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When Do Voters Punish Corrupt Politicians? Evidence from a Field and Survey Experiment

Abstract

When do voters punish corrupt politicians? Heterogeneous views about the importance of corruption can determine whether or not increased information enhances accountability. If partisan cleavages correlate with the importance voters place on corruption, then the consequences of information may vary by candidate, even when voters identify multiple candidates as corrupt. We provide evidence of this mechanism from a field experiment in a mayoral election in Brazil where a reputable interest group declared both candidates corrupt. We distribute fliers in the run-off mayoral election in São Paulo. Informing voters about the challenger's record reduced turnout by 1.9 percentage points and increased the opponent's vote by 2.6 percentage points. Informing voters about the incumbent's record had no effect on behavior. We attribute this divergent finding to differences in how each candidate's supporters view corruption. Using survey data and a survey experiment, we show that the challengers' supporters are more willing to punish their candidate for corruption, while the incumbent's supporters lack this inclination.

When do voters punish corrupt politicians? Recently, many studies of electoral democracies have tried to answer this question. Taking as a starting point that one precondition for electoral accountability is sufficient knowledge by the citizenry of politicians' records, these studies have adopted varied methods to inform voters about corruption cases involving candidates. Though some work has suggested that better-informed voters tend to punish corrupt candidates,[1] more recent studies suggested a more mixed response, showing effects only on particular subgroups and contexts.[2] Whether voters punish corrupt politicians appears to reflect factors like current economic conditions, partisanship, and the level and type of corruption in a society.[3] In addition, many voters punish incumbents by disengaging from the political process.[4]

In times of increasingly polarized politics, however, another strand of the literature finds that partisanship is an important factor when voters evaluate corruption allegations. In general, these studies show that voters minimize corruption accusations involving candidates from parties they support or forgive the candidate's misdeeds.[5] In developing countries, for instance, identification with a traditional party appears associated with higher tolerance of vote buying practices.[6]

The present study engages this debate by showing that information about candidate corruption can result in voters punishing politicians. However, some candidates are more accountable to voters when it comes to corruption than others, particularly as voters' views on corruption can vary substantially according to party cleavages. Our results suggest that voters who identified with parties with an anti-corruption brand punish their own candidates more harshly. As a result, we show that increased transparency can have divergent consequences and can reduce turnout, even when two competing candidates are convicted of corruption by lower courts. Instead of

[1]Pande 2011.
[2]Dunning et al. 2019.
[3]Klašnja and Tucker 2013.
[4]Chong et al. 2014.
[5]Rundquist, Strom, and Peters 1977; Anduiza, Gallego, and Muñoz 2013.
[6]Gonzalez Ocantos, Jonge, and Nickerson 2014.

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acting as a buffer, party identification intensifies the punishment by voters sympathizing with parties branded as anti-corrupt.

Based on data from a field and survey experiment conducted during the 2008 mayoral election in São Paulo, Brazil, we test how party allegiances affect voters' responses to candidate corruption. We find that supporters of a challenger candidate coming from an anti-corruption party are more willing to punish their own candidate, while supporters of an incumbent candidate from a more traditional party lack this inclination.[7] Our study shows that corruption is an important issue in the developing world, and also identifies the relevance of party identification dynamics in Brazil, a relatively young democracy.

Corruption and Party Bias

An important precondition for electoral accountability is whether or not voters have access to information about the corrupt behavior of public officials, which may prompt them to vote against such candidates on election day. An empirical literature that examines the effects of corruption on voting behavior has emerged showing that voters in developing democracies care about the misconduct of incumbent candidates. Banerjee et al. (2014) find, for instance, that voters in India react negatively to corruption allegations independently of socioeconomic or caste conditions. In addition, Chong et al. (2014) show in Mexico that the effect of corruption information about incumbents is a general disengagement of the political process, with vote losses not only for the incumbent, but also for the challenger, along with higher abstention.

A second strand of literature focused on the electoral effects of anti-corruption campaigns involving elected officials in established democracies shows that partisanship plays an important role in explaining voter responses to corruption.McCann and Redlawsk (2006) show that Republican voters, when compared to Democrats, place less emphasis on corruption situations close to the ones experienced by officials of the George W. Bush administration. Similarly, Eggers et al. (2014) find that British MPs involved in scandals were reelected at higher rates in competitive districts than in non-competitive ones, suggesting that voters would downplay the seriousness of corruption scandals rather than face the risk of the opposing party winning the seat. Anduiza, Gallego, and Muñoz (2013) also show that Spanish voters tend to consider accusations of corruption less serious when involving politicians of parties they identify with, particularly for those with lower levels of political awareness.

The evidence suggests that partisan bias may function as a buffer against corruption scandals and hinder electoral accountability for voters in democracies with established parties. Voters sympathizing with a particular party may consider the ideology and policies sponsored by a candidate more relevant than involvement in corruption. In young democracies, by contrast, less consolidated party identities, political volatility, and a higher skepticism of institutions and politicians should weaken this effect. Voters would have fewer reasons to filter corruption allegations through a party lens as party identification and general trust in the party system tends to be weaker.

In practical terms, though, parties in young democracies are dynamic organizations engaged in an effort to create their own brand and identity among voters. Although the specifics of these

[7]At the time of the election, the DEM party was viewed at the national level as a clientelistic party, however the extent to which that view extends to São Paulo during the time that our study was conducted is arguable. At a minimum, because Kassab was relatively unknown before the campaign, the national perception of the party had at least some influence on its perception at the local level in São Paulo.

identities are intertwined with historical, national, and local contexts, anti-corruption platforms tend to be a common banner for many rising parties. Relatively young parties which built their reputation among voters on an anti-corruption platform, thus may suffer harsher punishment from sympathizers when compared to other traditional parties. Party bias, in such a context, would no longer work as a buffer, but as an amplifier of punishment by disappointed voters. As Arias et al. (2016) show, prior beliefs and expectations about candidates and parties are a crucial aspect that explain how voters process information about corruption; a sympathizer of a party or candidate that has a reputation of malfeasance will not update her priors as much as a sympathizer of a party or candidate that has a clean reputation.

Context

In this study, we conducted a field and survey experiment during the 2008 mayoral run-off election in São Paulo, Brazil. Specifically, we took advantage of a unique set of events that took place during the election period. The Brazilian Magistrates Association (*Associação dos Magistrados Brasileiros*, or AMB) published a document called the "Dirty List" (*Lista Suja*), which listed politicians running in the 2008 elections who had convictions involving impropriety while in government office. Both candidates running in the mayoral election of São Paulo – Gilberto Kassab of the Democratic Party (DEM) and Marta Suplicy of the Worker's Party (PT) – appeared on the AMB's Dirty List.

At the time of the experiment both parties also had different stances regarding corruption. The PT was traditionally associated with leftist ideology and an enthusiastic sponsor of clean and participatory governance. At the time of the study, the PT led congressional investigations about corruption in São Paulo.[8] Kassab's DEM party, by contrast, was less distinctive. Nominally a center-right party, the DEM party was particularly strong in the poorer states in the Brazilian northeast and its major leaders were frequently associated with extensive use of patronage while in office.[9] Locally, the DEM party was a supporter of Paulo Maluf, a popular politician and two-time mayor of the city who was later convicted of corruption charges involving illegal government contracts, and known by the phrase *rouba, mas faz* (he robs, but gets things done).[10] During the week prior to the election, we administered two treatments in the form of fliers informing voters that either Kassab or Suplicy appeared on the Dirty List and gave information about the nature of their respective charges and trial results. The AMB included Kassab on the Dirty List because a court convicted him of "administrative impropriety" in 1997, while he served as the Secretary of Planning for the City of São Paulo. The case, launched by public prosecutors in São Paulo, accused Celso Pitta, mayor at the time, and his staff, which included Kassab, of taking out newspaper advertisements paid with municipal funds in which they allegedly defended their own "personal interests" while they were under investigation. A lower court held that Kassab was guilty, but the decision was overturned on appeal. The public prosecutor appealed this decision, but it had yet to be resolved at the time of the election. Despite objections from the Kassab campaign, the AMB kept him on the Dirty List.

Suplicy's conviction involved more serious charges. In 2005, a São Paulo court convicted her of inappropriately giving a R$2 million (approximately US$840,000 at the time of the election) no-bid contract to an NGO focused on advocacy for and increasing awareness of sexual orientation

[8]Samuels 2004; Hunter 2010.
[9]Montero 2010; Power and Rodrigues-Silveira 2019.
[10]Pimentel Jr and Penteado 2011.

issues. The municipality awarded the contract to train São Paulo school teachers on sexual orientation. Suplicy founded the NGO in 1990 and served as its honorary chairman until 2000. At the time of the election, the decision was under appeal.[11]

Corruption featured prominently in the campaign, as both candidates accused each other of engaging in malfeasance while in office, particularly after the first round in which Kassab won with 34 percent of the vote versus Suplicy's 33 percent.[12] Suplicy went so far as to petition the election authorities to make Kassab ineligible for re-election because of alleged politicized distribution of public benefits. Kassab's attacks primarily focused on Suplicy's record on public works when she was mayor between 2000 and 2004, but his campaign also raised the corruption issue. Early in the election, before Kassab was on the Dirty List, he even attacked Suplicy for being declared "dirty" by the AMB. Despite the closeness of the first round, polls showed Kassab with a consistent lead throughout the second round, and he subsequently won the election with a decisive 60 percent of the vote.

Research Design

Our empirical strategy relies on three distinct components: a field experiment, survey, and embedded survey experiment. For the field experiment, we designed two fliers – one for each candidate – which are featured in Appendix 1. The fliers incorporate aspects similar to other political marketing material in Brazil, while having credibility in the information they are conveying. Both fliers have newspaper articles from *Folha de São Paulo*, one of the country's most respected newspapers, detailing the corruption allegations of each candidate. We also included the case numbers of each court case to increase the credibility of the information in the fliers.

The unit of analysis for the experiment is the *local de votação*, or voting precinct. Voting precincts are the smallest units for which we could administer a treatment, while obtaining vote share and turnout data. In selecting precincts in the randomization group, we made a number of decisions based on our substantive interests and logistical constraints. We chose 400 of São Paulo's 1,759 precincts utilizing a constraint optimization algorithm, which is described in detail in Appendix 2.

We randomly assigned voting precincts that would receive the Kassab or Suplicy flier, and had a control group of precincts that did not receive the flier. In all, households in the vicinity of 100 precincts received the Kassab flier, another set of households in the vicinity of 100 precincts received the Suplicy flier, and 200 precincts were in the control group. In the week prior to the election, we distributed 187,177 fliers to individual households.[13] To measure the effect of the intervention, we examined official electoral outcomes of each candidate's vote share, turnout, and spoiled ballots.[14]

[11] One clear limitation of our study is the different types of corruption cases involving each candidate. As Suplicy's case was more serious than Kassab's, we cannot completely rule out that the severity of each accusation is affecting the results. However, survey results suggest that voters perceived both cases as equally serious.

[12] Despite being the incumbent, Kassab was the vice-mayor of José Serra, who left office to run for state governor in 2006. At the start of the campaign, polls showed that Kassab was the least known of the main candidates running for mayor in 2008. Therefore, adversaries focused heavily during the campaign on the corruption track record of his party and allies.

[13] A description of the logistics for the flier delivery can be found in Appendix 3.

[14] As voting is mandatory in Brazil, rates of spoiled ballots are an important measure of dissatisfaction of voters with candidates and the electoral process in general.

The week after the election, we launched a survey to determine what voters already knew about accusations involving both candidates. The survey (n=200) covered São Paulo residents living near polling stations in the field experiment control group.[15] Since the treatment was not administered in these precincts, knowledge among surveyed voters should reflect knowledge among voters prior to the intervention. In addition to collecting basic attitudinal data, we also used a survey experiment to observe individual level attitudinal responses to the information contained in the fliers. For the survey experiment, we randomly assigned 200 respondents with equal probability the Kassab flier, the Suplicy flier, or a placebo flier showing basic biographical information for both candidates (shown in Appendix 4). After the respondents read the fliers, the interviewers asked voters to grade Kassab and Suplicy on a scale from 0 to 10, where 0 indicated strong opposition and 10 indicated strong support for the candidate.

Results

Field Experiment

For the survey experiment, we present two sets of results for each of our three dependent variables. Our quantity of interest is the average treatment effect on precincts. The first estimator is the simple intent-to-treat estimator, which is the average within-block difference in treatment and control precinct means. Our second set of estimates are from a simple linear regression of the outcome variable on a treatment indicator, a vector of covariates, and block dummy variables. The model we estimate is as follows:

$$Y_i = \beta_0 + \beta_1 T_i + \sum_{k=1}^{K-1} \gamma_k B_{ki} + \lambda_1 X_1 + \lambda_2 X_2 + u_i$$

Y_i is the outcome of interest, T_i is the treatment indicator, X_1 and X_2 are two pre-treatment covariates, and u_i is the disturbance term. To account for the fact that randomization occurred within matched pairs or blocks (k), we add fixed effects (B_{ki}) for all but one matched pair. Since we are interested in the separate effects of each type of flier, we estimate this model separately for each intervention. We adjust for two covariates: PT vote share in the 2004 mayoral election and the number of registered voters in the precinct. 2004 PT vote share is an important covariate because it is highly predictive of our outcome variables and can increase the precision of our estimates. We also adjust for the number of voters in the precinct because we detected some imbalance in this covariate after randomization (see Appendix 5). Finally, all standard errors account for heteroskedasticity, as robust standard errors are used in covariate adjusted results and the intent-to-treat estimates do not assume equal variance across treatment conditions.

Table 1 presents the effect of the Suplicy fliers on the vote share, turnout, and spoiled ballots of Suplicy.[16] For vote share (votes as a percent of total votes cast), we find a negative effect of 2.6 percentage points, which amounts to about 15 percent of a standard deviation. The 90 and 95 percent confidence intervals of the unadjusted estimate overlaps with 0 (p = 0.2), but the adjusted estimate, which is also -2.6 percentage points, is statistically significant at conventional levels.

[15]We cluster sampled 20 control group precincts, and then randomly sampled ten households in the vicinity of the selected precincts.

[16]Spoiled ballots in all presentations of results are measured by the blank votes cast in the election. We also estimated treatment effects on invalid votes and the sum of invalid votes and blank votes. All estimates were statistically indistinguishable from 0.

TABLE 1: Results of Marta Suplicy fliers on election outcomes. Estimates without covariates are from the simple ITT estimator. Estimates with covariates are from the linear model.

	Vote Share (%)		Turnout (%)		Spoiled Ballots (%)	
Estimate	-2.6	-2.6	-1.9	-1.8	0.03	0.01
Standard Error	1.99	0.93	0.46	0.45	0.08	0.08
95 % Conf. Int.	[-6.5, 1.3]	[-4.4, -0.7]	[-2.7, -0.9]	[-2.7, -0.9]	[-0.1, 0.2]	[-0.1, 0.2]
p	0.2	0.01	0	0	0.72	0.86
Covariates	No	Yes	No	Yes	No	Yes

TABLE 2: Results of Gilberto Kassab fliers on election outcomes. Estimates without covariates are from the simple ITT estimator. Estimates with covariates are from the linear model.

	Vote Share (%)		Turnout (%)		Spoiled Ballots (%)	
Estimate	1.9	1.5	0.1	0	-0.05	-0.09
Standard Error	1.87	0.99	0.42	0.41	0.12	0.13
95 % Conf. Int.	[-1.8, 5.5]	[-0.5, 3.4]	[-0.7, 0.9]	[-0.8, 0.8]	[-0.3, 0.2]	[-0.4, 0.2]
p	0.32	0.15	0.77	0.95	0.68	0.49
Covariates	No	Yes	No	Yes	No	Yes

While estimated with some imprecision, this result does suggest that receiving the flier induced some voters who otherwise would have supported Suplicy to abstain or vote for Kassab.

Our estimates support the hypothesis that providing information about Suplicy's corruption convictions lowered the candidate's vote totals, but where did these votes go? When we estimate the effect of the Suplicy intervention on total votes received by Kassab as a percent of registered voters (not vote share as a percent of ballots cast), we find a statistically insignificant increase of 1.5 percentage points (standard error of 1.7). Thus, while it is likely that some Suplicy voters changed their vote and cast a ballot for Kassab, abstention likely was the primary response by voters to the intervention. Further evidence that the intervention reduced turnout is presented in the second two columns of Table 1, where we find an effect of -1.9 percentage points, which is statistically significant at conventional levels. Results using covariate adjustment are substantively equivalent to the unadjusted results (point estimate of -1.8 percentage points). For spoiled ballots, we find a small positive difference, but both estimates are statistically indistinguishable from 0.

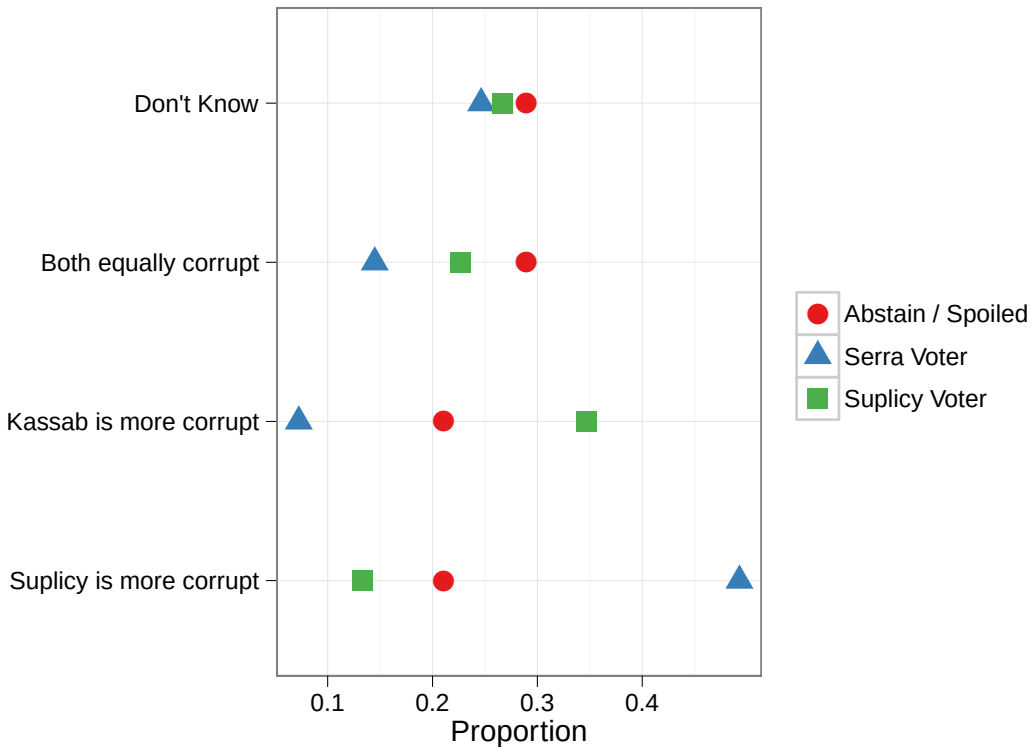
The estimated effects of Kassab fliers are found in Table 2. Surprisingly, the point estimate on Kassab's vote share is positive, ranging from 1.5-1.9 percentage points, depending on the specification. This result, however, is estimated imprecisely and consequently not statistically significant at conventional levels. The estimates for the other two outcome variables – turnout and spoiled ballots – are small and not statistically significant.

Survey Experiment

As discussed above, voters may already have existing beliefs about the corruption each candidate is and these beliefs will affect their response to new information. If voters already perceive a

candidate as corrupt, discovering he is on the Dirty List may not change their attitudes. It is possible, for example, voters already assumed Kassab was corrupt and thus the flier would not affect their evaluation of him. To check this possibility, the survey asked voters to rank each candidate by their perceived corruption level. On average, voters' evaluations of the candidates on this quality differed in that 29 percent of voters identified Suplicy as the most corrupt candidate, while 20 percent named Kassab. 20 percent said both were equally corrupt, while another 30 percent stated they did not know.[17] These responses suggest that while a plurality of voters considered Suplicy more corrupt, the majority of voters believed both candidates were equally corrupt or could not make the comparison. Overall, these results suggest the differential effects in the field experiment unlikely result from diverging ex-ante candidate evaluations.

Figure 1: Ranking Candidates on Perceived Corruption by Vote in 2004



These aggregate figures, however, mask considerable heterogeneity when voters are disaggregated by their past political behavior. Figure 1 shows how voters rank the candidates in subgroups defined by their self-reported vote in the run-off for the 2004 mayoral election.[18] Suplicy, the incumbent in 2004, lost the election against former presidential candidate José Serra. The political

[17]In addition, we also asked about the previous knowledge of the Dirty List. Only 25% of survey respondents said they knew about the list, and only 12% could place both candidates correctly.

[18]The pattern is very similar if we stratify by 2008 vote choice, showing that heterogeneity in voters' evaluations coincide with party cleavages that existed prior to the 2008 election.

leanings of each voter strongly predicts how voters evaluate each candidate on corruption. 34 percent of Suplicy voters in 2004 viewed Kassab as the more corrupt candidate, while only 7 percent of Serra voters felt similarly. The views of Suplicy and Serra voters are not completely symmetric: Serra voters are more likely to believe that Suplicy is more corrupt (49 percent) than Suplicy voters are to believe that Kassab is more corrupt (34 percent). As expected, voters who abstained or cast a spoiled ballot in the 2004 election were more likely to claim that each candidate was equally corrupt.

Given that voters' ex-ante perception of the candidates' corruption varied markedly by their political leanings, any intervention designed to increase voters' information could have highly heterogenous effects depending on the candidate the voter intends to support. If a Suplicy supporter received information about Suplicy and viewed the new information as credible, for example, then she might be less inclined to turnout or cast a ballot for Suplicy. This is especially the case if Suplicy voters were more likely to be weak supporters of the candidate. Thus, a potentially important distinction between the two candidates is the intensity of their voters preferences, since a candidate with many weak supporters would likely suffer more upon receiving information. In this election, we find no evidence of a divergence in the intensity of preferences among the candidate's supporters. To assess this, we asked respondents to rate the candidates with a 1 to 10 "feeling thermometer" score. The distribution among each candidate's voters were almost identical with a mean score of 7.8 for Suplicy among Suplicy voters (median of 8) and a mean score of 7.6 (median of 8) for Kassab among Kassab voters. The similarity across the two groups of voters suggests that intensity of preferences is an unlikely explanation for the divergent effects found in the field experiment.

Even in the absence of differences in the intensity of support across each candidate's voters, the effects of information about corruption could diverge if a candidate's supporters differ in the importance they place on corruption. That divergence may exist since Suplicy's party, the PT, had at the time a long history of emphasizing transparency in government. This history may cause voters who care about this issue to support her. We find a marked difference between Suplicy supporters and other voters in the importance placed on corruption. Among Suplicy supporters, 70 percent stated when deciding who to vote for in the 2008 election, corruption was "very important" or "important" in their decision. By contrast, a considerably fewer 48 percent of Kassab supporters said that corruption was "very important" or "important." This 22 percentage point difference suggests that Suplicy voters would, on average, be considerably more sensitive to learning about Suplicy's placement on the Dirty List.

Overall, the findings of the survey suggest that the most substantial difference across Kassab and Suplicy voters is the weight each candidate's supporters place on corruption in their decision making. Perhaps because of the PT's historical image as not engaging in the corrupt practices used by other parties, more Suplicy voters than Kassab voters said corruption was an important factor when choosing candidates. This suggests that learning about one's preferred candidate's placement on the Dirty List would have a larger effect on behavior among Suplicy supporters than Kassab supporters, which is consistent with the results of the field experiment.

While we are interested in the overall impact of the fliers on voter attitudes, the survey experiment also allows us to test other hypotheses explaining the divergent effects found in the field experiment. In particular, we test the hypothesis that Suplicy's supporters' views are more affected by learning about her placement on the Dirty List than the views of Kassab's supporters when they learn about his corruption record.

After asking respondents to read the fliers described above, we asked voters about the plausability and seriousness of the accusations. If voters perceived the Suplicy accusations were

more believable or serious, then this difference could explain the disparate behavioral response to the fliers. We find no evidence for either explanation. Only 30 percent thought the flier was mostly or completely false; most voters exposed to the Suplicy flier said the accusations were mostly or completely true. For those given the Kassab flier, the proportions are very similar: only 28 percent thought the flier was mostly or completely false. When it comes to the seriousness of the accusations, once again few differences appeared by flier. 80 percent and 78 percent of voters exposed to the Suplicy flier and Kassab flier, respectively, thought the accusations were very serious or serious. The similarity in voter perceptions provides evidence that differences in the accusations are not an explanation for why the Suplicy flier was more effective at changing voting behavior.

TABLE 3: Survey experiment results for the Suplicy (PT) and Kassab (DEM) fliers. The dependent variable is the post-treatment minus pre-treatment candidate evaluation feeling thermometer on a scale of 0 to 10.

	Suplicy vs Placebo	Kassab vs Placebo	Suplicy vs Kassab
Estimate	-0.78	-0.36	-0.54
Standard Error	0.32	0.34	0.42
95 % Conf. Int.	[-1.41, -0.15]	[-1.03, 0.31]	[-1.36, 0.28]
p	0.02	0.3	0.2

We also examine the overall effects of the fliers on voters' evaluations of the candidates by comparing voters' evaluations of Suplicy and Kassab when they view the Suplicy or Kassab flier versus a placebo flier. These results are shown in the first two columns of Table 3. The effect of the Suplicy flier on voters' evaluations of Suplicy is larger than the effect of the Kassab flier on voters' evaluations of Kassab, although the difference between the two effects is not significantly distinguishable from 0. After being exposed to the Suplicy flier, respondents in the treatment group on average adjusted their evaluations downward by an estimated 0.78 points on a 10-point scale, which amounts to about 60 percent of a standard deviation. The point estimate for the Kassab flier was an insignificant -0.36. The third column compares those receiving the Suplicy flier to those receiving the Kasab flier. The Suplicy flier more negatively affects attitudes, though this difference is not statistically significant. Overall, these individual-level estimates are in keeping with the field experiment evidence: the Suplicy flier harms voter evaluations of her, while the Kassab flier has weaker effects.

To test whether or not Suplicy voters respond differently to increased information about their favored candidate's corruption record than Kassab voters, we estimated treatment effects separately in strata defined by vote choice. The first two columns of Table 4 show the effect of the Suplicy flier, as compared to the placebo flier, on Suplicy versus Non-Suplicy voters. The estimate for Suplicy voters is more than three times the size of the estimate for Non-Suplicy voters: -1.29 versus -0.38. Given the small samples, however, the difference between the two estimates (the interaction) is not statistically significant. Still, the difference in magnitudes certainly suggests that Suplicy voters are more sensitive to corruption-related information than supporters of other candidates.

When we examine heterogeneity in the effect of the Kassab flier, the contrast with the effect of Suplicy flier is striking. As shown in the third and fourth columns of Table 4, the heterogeneity observed is the opposite of what we found for the Suplicy flier. Kassab voters who read the flier, on average, give a *higher* evaluation of the candidate. Although this estimate is not statistically

TABLE 4: Heterogeneity in survey experiment results for the Suplicy (PT) and Kassab (DEM) fliers. The dependent variable is the post-treatment minus pre-treatment candidate evaluation on feeling thermometer on a scale of 0 to 10.

	Suplicy vs Placebo		Kassab vs Placebo	
	Non-Suplicy Voters	Suplicy Voters	Non-Kassab Voters	Kassab Voters
Estimate	-0.38	-1.29	-1.24	0.42
Standard Error	0.32	0.53	0.5	0.5
95 % Conf. Int.	[-1.01, 0.25]	[-2.33, -0.25]	[-2.22, -0.26]	[-0.56, 1.4]
p	0.24	0.02	0.02	0.4
n	85	48	62	72

distinguishable from 0, it is distinguishable from the effect of the flier among non-Kassab voters. For non-Kassab voters, reading the Kassab flier induced a statistically significant 1.24 point decrease in their evaluation of the candidate. The difference in the size of the effect between Kassab voters and non-Kassab voters is 1.7 points (standard error of 0.7).

Overall, the results from the survey experiment provide further evidence that Suplicy's voters have a larger reaction to increased information about their candidate's corruption record than Kassab's voters. Upon learning of Suplicy's position on the Dirty List, Suplicy's voters perceive her more negatively, on average. When Kassab voters learn about their candidate's placement on the Dirty List, their evaluation of their candidate is essentially unchanged. Furthermore, our survey evidence shows that Suplicy's base professes to place more importance on corruption than Kassab's base. We posit this difference in how each candidate's voters view the importance of corruption resulted in a differential behavioral response in our field experiment. In general, our evidence indicates that Suplicy's voters viewed their candidate more negatively after learning about her record and became more likely to abstain. To a lesser degree, her supporters switched their vote to Kassab. Kassab voters, because they view corruption as less central to their decision-making, failed to change their views or their behavior.

Discussion and Conclusion

In this study, we show that publicizing a candidate's record on corruption alters voters' behavior, but the effects are contingent upon the importance voters place on clean governance in their decision-making. Furthermore, the importance voters place on a candidate's corruption record can be shaped by political cleavages, an important mechanism previously unexplored in the experimental literature on corruption. As a result, the effects of increased transparency may result in outcomes where one politician may be punished when his corruption record is revealed while another is not.

In the case of São Paulo, we document the existence of a partisan cleavage in how voters perceive the importance of corruption. Furthermore, we argue that this cleavage has real consequences for the effectiveness of an anti-corruption intervention. Despite voters viewing the accusations against each candidate as equal in seriousness, our field experimental evidence revealed that only Suplicy, the PT's candidate, was punished at the ballot box when voters learned about her placement on the Dirty List. Data from our survey and survey experiment provide

evidence of a mechanism: Suplicy's supporters are much more sensitive to corruption information than Kassab's supporters. As a result of this increased sensitivity, the information induced some of Suplicy's supporters to abstain and others, to a lesser degree, to switch their vote to her opponent.

An important question raised by these results is why are Suplicy voters more willing to change their behavior when they learn about their candidate's record? We suspect that the PT's historical cultivation of a brand as a party with a distinct "mode of governance" ("modo petista de governar") emphasizing transparency and citizen participation may have raised PT voters' expectations on the corruption issue. For many PT voters at the time, clean governance may be central to their political identity. Kassab's party, if anything, has developed a brand as a party whose candidates may "rob, but get things done." As a result, Kassab voters likely had lower expectations about their candidate's integrity in office and consequently new information about past misdeeds failed to change their behavior.

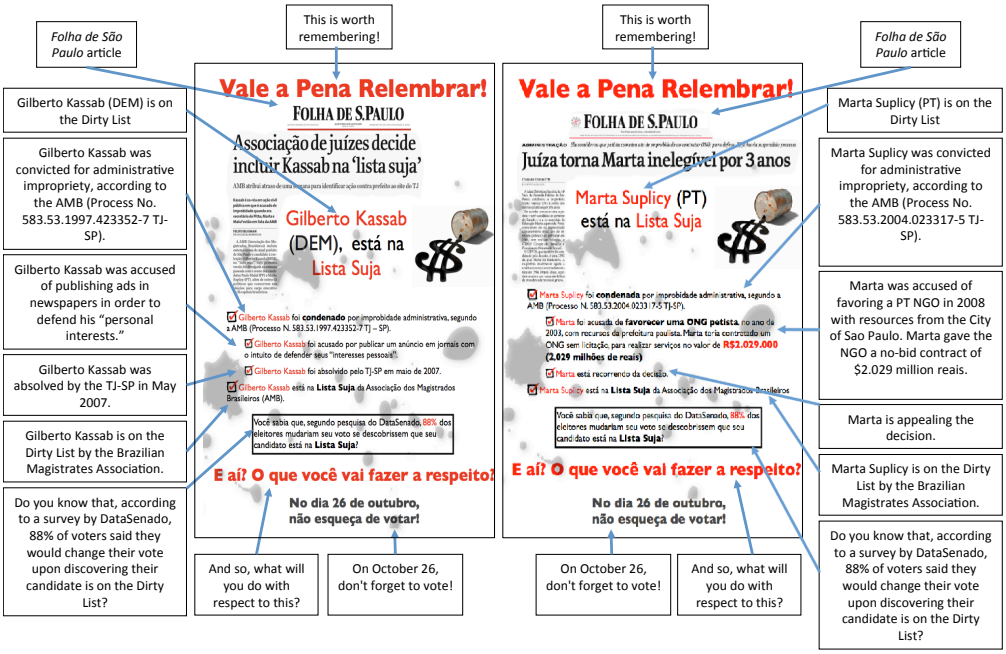
Our findings suggest the historical factors that explain how a party becomes particularly trusted on the issue of corruption and that cause its supporters to vote based on candidates' corruption records is an important area for future research. Thus, previous studies that merely treat corruption as a valence issue are likely to overlook this important dimension of the effects that corruption information can have on the electorate.

Moreover, considering recent developments in Brazil - with PT governments being involved in massive corruption scandals - the anti-corruption brand has likely faded. Other parties and politicians are trying to brand themselves as clean, such as the current president, Jair Bolsonaro, during his campaign against a PT candidate. Reputations are dynamic characteristics of a party and future studies should take this into consideration.

One troubling possibility raised by our findings is that increased transparency may disadvantage candidates from parties with a reputation for clean governance when they compete against candidates from parties with no such reputation. In the case of Brazil, PT candidates may be particularly vulnerable to attacks by opposing parties on the corruption issue. Increased transparency could paradoxically, at least in the short term, reduce the chances of PT candidates winning office, even if are less corrupt than candidates from parties like the DEM party. Of course, this may be an acceptable outcome to PT voters, as long as it creates a long-term incentive for PT politicians to govern without resorting to corruption and for the party to select clean candidates. Still, the heterogeneity across candidates that we document counterintuitively suggests that information campaigns can increase the incidence of corruption in government by disproportionately punishing "clean" parties.

More broadly, our findings suggest that future experimental work on information and accountability will find varying effects across different political contexts. As we found in São Paulo, the existence of information effects depends on highly contextual factors associated with particular candidates, parties, and the distribution of preferences in the electorate. Future work on the effects of information on political accountability should not treat corruption strictly as a valence issue, and should instead address how these antecedent factors affect voters' responses to increased transparency. As we have documented, the relationship between information and accountability is by no means a simple one.

Appendix 1: The Fliers



Appendix 2: Sampling Procedure

In selecting the group of precincts in the randomization group, we made a number of decisions based on our substantive interests and logistical constraints. We chose 400 of São Paulo's 1,759 precincts utilizing a constraint optimization algorithm that operated as follows:

(1) selected a relatively even mix of precincts based on the vote choice in previous elections. The specific covariates are discussed in greater detail in Section 5.2.

(2) chose precincts to maintain a relatively even mix of poor, lower middle class, and middle class precincts.

(3) maximized the distance between the treatment and control groups in order to minimize the potential for cross-over violations.

(4) selected the smallest polling locations in order to maximize statistical power.

(5) limited the geographic areas of polling locations to the north, east, and south zones of São Paulo. Due to budget constraints, the delivery company we used to deliver the fliers limited us to three geographic zones in São Paulo. These three zones best satisfied the other criteria on which we selected the precincts in the randomization group.

(6) included precincts in areas with a high penetration of individual household units with individual mailboxes. We intentionally avoided areas with a high percentage of high-rise and mid-rise apartment buildings, because of the high likelihood of fliers not being delivered by doormen or other personnel who would control access to the buildings.

To reduce the risk of interference across experimental units, we ensured that precincts in the study were not closer than half a mile from other precincts in the study.[19]

After ensuring some amount of distance between the experimental precincts, we grouped them into blocks of two based on longitude, latitude, PT vote share in the 2004 mayoral elections, and PT vote share in the 2006 presidential elections. More specifically, we matched precincts to their nearest neighbor on a Mahalanobis distance metric. Within blocks, each precinct had an equal probability of being selected into treatment.

[19]It is true that despite our precautions, some interference (sometimes referred to as "SUTVA" violations) could have occurred. The most plausible scenario is that a resident in a treatment precinct could have informed a voter living in a control precinct about the content of the flier. While we think that such violations were likely to have been few given that the election occurred only a few days after the distribution of the fliers, any interference that did occur would most likely result in downwardly biased (towards zero) treatment effect estimates. Under the assumption that receiving a flier with negative information about the candidate would not induce voters to vote for the candidate, our treatment effect is a lower bound on the true average treatment effect. More precisely, if the effect of receiving the flier on whether or not a voter votes for the candidate is non-positive in both treatment households and control households that inadvertently receive the information on the flier through interference, then reported treatment effect estimates of the average treatment effect in the absence of interference are downwardly biased. Our estimates would only overstate the treatment effect in the unlikely scenario that the fliers had opposing effects, i.e. that the flier caused voters in treatment precincts to vote against the candidate and caused control households to vote for the candidate. For a precise formulation of bounds in the presence of interference, see Manski (2013).

Appendix 3: Flier Delivery Logistics

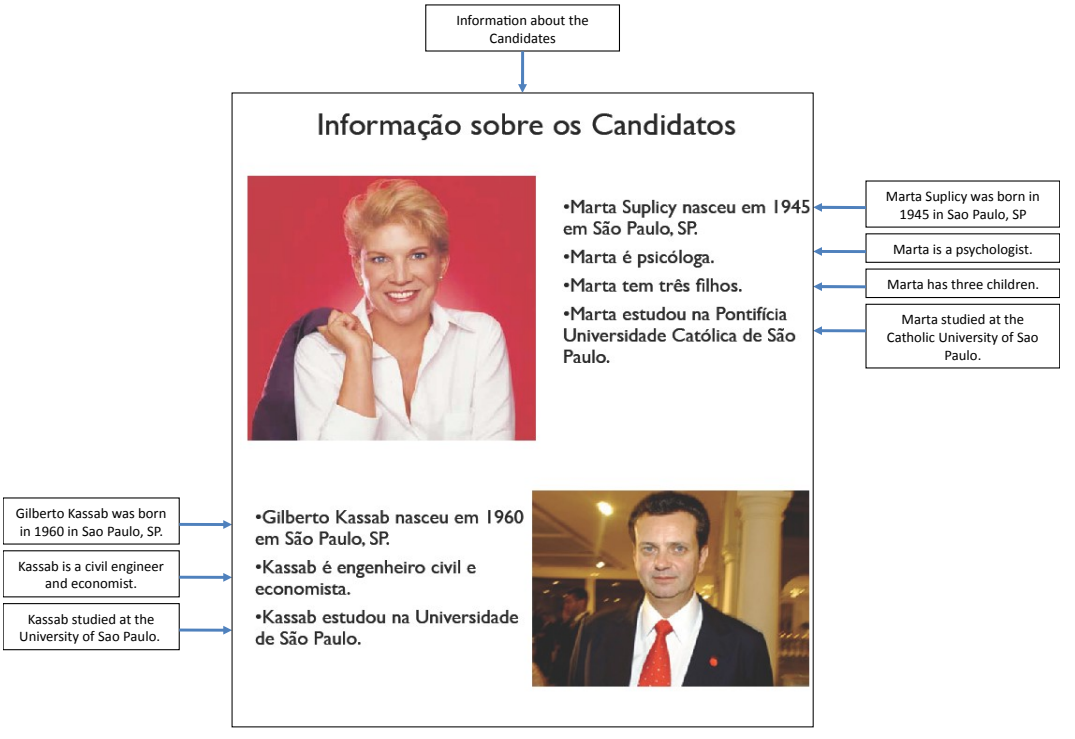
In order to deliver the fliers, we hired a direct marketing firm with extensive experience delivering marketing and political propaganda for prominent multinational and local retailers and political candidates. The firm delivered the fliers from October 22-25, 2008 (over the four days prior to the election), and had a number of enforcement measures in place to make sure that the correct fliers were delivered to households.[20]

Unlike in the United States, Brazilian voters are allowed to choose any voting precinct within an electoral zone located where he or she resides. In 2008, the municipality of São Paulo had 1,759 precincts located in 57 electoral zones. Unfortunately, in Brazil, data is not publicly available for the precincts to which voters are zoned. We spoke to political consultants and experts in voting behavior who stated that approximately 70 to 95 percent of voters vote at the location closest to their house in São Paulo. As a result, we were unable to determine the precise households that belonged to the voting precinct. Voters are, however, only able to vote in the precinct in which they are registered. In determining the appropriate number of households to deliver fliers for a given precinct, we knew the number of voters that were registered to vote at the precinct. We knew that the average number of voters per household in São Paulo at the time of the election was 3.1. In order to be conservative in our estimate of households for a given precinct, we took the number of voters in the precinct, and divided the number by 2.8 to obtain the number of households within a precinct to which we would deliver fliers. We also delivered an additional ten percent of fliers because of the high likelihood of dilution in the immediate area of the precinct. The direct marketing firm maintained a current database with the number of individual houses per city block. The delivery firm located the 200 precincts in the treatment group, and gave maps to the deliverers so that they would "spiral out" from the precinct delivering all of the fliers with the precinct as the center of a radius. Supervisors dropped off delivery personnel at the voting precinct (which almost always was a school). In the weeks after the election, we also asked respondents in the treatment group the distance they lived from their voting precinct, and 63.9 percent stated that they lived 1 kilometer or less from their polling location, and 77.5 percent reported living less than 2 kilometers away from their polling location.

As a result of the imprecision with which we were able to deliver the treatment, we believe that our treatment effects most likely underestimated the impact of the treatment. While the vast majority of voters assigned to a given precinct live in the immediate vicinity of the precinct's polling station, the small number of voters who live far from the polling station—most likely because they never bothered to change their registration after moving—would not have received the flier. Furthermore it is possible that some of the residents who received fliers actually voted in a control precinct, which would further attenuate our estimate. Because we do not have precise data on which voters no longer live near their precinct's polling station, we can only estimate an "intent-to-treat" effect that is likely to be lower in magnitude than the effect among those who actually received the flier.

[20]First, the overwhelming majority of deliverers had worked with the firm previously, and had thus established a working relationship with the firm. Second, supervisors monitored deliverers and also performed random checks of mailboxes to ensure that the proper fliers were delivered. Third, delivery personnel carried hand radios and were monitored by a supervisor based at the office of the direct marketing firm. This supervisor had himself been a deliverer and had good local knowledge of the appropriate time it would take to complete a delivery route. Finally, the firm gave our research team unfettered access to monitor their work. We therefore conducted our own random checks of mailboxes to make sure the correct fliers were delivered and also accompanied the supervisors during the delivery.

Appendix 4: Placebo Flier for the Survey Experiment



Appendix 5: Balance on Baseline Variables (N=400)

Variable	Mean Diff	Standard Error	t-Test p-Value	KS-test p-Value
Number of Registered Voters	-298.38	133.42	0.03	0.09
PT Mayor Vote % (2004)	-0.32	0.98	0.74	0.54
PT Pres. Vote % (2006)	0.07	1.12	0.95	0.86
PT Congress Vote % (2006)	-0.06	0.72	0.93	0.99
PSDB Congress Vote % (2006)	0.32	0.63	0.62	0.14
1st Round Suplicy Vote % (2008)	-1.10	1.37	0.42	0.54
1st Round Kassab Vote % (2008)	0.14	0.74	0.86	0.79
1st Round Blank Vote % (2008)	-0.02	0.08	0.78	0.92
1st Round Invalid Vote % (2008)	-0.07	0.08	0.41	0.79
1st Round Turnout % (2008)	0.20	0.32	0.52	0.18
PT City Council Vote % (2008)	-0.65	0.83	0.43	0.54
PSDB City Council Vote % (2008)	0.86	0.60	0.15	0.33
DEM City Council Vote % (2008)	0.22	0.44	0.62	0.47

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