

Can Good Politicians Compensate for Bad Institutions? Evidence from an Original Survey of Italian Mayors

Maria Carreri, University of California San Diego

Can competent political leaders bring significant policy changes to communities otherwise doomed by “bad” informal institutions? This question has remained unanswered because of the lack of a convincing measure of politicians’ competence. I develop a novel survey technique to measure the administrative competence of executive politicians, and I apply it in interviews with 306 Italian mayors. I study the impact of mayors’ administrative competence on the policies they enact, using a difference-in-differences approach. Results show that more competent mayors are associated with better policies, but the association is only present in cases where the quality of informal institutions is low. In these municipalities, the election of more competent mayors translates into a more effective use of funds, an increase in long-term investments, and better service provision without an increase in taxes. Results hold across different measures of institutional quality.

The role of institutions as drivers of government performance has been widely documented.¹ By contrast, less empirical evidence exists on the role of political leaders for government performance. This is surprising in light of the fact that, according to Putnam (1976), “who rules” is the central question of empirical political science, claiming a distinguished lineage going back to James Madison, who argued that the primary aim of every constitution is to deliver leaders with the wisdom and virtue to pursue the common good (Madison 1788). A growing body of literature in political science is addressing this gap and studies how characteristics of politicians (their occupational background, class background, gender, military experience, personality, having daughters, even their smoking habits) shape policy.² However, we lack evidence on the policy impact of what is possibly the most central/desirable feature of political leaders—their competence.

One reason that the impact of politicians’ competence on policies has remained largely unexplored is the challenge in obtaining a convincing measure of competence. The existing literature in political science and economics has measured competence with human capital.³ As a growing body of research suggests, however, human capital is an insufficient measure

of political competence: it is confounded by class (Dal Bó et al. 2017); there is little empirical evidence on its correlation with performance, as more educated leaders are not less corrupt and do not pass more bills, nor do they govern wealthier nations (Carnes and Lupu 2015); and education is only weakly correlated with politicians’ cognitive abilities and leadership skills (Dal Bó et al. 2017).

In order to address these shortcomings, I designed a survey instrument to measure one dimension of executive politicians’ competence: administrative competence. The survey is inspired by Bloom and Van Reenen’s (2007) double-blind survey measure of managerial competence in firms and evaluates how well each mayor does the following: (1) defines the objectives for her term in office, (2) monitors the process of reaching these objectives, (3) knows the government’s daily operations, and (4) motivates and incentivizes the bureaucracy. This is, to my knowledge, the first article applying this methodology to and measuring managerial practices among politicians.

I use newly collected survey data on the administrative competence of 306 Italian mayors to examine whether more competent mayors make a more effective use of public funds and provide better services. Moreover, I study whether the

Maria Carreri (mcarreri@ucsd.edu) is an assistant professor at the School of Global Policy and Strategy at the University of California San Diego.

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1. See Acemoglu and Robinson (2012), Algan and Cahuc (2010), Knack and Keefer (1997), and North (1990).
2. See Burden (2007), Carnes (2012), Gelpi and Feaver (2002), Kirkland (forthcoming), Swers (2002), Washington (2008), and Witko and Friedman (2008).
3. See, for instance, Besley and Reynal-Querol (2011) and Galasso and Nannicini (2011).

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importance of politicians' administrative competence varies as a function of the quality of municipal institutions. The sign of this interaction is not clear *ex ante*—politicians and institutions might be complements or substitutes. That is, it could be that competent politicians can only make a difference if they work within a supportive institutional environment, or it could be that competent politicians can make a difference exactly where institutions are deficient. These two scenarios have different implications, and I try to adjudicate between them. Formal institutions are constant in Italy, so I focus here on the quality of informal institutions, whose large variation makes Italy an ideal setting for this study. I first leverage the north-south divide (Charron and Lapuente 2013; Guiso, Sapienza, and Zingales 2016) and use southern Italy as a proxy for lower-quality informal institutions, and I then employ three other municipality-level measures of informal institutions.

To get causal traction on the effect of administrative competence on the municipal budget, I build a panel of the municipalities in my sample, exploiting the fact that municipal budget data are available both before and after the interviewed mayor was elected. This allows me to estimate a difference-in-differences model and establish that municipalities that eventually elect a high- vs. low-competence mayor exhibit similar levels and trends of outcomes in the years preceding the election. Results show that mayoral competence translates into a more effective use of funds, an increase in long-term investments, and better service provision without an increase in taxes. However, this association is only present in municipalities characterized by poor informal institutions, as measured by four alternative indicators of institutional quality.

While the literature has largely focused on the role of political leaders (Ahlquist and Levi 2011; Berry and Fowler 2021; Easterly and Pennings 2020; Jones and Olken 2005) and institutions (Acemoglu and Robinson 2012; North 1990) as separate drivers of policy, my findings suggests a more nuanced picture: whether political leaders matter is contingent on the institutional environment in which they operate. The article also speaks to the debate about whether the characteristics of city officeholders matter for local government decisions (de Benedictis-Kessner and Warshaw 2016; Ferreira and Gyourko 2009; Gerber and Hopkins 2011; Kirkland forthcoming; Szakonyi 2021). My article also contributes to the study of managerial practices in different settings: bureaucracies (Rasul and Rogger 2018), schools (Di Liberto, Schivardi, and Sulis 2015), and public hospitals (Bloom et al. 2010).

THEORETICAL CONSIDERATIONS

The two most basic questions of political science, according to Putnam, Leonardi, and Nanetti (1993), are, “Who gov-

erns?” and “How well?” They draw a distinction between the first question, which is about representation and raises distributive considerations, and the second question, which gets at government effectiveness. When evaluating representative government, we must evaluate both its representativeness and its effectiveness, with political leaders affecting policy implementation along both dimensions. Political leaders' party and personal preferences affect the direction of policy. However, conditional on the chosen policy direction, the effectiveness of this policy's execution should depend on political leaders' competence. In this study, I focus on this second dimension.

A new and growing literature on the role of local political leaders has focused on the first dimension, showing that the party and other descriptive characteristics of mayors affect the direction of local policies (de Benedictis-Kessner and Warshaw 2016; Gerber and Hopkins 2011; Kirkland forthcoming; Szakonyi 2021), while evidence on the policy impact of the second dimension, administrative competence, is lacking. This dimension is particularly relevant for local executive politicians, who are often elected in nonpartisan races.⁴

The importance of individual political leaders in shaping policy implementation is debated. An alternative view is that political leaders are inconsequential for policies; rather, the main drivers of government performance are formal and informal institutions (Acemoglu and Robinson 2012; Algan and Cahuc 2010; Knack and Keefer 1997; North 1990). A third, more nuanced view is that politicians matter, but their impact is moderated by the quality of the institutions in which they operate. For instance, Jones and Olken (2005) show that the impact of political leaders on a country's growth is strongest in autocracies. I embrace this third view and study how the competence of Italian local leaders interacts with the institutional environment within which they operate. How should we expect the quality of institutions to moderate the effect of politicians' competence on policy? On one hand, mayoral competence may play an increasingly significant role as the quality of institutions becomes worse. Intuitively, competent politicians could have a larger impact where low-quality institutions leave more room for improvement, while high-quality institutions might impose a ceiling effect on the marginal impact of a politician.⁵ Alternatively, better institutions may enhance the ability

4. Nonpartisan elections are common at the local level, not only in Italy but across developed and developing countries: see, for instance, municipal elections in the United States (Kirkland forthcoming) or elections for the newly created local governments in Pakistan (Gulzar and Khan 2021).

5. Institutions have been found to operate as ceiling effects in a wide variety of contexts, such as economic reform (Acemoglu et al. 2008), the effectiveness of hereditary rule (Besley and Reynal-Querol 2017), and development project design (Khawaja 2009).

of good mayors to operate, making institutions and mayoral quality complements.

How do these theoretical considerations apply to the context of Italian local governments? Formal institutions are constant across Italy: mayors are elected with the same electoral rule, share the same powers, and are subject to the same level of legislative and judiciary checks and balances and the same rules governing the bureaucracy and the budget. While formal political institutions are the same throughout Italy, the informal institutional environments in which politicians operate vary widely across the country. Here, I define informal institutions as informal rules that create or strengthen incentives to comply with formal institutions (Helmke and Levitsky 2004). In other words, the proper functioning of formal institutions cannot be considered independent of, and is fact highly contingent on, the quality of the informal institutional environment (Stokes 2006). This has been shown in the Italian case specifically: Putnam, Leonardi, and Nanetti (1993) show how Italian regional governments, newly created formal institutions that were established homogeneously across Italy in the 1970s, performed with vastly different success across the country because of underlying differences in the quality of informal institutions.

Operationally, I use three alternative measures of informal institutions across Italian municipalities: the presence of organized crime, bureaucratic norms, and social capital. It is easy to understand how these informal institutions can represent obstacles for the policy effectiveness of a mayor. For a mayor planning to build a school in her municipality, the presence of organized crime can make the public procurement process more complicated and risky. Bureaucratic norms can be an obstacle to policy implementation when they lead to the presence of indolent and unresponsive bureaucrats, as described in several regions of southern Italy by Putnam, Leonardi, and Nanetti (1993). Some policies require the cooperation of all citizens in order to succeed, and therefore low levels of social capital can represent an obstacle. A common example among Italian municipalities is waste recycling, a policy that can only be successful if citizens trust that the recycled materials will not end up in a landfill and if they are civic-minded enough to comply with the rules of recycling.

One way to capture the variation in several aspects of informal institutions, albeit imperfectly, is to focus on the north-south divide, since a long body of literature has emphasized that the south is more deficient in terms of informal institutions as a result of lower social capital, more corruption (Golden and Picci 2005), clientelism (Alesina, Piccolo, and Pinotti 2016; Charron and Lapuente 2013; Chubb 1982), and a stronger presence of organized crime (Pinotti 2015).

INSTITUTIONAL BACKGROUND

Each of the 8,003 Italian municipal governments is composed of an elected mayor (*Sindaco*), an executive body (*Giunta*) appointed by the mayor, and an elected city council (*Consiglio*).⁶ Municipal governments manage around 10% of Italian public expenditures and are responsible for a vast array of services, such as municipal roads and infrastructure, the creation and maintenance of school buildings, waste management, water supply, and social services. Here I describe the features of municipal governments that are represented in my sample—namely municipalities whose government was elected after 2000 and that have between 3,500 and 6,500 inhabitants.

The mayor, elected with a single-round system to serve a five-year mandate with a two-term limit for consecutive terms, holds executive power at the municipal level and is responsible for the administration of the local government.⁷ The main responsibility of mayors is to draft the annual budget, which the municipal council approves with majority rule.⁸ The mayor enjoys considerable executive power and discretion over budget allocations (Fabbrini 2001). Municipal revenues include tax revenues (from taxes on income and real estate and for services such as trash collection), transfer revenues (from the national or regional governments or from the European Union [EU]), and a residual category for revenues raised through the municipality's assets or services (fees for city hall services, public transportation, sport infrastructure, police fines). On the expenditures side, current expenditures cover the municipality's operating costs, such as wages and utilities; capital expenditures are investments on projects that typically span more than one budget year and are related to the building of infrastructure, such as roads and schools; and residual expenditure category is largely the repayment of the municipality's outstanding debt. Qualitative interviews carried out with a subsample of the interviewed mayors highlighted consensus regarding the fact that spending more on capital rather than

6. Number of municipalities as of January 1, 2016. The number can vary marginally year by year as new municipalities are formed by merging or separating existing ones.

7. Only mayors of municipalities with more than 100,000 inhabitants can appoint a separate managerial figure (*direttore generale*), similar to a city manager.

8. The municipal council is responsible for overseeing the legislative activity of the mayor. Two-thirds of the seats in the municipal council are assigned to councilors in the mayoral coalition, and the remaining seats are assigned to the losing coalitions proportionally based on vote shares, using the D'Hondt method. The size of the council varies between seven and sixteen members depending on the year of the election, given several statutory changes mandating different municipal council sizes. The executive body is composed of a maximum of four members chosen by the mayor from among the elected councilors.

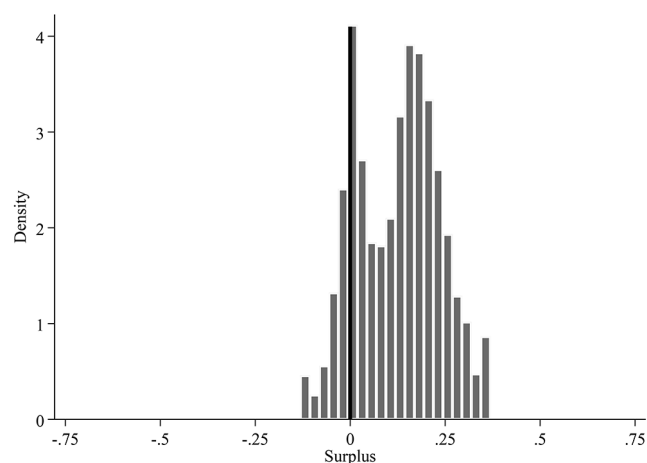


Figure 1. Distribution of the municipal surplus in the 306 municipalities in the sample for four years preceding and four years following the election of the interviewed mayor. Color version available as an online enhancement.

current expenditures is, while desirable, more challenging, since it involves more planning—capital expenditures span several years and require a series of permits and a detailed project.⁹

Each municipality is expected to run a balanced budget.¹⁰ While deviations from a balanced budget toward a deficit (negative surplus) are subject to sanctions under certain conditions,¹¹ mayors do not face any restriction related to the size of the municipal surplus. Figure 1 shows that only a limited number of mayors incur a deficit, while 85% of mayors close the budget with a positive surplus (with 60% of mayors incurring a surplus exceeding 10% of the budget and 25% of mayors incurring a surplus exceeding 20% of the budget). A large surplus, however, is undesirable, because it entails leaving “on the table” unused revenues that cannot be budgeted in the following fiscal years. Qualitative interviews confirm that (1) a vast majority of mayors considers achieving a minimal surplus a primary objective and “the clearest indicator of a virtuous administration,”¹² but (2) only some manage to deliver, given the inherent challenges in obtaining a minimal surplus,

9. Qualitative interviews were carried out in the summer of 2017 with a subgroup of the interviewed mayors, drawing from both tails of the competence distribution across the south, north, and center.

10. The balanced budget principle is imposed by the *Patto di Stabilità Interno* (Internal Stability Pact), which since 1999 has regulated the amount of debt that municipalities can reach through the yearly Financial Act. For instance, for the 2011–13 period, see Law 220/2010. It is worth noting that several EU countries, such as Austria, Germany, Spain, and Portugal, introduced some form of “domestic stability pact” similar to the Italian one, or fiscal stability laws regulating local governments, in order to apply the EU’s comprehensive budget framework (Lienert 2010).

11. See Law 220/2010 (1, 120).

12. Qualitative phone interview conducted by the author, July 2017.

which requires careful planning of revenues and expenditures for each budget year and constant monitoring to ensure that expenditures are made in a timely manner.¹³

MEASURING ADMINISTRATIVE COMPETENCE

In this section, I describe the content and methodology of my survey, present the sampling frame, describe the resulting measure of mayors’ administrative competence, and discuss its validity. More details on the survey methodology and on the resulting measure’s validity and reliability are discussed in the appendix (available online).

Survey content and methodology

In order to obtain a reliable measure of politicians’ administrative competence, I carried out an original phone survey of Italian mayors, with a methodology inspired by Bloom and Van Reenen’s 2007 study of managerial competence in firms. Surveys that build on Bloom and Van Reenen’s tried-and-tested measure of management practices in firms have been used to evaluate management practices among bureaucrats (Rasul and Rogger 2018),¹⁴ in schools (Di Liberto et al. 2015), and in public hospitals (Bloom et al. 2010). Below I describe the survey content and the survey methodology. A detailed discussion of how the survey methodology ensures unbiased responses is included in the appendix, along with a description of the process of securing interviews.

The main goal of the survey is to measure the competence of politicians as administrators of the local government in an outcome-agnostic way. This is achieved by posing questions that do not focus on the “output” of the mayors—that is, the policies that they implement—but rather deal with the practices involved in producing said output. Using a scoring grid, answers to each of the seven questions are scored from 1 (worst answer) to 5 (best answer).

The seven practices are grouped in four categories, as in Bloom and Van Reenen (2007): target setting, performance monitoring, operations, and incentives. The target-setting section of the survey deals with the objectives that the mayor has set forth for her term in office. Respondents are evaluated on the basis of the clarity of their objectives (not the content of the objectives), whether their objectives translate into practical targets, the interconnection and time horizon of said targets, and the extent to which members of the administration and of the bureaucracy are given specific responsibilities

13. The mean surplus is higher in southern Italy with respect to northern Italy by 14% of a standard deviation.

14. Rasul and Rogger (2018) study civil servants across 63 organizations of the Federal Civil Service in Nigeria.

in reaching the targets. The monitoring section deals with tracking the performance of the government in attaining its objectives. In particular, it asks whether the monitoring is informed by data, how often this monitoring takes place, and down to which level of the government machinery people are involved in the monitoring process. The operations section investigates the mayor's knowledge of the procurement procedures of her municipality (one of the most important and time-consuming operations for municipal governments) and the efficiency of their implementation. The incentives section deals with assessing how well the mayor incentivizes the municipal bureaucracy, specifically by rewarding best performers and addressing worst performers among the bureaucrats.¹⁵ Each answer is evaluated in real time by the interviewer, who assigns a score ranging from 1 to 5. The interviewer assigns the score based on a scoring grid containing the criteria that the mayor's answer has to satisfy for each score. As a clarifying example, table 1 shows the first survey question, which falls under the target-setting practice, with its scoring grid and three anonymized examples of answers that were given a score of 1, 3, and 5, respectively.¹⁶

The full survey instrument is in the appendix and reflects the order in which questions were asked during the survey. I use the unweighted average across all individual scores assigned to each mayor as my measure of the mayor's administrative competence. In the appendix, I show that results are robust to using an inverse-covariance weighted competence score (Anderson 2008).

Finally, data are collected on the mayor's party identification. This characteristic is collected at the end of the survey to minimize interviewer bias, as described in the next section.

Sampling frame and external validity

In the survey, I focused on small- and medium-sized municipalities.¹⁷ From this population, I extracted a random sample of 610 municipalities with between 3,500 and 6,500 inhabitants and invited their mayors to participate in the study. Of these, 306 agreed to participate in the interview. While the sample of mayors who were contacted was ran-

domly selected, the subsample of those who agreed to participate was not. This raises the concern that the mayors surveyed and their municipalities might systematically differ from those who declined to be interviewed, threatening the external validity of the results. Table A8 (tables A1–A28 are available online) shows *t*-tests for the difference in means between the mayors who declined and those who agreed to be interviewed for all available mayor- and municipality-specific characteristics and outcomes. Table A8 shows that the interviewed mayors (and their municipalities) do not systematically differ from those mayors (and their municipalities) who declined the interview. Table A9 shows balance across the two groups in the south, north, and center separately. Table A10 shows the representativeness of the sample by comparing it to all municipalities (and their mayors) with a population between 3,500 and 6,500 in 2016.

The administrative competence score

Data on the competence of politicians were collected between March and September of 2016 through phone interviews with 306 Italian mayors. I complement the survey data with administrative records from the Italian Ministry of Interior on the budget outcomes of each municipality and on the demographic characteristics of the interviewed mayors. I observe budget outcomes for every year during which the interviewed mayor is in power, as well as for the four years preceding her first term in office. The data employed in the analysis are described in the appendix and presented in tables A1–A4. In the appendix, I also discuss the validity and reliability of my competence measure.

Figure 2A plots the distribution of mean competence score for all mayors in the sample. There is a large spread in competence, with a considerable number of mayors scoring extremely poorly or extremely well. Overall, the variation is high, with a variance of .84 for the competence measure ranging from 1 to 5. Figures 2B, 2C, and 2D show the distribution of the competence score across the Italian south, center, and north, respectively. The mean value of the competence score and the spread of the distribution are comparable across the three areas, suggesting that a large portion of the variation shown in the full sample is driven by variation within, rather than across, the three areas. While the mean of the competence score is higher in central Italy, followed by northern and southern Italy (3.14, 2.99, and 2.92, respectively), most of the variation shown in figure 2A (standard deviation of .84) is driven by within-area variance (.83) rather than between-area variance (.11).

Appendix section A3 discusses the validity and reliability of the administrative competence measure in more detail. In particular, table A5 shows that a mayor's administrative

15. Mayors do not have the power to fire the bureaucrats working in the municipal government, but they can use a host of incentives to address bureaucrats' performance, such as a fund for monetary incentives to be distributed among the top performers, disciplinary procedures against worst performers, and coaching methods. Moreover, mayors can change bureaucrats' assignment to specific offices, with some appointments being more desirable than others.

16. For the sake of clarity and comparability, table 1 reports the anonymized answers of three mayors who listed a similar objective.

17. In 2016, small- and medium-sized municipalities (fewer than 10,000 inhabitants) represented 84.7% of all Italian municipalities.

Table 1. Example of Survey Question, Scoring Grid, and Anonymized Answers

(1) Target Inter-connection

- a) Could you describe the main objectives that you set for your term in office?
- b) Which practical targets are associated to each of these main objectives?
- c) How are these targets cascaded down to individual members of the government and of the bureaucracy?

	Score 1	Score 3	Score 5
Scoring grid	Objectives and targets are very loosely defined. They do not cascade down throughout the administration.	Objectives are clearly defined and targets are defined for some of the objectives. They do cascade down but only to members of the administration.	Objectives have clearly defined targets. They cascade down to individual members of the administration and of the bureaucracy and increase in specificity as they cascade, defining individual expectations for each person.
Anonymized examples	Defines objective as "Tourism." Does not identify practical targets.	Defines objective as "Increasing Tourism." Identifies two practical targets (redecorating the old town; establishing an info point for tourists). Assigns responsibilities to a member of the executive.	Defines objective as "Reaching x tourists per year." Identifies three practical targets (redecorating the main square of the old town; establishing an annual festival; creating a bike path through the municipality's national park). Assigns responsibilities to a member of the executive and one bureaucratic office through a timetable.

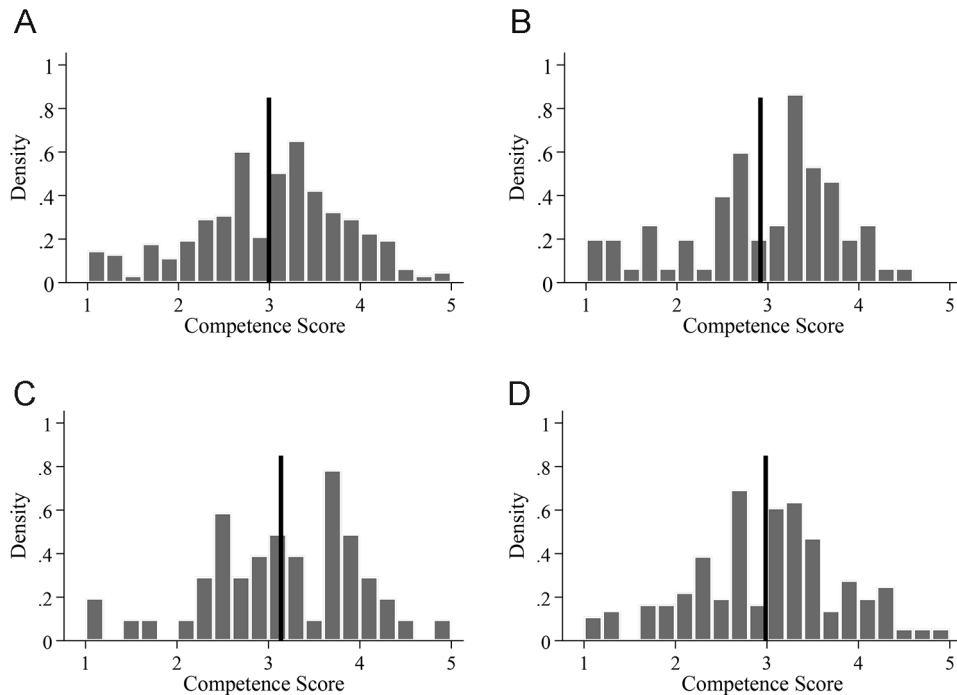


Figure 2. Distribution of the competence score across Italy: A, Full sample ($N = 306$); B, south ($N = 75$); C, center ($N = 51$); D, north ($N = 180$). The thin, vertical line marks the mean value in each sample. Mean values of the competence score are 2.99, 2.92, 2.99, and 3.14, respectively. Color version available as an online enhancement.

competence correlates with other common measures of “quality” employed in the literature (e.g., educational attainment, skill content of the job), suggesting its validity as a relevant measure of quality.¹⁸ Table A5 also shows that only 17% of the variation in the administrative competence score is accounted for by these other measures of “quality.”

EMPIRICAL STRATEGY AND RESULTS

In order to study the effect of the mayor’s administrative competence on policies, I employ two empirical strategies. I first explore the relationship descriptively with a cross-sectional analysis controlling for a wide set of mayor-specific and municipality-specific characteristics. Second, to address the concern about unobservable determinants of both mayoral competence and outcomes, I use a difference-in-differences model exploiting the availability of the outcome variables for the years preceding the election of the interviewed mayors. Throughout, the effect of mayoral competence is analyzed as a function of the institutional environment in which the mayor operates.

Cross section

Using data on the administrative competence of the mayors interviewed during the summer of 2016 and coupling them with administrative records on the budget of their municipalities for all years during which the interviewed mayors were in power, I build an unbalanced panel of 306 municipalities over 2010–15. Using these data, I estimate the following model:

$$y_{it} = \beta \text{MeanCompetenceScore}_i + \alpha_r + \gamma' X_i + \varepsilon_{it}, \quad (1)$$

where y_{it} is a budget outcome of municipality i for year t of the term of the interviewed mayor, the variable of interest $\text{MeanCompetenceScore}_i$ records the mean administrative competence score of the mayor of municipality i . The variable α_r represents region fixed effects,¹⁹ while the matrix X_i includes the party of the mayor; the mayor’s age, gender, educational attainment, years in an elected position in the municipal government, and skill content of previous employment; an indicator for which year of the five-year term the mayor was serving at the time of the interview; and the interview length in minutes. Standard errors are clustered at the municipality level.

18. Interestingly, prior office-holding, measured as the number of years in an elected position in the municipal government, does not predict the competence score. This might be explained by the fact that municipal governments are the lowest level of government in Italy. Therefore, if on one side we expect a positive correlation between tenure at the local level and administrative competence because of a learning effect, on the other side we expect a negative correlation because more competent mayors are more likely to advance to more remunerative and prestigious offices at higher levels of government.

19. Italy’s 8,003 municipalities are divided among 20 regions. All regions are represented in the sample, with the exception of Valle d’Aosta.

I start by studying the correlation between mayors’ competence and the relative size of the municipal surplus, which is, as explained in the institutional background section, one of the main dimensions of an efficient use of public funds in the Italian context: we expect more competent mayors to achieve a smaller surplus, all else constant.²⁰ In table 2, panel A presents results for the entire sample, while panels B, C, and D present results for the subset of municipalities in the Italian south, north, and center, respectively. Mayors with higher competence scores are associated with a reduction in the municipal surplus in southern Italy only. The coefficient of interest is consistent across specifications and the effect is sizeable in magnitude: a one-standard-deviation increase in the competence score is associated with a decrease ranging from 2 to 2.8 percentage points in the surplus as a function of the overall budget size—an effect ranging between 21% to 29% of the dependent variable’s standard deviation. Table A11 shows that the difference in the effect in the south versus the rest of Italy is statistically significant.

Difference-in-differences

The results presented in the cross-sectional analysis are subject to two related potential concerns: municipalities that elect a more competent mayor might be more likely to experience, in the preelection years, (1) lower *levels* of surplus, or (2) a decreasing *trend* in surplus. In this section, I address these two concerns. Exploiting the fact that information on each municipality’s surplus is also available for the years preceding the election of the interviewed mayor, I build a panel in which each municipality is observed for a maximum of four years preceding and four years following the election of the interviewed mayor. Because of the staggered nature of Italian local elections, the election year for the mayors in my sample ranges between 2005 and 2015. First, I establish that municipalities that eventually elect a high- versus low-competence mayor exhibit similar *levels* of surplus in the years preceding the election. This is evident from table 3, which shows the average effect of mayoral competence on budget outcomes in each of the four years preceding the election of the mayor. Municipalities that eventually elect a high-competence mayor do not show, on average, any difference in the level of surplus with respect to municipalities that eventually elect a low-competence mayor, in any of the preelection years.

Second, I use a difference-in-differences model to show that (1) municipalities that eventually elect a high-competence mayor exhibit similar *trends* in surplus in the years preceding the election, and (2) the effect of the competence of the

20. The variable is constructed as (Total revenues – Total expenditures) / Total expenditures.

Table 2. Competence Score and Budget Surplus

	(1)	(2)	(3)	(4)
A. Full Sample				
MeanCompetenceScore	-.001 (.005)	-.002 (.005)	-.000 (.005)	-.000 (.005)
Observations	939	927	927	927
Municipalities	306	303	303	303
R ²	.075	.080	.088	.100
SD	.0907	.0911	.0911	.0911
Standardized effect	-.001	-.001	.000	.000
B. South				
MeanCompetenceScore	-.023** (.011)	-.032** (.014)	-.035** (.015)	-.035** (.015)
Observations	240	233	233	233
Municipalities	75	73	73	73
R ²	.169	.200	.213	.232
SD	.0934	.0939	.0939	.0939
Standardized effect	-.020	-.026	-.029	-.028
C. North				
MeanCompetenceScore	.006 (.006)	.008 (.007)	.009 (.007)	.009 (.007)
Observations	552	547	547	547
Municipalities	180	179	179	179
R ²	.092	.095	.111	.119
SD	.0892	.0895	.0895	.0895
Standardized effect	.005	.007	.008	.008
D. Center				
MeanCompetenceScore	.001 (.009)	-.011 (.010)	-.003 (.014)	.000 (.015)
Observations	147	147	147	147
Municipalities	51	51	51	51
R ²	.100	.256	.284	.301
SD	.0916	.0916	.0916	.0916
Standardized effect	.001	-.010	-.003	.000
Mayor controls	No	Yes	Yes	Yes
Party FE	No	No	Yes	Yes
Year of term FE	No	No	No	Yes

Note. FE = fixed effects; SD = standard deviation of the dependent variable. The dependent variable is the per capita municipal surplus relative to the budget size (Total revenues – Total expenditures) / Total expenditures, winsorized at the 1% level. All specifications include fixed effects for the year and region and control for the length of the interview in minutes. Mayor controls include her gender, age, skill content of previous occupation, educational attainment, year of the five-year term that she was serving at the time of the interview, and years of prior office-holding in the municipal government. Standardized effect = Coefficient × Standard deviation of MeanCompetenceScore. Standard errors clustered at the municipality level are shown in parentheses.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

Table 3. No Difference in Preelection Surplus for High- versus Low-Competence Mayors

	Full Sample	South	North	Center
MeanCompetenceScore × Year − 1	−.005 (.007)	−.003 (.017)	−.003 (.010)	−.016 (.011)
MeanCompetenceScore × Year − 2	.008 (.007)	.021 (.016)	.006 (.009)	−.003 (.017)
MeanCompetenceScore × Year − 3	−.007 (.007)	.000 (.016)	−.007 (.009)	−.021 (.014)
MeanCompetenceScore × Year − 4	−.001 (.007)	−.003 (.013)	.001 (.010)	−.006 (.014)
Observations	1,212	293	718	201
Municipalities	305	74	180	51
R ²	.075	.109	.055	.129
SD	.106	.115	.104	.0968

Note. SD = standard deviation of the dependent variable. The dependent variable is the per capita municipal surplus relative to the budget size (Total revenues − Total expenditures) / Total expenditures, winsorized at the 1% level. Specification includes fixed effects for each year preceding the election year. Observations for one municipality are missing from the south sample in the analysis because budget data are missing for this municipality in all preelection years. Standard errors clustered at the municipality level are shown in parentheses.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

interviewed mayor on surplus materializes only after her election. Intuitively, if the selection concern is valid, we would expect municipalities that elect better mayors to follow a different trend in terms of their surplus even before the election. I rule out this concern by incorporating a placebo test in the analysis shown above: I show that the administrative competence of the mayor does not affect the municipal surplus before her election. Specifically, I compare the differential change in surplus before and after the election of the interviewed mayor between municipalities where better and worse mayors are elected.²¹ I estimate

$$y_{it} = \alpha_i + \beta_t + \gamma(\text{MeanCompetenceScore}_i \times \text{PostElection}_t) + \delta_y + \sum_{k=1}^m \lambda_k(x_{ki} \times \text{PostElection}_t) + \varepsilon_{it}, \tag{2}$$

where t represents a normalized measure of years, indexing the number of years since the interviewed mayor of municipality i was elected, with $t = 0$ being the election year. Municipality fixed effects, α_i , control for any time-invariant, municipality-specific characteristic that has an effect on budget outcomes. Normalized year fixed effects, β_t , control for political budget cycles, addressing the possibility that the municipal surplus changes for all municipalities as the election

21. This is similar to the approach used in Bandiera et al. (2020) to evaluate the effect of CEO performance on firm productivity, measured cross-sectionally through a survey.

approaches. The coefficient of interest, γ , captures the average difference in surplus for municipalities with better mayors after the mayor’s election relative to before the election. The calendar year fixed effects, δ_y , control for year-specific effects. The m controls x_{ki} include the mayor’s party, age, gender, educational attainment, years in an elected position in the municipal government, skill content of previous employment, and the interview length. Standard errors are clustered at the municipality level.

There are two assumptions behind this design. The first assumption is that the budget of municipalities that elect better mayors would have evolved similarly to the budget of municipalities that elect worse mayors in absence of the treatment (i.e., the election of mayors with different competence levels). The second assumption is that the competence of the interviewed mayors is uncorrelated to the (unobserved) competence of their predecessors.

To provide evidence in support of the first assumption, I analyze whether there are differential pretrends in surplus between municipalities that will elect mayors of different competence levels by estimating a version of equation (2) where the effect of $\text{MeanCompetenceScore}_i$ is allowed to vary flexibly over time. So

$$y_{it} = \alpha_i + \beta_t + \sum_{t=-4}^{+4} \gamma_t \text{MeanCompetenceScore}_i + \delta_y + \sum_{t=-4}^{+4} \lambda_t X_i + \varepsilon_{it}. \tag{3}$$

Table 4 confirms the cross-sectional results reported in table 2— that is, we see that better mayors are associated, in the Italian south only, with a reduction in the municipal surplus. The effect is consistent across specifications and is economically meaningful: a one-standard-deviation increase in the competence score leads to a reduction of between 2.2 and 3.1 percentage points in the municipal surplus as a function of the budget size, corresponding to 18% and 26% of a standard deviation in the outcome in the period preceding the election of the interviewed mayor. Following Mummolo and Peterson (2018), a within-unit shift in the MeanCompetenceScore that is more useful for interpreting the results can be obtained by computing the standard deviation of the MeanCompetenceScore after it has been residualized with respect to the fixed effects included in the analysis. A one-standard-deviation increase in the residualized MeanCompetenceScore in the south leads to a reduction in the municipal surplus by 1.3 percentage points, corresponding to 11% of a standard deviation in the outcome in the period preceding the election of the interviewed mayor.²² Table A12 shows that the difference in the effect in the south versus the rest of Italy is statistically significant.²³

Crucially, figure 3 shows that the decrease in surplus observed in municipalities that elect better mayors takes place precisely after the new mayor is elected, with no differential pretrends in surplus in the years leading up to the election. Intuitively, the change in the surplus of each municipality in the years preceding the election does not predict the competence of the new mayor elected at time 0.

Table A5 shows that the administrative competence of the interviewed mayors is correlated to a number of their characteristics. To test the second identifying assumption, I leverage the available characteristics (age, education level, skill content of the previous job) for the previous mayors for each municipality. Table 5, panel A, shows no correlation between the competence of the interviewed mayor and any of the available characteristics of her predecessor. Table 5, panel B, shows that there is no persistence over time in the char-

acteristics of elected mayors. Overall, table 5 suggests that the competence of the interviewed mayor is uncorrelated to the competence of the previous mayor, further alleviating the selection concern.²⁴

In light of table A5, one might wonder if any characteristic of the mayors has an effect on the budget surplus conditional on those mayors' competence scores. Table A20 rules out this concern. The estimates shown in table 4 are calculated using an unbalanced sample. For instance, if an interviewed mayor was elected for the first time in 2013, her municipality would appear in the data set for the years 2009–15 (i.e., for all four years preceding the election but only two years following it). In order to rule out the concern that results are driven by the sample composition in the pre- and postelection years, I estimate equation (2) for the subset of municipalities whose budget data are available for the full ± 4 -year window around the mayor's election. Table A21 shows robustness to this sample restriction. Figure A2 shows that results are not driven by any single municipality in the south. We also want to rule out the possibility that the negative effect of competence on surplus is driven by the small number of municipalities with a budget deficit (i.e., a negative surplus). Table A22 shows that results are virtually unchanged if the absolute value of the surplus is used as a dependent variable.

Better mayors and more long-term investments

Results show that more competent mayors manage the budget more efficiently by closing the gap between revenues and expenditures. Better mayors may achieve this through expenditures or through revenues. Column 1 of table 6 shows that mayors with a higher competence score are especially able to raise total expenditures. Columns 2–4 further show that the increase in total expenditures is explained by an increase in capital and reimbursement expenditures rather than current expenditures. Better mayors are spending more on long-term investments (infrastructure building and multiyear projects) and are more likely to repay the municipality's outstanding debt. A one-standard-deviation increase in the MeanCompetenceScore is associated with an increase in capital expenditures of 66 euros per capita, corresponding to 19% of the mean value of capital expenditures in the south over the four preelection years. The effect of competence on capital expenditures is consistent with the fact that 66% of the interviewed mayors listed at least one capital investment among the main objectives of their term in office. The higher likelihood of competent mayors to deliver capital investments

22. The MeanCompetenceScore is residualized with respect to fixed effects for the calendar year, the normalized year, and the region.

23. The results presented in the rest of the article are not driven by any single component of the competence score. Tables A13 and A14 show that results are robust to substituting for the unweighted competence score its inverse-covariance weighted version. Table A16 shows that results are robust to excluding from the competence score, one at a time, (1) each of the four management practices, or (2) each of the seven questions that compose the competence score. Table A17 reports, for the south, the effect of each of the four components of the competence score (i.e., the scores received by the mayors for target setting, performance monitoring, operations, people management) and shows that the four dimensions of competence contribute similarly to the effect reported in table 4, panel B.

24. Table 5 shows results for southern Italy. Tables A18 and A19 show similar results for northern and central Italy, respectively.

Table 4. Competence Score and Budget Surplus: Difference-in-Difference

	(1)	(2)	(3)	(4)
A. Full Sample				
MeanCompetenceScore × PostElection	−.003 (.005)	−.003 (.005)	−.003 (.005)	−.002 (.005)
Observations	2,362	2,362	2,339	2,339
Municipalities	306	306	303	303
R ²	.691	.698	.698	.699
SD surplus pre	.109	.109	.109	.109
Standardized effect	−.002	−.003	−.003	−.002
B. South				
MeanCompetenceScore × PostElection	−.027*** (.007)	−.027*** (.008)	−.038*** (.009)	−.038*** (.011)
Observations	588	588	571	571
Municipalities	75	75	73	73
R ²	.748	.751	.760	.761
SD surplus pre	.120	.120	.120	.120
Standardized effect	−.022	−.023	−.031	−.031
C. North				
MeanCompetenceScore × PostElection	.008 (.007)	.008 (.007)	.008 (.007)	.008 (.007)
Observations	1,392	1,392	1,386	1,386
Municipalities	180	180	179	179
R ²	.679	.685	.686	.688
SD surplus pre	.107	.107	.107	.107
Standardized effect	.007	.007	.007	.007
D. Center				
MeanCompetenceScore × PostElection	−.003 (.009)	−.009 (.009)	−.016* (.010)	−.002 (.015)
Observations	382	382	382	382
Municipalities	51	51	51	51
R ²	.705	.718	.746	.750
SD pre	.098	.098	.098	.098
Standardized effect	−.003	−.008	−.014	−.002
Region FE	N	Y	Y	Y
Mayor controls	N	N	Y	Y
Party FE	N	N	N	Y

Note. FE = fixed effects; SD pre = standard deviation of the dependent variable in the preelection period. Dependent variable is the per capita municipal surplus relative to the budget size (Total revenues – Total expenditures) / Total expenditures, winsorized at 1%. All specifications include fixed effects for the municipality, years since the mayor was elected, and calendar year, and I control for the interview length in minutes. Mayor controls include her gender, age, skill content of previous occupation, educational attainment, and years of prior office-holding in the municipal government. The variable PostElection is an indicator taking value 1 for each year of the interviewed mayor's first term. All controls, as well as region and party indicators, are interacted with the PostElection indicator. Standardized effects = Coefficient × Standard deviation of the MeanCompetenceScore. Standard errors clustered at the municipality level are shown in parentheses.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

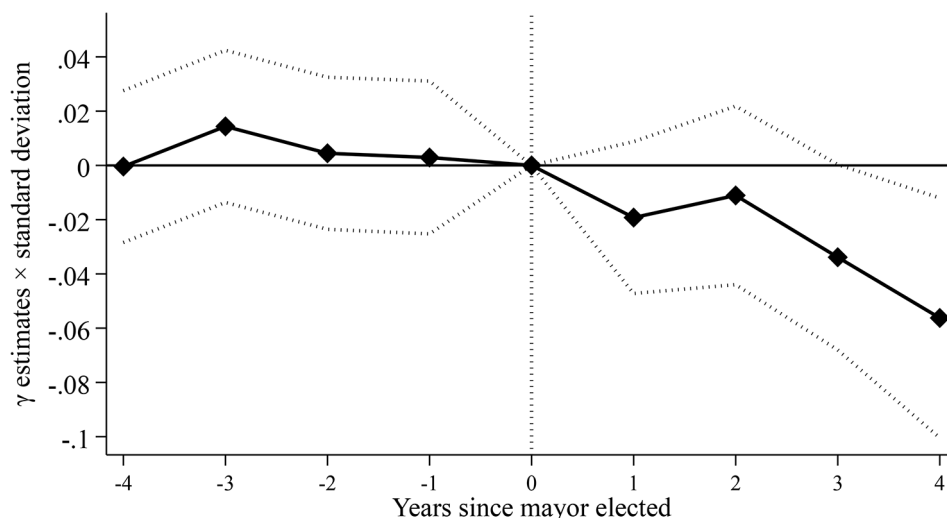


Figure 3. Timing of surplus reduction in the south. The coefficient plot above represents the coefficient estimates γ_t from the difference-in-differences model in equation (3) multiplied by the standard deviation of the MeanCompetenceScore. Dotted lines plot the 95% confidence intervals. Color version available as an online enhancement.

might stem from a longer time horizon or from a greater ability to put together the necessary bureaucratic and monetary resources to approve more complicated projects. These results are in line with the evidence for US mayors, who overwhelmingly identify an increase in infrastructure investment projects as their top priority (Einstein and Glick 2016).

Importantly, competent mayors increase capital investments without increasing taxes (col. 6). While there is a small and marginally insignificant increase in total revenue, this is not driven by an increase in taxes, but rather by a modest increase in the residual component of budget revenues, mostly consisting of fees collected for municipal services (services at

Table 5. No Correlation with Previous Mayor’s Characteristics in the South

	Age (1)	High-Skill Job (2)	Low-Skill Job (3)	Unemployed (4)	<High School Education (5)	High School Education (6)	University Education (7)
A. Interviewed Mayors’ Competence Score and Previous Mayors’ Characteristics							
MeanCompetenceScore	1.017 (1.021)	-.003 (.068)	.003 (.049)	-.001 (.059)	.034 (.023)	-.061 (.064)	.027 (.066)
Observations	73	73	73	73	73	73	73
R ²	.014	.000	.000	.000	.030	.013	.002
B. Interviewed Mayors’ and Previous Mayors’ Characteristics							
Dependent variable for interviewed mayor	.121 (.083)	.105 (.160)	.220* (.123)	.283 (.302)	—	-.104 (.122)	-.141 (.125)
Observations	73	71	71	71	73	73	73
R ²	.029	.006	.044	.013	.000	.010	.018

Note. See the data section in the app. for the variables’ descriptions. The unit of observation is the municipality. The coefficient in col. 5 of panel B is missing because no previous mayor completed less than high school. Standard errors are shown in parentheses.

* Significant at the 10% level.
 ** Significant at the 5% level.
 *** Significant at the 1% level.

Table 6. Competence Score and Surplus Components in the South

	Expenditures				Revenues			
	Total (1)	Current (2)	Capital (3)	Reimbursements (4)	Total (5)	Taxes (6)	Transfer (7)	Other (8)
MeanCompetenceScore × PostElection	151.220*** (55.383)	17.718 (13.164)	80.678** (32.007)	54.239* (30.444)	92.081* (51.619)	-9.417 (10.859)	16.311 (10.805)	77.223 (47.139)
R ²	.611	.875	.349	.673	.611	.929	.897	.545
Mean outcome pre	1,234	536.2	340.9	237.4	1,235	348.4	229.2	649.1
Standardized effect	123.255	14.441	65.758	44.209	75.052	-7.676	13.294	62.942

Note. Pre = preelection period. Results for 571 observations corresponding to 73 municipalities. The dependent variables are expressed in euros per capita and are winsorized at 1%. All specifications include fixed effects for the municipality, years since the mayor was elected, and calendar year, and I control for the interview length in minutes. Mayor controls include her gender, age, skill content of previous occupation, educational attainment, and years of prior office-holding in the municipal government. The variable PostElection is an indicator taking value 1 for each year of the interviewed mayor's first term. All controls, as well as region and party indicators, are interacted with the PostElection indicator. Standardized effects = Coefficient × Standard deviation of the MeanCompetenceScore. Standard errors are clustered at the municipality level.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

the city hall, public transportation, tourism services, fines by the police, the use of municipal sport infrastructure).

Better mayors and better service provision

Do lower surplus and higher capital expenditures associated with competent mayors translate into better public goods? I investigate this question using municipality-level data on the quality of service provision. It is key to couple data on public spending with data on service provision, since it is well documented that the cost of public investment does not directly translate into the value of existing capital (Golden and Picci 2005; Pritchett 2000). Moreover, while the size of the municipal surplus might not be an externally valid measure of government effectiveness, high-quality service provision is a universally shared goal of local governments. In 2010, the Italian Ministry of Economic Affairs and Finance appointed a task force to collect municipality-level data on expenditures and the quantity and quality of services provided. The resulting municipality-level index, available for the years 2010 and 2013 only, ranges between 1 and 10 and measures how virtuous each municipality is by weighting (1) the quality of its services vis-à-vis the quality of services provided by comparable municipalities, and (2) the amount spent on these services vis-à-vis the expenditure of comparable municipalities.²⁵ Coefficients in table 7 show the effect of an increase in the mayor's competence on the index of services quality in the

Italian south (col. 1), north (col. 2), and center (col. 3). While the small sample size limits the external validity of the analysis, results are in line with those presented so far and show that the election of a competent mayor translates into better service provision only where the quality of institutions is lower. A one-standard-deviation increase in the mayor's MeanCompetenceScore in the south leads to a postelection increase of .65 in the index of quality of service provision. The magnitude

Table 7. Competence Score and Quality of Service Provision

	South (1)	North (2)	Center (3)
MeanCompetenceScore × PostElection	.744** (.354)	.507 (.330)	-.369 (.514)
Observations	48	114	28
Municipalities	25	61	15
R ²	.794	.777	.727
Mean outcome pre	4.832	6.957	5.547
Standardized effect	.653	.453	-.387

Note. Pre = preelection period. The dependent variable is an index of service provision quality ranging from 1 to 10. All specifications include fixed effects for the municipality, years since the mayor was elected, and the interview length interacted with the PostElection indicator. Standard errors clustered at the municipality level are shown in parentheses.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

25. For a methodological note on the index construction, see Porcelli et al. (2016) and <http://www.mef.gov.it/ministero/commissioni/ctfs/>.

of the effect is sizeable, as it corresponds to 14% of the dependent variable's preelection mean.

Competent mayors in the south bridge the north-south gap in the quality of service provision, as shown in figure 4. Here the north-south gap is represented by the vertical distance between the two red lines. Southern mayors in the right tail of the competence distribution partly bridge this gap by achieving levels of service provision that are within one standard deviation of the average level in the north (horizontal line in fig. 4A). Figure A3 shows that results are not driven by any single municipality in the south.

Alternative measures of institutions

Results presented so far seem to provide evidence in favor of the substitutability between politicians' and institutions' quality, showing that more competent politicians are effective in the Italian south only. I have so far attributed this heterogeneity to the lower quality of informal institutions in the south vis-à-vis the rest of Italy. However, the different effect of politicians' competence in the south relative to the rest of Italy could result from any other south-specific characteristics that moderate the effect of competence. In this section, I strengthen my interpretation by employing three alternate municipality-level measures of institutional quality as an alternative to the crude north-south distinction, and I show that results are consistent across these three measures. Measuring informal institutions is empirically challenging, given their unwritten nature (Helmke and Levitsky 2004). I focus here on three alternative aspects of

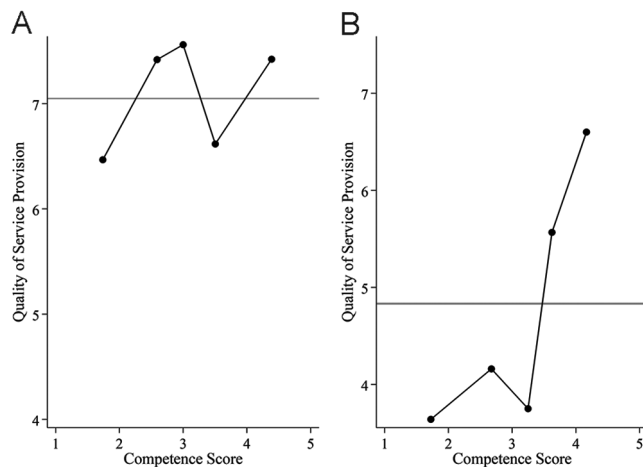


Figure 4. Competent southern mayors bridge the north-south service provision gap. Binned scatter plots display the relationship between the competence score and the quality of service provision index in 2013, when the interviewed mayors were in office. I construct five equally sized bins of the competence scores given to each mayor and, for each bin, plot the value of the service provision index of the mayor's municipality. Horizontal lines represent the mean service provision quality in the preelection period (2011) in the north (A) and south (B). Color version available as an online enhancement.

informal institutions that can be measured in a meaningful way at the municipality level in Italy.

Social capital. I test whether the effect of mayoral competence is heterogeneous with respect to the level of social capital in a municipality. Social capital is intended to capture the unwritten rules of trust and reciprocity in a community that can affect the functioning of democratic institutions (Knack and Keefer 1997; Putnam et al. 1993). I use data on social capital at the municipality level from Nannicini and colleagues (2013). I construct an inverse-covariance weighted index of social capital (Anderson 2008) for each municipality in my sample based on the following variables: blood donations, number of nonprofit organizations, number of nonsport daily newspapers sold, answer to the trust question in the World Value Survey, and turnout in the most recent referendum. Based on this measure, I construct an indicator of low social capital, taking value 1 for all municipalities in the sample whose social capital is below the 25th percentile of the distribution, a value corresponding to the 40th percentile in the Italian south. Column 1 of table 8 shows that a one-standard-deviation increase in the mayor's competence score in municipalities characterized by low social capital decreases the municipal surplus by 1.8 percentage points, an effect equivalent to 16% of a standard deviation in the preelection surplus, while we see no effect for the remaining municipalities. However, since social capital is lower in southern municipalities, as shown in tables A2–A4, it could be the case that southern municipalities are driving the effect of the Low Social Capital indicator. To address this concern, column 2 presents a horse race between the South and the Low Social Capital indicators and shows that the effect of low social capital is not entirely driven by southern municipalities. As expected, the coefficient in column 2 is smaller than in column 1, since social capital is only one dimension of the overall quality of informal institutions. The remaining dimensions are captured by the South indicator. In tables A23–A28 and figures A4 and A5, I show that all results are robust to using Low Social Capital as the main measure of institutional quality.

Mafia presence. I look at the presence of mafia organizations as an additional dimension of informal institutions (Gambetta 1993; Lauth 2000). The presence of organized crime can affect the job of a mayor through several channels, such as making the procurement operations more complicated given the threat of corruption. I employ a municipality-level measure of the number of businesses, goods, and buildings confiscated as a result of mafia involvement by the Italian police, which, given the distribution of organized crime in Italy, has a meaningful

Table 8. Heterogeneous Effect with Alternative Measures of Institutional Quality: Surplus

	(1)	(2)	(3)	(4)
MeanCompetenceScore × PostElection × Low Social Capital ^a	-.028*** (.010)	-.019* (.010)		
MeanCompetenceScore × PostElection × South		-.021* (.011)		
MeanCompetenceScore × PostElection × Mafia Presence ^a			-.066** (.026)	
MeanCompetenceScore × PostElection × No Letter ^a				-.013 (.013)
MeanCompetenceScore × PostElection	.006 (.006)	.008 (.006)	-.030** (.012)	-.001 (.005)
Observations	2,011	2,011	571	2,339
Municipalities	262	262	73	303
R ²	.689	.689	.763	.700
SD pre	.110	.110	.120	.109
Standardized effect	-.018	-.009	-.085	-.011

Note. SD pre = standard deviation of the dependent variable in the preelection period. See col. 4 of table 4 for the list of variables (controls and fixed effects) included in the specification. Standardized effects represent the sum of the coefficients of MeanCompetenceScore × PostElection and the coefficient of the interaction term indexed by *a* multiplied by the standard deviation of the MeanCompetenceScore in the sample of municipalities with low social capital (cols. 1–2), mafia presence (col. 3), and low bureaucratic norms (col. 4), respectively. Data from col. 3 are for the south only.

^a Heterogeneous treatment effect with social capital measure.

* Significant at the 10% level.

** Significant at the 5% level.

*** Significant at the 1% level.

variation across and within regions in the south only.²⁶ Column 3 of table 8 shows that the effect of more competent mayors on the budget surplus is stronger in municipalities with mafia presence, where a one-standard-deviation increase in the MeanCompetenceScore leads to an average reduction in surplus of about 70% of a standard deviation, while the average reduction in municipalities without a mafia presence is 20% of a standard deviation.

Bureaucratic norms. Finally, I collect a behavioral measure of bureaucratic norms from a group of bureaucrats who are not under the mayor's supervision: postal workers. While the rules governing the bureaucracy are formal institutions, their efficacy is affected by the informal norms of bureaucratic behavior (Hamilton-Hart 2000). I sent to each municipality in my sample a letter addressed to a fictitious recipient at a fictitious address but bearing the correct municipality name and postal code.²⁷ Italian municipal post offices are responsible for returning to the sender any letter mailed to an incorrect address. As in Chong and colleagues (2014), I record whether

each letter is returned and use it as a proxy for the quality of bureaucratic norms. This measure presents two advantages. First, it is available for the whole sample. Second, postal offices operate in each municipality but do not depend on the mayor or the municipal government.²⁸ Note that this measure of institutional quality is orthogonal to the north-south divide, with the median return rate of my letters being similar across the north, south, and center. The analysis performed in column 4 of table 8 is underpowered in light of the fact that for only 15% of municipalities, the letter was not returned to the sender. However, results presented in column 4 are qualitatively in line with those presented in columns 1–3 and confirm the substitutability between the quality of mayors and that of the local institutions by showing that the effect of high-competence mayors in the whole sample is driven by those municipalities whose post office did not comply with the rule of sending back the letter.

CONCLUSION

In this article, I ask to what extent politicians' administrative competence matters for policy and whether it can compensate

26. More details in the additional data section in the appendix.

27. All letters were addressed to Giovanni Verde in Via Atlante 36 and were all sent from the same zip code on the same day.

28. As required by the DDL 261/1999, all municipalities in my sample have a post office.

for low-quality informal institutions. I develop a survey instrument to measure the administrative competence of executive politicians, and I administer it to a representative sample of Italian mayors.

The election of more competent mayors translates into a more effective use of funds, an increase in long-term investments, and better service provision without an increase in taxes, but only where the quality of institutions is low. This is true across a series of different measures of institutional quality: southern versus northern Italy, presence of organized crime, level of social capital, and a behavioral measure of the efficacy of local bureaucratic norms.

Mayoral competence plays an increasingly important role as the quality of institutions worsens. In light of these findings, efforts to increase the administrative competence of local politicians may represent a cost-effective way of increasing the quality of public goods provision.

While the focus of this article is on Italian mayors, its findings are likely to be relevant across different settings. The role of local governments and their executive politicians has recently drawn considerable attention in the US context (Arnold and Carnes 2012; Tausanovich and Warshaw 2014), with local policies representing an increasing share of government activities (Trounstein 2009). Evidence suggests that local governments might be the very place where significant policy change can take place, given the lower relevance of partisan polarization in this context (Ferreira and Gyourko 2009). Applying the methodology that I developed in this article to the study of politicians managing US municipal governments represents a promising area of future research. The main finding of the article—that politicians' competence matters most in worse institutional environments—is particularly relevant for local governments in developing countries, pointing to the importance of political selection in weakly institutionalized settings (Gulzar and Khan 2021).

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REFERENCES

- Acemoglu, Daron, Simon Johnson, Pablo Querubin, and James A. Robinson. 2008. "When Does Policy Reform Work? The Case of Central Bank Independence." *Brookings Papers on Economic Activity* 1:351–418.
- Acemoglu, Daron, and James A. Robinson. 2012. *Why Nations Fail*. New York: Crown.
- Ahlquist, John S., and Margaret Levi. 2011. "Leadership: What It Means, What It Does, and What We Want to Know About It." *Annual Review of Political Science* 14:1–24.
- Alesina, Alberto, Salvatore Piccolo, and Paolo Pinotti. 2016. "Organized Crime, Violence, and Politics." *Review of Economic Studies* 86 (2): 457–99.
- Algan, Yann, and Pierre Cahuc. 2010. "Inherited Trust and Growth." *American Economic Review* 100 (5): 2060–92.
- Anderson, Michael L. 2008. "Multiple Inference and Gender Differences in the Effects of Early Intervention: A Reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects." *Journal of the American Statistical Association* 103 (484): 1481–95.
- Arnold, Douglas R., and Nicholas Carnes. 2012. "Holding Mayors Accountable: New York's Executives from Koch to Bloomberg." *American Journal of Political Science* 56 (4): 949–63.
- Bandiera, Oriana, Stephen Hansen, Andrea Prat, and Raffaella Sadun. 2020. "CEO Behavior and Firm Performance." *Journal of Political Economy* 128 (4): 1325–69.
- Berry, Christopher R., and Anthony Fowler. 2021. "Leadership or Luck? Randomization Inference for Leader Effects in Politics, Business, and Sports." *Science Advances* 7 (4): eabe3403.
- Besley, Timothy, and Marta Reynal-Querol. 2011. "Do Democracies Select More Educated Leaders?" *American Political Science Review* 105 (3): 552–66.
- Besley, Timothy, and Marta Reynal-Querol. 2017. "The Logic of Hereditary Rule: Theory and Evidence." *Journal of Economic Growth* 22 (2): 123–44.
- Bloom, Nicholas, and John Van Reenen. 2007. "Measuring and Explaining Management Practices Across Firms and Countries." *Quarterly Journal of Economics* 122 (4): 1351–408.
- Bloom, Nicholas, Carol Propper, Stephan Seiler, and John Van Reenen. 2010. "The Impact of Competition on Management Quality: Evidence from Public Hospitals." *Review of Economic Studies* 82 (2): 457–89.
- Burden, Barry C. 2007. *Personal Roots of Representation*. Princeton, NJ: Princeton University Press.
- Carnes, Nicholas. 2012. "Does the Numerical Underrepresentation of the Working Class in Congress Matter?" *Legislative Studies Quarterly* 37 (1): 5–34.
- Carnes, Nicholas, and Noam Lupu. 2015. "What Good is a College Degree? Education and Leader Quality Reconsidered." *Journal of Politics* 78 (1): 35–49.
- Charron, Nicholas, and Victor Lapuente. 2013. "Why Do Some Regions in Europe Have a Higher Quality of Government?" *Journal of Politics* 75 (3): 567–82.

- Chong, Alberto, Rafael La Porta, Florencio Lopez-se-Silanes, and Andrei Shleifer. 2014. "Letter Grading Government Efficiency." *Journal of the European Economic Association* 12 (2): 277–99.
- Chubb, Judith. 1982. *Patronage, Power, and Poverty in Southern Italy: A Tale of Two Cities*. Cambridge: Cambridge University Press.
- Dal Bó, Ernesto, Frederico Finan, Olle Folke, Torsten Persson, and Johanna Rickne. 2017. "Who Becomes a Politician?" *Quarterly Journal of Economics* 132 (4): 1877–914.
- de Benedictis-Kessner, Justin, and Christopher Warshaw. 2016. "Mayoral Partisanship and Municipal Fiscal Policy." *Journal of Politics* 78 (4): 1124–38.
- Di Liberto, Adriana, Fabiano Schivardi, and Giovanni Sulis. 2015. "Managerial Practices and Students' Performance." *Economic Policy* 30 (84): 683–728.
- Easterly, W., and S. Pennings. 2020. "Leader Value Added: Assessing the Growth Contribution of Individual National Leaders." Working paper no. 27153, National Bureau of Economic Research, Cambridge, MA.
- Einstein, Katherine L., and David M. Glick. 2016. "2015 Menino Survey of Mayors." Initiative on Cities, Boston University. <https://open.bu.edu/ds2/stream/?#/documents/98006/page/1> (accessed August 9, 2021).
- Fabbrini, Sergio. 2001. "Features and Implications of Semi-Parliamentarism: The Direct Election of Italian Mayors." *South European Society and Politics* 6 (2): 47–70.
- Ferreira, F., and J. Gyourko. 2009. "Do Political Parties Matter? Evidence from US Cities." *Quarterly Journal of Economics* 124 (1): 399–422.
- Galasso, Vincenzo, and Tommaso Nannicini. 2011. "Competing on Good Politicians." *American Political Science Review* 105 (1): 79–99.
- Gambetta, Diego. 1993. *The Sicilian Mafia: The Business of Private Protection*. Cambridge, MA: Harvard University Press.
- Gelpi, Christopher, and Peter D. Feaver. 2002. "Speak Softly and Carry a Big Stick? Veterans in the Political Elite and the American Use of Force." *American Political Science Review* 96 (4): 779–93.
- Gerber, Elisabeth R., and Daniel J. Hopkins. 2011. "When Mayors Matter: Estimating the Impact of Mayoral Partisanship on City Policy." *American Journal of Political Science* 55 (2): 326–39.
- Golden, Miriam A., and Lucio Picci. 2005. "Proposal for a New Measure of Corruption, Illustrated with Italian Data." *Economics and Politics* 17 (1): 37–75.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2016. "Long-Term Persistence." *Journal of the European Economic Association* 14 (6): 1401–36.
- Gulzar, Saad, and Yasir Khan. 2021. "'Good Politicians': Experimental Evidence on Motivations for Political Candidacy and Government Performance." Social Science Research Network Working paper 3826067, Rochester, NY.
- Hamilton-Hart, Natasha. 2000. "The Singapore State Revisited." *Pacific Review* 13 (2): 195–216.
- Helmke, Gretchen, and Steven Levitsky. 2004. "Informal Institutions and Comparative Politics: A Research Agenda." *Perspectives on Politics* 2 (4): 725–40.
- Jones, Benjamin F., and Benjamin A. Olken. 2005. "Do Leaders Matter? National Leadership and Growth Since World War II." *Quarterly Journal of Economics* 120 (3): 835–64.
- Khwaja, Asim Ijaz. 2009. "Can Good Projects Succeed in Bad Communities?" *Journal of Public Economics* 93 (7–8): 899–916.
- Kirkland, P. A. Forthcoming. "Business Owners and Executives as Politicians: The Effect on Public Policy." *Journal of Politics*.
- Knack, Stephen, and Philip Keefer. 1997. "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation." *Quarterly Journal of Economics* 112 (4): 1251–88.
- Lauth, Hans-Joachim. 2000. "Informal Institutions and Democracy." *Democratization* 7 (4): 21–50.
- Lienert, Ian. 2010. "Should Advanced Countries Adopt a Fiscal Responsibility Law?" Working paper 10/254, International Monetary Fund, Washington, DC.
- Madison, James. (1788) 1961. *The Federalist Papers: A Collection of Essays in Support of the Constitution of the United States*. New York: Doubleday.
- Mummolo, Jonathan, and Erik Peterson. 2018. "Improving the Interpretation of Fixed Effects Regression Results." *Political Science Research and Methods* 6 (4): 829–35.
- Nannicini, Tommaso, Andrea Stella, Guido Tabellini, and Ugo Troiano. 2013. "Social Capital and Political Accountability." *American Economic Journal: Economic Policy* 5 (2): 222–50.
- North, Douglass C. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.
- Pinotti, Paolo. 2015. "The Economic Costs of Organised Crime: Evidence from Southern Italy." *Economic Journal* 125:203–32.
- Porcelli, Francesco, Francesco Vidoli, Roberto Dispotico, and Danilo Ballanti. 2016. "Measuring Public Sector Performance: A Four Quadrants Model to Monitor Local Governments' Efficiency." In Apostolis Philippopoulos, ed., *Public Sector Economics and the Need for Reforms*. Cambridge, MA: MIT Press.
- Pritchett, Lant. 2000. "The Tyranny of Concepts: CUDIE (Cumulated, Depreciated, Investment Effort) Is Not Capital." *Journal of Economic Growth* 5:361–84.
- Putnam, Robert D. 1976. *The Comparative Study of Political Elites*. Englewood Cliffs, NJ: Prentice-Hall.
- Putnam, Robert D., Robert Leonardi, and Raffaella Y. Nanetti. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton University Press.
- Rasul, Imran, and Daniel O. Rogger. 2018. "Management of Bureaucrats and Public Service Delivery: Evidence from the Nigerian Civil Service." *Economic Journal* 128 (608): 414–46.
- Stokes, Susan. 2006. "Do Informal Institutions Make Democracy Work? Accounting for Accountability in Argentina." In Gretchen Helmke and Steven Levitsky, eds., *Informal Institutions and Democracy: Lessons from Latin America*. Baltimore: Johns Hopkins University Press.
- Swers, Michele L. 2002. *The Difference Women Make: The Policy Impact of Women in Congress*. Chicago: University of Chicago Press.
- Szakonyi, David. 2021. "Private Sector Policymaking: Business Background and Politicians' Behavior in Office." *Journal of Politics* 83 (1): 260–76.
- Tausanovich, Chris, and Christopher Warshaw. 2014. "Representation in Municipal Government." *American Political Science Review* 108 (3): 605–41.
- Trounstein, Jessica. 2009. "All Politics Is Local: The Reemergence of the Study of City Politics." *Perspectives on Politics* 7 (3): 611–18.
- Washington, Ebonya L. 2008. "Female Socialization: How Daughters Affect Their Legislator Fathers." *American Economic Review* 98 (1): 311–32.
- Witko, Christopher, and Sally Friedman. 2008. "Business Background and Congressional Behavior." *Congress and the Presidency* 35 (1): 71–86.