

Rooting Out Corruption or Rooting for Corruption? The Heterogeneous Electoral Consequences of Scandals.*

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Abstract

Corruption scandals have been found to have significant but mild electoral effects in the comparative literature (Golden, 2006). However, most studies have assumed that voters punish all kinds of illegal practices. This article challenges this assumption by distinguishing between two types of corruption, according to the type of welfare consequences they have for the constituency. This hypothesis is tested using data from the 2011 Spanish local elections. We exploit the abundance of corruption allegations associated with the Spanish housing boom, which generated income gains for a wide segment of the electorate in the short-term. We find that voters ignore corruption when there are side benefits to it, and that punishment is only administered in those cases in which they do not receive compensation.

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1 Introduction

Elections are supposed to allow voters to “throw the rascals out” (Przeworski et al., 1999). Hence, we would expect corruption scandals to have a strong effect on the electoral performance of the politicians involved in them. However, recent literature shows that electoral retribution to dishonest behavior in office is rather mild and that it does not always prevent implicated individuals from being reelected (see Golden, 2006).

We claim in this paper that the economic externalities associated to the corrupt activity are a relevant dimension that can account, in some cases, for the lack of a strong punishment to misbehaving politicians. When a mayor decides to engage in corruption, she is taking advantage of her position to obtain private gains. Yet beyond the illegal rents that accrue to the incumbent, the abuse of public office generates economic externalities for the electorate as a whole. The literature has emphasized the negative economic consequences of political corruption (Mauro, 1995). Indeed, most previous empirical studies have adopted a definition of corruption that focuses on the misappropriation of resources by the political elite —embezzlement, demands for bribes, nepotism, etc. In some circumstances, however, the abuse of public office may go together with positive economic externalities for the community. An incumbent that purposely allows businesses to disregard regulations that limit the scope of their activity will, in the short term, spur these businesses to grow and expand. Even if the incumbent demands bribes in return for having circumvented the law, a large share of the electorate is likely to benefit from the increase in economic activity. In these situations, the electorate is forced to balance at the voting booth an undesirable action that indicates that the politician is willing to break the law, and an outcome that is valuable and that in normal conditions would be rewarded. Although we would expect candidates who have plainly abused their position for their own private gain to be punished on Election Day, it is not obvious that the same will happen when the irregular actions turn into an economic gain for the general public. Indeed, voters might be tempted to reward corruption if they materially benefit from it (Rundquist et al., 1977).

In this paper we analyze the differential effect of the welfare outcomes of corruption on the electoral success of mayors using a unique dataset on the Spanish local elections of 2011. Previous

research about the Spanish case found that the mayors involved in scandals were virtually unaffected electorally by the accusations (Rivero and Fernández-Vázquez, 2010). However, in this study we show that, when we unpack the definition of corruption and account for differences in its economic consequences, mayors indeed suffer an average loss of 4.2% in vote share when the irregular action does not contribute to the welfare of the municipality, while they go unpunished when it does. That is, we find that the reward to the benefits provided by the mayor completely offsets the retribution that voters would have inflicted on the politician if there had been no economic benefits.

In the next section, we review the relevant literature on the subject and specify the scientific contribution of our study. In section 3 we discuss the sources and the analytical strategy we used to select those cases classified as showing some corrupt activity. The criteria for the differentiation of the kind of corruption are defined in section 4. We next briefly describe the particular characteristics of the Spanish case and present our dataset. The main results of the paper appear in section 6, and we conclude in section 7.

2 Theoretical framework

2.1 Heterogeneity in the outcomes of corruption

Corruption signals to voters that a politician is of a *bad type* (Fearon, 1999): someone who is willing to exploit her privileged position for her own private benefit. That is why corruption scandals are generally expected to negatively affect the electoral prospect of the incumbent, since her involvement in malfeasance supplies valuable information about an undesirable characteristic of either the politician or the party in government. Thus, among a number of candidates, citizens will prefer to choose one that is not involved in illicit activities, *ceteris paribus*.

Take for instance one extreme case that appears in our dataset. The mayor of El Ejido (Almería) was accused of embezzlement and diversion of public funds to politically friendly businessmen (Cabrera, 2011). With the cooperation of several members of the local government and under the orchestration of the mayor himself, a municipality-owned enterprise contracted out the provision

of public services to a few “friendly” firms that charged heavily over-inflated invoices to the town. According to the judicial investigation, the irregular diversion of funds to the network of cronies reached an amount close to 150 million Euros, twice as high as the total municipal budget for a full year.¹ The action of the politicians in this case constitute a clear example of misappropriation of public resources for political and personal benefit. We would thus expect voters to punish the incumbent, at least if the electorate has enough accurate information about the incumbent’s wrongdoings.

However, such a simple trigger mechanism against corruption faces consequential difficulties in real electoral settings. When voters go to the voting booth, they are forced to evaluate the incumbent on many dimensions simultaneously, and it might well be the case that a poor record on a valence issue, as represented here by credible accusations of corruption (Stokes, 1963), is more than compensated for by accomplishments on some other dimension, like a strong performance of the local economy, even if it is caused by an irregular action. Hence, it is conceivable that even if voters may not approve all the actions of the politician in office, their internal calculations may result in a positive balance in favor of reelection. This observation is a direct extrapolation of the conventional model of economic voting, which assumes in its simplest version that voters target an observable variable that summarizes the past actions of the incumbent (Barro, 1973; Fiorina, 1978; Ferejohn, 1986). Interestingly, the standard economic voting model is indifferent to the *legality* of the tools available to the politician. In this sense, our interpretation of the trade-off faced by voters between the outcomes (economic results) provided by the politician and the nature of the actions leading to them can be understood as a bridge between the literatures of economic voting and corruption.

Most importantly, there are settings in which the constituency perceives that the corrupt activity has produced some positive externality that is valuable to the community. Take the accusation against the mayor of Pastrana (Guadalajara). The mayor had allegedly allowed the construction of apartment buildings on rural land (Cuevas, 2010). In a relatively small municipality of only 1,200 inhabitants, the construction of several dozen apartments generates a sizable positive impact on the local economy. The growth in the construction industry raises local employment levels, increases

¹Information on the local budget was obtained from the Instituto de Estadística y Cartografía of the Junta de Andalucía, <http://www.juntadeandalucia.es/institutodeestadisticaycartografia/>

demand for locally produced goods and services, and owners of the land where construction takes place see the value of their property multiply. In such a context, a wide spectrum of voters is sharing in the benefits associated with the irregular action. Thus, even if there is a suspicion that the mayor took an irregular decision from which she has benefited personally, voters may consider that the flow of income to the municipality exceeds the distaste for having a dishonest mayor. In this type of setting, the voters' decision has to balance the fact that the action is certainly objectionable, but is at the same time producing a benefit for the locality that may not have been realized had the mayor not taken this corrupt decision. Therefore, the situation is capturing the idea behind the slogan of political boss Adhemar de Barros, "*Adhemar rouba, mas faz*," Adhemar steals but gets things done (Skidmore, 1967).

We argue that, in these kinds of situations, voters do not separate out the corrupt action and its effects and evaluate the two dimensions independently. On the contrary, we read them as an example of how politicians have at their disposal a wide menu of options when they decide to engage in illegal activities. It is reasonable to expect that politicians in fact can predict the reaction of voters to the corruption scandal, and also how voters will use corruption to extract information about the politician's willingness to deliver benefits to the community.

Voters who appear to turn a blind eye to corruption are not unknown to the growing number of studies on the electoral consequences of corruption in different countries and contexts. For instance, Peters and Welch (1980); Jacobson and Dimock (1994) and Welch and Hibbing (1997) show that congressmen involved in corruption scandals only suffer a 5 to 10% reduction in their electoral support. In Brazil, Ferraz and Finan (2008) estimate a 10% reduction in the reelection probability for mayors who were subject to a random federal audit over the management of public funds.² Similarly, Chang et al. (2010) show that the reelection rate in Italy for accused and non-accused candidates in the national parliament is similarly high across all legislative terms, with the only exception of the period 1992-1994. In Japan, Reed (1996) reported that 62% of legislators who had either been found to be corrupt by a court or were facing corruption charges after 1943 were reelected and, not only that, some of them even increased their vote share. In the United Kingdom,

²More recent studies that dispute part of the mechanism have obtained smaller estimates using the same data (Brollo, 2008; Brollo et al., 2009).

Eggers and Fisher (2011) show that MPs implicated in the expenses scandal suffered an average vote share loss of about 1.5 percentage points. Finally, in an experimental setting, Chong et al. (2012) did not find a significant effect of information about corruption on the electoral performance of the incumbent in the Mexican local elections.

Indeed, the role of information provision as a mechanism to control corruption does not seem to be straightforward (Pande, 2011; Vivyan et al., 2012), at least as a way to improve the pool of politicians running in elections. Although information is a clear requirement to ensure responsibility (Besley and Burgess, 2002), and in some cases improves accountability (Ferraz and Finan, 2008), recent studies have found that information about corruption might simply reduce participation in the electoral process (Chong et al., 2012), and in fact its effects may actually be rather short-lived (Brollo, 2008). What is more, information processing by voters can be mediated by their partisan preferences, as shown by a recent study by Anduiza et al. (2012) indicating that corruption is evaluated differently depending on whether the charged politician is a member of the party with which the voter feels closest.

This article contributes to the growing literature attempting to explain why politicians involved in scandals avoid severe penalties in their reelection bids. Our finding that voters ignore corruption when there are side-benefits to it and that therefore electoral punishment is only administered in those cases in which they do not receive compensation helps account for the low levels of electoral accountability for corruption that the literature has identified. Our paper is closely related to the survey experiment approaches of Weitz-Shapiro and Winters (2010) and Muñoz et al. (2012). In both cases, they seek to find support for the notion of “implicit exchange” according to which voters may knowingly overlook corruption when the candidate performs well (the “rouba, mas faz” claim). However, the empirical evidence drawn from survey experiments is not unequivocal: while Weitz-Shapiro and Winters’s results show no trace of implicit exchange, subjects in Muñoz et al.’s experiment were willing to trade corruption for a good economic management. Our paper is also related to the recent study by Klasnja et al. (2012), who examine the differences between the effect of perceptions of corruption in the society and that of personal experiences with it. They find that only the former is relevant when casting a ballot.

Our article also addresses the argument advanced by [Zechmeister and Zizumbo-Colunga \(2013\)](#) that the broad economic conditions moderate the impact of scandals on support for incumbents. According to the authors, voters are only willing to retaliate against corrupt politicians in contexts of economic crisis. Given the dire economic situation of Spain in 2011, after more than two years of economic recession, the expectation would be that *all* accused mayors would be intensely penalized by their constituent. However, this is not what we find: it turns out that the key mediating factor is not the general economic situation, but the precise economic returns associated to illegal actions.

2.2 The Spanish case

The Spanish case is a natural choice for the study of corruption. Spain generally scores poorly in all cross-country rankings of perception of corruption at all administrative levels ([Krause and Mendez, 2009](#)). Moreover, there is a recent corpus of literature showing that Spain indeed fits into the general pattern found in the comparative literature and in country case-studies: voters dislike corruption but incumbents rarely suffer electoral consequences for their illegal actions ([Barreiro and Sánchez-Cuenca, 2000](#); [Jiménez, 2007](#); [Rivero and Fernández-Vázquez, 2010](#)). In particular, between 2003 and 2007 around 70% of mayors who faced some kind of accusation were reelected ([Alternativas, 2008](#)). Detailed studies have targeted variations in electoral support rather than the re-election rate. [Costas-Pérez et al. \(2012\)](#) find that mayors in this situation lose an average of 4% of the vote. However, [Rivero and Fernández-Vázquez \(2010\)](#), using a smaller sample but with a stricter definition of corruption and accounting for the fact that some mayors do not run for re-election, found no significant effect of scandals.

Most importantly for our theory, Spain offers a significant number of cases in which mayors irregularly rezoned rural land and allowed an excess of construction in the municipality, thereby fueling the local economy in the short term ([Jiménez, 2009](#); [Villoria and Jiménez, 2012](#)). Indeed, the growth of the construction industry generates a positive economic shock for a wide segment of the local population. There is an increase in job opportunities in construction-related activities, particularly for low-skilled local workers. There is also a rise in population, which benefits

local providers of goods and services. In the Spanish case, moreover, the rapid growth in residential construction generated a significant boost in tax revenues for local governments: this allowed municipalities to lower local tax rates and invest in public infrastructure while the housing boom period lasted. Hence, in addition to the more conventional cases of pure private misappropriation of public resources, Spain has a very large number of instances in which the mayor's shady actions positively affected the local population.

The Spanish case is also suitable because most corruption scandals satisfy two necessary conditions for the existence of electoral retribution (Rundquist et al., 1977): a) the accusations had some *credibility*, stressed by the involvement of judicial authorities, which in turn b) produced extensive press coverage, thereby raising *public awareness* on the issue (see section 3). In fact, corruption is a highly salient issue in Spanish politics, in part because of the common belief that “Spanish voters forgive corrupt politicians”. As we show in Figure 1a, the number of news stories about corruption scandals in the most widely read newspaper in Spain, *El País*, increased in the two years leading to the 2011 elections.³ On the other hand, corruption and fraud have been increasingly mentioned by Spanish citizens as some of their main political concerns (Figure 1b).

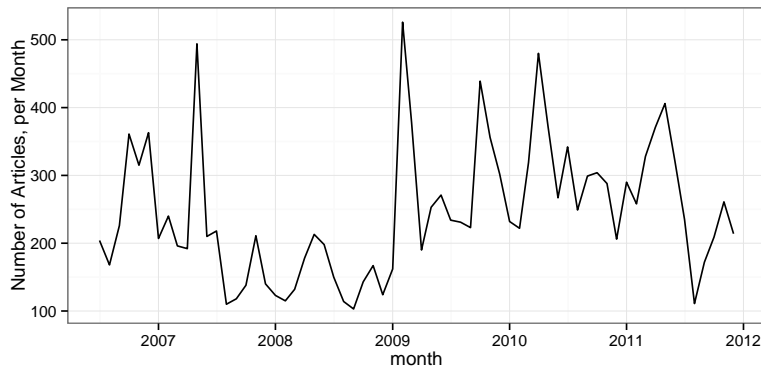
Spain presents a closed-list proportional system at the local level, which confers considerable power to political parties over elected members. This power has the clearest manifestation in the configuration of the party lists, which means that the reputation of candidates is tightly linked to that of the party: blame for a scandal is not likely to be circumscribed exclusively to the rotten apples but also to the party that selected them. Also, during the past decades, Spain has witnessed a process of nationalization of the local party system: the main national parties have also become the main contenders in the local arena (Montero et al., 2011). Therefore, there is interpenetration between the different levels of electoral competition (national, regional, local) that has made the national and regional brands take a clear interest in the selection and control of candidates at the local level.

The strength of Spanish political parties, even at the local level, may include the capacity to

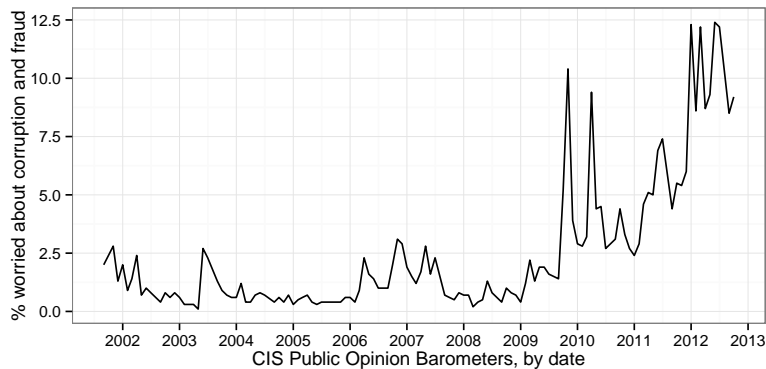
³The data displayed on Figure 1a was collected from LexisNexis. We searched for articles mentioning “corrupción” on *El País* for each month from July 2006 to December 2012, and counted the number of results, excluding those in the “International” section of the newspaper. Despite its well-known left-wing bias, we argue that the increased coverage of corruption scandals on *El País* is representative of most media outlets in the country. Note also that *El País* is the newspaper with the highest circulation in Spain.

Figure 1: Historic Evolution of the Attention to Corruption.

(a) Number of News Stories in *El País* Mentioning Corruption



(b) Mentions of Corruption As One of Main Problems in Spain



force the mayor to step down and not seek reelection. Resorting to these tools of internal control implies some costs for the party. In this sense, expelled mayors have obvious incentives to change their party label after being sacked, given that it is very likely that they will take with them some of their previous electoral support. As a consequence, the number of votes for their original party will decrease. In our analysis below we have taken into account whether the mayors have decided to run with new parties that are different to those that helped them reach their position in the first place.

To summarize, we have selected Spain because it constitutes a suitable case to test our theory. Yet the implications of our findings extend well beyond this case. Our argument applies to any setting in which illegal actions may produce positive economic externalities. It is not contingent on

idiosyncratic characteristics of Spanish local institutions or the occurrence of a housing boom. In fact, we claim that our results may help explain why, in a wide array of countries, it has been found that incumbents affected by corruption scandals do not incur major electoral losses.

3 Identifying corruption scandals

In order to estimate the effect of corruption scandals in the 2011 Spanish local elections, we have identified those municipalities in which the incumbent was accused of corrupt behavior. Our working definition of corruption uses the following criteria:

1. *Who*: The mayor or another member of the municipal executive branch are involved.⁴
2. *What*: The accusation involves criminal charges related to corruption and abuse of public office.
3. *By whom*: Charges are brought by a non-partisan actor —a judge, a public prosecutor or the police.
4. *When*: Claims about misbehavior surface in the press in between the local elections of May 2007 and May 2011.

In order to determine which Spanish municipalities were affected by corruption, we have combined several compilations of corruption scandals reported in local, regional and national newspapers, as well as in reports written by non-governmental organizations, think tanks and public advocacy groups. These lists enumerate municipalities that witnessed a corruption scandal. Even if each of these records is not exhaustive in itself, by combining several non-overlapping lists we have attempted to maximize the coverage of the universe of local corruption scandals in the 2007-2011 period.⁵

⁴Empirically, all accusations in our data set that involve a member of the municipal executive also include the mayor. The reason is that, even if the main suspect is not the mayor, she is also investigated in order to determine whether she authorized the corrupt behavior.

⁵Newspaper compilations of local corruption scandals were published by El País ([link](#), [link](#)), El Mundo ([link](#), [link](#)), ABC ([link](#)), 20 minutos ([link](#)), and Ideal de Granada ([link](#)). The advocacy group “No Les Votes” maintains a com-

For each municipality affected by local corruption, we have documented the newspaper stories covering the scandal in the local and national press. We have retrieved these newspaper stories in MyNews.es, an online archive of more than 200 Spanish local and national newspapers. One by one, we have reviewed the content of these stories to code information on the identity of the politicians accused, the actor that makes the allegations, the nature of the charges, the timing of the scandal—when it emerged in the press—and the judicial status of the case at the time of the 2011 elections. This information has allowed us to determine whether the municipal scandal fits into our definition of corruption and to classify corruption cases according to the economic externalities they generate. According to our data, 75 municipalities were affected by corruption scandals between 2007 and 2011, about 1% of the total number of Spanish *municipios*. Table A.1 in the Online Appendix lists these municipalities and provides information on the incumbent party and the newspaper references that we have used to determine the nature of the scandal.

Our definition of corruption is similar to the one used by [Chang et al. \(2010\)](#). In both cases, attention is restricted to charges of criminal behavior made by a non-partisan actor. By focusing on criminal charges we leave aside instances in which the municipal government may have engaged in mismanagement of public affairs without evidence of abuse of office for private gains. This is the case of accounting irregularities, for instance. In these cases, the accusation may provide information about the competence of the incumbent, but not about its honesty. Our approach is also present in [Ferraz and Finan \(2008\)](#): although the authors do not make an explicit reference to criminal behavior, the type of malfeasance they consider belongs to that category: “We define political corruption as any irregularity associated with fraud in procurement, diversion of public funds, or over-invoicing” ([Ferraz and Finan, 2008](#), p. 710). Indeed, according to the Spanish criminal code, all these examples of malfeasance are prosecuted in criminal courts. In other words, [Ferraz and Finan](#)’s universe of corruption cases satisfies our “*what*” criterion. It also satisfies the “*by whom*” aspect, since the accusation is released by a nonpartisan institution, the *Controladoria Geral da União*.⁶

prehensive log of corruption scandals that surface in the press ([link](#)). A list of municipalities affected by allegations of corruption was also published by the think-tank “Fundación Alternativas” ([link](#)).

⁶see [Ferraz and Finan \(2008\)](#), pp. 707-708).

Our definition of corruption scandals purposely concentrates on accusations with the highest level of credibility. We expect voters to consider charges brought by a judge to be more informative than accusations made by a member of the opposition. In the former case, a judge is supposed to bring charges only when the evidence is sufficiently strong. In fact, Spanish judges and prosecutors are elite-level civil servants who have to pass a selective national exam in order to access their position. They are neither popularly elected nor politically appointed. Therefore, they are substantially insulated from political pressure. That need not be the case in accusations made by an opposition politician or a partisan-leaning newspaper. The reason is that the latter are an example of *cheap-talk*: false accusations from partisan actors are likely to incur in limited or no cost and therefore actors with opposing interests to the incumbent have incentives to fabricate charges.

Our definition of corruption scandals also enables a clean test of our argument that politicians whose corrupt practices have generated a stream of economic gains for a large share of the local electorate do not lose support in the following elections. By restricting our attention to higher credibility allegations, we minimize the risk that finding no electoral punishment for corruption in our empirical analyses is the result of voters considering accusations as cheap-talk. We aim to make sure that such a hypothetical null finding stems from the positive economic externalities of the corrupt behavior rather than from voters dismissing the accusation as uninformative.

Despite our detailed documentation of local corruption scandals, it is possible that some instances of local corruption were not picked up by the press. As a result, such municipalities will have been coded as *not* affected by a corruption scandal. We consider that this potential problem of misclassification does not significantly bias our empirical results. The size of our control group—municipalities coded as not affected by scandals—is very large, almost 8,000 cases, so even if it includes a handful of instances in which the incumbent was actually involved in corruption, this will not substantially impact our estimates of the effect of scandals on incumbent support. Most importantly, the presence of these *false negatives* within our control group does not affect in any way our analysis of whether voters react to scandals differently depending on the economic externalities associated with corruption. In this case the two groups of municipalities that we are comparing have been involved in corruption scandals, some with positive and others with negative externalities.

ties. Therefore, in this type of comparison the presence of miscoded cases of corruption within the control group is not relevant.

4 Criteria to distinguish corruption scandals

We have categorized corruption scandals into two types, as a function of the economic externalities that are generated by the corrupt behavior under investigation. If the action undertaken by the mayor increases the economic activity of the municipality, at least in the short run, we consider that the corrupt behavior is welfare enhancing. Otherwise, the scandal is classified as welfare decreasing. Our coding decision is based on an evaluation of the following counterfactual:

Would the local economy have benefited in the short run if the mayor had not engaged in the illegal practice in question?

Take for instance a case of over-invoicing in public procurement. It is clear that this type of behavior implies a waste of public resources that damages the economic welfare of the community. In contrast, authorizing the construction of housing in a protected area increases the level of economic activity. Jobs are created in the construction industry, property values rise and the demand for locally provided services increases, thereby raising income levels. Consequently, the community would have been worse off had the mayor abstained from making this decision.

In order to classify cases, we have analyzed the newspaper stories covering each corruption scandal.⁷ Since these stories do not often quantify the precise economic consequences of the illegal actions, our coding is based on the type of charges that are brought against the politician.⁸ As Table 1 summarizes, we have defined as welfare decreasing those scandals in which the municipal government has engaged in either fraud in procurement, embezzlement of public funds, illegal hiring decisions or extortion. Conversely, instances of illegal construction licensing in non-developable

⁷The newspaper stories that have been used as a source to define the characteristics of the scandal in each municipality are available in Table A.1 in the Online Appendix.

⁸This information is available in the vast majority of newspaper stories.

or environmentally protected areas have been coded as welfare enhancing. According to this classification, out of 75 municipalities involved in corruption scandals, 29 have been coded as welfare enhancing while the remaining 46 as welfare decreasing.

This classification may be illustrated using some concrete cases. The scandal affecting the mayor of Pozuelo (Madrid) constitutes an example of procurement fraud, since he was accused of engaging in favoritism by awarding huge public contracts to particular firms without going through a public contest. The allegation involving the municipal government in Ibi (Alicante) is a case of embezzlement: a member of the local cabinet used public money coming from fees paid by users of public sports facilities for her private use, including the purchasing of personal trips. The mayor of Mairena de Alcor (Sevilla) allegedly made illegal hiring decisions by giving jobs to members of the incumbent party rather than following the legally stipulated procedure of having a public examination. In each of these cases, the public would have benefited if the mayor had not acted illegally. Welfare enhancing corrupt practices can be exemplified by the scandals concerning Alcaucín (Málaga) and Navalcán (Toledo). The mayor of Alcaucín was prosecuted for knowingly authorizing the massive construction of residential buildings on non-developable land. In Navalcán, the mayor allegedly allowed the construction of several residential houses within a wildlife refuge area.

Two points are worth mentioning. First, the existence of private benefits accruing to the mayor in exchange for illegal behavior is not taken into account in distinguishing between cases of corruption. We assume that mayors obtain private benefits in *all* cases. What matters for our purposes is the economic consequences for the public at large. Second, in two municipalities, the mayor is accused of several criminal offenses that have different types of welfare consequences. The coding rule that we have followed has been to consider as welfare enhancing a corruption scandal if at least one of the illegal actions increases the level of economic activity in the municipality. As our robustness checks show (section 6.2), this coding decision does *not* affect our results. For your reference, table A.1 in the Online Appendix lists the municipalities affected by a corruption scandal, including information about whether the corrupt activity has been coded as welfare enhancing or decreasing and the newspaper sources that we have consulted in order to determine the type of corruption.

5 Research Design

5.1 Empirical Strategy

Most existing studies on the electoral consequences of corruption estimate regression equations similar in nature to this:

$$\text{vote share}_{i,t=1} = \beta_0 + \beta_1 * \text{vote share}_{i,t=0} + \beta_2 * \text{corruption}_i + \mathbf{x}_i\gamma + \varepsilon_i \quad (1)$$

where the dependent variable is vote share for the incumbent party in municipality $i = 1, \dots, n$ and election $t = 1$ (after the corruption scandal), and the independent variables are vote share for the same party and municipality in $t = 0$ (before the corruption scandal, the baseline) and a corruption indicator, while \mathbf{x}_i represents a vector of control variables. The electoral cost of corruption is thus β_2 , the loss in percentage points associated with corruption scandals, all else equal.

The main contribution of our work is to go beyond the assumption that the effect of corruption can be summarized in a single coefficient. Conflating different types of corruption scandals in the previous equation will downwardly bias the estimates. Indeed, if we pool together situations in which the incumbent will surely be penalized with others in which voters are not incentivized to remove her, the estimated effect of the electoral retribution will not reflect the actual distaste of corruption.

Therefore, we argue that the magnitude of the electoral punishment to corrupt politicians depends upon the type of corrupt practices in which they engage. As we described in section 4, we distinguish two types of corruption scandals, according to whether they increase economic activity in the municipality, at least in the short run. We will use the terms “welfare-enhancing” and

“welfare-decreasing” to refer to each of them. Our main regression equation is thus:

$$\begin{aligned} \text{vote share}_{i,t=1} = & \beta_0 + \beta_1 * \text{vote share}_{i,t=0} + \\ & \beta_2 * \text{welfare-enhancing}_i + \beta_3 * \text{welfare-decreasing}_i + \\ & \mathbf{x}_i \boldsymbol{\gamma} + \varepsilon_i \end{aligned} \tag{2}$$

where the corruption indicator is split in two dummy variables, *welfare-enhancing* and *welfare-decreasing*, with the same baseline as earlier (no corruption), with $t = 1$ for 2011 and $t = 0$ for 2007. Our theory leads us to expect β_2 to be positive or at least not significantly different from zero, and β_3 to be negative and significant.

5.2 Data

In order to test our hypotheses, we have prepared an original data set that comprises three types of information. First, we have compiled the 2007 and 2011 election results for all 8,004 Spanish municipalities where elections were held, including the name and party affiliation of all elected mayors, as well as their vote and seat shares in each election.⁹ For each municipality, we coded whether the incumbent party had an absolute majority at the time of the 2011 election, and whether the mayor ran again as candidate.

Our data shows that 77% of mayors elected in 2007 ran again as candidates in the 2011 elections. This proportion is lower for mayors accused of corruption (61%), which suggests that some of them “retire strategically” in order to avoid electoral punishment (Londregan and Guzman, 2013).¹⁰ As explained in section 2.1, political parties might exercise political accountability before the election by replacing their candidate, and it is therefore necessary to account for this possibility in order to isolate the effect of corruption scandals. In Section 6 we show that our results are robust to the inclusion of this variable in our regression models.

⁹The source for the list of elected mayors is the Ministry of Territorial Policy and Public Administration of Spain. The source for the electoral returns is the Ministry of Interior of Spain

¹⁰Mayors involved in welfare-decreasing corruption are slightly more likely to run again as candidates (67.4% vs. 51.7%). However, note that this difference is not statistically significant at conventional levels ($p=0.18$).

Second, we have combined this information with a list of the 75 corruption scandals that became public between 2007 and 2011 (see section 3) and their characteristics. We have classified each of them as either generating economic benefits (29 cases) or not (46 cases). We have also recorded those few cases that combined both types of benefits (only two), to ensure that our results are robust to alternative coding criteria.¹¹ We have created a dummy variable for each type of corruption scandal, which takes value 1 for municipalities in that category and value 0 for all other municipalities, including those with non-corrupt mayors.

The data set also includes an estimate of the media attention that each scandal received. Our measure of media attention is the number of news stories about corruption in each municipality between May 2007 and May 2011. The source of information is the news archive *myNews.es*, which encompasses the news stories published in the print editions of all Spanish national, regional, and local newspapers since 1996.¹² Finally, we have also included a socioeconomic indicator at the local level: the population in each municipality in 2007 and 2011 (logged).

We offer summary statistics for each variable in the data set in Table 2. None of the variables has a substantive proportion of missing values. Note that vote shares for the incumbent mayor are in a few cases close to zero because of party switches.¹³

¹¹As described in Section 3, cases that combined both types of benefits were coded in the main data set as welfare-enhancing corruption scandals.

¹²Note that we had to omit Cuenca (the province capital) from our dataset, because the search results for its name included many references to other corruption scandals in municipalities within the province. We found that three corruption scandals had zero mentions on the print editions of the news outlets included in MyNews. Note that these cases are included in our dataset because they were reported on the online editions of at least one newspaper.

¹³Unemployment rates (proportion of inhabitants within each municipality who are registered as “looking for a job” in the Spanish Service for Employment) are also available for each municipality. However, we do not include this variable in our analysis since it could induce post-treatment bias, and because it is a noisy measure of the real level of unemployment, given its self-reported nature and the high levels of labor mobility across municipalities.

6 The electoral consequences of corruption

6.1 Main results

A preliminary comparison of the electoral results in municipalities with and without corruption is consistent with the findings of previous studies regarding the mild electoral effects of corruption scandals in Spain and other countries. A high proportion of parties whose mayor had been involved in corruption scandals were able to remain in power (62.7%), at a rate only slightly lower than that of all incumbent parties (67.9%). The size of this effect is close to what [Chang et al. \(2010\)](#) find in their study of Italian MPs, for example. In terms of vote share we also find similar results: the average loss for incumbent parties affected by allegations of corruption was -8.5% (-3.4% for all incumbent parties). Again, this figure is remarkably similar to other cases, such as the 1992 House banking scandal in the US, which reduced incumbents' vote share by 5 percent on average ([Jacobson and Dimock, 1994](#)).

However, it is also important to note the broad heterogeneity that we observe in voters' reactions. In some municipalities, the party of the incumbent mayor lost more than 30 percentage points from one election to another. In one of the most extreme cases, La Muela (Zaragoza), the vote share of the incumbent party decreased from 54.7% to 4.4%. However, we also find examples where corrupt mayors are not only reelected, but also increase their vote share by ten percentage points or more. The most prominent example is Torrejón de Ardoz (Madrid), where the incumbent party received 68.5% of the vote (from 43.3% in the previous election), despite the fact that the mayor had been charged with corruption.

What explains this variation in the electoral consequences of corruption? In section 2 we argued that the welfare consequences of corruption scandals play a fundamental role in how voters react to corrupt practices. We now turn to test this hypothesis by estimating the coefficients in equations 1 to 2, where we control for the effect of other variables that could bias our estimates.

We present our main results on Table 3. The first column presents our baseline model (equation 1), which estimates the effect of corruption scandals on the vote share of the incumbent mayor's

party, without differentiating by their welfare consequences. After controlling for potential confounders, we find that parties affected by corruption lost an average of 1.8 percentage points compared to those that are not involved in scandal, and this coefficient is significantly different from zero ($p < 0.05$).¹⁴ Furthermore, this result is robust to the inclusion of a wide range of control variables: whether the incumbent mayor ran for reelection or not, whether she had absolute majority in the local council, population size, unemployment rates, and region and party fixed effects.¹⁵

Model 2 introduces the distinction between welfare-enhancing and welfare-decreasing corruption, and shows the estimated coefficients for equation 2. We find that corruption type is a significant and powerful predictor of the magnitude of the electoral punishment. As expected, mayors who were involved in corrupt practices with no benefits for the municipality reduced their vote share by a wider margin, -4.2%. However, whenever corrupt practices exert any type of short-term benefit, their electoral effect is not significantly different from zero and positive. As we show in Model 3, this result holds even after controlling for the strategic retirement of mayors involved in corruption scandals. In fact, we find that the coefficient for the interaction between welfare-enhancing corruption and running with a different candidate is positive and significant. When we add the coefficients for the main effect and the interaction, our model shows that the effect of welfare-enhancing corruption scandals for mayors who decide to retire is in fact positive: an increase in 3.2 percentage points.

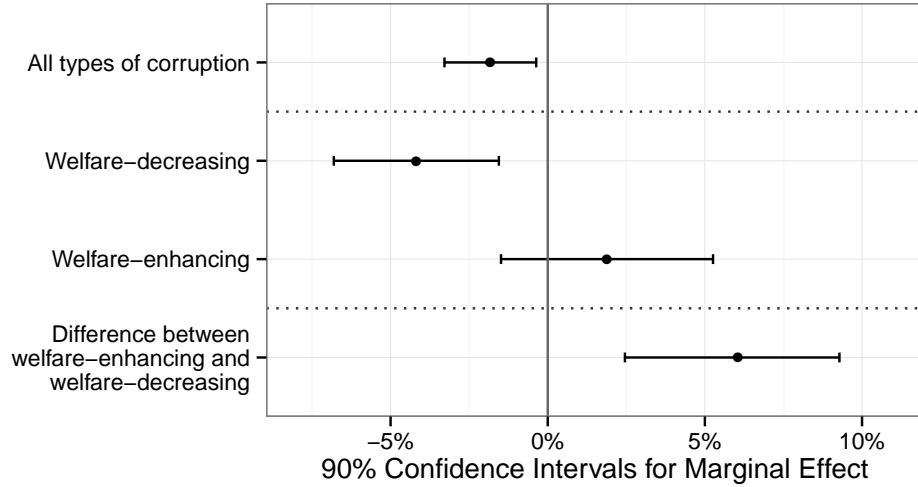
In Figure 2 we plot the marginal effect for each type of corruption, as estimated in the model, as well as the marginal effect of the difference between welfare-enhancing and welfare-decreasing corruption. As we can see, the distinction that we introduce between corruption scandals appears to explain why some corrupt politicians are not held accountable.¹⁶

¹⁴Note that we compute standard errors clustered at the regional level, so that we draw the correct inferences despite the potentially high spatial autocorrelation.

¹⁵By introducing this set of control variables, we are ensuring that our main result is not spurious, simply due to the characteristics of the municipalities whose mayors engage in corrupt practices. For instance, it is possible that the episodes of corruption tend to occur in those places where mayors are more popular, thus creating an electoral ‘buffer’ big enough to reduce the risk of a defeat. Similarly, we might expect corruption scandals to break out more frequently in smaller municipalities, where local politics receive less media attention, and therefore the mayor might find it easier to avoid being discovered if she is corrupt. The use of party- and region-fixed effects also controls for any confounding factors at these levels that could bias the estimated effect of corruption on the vote.

¹⁶Given our limited sample size, we also conducted a sensitivity analysis by running the regression in Model 2 a total of 75 different times, each time excluding a different corruption scandals. We found that our main results are robust

Figure 2: Marginal Effect of Corruption Charges



6.2 Robustness checks

In this section we show that our main result is robust to different model specifications. In Table 4 we show the results of such robustness checks. Model 1 replicates our main regression equation after excluding those (2) municipalities in which the incumbent was accused of both welfare enhancing and welfare decreasing corrupt practices (see section 4), finding substantively identical results, which shows that these two outliers are not driving our conclusions.

Model 2 replicates our main result but using a difference-in-differences estimator: the dependent variable is now the *change* in the vote share for the incumbent between 2007 and 2011, the two main independent variables are the corruption indicators, and we also control for changes in population size (logged). Despite the different specification, we find substantively identical results: welfare-decreasing corruption is severely punished by voters, with an estimated loss of around 7 percentage points, while the electoral effect of welfare-enhancing corruption is not significantly different from zero.

Finally, Model 3 estimates equation 2, but using a dichotomous dependent variable, with value 1 for municipalities where the incumbent party held the mayorship after the election, and value 0 for all other cases.

o otherwise. Given the nature of the endogenous variable, we estimate a probit regression model. In this case, we do not get significant results at conventional levels ($p = .13$ for β_2 and $p = .12$ for β_3), but all coefficients have the expected sign. Holding all variables at their means, our model predicts that non-corrupt incumbent parties have a 73.9% (73.2% to 74.6%) probability of retaining the mayorship.¹⁷ This predicted percentage increases to 81.8% (72.9%, 90.7%) when the mayor engaged in corrupt practices with welfare-enhancing consequences, but decreases to 60.5% (41.6%, 79.3%) for the rest of corrupt mayors. While this result provides weaker evidence in support for our hypotheses, note that it is not our main outcome of interest, given that re-election is also the result of post-election bargaining in the Spanish local electoral system.

6.3 Testing an alternative explanation

The existing literature on the electoral effects of corruption highlights the important role of information on the extent to which voters can exercise political accountability (e.g., see Ferraz and Finan, 2008; Chang et al., 2010; Chong et al., 2012). Corruption scandals that receive broader attention by the media might result in larger losses in vote share all else equal, because the total level of information that voters receive about the corrupt practices is higher. If this is the case, one possible explanation of the difference between welfare-enhancing and welfare-decreasing corruption could simply be that the latter receives broader media coverage.

We test this hypothesis in Model 1 of Table 5. Our dependent variable is the (logged) number of news stories about corruption in each municipality between 2007 and 2011, which we consider a proxy of media attention. Our main independent variable is an indicator of welfare-enhancing corruption.¹⁸ This result shows that, while corruption scandals that generate some kind of benefits for the municipality tend to receive slightly lower media attention, this difference is far from being statistically significant once we control for population size. In consequence, we cannot attribute the differences in the electoral effect of corruption scandals to their media attention, because we still found significant results after controlling for population size.

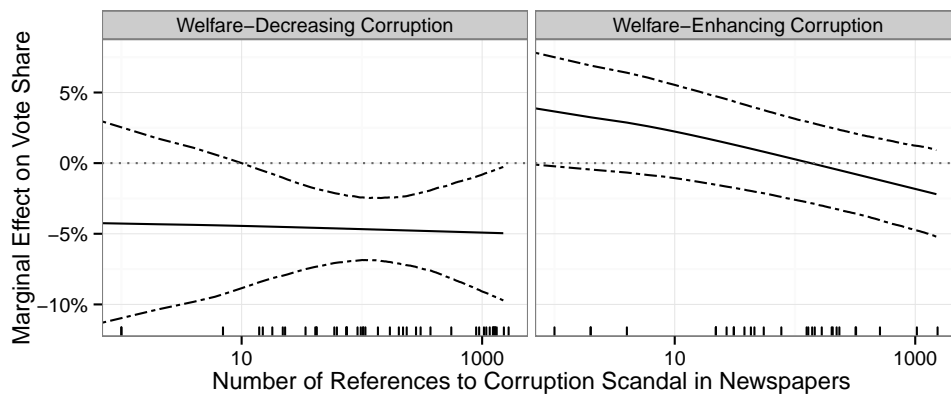
¹⁷The quantities in parenthesis indicate 95% confidence intervals for each estimate.

¹⁸Note that only municipalities with corruption scandals are included in this regression equation.

This result does not rule out the possibility that media coverage has a different impact on voters' reactions based on what type of corruption scandal is covered in newspapers. Assuming that newspapers always cover corruption scandal from a negative perspective, one could argue that citizens might need to receive a higher amount of information about a welfare-enhancing corruption scandal in order to exert the same amount of electoral punishment to the incumbent. This would be so because the benefits they receive offset their willingness to exercise electoral accountability of corrupt mayors. Finding evidence of a differential effect of media coverage on voters' reactions to corruption would provide additional support for our finding, because it would indicate that the distinction between types of corruption that we introduce is meaningful in understanding the heterogeneity in the electoral effects of corruption.

This hypothesis is tested in Model 2 of Table 5. To our main regression equation, we now add the variable measuring the number of references to each corruption scandals in newspapers, and interact it with our two indicators for corruption. We also control for population size as a proxy for the extent of media coverage of local politics, under the assumption that political information is more widely covered in large municipalities. A graphical interpretation of the results in this model is provided in Figure 3. This plot shows the marginal effect of a corruption scandal conditional on the number of news stories that referenced it, for each corruption type.

Figure 3: Marginal Effect of Corruption Charges



We find two important results. First, as previous studies suggested, the magnitude of the elec-

toral punishment is increasing in the breadth of its media coverage. When the scandal was not reported in the newspapers, the loss in vote share was not significantly different from zero for welfare-decreasing corruption scandals, and even positive and significant for welfare-enhancing corruption scandals. However, as the number of news stories increases, the marginal effect becomes more negative, and significant in the first case. Second, we also find that the magnitude of this change is larger in the second type. This is, while welfare-enhancing corruption generates smaller losses in vote share for the incumbent mayor holding media coverage constant, as the number of news stories about the case increases, the loss in vote share becomes larger. This result highlights the important role of information in the exercise of accountability. Although our dataset does not contain enough corruption cases to have the sufficient power to test this hypothesis, and of course media coverage is endogenous to the severity of the corruption charges, our finding suggests that at very high levels of media coverage, welfare-enhancing corruption will also exert significant losses in vote share.

7 Conclusions

Elections are a tool to select and discipline politicians. Because of that, we would expect corruption to be severely sanctioned by voters, as it constitutes an action that highlights an undesirable characteristic of the candidate. However, the specialized literature does not find strong support for this prediction: corrupt politicians regularly elude harsh punishments at the ballot box. This article provides an explanation that helps account for this puzzle: not all corrupt actions are unambiguously negative for the constituency that is supposed to judge them on Election Day. In fact, in some situations, voters might benefit from having a corrupt politician in office, as some of these corrupt activities might result in a short-term increase in their welfare. Our argument contends that, if a politician steals, voters will retain her if the electorate as a whole shares the rents that the illegal action generates.

In this paper we identify and illustrate these two types of corruption in Spanish municipalities. A large number of scandals involving municipal governments have been widely covered in the local, national and international press, as well as its apparent lack of electoral punishment. Using a unique

dataset of allegations of wrongdoing in which there has been an involvement of a judicial authority between 2007 and 2011, we find that *all* corrupt mayors lost an average of 1.8% vote share relative to honest mayors. However, this value hides a relevant heterogeneity: whereas mayors involved in welfare-decreasing corrupt practices suffered an electoral penalty of about 4.2%, those that engaged in actions that provided citizens with rents survived the verdict of elections completely unharmed. Voters, in sum, turned a blind eye to corruption if they obtained side benefits from it.

Our results run counter the idea that voters have an intrinsic preference for the mode in which the politician behaves in office. On the contrary, their evaluation of the politician's performance is based entirely on outcomes and not on actions. We think that our results neither support that voters are unable to perceive the wrongness of the actions of the mayor, nor that voters condone corruption, nor even that they are behaving myopically. From our perspective, voters behave as in a collective action problem in which no one has individual incentives to punish the incumbent, even although the whole community would possibly benefit from its removal. This is hardly a characteristic of our case of study. The number and variety of corruption cases in Spain makes identification easier as welfare-enhancing and welfare-decreasing cases appear together, but we are confident that the same mechanism underlies voting behavior in other cases.

Therefore, the results presented here offer direct empirical evidence, relying on observational data, of the existence of an implicit exchange between voters and politicians regarding corruption (Rundquist et al., 1977). Not only that, our finding represents the extreme case of an implicit exchange: it is not that voters reward a corrupt incumbent because she happens to be a good manager of the economy —the incumbent is reelected because a wide spectrum of the electorate had a chance to enjoy the side benefits accruing from the illegal behavior.

Table 1: Type of charges and coding decision

Welfare decreasing	Welfare enhancing
Fraud in procurement	Licensing construction on non-developable land
Embezzlement	Licensing construction in environmentally protected areas
Illegal hiring of municipal personnel	
Blackmail	

Table 2: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Incumbent Mayor Vote Share (2007)	0.55	0.16	0	1	8004
Incumbent Mayor Vote Share (2011)	0.51	0.18	0	1	8004
Absolute Majority	0.80	0.40	0	1	7887
Different Candidate	0.23	0.42	0	1	7884
Corruption Scandal	0.01	0.10	0	1	8004
Welfare-Enhancing Corruption	0.004	0.060	0	1	8004
Welfare-Decreasing Corruption	0.006	0.076	0	1	8004
No. of Mentions to scandal	357	486	0	1660	74
Population in 2007 (logged)	6.60	1.80	1.79	14.96	7884
Population in 2011 (logged)	6.60	1.84	1.61	15.00	7950

Table 3: OLS regressions on Incumbent Vote Share

	Model 1	Model 2	Model 3
Previous Vote Share	0.460*** (0.027)	0.460*** (0.027)	0.460*** (0.027)
Corruption	-0.018** (0.008)		
Different Candidate	-0.063*** (0.005)	-0.064*** (0.005)	-0.064*** (0.005)
Absolute Majority	0.040*** (0.010)	0.040*** (0.010)	0.040*** (0.010)
Population (logged)	-0.019*** (0.003)	-0.019*** (0.003)	-0.019*** (0.003)
Welfare-Enhancing Corruption		0.019 (0.019)	0.005 (0.014)
Welfare-Decreasing Corruption		-0.042** (0.015)	-0.040*** (0.013)
Diff. Cand. × Welfare-Enhancing Corr.			0.028* (0.014)
Diff. Cand. × Welfare-Decreasing Corr.			-0.007 (0.044)
Constant	0.322*** (0.020)	0.321*** (0.020)	0.321*** (0.020)
R^2	0.46	0.46	0.46
RMSE	0.13	0.13	0.13
N	7884	7884	7884
Fixed-effects	Yes	Yes	Yes

Dependent variable: vote share for incumbent mayor in 2011. Standard errors, clustered by region, in parentheses. Signif.: *10% **5% ***1%. Regression includes fixed-effects by region and party where noted.

Table 4: Robustness Checks

	Model 1	Model 2	Model 3
Previous Vote Share	0.460*** (0.027)		3.817*** (0.678)
Welfare-Enhancing Corruption	0.018 (0.022)	-0.018 (0.016)	0.461 (0.305)
Welfare-Decreasing Corruption	-0.042** (0.015)	-0.070*** (0.019)	-0.615 (0.401)
Different Candidate	-0.064*** (0.005)		-1.106*** (0.108)
Absolute Majority	0.040*** (0.010)		0.353*** (0.128)
Population (logged)	-0.019*** (0.003)		-0.018 (0.038)
Population Change (2007-2011)		0.015 (0.014)	
Constant	0.321*** (0.020)	-0.064*** (0.007)	-1.897*** (0.285)
R^2	0.46	0.03	
RMSE	0.13	0.15	
N	7882	7830	7882
Fixed-effects	Yes	Yes	Yes

Dependent variables: vote share for the party of the mayor in 2011 (Model 1), change in vote share for the party of the mayor between 2007 to 2011 (Model 2), dummy indicating whether the incumbent party held the mayoralship (Model 3). Municipalities with corruption scandals that exerted both types of benefits are excluded from the sample in Model 1. Model 4 is a probit regression. Model fit for Model 4: Pseudo R^2 is 0.19, PCP is 74.7% (Baseline: 67.9%). Standard errors, clustered by region, in parentheses. Signif.: *10% **5% ***1%. Regression includes fixed-effects by region and party where noted.

Table 5: OLS regressions

	Media Attention	Vote Share
Welfare-Enhancing Corruption	-0.276 (0.425)	0.039 (0.024)
Population (logged)	0.611*** (0.148)	-0.019*** (0.003)
Previous Vote Share		0.528*** (0.032)
Welfare-Decreasing Corruption		-0.035 (0.036)
Media attention		-0.002 (0.009)
× Welfare-Decreasing Media attention		-0.009** (0.004)
× Welfare-Enhancing		
Constant	-0.731 (1.411)	0.298*** (0.025)
R^2	0.21	0.43
RMSE	1.68	0.13
N	74	7884
Fixed-effects	No	Yes

Dependent variables: number of news stories about corruption in each municipality (“Media Attention”), vote share for the party of the mayor (“Vote Share”). Standard errors, clustered by region, in parentheses. Signif.: *10% **5% ***1%. Regression includes fixed-effects by region and party where noted.

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