265	251
Bandwidth	0.23	0.19
Fixed Effects	NO	YES
Controls	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

9 Conclusion

This paper examines how family ties influence political accountability in democratic settings. Using data from over 33,000 Italian municipal elections, we show that mayors from large families systematically underperform while in office. Specifically, they attract fewer EU funds, repay less debt, and - according to the TWFE estimates - accumulate more debt. Despite this poor performance, they are no less likely to be reelected. This suggests that large kinship networks provide a stable base of electoral support, shielding them from the usual accountability mechanisms that should discipline incumbents.

These findings matter for two reasons. First, they highlight a previously under-explored threat to democratic accountability: the role of family-based electoral loyalty. While much research focuses on institutions or information, our results show that social structures like kinship can distort incentives and weaken performance. Second, by identifying a measurable mechanism through which family networks insulate politicians, our findings help explain variation in local governance even within a developed democracy.

These findings have broader implications for our understanding of democratic accountability, particularly in contexts where social and familial networks play a central role in political life. While our findings focus on Italy, similar patterns may emerge in other political systems where familial and social ties are an important part of electoral behavior - Latin America and the Philippines, for example.

Future research could investigate the two potential sources of kin-based loyalty - valence and clientelism - more directly. Our analysis cannot fully separate these mechanisms, though we provide preliminary evidence that mayors do not systematically target resources to relatives. Further studies could also explore whether family-based insulation affects other areas of governance, such as corruption or public service delivery, and examine whether similar patterns exist in other contexts where kinship networks are strong.

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A Appendix

A.1 Additional Tables

Table A.1: Summary Statistics Variables Employed

Variable	Whole Sample		Effective Sample	
	Mean	SD	Mean	SD
Outcomes				
EU Funds p.c. (Log)	2.811	2.575	3.353	2.854
Debt Repayment	1.123	1.175	1.223	0.956
Debt Accumulated	0.642	0.576	0.659	0.607
Funds for Relatives' Streets p.c. (Log)	0.054	0.778	0.446	2.200
Cabinet Member Relatives	0.019	0.136	0.120	0.324
Funds p.c. for Mayor Street	26.694	150.035	38.024	168.756
Pr(Mayor Reelected)	0.388	0.487	0.402	0.490
Mayor Characteristics				
Sex (1 = Female)	0.106	0.308	0.097	0.296
Age	49.171	10.543	48.847	10.869
Education	0.376	0.484	0.349	0.477
White Collar	0.557	0.497	0.534	0.499
Experience With Municipality	0.491	0.500	0.522	0.500
Managerial Experience	0.262	0.440	0.269	0.444
English Skills (Dummy)	0.200	0.401	0.163	0.370
IT Skills (Dummy)	0.331	0.471	0.388	0.488
Native	0.432	0.495	0.522	0.500
Dynastic	0.048	0.214	0.116	0.320
Shares of Votes	0.633	0.180	0.654	0.181
Municipality Characteristics				
Population (Log)	7.222	0.867	6.588	0.915
Surface (Log, Km²)	2.891	0.925	2.767	0.843
Latitude	43.415	2.434	43.207	2.442
Longitude	11.265	2.841	11.622	2.902

Notes: This table reports summary statistics for both the full and effective samples. The full sample includes 33,282 observations, while the effective sample refers to the subset used in the RDD analysis (PCRD), consisting of 2,368 observations.

Table A.2: Share of Relatives and Economic Performance - Full Controls

	EU Funds p.c. (Log)		Debt Repayment		Debt Accumulated	
Share Relatives of Mayor	-0.57		-1.28***		0.50	
	(1.30)		(0.47)		(0.32)	
Share Relatives of Mayor > 95th Percentile		-0.30*		-0.15**		0.09*
		(0.18)		(0.07)		(0.05)
Sex Mayor Dummy	-0.06	-0.06	-0.02	-0.02	0.01	0.01
	(0.09)	(0.09)	(0.02)	(0.02)	(0.01)	(0.01)
Age of Mayor	-0.00	-0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Education Mayor Dummy	0.06	0.06	0.01	0.01	-0.01	-0.01
	(0.06)	(0.06)	(0.02)	(0.02)	(0.01)	(0.01)
White-Collar Mayor Dummy	0.05	0.05	0.02	0.02	0.00	0.00
	(0.06)	(0.06)	(0.02)	(0.02)	(0.02)	(0.02)
Native Mayor Dummy	0.18**	0.18**	-0.00	-0.01	0.00	0.00
	(0.08)	(0.08)	(0.02)	(0.02)	(0.02)	(0.02)
Dynastic Mayor	0.12	0.13	-0.06	-0.08	0.02	0.03
	(0.11)	(0.11)	(0.07)	(0.07)	(0.03)	(0.03)
% Residents w/ High School Diploma	2.66	2.63	-0.39	-0.39	0.55***	0.55***
	(1.87)	(1.86)	(0.43)	(0.43)	(0.19)	(0.19)
% Residents Employed in Agriculture	-1.48	-1.51	-0.10	-0.10	-0.51***	-0.51***
	(1.32)	(1.32)	(0.95)	(0.95)	(0.19)	(0.19)
Average Age of Municipal Residents	0.02	0.02	-0.04	-0.04	0.01	0.01
	(0.09)	(0.09)	(0.02)	(0.02)	(0.01)	(0.01)
EU Funds p.c. (Log) In Previous Term	-0.35***	-0.35***				
	(0.01)	(0.01)				
Debt Repayment In Previous Term			-0.54**	-0.54**		
			(0.21)	(0.21)		
Debt Accumulated In Previous Term					-0.30***	-0.30***
					(0.05)	(0.05)
Observations	11,743	11,743	12,739	12,739	13,035	13,035
Fixed Effects	YES	YES	YES	YES	YES	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. OLS estimates from Equation (1). Standard errors in parentheses, clustered at the municipality level. Fixed effects include: year FE, and municipality FE.

Table A.3: Share of Relatives and Economic Performance, Deciles

	EU Funds p.c. (Log)	Debt Repayment	Debt Accumulated
Share Relatives of Mayor > 90th Percentile	-0.27**	-0.16**	0.05*
	(0.12)	(0.07)	(0.03)
Sex Mayor Dummy	-0.06	-0.02	0.01
	(0.09)	(0.02)	(0.01)
Age of Mayor	-0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)
Education Mayor Dummy	0.06	0.01	-0.01
	(0.06)	(0.02)	(0.01)
White-Collar Mayor Dummy	0.05	0.02	0.01
	(0.06)	(0.02)	(0.02)
Native Mayor Dummy	0.18**	-0.01	0.01
	(0.08)	(0.02)	(0.02)
Dynastic Mayor	0.14	-0.07	0.03
	(0.11)	(0.06)	(0.03)
% Residents w/ High School Diploma	2.63	-0.39	0.55***
	(1.87)	(0.43)	(0.19)
% Residents Employed in Agriculture	-1.51	-0.12	-0.51***
	(1.32)	(0.94)	(0.19)
Average Age of Municipal Residents	0.02	-0.04	0.01
	(0.09)	(0.02)	(0.01)
EU Funds p.c. (Log) In Previous Term	-0.35***		
	(0.01)		
Debt Repayment In Previous Term		-0.54**	
		(0.21)	
Debt Accumulated In Previous Term			-0.30***
			(0.05)
Observations	11,743	12,739	13,035
Fixed Effects	YES	YES	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. OLS estimates from Equation (1). Standard errors in parentheses, clustered at the municipality level. Fixed effects include: year FE, and municipality FE.

A.1.1 Last Name Weights

We implement a further pre-processing step on last names to avoid the possibility that highly frequent last names are driving our results. To increase confidence in our main measure, we built a continuous index that assigns a score to each last name, taking into account its frequency among the population. The idea is to discount highly frequent last names and give more relevance to uncommon last names. We simply divide the frequency of a last name by the total number of observations in the dataset of the entire population.

The table below shows the list of the 10 most common and 10 most uncommon last names of our large-family mayors according to the index explained in the previous section.

Table A.4: Last Names Scores

Last Name	Weight Normalized	Municipality
Rossi	0.01	Anzano di Puglia (FG)
Ferrari	0.01	Borghetto d'Arroscia (IM)
Conti	0.01	Viale d'Asti (AT)
Gallo	0.01	Martirano Lombardo (CZ)
Caruso	0.01	Ciminà (RC)
Giordano	0.01	Corbara (SA)
Fontana	0.01	Rezzoaglio (GE)
Marino	0.01	Pentone (CZ)
Galli	0.01	Cirimido (CO)
Quasimodo	0.17	Igliano (CN)
Murranca	0.11	Pompu (OR)
Pisolo	0.09	Dosso del Liro (CO)
Sturabotti	0.08	Vallinfreda (RM)
Eroini	0.08	Valleve (BG)
Mabritto	0.07	Pecco (TO)
Cordeglio	0.06	Montegrosso Pian Latte (IM)
Risio	0.06	Cocullo (AQ)

Notes: Normalized weights assigned to mayoral last names based on their relative frequency in the population. More common last names (e.g., Rossi, Ferrari) receive lower scores, while rarer names (e.g., Quasimodo, Murranca) receive higher scores, reflecting their greater identifying power.

Table A.5: Large-Family Mayor and Economic Performance, Robustness to Re-Weighting Index by Last Names' Frequence in Phone Directories

	EU Funds p.c. (Log)		Debt Repayment		Debt Accumulated	
Large-Family Mayors	1.67	-1.27**	-0.35*	-0.23**	-0.00	-0.23***
	(1.61)	(0.51)	(0.18)	(0.11)	(0.11)	(0.08)
Observations	1,295	1,266	1,320	1,302	1,329	1,311
Effective Obs. (Left)	422	248	377	405	375	345
Effective Obs. (Right)	383	250	365	374	361	328
Bandwidth	.28	.13	.18	.13	.19	.15
Fixed Effects	NO	YES	NO	YES	NO	YES
Controls	NO	YES	NO	YES	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

Table A.6: Large-Family Mayors and Economic Performance in Previous Term

	EU Funds p.c. (Log) Lag		Debt Repayment Lag		Debt Accumulated Lag	
Large-Family Mayor	-0.34	0.91	0.10	0.04	0.01	-0.07
	(0.97)	(0.57)	(0.24)	(0.21)	(0.12)	(0.07)
Observations	401	391	467	454	468	455
Effective Obs. (Left)	160	137	203	153	174	141
Effective Obs. (Right)	95	85	122	94	110	86
Bandwidth	.25	.18	.31	.17	.21	.14
Fixed Effects	NO	YES	NO	YES	NO	YES
Controls	NO	YES	NO	YES	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

Table A.7: Large-Family Mayors and Economic Performance,
Robustness to Second Polynomial Degree

	EU Funds p.c. (Log)		Debt Repayment		Debt Accumulated	
Large-Family Mayor	-1.23*	-0.68	-0.50*	-0.51*	0.01	-0.05
	(0.66)	(0.42)	(0.29)	(0.27)	(0.09)	(0.08)
Observations	1,302	1,273	1,327	1,309	1,336	1,318
Effective Obs. (Left)	462	438	466	446	426	443
Effective Obs. (Right)	416	394	430	411	396	412
Bandwidth	.34	.31	.33	.3	.27	.29
Fixed Effects	NO	YES	NO	YES	NO	YES
Controls	NO	YES	NO	YES	NO	YES
Polynomial	2	2	2	2	2	2

Notes: *** $p<0.01$, ** $p<0.05$, * $p<0.10$. RDD estimates from Equation (2) with quadratic polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

Table A.8: Large-Family Mayors and Economic Performance,
Robustness to Small vs Large Families

	EU Funds p.c. (Log)		Debt Repayment		Debt Accumulated	
Large-Family Mayor	-2.20**	-1.36**	-0.77	-0.69*	0.02	-0.03
	(1.02)	(0.55)	(0.50)	(0.37)	(0.14)	(0.11)
Observations	826	805	843	828	848	833
Effective Obs. (Left)	154	147	182	163	184	182
Effective Obs. (Right)	198	181	226	197	234	229
Bandwidth	.16	.16	.19	.15	.22	.21
Fixed Effects	NO	YES	NO	YES	NO	YES
Controls	NO	YES	NO	YES	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

Table A.9: Large-Family Mayors and Economic Performance,
Robustness to OpenCivitas Variables

	Tons Waste p.c.	Tons Waste p.c. (Log)	% Recycling
Large-Family Mayor	87.02***	0.17**	-10.06**
	(29.85)	(0.07)	(5.05)
Observations	288	288	288
Effective Obs. (Left)	60	60	72
Effective Obs. (Right)	63	63	73
Bandwidth	.19	.19	.24
Fixed Effects	YES	YES	YES
Controls	YES	YES	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

A.2 Mayors' *CVs*

The Legislative Decree 14 March 2013, No. 33, or more simply *Decreto Trasparenza -* Transparency Norms - requires that mayors publish their *curricula* on the municipality's website for the entire duration of their mandate and for three years following their term. However, the implementation of the law is inconsistent across different municipalities for two reasons. First, smaller municipalities might lack the resources or technical expertise to maintain up-to-date and comprehensive websites. Second, there is limited oversight and no infringement procedures against the violating municipality.

To overcome these challenges, we sent an official request - via certified electronic mail (*PEC*) - to each municipality, asking for the CVs of mayors in office since 2000. We managed to compile a dataset of approximately 1,500 curriculum vitae of mayors, covering nearly 2,300 mayoral terms from 2000 to 2021.

Each document was then analyzed using a custom Python pipeline that relied on the GPT-5-nano model to extract standardized information. The model was prompted in Italian to read each CV and answer a structured set of extraction questions, following a protocol specifically designed for this project (described in detail in the replication materials). The prompt instructed GPT to identify only explicitly stated information and to report both the extracted variable and the original Italian quotation as evidence. All outputs were then manually reviewed for consistency and merged with the main dataset.

The variables used in section 6.4 were generated directly from these GPT-coded outputs. The variable *experience with the municipality* was derived from mentions in either the education or work sections, indicating prior activity in fields directly relevant to local governance. The variable *managerial experience* was coded from explicit phrases indicating supervision of personnel. The variables English skills and IT skills were obtained from the sections typically labeled "Competenze linguistiche" and "Competenze informatiche," respectively, and were coded as one whenever the CV mentioned any intermediate or advanced proficiency in these domains.

For instance, consider the CV in Figure A.1. The CV explicitly includes the following passage: *"Designer and site inspector for the construction of a state-owned building to be used as the headquarters of the State Forestry Corps in the municipality of Canistro".* This description clearly indicates supervisory and managerial responsibilities, as well as direct experience with public-sector construction and local infrastructure projects. These tasks involve oversight of personnel, coordination of works, and compliance with public regulations, thus meeting the criteria for both managerial experience and municipal expertise. The document contains no reference to a university degree or to English proficiency, but does mention advanced IT use, resulting in a positive score for IT skills.

Figure A.1: Example of CV

(a) Professional experience section.

(b) Digital and professional skills section.

Table A.10: Large-Family Mayors and Tax Revenues

	Tax Revenues	
Large-Family Mayor	-0.04	0.03
	(0.05)	(0.04)
Observations	1,383	1,362
Effective Obs. (Left)	507	418
Effective Obs. (Right)	478	397
Bandwidth	.31	.2
Fixed Effects	NO	YES
Controls	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. RDD estimates from Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). Standard errors in parentheses, clustered at the municipality level. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.
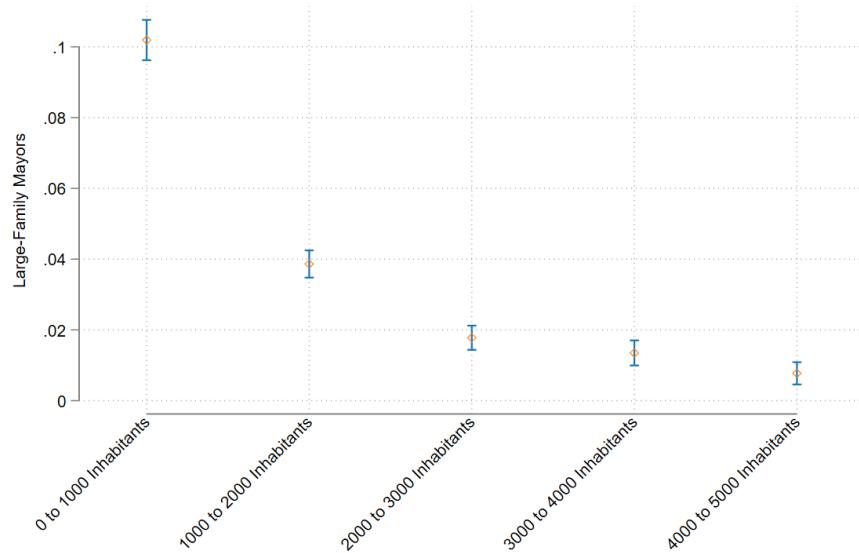
Table A.11: Share of Relatives and Vote Shares

	Vote Share	
	(1)	(2)
Share Relatives of Candidate	0.97***	0.96***
	(0.04)	(0.05)
Observations	71,475	71,462
Fixed Effects	NO	YES

Notes: *** p<0.01, ** p<0.05, * p<0.10. OLS estimates. Standard errors in parentheses, clustered at the municipality level. Fixed effects include: year FE, and municipality FE.
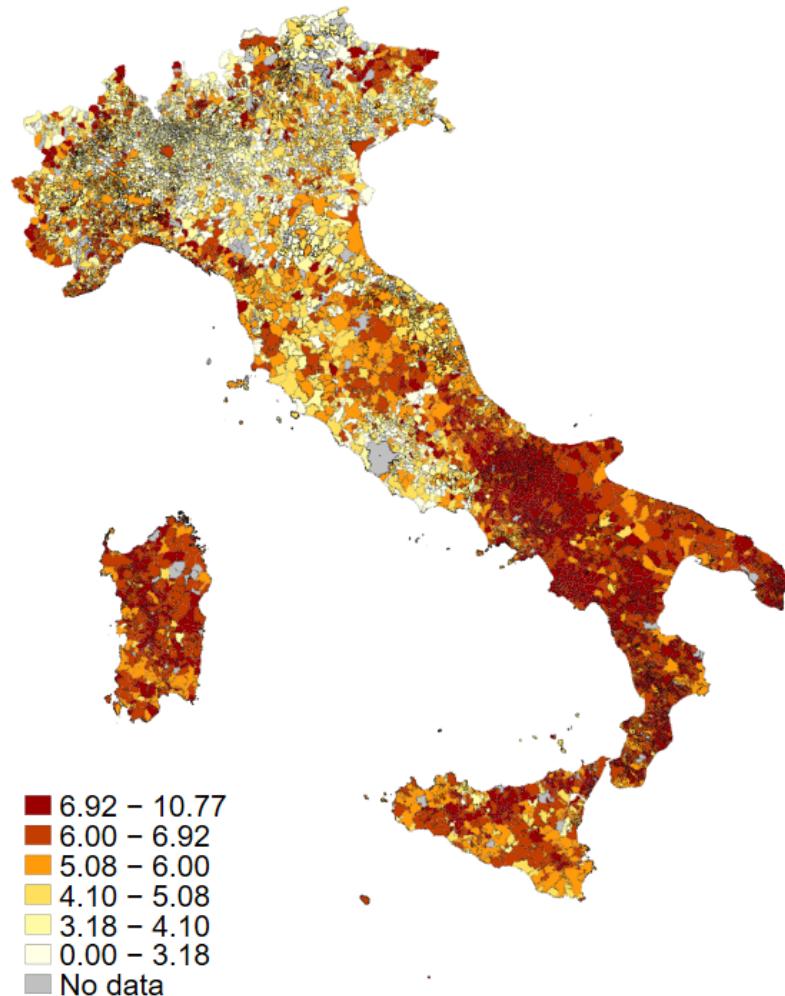
A.3 Additional Figures

Figure A.2: Share of Large-Family Mayors, by Population
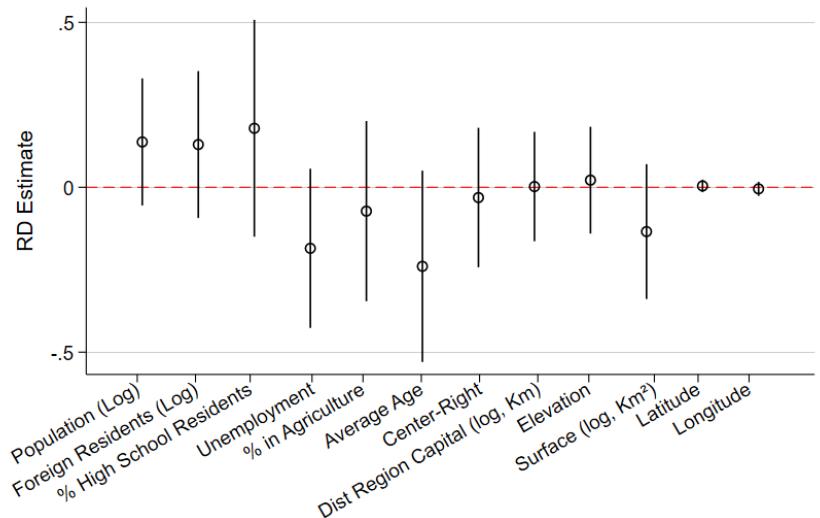
Notes: The figure shows the share of large-family mayors across population bins, where "large-family" is defined as being above the 95th percentile in the distribution of mayors' last name frequency. Vertical bars represent 90% confidence intervals.

Figure A.3: Spatial Distribution EU Funds p.c. (Log)

6.92 – 10.77
6.00 – 6.92
5.08 – 6.00
4.10 – 5.08
3.18 – 4.10
0.00 – 3.18
No data
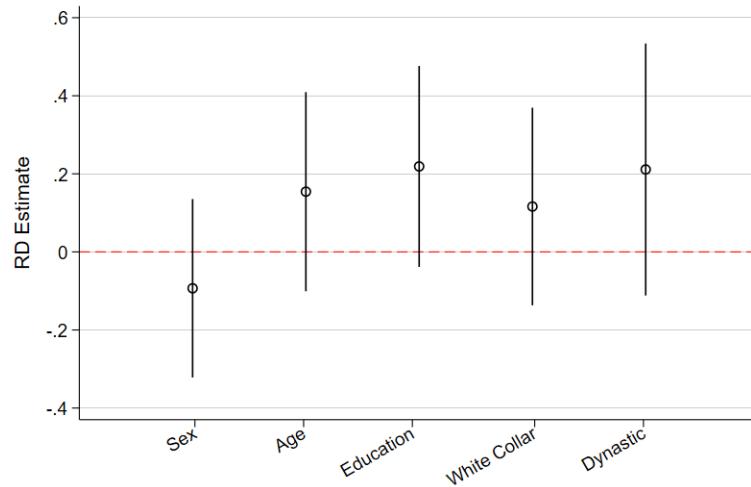
Notes: Spatial distributions of the log EU funds pc received by each municipality in the sample period.

Figure A.4: Balance Checks: Large-Family Mayor's and Municipal Characteristics
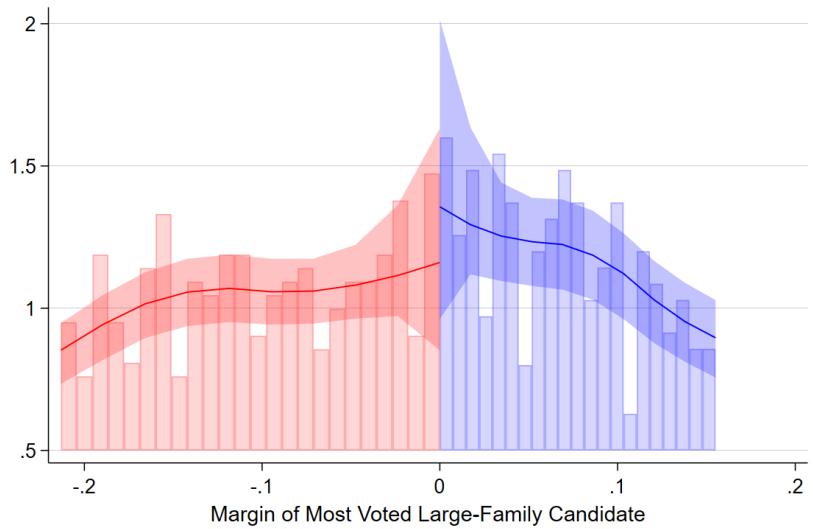
Notes: RDD estimates were obtained using the same framework of Equation (2) using the specification with only FEs. The dependent variables are standardized to enhance the comparability of coefficients' magnitudes. The outcome variable of each model is listed on the x-axis. Vertical bars are 90% confidence intervals, based on bias-corrected standard errors clustered at the municipality level.

Figure A.5: Threats to PCRD - Other Characteristics of Large-Family Mayors
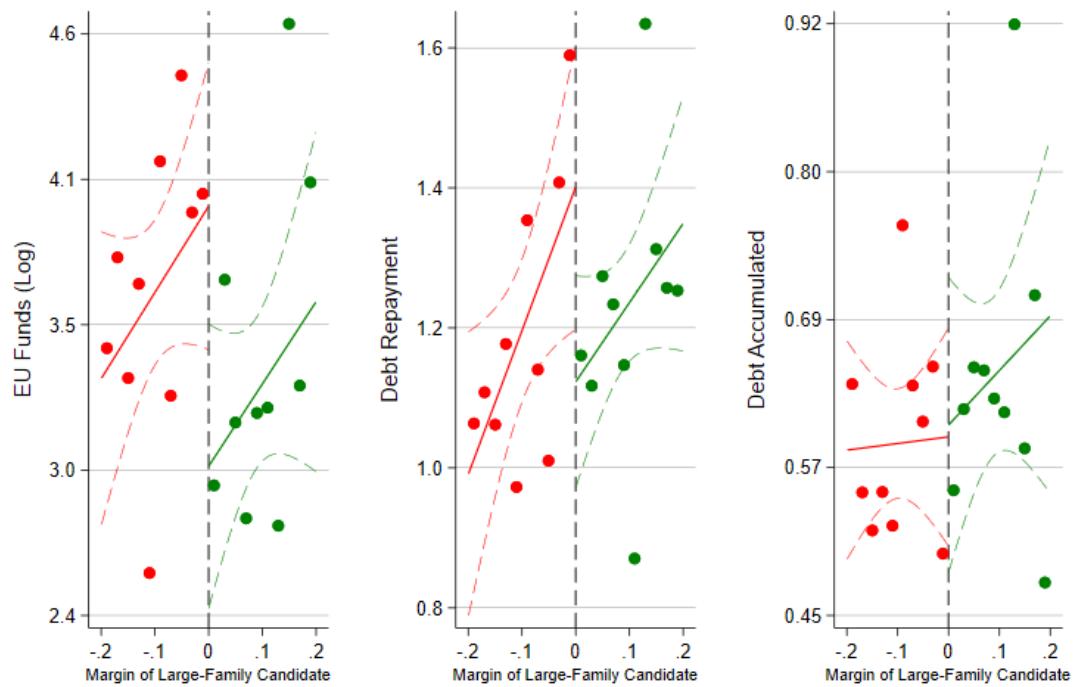
Notes: RDD estimates were obtained using the same framework of Equation (2) using the specification with only FEs. The dependent variables are standardized to enhance the comparability of coefficients' magnitudes. The outcome variable of each model is listed on the x-axis. "Education" is an indicator for a candidate holding any post-high school educational title. Vertical bars are 90% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level.

Figure A.6: Identification Test – Manipulation of Running Variable

Notes: The plot shows the standard manipulation test proposed by McCrary (2008) for the margin of victory/loss of the most voted large-family candidate, computed using the package `rddensity` with a first-degree polynomial. Each dot represents the density of the margin of victory of the most voted large-family candidate for the corresponding bin. The curve represents kernel approximations of the density, fitted separately on each side of the cutoff, with the relative 90% confidence intervals.
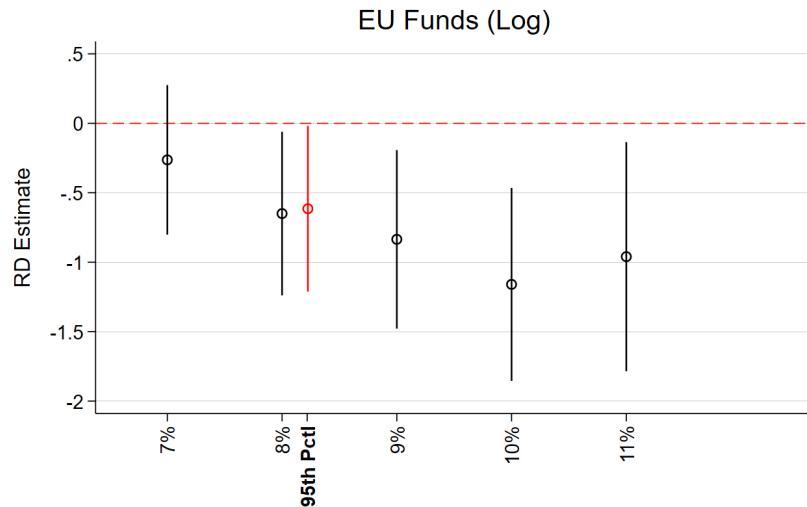
Figure A.7: Large-Family Mayors and Economic Performance, RDD Plot

Notes: Each dot is the average outcome over a mayoral term, for a given bin of margin of victory of the most voted large-family candidate. The solid lines are linear polynomials in the margin of victory, fitted separately on each side of the cutoff. The dashed lines are 90% confidence intervals.
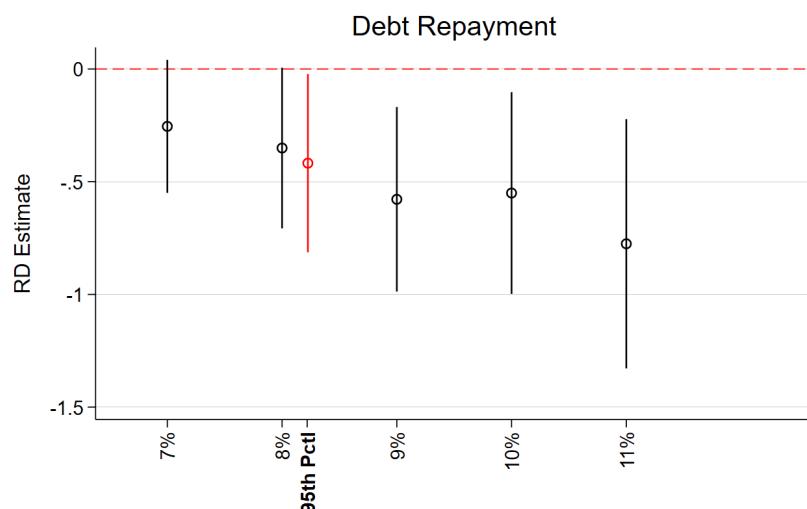
A.3.1 Robustness to Different Definitions of Large-Family Candidates

Figure A.8: Coefplot on Different Definitions Relatives - EU Funds (Log)
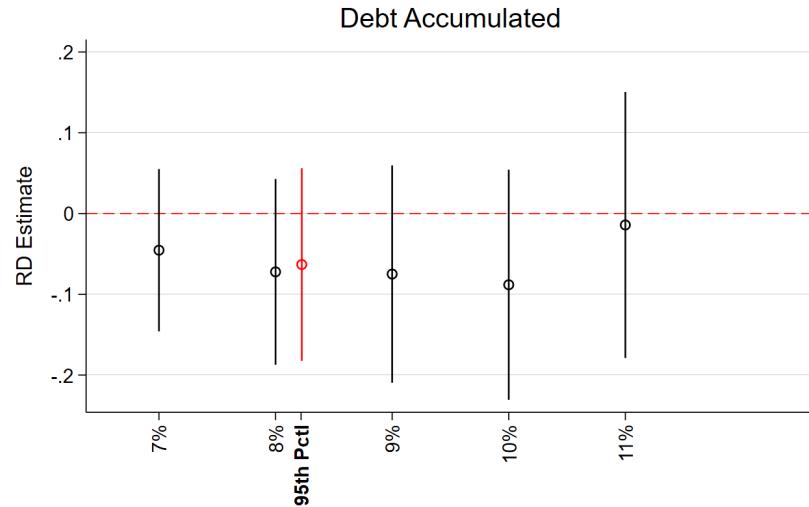

Notes: RDD estimates were obtained using the same framework of Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). The x-axis represents the threshold of *share relatives* after which a candidate is classified as a large-family candidate. Vertical bars show 90% confidence intervals. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

Figure A.9: Coefplot on Different Definitions Relatives - Debt Repayment
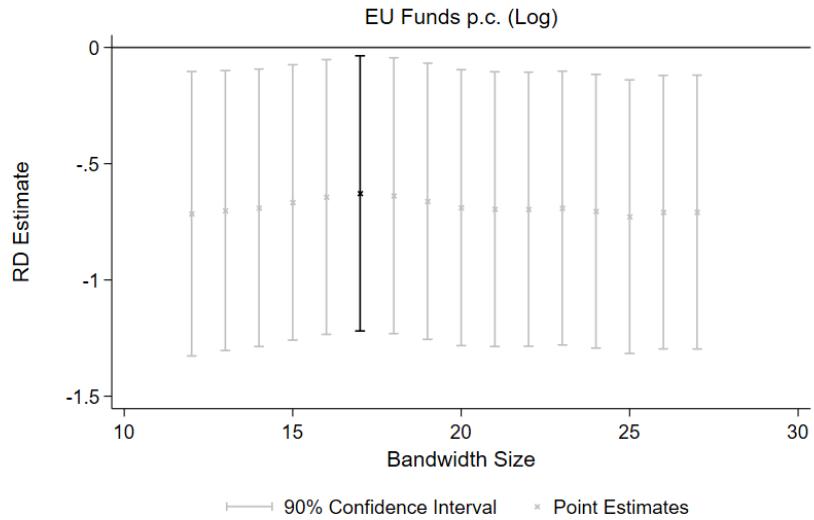
Notes: RDD estimates were obtained using the same framework of Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). The x-axis represents the threshold of *share relatives* after which a candidate is classified as a large-family candidate. Vertical bars show 90% confidence intervals. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

Figure A.10: Coefplot on Different Definitions Relatives - Debt Accumulated
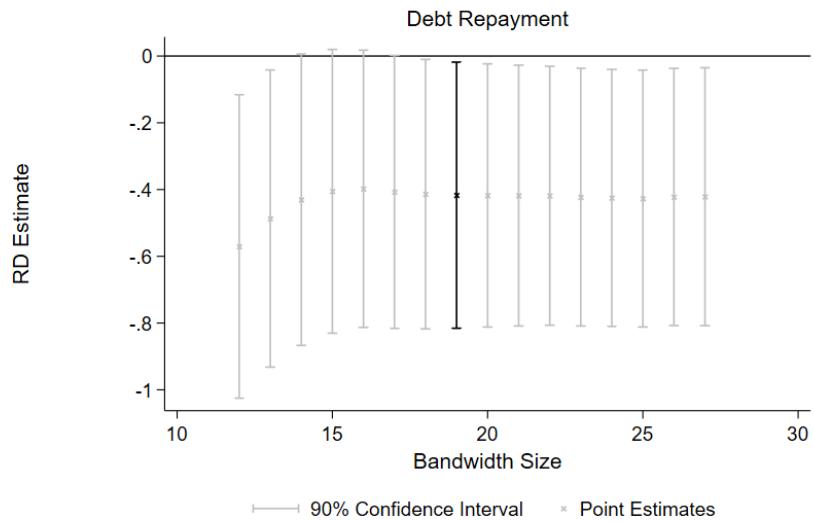
Notes: RDD estimates were obtained using the same framework of Equation (2) with linear polynomial fit, triangular weighting kernel and data-driven optimal bandwidth selection (Calonico et al. 2014). The x-axis represents the threshold of *share relatives* after which a candidate is classified as a large-family candidate. Vertical bars show 90% confidence intervals. Controls include: sex of the mayor, age of the mayor, native mayor, population, latitude, longitude, year FE and province FE.

Figure A.11: Large-Family Mayor and EU Funds (Log),
Robustness to Different Bandwidths
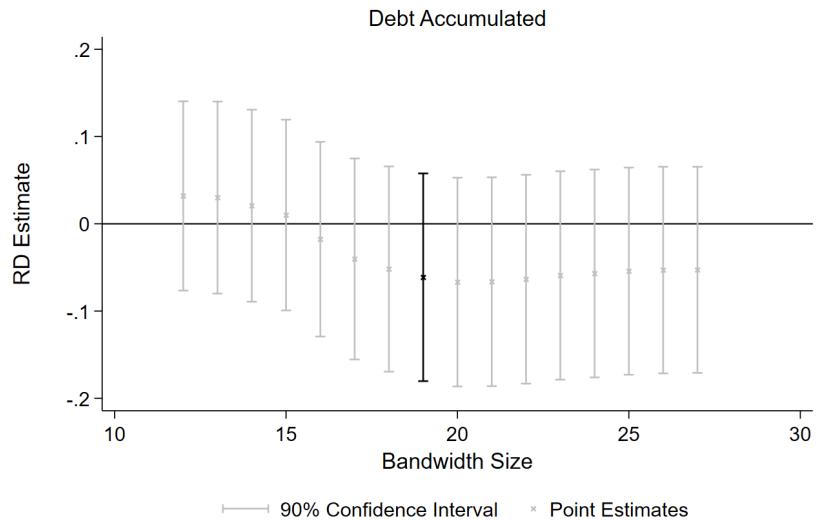
Notes: Each cross represents one RD estimate from fitting Equation (2), using a bandwidth (on each side of the cutoff) of the size indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust standard errors clustered at the municipality level. The dependent variable is the amount of log EU funds per capita in municipality i during term t.

Figure A.12: Large-Family Mayor and Debt Repayment,
Robustness to Different Bandwidths
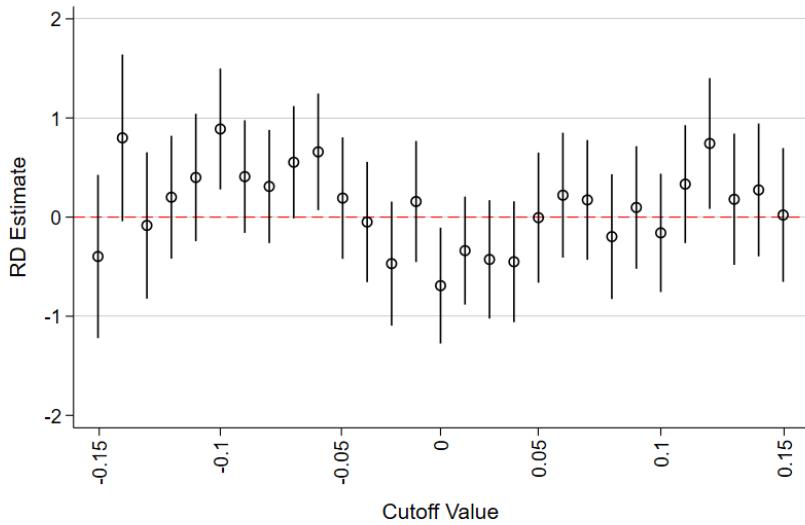
Notes: Each cross represents one RD estimate from fitting Equation (2), using a bandwidth (on each side of the cutoff) of the size indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust standard errors clustered at the municipality level. The dependent variable is the average debt repayment in municipality i during term t.

Figure A.13: Large-Family Mayor and Debt Accumulated,
Robustness to Different Bandwidths
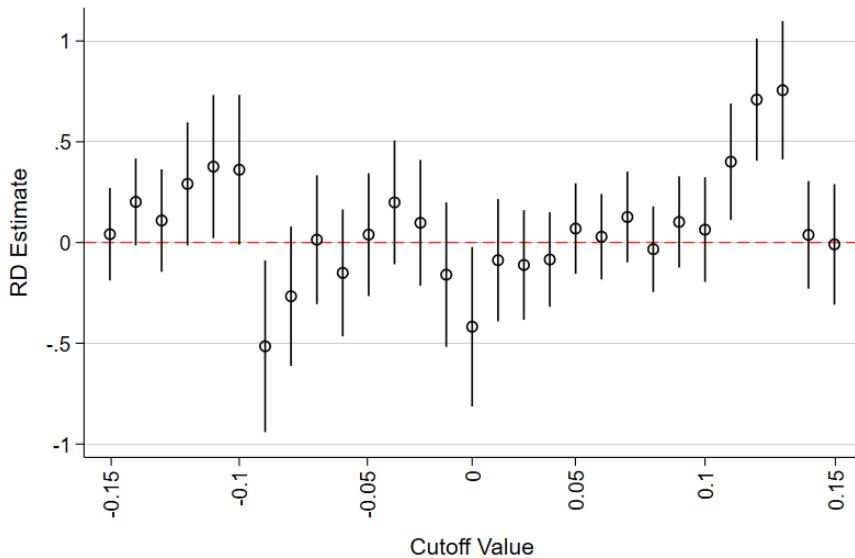
Notes: Each cross represents one RD estimate from fitting Equation (2), using a bandwidth (on each side of the cutoff) of the size indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust standard errors clustered at the municipality level. The dependent variable is the average debt accumulated in municipality i during term t.

Figure A.14: Falsification Test – Large-Family mayor and EU Funds,
Effects at Irrelevant Cutoffs of the Running Variable
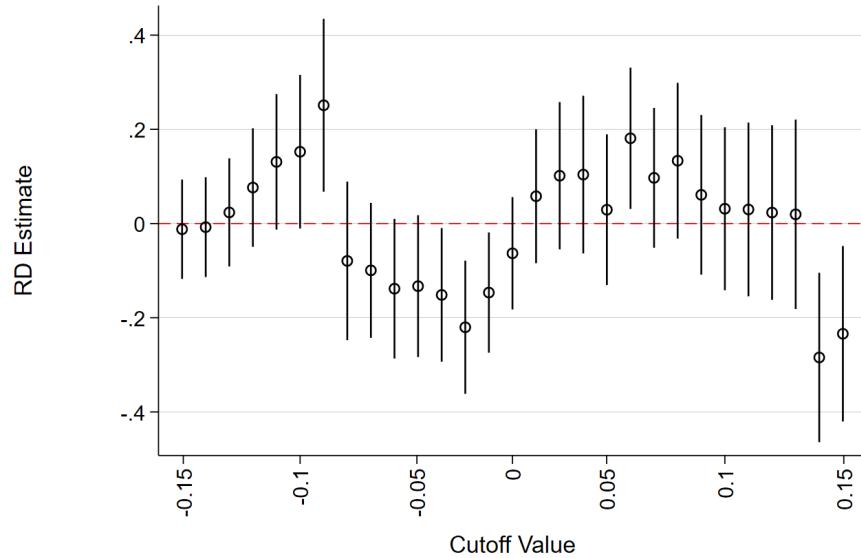
Notes: Each dot represents one RD estimate from fitting Equation (2) with the full set of controls, using the cutoffs for the running variable – margin of victory/loss of the most voted large-family candidate – indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level. The dependent variable is the amount of log EU funds per capita in municipality i during term t.

Figure A.15: Falsification Test – Large-Family mayor and Debt repayment,
Effects at Irrelevant Cutoffs of the Running Variable
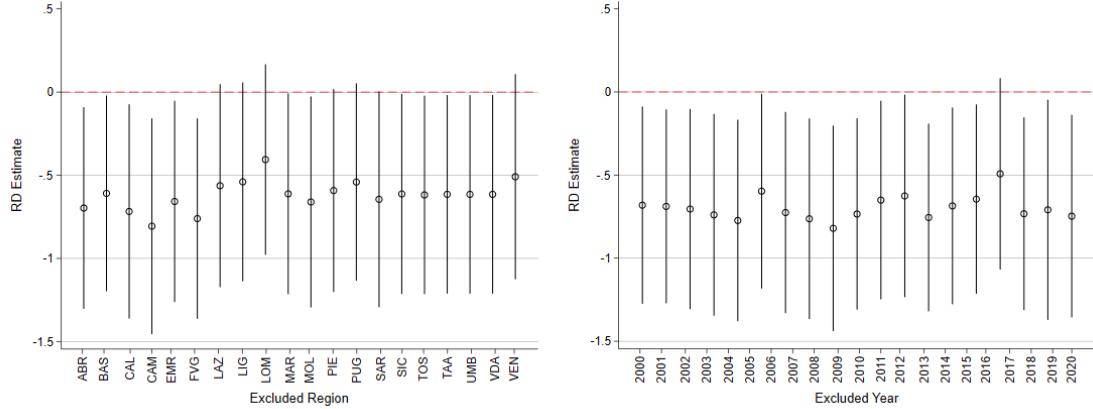
Notes: Each dot represents one RD estimate from fitting Equation (2) with the full set of controls, using the cutoffs for the running variable – margin of victory/loss of the most voted large-family candidate – indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level. The dependent variable is the average debt repayment in municipality i during term t.

Figure A.16: Falsification Test – Large-Family mayor and Debt Accumulated, Effects at Irrelevant Cutoffs of the Running Variable
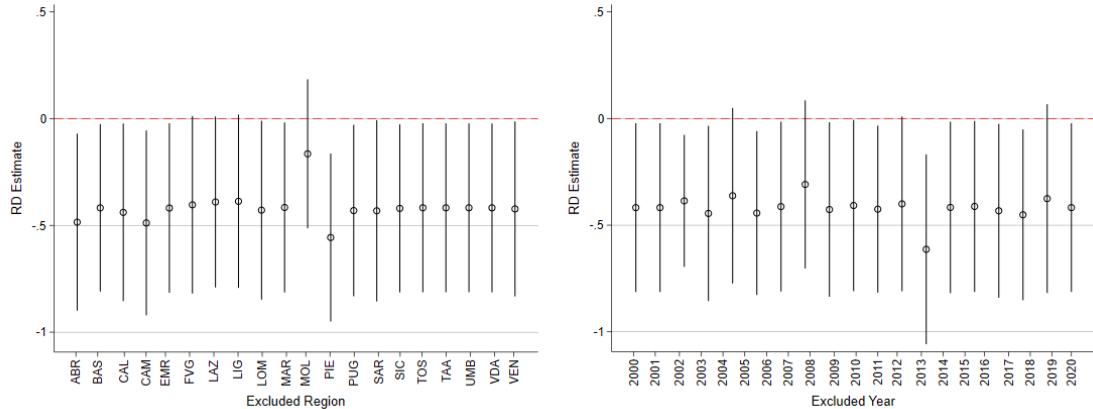

Notes: Each dot represents one RD estimate from fitting Equation (2) with the full set of controls, using the cutoffs for the running variable – margin of victory/loss of the most voted large-family candidate – indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level. The dependent variable is the average debt accumulated in municipality i during term t.

Figure A.17: Robustness Test – Large-Family Mayor and EU Funds,
Jackknife Excluding Regions and Election Years
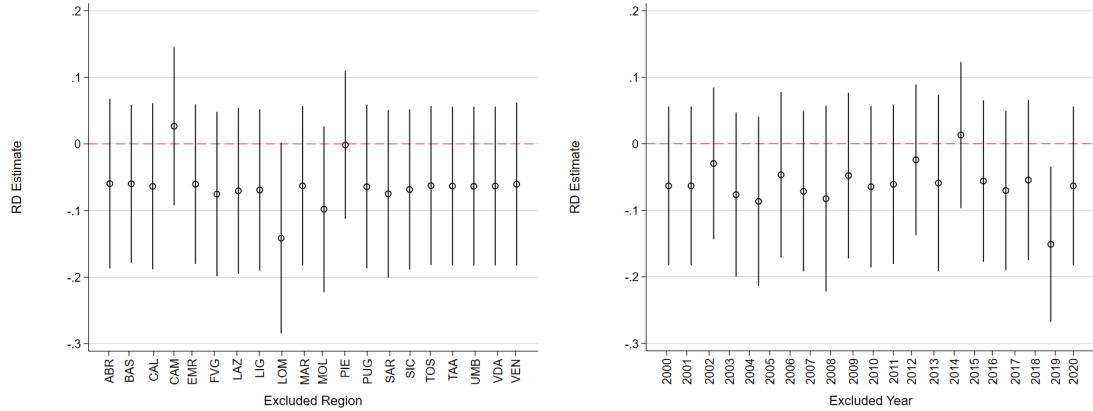
Notes: In both panels, the dependent variable is the amount of log EU funds per capita in municipality i during term t. In Panel A, each dot represents one RDD estimate from Equation (2), excluding all municipalities within the region indicated on the horizontal axis. In Panel B, each dot represents one RDD estimate from Equation (2), excluding all municipalities holding elections during the year indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level.

Figure A.18: Robustness Test – Large-Family Mayor and Debt Repayment,
Jackknife Excluding Regions and Election Years

Notes: In both panels, the dependent variable is the average debt repayment in municipality i during term t. In Panel A, each dot represents one RDD estimate from Equation (2), excluding all municipalities within the region indicated on the horizontal axis. In Panel B, each dot represents one RDD estimate from Equation (2), excluding all municipalities holding elections during the year indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level.

Figure A.19: Robustness Test – Large-Family Mayor and Debt Accumulated,
Jackknife Excluding Regions and Election Years

Notes: In both panels, the dependent variable is the average debt accumulated in municipality i during term t. In Panel A, each dot represents one RDD estimate from Equation (2), excluding all municipalities within the region indicated on the horizontal axis. In Panel B, each dot represents one RDD estimate from Equation (2), excluding all municipalities holding elections during the year indicated on the horizontal axis. Vertical bars are 90% confidence intervals, based on robust, bias-corrected standard errors clustered at the municipality level.