

REVEALING MALFEASANCE: HOW LOCAL MEDIA FACILITATES ELECTORAL SANCTIONING OF MAYORS IN MEXICO ^{*}

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We estimate the effect of local media outlets on political accountability in Mexico, focusing on malfeasance by municipal mayors. We study federal grants earmarked for infrastructure projects targeting the poor, and leverage two sources of exogenous variation. First, we exploit variation in the timing of the release of municipal audit reports. Second, going beyond existing studies, we exploit within-municipality variation in media at the electoral precinct level. In particular, we use a geographic regression discontinuity design, comparing neighboring precincts on the boundaries of media stations' coverage areas, to isolate the effects of the media environment on voter behavior. We find that voters punish the party of malfeasant mayors, but only in electoral precincts covered by local media stations. Each additional local radio or television station reduces the vote share of an incumbent political party revealed to be corrupt by 1 percentage point, and reduces the vote share of an incumbent political party revealed to have diverted funds away from the poor by around 2 percentage points. The electoral costs of diverting resources away from the poor are especially large for the populist PRI party. However, we find no effect of media stations that cover the municipality but are based in other municipalities.

JEL: D72, D78, H41, O17.

Key words: elections, voter behavior, corruption, malfeasance, media.

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1 Introduction

A large body of scholarship in political economy asserts that in large democracies: (i) elections are one of the key institutions for producing political accountability; (ii) in order for elections to function well, voters must be adequately informed; and (iii) the mass media play an essential role in informing voters.¹ One important application of this trio, which is especially important in developing democracies, is the electoral sanctioning of corruption and other malfeasant behavior.

There is, however, relatively little solid evidence that the media actually inform significant numbers of voters about the behavior of malfeasant politicians. The strongest evidence is from [Ferraz and Finan \(2008\)](#), who find that incumbent mayors in Brazil who are revealed to be corrupt suffer more at the polls in areas with local radio stations than in other areas. Other studies find that corrupt politicians are more likely to be punished electorally when their corruption is covered in the news, or when political corruption is more generally salient.² However, none of these studies exploit exogenous variation in media or the salience of the media coverage.

In addition, it is not clear whether voters care about malfeasance, and if so, what types of malfeasance matter most to them. Some studies find that when incumbent politicians are exposed as corrupt then either the incumbents themselves or the parties to which they belong receive significantly fewer votes at the next election.³ However, other studies find mixed results, or no significant relationship between evidence of corruption or malfeasance and vote shares.⁴ Furthermore, although corruption may not affect voter behavior, other aspects of politicians' performance—such as overall rankings, or targeting public spending toward the poor—does.⁵ Theorists have responded by providing arguments to explain why voters might not punish corrupt politicians.⁶

In this article we estimate the effect of local media outlets on political accountability in Mexico, focusing specifically on municipal mayors. Our detailed local data allow us to exploit two sources

¹See, e.g., Thomas Jefferson: “The functionaries of every government have propensities to command at will the liberty and property of their constituents. There is no safe deposit for these but with the people themselves, nor can they be safe with them without information. Where the press is free, and every man able to read, all is safe” (Thomas Jefferson to Charles Yancey, 1816. ME 14:384).

²See, e.g., [Chang, Golden and Hill \(2010\)](#), [Costas, Solé-Ollé and Sorribas-Navarro \(2011\)](#), and [Eggers and Fisher \(2011\)](#) for studies of Italy, Spain and England respectively.

³See, e.g., [Ferraz and Finan \(2008\)](#), [Slomczynski and Shabad \(2012\)](#), and [Banerjee et al. \(2014\)](#).

⁴See, e.g., [McCann and Dominguez \(1998\)](#), [Dutta and Gupta \(2012\)](#), [de Figueiredo, Hidalgo and Kasahara \(2013\)](#), and [Chong et al. \(forthcoming\)](#).

⁵See, e.g., [Banerjee et al. \(2011\)](#) and [Humphreys and Weinstein \(2012\)](#).

⁶See, e.g., [Rundquist, Strom and Peters \(1977\)](#), [Caselli and Morelli \(2004\)](#), [Besley and Prat \(2006\)](#), [Dutta and Gupta \(2012\)](#), and [Svolik \(2013\)](#).

of plausibly exogenous variation. First, as in Ferraz and Finan (2008), we exploit variation in the timing of the release of municipal audit reports. In particular, we compare mayors who engage in malfeasance behavior that is revealed in audit reports published in the year before an election to similar mayors whose audit reports are not published until after the election. Second, and going beyond existing studies, we leverage within-municipality variation in the electoral precincts that are covered by radio and television stations located within the municipality. To ensure that this is not correlated with precinct-level differences in development, we use a geographic regression discontinuity design to compare neighboring precincts at the boundaries of stations coverage areas.⁷ Furthermore, we extend existing studies by distinguishing between different types of malfeasance behavior.

A significant proportion of government spending is administered by Mexico's c.2,400 mayors. Given widespread concerns about corruption, in 1999 the Mexican Congress passed a law institutionalizing independent audits of the use of federal funds. Importantly, such audits are announced after the federal funds have been disbursed. We focus on the audit reports pertaining to the Municipal Fund for Social Infrastructure (FISM). FISM is a major social program that provides mayors with funds for infrastructural projects intended to benefit impoverished citizens and represent about 25% of mayors' annual budgets. The audit reports reveal the share of FISM money spent "in an unauthorized manner," as well as the share spent on projects "not benefiting the poor." The first figure clearly represents malfeasance, and usually actual corruption. The second figure indicates malfeasance of a different sort—diverting funds from their intended targets. By law, 100% of FISM projects must benefit the poor, so any money not spent on the poor represents misallocation.

Our results demonstrate that voters punish the party of malfeasant mayors, but only in electoral precincts covered by local media stations. The point estimates imply that each additional local radio or television station reduces the vote share of an incumbent political party revealed to be corrupt by one percentage point.⁸ The effects of misallocating funds away from the poor are even larger. Our point estimates imply that if the incumbent party has significantly misallocated funds away from the poor, each additional local radio or television station reduces the party's vote share by between 1.5 and 2.5 percentage points, depending on the severity of the malfeasance. However, these effects only hold for media stations based within the municipality to which a given audit report applies. We find no effect of media stations that cover the municipality but are based in other municipalities.

We also find evidence suggesting that voters punish parties more for behavior that is not only

⁷These are defined by the areas reached with commercial quality signal strength.

⁸We examine the electoral implications of malfeasance for the incumbent mayor's political party, because incumbent mayors could not run for re-election themselves due to term limits.

malfeasant but contrary to the party's ideological reputation. More specifically, voters punish the PRI for diverting FISM funds away from the poor, but do not punish the PAN. The PRI has a stronger "pro-poor" reputation than the PAN.⁹ Thus, it might be more surprising when a PRI mayor is caught misallocating FISM funds by spending on the non-poor, making it more likely that voters significantly update their beliefs about the party's sincerity, commitment, or competence. Alternatively, voters might simply find this behavior by the PRI to be particularly hypocritical, therefore more egregious and deserving of punishment.

We show that our results are robust to a series of sensitivity checks. First, our results are robust to using an alternative measures of corruption and misallocation of funds away from the poor, as well as alternative definition of party incumbents, which might be of relevance since parties in Mexico often run for office on short-lived coalitions. Second, through the inclusion of municipality fixed effects or by simply focusing on within-municipality matches, we show that our estimates are not driven by matches where the treated and control units come from neighboring municipalities. Lastly, we examine the effect of different types of media separately and find that local media's effect are largest for FM radio and television.¹⁰

Our findings contribute to the literature in a variety of ways. First, we exploit a source of variation for estimating media effects that has not been explored in the literature on political accountability in developing democracies. A number of previous studies have applied the same general idea—using detailed features of the media market environment to obtain plausibly exogenous variation in the degree of "exposure" to different media outlets or messages—to primarily study phenomena such as the impact of media bias.¹¹ Snyder and Strömberg (2010) and Fergusson (2014) also apply this idea to study how the media market environment improves accountability in the U.S., but do not provide evidence of a direct link to political malfeasance.

Some of the studies that focus on the degree to which voters respond to corruption and other types of malfeasance also provide evidence of a media linkage, but as noted above, the evidence is often more suggestive than conclusive. Ferraz and Finan (2008) find that the number of local AM radio stations increases the electoral response to mayoral corruption in Brazil. As the authors acknowledge, however, the presence or absence of local stations may be correlated with a variety

⁹For example, according to the 2009 CIDE-CSES survey, voters identify the PRI to the left of the PAN. See the Comparative Manifesto Project codings [here](#).

¹⁰We also show that our estimates are not driven by differences in internet access—a variable that our matches present an imbalance on—by controlling for a triple interaction between audit results and the proportion of the precinct with internet access.

¹¹See, e.g., DellaVigna and Kaplan (2007), Chiang and Knight (2011), and Enikolopov, Petrova and Zhuravskaya (2011). See DellaVigna and Gentzkow (2010) for a review of this literature.

of municipal characteristics, only some of which can be measured and included as controls. A particular concern is that more developed municipalities, which are more likely to have local radio stations, are also more likely to contain better educated and more politically engaged and sophisticated voters, who may be more sensitive to mayoral performance.¹² Thus, although Ferraz and Finan (2008) control for a battery of municipal-level variables, their empirical strategy cannot rule out the possibility that their estimates are biased due to the presence of such unobserved confounders.

Similarly, Eggers and Fisher (2011) find a statistically significant loss in vote share for legislators whose misbehavior in the 2009 expenses scandal was serious enough to be featured in the news, but not for other implicated legislators. Costas, Solé-Ollé and Sorribas-Navarro (2011) also find that the incumbent's vote share loss was larger for corruption cases that were widely reported in the newspapers. While these findings are consistent with a media effect, it is also likely that the correlations reflect differences in the types of misbehavior covered by the media. In particular—as the authors of these studies clearly recognize—media outlets are likely to cover “serious” malfeasance more heavily than “minor” malfeasance. Chang, Golden and Hill (2010) show that there was more coverage of political corruption and political party finances in one of the major Italian national newspapers during the election for which they find a significant negative effect of criminal charges on voting (the 1994 election), relative to the previous eight years.

Unlike these previous studies, our estimates almost surely understate, rather than overstate, the effects of providing more media to voters. More precisely, we provide estimates of the “intention-to-treat” voters with access to media, because our geographic regression discontinuity is fuzzy rather than sharp.¹³ Some of the precincts that we classify as outside the coverage area of a given station are actually “partially inside” the station's coverage area, and that some of the precincts we classify as inside a station's coverage area are only “partially outside.” As a result, the average difference in reception between the precincts that are just inside and just outside of a station's coverage area is less than complete even though we treat it as if it were complete.

Second, we demonstrate the importance of *local* media for local political accountability, rather

¹²Klasanja (2011) and Weitz-Shapiro and Winters (2014) find evidence that voters with greater “political awareness” or literacy are more likely to punish incumbents in scandals.

¹³As we discuss in more detail below, radio and television signal strengths decay gradually as a function of geographic distance, not abruptly, and are also affected by terrain, large obstacles, ground conductivity, and even weather and temperature. Whether or not a given household can receive a signal may also depend on the equipment—e.g. the type of antenna—the household has. So, the exact boundaries of each station's coverage area are never perfectly accurate (or even completely fixed). Another issue, especially for radio, is that many people who commute may hear radio stations outside the area where they live.

than media in general. This is an important consideration because local radio and television are often the only way in which isolated voters can learn about the performance of their incumbent politicians, and around 20% and 25% of Mexican electoral precincts are respectively not covered by a single FM or television station.¹⁴ Moreover, the importance of local media is of particular importance since local media markets are shrinking in many countries. In Mexico, in the last 15 years there was a 40% decline in the share of individuals claiming to read political news in newspapers.¹⁵ In the U.S., daily newspaper circulation dropped from just over 1.0 newspapers per household in 1950 to about 0.3 per household in 2010. This trend is particularly worrying given that our evidence provides a clear rationale for politicians to exploit the weakening economic position of local media and to seek its control (Besley and Prat 2006), by purchasing radio stations (Boas and Hidalgo 2011) or preventing “defamation” (Stanig forthcoming).

Third, we show that voters respond differently to different types of malfeasance. As noted above, the bulk of the literature on political accountability in developing democracies has focused on corruption. Two exceptions are Banerjee et al. (2011) and Humphreys and Weinstein (2012). Humphreys and Weinstein (2012) conducted a field experiment in Uganda, and find that providing voters with information about the overall performance of their incumbent legislator relative to other legislators—as measured by an index involving participation in floor debates and votes, participation in committee debates and votes, and constituency service—leads voters to update whether they approve of, or intend to vote for, their incumbent. Banerjee et al. (2011) conducted a field experiment in India, and find that voters living in slums are more likely to vote for their incumbent legislator if they learn that the incumbent allocates more of her discretionary project spending funds to slums rather than other areas. Our findings are analogous to those of Banerjee et al. (2011), since we find that voters are more likely to vote against incumbents who divert funds away from the poor.¹⁶

Fourth, since audits are announced only after FISM funds have been allocated, our results show that the *possibility* of being audited is insufficient to prevent municipal mayors from engaging in malfeasance. Our findings thus complement previous research suggesting that audits can be effective at reducing corruption if it is known before spending occurs that the reports could result in criminal prosecution (Olken 2007) or be released before an election (Bobonis, Fuertes

¹⁴Local radio is less prevalent in Brazil (Ferraz and Finan 2008).

¹⁵60% of Latinobarometer respondents claimed reading political news in newspapers 1996, compared to 36% in 2009.

¹⁶The analogy is not perfect, since in our case the diversion of funds away from the poor is a direct violation of FISM program rules, while in their case it is not—legislators in India are free to allocate their discretionary project funds anywhere in their districts.

and Schwabe 2014). Rather, the corruption levels we find in Mexico are broadly similar to those observed by Ferraz and Finan (2008) in Brazil, where the municipal audit scheme was only announced after spending had occurred. Our results thus suggest that it is only the certainty of being audited that causes politicians to anticipate being audited and alter their malfeasant behavior. This is consistent with the dynamic optimizing behavior observed in India (Niehaus and Sukhtankar 2013).

The article proceeds as follows. Section 2 provides a brief overview of local governments in Mexico, the FISM funds that we study, the audit of such funds, and local media in Mexico. Section 4 details our data and identification strategy. Section 5 presents our main results and robustness checks. Section 6 concludes.

2 Political accountability in Mexico

2.1 Municipality audits

Mexico's 31 states contain around 2,400 municipalities, which are currently responsible for 20% of total government spending after a significant fiscal decentralization that took place in the 1990s.¹⁷ Municipal governments are led by mayors, who are responsible for delivering basic public services and managing local infrastructure. Mayors are normally elected every three years, although they serve four-year terms in some states, and could not stand for re-election.¹⁸

An important component of a mayor's budget is the Municipal Fund for Social Infrastructure (FISM). On average, this represents 24% of a municipality's total income. FISM funds, which are allocated to municipalities by the Fiscal Coordination Law (LCF) passed in 1997, are direct federal transfers provided exclusively for the funding of public works, basic social actions, and investments that directly benefit the socially disadvantaged population that is in extreme poverty. Spending can be assigned in any of the following categories: potable water, sewage, drainage and latrines, municipal urbanization, electrification or rural and poor suburban areas, basic health infrastructure, basic education infrastructure, improvement of housing, rural roads and rural productive infrastructure. Unlike previous studies focusing on corruption in more general programs (e.g. Ferraz and Finan 2008; Bobonis, Fuertes and Schwabe 2013), the specific targeting of FISM funds allows us to examine the electoral response by voters to both corruption and the misuse of funds intended to serve a disadvantaged population.

¹⁷Education and health were decentralized between 1992 and 1996 and the decentralization of infrastructure projects followed in 1997 (Wellenstein, Núñez and Andrés 2006).

¹⁸Re-election will become possible for those running starting in 2015.

Compared to previous social programs, FISM funding has been relatively successful at targeting resources at the poor (Wellenstein, Núñez and Andrés 2006). However, funds are often misallocated. In some cases, mayors engage in corrupt activities such as diverting resources, not offering public contracts up for open tender, and expensing personal largesse. FISM transfers can also be spent on public works not targeted at poor areas, such as paving the streets or improving sewage in rich urban areas.

The use of FISM funds is subject to independent audits by Mexico's Federal Auditor's Office (ASF). The ASF, which was established in 1999 in response to widespread concerns regarding the mismanagement of public resources, is an independent body with constitutionally-enshrined powers to audit the federal, state and municipal governments. In each year since 2000, the ASF has audited FISM spending in multiple municipalities per state. Importantly, an audit is announced after the spending has occurred. Although the exact formula for selection is not publicly available, official information indicates that municipalities are chosen on the basis of the federal transfers they received, the importance of these funds relative to the municipal budget, whether they have been audited before, and their history of misallocated expenditure.¹⁹ However, our identification strategy exploits the timing of audits, rather than comparing audited and non-audited municipalities. The ASF's selection rule defines the population to which our estimates apply.

Audits focus on the spending and management of FISM resources, and are conducted by independent ASF officials. Auditors check that officials abide by the rules established for the management of FISM resources (e.g., procurement rules, accounting procedures), that the status of the funded projects is in accordance with the books, and that funds are given the use they were intended for. Audit reports are not publicly released until up to two years after the audit was conducted. The ASF presents to Congress the results of all audits conducted in the calendar year two years prior by the last working day of February each year. The reports are then made publicly available online.

ASF audit reports break down the use of FISM funds across several dimensions. Most importantly, the reports state the percentage of FISM funds spent on infrastructure projects not benefiting the poor and the percentage of funds used for unauthorized spending. Spending that does not benefit the poor ranges from the diversion of resources to support agricultural production (during election times) to paving the streets of relatively rich urban areas. We interpret unauthorized spending, which includes the diversion of resources for personal expenses of the mayor and funds that are unaccounted for, as corruption.²⁰ In the Online Appendix, we provide an example of an

¹⁹Personal interview with the Licentiate Jaime Alvarez Hernández, General Director of Research and Evaluation of the Special Audit of Federal Spending, in July 2012.

²⁰This definition resembles Ferraz and Finan (2008) in that we focus on violations that include procurement fraud, diversion and over-invoicing, but differs in that we quantify the relative impor-

audit report.

The ASF can impose a variety of punishments on malfeasant public officials. In particular, the ASF can inflict municipality fines to recover FISM funds, recommend that the Ministry of Public Function removes, suspends or imposes economic sanctions on officials, or file (or recommend) a criminal case against culpable individuals. However, in practice these punishments have not been used regularly: between December 2006 and July 2012, the Ministry of Public Function only recovered two million U.S. dollars, sanctioned 9,000 public employees for serious misdemeanors, and incarcerated one hundred officials.²¹

2.2 Local media

As in many developing countries, radio and television networks are the principal source of news in Mexico. While a few television stations are predominantly national in focus, the focus of radio stations and most television stations is predominantly local.

The annual release of municipal audit results in February is a much-anticipated media event. This is particularly true for television networks, which widely broadcast footage of the release. However, many news reports concerning the ASF releases are published in February and March of each year. Supporting this claim, Figures 1 and 2 show that trends in Google searches for the ASF and FISM spike around February and March each year. Nevertheless, we still found many news reports from later in the year.

[Figures 1 and 2 about here.]

Media reports, which generally cover mayors within a given state or just the local vicinity, almost exclusively focus on cases of corruption and mayors not spending FISM funds on projects targeting the poor. Most reports cite the exact proportions of unauthorized spending and spending on projects not targeted at the poor.²² Little mention was made of other features of the reports such as the the degree of participation of the community in the allocation of funds or the share of FISM funds that were spent, which are also other variables disclosed in the ASF reports.

tance of such corruption. Rather than the percentage of unauthorized spending, Ferraz and Finan (2008) count the number of corruption violations.

²¹El Universal, “A la cárcel, solamente 100 ex servidores”, 29th May 2014, [link](#).

²²For example, see: BBM Noticias, “ASF: desvió Ugartchechea 370.9 mdp”, October 21st 2013, [here](#); El Informador, “Hallan irregularidades en gasto tapatío contra pobreza”, February 28th 2013, [here](#); Revolución Tres Punto Cero, “En 2012, se desviaron a campañas 29 millones de pesos para combate a la pobreza en Tabasco”, March 6th 2014, [here](#).

The bulk of news reports focus on particularly egregious cases of corrupt and neglectful mayors.²³ For example, in 2013 it was revealed Oaxaca de Juárez's mayor had created a fake union to collect payments, presided over many public works contract without offering open tender, diverting payments for advertising and consulting fees, and failed to provide details of considerable quantities of spending.²⁴ While Mayor Luis Julián Ugartechea Begué represents one of the most corrupt mayors, such behavior was not uncommon. Many reports pointed to mayors diverting payments, using FISM funds for personal and family expenses and manipulating tender processes. Failures to spend FISM funds on the poor were just as common in media reports. In many cases, public works projects were undertaken in urban and affluent parts of the city. In others, the alleged project never materialized despite being paid for, or was diverted for alternative uses such as supporting local candidates from the incumbent's party.

Mayors in Mexico cannot stand for re-election. This feature differentiates our study from many preceding studies (e.g. Banerjee et al. 2011; Ferraz and Finan 2008; Humphreys and Weinstein 2012). However, there are good reasons to believe that a mayor's political party may still be punished by voters at the next election. First, political parties do not disappear with mayors. Although the local coalitions between parties uniting behind a mayoral candidate can change across elections, political parties always back a particular candidate. Second, previous evidence shows that at least in some cases political parties are punished for the actions of their leaders (e.g. Chong et al. forthcoming).

Voters in Mexico appear to be generally unaware of mayoral responsibilities (Chong et al. forthcoming). Moreover, most public spending is invisible and inaccessible to most voters. A few voters will know about a few public projects from direct experience; for example, a voter who visits a new hospital or health clinic due to an illness, a voter with children who attend a newly renovated school, or a voter who drives over a newly paved road (after months of frustration driving around the construction site). For the most part, however, voters only learn about public spending through media coverage and thanks to the ASF audit reports.²⁵ This is even more true of money *not* spent

²³Because of this, media coverage may be biased toward large municipalities where the sums involved are large in nominal terms or smaller municipalities where the proportion of FISM funds misallocated is especially large.

²⁴BBM Noticias, "ASF: desvió Ugartechea 370.9 mdp", October 21st 2013, [here](#).

²⁵In principle, local governments are required to inform the public about the arrival of FISM funds. However, only about 50% comply with this requirement. Moreover, among those that do comply, the main communication channels used are newspapers and the internet—i.e., two types of mass media. Furthermore, media relies extensively on the ASF audit reports since governments are extremely reluctant to release information about their expenses to the public (Lavielle, Pirker and Serdán, 2006).

that should have been spent, or money that is spent improperly. Survey data is consistent with this view. According to the 2009 Latinobarometer, for example, 83% of respondents gather political information from TV, 41% gather political information from radio, 30% gather political information from newspapers, and 41% gather political information from family, friends and colleagues (many of whom, of course, gather *their* information from TV, radio and newspapers).²⁶

We now turn to our data, and to the empirical strategy we use to identify the effects of the release of audit reports in electoral precincts with and without local media outlets.

3 Data

This section describes our main sources of data: electoral results at the electoral precinct level; municipality audit reports; and precinct-level radio and television coverage.

3.1 Mayoral election outcomes

Mexico's municipalities (and Congressional districts) are divided in to around 67,000 electoral precincts. Using data from the Federal Electoral Institute (IFE) and State Electoral Institutes, we collected electoral returns for every available precinct in each municipal election between 2002 and 2012. States hold municipal elections in different years, and at three of four year intervals. We thus accumulated up to four election results per electoral precinct, which enabled us to identify the incumbent and incumbent's past vote share in all the elections in our period of analysis, 2007-2012.

We focus on two main outcome variables: the change in incumbent party's vote share at the precinct level, and whether the incumbent party was re-elected at the municipal level. The former measure quantifies the extent of voter sanctioning, and the latter captures the implications for the identity of the office-holder. We define the vote share as a proportion of voters that turned out.²⁷

Mexico's mayors could not stand for re-election, so we focus on the party of the incumbent mayor. Given municipal politics entails the formation of local coalitions between political parties, establishing the identity of the incumbent can be complex in some cases. For example, in 2010 the incumbent mayor of the municipality of Tuxtla Gutierrez (in the state of Chiapas) represented a four-party coalition containing the PRD, PT, PVEM and PC. However, the 2010 election saw five groups stand for election: while the PRI, PT, PVEM and PSD all stood separately, a coalition

²⁶These are the only four responses to an open-ended question that received a non-negligible number of mentions.

²⁷Since turnout is not significantly affected by the release of audit reports, we obtain similar results when measuring vote share as a proportion of registered voters.

formed between the PAN, PRD, PC and PANAL. To address such cases where the incumbent coalition split at the next election, we define the incumbent vote share as the vote share of the largest sub-coalition at the next municipal election, and define incumbent re-election similarly. This captures the fact that many coalitions are dominated by a major party in the municipality. Although most cases are straight-forward to code, we ensure that our results do not depend on our coding by restricting our analysis to the 82% of electoral precincts in our sample where the PAN or PRI—Mexico’s largest national parties, which typically dominate every coalition they are part of—were incumbents as a robustness check.²⁸

3.2 Audit reports

Audit reports are released with a two year lag, so the release coincides with elections held two years after the report occurred. Since all reports are released in February, and municipal elections take place later in the calendar year, we simply define elections by whether an audit was released in the February of that year. The two year gap between audit and its release means that the audit generally occurred in the first year of a mayor’s term in the cases where the report was released in an election year. Our control group will be mayors in municipalities where the audit was released in the year following the election; in such cases, the audit report generally pertains to their second year in office.

The results of audit reports are publicly available on the ASF’s website. Each report provides specific quantitative details pertaining to the use of FISM funds. We extracted the proportion of funds spend in an unauthorized manner and not spend on project benefiting the poor from every available report between 2005 and 2012.²⁹ This yielded a total 1,050 municipal audits, which were relatively evenly spread across years and covered 432 unique municipalities. Of these (and those for which data is available), 388 reports from 268 different municipalities were released in an election year or the year after. We henceforth restrict attention to this subsample of audits, which are depicted in Figure 3.

[Figure 3 about here.]

We focus on two measures of mayor performance. To capture corruption, we define two indicators for precincts with mayors in the third and fourth quartiles of the distribution of unauthorized

²⁸Although the PRD is also a large national party, its support base is more regional and consequently often forms coalitions with parties that are locally strong.

²⁹We did not collect earlier audit reports because they did not present those figures in a systematic way.

FISM spending. To capture neglectful spending, we similarly define indicators for mayors in the third and fourth quartiles with respect to FISM funds not allocated to spending on the poor. In our sample, only mayors above the median engaged in non-negligible corrupt or neglectful spending.³⁰ We prefer binary performance metrics identifying more egregious cases of bad performance since standard theoretical models suggest that voter sanctioning involves cut-off rules (e.g. Barro 1973; Ferejohn 1986). Furthermore, our examination of media reports indicates that only relatively serious cases are widely reported. Nevertheless, we find very similar results using a continuous measure where we instead assume that sanctioning is a linear function of revealed performance.

3.3 Media coverage

In addition to our fine-grained electoral data, a key feature of this study is the detail of our media coverage data. Following a major media reform in 2007 (see Larreguy, Marshall and Snyder Jr. 2014), the IFE required signal coverage data from every AM and FM radio station and every television station in the country. For each media station we code the municipality from where the station broadcasts and define the commercial quality coverage area.³¹ See Larreguy, Marshall and Snyder Jr. (2014) for details.

Figures 4, 5, and 6 map the location and coverage of each AM, FM and television station. Although media coverage is extensive, with most precincts receiving at least one media signal and most municipalities containing at least one media station, Figures 7a and 7b below document considerable variation in the number of own-municipality media stations covering each precinct. Since the number of radio and television stations has remained constant between 2003 and 2010, we cannot exploit temporal variation in media coverage.

[Figures 4, 5 and 6 about here.]

Our principal measure of local media coverage is the total number of local media stations covering a given electoral precinct. We define a local media station as any AM, FM or television station emitting from within a given precinct's municipality. The average precinct is covered by 4.4, 5.4 and 2.4 AM, FM and television stations respectively, while the total number of local media stations covering a precinct ranges from 0 to 40. Given these precinct totals are highly correlated across media types, simply adding the total together yields similar results to examining

³⁰The level of corruption in the median precinct was 0.4% of FISM funds, while neglectful spending in the median precinct was 0%.

³¹For only a small number of FM and television stations did the same station broadcast from multiple municipalities. No electoral precincts received the same signal from multiple antennae.

each type of media separately.³² As a robustness check, we also examine each type of media separately. To identify the importance of local media, we also computed the total number of media stations covering a precinct that do not broadcast from within the municipality. The average precinct receives as many FM and television signals from inside their municipality as outside; the greater signal range of AM stations means that precincts are typically covered by twice as many AM stations emitting from outside their municipality.

[Figures 7a and 7b about here.]

4 Empirical strategy

Our goal is to identify the effect of local media coverage of municipal audits on incumbent party's electoral performance. To achieve this, we require exogenous variation in *both* the release of audit reports and access to local media. We combine the difference-in-difference (DD) design of Ferraz and Finan (2008) with a geographic regression discontinuity (GRD) exploiting within-municipality variation in media coverage. We first briefly outline the DD approach used in previous work, before explaining both why the GRD is required to estimate the effect of local media and how it is implemented.

4.1 Identifying the effects of audit reports

The DD design rests upon exogenous variation in the occurrence of audience. To identify the effects of audits we use municipalities where an audit report was released just after an election as a control group for municipalities where the audit was released before the election. We then move beyond this first difference by adding two additional layers of differences: whether a mayor is corrupt or neglectful, and the number of media stations covering a given precinct.

As noted above, Mexican municipalities are not randomly chosen for audits. However, we focus on municipalities that have been audited at least once. Consequently, to identify the causal effects of an audit being released we require only that the *timing* of audits is effectively random. Given that the ASF is an independent body and follows a specific formula for allocating audits, this appears to be a reasonable assumption. Table 1 confirms that differences in the political, demographic, media coverage and economic characteristics between electoral precincts in municipalities where an audit was released in the year before an election and those where an audit was

³²In our main sample (before exploiting our GRD design), this procedure yielded a Cronbach's alpha of 0.84. The minimum pairwise correlation between the variables is 0.65.

released the following year are consistent with chance.³³ The variables in the final five rows are taken from the precinct-level Census data from 2010, and are described in greater detail in the Online Appendix. Our full sample contains 42,595 precinct-election observations.

[Table 1 about here.]

A second potential concern is that the content of audit reports differs across election and non-election years. For example, auditors could be more lenient or more meticulous in the knowledge that a report will be released in an election year. Alternatively, mayors anticipating the release of an audit report in an election year may spend more appropriately. To examine these possibilities we compare audit reports released in an election to the universe of all other audits that have ever been carried out in Figure 8. The distribution of unauthorized spending and spending not on the poor is almost identical. Combined with our randomization check, this strongly suggests that the audits results released in election years are typical of “normal” auditing.

[Figure 8 about here.]

To identify the effect of revealing a mayor to be corrupt or neglectful before an election, we estimate the following DD equation using OLS:

$$\begin{aligned}
 Y_{p,m,t} = & \beta_1 \text{audit}_{m,t} + \beta_2 \text{audit outcome}_{m,t} + \beta_3 \left(\text{audit}_{m,t} \times \text{audit outcome } Q3_{m,t} \right) \\
 & + \beta_4 \left(\text{audit}_{m,t} \times \text{audit outcome } Q4_{m,t} \right) + X_{p,m,t} \gamma + \zeta_t + \varepsilon_{p,m,t}, \quad (1)
 \end{aligned}$$

where $Y_{p,m,t}$ is the incumbent party’s vote share in precinct p in municipality m in year t (or whether the incumbent party won the municipal election), $\text{audit}_{m,t}$ as an indicator for an audit being released before the election, and $\text{audit outcome } Q3_{m,t}$ and $\text{audit outcome } Q4_{m,t}$ are indicators for municipalities in the third and fourth quartiles of the distributions corrupt or neglectful mayors (regardless of whether the audit was released before or after the election). We include election year fixed effects ζ_t to ensure that we compare municipalities where an audit report was released just after an election to municipalities where the audit was released before the election. To increase the efficiency of our estimates, we also included the political and Census variables listed in Table 1 as controls. Throughout, we cluster by municipality-year to account spatial correlation of the precincts in the same municipality.

³³This assumes that the tests are independent. Although they probably are not, finding only three (of 30) differences statistically significant at the 10% level strongly supports our claim.

Our main coefficients of interest are β_3 and β_4 , which identify the effect of an audit conditional upon it revealing corruption or that the mayor did not spend FISM money on the poor. By not weighting our observations, our estimates reflect the effect of an audit in an average precinct. This contrasts with Ferraz and Finan (2008), whose unit is the average municipality.

4.2 Identifying the effects of media stations revealing audit reports

To examine the heterogeneous effects of revealing corruption or neglectful behavior, Ferraz and Finan (2008) further interact $audit_{m,t} \times audit\ outcome_{m,t}$ with the number of local media stations located in a municipality. If the number of local media stations were effectively randomly assigned, then this would estimate the average effect of an audit report being released for each additional local media station. Unlike our precinct-level data, this strategy rests upon between-municipality differences in media coverage.

However, media stations are not randomly assigned across municipalities. Although the number of local media stations does not predict political or demographic variables in our data, it is significantly positively correlated with precinct-level literacy rates, living in households with basic necessities and luxury amenities, and the number of household owning a radio or television (even after the inclusion of municipality and year fixed effects). These correlations may upwardly bias our estimates of local media's effects if the better educated and informed citizens in such precincts are more willing or able to sanction incumbent mayors (e.g. Alt, Lassen and Marshall 2014; Weitz-Shapiro and Winters 2014).³⁴ This problem may be worsened by the omission of additional unobserved correlates of local media stations. To address these concerns we also exploit plausibly exogenous variation in the number of local media stations.

4.3 Geographic regression discontinuity

To generate plausibly exogenous variation in local media coverage, we compare neighboring electoral precincts either side of a media coverage boundary. It is important to emphasize that broadcast signals decay gradually rather than abruptly, so the commercial quality signal boundary is not simply the difference between receiving or not receiving a station's signal. However, since our unit of analysis—the electoral precinct—is spatially discrete, any continuously declining difference produces a discrete change in signal quality once aggregated to the precinct level. In this sense, we regard the boundary as a fuzzy discontinuity where the likelihood that the average voter in a

³⁴In theory, these correlations could also downwardly bias our estimates if such precincts contain voters with stronger prior belief about their incumbent's quality (Zaller 1992).

precinct receives a high quality signal is substantially lower. Our geographic regression discontinuity (GRD) design is therefore similar to previous studies exploiting differences in media market boundaries (e.g. Ansolabehere, Snowberg and Snyder 2006; Enikolopov, Petrova and Zhuravskaya 2011; Snyder and Strömberg 2010).

After identifying “treated” precincts which differ from their neighbors in terms of the number of local media stations that they receive, we use matching to identify the best neighboring control precinct for each treated precinct. The number of local media stations is already well balanced across political and demographic variables, so our best match is defined as the neighboring precinct with the smallest Mahalanobis distance in terms of the five 2010 Census variables at the foot of Table 1. Since the Census variables are time-invariant, matched pairs are identical for each year. Together, this yields a GRD sample size of 19,230 observations.

[Table 2 about here.]

Our design ensures that within-match differences in the number of local media stations covering neighboring electoral precincts are plausibly exogenous. Table 2 shows that the number of local media stations is generally uncorrelated with audit, demographic and economic variables in regressions controlling for match and year fixed effects.³⁵ Importantly, there are no significant differences in the number of non-local media stations; this is important because the number of local media stations is typically correlated with non-local media stations.³⁶ There are, however, two cases of slight imbalance. Driven by a small number of cross-municipalities matches, PAN municipalities have more media stations than PRI and then PRD municipalities. Internet usage is also 0.1 percentage points higher for an additional local media station. In our robustness checks, we demonstrate that neither represents a source of concern.

The GRD sample differs from the full sample of elections occurring in the years before and after an audit is released. Consequently, our sample may represent different populations, and the effectively random assignment of audits may no longer hold. Table 3 provides summary statistics for the GRD sample, and compares municipalities by the timing of their audit’s release. First, corruption is six percentage points less prevalent in the GRD sample, while media coverage is slightly larger, and precincts are generally less socio-economically developed. Second, there are no significant differences between precincts in municipalities audited before and after elections when comparing precincts where an audit was released before and after an election.

³⁵The media variables are omitted because they define the matching design.

³⁶In the Online Appendix, we also show that simultaneously controlling for the number of non-local media stations does not affect balance across the number of local media stations.

[Table 3 about here.]

Combining exogenous variation in the timing of audit and the number of media stations covering a given electoral precinct, we estimate the following DD and GRD specification:

$$\begin{aligned}
 Y_{p,k,m,t} = & \beta_1 \text{audit}_{m,t} + \beta_2 \text{audit outcome}_{m,t} + \beta_3 \left(\text{audit}_{m,t} \times \text{audit outcome } Q3_{m,t} \right) \\
 & + \beta_4 \left(\text{audit}_{m,t} \times \text{audit outcome } Q4_{m,t} \right) + \beta_5 \text{media}_{p,m} + \beta_6 \left(\text{audit}_{m,t} \times \text{media}_{p,m} \right) \\
 & + \beta_7 \left(\text{audit}_{m,t} \times \text{audit outcome } Q3_{m,t} \times \text{media}_{p,m} \right) \\
 & + \beta_8 \left(\text{audit}_{m,t} \times \text{audit outcome } Q4_{m,t} \times \text{media}_{p,m} \right) + X_{p,m,t} \gamma + \xi_k + \zeta_t + \varepsilon_{p,k,m,t}, \quad (2)
 \end{aligned}$$

where ξ_k is a match fixed effect, which ensures our estimates identify only off within-match variation in media coverage. The balancing variables in Table 5 are included in $X_{p,m,t}$ to increase the efficiency of our estimates. To understand the effects of media, we examine two measures of $\text{media}_{p,m}$: the total number of local media stations and the total number of non-local media stations. Since our sample contains some precincts at municipality borders to maximize our sample size, we exploit both within- and across-municipality variation. However, if we only allow within-municipality matches or include municipality fixed effects, we obtain very similar results.

5 Results

We first examine whether audits revealing a mayor to be corrupt or neglectful before an election reduce a mayor's vote share and probability of re-election. However, our main contribution is to then identify large complementary effects of local media. Our results demonstrate that an additional media station significantly increases the electoral punishment that a corrupt or neglectful mayor faces.

5.1 Audits and political accountability

Table 4 presents the average effect of an audit revealing a mayor to be corrupt or neglectful of the poor on the mayor's electoral prospects. The outcome in columns (1) and (2) is the change in the mayor's vote share at the precinct level, while the outcome in columns (3) and (4) is whether the mayor was re-elected in the municipality. The results pertain to the full sample, and were estimated using equation (1).

[Table 4 about here.]

Our estimates indicate that an audit released before an election can have substantial electoral implications. Column (1) shows that revealing a mayor to be in the most corrupt quartile before the election, on average, reduces the vote share of a corrupt mayor by seven percentage points. Although this does not quite reach statistical significance, the magnitude represents 14% of the average incumbent's initial vote share. Column (2) finds that revealing that a mayor is neglectful before an election significantly reduces their vote share: the vote share of mayors in the third quartile declines by eight percentage points, while mayors in the fourth quartile lose a further three percentage points.

Looking at the probability of re-election similarly suggests that voters severely punish mayoral malfeasance. Measured at the municipal level, the change in incumbent vote share maps to large reductions in the probability of being re-elected. Column (3) finds that revealing a mayor as one of the most corrupt reduces their re-election probability by 34 percentage points, although this is again not quite statistically significant.³⁷ Column (4) shows that the publication of an audit report showing that a mayor did not spend FISM federal transfers on the poor is 38 percentage points less likely to be re-elected. For both audit outcomes, the effect is much larger for mayors in the fourth quartile relative to the third.

The substantial electoral sanctioning implied by these results is similar in magnitude to that found by Ferraz and Finan (2008) in Brazil, although we measure corruption in terms of stolen funds rather than the number of corrupt spending violations. However, our results also suggest that incorrectly spending money earmarked for the poor evokes sanctioning of similar magnitude to corruption.³⁸ However, our DD estimates are relatively noisy. A plausible explanation for our lack of precision is that audit reports only affect voter behavior when the information is clearly conveyed.

5.2 The effects of media coverage of audit reports

We now address the central question of this article: are politicians more likely to be sanctioned by voters when media stations exist to publicize their behavior? Combining our DD and GRD designs, we first examine the effects of local media stations—those emitting from the same municipality as an electoral precinct—before turning to non-local media stations. Since mayoral corruption and

³⁷The relative lack of precision reflects the fact that we have 481 audited municipalities, of which only 51 had mayors that were revealed to be corrupt before the election.

³⁸The Online Appendix reports quantitatively similar, but far noisier, estimates for the GRD sample, which includes only a selection of precincts from 330 municipality elections and only identifies off within-matched pair variation.

neglect are primarily important local issues, we expect to find that local media is more effective at facilitating electoral accountability.

Table 5 provides our estimates for the sanctioning effect of an additional media station emitting from the precinct's own municipality. Since the precincts in most matched pairs are both located in the same municipality, our analysis now focuses on the change in the incumbent's vote share at the precinct level.

The results for revealing a corrupt mayor show that local media supports electoral accountability. In column (1), mayors in the third and fourth quartiles of the corruption distribution experience significant losses in their vote share—around one percentage point for each additional local media station. A standard deviation increase in the number of media stations, which entails 11.6 more media stations, thus reduces the vote share of an incumbent revealed to be corrupt by ten percentage points. The insignificant interactions between our audit dummy and a mayor's corruption quartile indicate that revealing a mayor to be corrupt has no effect in precincts covered by no media stations.

[Table 5 about here.]

In precincts where local media reveals a mayor to have neglected the poor, the effect is larger and increasing in the severity of a mayor's neglect. Column (2) shows that an additional local media station reduces a neglectful mayor's vote share by 1.5 percentage points for mayors in the third quartile and 2.5 percentage points for mayors in the most neglectful quartile. A standard deviation increase in the number of local media stations thus entails a 23 percentage point decrease in the vote share of the most neglectful mayors if their behavior is revealed before an election. This represents a decline of almost half their vote share. Again, the interaction between the pre-election audit release and not spending on the poor shows that in locations with zero local media stations, the effect of revealing a mayor to be neglectful is effectively zero. Consistent with the DD estimates in Table 4), our GRD results thus clearly indicate that the *media-induced* electoral response to revealing neglect of the poor is larger than the electoral response to corruption.

To examine the role of non-local media, Table 6 presents the results of estimating equation (2) with interactions for both local and non-local media. For non-local media, balance across the variables in Table 2 is even stronger.³⁹ The results clearly indicate that non-local media has a far smaller effect on election outcomes than local media. Comparing the coefficient on the triple interactions, the effect of non-local media is always smaller than for local media. While the

³⁹Since our matching did not maximize differences in non-local media, this in part stems from many matches with no variation in the number of non-local media stations.

difference for corruption is relatively small, the large impact of local media is far greater than that for non-local media where a mayor neglects the poor. Nevertheless, the negative coefficients for non-local media allow for the possibility of a small spillover effect consistent with media stations reporting audit results reports for multiple local municipalities.⁴⁰

[Table 6 about here.]

5.3 Robustness checks

By exploiting two sources of plausibly exogenous variation, there are good reasons to be confident in our estimates. Nevertheless we now show that our GRD estimates are not sensitive to particular specification choices. Table 8 present the results of our robustness checks, and focus on the triple interactions identifying the effect of local media revealing mayoral malfeasance.

First, we show that the results are robust to our definition of party incumbents. Since party coalitions can vary over time within municipalities, and it is not always obvious which the prominent party within a given coalition is, we restrict attention to incumbents containing the PAN or PRI. These parties almost always dominate smaller parties in local coalitions. Panel A of Table 8 shows that our estimates slightly increase in magnitude for the 88% of precincts where the PAN or PRI were incumbents.

[Table 8 about here.]

Second, panels B-D show the results when looking at different types of media separately. Comparing coefficients magnitudes across the panels, we find that local media's effects are generally largest for FM radio and especially television. There are several potential explanations for this finding. First, as the coverage maps above indicate, AM radio stations cover a larger area and may thus seek to appeal to a broader demographic. Second, the matches that differ in terms of their FM and television coverage may be more urban locations where voters are more able or willing to act upon information concerning their mayor's performance.

Third, a potential concern is that our GRD estimates are driven by matches where the treated and control units are from bordering municipalities. Such matches could therefore be picking up unobservable features of the municipalities, or the lingering differences in incumbent status highlighted in Table 2. Demonstrating that this is not the case, panel E provides very similar

⁴⁰Because our GRD-matching approach focuses on difference in local media, our estimates for non-local media may be under-powered.

estimates when controlling for municipality fixed effects. Panel F shows very similar results when the set of potential matches is restricted to precincts within the same municipality.

Fourth, our balance checks highlighted an imbalance in internet access. Given audit reports were also released online, it is possible that local media coverage is simply a proxy for internet access. However, since the imbalance is extremely small in magnitude, it is hard to believe that this correlation could account for our large estimates. Furthermore, panel G shows that controlling for a triple interaction between audit results and the proportion of the precinct with internet access barely affects our point estimates, although the corruption coefficients become statistically insignificant. Supporting the importance of media more generally, the internet coefficients suggest that precincts with greater internet access are more likely to punish corrupt, but not neglectful, mayors. Since internet access may still be correlated with precinct characteristics like education and political interest, further work is required to establish whether the association with internet access is causal.

Fifth, we consider a linear specification of the audit report results. In particular, we use the share of unauthorized spending and spending not on the poor instead of the binary approaches used above. We thus allow for alternative types of voter punishment strategies. Panel H shows substantively similar results, although the magnitudes are smaller. This supports the claim that voters more severely punish worse behavior in office.

Sixth, at the cost of losing randomization in local media, we estimate equation (1) on the full sample in order to check the external validity of our GRD estimates. The results in Table 9 are broadly similar to the GRD estimates. For both corruption and spending not on the poor, a mayor revealed as malfeasant before an election experiences a significant decrease in their vote share for each additional local media station. Although the GRD and full samples yield relatively similar results, the estimates suggest that not accounting for differences correlated with media availability slightly downwardly biases media's amplifying effects of spending not on the poor.

[Table 9 about here.]

5.4 Heterogeneity by party

Since parties vary in their political platforms and reputations, voters might punish some parties more than others. For example, voters might be more likely to update their beliefs about the sincerity, commitment, or competence of parties when the incumbent's behavior in office contradicts the campaign promises of their party or voter expectations of politicians.⁴¹ Alternatively, voters

⁴¹See, e.g. Alt, Lassen and Marshall (2014), who show that opposition claims that economy is performing well or government claims that the economy is performing badly have larger ef-

might find some behavior particularly hypocritical, and therefore more egregious and deserving of punishment.

While all parties in Mexico have been linked with corruption, particularly in our sampling period following the collapse of PRI single-party dominance, the main parties differ in the extent to which they promise to support the poor. Since the PRI is a populist party appealing to the relatively disadvantaged masses, we might expect revelations of failing to spend no the poor to hurt the PRI more than other parties. The PAN, which also has a significant number of mayors, is instead the party of richer voters.

Table 10 examines this relationship by comparing the effects of media in the GRD sample between PRI and non-PRI incumbents.⁴² Although PRI municipalities could be correlated with other relevant characteristics, the results suggest that our results are primarily driven by the precincts with a PRI incumbent. This evidence implies that voters are particularly willing to punish politicians that claim to support poorer voters but which ultimately neglect them.

[Table 10 about here.]

6 Conclusion

Many scholars call media “the fourth estate,” due to its potential to inform voters about the behavior of politicians in office. Both national and local media are needed: while national media outlets cover national level actors, local media are necessary to inform voters about the performance of local politicians. However, since local media is often monopolistic or oligopolistic, it may be especially vulnerable to capture in developing democracies (Besley and Prat 2006).

Using detailed local data and a geographical regression discontinuity design that exploits differences in signal coverage across neighboring electoral precincts, we identify the impact of the media environment on political accountability. We show that voters punish the party of malfeasant mayors, but only in electoral precincts covered by local media stations. In particular, we find that each additional local radio or television station reduces the vote share of an incumbent political party revealed to be corrupt by 1 percentage point, and reduces the vote share of an incumbent political party revealed to be have diverted funds away from the poor by about 2.5 percentage points.

ffects on voter evaluations of government. Similarly, Chiang and Knight (2011) for evidence that “surprising” newspaper endorsements have a significant effect on voter behavior but “expected” endorsements do not.

⁴²Although the PRD is perhaps the most left-leaning party, the number of PRD mayors is quite small and these mayors often hold office in coalition with other local parties.

However, we find no effect of media stations that cover the municipality but are based in other municipalities. Thus, our findings demonstrate the importance of media, especially local media, in supporting political accountability.

The electoral costs of diverting resources away from the poor are especially large for the populist PRI party. One interpretation of this finding is that voters punish parties more for behavior that is not only malfeasant but contrary to the party's ideological reputation. This raises important questions about voter sophistication and, therefore, about the scope for politicians to engage in malfeasant behavior in office. Further work is clearly needed to understand the conditions under which different types of politicians are punished by voters.

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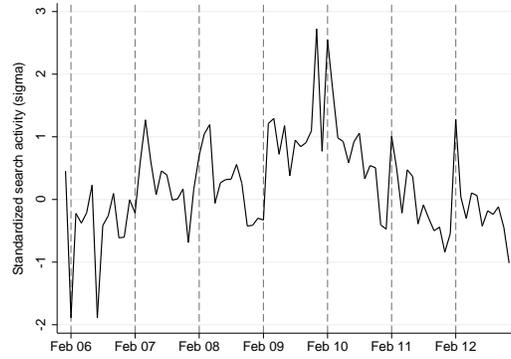


Figure 1: Google searches for ASF, by month

Notes: Extracted using Google Correlate (<http://correlate.googlelabs.com>) on 15th July 2014. The data cover the period used in our sample.

Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. Cambridge University Press.

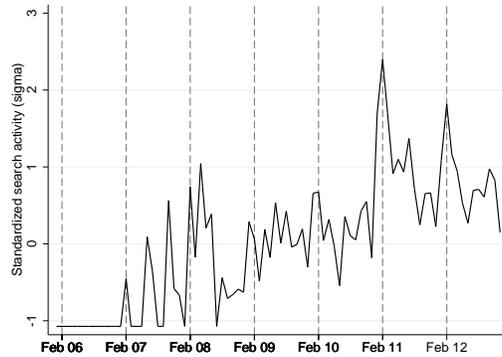


Figure 2: Google searches for FISM, by month

Notes: Extracted using Google Correlate (<http://correlate.googlelabs.com>) on 15th July 2014. The data cover the period used in our sample.

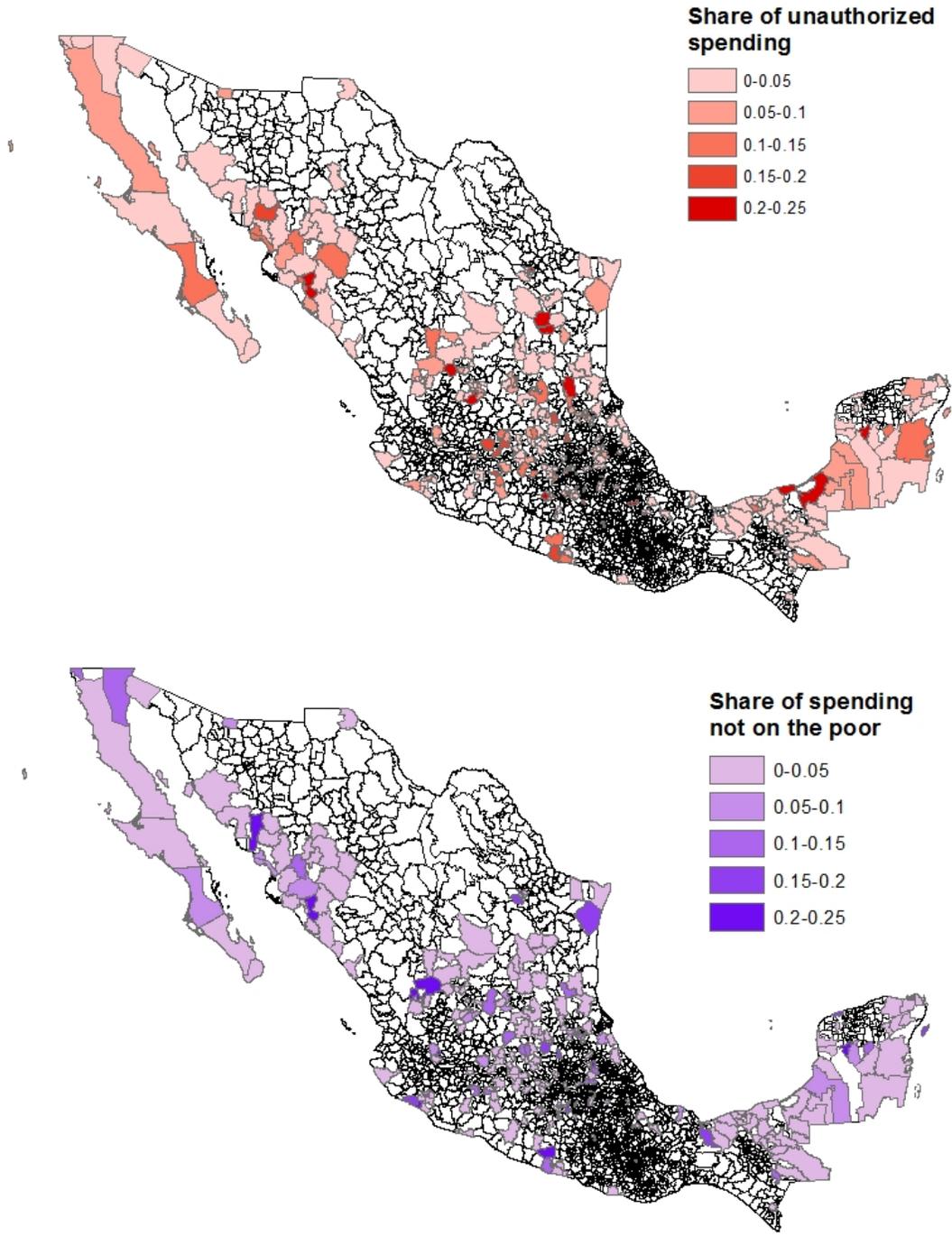


Figure 3: Distribution of audit report outcomes by municipality.

Notes: Only the 268 municipalities in our final sample are included. Where more than one audit occurs, we take the average audit outcome.

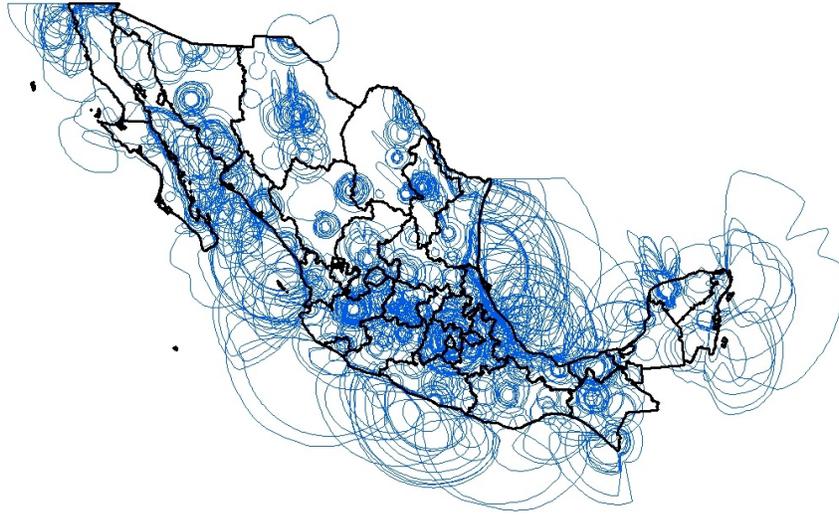


Figure 4: AM radio signal coverage areas (source: IFE).

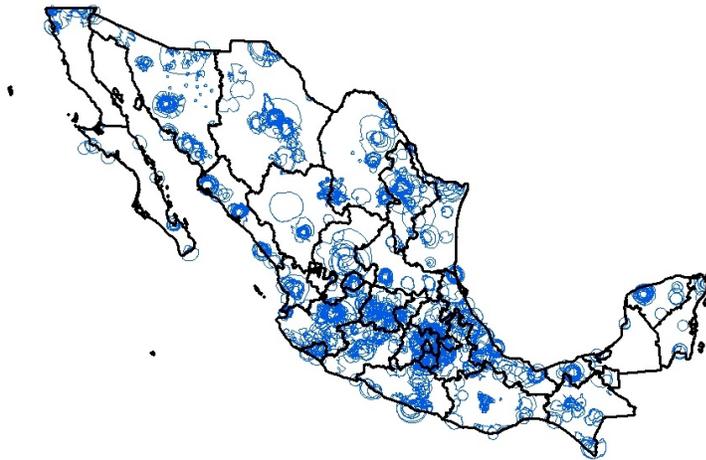


Figure 5: FM radio signal coverage (source: IFE).

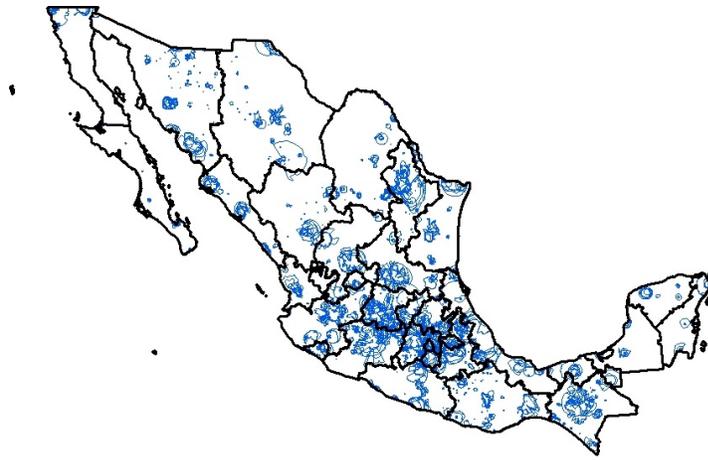
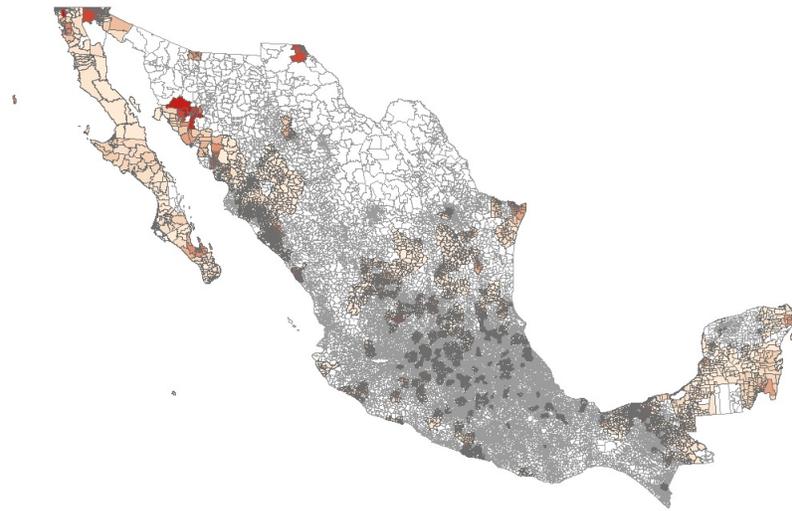
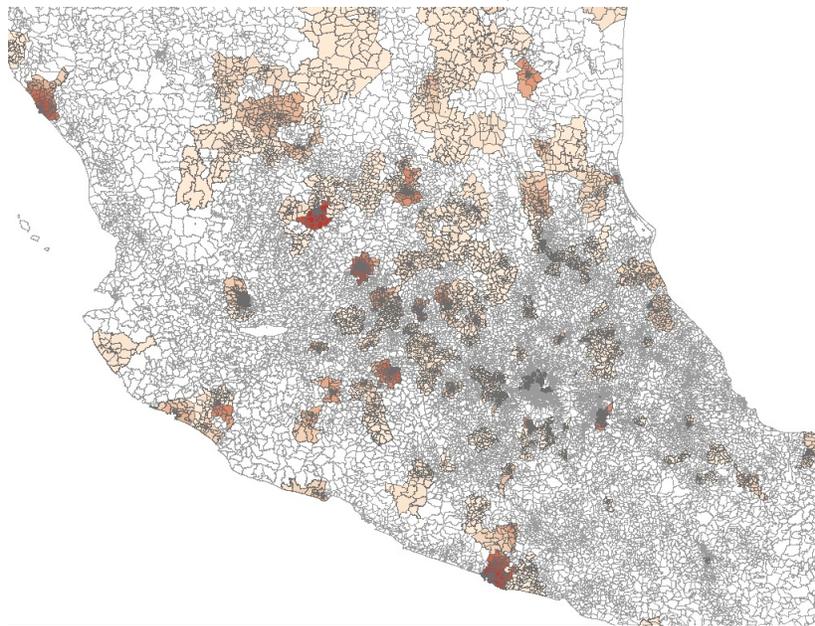


Figure 6: TV signal coverage (source: IFE).



(a) Whole country.



(b) Zoomed in at the center of the country.

Figure 7: Distribution of the number of own municipality stations (AM, FM and TV) received by precincts (source: IFE).

Notes: Only precincts in our GRD sample are included. Dark shades of red indicate precincts with a larger total number of own-municipality radio or television stations.

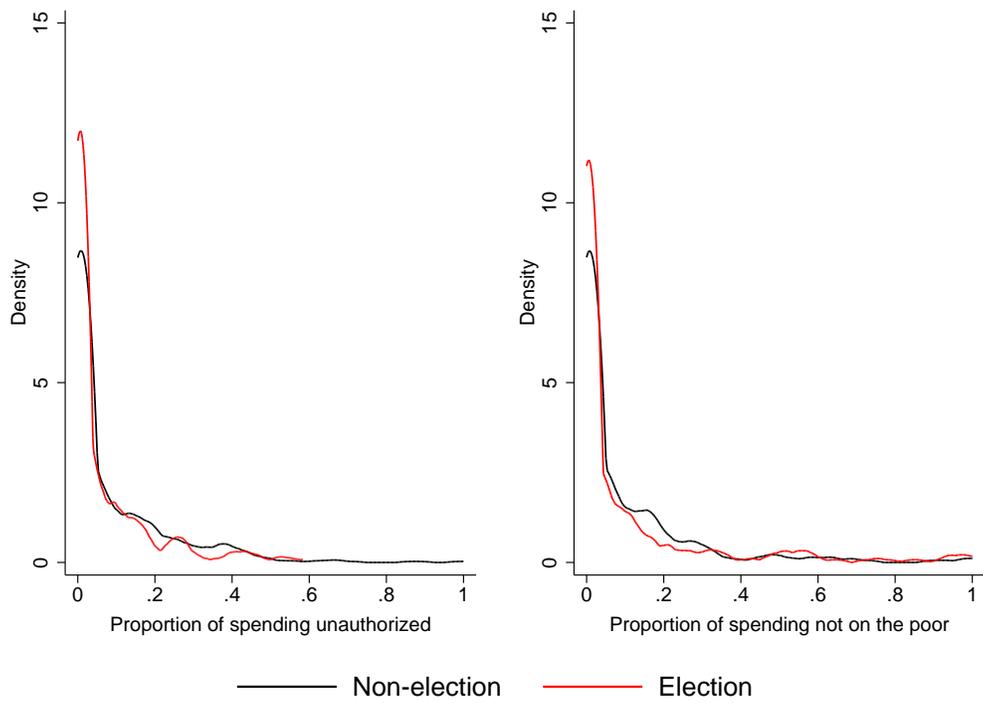


Figure 8: Distribution of audit report results

Notes: The distributions are based on 236 audits released in election years, and 506 that were not.

Table 1: Summary statistics by audit status (full sample)

	Control (no audit) mean	Audit difference	
Unauthorized spending	0.113	-0.037	(0.031)
Corrupt Q3	0.213	0.063	(0.072)
Corrupt Q4	0.319	-0.117	(0.081)
Spending not on the poor	0.094	0.028	(0.034)
Not poor Q3	0.094	-0.031	(0.080)
Not poor Q4	0.270	0.026	(0.080)
Registered voters	1,340.4	-54.3	(82.82)
Turnout (lag)	0.483	0.035*	(0.020)
PAN incumbent	0.374	0.026	(0.089)
PRI incumbent	0.451	0.062	(0.091)
PRD incumbent	0.159	-0.072	(0.056)
Local AM	0.719	0.019	(0.050)
Local FM	0.628	0.047	(0.078)
Local TV	0.495	0.157*	(0.08)
Non-local AM	0.158	0.004	(0.047)
Non-local FM	0.235	-0.029	(0.072)
Non-local TV	0.349	-0.137*	(0.075)
Total local AM	3.854	0.607	(0.971)
Total local FM	4.405	1.926	(1.239)
Total local TV	2.060	0.618	(0.064)
Total local media	10.318	3.151	(2.465)
Total non-local AM	21.174	-2.006	(3.597)
Total non-local FM	10.475	-0.331	(1.903)
Total non-local TV	7.315	-1.036	(1.846)
Total non-local media	3.383	-0.639	(0.74)
Share employed	0.952	0.002	(0.002)
Share illiterate	0.060	-0.002	(0.010)
Share with household necessities	0.083	0.028	(0.024)
Share with household amenities	0.548	0.021	(0.017)
Share with internet	0.224	0.019	(0.019)

Notes: The audit difference results are from a regressions of the outcome variables on the left-hand-side of the table on an indicator for an audit being released the year before an election, where standard errors are clustered by municipality-year are in parentheses. There are 42,595 observations for each variable. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 2: Balance after GRD-matching

Panel A: Time-varying variables		Unauth. spending	Corrupt	Non-poor spending	Not poor	Eligible voters	Turnout (lag)	PAN incumbent	PRI incumbent	PRD incumbent
Local media		-0.001 (0.003)	-0.000 (0.008)	-0.001 (0.004)	-0.001 (0.004)	15.807 (14.115)	-0.001 (0.001)	0.022*** (0.007)	-0.008 (0.006)	-0.015*** (0.006)
Observations		19,230	19,230	19,230	19,230	19,230	19,230	19,230	19,230	19,230
Panel B: Time-invariant variables		Non-local media	Employed	Illiterate	Household necessities	Household amenities	Internet			
Local media		-0.041 (0.146)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.001)	0.001 (0.001)	0.001** (0.001)			
Observations		19,230	19,230	19,230	19,230	19,230	19,230			

Notes: All specifications include match and year fixed effects, up to two possible matches, and are estimated using OLS. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 3: Summary statistics by audit status (GRD sample)

	Control (no audit) mean	Audit difference	
Unauthorized spending	0.062	0.006	(0.023)
Corrupt Q3	0.243	0.099	(0.095)
Corrupt Q4	0.186	-0.001	(0.067)
Spending not on the poor	0.064	0.043	(0.029)
Not poor Q3	0.335	-0.036	(0.108)
Not poor Q4	0.113	0.132**	(0.066)
Registered voters	1,380.9	26.21	(153.9)
Turnout (lag)	0.493	0.016	(0.020)
PAN incumbent	0.395	-0.068	(0.101)
PRI incumbent	0.457	0.115	(0.102)
PRD incumbent	0.117	-0.01	(0.043)
Local AM	0.817	0.011	(0.050)
Local FM	0.718	0.024	(0.059)
Local TV	0.580	0.072	(0.065)
Non-local AM	0.135	-0.026	(0.038)
Non-local FM	0.139	-0.029	(0.038)
Non-local TV	0.192	-0.071*	(0.038)
Total local AM	4.071	0.720	(1.085)
Total local FM	4.242	2.185*	(1.304)
Total local TV	2.313	0.308	(0.064)
Total local media	10.626	3.213	(2.845)
Total non-local AM	12.808	-0.572	(2.223)
Total non-local FM	8.122	-0.68	(1.314)
Total non-local TV	3.118	0.303	(0.853)
Total non-local media	1.569	-0.195	(0.355)
Share employed	0.954	0.002	(0.003)
Share illiterate	0.092	-0.008	(0.010)
Share with household necessities	0.666	0.059	(0.036)
Share with household amenities	0.466	0.041	(0.026)
Share with internet	0.127	0.043	(0.027)

Notes: The audit difference results are from a regressions of the outcome variables on the left-hand-side of the table on an indicator for an audit being released the year before an election, where standard errors are clustered by municipality-year are in parentheses. There are 19,230 observations for each variable. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 4: The effect of audits revealing corruption (full sample)

	Change in incumbent vote share		Incumbent re-elected	
	(1)	(2)	(3)	(4)
Audit	0.028 (0.021)	0.062*** (0.024)	0.122 (0.120)	0.147 (0.112)
Corrupt Q3	0.009 (0.027)		0.070 (0.143)	
Audit × Corrupt Q3	-0.001 (0.041)		0.046 (0.175)	
Corrupt Q4	0.028 (0.041)		0.278* (0.157)	
Audit × Corrupt Q4	-0.066 (0.046)		-0.337 (0.215)	
Not poor Q3		0.043* (0.026)		-0.072 (0.156)
Audit × Not poor Q3		-0.080* (0.041)		0.013 (0.189)
Not poor Q4		0.076* (0.040)		0.100 (0.152)
Audit × Not poor Q4		-0.111** (0.046)		-0.377** (0.187)
Observations	42,595	42,595	42,595	42,595
R^2	0.08	0.09	0.14	0.14

Notes: All specifications include pre-treatment controls and year fixed effects, and are estimated using OLS. Similar estimates for the GRD sample are provided in the Online Appendix. The omitted category for corruption and not spending on the poor is Q1 and Q2. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 5: The effect of audits revealing corruption, by local media availability (GRD sample)

	Change in incumbent vote share	
	(1)	(2)
Audit	-0.039 (0.034)	-0.013 (0.032)
Local media	-0.005 (0.004)	-0.007* (0.004)
Audit × Local media	0.006* (0.003)	0.012*** (0.004)
Corrupt Q3	-0.105** (0.046)	
Audit × Corrupt Q3	0.078 (0.053)	
Audit × Corrupt Q3 × Local media	-0.008** (0.004)	
Corrupt Q4	0.001 (0.057)	
Audit × Corrupt Q4	0.064 (0.064)	
Audit × Corrupt Q4 × Local media	-0.009 (0.006)	
Not poor Q3		-0.018 (0.039)
Audit × Not poor Q3		0.043 (0.047)
Audit × Not poor Q3 × Local media		-0.015*** (0.005)
Not poor Q4		-0.036 (0.045)
Audit × Not poor Q4		0.035 (0.072)
Audit × Not poor Q4 × Local media		-0.025*** (0.007)
Observations	19,230	19,230
R^2	0.52	0.54

Notes: All specifications include pre-treatment controls and match and year fixed effects as controls, use up to two possible matches, and are estimated using OLS. The omitted category for corruption and not spending on the poor is Q1 and Q2. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 6: The effect of audits revealing corruption, including non-local media (GRD sample)

	Change in incumbent vote share	
	(1)	(2)
Audit	-0.067 (0.045)	0.020 (0.035)
Audit × Corrupt Q3	0.146** (0.063)	
Audit × Corrupt Q3 × Local media	-0.007** (0.004)	
Audit × Corrupt Q3 × Non-local media	-0.005** (0.003)	
Audit × Corrupt Q4	0.117 (0.076)	
Audit × Corrupt Q4 × Local media	-0.009 (0.006)	
Audit × Corrupt Q4 × Non-local media	-0.003 (0.003)	
Audit × Not poor Q3 × Local media		-0.015*** (0.005)
Audit × Not poor Q3 × Non-local media		0.005* (0.003)
Audit × Not poor Q4		0.069 (0.089)
Audit × Not poor Q4 × Local media		-0.020*** (0.006)
Audit × Not poor Q4 × Non-local media		-0.001 (0.003)
Observations	19,230	19,230
R^2	0.53	0.54
Equality of media effects (p value)		
Corrupt Q3	0.649	
Corrupt Q4	0.429	
Not poor Q3		0.000
Not poor Q4		0.007

Notes: All specifications include pre-treatment controls and match and year fixed effects, use up to two possible matches, and are estimated using OLS. The omitted category for corruption and not spending on the poor is Q1 and Q2. Some lower order terms are omitted to save space. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 7: Robustness checks (GRD sample)

Panel A: PAN and PRI incumbents	Change in incumbent vote share	
	(1)	(2)
Audit × Corrupt Q3 × Local media	-0.009** (0.004)	
Audit × Corrupt Q4 × Local media	-0.013** (0.006)	
Audit × Not poor Q3 × Local media		-0.013** (0.006)
Audit × Not poor Q4 × Local media		-0.032*** (0.007)
Panel B: AM radio	Change in incumbent vote share	
	(1)	(2)
Audit × Local AM × Corrupt Q3	0.008 (0.011)	
Audit × Local AM × Corrupt Q4	0.012 (0.019)	
Audit × Local AM × Not poor Q3		-0.029 (0.019)
Audit × Local AM × Not poor Q4		-0.044** (0.019)
Panel C: FM radio	Change in incumbent vote share	
	(1)	(2)
Audit × Local FM × Corrupt Q3	-0.030*** (0.010)	
Audit × Local FM × Corrupt Q4	-0.015 (0.011)	
Audit × Local FM × Not poor Q3		-0.031*** (0.011)
Audit × Local FM × Not poor Q4		-0.041*** (0.011)
Panel D: television	Change in incumbent vote share	
	(1)	(2)
Audit × Local TV × Corrupt Q3	-0.021 (0.015)	
Audit × Local TV × Corrupt Q4	-0.042** (0.016)	
Audit × Local TV × Not poor Q3		-0.037*** (0.014)
Audit × Local TV × Not poor Q4		-0.062*** (0.020)

Notes: All specifications include pre-treatment controls and match and year fixed effects, use up to two possible matches, and are estimated using OLS. All regressions have 19,230 observations except Panel A which contains 16,947 observations. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 8: Robustness checks (GRD sample) (continued)

Panel E: municipality fixed effects	Change in incumbent vote share	
	(1)	(2)
Audit × Corrupt Q3 × Local media	-0.010** (0.004)	
Audit × Corrupt Q4 × Local media	-0.011 (0.007)	
Audit × Not poor Q3 × Local media		-0.019*** (0.005)
Audit × Not poor Q4 × Local media		-0.030*** (0.010)
Panel F: within-municipality matches	Change in incumbent vote share	
	(1)	(2)
Audit × Corrupt Q3 × Local media	-0.015*** (0.005)	
Audit × Corrupt Q4 × Local media	-0.013* (0.008)	
Audit × Not poor Q3 × Local media		-0.020*** (0.006)
Audit × Not poor Q4 × Local media		-0.027** (0.010)
Panel G: control for internet access	Change in incumbent vote share	
	(1)	(2)
Audit × Corrupt Q3 × Local media	-0.007 (0.005)	
Audit × Corrupt Q4 × Local media	-0.006 (0.007)	
Audit × Corrupt Q3 × Internet	-0.104 (0.157)	
Audit × Corrupt Q4 × Internet	-0.479*** (0.158)	
Audit × Not poor Q3 × Local media		-0.017*** (0.005)
Audit × Not poor Q4 × Local media		-0.027*** (0.007)
Audit × Not poor Q3 × Internet		0.258 (0.198)
Audit × Not poor Q4 × Internet		0.097 (0.196)
Panel H: linear audit measures	Change in incumbent vote share	
	(1)	(2)
Audit × Unauthorized × Local media	-0.009 (0.019)	
Audit × Spending not poor × Local media		-0.048*** (0.014)

Notes: All specifications include pre-treatment controls and match and year fixed effects, use up to two possible matches, and are estimated using OLS. All regressions have 19,230 observations, except Panel F which contains 15,080 observations. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 9: The effect of audits revealing corruption, by local media availability (full sample)

	Change in incumbent vote share	
	(1)	(2)
Audit	-0.011 (0.023)	-0.001 (0.025)
Local media	0.000 (0.001)	-0.002 (0.002)
Audit × Local media	0.001 (0.001)	0.006** (0.003)
Corrupt Q3	-0.021 (0.031)	
Audit × Corrupt Q3	0.017 (0.039)	
Audit × Corrupt Q3 × Local media	-0.002 (0.003)	
Corrupt Q4	-0.037 (0.039)	
Audit × Corrupt Q4	0.075 (0.055)	
Audit × Corrupt Q4 × Local media	-0.008** (0.003)	
Not poor Q3		0.021 (0.031)
Audit × Not poor Q3		-0.018 (0.040)
Audit × Not poor Q3 × Local media		-0.007** (0.003)
Not poor Q4		-0.010 (0.042)
Audit × Not poor Q4		0.009 (0.049)
Audit × Not poor Q4 × Local media		-0.011*** (0.003)
Observations	42,595	42,595
R^2	0.12	0.14

Notes: All specifications include pre-treatment controls and year fixed effects, and are estimated using OLS. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 10: Heterogeneous effects of revealing neglect of the poor by party

	Change in incumbent vote share	
	(1)	(2)
Audit	-0.013 (0.032)	-0.033 (0.050)
Local media	-0.007* (0.004)	-0.000 (0.005)
Audit × Local media	0.012*** (0.004)	0.006 (0.004)
PRI		0.017 (0.056)
Audit × PRI		0.054 (0.064)
Local media × PRI		-0.003 (0.004)
Audit × Local media × PRI		0.007 (0.005)
Not poor Q3	-0.018 (0.039)	-0.017 (0.044)
Audit × Not poor Q3	0.043 (0.047)	0.037 (0.076)
Audit × Not poor Q3 × Local media	-0.015*** (0.005)	-0.004 (0.007)
Audit × Not poor Q3 × PRI		0.047 (0.099)
Audit × Not poor Q3 × Local media × PRI		-0.034** (0.014)
Not poor Q4	-0.036 (0.045)	-0.049 (0.067)
Audit × Not poor Q4	0.035 (0.072)	0.013 (0.097)
Audit × Not poor Q4 × Local media	-0.025*** (0.007)	-0.009 (0.008)
Audit × Not poor Q4 × PRI		0.058 (0.108)
Audit × Not poor Q4 × Local media × PRI		-0.027** (0.012)
Observations	19,230	19,230
R^2	0.54	0.55

Notes: All specifications in the full sample include pre-treatment controls and year fixed effects and are estimated using OLS. All specifications in the GRD sample include pre-treatment controls and match and year fixed effects, up to two possible matches, and are estimated using OLS. Lower order media terms are omitted. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

ONLINE APPENDIX
REVEALING MALFEASANCE: HOW LOCAL MEDIA
FACILITATES ELECTORAL SANCTIONING
OF MAYORS IN MEXICO

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1 Variable definitions

Incumbent party vote share. The vote share, as a proportion of total votes cast, in a given electoral precinct. As noted in the main text, we define incumbent vote share as the vote share of the largest sub-coalition at the next municipal election. We do this because municipal party coalitions change across elections. Source: IFE and State Electoral Institutes.

Incumbent party win. Indicator coded one where the incumbent party is re-elected. Incumbents are defined as above. Source: IFE and State Electoral Institutes.

Unauthorized spending. Percentage of FISM funds spent in an unauthorized manner. See text for further discussion. The variables Corrupt Q3 and Corrupt Q4 are separately defined by the third and fourth quartiles of our full sample and GRD sample. Source: ASF audit reports.

Spending not on the poor. Percentage of FISM funds spent not spent on the poor. See text for further discussion. The variables Not poor Q3 and Not poor Q4 are separately defined by the third and fourth quartiles of our full sample and GRD sample. Source: ASF audit reports.

Registered voters. The number of voters registered to vote in the electoral precinct. Source: IFE and State Electoral Institutes.

Turnout (lag). Precinct-level electoral turnout at the previous election. Source: IFE and State Electoral Institutes.

PAN/PRI/PRD incumbent. Indicator coded one for the incumbent mayor represents a coalition containing the PAN, PRI or PRD. Source: IFE and State Electoral Institutes.

Local AM/FM/TV. Indicator coded one for electoral precincts covered by at least one AM/FM/TV station emitting from within the municipality. Source: computed from IFE data.

Non-local AM/FM/TV. Indicator coded one for electoral precincts covered by at least one AM/FM/TV station emitting from outside the municipality. Source: computed from IFE data.

Total local AM/FM/TV. The total number of AM/FM/TV stations emitting from within the municipality. Source: computed from IFE data.

Total non-local media. The total number of AM, FM and TV stations emitting from outside the municipality. Source: computed from IFE data.

Share employed. Percentage of the precinct population employed in 2010. Source: Mexican 2010 Census.

Share illiterate. Percentage of the precinct population aged above 15 that is illiterate in 2010. Source: Mexican 2010 Census.

Share with household necessities. Percentage of households with electricity, piped water, toilet and drainage. Source: Mexican 2010 Census.

Share with household amenities. Average number of households in a given precinct with a refrigerator, a washing machine, a car or truck, a landline, a cellphone, or internet access in 2010. Source: Mexican 2010 Census.

Share with internet. Percentage of households in the precinct with an internet connection in 2010. Source: Mexican 2010 Census.

2 Audit reports

Figures 1 and 2 provide an example of an audit report from 2008 for the municipality of Ajalpan in the state of Puebla.

3 Lack of balance across media stations

Table 1 shows that the number of local media stations that cover an electoral precinct is strongly correlated with a variety of socio-economic development indicators. In particular, we find that precincts with more local media stations are inhabited by household that are more literate, possess more household necessities and amenities (see variable definitions above), and are more likely to also be connected to the internet. In short, precincts with more media stations are more developed.

Table 1: Precinct-level correlation of media stations with other socioeconomic variables

	Share employed	Share illiterate	Share with household necessities	Share with household amenities	Share with internet
Local media	-0.000 (0.000)	-0.002*** (0.000)	0.009*** (0.001)	0.007*** (0.001)	0.007*** (0.001)
Observations	42,595	42,595	42,595	42,595	42,595

Notes: All specifications include year fixed effects, and are estimated using OLS. Standard errors are clustered by municipality. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

FONDO PARA LA INFRAESTRUCTURA SOCIAL MUNICIPAL
INDICADORES PARA APOYAR LA VALORACIÓN DEL CUMPLIMIENTO
DE METAS Y OBJETIVOS DEL FONDO
MUNICIPIO DE AJALPAN, PUEBLA
CUENTA PÚBLICA 2008

Concepto	Valor del Indicador
I. OPORTUNIDAD EN EL EJERCICIO DEL FONDO	
1.1 Nivel de gasto al 31 de diciembre. (% ejercido del monto asignado).	55.8
1.2 Nivel de gasto al 31 de julio de 2009 (% ejercido del monto asignado).	86.9
II.- CUMPLIMIENTO DE LA PROGRAMACIÓN	
II.1 Obras del programa inicial aprobado por el cabildo que fueron ejecutadas. (%)	100.0
II.2 Monto de las obras del programa inicial aprobado por el cabildo que fueron ejecutadas. (%)	100.0
II.3 Cumplimiento de las metas físicas aprobadas de las obras y acciones de la muestra de auditoría. (% de las obras y acciones de la muestra de auditoría que cumplieron con sus metas físicas).	100.0
III.- APLICACIÓN DE LOS RECURSOS	
III.1 Recursos ejercidos en obras y acciones que no beneficiaron a población en rezago social y pobreza extrema (% respecto del monto total ejercido del FISM).	11.1
III.2 Recursos ejercidos en obras y acciones que no beneficiaron directamente a población en rezago social y pobreza extrema (% respecto de la muestra de auditoría).	11.4
III.3 Recursos ejercidos en rubros no autorizados por la Ley de Coordinación Fiscal (% respecto del monto total ejercido del FISM)	41.8
III.4 Destino de la inversión en obras y acciones por rubro y gasto (%)	
1.- Agua Potable.	8.1
2.- Alcantarillado.	2.6
3.- Drenaje y letrinas.	0.0
4.- Urbanización municipal.	23.4
5.- Electrificación rural y de colonias pobres.	1.1
6.- Infraestructura básica de salud.	0.0
7.- Infraestructura básica de educación.	16.0
8.- Mejoramiento de vivienda.	0.9
9.- Caminos rurales.	11.5
10.- Infraestructura productiva rural.	0.0
11.- Desarrollo Institucional.	0.0
12.- Gastos indirectos.	0.0
13.- Otros.	36.4
Total	100.0
III.5 Inversión en pavimentos y obras similares (% del monto total ejercido del FISM).	19.1
III.6 Inversión en la cabecera municipal (% del monto total ejercido del FISM).	18.8
III.7 Población en la cabecera municipal en 2008 (% de la población total del municipio).	45.3
III.8 Proporción de viviendas particulares habitadas respecto del total, que no disponen de:	
Agua entubada de red pública (%).	31.3
Drenaje. (%).	55.5
Energía eléctrica. (%).	6.6
III.9 ¿Se destinaron recursos del FISM al Desarrollo Institucional?, Si o No.	NO
a) ¿El municipio convino el programa de Desarrollo Institucional con el Ejecutivo Federal - SEDESOL- y con el Ejecutivo Estatal?, Si o No.	NO
III.10 Recursos aplicados en Desarrollo Institucional que no corresponden con los objetivos de este rubro (% del monto ejercido en Desarrollo Institucional).	0.0
IV.- RESULTADOS	
IV.1 Situación constructiva y operativa de las obras visitadas (distribución % de las obras visitadas).	
A) número de obras visitadas 38	100.0
1. Obras Terminadas	94.7
a) Operan adecuadamente.	100.0
b) No operan adecuadamente.	0.0
c) No operan.	0.0
2. Obras en proceso.	5.3
3. Obras suspendidas.	0.0

Figure 1: Sample ASF audit report (page 1)

Notes: Extracted from the ASF audit report on the use of FIMS funds by the municipal government of the municipality of Ajalpan in the state of Puebla in 2008. The red squares indicate the lines where the ASF reports the FISM funds spent “in an unauthorized manner” and the share spent on projects “not benefiting the poor.”

IV.2 Procuración de las preservación y protección del medio ambiente (% de las obras de la muestra de auditoría que cuentan con la validación de no impacto ambiental desfavorable).	100.0
IV.3 Satisfacción de los beneficiarios de las obras revisadas (% de las obras revisadas en las que los beneficiarios están satisfechos).	100.0
V.- PARTICIPACIÓN SOCIAL	
V.1 Obras y acciones de la muestra de auditoría autorizadas por el Comité de Planeación para el Desarrollo Municipal (COPLADEM) ó Consejo de Desarrollo Municipal (CDM) (%).	100.0
V.2 Inversión en obras y acciones de la muestra de auditoría que fueron autorizadas por el COPLADEM ó CDM (%).	100.0
V.3 Obras y acciones de la muestra de auditoría que cuentan con la solicitud de la comunidad (%).	100.0
V.4 Inversión en obras y acciones de la muestra de auditoría que cuentan con solicitud de la comunidad (%).	100.0
V.5 Obras terminadas de la muestra de auditoría que cuentan con acta de entrega recepción a la comunidad y al organismo operador (%).	100.0
V.6 Obras y acciones de la muestra de auditoría con acta de entrega recepción suscrita por el representante del Comité Pro Obra (%).	100.0
V.7 Nivel de operación y participación social del COPLADEM o CDM	
a) ¿Existe y opera en el municipio el COPLADEM o CDM?, Si o No.	SI
b) En su caso, ¿Opera regularmente el COPLADEM o CDM? [criterio: opera regularmente cuando sesiona al menos 3 veces al año], Si o No.	SI
c) Número de sesiones de trabajo que tuvo el COPLADEM o CDM en el año.	3
d) Número de representantes sociales que en promedio participaron en las sesiones del COPLADEM o CDM	105
VI.- TRANSPARENCIA EN LA APLICACIÓN DE RECURSOS	
VI.1 Entrega de informes trimestrales a la SEDESOL sobre el ejercicio del fondo (% de informes entregados respecto de los previstos enviar).	0.0
VI.2 Entrega de informes trimestrales a la SHCP sobre el ejercicio, destino y resultados obtenidos de los recursos de los fondos (% de informes entregados respecto de los previstos entregar).	50.0
VI.3 Difusión de la información enviada a la SHCP sobre el ejercicio del gasto y que fue publicada en los órganos locales oficiales de difusión, Internet u otro medio local de difusión (% de informes difundidos respecto a los previstos difundir).	0.0
a) ¿La información de los informes trimestrales reportados a la SHCP coinciden con los registros contables del municipio?, Si o No.	NO
b) ¿La calidad de la información de los informes trimestrales reportados a la SHCP fue adecuada; está desglosada por obra y acción, y coincide con los registros contables del municipio?, Si o No.	SI
VI.4 Difusión de las obras y acciones a realizar (% del monto asignado al fondo que fue difundido al inicio del ejercicio, respecto de las obras y acciones por realizar, con su costo, ubicación, metas y beneficiarios).	0.0
a) ¿Se difundió adecuadamente entre la población, al inicio del ejercicio, el monto recibido del FISM, así como las obras y acciones a realizar, su costo, ubicación, metas y beneficiarios?, Si o No.	NO
VI.5 Difusión de los resultados Alcanzados (% de la inversión ejercida en obras y acciones, que se difundieron e informaron a la población, al cierre del ejercicio, junto con sus resultados)	0.0
a) ¿Se difundieron adecuadamente entre la población, al final del ejercicio, las obras y acciones realizadas, su costo, ubicación, metas y beneficiarios, Si o No.	NO
VII.- FINANZAS MUNICIPALES	
VII.1 Importancia del fondo respecto a los recursos propios municipales	2,379.8
VII.2 Importancia del fondo respecto a las participaciones fiscales	153.7
VII.3 Importancia del fondo respecto a los recursos propios municipales y participaciones fiscales	144.4
VII.4 Proporción de la inversión del fondo en obra pública respecto a la inversión total en obra pública, del municipio	91.2
VII.5 Importancia del fondo respecto al monto total del presupuesto aprobado 2008 del municipio	47.2
VII.6 Variación de los ingresos propios municipales 2008 - 2007	14.3

FUENTE: Información proporcionada por el municipio de Ajalpan, Puebla *Censo de Población 2005, INEGI.

Figure 2: Sample ASF audit report (page 2)

Note: See Figure 1.

4 Additional results

Table 2 shows that controlling for the the total number of non-local media stations does not affect balance in our GRD design. This is not surprising since the GRD breaks the correlation between the number of local media stations and non-local media stations. Nevertheless, this represents an important placebo further demonstrating that we not picking up differences in non-local media stations. Furthermore, the balance tests suggest that estimates for non-local media are unlikely to be biased too.

Table 3 presents our DD estimates for the GRD sample. Due to the significant decline in sample size, and the fact that the GRD estimates only identify off within-match variation (and thus only from matches cross municipality borders), our estimates are considerably noisier. Nevertheless, the point estimates are very similar to those in the Table 4 of the main paper. The similarity is not surprising given that the full and GRD samples are similar in composition (see Tables 1 and 3).

Table 2: GRD balance checks, controlling for non-local media share

	Unauthorized spending (1)	Corrupt Q3 (2)	Corrupt Q4 (3)	Spending not on poor (4)	Not poor Q3 (5)	Not poor Q4 (6)	Registered voters (7)	Turnout (lag) (8)
Local media	-0.001 (0.003)	0.001 (0.003)	-0.003 (0.007)	-0.001 (0.004)	0.009 (0.007)	-0.001 (0.005)	15.826 (14.406)	-0.001 (0.001)
Non-local media	0.000 (0.002)	-0.002 (0.002)	0.002 (0.005)	-0.000 (0.003)	-0.002 (0.004)	-0.004 (0.004)	-18.155 (13.988)	0.000 (0.001)

	PAN incumbent (9)	PRI incumbent (10)	PRD incumbent (11)	Share employed (12)	Share illiterate (13)	Share with household necessities (14)	Share with household amenities (15)	Share with internet (16)
Local media	0.023*** (0.007)	-0.008 (0.006)	-0.015*** (0.006)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.001)	0.001 (0.001)	0.002*** (0.001)
Non-local media	0.007 (0.005)	-0.003 (0.004)	-0.004 (0.004)	0.000* (0.000)	0.000 (0.000)	-0.002*** (0.001)	0.000 (0.000)	0.001 (0.001)

Notes: All specifications include match and year fixed effects, use up to two possible matches, and are estimated using OLS. All regressions have 19,230 observations. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.

Table 3: The effect of audits revealing corruption (GRD sample)

	Change in incumbent vote share			Incumbent re-elected		
	(1)	(2)	(3)	(4)	(5)	(6)
Audit	0.015 (0.026)	0.007 (0.030)	0.027 (0.033)	0.121 (0.096)	0.078 (0.094)	0.174 (0.111)
Corrupt	0.068 (0.044)		0.076* (0.041)	0.509*** (0.166)		0.499*** (0.166)
Audit × Corrupt	-0.054 (0.051)		-0.060 (0.049)	-0.240 (0.250)		-0.206 (0.256)
Not poor		0.018 (0.047)	0.038 (0.051)		-0.016 (0.135)	0.135 (0.156)
Audit × Not poor		-0.034 (0.068)	-0.038 (0.070)		-0.231 (0.283)	-0.311 (0.274)
Observations	19,230	19,230	19,230	19,230	19,230	19,230
R^2	0.51	0.50	0.51	0.73	0.70	0.73

Notes: All specifications include pre-treatment controls and match and year fixed effects, use up to two possible matches, and are estimated using OLS. All regressions have 19,230 observations except Panel A which contains 16,947 observations. Standard errors are clustered by municipality-year. * denotes $p < 0.1$, ** denotes $p < 0.05$, *** denotes $p < 0.01$.