Incumbent Party Corruption and Clientelism: Evidence from Mexican Local Elections

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Abstract

In theories of clientelism, voters are conceptualized as rational or social norm conforming. This article presents a consolidated account in which poor voters care about the expressive value of voting, the value of the clientelist offer, and the disparity between what they get in a clientelist exchange and the size of the spoils of government. This framework helps explain why a poor voter could refuse to sell her vote, even in cases where there are no ideological costs of casting a ballot in favor of a political machine. Drawing from a large scale randomized informational campaign, which provided people with information about incumbent corruption close to mayoral races in Mexico, paired with survey questions about clientelism, the article shows that corruption information led to a substantive decrease in the willingness of people in the lowest income group to sell their votes in exchange for low value gifts, and had no effect on people’s willingness to sell their votes for more expensive ones. Thus, corruption information increased the price of poor people’s votes. The article concludes with a discussion of questions open by these findings and avenues for future research.

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Although classical arguments of clientelism differ from one another in their assumptions about what people value and the decision rules that dictate political behavior, they all predict that people living in poverty have few reasons to walk away from political machines’ vote buying offers. This paper provides an account of clientelism in which poor people can refuse to trade their votes for cheap offers even in cases where there is no ideological costs of casting a ballot in favor of a political machine.

My argument is situated between two strands of scholarship. Rational choice theories are at one end. These models postulate that voters decide whether to sell their vote to the machine or not by comparing the value of the machine’s gift to the value of voting in accordance to one’s preferences (Stokes 2005). Theories with social preferences are at the other end. Research in this group postulates that social norms are crucial to sustaining clientelism (Scott 1972; Lemarchand 1977; Auyero 2001; Finan and Schechter 2012). When norms of reciprocity are prevalent, then political brokers can commit voters to support the machine with their gifts, discretionary access to public services, and political favors.

Although most theories of vote buying and vote selling fit comfortably within these two strands of scholarship, empirically voters are probably situated between the extremes of rational decision-making and conforming to social norms. In this middle ground, the otherwise acquiescent group of poor voters has more agency. Building on prior work, I propose a consolidated account of vote selling, which, like rational choice models, allows voters to

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2For a review of this literature see Stokes 2007; Schaffer 2007; and Kitschelt and Wilkinson 2007.
compare the value of the broker’s offer to the expressive value of voting. But, like social preferences theories, allows voters to include reciprocity considerations in their decisions. Unlike prior work on social preferences, however, which assume that brokers’ offers always commit voters to cast a ballot in favor of the clientelist party, my account postulates that norms of reciprocity can go in two ways: holding the expressive value of voting constant, when voters perceive that the broker’s offer is *fair*, they reciprocate with a vote for the machine, and when they perceive the offer is *unfair*, they reciprocate by withdrawing support for the machine.

To develop my argument, I build on Stokes’ (2005) seminal model of vote-buying, in which voters are self-interested. I add to her formulation the possibility that voters compare the value of the broker’s offer to the share of resources captured by the machine (i.e. corruption). When voters are averse to the disparity between what they get in the clientelist exchange and the size of the spoils of government, unwillingness to sell votes for cheap becomes a possibility among those who are willing to sacrifice their material payoff to punish a broker for an unfair vote buying offer. With these augmented preferences, all else equal, the lower the value of the broker’s offer compared to the share of resources captured by the machine, the lower the likelihood that the voter will sell her vote for a low value gift.

That voters reject unfair vote buying offers is consistent with findings in laboratory experiments, which show that people are willing to reject unfair offers in ultimatum games even if this decision comes at the cost of decreasing material well-being (Rabin 1998). It is also consistent with findings in economics which show that “consumers may not buy a product sold by a
monopolist at an unfair price, even if the material value to the consumer is greater than the price. By not buying, the consumer lowers his own material well-being so as to punish the monopolist” (Rabin 1993, 1281).

To assess the validity of my argument, I estimate the effects of information about governmental corruption, which gives voters a sense of the overall amount of resources available to incumbents (and their machines) to pocket, on people’s willingness to sell their votes for various gifts and access to government resources. Uncovering the effects of governmental corruption on a person’s willingness to sell her vote in exchange for a favor, a gift, or access to a service is challenging because corruption and clientelism could be simultaneously determined. Hence, a causal interpretation of the effects of corruption on vote selling with observational data may require strong assumptions.

To circumvent the methodological challenges posed by reverse causation and simultaneity, I take advantage of exogenous variation in information about incumbent corruption created by Chong, De La O, Karlan, and Wantchekon (2015)’s field experiment. This field experiment disseminated in selected voting precincts in Mexico information about the percent of public resources mayors spent in a corrupt manner close to municipal elections. The information about corruption comes from the Mexican Federal Auditor’s Office. I pair this variation in exposure of corruption with survey questions about clientelism I included in the post-intervention survey.

I find that offering information about incumbent corruption decreases poor people’s willingness to sell their votes for cheap gifts, such as food, construction material, or some cash. Yet exposure of corruption does not
affect poor people’s willingness to sell their vote for more expensive clientelist offers, which have the potential to generate a stream of future income, like a scholarship or a job in the public sector.

With incremental changes to the received wisdom, this article makes three contributions to the vast literature on clientelism. First, I shed additional light into the determinants of the vote choice elasticity, as defined by Kitschelt and Wilkinson (2007). So far, scholarship has predominantly focused on how partisanship and income affect the price of votes. Here, I postulate another set of factors which influence how sensitive voters are to the value of a clientelist offer. Second, there is academic consensus that: “Clientelist exchange usually requires one of the parties to trust that the other will deliver on their promises . . . Iteration provides the patron and the client with information about the reliability of the other and gives each party the opportunity to punish the other for defecting” (Hicken 2011: 293). Yet, scholars have almost exclusively focused on how and when the machine punishes voters who defect. Less is known about when and why voters choose to punish the machine.3 Finally, this paper may partly help explain why, in cases where there are little ideological differences between parties (i.e. countries with weak party systems), not all poor people sell their vote to a machine.

Beyond the literature on clientelism, this paper contributes to the research on the effects of political corruption on political behavior and attitudes. It has long been recognized that clientelism and the misuse of public office for private gain feed upon each other.4 Indeed, the assumption that clientelism

3See Weitz-Shapiro (2012) for an account about how people who do not benefit from clientelism (middle income poeple) dislike it.
4See, for example, Scott 1969. Also see more recent studies: Della Porta (2000), Heywood
is strongly associated with governmental corruption is so widespread that in some studies the two phenomena are used interchangeably.\(^5\) A few recent studies have begun to explore the relationship between corruption and clientelism (Kawata 2006). Szeftel (2000) argues that in Africa patron-client relations are for the most part responsible for the corruption that affects the region. Singer (2009) further argues that because clientelism undermines the ability of citizens to hold public officials accountable, it fosters corruption. In these accounts, corruption is an outcome of clientelism. Yet this direction of causation is unlikely to tell the complete story. Banerjee, Kumar, Pande and Su (2010), for example, show that randomly distributed newspapers containing report cards with information on candidates and legislators’ criminal record (among other types of information) substantially decreased cash-based vote buying among slum dwellers in Delhi.

The structure of this paper is as follows. Section 1 presents the argument. Section 2 briefly reviews clientelism and corruption in the Mexican context. Section 3 describes the empirical strategy. Section 4 presents the empirical findings. Finally, Section 5 discusses the implications of the results and concludes.

1 The argument

Stokes (2005) seminal model of vote buying postulates that voters’ utilities can be expressed as follows:

\(^5\)Hicken 2011, for example, notes that Persson et al. (2003) and Keefer 2007 use corruption as a proxy for the level of clientelism.
\[ U_i = -\frac{1}{2}(v_i - x_i)^2 + b_i \]  

(1)

Where \( v_i = \{x_1, x_2\} \) represents a vote for either the machine or the opposition, \( x_i \) represents voter \( i \)'s position on the ideological spectrum, and \( b_i = \{0, b\} \) represents the value to the voter of the reward offered by the machine in exchange for her vote relative to the value of voting according to the voter’s preferences. Hence, \( 1/2(v_i - x_i) \) is the expressive value of voting, and \( b_i \) is the value of clientelism. With this utility function and an iterated game, Stokes (2005) shows, among other things, that the machine targets poor voters because it is more likely that for them the value of \( b \) is higher than the expressive value of voting. And, the machine targets weakly opposed voters because they can “credibly commit to voting for the machine in exchange of a gift” (Stokes 2005, 321). Other scholars have modified equation (1) to take into account that the machine may buy turnout instead of vote choice (Nichter 2008), or to allow for the use of mixed strategies (Magaloni et al 2007; Dunning and Stokes 2007).

I do not challenge that voters take into account the expressive value of voting and the value of the clientelist offer. Instead, I argue that equation (1) is a special case where voters only take into account their self-interest (i.e. what voting for a party’s ideology and what clientelism means to them). A more general formulation of voters’ utility may allow for voters to care about factors that go beyond their immediate self-interest. In particular, voters may compare the value of \( b \) to the share of resources that the machine (which I am equating with the incumbent) keeps for itself. With aversion to inequality between what they get and what the machine gets, voters may be
unwilling to sell their vote for cheap. If voters believe that the machine is offering an unfair price for their vote, they may reciprocate by withdrawing support, even if this means that they will sacrifice their material payoff.

Consider the following addendum to the vote buying model:

\[
U_i = -\frac{1}{2}(v_i - x_i)^2 + b_i - \alpha(b_j - b_i)
\]  

where \(b_j\) is the share of total resources available for vote buying that the machine keeps for itself. The total amount of resources available for vote buying is \(B = bj + \sum bi\). Certainly, the machine has to buy the votes of more voters than just voter \(i\), but I will assume that voters only observe their own offer \(b_i\). The expressive value of voting remains the same as in equation (1).  

0 \leq \alpha \leq 1 represents the marginal rate of substitution. When \(\alpha = 0\) the voter only cares about her self-interest. When \(\alpha > 0\), the voter also cares about how much of \(B\) is the machine keeping for itself. The value of selling the vote is now a function of \(b_i\) and \(-\alpha(b_j - b_i)\). If the machine makes a vote buying offer, \(b_i\) and \(\alpha > 0\), then the voter will cast a ballot for the machine if:

\[
-\frac{1}{2}(x_1 - x_i)^2 + b_i - \alpha(b_j - b_i) \geq -\frac{1}{2}(x_2 - x_i)^2
\]  

To highlight the contribution of the augmented preferences, let’s take the case where the expressive value of voting is zero. This could be a case where political parties do not have ideological platforms, such that electoral campaigns are center on either valence issues or on the personality traits of candidates. In this case, a voter will sell her vote if:
\[ b_i - \alpha (b_j - b_i) \geq 0 \]  \hspace{1cm} (4)

rearranging to solve for \( b_i \),

\[ b_i \geq \frac{\alpha b_j}{1 + \alpha} \]  \hspace{1cm} (5)

Following equation (5), the higher \( \alpha \) is, the higher the offer, \( b_i \), needs to be to sway a person to sell her vote. Similarly, as \( b_j \) increases, the value of \( b_i \) needs to increase. So, for any given \( b_i \), the more sensitive people are to the difference between the machine’s offer and the machine’s captured resources, and the more the machine keeps for itself, the higher voters’ willingness to reject cheap, and to their eyes unfair, offers.

This account of clientelism would be mute if voters have no way to assess \( b_j \). Yet voters do not need to be fully informed about the extent of a political machine’s corruption. Their expectations can be informed by shortcuts. For example, incumbent corruption scandals involving embezzlement, diversion of resources, or other forms of capture of public resources can give voters a sense of the size of \( B \) and \( b_j \).

2 Clientelism and corruption in Mexico

Mexico, the country from which I present evidence, is widely seen as fertile ground for clientelism and corruption (Mainwaring 1995). One party, the Institutional Revolutionary Party (PRI), dominated the political system for over seven decades. Throughout its long rule, the PRI created an
efficient and highly adaptable political machine for distributing selective benefits in exchange for political support (Bruhn 1996, Camp 2003, Cornelius and Craig 1991, Díaz Cayeros et al. 2007 & 2009, Eckstein 1988, Magaloni 2006). Despite its competitive advantage in the provision of clientelism, the PRI’s hegemony slowly eroded throughout the 1980s and 1990s, with isolated opposition party victories at the local level coming first, and national level victories coming second. Throughout the democratization process, Mexicans became increasingly committed to democratic values (Domínguez and McCann 1996). Heightened electoral competition culminated in the defeat of the PRI in the 2000 presidential elections. By then, a large share of the population lived in a competitive electoral system. The right wing party, National Action (PAN), won the 2000 and 2006 presidential elections, and the PRI recover the presidency in the 2012 election.

Most of the scholarship about clientelism in Mexico agrees that machine politics evolved with the transition away from authoritarianism to democracy (Schedler 2004). Yet the extent of the transformation remains unclear. Although there are signs that electoral competition has eroded clientelism (Collier 1992, Dion 2010, De La O 2015), machine politics continues to be a contested issue in local and federal elections (Bruhn and Greene 2007; Díaz Cayeros et al. 2007 & 2009; Greene 2011; Klesner 2009; McCann and Lawson 2003; Domínguez et al. 2009). But the effectiveness of today’s clientelism pales compared to its effectiveness in the early 1990s (Cornelius 2004,

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6The emergence of competitive elections at the subnational level, however, was highly uneven, with the acceptance of multiparty electoral competition in some areas by the mid-1990s and the continued electoral dominance of the PRI into the twenty-first century in other parts of the country (Fox 1994; Lawson 2000; Hiskey and Bowler 2005).
Domínguez et al. 2009, Moreno 2003). Indeed, it is increasingly common to hear that voters “take [the machine’s gift] with one hand, and vote for who they want with the other hand” (CITE). In his analysis of the influential 2000 elections, Corneluis (2002) concludes that the PRI was still responsible for more than half of the attempts of vote buying, but that clientelism was ineffective: “If anything, clientelism caused aversion” because the PRI did not take into account people’s attitudes towards vote buying (2002, 12).

In a similar vein, Schedler (2004) argues that in modern-day Mexico, clientelism is not well received, not even in poor rural communities. Drawing from in-depth interviews with rural residents, Schedler (2004) shows that people’s decisions about vote selling are not uniquely influenced by the value of the gift vis a vis the value of voting according to one’s preferences. For example, one interviewees told him:

“Lately, the PRI offered 50 pesos, even 100 pesos around here
... but people are fed up, it is a rotten thing to do”

He also reports that people understand that political machines are funded with public resources. Therefore, clientelist offers are generally not considered private gifts. Because people perceive the machine’s budget to come from public resources, they do not automatically feel obliged to reciprocate. Take, for example, the following quote from one of his interviews:

7That clientelism can be costly for political parties is not exclusive to Mexico, Weitz-Shapiro (2013), for example, shows that in Argentina voters who do not benefit from clientelism disapprove of such tactics.

8“Aquí últimamente el PRI anduvo ofreciendo 50 pesos por el voto, hasta 100 pesos [...] pero pues la gente esta fastidiada, ya es mucha sinvergüenzada” (in Schedler p.82)
“If they come and tell me, I give you 200 pesos, well give them to me, anyways they are not from your own pocket . . . and I will vote for who I feel like it”

Finally, although Schedler does not interpret his material this way, a recurrent theme in his interviews is that people take into account the amount of public resources available to politicians and the extent of public corruption when evaluating the value of the clientelist offer. Take for example the following quotes:

“It is not a favor . . . it is a way of deceiving people, but they are giving us what they take from us, they never give away anything, it is not a gift, it is not help . . . they are giving us back from what they take from us, from our taxes . . . with that same money they are giving us back bullshit”

“He promises, gives away a few things, gets to power, and he is the one who benefits”

“From all of Mexico’s wealth. From there they are giving back a little of what we would get if all the wealth was allocated equally”

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9 “Si vinieran y me dijeran te doy 200 pesos, pues dámelos, total no son de tu bolsa ... voy y voto por quien se me de la gana” (in Schedler p.79)
10 “No es favor [...] es un engaño, es una forma de engañar a la gente, pero nos dan lo que nos quitan, nunca regalan nada, no es regalo, no es ayuda [...] lo regresan por lo que nos quitan, de impuestos [...] con ese mismo dinero nos están regresando cualquier pendejada” (in Schedler p.79)
11 “El les promete, les da unas cuantas cosas, llega al poder y el que se beneficia es él” (in Schedler p. 80)
12 “De toda la riqueza que México tiene. De ahí esta regresando un poquito de todo lo
Like clientelism, corruption did not disappear with democratization (Morris 2004). In fact, the spread and tenacity of the misconduct of public officials seem to have increased as democracy made its way through the country (Weyland 2008, Geddes and Ribeiro 1992). To illustrate the magnitude of the governmental corruption in Mexico, consider the Transparencia Mexicana 2010 results. The 2010 survey detected 200 million incidences of corruption. The average price of a mordida was 165 pesos. Bribes to access public services amounted to approximately 32 million pesos. On average, Mexican households spend 14% of their income in bribes. Furthermore, corruption is regressive since households with incomes corresponding to the minimum wage spend 33% percent of their income in bribes (Transparencia Mexicana 2011). The rest of the paper explores how information about corruption affects voters willingness to sell his or her vote.

3 Data and methods

Two methodological challenges arise to test the effect of corruption on clientelism. One of these challenges relates to omitted variable bias: people with perceptions of widespread corruption may be different to people without such perceptions. Controlling for observable personal characteristics like age, education, or wealth may be insufficient to make the respondents with perceptions of widespread corruption comparable to respondents without such perceptions. As a result, an estimation strategy that requires that we control for every relevant confounder may produce biased results due to the omis-

que nos tocaría a todos los mexicanos si la riqueza fuera repartida equitativamente” (in Schedler p.79)
sion of variables that we cannot observe (or did not measure) but affect both corruption and clientelism. The second methodological challenge relates to reverse causality, or simultaneity. Perceptions of corruption can be a cause and be themselves caused by clientelism. To circumvent these challenges, I use the exogenous variation in information about corruption produced by Chong, De La O, Karlan and Wantchekon (2015)’s randomly assigned corruption and public expenditure information campaign in Mexico together with survey questions about clientelism I incorporated in the post-intervention survey.

3.1 Clientelism in local elections and exogenous information about corruption

Chong et al. (2015)’s information campaign distributed flyers door-to-door in randomly selected voting precincts. All flyers included the question: “Who is responsible for the public lighting, safe water, sewage, and local roads in your municipality?” Also, flyers included information on the total amount of resources from a federal transfer scheme (FISM) available to the mayor in that municipality to invest in public services, and the amount of resources the mayor actually spent. In one group of voting precincts, the flyer included information about the percentage of the transfer scheme resources the mayor spent in a corrupt manner (i.e. spending where some form of irregularity was identified such as over-invoicing, fake receipts, diverting resources, fraud, etc.). In average, mayors spent 35 percent of the resources in corrupt manners (with a standard deviation of 25). The control group received no information. Thus, the experiment offered information that voters could use to assess
the size of $B$ and $b_j$, which are the essential elements of my argument (as described in the previous section).

In the analysis that follows, I combine the exogenous increase in information about incumbent corruption with survey items that measure respondents’ willingness to sell their vote for various types of goods and access to public services. These questions vary $b_i$, or the value of the clientelist offer. I also included in the survey standard questions to measure if respondents received an offer from a political party or government office to buy their votes. Below I describe in detail these questions.

The field experiment was conducted in collaboration with Innovations for Poverty Action. Two local firms with expertise in flyer distribution conducted the information campaign. To maximize the possibility that voters read, believed and retained the information, the flyer was designed in consultation with a locally-based graphic designer. To establish credibility and political independence, flyers included a reference to the source of the information and a legend explaining that the informational campaign was non-partisan. The flyer designs also incorporated feedback gathered from two focus groups.

The distribution of the flyers took place approximately one week before municipal elections.\textsuperscript{13} Flyers were distributed to all households within the boundaries of a voting precinct. In order to ensure that the flyers were being distributed according to protocol, close supervision was enforced. In the randomization process, each state was allocated 50 voting precincts per

\textsuperscript{13}The municipal elections in Jalisco and Morelos were held on Sunday July 5, 2009. Flyer distribution in Jalisco took place from Friday, June 26th through Tuesday, June 30th. Flyer distribution in Morelos took place from Saturday, June 27th through Tuesday, June 30th. The municipal elections in Tabasco were held on Sunday, October 18th. Flyer distribution took place from Friday, October 9th through the 14th.
treatment and randomization was blocked by municipality.\textsuperscript{14} In total, 150 voting precincts were randomly assigned to receive information about corruption and 1910 precincts were assigned to the control group. The campaign distributed 44,000 flyers per treatment.

The post-intervention survey was in the field approximately two weeks after the information campaign (ten days after the elections). Since the survey intended to measure the effects of the information campaign, respondents were not exposed to the information again at the time of the survey.\textsuperscript{15}

Table A.1 in the appendix describes the baseline characteristics of the 2,360 voting precincts in the field experiment in panel A, and the characteristics of the 750 survey respondents in panel B. Column 1 shows the means (and standard deviations) of characteristics for the treatment group, while column 2 displays the values for the control group. Column 3 shows the orthogonality of various demographic and electoral variables to the randomized treatment assignment, by presenting p-values of F-tests of the significance of the treatment on each of the baseline characteristics. The last row of panel A presents the p-values of an F-tests from a regression where the dependent variable is a dummy indicating whether the precinct belong to the treatment

\textsuperscript{14}STATA was used to generate a random number for each precinct by municipality. Precincts were ranked by the random number. The first N precincts were chosen to be part of treatment 1, the next N precincts were chosen to be in treatment 2, and the next N precincts were part of treatment 3. The rest of the precincts were part of the control group. N was set in proportion to each municipality’s number of registered voters.

\textsuperscript{15}The sample for the survey was selected in three steps. First, we randomly selected fifteen precincts in each of the treatment groups and thirty precincts in the control group to participate in the survey. For logistical reasons, this randomization was stratified by state. Second, within each selected precinct two blocks were randomly selected. Finally, within each block five households were surveyed. The total sample for the survey consisted of 750 voters in 75 precincts.
group. The independent variables are baseline characteristics and municipality fixed effects. Based on this orthogonality test, baseline characteristics do not explain assignment to treatment. Thus, randomization successfully created balance in baseline characteristics across treatment and control voting precincts.

With regards to balance in individual level characteristics, the last column in panel B presents the p-values of F-tests of the significance of the treatment dummy on each of the baseline characteristics. These tests confirm that for 15 out of 18 demographic variables there are no significant differences across experimental groups. For the remaining three demographic variables, there is a minor imbalance significant at the 5 percent level. These imbalances are taken into account in the next section, when I discuss the robustness of the estimates. An alternative orthogonality test is presented in the last row of panel B. The p-value of an F-test from a regression where the dependent variable is an indicator for the voting precinct belonging to the treatment group and the independent variables are baseline characteristics and municipality fixed shows that baseline characteristics do not explain assignment to treatment.

As briefly mentioned before, in the survey I included two sets of questions about clientelism, which I use as dependent variables. The first set asked respondents whether each of the largest political parties in Mexico or any of the three levels of government had offered them money, a public good or public service in exchange for their vote. The exact wording of these questions, which are widely used in the literature, is: “Has [name of political party or government office] asked you to benefit them with your vote in
exchange for money, a good, a service, or access to a public program?” Based on these survey items, I created the variable Votebuy, which takes the value of one if a respondent said that a political party or any government official offered a gift, money or a favor in exchange for her vote, zero otherwise. In the control group, 13 percent of people reported receiving an offer to exchange their votes for gifts or favors.

The second set of questions asked respondents about their willingness to sell their vote. The survey prompted respondents to think about the hypothetical case that a political party wants to buy their votes, and asked them whether they were willing to exchange their votes for cash, food, construction material, food supplies, a scholarship, access to a social program, or a job in the public sector. Each item was asked separately and answers were not mutually exclusive. That is, a respondent could say yes to as many of these items as appropriate. The exact wording of these questions is: “If a political party offers you to exchange your vote for [specific good], would you be willing to vote for that party?”

From this set of questions, I created two categorical variables. First, SellVote takes the value of 0 if a respondent said that she was unwilling to sell her vote regardless of what is offered; 1 if a respondent said she would sell her vote only for the most expensive goods, such as a job in the public sector, a scholarship or access to a social program; 2 if a respondent said she would sell her vote for either a job in the public sector, a scholarship, access to a social program, food, food supplies, construction materials, or cash. In the control group, 70 percent of respondents said they would be unwilling to sell their vote regardless of what is offered, 6.5 percent of respondents said that
they would sell their vote only for the most expensive goods, and 23 percent of respondents said they would sell their vote for either cash, an expensive or a cheap good.\footnote{I do not specify a binary dependent variable (i.e. willing/unwilling to sell vote) because this would further compress the variation in the dependent variable.}

Second, to disaggregate further the dependent variable, $SellVote_2$ takes the value of 0 if a respondent said that she was unwilling to sell her vote regardless of what is offered; 1 if a respondent said she would sell her vote only for the most expensive goods (a job in the public sector, a scholarship or access to a social program); 2 if a respondent said she would sell her vote for food, food supplies or construction materials; and 3 if a respondent said she would sell her vote for cash. In the control group, 70 percent of respondents said they would be unwilling to sell their vote regardless of what is offered, 6.7 percent of respondents said that they would sell their vote only for the most expensive goods, 8 percent of respondents said they would sell their vote for food, food supplies or material for construction, and 15 percent said they would sell their vote cash.

Both dependent variables capture how sensitive people are to offers from political parties. For example, a respondent could say she is willing to sell her vote for food, construction material and a job in the public sector. $SellVote$ would take the value of 2 because the revealed preference of this respondent is that she would be willing to sell her vote at a low price, as low as a gift in the form of food. In contrast, a respondent that says she would only sell her vote for a job in the public sector is coded as 1 because her revealed preference is that she puts a high price on her vote. The advantage of $SellVote$ is
that because it groups more people into category 2, estimates based on this variable have more statistical power. The advantage of SellVote2 is that it is more disaggregated, so we can get a better insight into which types of goods are more affected by treatment.

Income in the post-intervention survey is measured with a question that measures monthly income in a discrete way. Respondents have five intervals to choose from: (1) up to 1,500 MXN pesos, which roughly represents the extreme poverty line; (2) between 1,500-3,000 MXN pesos, which roughly represents the poverty line; (3) between 3,000-6,000 MXN pesos; (4) between 6,000-12,000 MXN pesos; and (5) more than 12,000 MXN pesos. Because income is right-skewed I created four dummy variables from this question (one for extreme poverty, one for poverty, one for respondents who answered 3, and one respondents who answered 4 or 5).

To estimate the effect of corruption information on clientelism, I used the following empirical specification:

\[
Clientelism = \beta_0 + \beta_1 Treatment \\
+ \beta_2 Income2 \\
+ \beta_3 Income3 \\
+ \beta_4 Income4 \\
+ \beta_5 Treatment \times Income2 \\
+ \beta_6 Treatment \times Income3 \\
+ \beta_7 Treatment \times Income4 \\
+ \epsilon
\] (6)
Treatment is a dummy variable that indicates that the voting precinct was randomly selected to receive information about corruption. Income1 to Income4 are the income dummy variables. The reference group are respondents in the first income group. Finally, to let the effect of Treatment to vary with income, I interacted the treatment with the corruption dummies. Error terms are assumed to be independent across electoral precincts, but are allowed to be correlated across observations in the same electoral precinct (i.e. the standard errors are clustered at the electoral precinct level, which is the level of randomization).

After presenting the main results, I will discuss the robustness of the estimates to the inclusion of baseline characteristics as controls, the use of inverse probability weights that account for the different probability of treatment across municipalities, and to dropping from the sample municipalities where failure to treat was problematic. Also, I will discuss the results of the estimation when using an alternative (more disaggregated) coding of the dependent variable capturing willingness to sell one’s vote.

4 Findings

Table 1 presents the results of disseminating information about corruption on clientelism. Columns 1 and 2 present the results from a multinomial logit model. The dependent variable is SellVote, which, as explained earlier, takes the value of one to indicate people’s willingness to sell their votes for expensive goods, and 2 to indicate willingness to sell a vote for expensive or cheap goods. The base category is SellVote = 0, or unwillingness to sell votes regardless of what is offered. Since the model includes the interaction
between corruption information and income levels, we can interpret the coefficient of Treatment as the effect of exposing corruption information among respondents in the lowest value of the income scale. Adding the coefficient of Treatment to the interaction coefficients, we can recover the effects of exposing corruption at various income groups.

Column 1 shows that treatment, income and their interactions have no effect on the multinomial log-odds for willingness to sell a vote for a job, a program or a scholarship versus unwillingness to sell a vote. However, column 2 shows that the multinomial log-odds for willingness to sell a vote for either an expensive or cheap good versus unwillingness to sell a vote decreases for people in lowest income group who were exposed to corruption information (p-value < 0.01). The effect of treatment on willingness to sell a vote for either expensive or cheap goods cancels out for people in income groups 2 through 4 (p-values < 0.01).

Column 3 shows the effect of treatment, income and their interactions on Votebuy, which measures if a political party or any government official offered the respondent a gift, money or a favor in exchange for her vote. While SellVote captures respondents’ side of the clientelist exchange, Votebuy, captures political brokers’ side (as reported by respondents). Perhaps as expected, disseminating information about corruption had no effect on political brokers’ behavior. This null result is in part explained by the timing of the experiment. The informational campaign ended five days before the election day, once political parties were by law not allowed to campaign. Therefore, they could not officially respond to the corruption information in their territorial campaigns. However, they could have responded to the informational
campaign breaking the law, but political brokers did not have access to the list of randomized voting precincts. So, even if they tried to respond to the informational campaign, they could not target the experimental voting precincts.

Because multinomial log-odds are not intuitive, to get a sense of the magnitude of the effects, I computed the average marginal effects of treatment at the four income levels. Panel A in table 2 presents the marginal effects (and p-values) computed after the estimation of the basic model. At the lowest income level, disseminating information about corruption leads to a 0.16 percentage point increase (although not statistically significant, p-value=0.40) in the probability that a person living in extreme poverty is willing to sell her vote for a job, scholarship or a program versus being unwilling to sell her vote. And it leads to a 0.19 percentage point decrease (p-value=0.00) in the probability that a person living in extreme poverty is willing to sell her vote for either an expensive or a cheap good versus being unwilling to sell her vote. At the second and third income levels, treatment has no statistically significant effect. At the fourth, and highest income level, treatment leads to a 0.17 percentage point increase (p-value=0.05) in the probability that a person is willing to sell her vote for a job, a program, or a scholarship versus being unwilling to sell her vote, but has no effect on the probability that a wealthy person is willing to sell her vote for cheap or expensive goods.

Panel B in table 2 reports three robustness test. First, I included in the model individual level baseline characteristics as control variables, including age, gender, education and occupation. Baseline controls take into account the minor unbalances in the experimental sample and they improve the pre-
cision in the estimates. As in the basic model, once baseline controls are included, treatment leads to a 0.15 percentage point increase (p-value=0.05) in the probability that a wealthy respondent is willing to sell her vote for a job, a scholarship, or a program. Also, treatment leads to a 0.23 percentage point decrease (p-value=0.00) in the probability that a person living in extreme poverty is willing to sell her vote for any type of good. Hence, although the magnitude of the effects is slightly larger among respondents in lower income group, the inclusion of controls does not change the substantive findings.

Second, in Chong et al. (2015)’s experiment, which had a block randomized design, treatment probabilities vary by block. To account for this, I weighted observations by the inverse of the probability of treatment (constant within, but not across municipalities). According to Gerber and Green (2012), this weighted regression “produces the same estimate as weighting the estimated Average Treatment Effect for each block” (130). With the weighted data, treatment leads to a 0.14 percentage point increase (p-value=0.21) in the probability that a wealthy person is willing to sell her vote for an expensive gift. However, this result is less precisely estimated compared to the basic model and is not statistically significant at conventional levels. Yet, treatment effects among people in the lowest income group, as before, leads to a 0.17 percentage point decrease (p-value=0.02) in the probability that a person is willing to sell her vote for any type of good versus being unwilling to sell her vote.

Third, field experimentation always presents the challenge that received treatment may not coincide with assigned treatment. One source of discor-
dance between assignment and actual treatment are spillovers (i.e. people who received information about incumbent corruption could have talked to people in the control group). Although there is no measure of how much of the treatment effect spilled over to the control group, it is likely that such interactions between experimental groups diluted the effect of treatment, in which case estimates are a lower bound on the average treatment effects. Another concern with field experiments is failure-to-treat. Chong et al. (2015) report that overall compliance with treatment assignment was high, however there were three municipalities out of the twelve in the study where failure-to-treat was equal or higher than 25% (in the three problematic municipalities, average coverage of treatment was 59%, while in the rest of the municipalities average coverage was 93%). In a block randomized experiment, like Chong et al. (2015)’s, problematic blocks can be dropped without compromising the internal validity of the rest because randomization takes place within blocks (Hayes and Moulton 2009). Then, I estimated the basic model dropping the three municipalities where failure-to-treat is of concern. With the restricted sample, treatment leads to a 0.10 percentage point increase (p-value=0.38) in the probability that a wealthy person is willing to sell her vote for an expensive gift, but this result is not statistically significant. Like in previous estimates, however, treatment again leads to a 0.20 percentage point decrease (p-value=0.00) in the probability that a person living in extreme poverty is willing to sell her vote for any type of good versus being unwilling to sell her vote.

In sum, disseminating information about corruption seemed to have a positive effect among wealthy people on the probability that they would
be willing to sell their vote for expensive goods. However, this effect is not robust to the use of inverse probability weights or dropping from the analysis municipalities where failure-to-treat was problematic. On the other hand, the effect of treatment among people in the lowest income group is robust to the inclusion of baseline controls, inverse probability weights and dropping problematic municipalities. The magnitude of the effect is stable too, ranging from -0.17 to -0.23 percentage points. These results show that, in this experimental sample, the poorest respondents’ willingness to engage in vote buying is most sensitive to information about corruption, and that people living in extreme poverty respond to the treatment by decreasing their willingness to exchange their votes for either expensive or cheap goods. Although their willingness to exchange their votes for the most expensive goods remains unchanged.

Next, I consider which of the goods offered by parties are driving these effects. SellVote2 is more disaggregated, so with it we can get a better sense of the treatment effects. However, we should also expect a loss in precision because positive reports of willingness to sell one’s vote are now split into three categories as oppose to two. Table 3 shows these results. As before, treatment, income and their interactions have no effect on the multinomial log-odds for willingness to sell a vote for a job, a program or a scholarship versus unwillingness to sell a vote. However, columns 2 and 3 show that the multinomial log-odds for willingness to sell a vote for food, food supplies, or construction material, as well as the multinomial log-odds for willingness to sell a vote for cash, decrease for people in the treatment group living in extreme poverty (p-values < 0.01). The effect of treatment on willingness to
sell a vote for food, food supplies, or material, as well as for cash, cancels out for people in income groups 2 through 4 (p-values<0.01).

To help with the interpretation of these results, Figure 2 displays the marginal effects of treatment by income group. The left-most graph shows that although disseminating corruption information increases people’s willingness to sell their vote for a job, program or scholarship in the lowest and highest income groups, it only does so in a statistically significant way among people in the latter group (0.16 percentage points, p-value=0.39 and 0.18 percentage points, p-value=0.036, respectively). The middle graph shows that treatment lead to a decrease of 0.11 percentage points (p-value=0.09) in the probability that a person in the lowest income group is willing to sell her vote for food, food supplies, or construction material. Finally, the right-most graph shows that treatment lead to a 0.07 percentage point decrease (p-value=0.05) in willingness to sell one’s vote for cash among people in lowest income group. Respondents in other income groups are not affected by treatment. Then, disseminating information about corruption affects the most people in the lowest income group leading them to be less willing to sell their votes to political brokers for food, food supplies, or construction material, and less willing to sell their votes for cash.

5 Discussion

This article presents a consolidated account of clientelism where voters take into consideration the value of the clientelist offer, the expressive value of voting, and how fair is the clientelist offer compared to what the political machine keeps for itself (i.e. the extent of incumbent corruption). Drawing
on this framework, I postulate that the more sensitive people are to the
difference between the value of the machine’s offer and the share of captured
resources by the machine, as well as the more the machine keeps for itself, the
higher voters’ willingness to reject cheap clientelists offers. With incremental
changes to the received wisdom, this account sheds light into a few elusive
elements of clientelism, including the determinants of vote choice elasticity
(beyond income and partisanship), when and why voters are willing to punish
a political machine, and why empirically not all poor voters sell their vote,
not even in cases where candidates are ideologically indistinguishable.

The evidence comes from a randomized informational campaign, which
provided people with information about incumbent corruption close to may-
oral races in Mexico, paired with questions about clientelism I included in
the field experiment’s post-intervention survey. The experiment reveals that
corruption information led to a substantive decrease in the willingness of
people in the lowest income group to sell their votes to political brokers in
exchange for food, food supplies, construction material and cash. People’s
willingness to sell their votes for more expensive gifts, such as a job, access
to a program, or a scholarship remain for the most part unchanged. Thus,
corruption information increased the price of poor people’s votes.

That poor people take into account the spoils from office in their vote
selling calculations opens up exciting questions about the functioning and
the demise of clientelism. Future research, for example, may explore in more
detail the mechanism linking corruption information to clientelism. To be
sure, with the empirical evidence at hand, I cannot fully account for why poor
people respond to the corruption information by decreasing their willingness
to sell their votes for cheap. However, the empirical patterns here, and third party accounts of the current state of clientelism in rural Mexico, such as Schedler (2004), suggest that fairness considerations are at play.

It may also be fruitful to further study why people in the lowest income group respond to the corruption information differently to the people in the second to last income group. One possibility is that information about corruption has the most effect among people who at baseline are the least informed. Here, I remained agnostic about the functional form that corruption information and income follow, and included in the model four dummy variables to account for various income levels. With a more continuous measure of income, perhaps future work could estimate the effect of corruption and income under various assumptions about functional form (i.e. linearity, quadratic, etc.) and could empirically identify the breaking point at which the marginal effect of corruption information becomes indistinguishable from zero.

Another promising line of research may be to estimate the elasticity of votes with a more continuous measure of the value of the clientelist offer. Here, I measured peoples willingness to sell their votes in exchange for typical gifts and political favors in the context of Mexico. Food, construction material, and some cash, however, are different from a job in the public sector and a scholarship in at least three dimensions. One is their value. Another is their potential to generate revenue. Both of these dimensions are compatible with the argument of aversion to unfair offers. Yet another dimension is whether the gift is contingent upon the machine keeping up its promise (for example, providing a job in the public sector once the machine’s candi-
date wins). Corruption information could exacerbate commitment problems. However, the empirical patterns here suggest that this is not the case because people’s willingness to sell their vote for a public sector job or access to a social program remain unchanged. Once we know that poor people can react to corruption information by rejecting broker’s cheap offers in the context of a large scale field experiment, future research could take the next steps in laboratory experiments in the field, which allow better measures of these dimensions and can elicit responses from voters in a more controlled environment.

Finally, future research could explore the effect of corruption information on clientelism in other settings. While Mexico is not an outlier, it is certainly among the OECD countries with highest perceptions of political corruption (Casar 2015). In other contexts, with different institutions and different clientelist arrangements, corruption information may produce different results. Yet, this is a research agenda where replication and accumulation of internally valid studies could produce a better perspective on poor people’s engagement with political machines. Despite the many open question, I hope at the very least this article shows the gains from considering incremental changes to our theoretical frameworks which give poor voters more agency.
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Scott, James C. 1972. “Patron-client politics and political change in South-


Transparencia Mexicana. 2011.


Table 1: The effects of exogenous information about corruption on clientelism

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you vote for a party, if they offer you a:</td>
<td>Did a party offered to buy your vote?</td>
<td>(Multinomial logit, reference group: Unwilling to sell vote)</td>
</tr>
<tr>
<td>Job, scholarship program, food, supplies, material or cash</td>
<td></td>
<td>(LPM)</td>
</tr>
<tr>
<td>Treatment</td>
<td>1.66</td>
<td>-12.13**</td>
</tr>
<tr>
<td>Income 2</td>
<td>1.03</td>
<td>0.22</td>
</tr>
<tr>
<td>Treatment X Income 2</td>
<td>-1.94</td>
<td>12.35**</td>
</tr>
<tr>
<td>Income 3</td>
<td>0.78</td>
<td>0.58</td>
</tr>
<tr>
<td>Treatment X Income 3</td>
<td>-1.43</td>
<td>11.73**</td>
</tr>
<tr>
<td>Income 4</td>
<td>0.30</td>
<td>0.60</td>
</tr>
<tr>
<td>Treatment X Income 4</td>
<td>0.11</td>
<td>11.98**</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.04**</td>
<td>-1.43**</td>
</tr>
<tr>
<td>Observations</td>
<td>646</td>
<td>646</td>
</tr>
</tbody>
</table>

Robust standard errors (clustered at the precinct level) in parentheses

** p<0.01, * p<0.05
Table 2: Marginal effects of corruption information by income

<table>
<thead>
<tr>
<th></th>
<th>Pr(Selling vote for job, scholarship vs. unwilling to sell vote)</th>
<th>Pr(Selling vote for any type of good or program vs. unwilling to sell vote)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic model:</td>
<td>Robustness tests</td>
</tr>
<tr>
<td></td>
<td>Marginal effect</td>
<td>p-value</td>
</tr>
<tr>
<td>Income 1</td>
<td>0.16</td>
<td>0.40</td>
</tr>
<tr>
<td>Income 2</td>
<td>-0.02</td>
<td>0.64</td>
</tr>
<tr>
<td>Income 3</td>
<td>0.02</td>
<td>0.61</td>
</tr>
<tr>
<td>Income 4</td>
<td>0.17</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>With baseline controls:</td>
<td></td>
</tr>
<tr>
<td>Income 1</td>
<td>0.26</td>
<td>0.32</td>
</tr>
<tr>
<td>Income 2</td>
<td>-0.03</td>
<td>0.62</td>
</tr>
<tr>
<td>Income 3</td>
<td>0.02</td>
<td>0.66</td>
</tr>
<tr>
<td>Income 4</td>
<td>0.15</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>With inverse probability weights:</td>
<td></td>
</tr>
<tr>
<td>Income 1</td>
<td>0.25</td>
<td>0.29</td>
</tr>
<tr>
<td>Income 2</td>
<td>-0.00</td>
<td>0.99</td>
</tr>
<tr>
<td>Income 3</td>
<td>0.00</td>
<td>0.99</td>
</tr>
<tr>
<td>Income 4</td>
<td>0.10</td>
<td>0.38</td>
</tr>
</tbody>
</table>
Table 3: The effects of exogenous information about corruption on clientelism: alternative coding of dependent variable

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you vote for a</td>
<td>1.66</td>
<td>-13.27**</td>
<td>-12.28**</td>
<td>-0.04</td>
</tr>
<tr>
<td>party, if they offer</td>
<td>(1.60)</td>
<td>(0.90)</td>
<td>(0.81)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>you: Job, scholarship</td>
<td>1.03</td>
<td>0.14</td>
<td>0.33</td>
<td>0.07</td>
</tr>
<tr>
<td>or a program</td>
<td>(1.03)</td>
<td>(0.71)</td>
<td>(0.59)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Food, supplies, or</td>
<td>0.92</td>
<td>-0.24</td>
<td>1.13*</td>
<td>0.12**</td>
</tr>
<tr>
<td>material</td>
<td>(1.13)</td>
<td>(0.70)</td>
<td>(0.54)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Cash</td>
<td>0.07</td>
<td>-0.21</td>
<td>1.25*</td>
<td>0.19**</td>
</tr>
<tr>
<td>offered to buy your</td>
<td>(1.20)</td>
<td>(0.84)</td>
<td>(0.57)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>vote?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment X Income 2</td>
<td>-1.94</td>
<td>13.46**</td>
<td>12.51**</td>
<td>0.05</td>
</tr>
<tr>
<td>Income 2</td>
<td>(1.53)</td>
<td>(1.02)</td>
<td>(1.15)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Treatment X Income 3</td>
<td>-1.57</td>
<td>12.32**</td>
<td>12.07**</td>
<td>-0.01</td>
</tr>
<tr>
<td>Income 3</td>
<td>(1.70)</td>
<td>(1.11)</td>
<td>(1.01)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Treatment X Income 4</td>
<td>0.33</td>
<td>13.35**</td>
<td>11.99**</td>
<td>-0.05</td>
</tr>
<tr>
<td>Income 4</td>
<td>(1.72)</td>
<td>(1.49)</td>
<td>(1.15)</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.04**</td>
<td>-1.95**</td>
<td>-2.35**</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(1.09)</td>
<td>(0.66)</td>
<td>(0.53)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Observations</td>
<td>646</td>
<td>646</td>
<td>646</td>
<td>634</td>
</tr>
</tbody>
</table>

Robust standard errors in parentheses

** p<0.01, * p<0.05
Figure 1: Marginal effects of treatment by income groups
Appendix

A.1: Baseline Summary Statistics and Orthogonality Tests, Field Experiment

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
<th>Control</th>
<th>Orthogonality tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: Aggregate data</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Means and Standard Deviations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Polling Precinct’s Households with:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiteracy</td>
<td>0.04</td>
<td>0.04</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.04)</td>
<td></td>
</tr>
<tr>
<td>No primary school</td>
<td>0.22</td>
<td>0.23</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.08)</td>
<td></td>
</tr>
<tr>
<td>No sewage</td>
<td>0.07</td>
<td>0.07</td>
<td>0.54</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.05)</td>
<td></td>
</tr>
<tr>
<td>No electricity</td>
<td>0.06</td>
<td>0.06</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.06)</td>
<td></td>
</tr>
<tr>
<td>No potable water</td>
<td>0.15</td>
<td>0.15</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(0.20)</td>
<td>(0.22)</td>
<td></td>
</tr>
<tr>
<td>No cement flooring</td>
<td>0.05</td>
<td>0.04</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>(0.09)</td>
<td>(0.08)</td>
<td></td>
</tr>
<tr>
<td>No refrigerator</td>
<td>0.16</td>
<td>0.15</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.13)</td>
<td></td>
</tr>
<tr>
<td><strong>Electoral behavior:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnout 2006</td>
<td>57.65</td>
<td>59.67</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>(7.60)</td>
<td>(8.00)</td>
<td></td>
</tr>
<tr>
<td>Incumbent 2006 vote share</td>
<td>25.41</td>
<td>27.19</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>(8.14)</td>
<td>(7.59)</td>
<td></td>
</tr>
<tr>
<td>All challengers 2006 vote shares</td>
<td>32.23</td>
<td>32.50</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>(6.90)</td>
<td>(6.40)</td>
<td></td>
</tr>
<tr>
<td><strong>Orthogonality test</strong></td>
<td></td>
<td></td>
<td>0.91</td>
</tr>
</tbody>
</table>

Notes: This table is divided in two panels, which report baseline summary statistics from aggregate and survey data for the exogenous information about corruption. Column (1) presents the means (and standard deviations in parentheses) for the treatment group, while column (2) reports the same summary statistics for the control group. The last column presents the p-values of a F-test from a regression of each baseline characteristic on treatment, with fixed effects for municipality. The last row in each panel shows the p-values of a F-test from regressions of treatment on all baseline covariates and municipality fixed effects.
### Panel B: Individual characteristics

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
<th>Control</th>
<th>Orthogonality tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>0.56</td>
<td>0.50</td>
<td>0.10</td>
</tr>
<tr>
<td>Age</td>
<td>41.01</td>
<td>38.13</td>
<td>0.00</td>
</tr>
<tr>
<td>Income</td>
<td>2.70</td>
<td>2.86</td>
<td>0.43</td>
</tr>
<tr>
<td>Phone</td>
<td>0.44</td>
<td>0.53</td>
<td>0.54</td>
</tr>
<tr>
<td><strong>Education:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No education</td>
<td>0.06</td>
<td>0.03</td>
<td>0.08</td>
</tr>
<tr>
<td>Primary</td>
<td>0.34</td>
<td>0.22</td>
<td>0.08</td>
</tr>
<tr>
<td>High school</td>
<td>0.54</td>
<td>0.66</td>
<td>0.19</td>
</tr>
<tr>
<td>College or more</td>
<td>0.03</td>
<td>0.07</td>
<td>0.11</td>
</tr>
<tr>
<td><strong>Occupation:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureaucrat</td>
<td>0.02</td>
<td>0.04</td>
<td>0.57</td>
</tr>
<tr>
<td>Self-employed</td>
<td>0.2</td>
<td>0.16</td>
<td>0.32</td>
</tr>
<tr>
<td>Employed in private sector</td>
<td>0.02</td>
<td>0.07</td>
<td>0.00</td>
</tr>
<tr>
<td>Employed in agriculture</td>
<td>0.04</td>
<td>0.04</td>
<td>0.53</td>
</tr>
<tr>
<td>Worker</td>
<td>0.16</td>
<td>0.13</td>
<td>0.33</td>
</tr>
<tr>
<td>Housewife</td>
<td>0.41</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>Student</td>
<td>0.03</td>
<td>0.07</td>
<td>0.47</td>
</tr>
<tr>
<td>Teacher</td>
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<td>0.01</td>
<td>0.02</td>
</tr>
<tr>
<td>Unemployed</td>
<td>0.07</td>
<td>0.08</td>
<td>0.25</td>
</tr>
<tr>
<td>Retired</td>
<td>0.02</td>
<td>0.02</td>
<td>0.62</td>
</tr>
</tbody>
</table>

**Orthogonality test**: 0.77

*Notes: See notes in Panel A.*
Notes: This is an example of the flyer used in the information dissemination campaign. The flyer was folded in half. The upper image is the front and back of the flyer, and the lower image is the inside of the flyer. Control group received no flyer.