Title
Corruption in the Court of Public Opinion: How Voters Perceive and Respond to Candidate Corruption

Author
de Figueiredo, Miguel Francisco Pacheco

Publication Date
2016

Peer reviewed|Thesis/dissertation

Corruption in the Court of Public Opinion: How Voters Perceive and Respond to Candidate Corruption

by

Miguel Francisco Pacheco de Figueiredo

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Political Science

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor David Collier, Chair
Professor Henry Brady
Professor Jasjeet Sekhon
Professor Ian Ayres
Professor Edward Miguel

Fall 2016

Corruption in the Court of Public Opinion: How Voters Perceive and Respond to Candidate Corruption

by

Miguel Francisco Pacheco de Figueiredo

Abstract

Corruption in the Court of Public Opinion: How Voters Perceive and Respond to Candidate Corruption

by

Miguel Francisco Pacheco de Figueiredo

Doctor of Philosophy in Political Science

University of California, Berkeley

Professor David Collier, Chair

When do voters consider candidates for elected office to be corrupt? If corruption is strongly disfavored by voters, why do corrupt candidates remain popular and keep getting reelected? These questions are of great importance for a number of reasons. First, understanding how voters perceive candidate corruption can be predictive in determining electoral outcomes. When evaluating candidates accused of impropriety, success in the voting booth for these candidates can be an indicator of prevailing social norms toward corruption. Second, having an empirical foundation for how the public perceives corruption can also serve as an important basis for designing interventions to change such norms, including campaign finance reform and anti-corruption laws. Third, understanding regional differences in voter perceptions of candidates can lead toward building theories explaining variation in toleration of candidate corruption. Finally, uncovering divergence in how courts, laws, and the public define corruption has implications for the legitimacy of democratic institutions and electoral accountability.

The first chapter analyzes how voters conceptualize the corruption of political candidates, and offers explanatory and predictive frameworks that include the most important variables that factor into the voter's decision and predict individual voting behavior when a candidate accused of corruption is up for election. The second chapter, co-authored with F. Daniel Hidalgo and Yuri Kasahara, tests the causal effect of informing voters of corruption on voting behavior with a field and survey experiment in a mayoral election.

The experiments show voters' varied responses to corruption information and argues for a novel mechanism that explains the results. The final chapter examines a number of mechanisms that explain why voters support or punish corrupt politicians, raising new research questions for scholars to consider in future research.

To my parents, Rui and Isabel de Figueiredo, for everything.

Contents

List of Figures

List of Tables

Acknowledgments

This work would not have been possible without the support of many individuals and institutions. I would like to first acknowledge my dissertation committee: Henry Brady, Jasjeet Sekhon, Edward (Ted) Miguel, Ian Ayres, and especially my committee chair, David Collier. They are only part of the faculty community at UC Berkeley that provided unparalleled support that led me to this point. Ruth Berins Collier was incredibly generous with her time challenging me at every meeting to answer an important research question rigorously. Andrew Guzman and Bob Kagan provided very helpful substantive and tactical advice throughout my time at Berkeley, and have been great sources of support in straddling the interdisciplinary divide between law and social science. Many other faculty also provided unparalleled support, including Bruce Cain, Bob Cooter, Sean Farhang, Fred Finan, David Freedman, Rob MacCoun, Justin McCrary, Anne Joseph O'Connell, Alison Post, Bob Powell, Kevin Quinn, Steven Raphael, Dan Rubinfeld, Emmanuel Saez, Howard Shelanski, and Eric Talley.

This supportive faculty community was not limited to the walls of UC Berkeley. Soon after advancing to candidacy, I enrolled in the J.D. program at Yale Law School. John Donohue, Alan Gerber, Don Green, Christine Jolls, Alvin Klevorick, Yair Listokin, Daniel Markovits, Roberta Romano, Susan Rose-Ackerman, Alan Schwartz, Kate Stith, and James Whitman all provided a nice complement to the faculty at Berkeley that advised me. Faculty at other schools – Jeff Fagan, Josh Fischman, James Greiner, Mariana Mota Prado, Jonathan Rodden, Peter Siegelman, Erik Wibbels, Bob Weisberg, Abraham Wickelgren, and Matt Winters – also helped shape this project and provided important support during the writing of this dissertation.

Graduate student communities at UC Berkeley and Yale were also instrumental in this project. Many in this group are now faculty. Direct evidence of this contribution comes from F. Daniel (Danny) Hidalgo and Yuri Kasahara, who co-authored one of the chapters in this dissertation. At Berkeley, this group included Taylor Boas, Jennifer Bussell, Betsy Carter, Devin Caughey, Thad Dunning, Jordan Gans-Morse, Francois Gerard, Matthew Grossman, Veronica Herrera, Michael Higgins, Maiah Jaskoski, Diana Kapiszewski, Jody LaPorte, Ben Lessing, Daniel Mattingly, Lindsay Mayka, Suresh Naidu, Sara Newland, Simeon Nichter, Lucas Novaes, Jessica Rich, Sarah Reckhow, Neal Richardson, and Wendy Muse Sinek. Adam Cohon deserves particular mention in helping me with the last push with data analysis in the final chapter of this project. At Yale, Diego Werneck Arguelhes, Vikram Fielding-Singh, Brian Fried, Ezra Friedman, Jonah Gelbach, Jacob Goldin, Daniel Haar, Ben Johnson, Paul Lagunes, Ben Lindy, Sonia Mittal, Mariana Pargendler, Thomaz Pereira Connor Raso, Ryan Sakoda, Luis Schumerini, and Ben Taibleson. Brookes Brown was an amazing accountability buddy on a daily basis who never let me give up.

I will forever be indebted to the incredible hospitality, support, and insight given by a number of people – too many to name here – while I was in Brazil. Fernando Limongi was virtually a committee chair. Claudio Abramo, Angela Alonso, Rogerio Arantes, Marta Arretche, George Avelino, Martina Bergues, Ciro Biderman, Natalia Salgado Bueno, Fabricio Costa, Joaquim Falcão, Marcus Figueiredo, Enoque Gomes, Eduardo Jordão, Antonio Lavareda, Natalia Maia, Marcus Melo, Custodio Miranda, Teresa Miranda, Paulo Moura, Nara Pavão, Carlos Pereira, Lúcio Rennó, Alberto Luis Rollo, Luis Schuartz, Cesar Zucco. The doors to four institutions – Cebrap in São Paulo, Fundação Getulio Vargas Law School in Rio de Janeiro, and the University of São Paulo Department of Political Science – always were open to me and were a vibrant place for intellectual exchange in the field.

I also would like to acknowledge the generous financial support I received from a number of sources to complete this project. I received funding from the National Science Foundation's Doctoral Dissertation Research Improvement Grant (DDRIG), the Social Science Research Council, UC Berkeley's Survey Research Center, Yale Law School's John M. Olin Fellowship, Linkage Program, and Oscar M. Ruebhausen Fund.

There is one person who traverses all of these categories. Margaret Boittin started the doctoral program in political science the same year as me, and she also entered law school the same year as me. She was a companion in graduate and law school and in Brazil for part of the time during field work for this project. She has been an insightful colleague and has given unrelenting support and never gave up believing in me, even when it involved personal and professional sacrifice for her. She became family in 2011, when we married, and we became the proud parents of our daughter, Emilia, during the sprint to the finish line for this project. My heartfelt gratitude and thanks goes to her.

This journey all started with the intellectual curiosity inspired by family. My sister, Alcina, and brothers, Paul, John, and Rui, all provided incredible examples to follow professionally and personally. Their spouses, James Dalton, Kathy de Figueiredo, Bronwyn de Figueiredo, and Natalia Ferretti have extended that example. My father, Rui J. P. de Figueiredo, Sr., who passed away before this project was completed, and my mother, Isabel de Figueiredo, taught me to pursue my own dreams even when the path was long and circuitous. My deepest gratitude is reserved for my parents, and it is to them that I dedicate this dissertation.

Chapter 1

Electoral Accountability and Public Opinion

1.1 Introduction

Politics and corruption are seemingly inseparable. In Romania, more than one quarter of the country's 41 mayors elected in the June 2016 election were either under investigation or placed under preventative arrest for corruption (Bucureasa, 2016). In 2014, according to the Association for Democratic Reforms and National Election Watch, two anti-corruption organizations, nearly one third of the members of the Indian Parliament had criminal cases pending against them (Varghese, 2014). Similarly, as of May 2016 in Brazil, 59 percent of Senators at the federal level either had convictions or had been the subject of a criminal investigation in the past, and roughly the same proportion were in the same situation in Brazil's lower house (S. Smith, 2016). This phenomenon is not limited to developing countries; from 2009 until 2015, 16 New York state legislators had criminal convictions that included federal corruption, bribery, embezzlement, extortion, tax evasion, and perjury (Craig, Rashbaum, and Kaplan, 2016). In all of these cases, polls showed high voter dissatisfaction with corruption, yet significant numbers of politicians with corruption allegations and convictions running against "clean" candidates succeeded in being reelected.[1]

When do voters consider candidates for elected office to be corrupt? If corruption is strongly disfavored by voters, why do corrupt candidates remain popular and keep getting reelected? These questions are of great importance for a number of reasons. First,

[1] Bucureasa (2016) states in a poll taken two months before the election, "more than 82 per cent of Romanian voters wouldn't cast their ballots for a person who is under investigation or on trial on corruption charges." Varghese (2014) states that a report by the Association for Democratic Reforms showed that in India "the chances of winning was higher for candidates with criminal cases, compared to the candidates with a clean record."

understanding how voters perceive candidate corruption can be predictive in determining electoral outcomes. When evaluating candidates accused of impropriety, success in the voting booth for these candidates can be an indicator of prevailing social norms toward corruption. Second, having an empirical foundation for how the public perceives corruption can also serve as an important basis for designing interventions to change such norms, including campaign finance reform and anti-corruption laws. Third, understanding regional differences in voter perceptions of candidates can lead toward building theories explaining variation in toleration of candidate corruption. Finally, uncovering divergence in how courts, laws, and the public define corruption could have implications for the legitimacy of democratic institutions and electoral accountability.

One critical function of democracy is the power it gives to the citizenry to punish or reward politicians for their performance through elections. This form of vertical accountability provides an important check on those in power, and is one important feature that a number of scholars have stated is necessary for democracies to be self-enforcing and self-sustaining (Przeworski, S. C. Stokes, and Manin, 1999; Przeworski, 2003). Specifically, elections provide the authority to govern, while also determining "winners" and "losers" signaling to candidates what policies and behaviors should and should not be followed (Przeworski, 2003, p. 312).

Yet, often, we see that corrupt politicians get reelected, potentially undermining the promise of democratic accountability and the rule of law. Consider the following examples.

- **Alcee Hastings, former U.S. District Judge for the Southern District of Florida and current U.S. Representative for Florida:** Hastings has served in the U.S. House of Representatives since 1992 – winning reelection 12 times – even though he is only one of six federal judges (with a lifetime appointment) impeached by Congress (the Senate impeached him for his role in a bribery scandal). While in Congress, he has been involved in a number of scandals and Judicial Watch, an organization that exposes misconduct by politicians, ranked him first out of the 435 members of the U.S. House for nepotism for allegedly paying his girlfriend and relatives salaries and fees (Judicial Watch Blog Corruption Chronicles, 2012). Hastings won reelection in his congressional district in 2016 with 80.3 percent of the vote.
- **William Jefferson, U.S. Representative from Louisiana:** Jefferson earned the nickname "Dollar Bill" for stashing a $90,000 cash bribe in his freezer. He eventually was convicted of nearly a dozen corruption counts - including bribery, racketeering and money laundering - and was reelected after being indicted (Markon, 2009; Judicial Watch Blog Corruption Chronicles, 2012).

- **Paulo Maluf, current federal congressman in Brazil's lower house (*Câmara dos Deputados*), former governor of the State of São Paulo and former mayor of the City of São Paulo:** Maluf was indicted in New York, and has charges pending against him in Brazil for being part of a conspiracy to embezzle and conceal public funds. In addition to conspiracy, the indictment by the New York County District Attorney's Office also charged Maluf with grand larceny and criminal possession of stolen property. His constituents are known to describe him with the saying "Rouba mas faz" ("He robs, but he gets things done") (Romero and Sreeharsha, 2016). Maluf supported the impeachment of President Rousseff and is part of a recent effort in the legislature to strip prosecutors and judges of their power to investigate politicians involved in corruption (Romero, 2016).

The above cases all involve the successful reelection of candidates who were clearly guilty of corruption, but they also vary in important ways. The cases vary in the type of corruption in which the candidate engaged. The actions include favoritism (nepotism), accepting bribes, embezzlement, and money laundering. They also vary in the extent to which the alleged act results in private enrichment versus advancing a campaign or the policy preferences of the candidate. Legal actions taken in response to the alleged corruption also differ. Beyond the corruption itself, candidate attributes, such as the individual's gender, race, party, and public office may all be important factors that play into the candidate's reelection prospects. The candidate's links to voters, policy positions, and performance on the job are just some of the factors that may influence the probability of reelection given a corruption allegation.

We currently lack a coherent framework that explains the reelection of corrupt politicians. This study focuses on providing a framework for understanding the conditions under which voters will punish or reward corrupt politicians, and then testing aspects of the framework empirically. Although formal rules, well-designed laws, and efficient institutions are often important determinants of electoral accountability, they are often insufficient to curb candidate corruption (deSousa and Moriconi, 2013). To do this, this chapter examines the factors that determine how corruption is defined by voters, and what will lead them to reward or punish corrupt politicians in elections. The chapter that follows explores *when* voters will punish corrupt politicians by relying on a field experiment and survey experiment in an election to see if informing voters about the corruption of politicians will have a causal effect on their voting behavior. After discussing the causal effect of corruption information on voting behavior, the final chapter examines important tradeoffs that voters make in evaluating candidate corruption by experimentally manipulating candidate attributes presented to voters. The results of this experiment shed light on the *mechanisms* that will lead to varied outcomes in voting behavior, and ultimately answer the question of *why* voters punish or reward corrupt politicians.

In doing this, the work makes a number of contributions to the existing literature. First, while there is a vast literature about the consequences of corruption, research on what leads government to change to being clean is still nascent. As Adserà, Boix, and Payne (2003, p. 446) succinctly state: "[i]n contrast to the mounting scholarly research on the consequences of good governance, our knowledge about what causes governments to be clean and efficient is still at its infancy." Though the authors made this statement about the state of the literature more than a decade ago, I would argue that the literature is still at a similar stage with respect to what leads governments to become clean.

Second, a theoretical and empirical literature focused on voting behavior posits that increased information given to voters will result in increased turnout (Wolfinger and Rosenstone, 1980; Palfrey and Poole, 1987; Feddersen and Pesendorfer, 1996). The hypothesis is also prominent in work that has focused on corruption. Treisman (2000), for instance, suggests that increased transparency in democracies reduces corruption. Similarly, Kunicová and Rose-Ackerman (2005) assume that when corruption is made public, a candidate's reelection prospects decrease. The empirical chapters as part of this work show that under certain conditions, increasing information can lower voter turnout, leading to the need to place scope conditions on such theories.

Third, measuring the causal effect of corruption information on voting behavior is challenging, since information about the corruption of politicians is confounded by numerous other factors such as socioeconomic status and party identification. Much of the literature uses cross-national, descriptive survey, and observational data to make model-based inferences about the effect of corruption information on voting behavior (J. Peters and Welch, 1980; Welch and Hibbing, 1997; McCann and Dominguez, 1998; Treisman, 2000; Pereira, Melo, and C. M. Figueiredo, 2009). These studies make strong assumptions about unobserved factors being "controlled for" in the statistical model. A more recent literature, including the work presented in the next chapter, relies on field and natural experiments to make stronger causal inferences about the effect of corruption information on voting behavior (Ferraz and Finan, 2008; Banerjee, Kumar, et al., 2010; Banerjee, D. Green, et al., 2010; Humphreys and Weinstein, 2012; Chong et al., 2015). This work is still nascent, and there is a need for additional replication to discern clear patterns. The next chapter includes an in-depth discussion of this literature.

Fourth, very few studies have focused on the *mechanisms* leading voters to reward or punish corrupt behavior.[2] While a large body of literature has focused on country-level determinants of corruption, this study focuses on the role of the citizenry in changing or upholding electoral outcomes when candidates are accused of corruption. In contrast to work that has focused on economic voting – economic determinants that influence the

[2]Notable exceptions include Klašnja and Tucker (2013), Winters and Weitz-Shapiro (2013), and Klašnja, Tucker, and Deegan-Krause (2016).

voter's decision – this study is focused on *corruption voting*, which for the purposes of this analysis is defined as the study of voting behavior and public opinion in response to allegations of candidate corruption.[3] Chapter 3 is dedicated to understanding the tradeoffs voters make when faced with at least one corrupt candidate on the ballot. Elements in these tradeoffs include the type of corruption the candidate engaged in, the state of the corruption allegation, legal action (including court decisions) taken in response to the allegation, attributes of the candidate such as party, gender, race, and policy positions, among other factors.

Finally, along with the refinement of positive theories, there also are important empirical and normative questions about the conditions under which certain types of corruption information will reduce turnout, and the extent to which information in elections should be designed to increase voter participation and electoral accountability. Having an empirical foundation for how the public perceives corruption can also serve as an important basis for designing interventions to change such norms and the design of campaign finance reform and anti-corruption laws. This work raises important implications for the potentially deleterious consequences of transparency efforts, and motivates an empirical and policy research agenda dedicated to understanding how laws that regulate libel, truthful information in advertising, and free speech achieve desired outcomes for society. Similarly, participation and disclosure rules related to the activities of third parties active during elections could have an impact on the conditions under which voters reelect politicians suspected of corruption.

To gain traction on these questions, it is important to first have conceptual clarity and a clear analytic framework. This chapter proceeds by (1) defining the universe of corruption being discussed in this project; (2) developing a conceptual framework for understanding the conditions under which voters punish or reward politicians accused of corruption; and (3) discussing mechanisms that would explain the conditions under which voters will punish or reward a politician with corruption allegations.

1.2 Corruption Definitions and Types

Prior to engaging in a discussion about different types of corruption, a discussion of the definition of corruption is in order. There is little doubt that corruption is a highly contested concept (Gallie, 1956). The goal here is not to argue for a particular definition of corruption, but rather to show important differences in how various actors have approached conceptualizing corruption. These definitions are then contrasted with popular conceptions of corruption. Defining candidate corruption is challenging, especially since understanding of the concept in the realm of public opinion may not accord with definitions of the term offered by academics, courts and statutes. Yet, the exercise is important

[3] I borrow the term "corruption voting" from Klašnja and Tucker (2013).

because voter perceptions of different types of corruption can determine whether politicians who commit allegedly corrupt acts will be elected or not.

Formal Definitions of Corruption

One of the most popular conceptions of corruption in the academic literature, from Joseph Nye, defines it as "behavior which deviates from the formal duties of a public role because of private-regarding (personal, close family, clique) pecuniary or status gains; or violates the rules against the exercise of certain private-regarding influence" (Nye, 1967, p. 419). The emphasis on formal duties and rules (rather than norms) in this definition offers a more formalist approach to corruption, leading one to question the need, under certain conditions, for formal rules to be a requirement for an act to be defined as corrupt. A similar definition that has gained traction in academic, legal, and policy communities is Transparency International's definition: "the abuse of entrusted power for private gain." "Private gain" can take many forms, but personal enrichment is certainly one of the attributes that voters will find most objectionable in the behavior of a politician, and will be most likely to punish. For corruption violations to be definitively punished by the electorate, they often have to be severe violations of social norms and the law, and often sanctioned by legal action (Heidenheimer and Johnston, 2011; deSousa and Moriconi, 2013). There is greater variation in voter responses when conditions of illegality and personal enrichment are relaxed. For these reasons, some authors (e.g. Stephenson, 2015) choose to exclude legal campaign contributions, lobbying, and similar activities from their working definitions. While this may be appropriate because their work has different objectives, in evaluating the probability of voters punishing corrupt politicians, this aspect of corruption should be included in a definition of candidate corruption since it can both reflect and determine electoral behavior of voters.

Popular Conceptions

Political scientists and other social scientists have largely strayed from conceptualizing corruption from the perspective of the public and from using the public interest as a criterion in a definition, mainly because the standards for corruption vary greatly across individuals and the difficulty in defining the public interest. James Scott states this difficulty clearly. "Corruption, we would all agree, involves a deviation from certain standards of behavior. The first question which arises is, What criteria shall we use to establish those standards?" (Scott, 1972).

Scott states that defining the public interest precisely and with agreement would be nearly impossible since that is an inherently ideological inquiry. Scott then discusses the difficulties of incorporating public opinion into a definition of corruption, and ultimately concludes that the diversity and ambiguity of views among the public as to what constitutes a corrupt act makes defining a corrupt act difficult. Scott concludes that the criteria one

would use to determine a working definition would likely be arbitrary and problematic (Scott, 1972, p. 4).

The task of advancing any one conception of corruption that involves defining public interest or discerning public opinion is resolutely difficult. That goal is distinct from categorizing those different views of corruption, and then using the definition to categorize the scope of inquiry for when voters punish "corrupt" politicians. One reason for having a discussion of how the public conceives of corruption is that the majority of citizens hold a notion of corruption that is broader in scope than the way the term is used in academic literature or legal discourse.

1.3 Candidate Corruption Types in the Court of Public Opinion

To what extent do voters distinguish different types of corruption in candidates? What are the types of corruption that will lead voters to punish a politician in the voting booth? In this section, I argue that an important distinction is corruption that results in private enrichment versus corruption that is seen as "part of the political game." Electoral corruption can include a variety of actions as was seen in the introduction. Actions can include, but are not limited to bribery, vote buying, favoritism in procurement processes, nepotism, embezzlement, money laundering, collusion (Botero et al., 2016). These different types of corruption not only have different consequences for society, but also are likely to result in different electoral outcomes, all else being equal. The focus of this research is on elected officials, rather than those involved in the civil service or private citizen actions (unless the individual decides to run for office, and a corruption allegation while the individual was a bureaucrat or private citizen factored into voting behavior). Corruption types viewed as enhancing one's personal wealth involve a benefit that only the politician receives, whereas clientelistic exchanges and campaign financing are more likely to be seen as having a broader benefit (Bardhan, 1997).

The electoral effects of different types of corruption types is under-explored in the literature. Truex (2011) examines the reaction of individuals to petty corruption (favoritism and small gifts) versus large-scale bribery in Nepal and finds toleration of petty corruption. The study contributes toward establishing a threshold of corruption that is acceptable in the minds of voters, but because the research design relies on observational data, the study cannot isolate the impact of corruption type on individual attitudes. In a more recent survey experiment in Argentina, Botero et al. (2016) randomized whether a candidate offered employment and construction materials; "misused public funds" and increased his personal wealth; or did not benefit from corruption. Their experimental design also allowed the authors to test the effect of partisanship and socioeconomic status had an

effect on candidate evaluations. The authors found that voters punished corruption involving private enrichment more harshly than clientelism. Surprisingly, they also found that wealthier respondents did not find one type of corruption less acceptable (or more acceptable) than the other, whereas they differentiated between the two corruption types, selecting the clientelist candidate over the one who engaged in large-scale bribery (Botero et al., 2016, p. 19). Their results contrasted with Weschle (2016), who found the opposite result in a survey experiment in India when analyzing reactions to how a politician spends funds he receives from a company for a political favor.

One critical dimension that has gone unstudied in previous studies is the tradeoffs that voters make with respect to corruption type. The conjoint experiment in Chapter 3 not only experimentally manipulates corruption type and party, but also includes candidate policy positions, court decisions on political corruption, and attributes such as gender and affect. The design has the advantage of randomizing treatments, while offering a diverse set of choices that the voter is confronted with on a ballot with at least one candidate facing a corruption allegation.

1.4 Interpreting Voting Behavior Outcomes

The universe of voting behavior actions is both limited and relatively straight-forward: (1) vote for a candidate, (2) cast a spoiled ballot or protest vote, or (3) abstention.[4] Yet, ascribing intention to those actions can prove challenging. This section elucidates voter intentions that emerge from voting behavior when at least one politician on the ballot is accused of corruption.

Field interviews I conducted in Brazil reveal a salient distinction made by Brazilian voters, concerning tolerance of corruption involving use of public funds for personal enrichment (contract kickbacks, bribery, etc.) versus impropriety related to buying public policy or illegally financing a campaign. In June 2005, Brazilian Congressional Deputy Roberto Jefferson, who at the time was under investigation for a corruption scandal with the Brazilian post office, claimed the *Partido dos Trabalhadores* (the Workers Party, or PT) paid monthly "allowances" (*mensalão*) to Congressmen of R$30,000 (approximately US$16,800) per month so that they would vote in line with President Luiz Inácio (Lula) da Silva. The scandal resulted in eight resignations and three removals of Congressmen from office. Although empirical work by Rennó examining the effect of the *Mensalão* scandal concludes

[4]Court decisions can shed light on the difficulty of regulating and deciphering the intention of write-in votes. In 1992, the U.S. Supreme Court held in *Burdick v. Takushi* that Hawaii could enact a complete ban of write-in votes on the ballot. The case narrowed the holding of an earlier case, *Dixon v. Maryland State Administrative Board of Election Laws*, where the Fourth Circuit held that write-in votes was for a fictional candidate such as Donald Duck should be accommodated, since one's fundamental constitutional right included the right to say that no candidate was acceptable.

that the scandal did prevent candidates in the 2006 elections from seeking reelection and negatively affected the probability of reelection, the importance of partisanship and performance on other issues such as the economy, ultimately had larger effects on voting behavior in the case of the presidential election (Rennó, 2007).

The Exit, Voice, and Loyalty Model

Albert O. Hirschman's *Exit, Voice, and Loyalty* (EVL) provides a useful explanatory framework that sheds light on voting behavior when at least one of the candidates faces corruption allegations (Hirschman, 1970). Although Hirschman intended for the framework to be used in politics, relatively few scholars truly apply the framework to voting behavior.[5] Those that have used it to analyze voting behavior have exclusively applied it to allegiance to a party; to the best of my knowledge, the framework has not yet been applied to individual candidate voting. The framework is particularly useful in elections with allegedly corrupt politicians, since voter loyalty may transcend partisan and other allegiances. Scholars have suggested the use of the framework is particularly powerful where there is low turnout, high protest voting (either through write-in votes or the casting of spoiled ballots), high party coalition change, or frequent party switching among candidates – all of which are likely to occur when a candidate accused of corruption is on the ballot. These elections, as Weber (2011) points out with European parliamentary elections, offer a useful lens to see outcomes such as core voting, protest, conversion, and alienation that are part of the EVL framework (Weber, 2011, p. 907).

Prior to discussing the application of EVL, a brief discussion of Hirschman's model is in order. Hirschman originally developed the model to explain behavior in a market situation with firms and customers, but he also applied it to political parties and voters.[6] The model seeks to explain the behavior that takes place in reaction to a drop in quality of a product offered on the market by a firm. Consumers, in reaction to the quality drop, have the options either of "exit" (switching to another firm), "voice" (expressing displeasure to the firm with the hope of a response that will address the issue), or not doing anything in response.

For Hirschman, the response is determined by a cost-benefit calculus that involves the consumer's loyalty, alternatives, and expectations. When loyalty is present, the likeli-

[5]Dowding et al. (2000, p. 478) state that "[m]uch of the work in comparative politics uses the EVL framework merely to give a label to some of the processes under discussion and none tests Hirschman's purported interactions." The one exception, according to the authors is with party membership and behavior. More recent scholarship that has developed theoretical models and testing where the EVL framework is more central to voting behavior include Kang (2004), Gehlbach (2006), Hooghe and Pauwels (2011), and Weber (2011).

[6]In EVL, Hirschman parenthetically refers to the voter in place of the consumer (Hirschman, 1970, pp. 67-70, 73, 75).

hood of voice increases, and with less loyalty, the likelihood of exit increases. With more alternatives, the probability of exit increases, but consumers or voters may also leverage the availability of alternatives to increase the power of their voice. When consumers have high expectations of their own influence in achieving reform, that increases the probability they will respond by using voice, rather than exit (Hirschman, 1970; Weber, 2011).

Applying the Exit, Voice, and Loyalty Model to Elections with Alleged Corruption

In applying the EVL model to elections where candidates are allegedly involved in corruption, defining how voting behavior relates to exit and voice is an important first step. Table 1.1 describes the available exit and voice options available to the voter who is faced with voting for his or her own candidate accused of corruption: abstention, casting a spoiled ballot or writing in a candidate, or voting for the opposing candidate who is "less corrupt." The table applies a model developed by Weber (2011) and applies the EVL framework to individual candidate voting and also includes the possibilities of compulsory and write-in voting, both of which are present in a number of elections in developed and developing countries. While virtually all applications of EVL to voting behavior describe exit, voice and loyalty with respect to party identification, this application of the framework is intended to apply either to candidates or political parties. In many countries, the party system is weakly institutionalized; party switching is common among candidates, electoral volatility is high, and party labels do not prime or convey information to voters in the same way they would in a setting with high party institutionalization (Mainwaring and Torcal, 2006). In addition, settings where clientelistic politics dominate may also have more candidate-centered voting loyalties, especially where candidates are distributing direct benefits to voters such as payments for votes, jobs, or goods.

Table 1.1: Exit and Voice in Candidate Voting Behavior

	Voting for Less Corrupt Candidate "Opponent"	**Spoiled Ballot/ Write-In Candidate**	**Abstention**
Voice	Single-Election-Vote-Choice	Protest	"Voice-by-Silence"
Exit	Long-Term Candidate Switching	Indifference/ Weak alienation/ Compelled by Law	Indifference/ High Alienation/ Immune to Sanctions

Among the possibilities presented, the most obvious expression of voice involves vote

switching – in this case, voting for the alternative candidate when the voter's first-choice candidate is faced with corruption allegations.[7] Voice expressed through single-election-vote-choice refers to the voter engaging in a one-time vote against the candidate, while long-term candidate switching involves a permanent abandonment of the candidate in response to the alleged corruption.

Mandatory and write-in voting permit more tempered forms of voice and exit that largely have been overlooked in the literature. Barry (1974, p. 91) states that the voter's decision between exit and voice really involves:

> collaps[ing] two separate choices into one another. One choice is between exit (leaving) and non-exit (staying), the other is between voice (activity, participation) and silence (inactivity, non-participation). In any one situation, one choice has to be made of each pair of options, even if only by default.

However, introducing compulsory voting implies more than these two options for the voter, since protest voting is a "middle ground" between absenteeism and vote switching.[8] Voice by protest is most clear when a voter either writes in a candidate, especially if the write-in candidate has a low chance of winning the election, or casts a spoiled ballot as a form of protest. Casting a spoiled ballot in a compulsory voting system may reflect voicing discontent with the slate of candidates, but it also could also demonstrate the power of law in compelling voters to come to the polls. In doing so, those who are uninformed or uninterested in electoral politics might cast a spoiled ballot in order to avoid sanctions such as fines or suspension of privileges. "Weak alienation" characterizes those who cast spoiled ballots solely because they are compelled to vote, because they are at least engaged with the state through following the state and participating in the voting process, even if their engagement with the political system is limited. In examining the historical origins of mandatory voting, Helmke and Meguid (2010) point out that a number of ruling parties (including those on the right) supported compulsory voting because they were worried about their own supporters not turning out to vote in greater numbers relative to the opposition under a voluntary voting regime. These ends point to the desire of constitutional designers specifically intending to mitigate voter alienation through the passage of compulsory voting laws.

Despite Hirschman's original conceptualization of exit meaning an active choice for another firm or supplier, as Weber (2011) notes, a number of scholars have operationalized

[7] Not included in Table 1.1 is loyalty, which would be reflected in the voter choosing to stay with the candidate, in spite of the corruption allegation.

[8] Kang (2004) makes this point with a model of protest voting, although his model is more focused on abstention as a form of protest voting.

abstention into models of exit that include voting (Bélanger, 2004; Weber, 2011; W. R. Clark, M. Golder, and S. N. Golder, 2013). Cynicism with the electoral system and candidate menu can result in exit from voting altogether. Feelings of powerlessness and alienation could characterize those who exit through abstention. Moreover, in settings where there is compulsory voting, those who receive immunity from sanctions because they are unable to afford the penalties are often those who are most alienated from the political system. Particularly in developing countries, their interactions with the state might be limited or non-existent, and thus their abstention may be characterized by complete exit from the political system.

Weak enforcement of abstention sanctions or low penalties may also factor into the absenteeism in countries with mandatory voting. When sanction costs are low or are weakly enforced, groups may feel relatively unburdened or even immune to the sanctions, leading them to exit through absenteeism. Abstention rates in Greece reached 44 percent in 2015; although Greece has compulsory voting, it is rarely enforced (Adamopoulos, 2015). Similarly, Costa Rica, the Dominican Republic, Egypt, El Salvador, Honduras, Mexico, and Venezuela all do not enforce their compulsory voting laws (United Kingdom Electoral Commission, 2006; Rich, 2014). In these settings, it is possible that mandatory voting may make no difference, although the law being on the books alone might lead some either to vote or cast spoiled ballots. In addition to unenforced sanctions, weak sanctions can also lull large segments of the population into abstention, especially if large segments of society are relatively immune to sanctions because they are able to incur their cost.

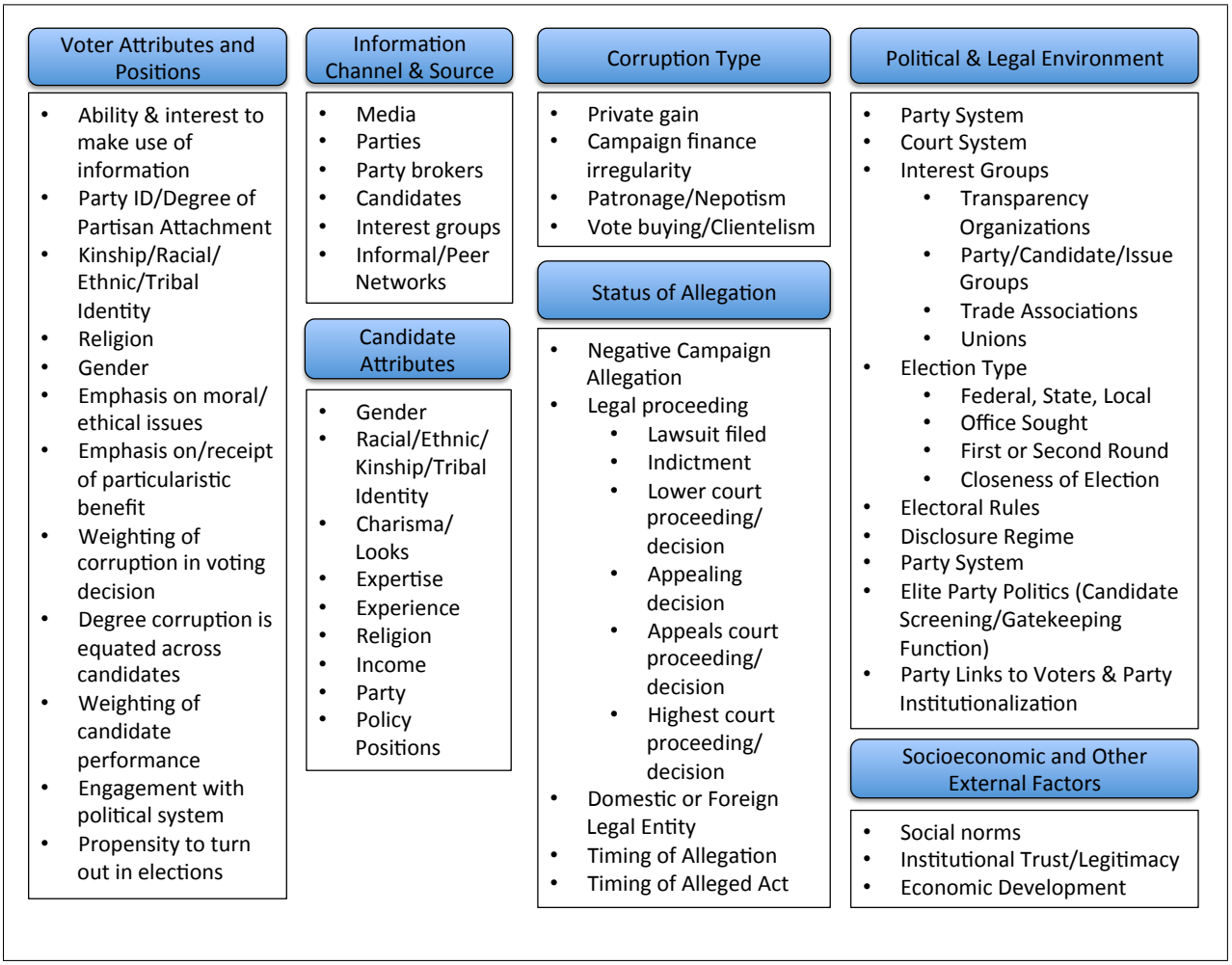
In distinguishing exit from voice, one other important conceptual distinction emphasized by normative and formal political theorists to keep in mind is voters who abstain as the result of alienation versus those who abstain as a consequence of indifference. Indifference, in this context, means that the voter perceives little or no difference between the "menu of options" of candidates on the ballot, while alienation implies a negative evaluation of all candidates (Brody and Page, 1973; Zipp, 1985). This distinction will be discussed in greater detail in the next chapter.

The complexity of discerning the voter's motivation raises important concerns related to the measurement of voter motivation and the implementation of research designs that can rigorously identify the motivation of each voter type. Field experimental work which has examined the conditions under which voters punish or support corrupt politicians can only identify the effect that corruption information can have on a candidate's vote share, turnout, spoiled ballot, or protest vote behavior. Identification strategies that can show vote switching and underlying motivations are challenging to do and have yet to be done in the field. In this project, I attempt to shed light on this behavior in a conjoint experiment in Chapter 3, where this issue is discussed in greater depth.

1.5 A Framework for Analyzing Candidate Corruption and Voting Behavior

Now that the scope of the concept for this project has been defined, I turn to describing the conceptual framework for analyzing the conditions under which voters will reward or punish corrupt politicians. The framework presented in Figure 1.5 identifies the most important individual- and macro-level factors that lead voters to punish, favor, or abstain from voting in an election when at least one candidate is perceived to be corrupt.

Figure 1.1: Factors Influencing Voter Behavior Toward a Candidate with a Corruption Allegation



The framework offers some new directions for research on the reelection of corrupt politicians. First, little of the existing literature has focused on the type of corruption that leads

voters to punish politicians with corruption allegations. Second, the status of the corruption allegation offers a new dimension that the literature has overlooked. Third, the framework includes sources of corruption information that are broader than much of the extant literature, including informal and peer networks, which have usually not been included in previous studies of the reelection of allegedly corrupt politicians. Finally, the framework brings together individual- and macro-level factors that weigh into the voter's decision, which have largely been studied separately in previous literature.

Information Channel and Source of Candidate Corruption Allegation

One important means of punishing corrupt politicians is to give voters information about the corrupt behavior, providing a potential basis to vote against such candidates. A theoretical literature focused on the effects of information on voting behavior concludes that under certain conditions, information improves accountability to mass publics (Alvarez, 1998; Lupia and McCubbins, 1998; Przeworski, S. C. Stokes, and Manin, 1999; Besley and Burgess, 2002). However, the empirical literature is still relatively scant on understanding the conditions under which information about corruption results in electoral accountability.

More generally, one hypothesis in the literature is that voters do not punish candidate corruption because they lack high-quality information to make a decision that would take corrupt politicians to task for their behavior (Ferraz and Finan, 2008; Humphreys and Weinstein, 2012; deSousa and Moriconi, 2013). Reasons for this information deficit among citizens are numerous. In a number of developing countries, accountability structures such as a professionalized press corps, robust watchdog organizations, and transparency in government are not commonplace. Access to information in certain developing countries may also be costly, especially for those in more rural areas, making the assessment of credible information challenging.

Making valid causal inferences about these relationships is difficult, in large part because information about the corruption of politicians is rarely randomly assigned to voters. A number of studies with non-experimental data that attempt to examine the effects of corruption charges on electoral performance find only modest effects (J. Peters and Welch, 1980; McCann and Dominguez, 1998). However, in a study of municipal governments in Brazil, Ferraz and Finan (2008) exploit randomized corruption audits, and find relatively large effects that ultimately decrease the probability of incumbent politicians being reelected; similarly a study by Chong et al. (2015) conducted in Mexico primarily shows a negative effect on incumbency. By contrast, in the randomized experiment I conducted with F. Daniel Hidalgo and Yuri Kasahara, discussed in the next chapter, corruption information given to voters about the incumbent had no statistically significant effect on voting behavior, although both experimental studies reduced turnout. The turnout result thus places scope conditions on previous theories positing that more informed voters are

more likely to turn out (Wolfinger and Rosenstone, 1980; Palfrey and Poole, 1987; Feddersen and Pesendorfer, 1996). Thus, while information about candidate corruption given to voters can enhance electoral accountability resulting in the punishment of corrupt politicians (Anderson and Tverdova, 2003; Chang and Golden, 2004; Rennó, 2007; Almeida, 2008; Ferraz and Finan, 2008; Winters and Weitz-Shapiro, 2013), there can be deleterious effects as well, including decreased voter turnout and reduced citizen confidence and trust in politicians and democratic institutions (Banerjee, D. Green, et al., 2010; Banerjee, Kumar, et al., 2010; Chong et al., 2015). Negative turnout effects can take place even in the presence of mandatory voting, and in some cases, voters are willing to bear the costs of absenteeism. Additionally, despite a number of papers that have shown that corruption is not a salient issue in the consciousness of many voters in the developing world (Anderson and Tverdova, 2003; Chang and Golden, 2004; Rennó, 2007; Almeida, 2008), experimental evidence has shown the opposite.

Field experimental work in this area is still nascent, and work that attempts to uncover the mechanisms that lead to these varied results is also relatively understudied in the literature. Common to all of the field experiments in this area is that they attempt to provide high quality and credible information that voters can easily digest. Recent work by Weitz-Shapiro and Winters (2014) and Botero et al. (2015), varies the corruption source in survey experiments in order to shed light on the effects of the credibility of individual sources. Specifically, Weitz-Shapiro and Winters (2014) vary whether corruption information in Brazil is disseminated via a federal corruption audit or from an opposing party, and the authors find that voters are more likely to punish the politician when the information comes from the audit. Botero et al. (2015) vary whether allegations coming from a reputable newspaper, the judiciary, or a well-respected non-governmental organization (NGO) in Colombia have an impact on vote choice. The authors find that the newspaper allegations have the strongest effect on voters punishing politicians with corruption allegations. This work is an important first step toward understanding the role of the source of information as having an effect on corruption information.

Given the current state of research, there is a need to evaluate the efficacy of additional channels of information used to disseminate corruption information. The framework thus includes interest groups, parties and party brokers, and informal social networks as other actors that disseminate corruption information in important ways.

The survey experiment by Botero et al. (2015) and the field experiment in the next chapter present treatment conditions where corruption information is presented by an interest group. In the former case, respondents are given information by *Misión de Observación* (MOE), an election monitoring NGO, and in the latter case by the *Associação dos Magistrados Brasileiros* (AMB), a trade association of judges. Both of these NGOs, according to the respective authors, have a high degree of credibility with voters, and largely serve the purpose of disseminating truthful information in elections.

However, interest groups can also exist as extensions of intricate party networks, and can also be the originators of biased or even false information. In the United States, increased advertising expenditure on attack ads by interest groups is one of the most important and dramatic recent changes in elections (Brooks and Murov, 2012). Estimates of campaign ad spending during the 2016 US election cycle exceed $11 billion, and (Wesleyan Media Project, 2016).[9] A prominent example, although not with corruption information, involved ads and a book promulgated by "Swift Boat Veterans for Truth," a 527 organization that questioned U.S. presidential candidate John Kerry's service record during the Vietnam War. Although the group's accusations were later widely discredited, descriptive survey work has shown a possible negative impact on Kerry's vote share (Cheng and Riffe, 2008). The literature on negative campaigning reveals important mechanisms through which corruption information can have an impact on voting behavior. In discussing the efficacy of attack ads by "dark money" interest groups, Brooks and Murov (2012, p. 388) distinguish between two important concepts and mechanisms through which such information can shape voting behavior: effectiveness and persuasiveness.[10] They state that "effectiveness is not simply persuasion. Rather, net effectiveness in a two-candidate race is persuasion (movement of the target downward in terms of favorability) minus backlash (movement of the beneficiary of the negative ad downward in terms of favorability)," ultimately concluding that "[a]n ad is effective when it depresses support for the target more than it depresses support for the benefiting candidate" (Brooks and Murov, 2012, p. 388). Thus, both effectiveness and persuasion must be examined in order to determine the impact of corruption information on voting behavior. Doing so will take account of backlash, a reaction from voters that the negative message sent was unacceptable. Thus, understanding the conditions under which corruption information will be perceived as an "attack" versus truthful negative information will shape how the voter acts on the information, and one step that is needed is to see how information from a broader set of interest groups is received by the electorate. Moreover, survey experimental research should consider the possibility of measuring abstention as a possible response by individuals. The work presented in Chapter 3 attempts to address this issue.

In addition to interest groups, political parties play an important role both by conveying information about candidates through a party label and by distributing information about candidates during elections. In settings where clientelism is prominent, party and candidate "brokers" too have a significant role in the process. Although the party or candidate broker's role in rally mobilization (e.g. Auyero, 2001; Szwarcberg, 2012), public goods provision (e.g. S. C. Stokes et al., 2013), vote or turnout buying and mobilization (e.g.

[9] In the wake of the passage of the Bipartisan Campaign Reform Act of 2002, and court decisions such as *Citizens United v. Federal Election Commission*, Super PACs, 527 organizations, and 501(c)(4) groups, Congress and the courts abolished numerous restrictions on the establishment, funding, disclosure, and advertising for such interest groups. For additional context on these changes, see Brooks and Murov (2012).

[10] Brooks and Murov (2012) relate the mechanisms only to negative attack ads, but they can be applied to negative information more generally in elections.

Levitsky, 2003; S. C. Stokes et al., 2013; Gans-Morse, Mazzuca, and Nichter, 2014), their activities also include campaigning and disseminating information about candidates, along with generating and responding to allegations of corruption. Zarazaga (2014, p.30) succinctly states that "[s]cholars and the media have underestimated the most common way brokers have of winning votes: by campaigning. ...Given the price of airtime on national television and the low readership of newspapers in poor areas, mayors and their challengers rely mainly on local campaigns run by brokers."[11] This role of the brokers as "propaganda activists" is enhanced by their simultaneous role as a reliable and trusted person in the community, where their enduring reputation for delivering on promises also enhances their credibility with information dissemination (Zarazaga, 2014, pp. 38-40).

Status of the Corruption Allegation

Another important factor largely overlooked in the literature is the status of the corruption allegation, which refers to the accuser or entity originating the accusation and any processes taken after the allegation is made or corruption action takes place. Status is distinguished from the allegation's source. The source relates to the information channel through which the voter receives news and updates of the candidate's alleged corruption. The status, by contrast, includes the initial accuser of the candidate's corruption or the process by which the corruption became known, and any related court, investigative, or other processes by which the details of the corruption are revealed. Thus, if an accusation about a candidate's corruption is initially launched by a newspaper or interest group, the newspaper or interest group would be part of the allegation's status and also a source for voters to access information about the candidate's corruption. If the accuser is an individual citizen who witnessed or took part in a corrupt act, he or she would not be considered the information channel for that act; rather, for the purposes of this study, the accuser would be considered part of the allegation's status and not part of the source or information channel for the voter.

Examining the process in which an alleged act of corruption is generated and then goes through the legal system, government investigation, or other process reveals moments that can be predictive of a candidate's support or demise. One additional feature worth noting is that the evidentiary burden can be relatively low, especially in the early stages of an arrest or the court process. Yet, the action of an arrest or an indictment can lead voters to "convict" in the "court of public opinion." Noticing the distance between the evidentiary burden required in a corruption allegation process, and how predictive it is not only of the person's ultimate guilt, but his or her demise in future elections sheds light on the power that actors such as prosecutors and judges have in shaping public opinion, and the credibility that voters have in the justice system. The mere threat of a

[11] Even in non-clientelistic settings, parties also can play an important role in coordinating messages with media and other groups. Koger, Masket, and Noel (2009) discuss this dynamic in detail.

lawsuit or investigation involving political corruption may reduce a candidate's prospects for reelection. Despite these possibilities, rigorous work on the effects of public opinion in response to corruption prosecutions, investigations, and court decisions is still in its infancy.

The extent to which voters have trust in prosecutors and judges will probably determine the likelihood they will punish politicians accused of corruption. If voters trust prosecutors and the judiciary and understand the nature of justice system procedures and rulings, then court decisions on corruption - whether they are convictions or not - are likely to serve as credible information informing voters of corruption. If there is distrust in prosecutors and the judiciary, then one of two outcomes are most likely: (1) all else equal, voters who perceive the court to be committing more Type II errors (failing to convict the guilty) than Type I errors (convicting the innocent) will only be responsive to judicial decisions when a conviction is handed down; or (2) *ceteris paribus*, the court decision will have no effect on the voters decision. The introduction of appeals adds complexity to the situation.[12] In Chapter 3 of this work, one treatment condition varies court rulings on candidate corruption, and examines the effects on voting for candidates in a conjoint survey experiment conducted in Brazil. To the best of my knowledge, this is the first experimental intervention to examine the effect of public corruption court rulings on voting behavior.

Candidate Attributes

Voters not only look at a candidate's corruption; they also weigh their decision in light of the candidate's policy positions, performance, and attributes. An established literature in American politics examines the effect of candidates' traits on voting behavior (e.g. Campbell et al., 1960; Funk, 1996; Bartels, 2002; Hayes, 2005). Although early works such as Campbell et al. (1960) emphasized the importance of candidate traits, the focus on candidate attributes became subordinated to the role of party identification, issue ownership, and other "rational" determinants of voting (Funk, 1996, pp. 1-2). A body of survey research in the 1980s and 1990s established a strong link between candidate traits and voter attitudes (e.g. Markus, 1982; Kinder, 1986). Traits have included the candidate's intelligence, competence, empathy, warmth, and trustworthiness, among others.

[12]The literature on prosecution of corruption is still emerging. Gordon (2009) develops a formal model and uses a regression discontinuity design to test for partisan bias in corruption prosecutions, and finds partisan bias in federal corruption prosecutions in the Clinton and Bush (II) Justice Departments, although the results may understate the bias for Bush (II) while overstating the bias for Clinton. Zhang (2015) uses a regression discontinuity design that relies on the prosecution of high-ranking Chinese Politburo member Chen Liangyu and a survey to examine the effect of corruption enforcement on public opinion. He found the crackdown increased citizen trust of the regime. In a review article, Gordon and Huber (2009) suggest the need for further research in this area.

Traits and "trait ownership" (Hayes, 2005) can play an important role in the voter's decision when corruption allegations surface in an election. In a survey experiment manipulating candidates' competence and warmth in response to marital infidelity or tax evasion, Funk (1996) found that both competence and warmth improved candidate evaluations, but competence had a greater effect. Other attributes include the extent to which the voter identifies with the candidate (Warner and Banwart, 2016), which can heighten the probability of forgiveness for a corrupt act. In Chapter 3 of this paper, I offer, to the best of my knowledge the first experimental research of candidate evaluations that includes these traits in order to see how they factor into candidate evaluations, when policy preferences, corruption type, and party are also included as treatment conditions.

Gender, Race, and Other "Fixed" Characteristics

The candidate's traits are also shaped by visible features such as gender or race which may have an impact on voters' support of a clean or corrupt politician. A literature exploring the effect of gender and corruption voting has only recently emerged. The majority of the literature examines the effect of women in politics on perceptions and actual levels of corruption (Dollar, Fisman, and Gatti, 2001; Swamy et al., 2001, e.g.).[13] According to Esarey and Chirillo (2013, p. 365) the assumption that women are more harshly punished for corruption has only been "anecdotally observed in American politics." Outside the United States, Jackson and R. Smith (1996) present a case study of punishment of female politicians for corruption in Australia, and Mancuso et al. (1998) demonstrate from interviews that the belief is present in Canada. In Chapter 3, the conjoint experiment has gender as a treatment condition, which will shed light on whether female politicians are punished more harshly than their male counterpoints for corruption. To the best of my knowledge, little, if any, work has been done that explicitly looks at the impact of race, age, and other candidate characteristics on the impact of corruption.

Political Party

Few studies have examined how voters and politicians react to corruption scandals, and the study of partisans is particularly important because providing information to strong partisans might be a useful strategy that corrupt politicians rely on to secure support. A relatively consistent and unsurprising finding in the literature is that strong partisans are the least likely to punish politicians with allegations of corruption (e.g. Slomczynski and Shabad, 2012; Anduiza, Gallego, and Muñoz, 2013; Winters and Weitz-Shapiro, 2015). Thus, in more highly institutionalized party systems, where links to bases of support are stronger and where a higher barrier for candidate entry is imposed, the probability of a corrupt politician appearing on the ballot decreases. In such systems, the meaning of a party label and party socialization carries greater weight, possibly serving as a signal for voters to sort between corrupt and clean politicians (deSousa and Moriconi, 2013).

[13] For an in-depth review of this literature, see Esarey and Chirillo (2013).

Although the lower barriers to entry, and party brand recognition in weakly institutionalized party systems are less likely to prohibit the entry and punishment of corrupt candidates, high party competition (which can take place in both highly and weakly institutionalized party systems) can increase the chances of credible information about corrupt politicians being disseminated. This increased accountability can result in electoral punishment, if voters are responsive to corruption information (Mainwaring and Torcal, 2006; deSousa and Moriconi, 2013).

Finally, the presence of an anti-corruption party, as discussed elsewhere in this chapter and the next chapter, can have important effects in raising the salience of the issue in elections. It also can lead to defection when a candidate with corruption allegations appears on the ballot from that party, as was the case in the experiments presented in the next chapter.

Voter Attributes and Positions

What attributes of voters lead them to be more likely to punish corrupt politicians? A number of studies in the literature focus on voters' inability to monitor the behavior of politicians or exercise their right to vote either because of institutional constraints or because of obfuscatory actions of the politician (e.g. Myerson, 1993; Persson, Tabellini, and Trebbi, 2003; Chang and Golden, 2007), while assuming a homogeneous electorate (Klašnja, 2016). In this section, I focus on the attributes that are most prevalent in the voting behavior and corruption literature, or that have emerged from the research I have conducted.

Partisan Attachment

Partisanship – characterized by a psychological attachment to a particular political party – often has an important influence on citizen perceptions of democratic institutions, candidates, and voting behavior. While studies of party identification in terms of mass politics has been the object of a rich line of inquiry in the American and European politics literature (e.g. Campbell et al., 1960; Bartolini and Mair, 1990; Miller and Shanks, 1996; Achen, 2002; D. P. Green, Palmquist, and Schickler, 2002), its dynamics are quite different and relatively under-studied in new democracies, in part because the role of parental socialization during recent democratic transitions is oftentimes much less pronounced (Converse, 1969; Jennings and Niemi, 1981; Achen, 2002). Although the socialization process might be different, there is evidence of stable partisan identification and preferences in some newer democracies (see, e.g. Samuels (2006) for Brazil and McCann and Lawson (2003) for Mexico). At the same time, however, a number of forces, work against this trend in these countries. Inter-generational partisan attachments are often not present when a host of new parties has emerged after a recent democratic transition. Moreover, Mainwaring and Torcal (2006) rightly point out that most democracies in developing countries also

have high electoral volatility, weak ideological and programmatic links with voters, and strong direct links between candidates and voters. Thus, voters in settings with weak party institutionalization are likely to respond to corruption allegations differently than in advanced industrialized countries. All else equal, overall levels of partisanship will be lower, party ties are less likely to induce loyalty in the face of corruption allegations, and candidate switching and spoiled ballots cast either as "voice" or "exit" will be higher (Gingerich, 2009; Klašnja and Tucker, 2013; Winters and Weitz-Shapiro, 2015).

One other important mechanism at work discussed in the next chapter and also mentioned by Klašnja, Tucker, and Deegan-Krause (2016) is the salience of corruption brought about by the presence of an anti-corruption party in the electoral arena. Specifically, the authors point to how an anti-corruption party raises the salience of corruption in society, leading large segments of society to engage in *sociotropic corruption voting*, or "vote choice influenced by [the] perception of corruption in society" (Klašnja, Tucker, and Deegan-Krause, 2016, p. 70). While this is "one side of the coin," field and survey experimental work discussed in the next chapter, coupled with a conjoint experiment that follows point to a backlash that can take place when voters feel betrayed by an anti-corruption party. Specifically, unlike voters who may respond with denial or by increasing their threshold for corruption when faced with a tradeoff between party loyalty and voting for a corrupt candidate (Anduiza, Gallego, and Muñoz, 2013), when provided information about corruption, voters from an anti-corruption party are more likely to be intensely negative than non-partisans or voters from other parties. For this reason, the weighting of corruption in the voting decision is a factor included in the framework given in Figure 1.5.

Education, Political Awareness, and Engagement

In the field experiment discussed in detail in Chapter 2, much of the population had relatively low education. Their changed behavior is likely to be consistent with theories that suggest that information about candidate behavior will lead less informed voters to update their assessments of politicians (Arceneaux, 2007; Malhotra and Kuo, 2008) and also with theories involving assessments of candidate performance (retrospective voting) (e.g. Key Jr., 1966; Fiorina, 1981; Winters and Weitz-Shapiro, 2013). These contrast with theories emphasizing partisan cues as important heuristics that permit less informed voters to act as if they are informed (e.g. Lupia and McCubbins, 1998; Jackman and Sniderman, 2002), and a body of work that emphasizes a lack of updating of priors so that the voter's views are stable and consistent with existing political beliefs (e.g. Zaller, 1992). Yet, it is important to realize that those theories likely do hold for those who remain loyal to other parties.

Another important body of literature posits that highly informed and more educated voters are more likely to punish corrupt politicians (deSousa and Moriconi, 2013; Winters and Weitz-Shapiro, 2015; Klašnja, 2016). Reasons for this dynamic include the motiva-

tion and ability of these voters to better distinguish different types of corruption, see the harmful impact of corruption in their life and community, and differentiate evidentiary burdens for corruption accusations. Finally, the possibility exists that poorer voters, although more likely to receive particularistic benefits in clientelistic settings, are less ideological than more highly educated voters, which can increase the chance of partisan attachment resulting in the support of a corrupt politician (Klašnja, 2016). However, deSousa and Moriconi (2013) point out that this proposition is still highly contested. One thing to keep in mind is that the theories discussed at the beginning of this section may apply to certain types of voters (like those who rank corruption highly), while theories emphasizing awareness and education could apply to other types of voters.

Political and Legal Environment

One could imagine citizens responding in a variety of ways to court decisions involving corruption. If voters trust the judiciary and understand the nature of its rulings, then court decisions on corruption whether they are convictions or not are likely to serve as credible information informing voters of corruption. If there is distrust in the judiciary, then two outcomes, which were mentioned earlier, are most likely: (1) all else equal, voters who perceive the court to be committing more Type II errors (failing to convict the guilty) than Type I errors (convicting the innocent) and will only be responsive to judicial decisions when a conviction is handed down; or (2) *ceteris paribus*, the court decision will have no effect on the voters decision.

In addition to court decisions on corruption, electoral rules can also shape the way voters will punish corrupt politicians. First, the number of candidates in the election can influence the extent to which voters will make an informed voting decision. In a novel survey experiment in Brazil, Aguilar et al. (2015) examined the impact of candidate race on vote choice. The authors found that with only a few candidates on the ballot, respondents selected candidates without regard to race. As the ballot size increased with more candidate choices, white and non-white respondents were more likely to choose a candidate of their own race. With corrupt candidates, the role of information provision and the salience of corruption as an issue are likely to be more important in settings where there are more candidates on the ballot. Thus, all else equal, corrupt candidates are more likely to be punished in second round elections, where voters can scrutinize each candidate in greater detail, increasing the probability that the allegedly corrupt act will be known to voters. In addition, whether electoral punishment is more likely in local and regional elections than in national elections is unclear and likely to be context-specific. In localities where clientelism is prominent, voters may be able to punish political machines that do not deliver on promises, but on the other hand, the monitoring of votes may diminish the chance that a corrupt political machine would be voted out of power. Whether or not clientelism is present, voters are likely to have greater ease in seeing the provision of public services and if corruption is undermining efficiency and quality of services. However,

as deSousa and Moriconi (2013, p.482) point out, in most countries, mayors spend but do not tax and voters are more likely to be hostile to those levying taxes.

The screening of candidates, either by parties or electoral entry rules can also prevent potential candidates involved in corruption from entering the political arena. Scholars have pointed out the higher entry barriers of single- or multi-member districts relative to proportional representation systems, the absence of party list voting, and high party competition all increase electoral accountability and reduce the likelihood of corrupt candidates having a place on the ballot (deSousa and Moriconi, 2013; Persson, Tabellini, and Trebbi, 2003; Kunicová and Rose-Ackerman, 2005; Kurer, 2005; Myerson, 1993).

Socioeconomic and Other External Factors

To date, very little work has been done on the extent to which voters hold politicians accountable for corruption when in different socioeconomic conditions. The lack of literature is understandable; approaching this question in a causal manner presents challenges since economic conditions can be correlated with many other factors. In comparing the reaction of voters to economic conditions in Sweden (a low corruption country) and Moldova (a high corruption country), Klašnja and Tucker (2013) find that Swedish voters punish corrupt politicians equally, irrespective of the economy. Moldovan voters, by contrast, are more likely to punish allegedly corrupt politicians when the economic conditions are more challenging. The economy is a proxy for performance of the politician, and perhaps not surprisingly, voters in more difficult economic conditions are more likely to assign blame to incumbents for an economic downturn. Moreover, the corrupt act – especially it involves private enrichment – can accentuate inequality and create greater resentment when an elite politician enriches himself while citizens are suffering during difficult economic times. When economic times are good, voters are more likely to be attracted to the politician's competence and even believe that the officeholder should stay in power for the prosperous economy to continue (deSousa and Moriconi, 2013).

1.6 Conclusion

Taken together, this chapter offers an in-depth look at when and why voters punish corrupt politicians. The framework includes inter-play of macro- and micro-levels that work to determine whether voters will punish or support allegedly corrupt politicians. The complex inter-play of political, economic, and social forces suggests that variation in voter response to corruption should not be seen solely as a valence issue as a number of scholars have done in the past (D. E. Stokes, 1963; Ansolabehere and Jr., 2000; J. Green, 2007; M. Clark, 2009; Curini and Martelli, 2010; Curini, 2015).

Chapter 2

When Do Voters Punish Corrupt Politicians?

(with F. Daniel Hidalgo and Yuri Kasahara)

2.1 Introduction

When do voters punish corrupt politicians? The question has important implications for institutions intended to keep politicians accountable. Electoral accountability is often perceived to be an important means of reducing incentives of politicians to engage in corruption. While there is a vast literature about the consequences of corruption (Johnston, 1986; Mauro, 1995; Olken, 2005), the literature focused on the causes of non-corrupt governments is still nascent. As Adserà, Boix, and Payne (2003, p. 446) succinctly state: "[i]n contrast to the mounting scholarly research on the consequences of good governance, our knowledge about what causes governments to be clean and efficient is still at its infancy." One precondition for electoral accountability is sufficient knowledge by the citizenry of politicians' records. When voters are informed about accusations of corruption, most assume that voters will punish the corrupt candidates. This paper shows that information about candidate corruption given to voters can indeed result in the politician being punished by voters, but that some candidates are more accountable to voters when it comes to corruption than others. The degree to which voters view corruption as important to their decision-making can vary substantially and, furthermore, can be correlated with political cleavages. As a result, we show that increased transparency can have divergent partisan consequences, even when two competing candidates have corruption convictions. 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.

We find that when voters view corruption as important, then the increased provision of

information can induce supporters of the corrupt candidate to abstain. Our results establish that transparency can suppress turnout even in the presence of mandatory voting, demonstrating that in some cases, voters are willing to bear costs not to vote. Additionally, despite a number of papers that have shown that corruption is not a salient issue in the consciousness of many voters in the developing world (Anderson and Tverdova, 2003; Chang and Golden, 2004; Rennó, 2007; Almeida, 2008), we find, under certain conditions, it still remains an important determinant of voting behavior.[1] While a host of non-governmental organizations (NGOs), international organizations, and governments have initiated various efforts to increase transparency and government accountability in elections, few have analyzed the impact of these initiatives in terms of their effect on electoral behavior in a manner that allows one to make valid causal inferences. Our study presents a step toward accomplishing such a goal, shedding light on the conditions under which corruption may or may not be subject to voter sanction.

In this study, we conduct a field experiment during the 2008 mayoral run-off election in São Paulo, Brazil, the seventh largest city in the world. In our study, to our knowledge the first field experiment involving elections in Latin America, we exploit the fact that both candidates in the run-off election had been convicted of corruption and inform selected voters of these convictions via the distribution of fliers. We randomly assigned whether or not households in the vicinity of a given polling station receive fliers containing the information. The experimental design allows us to make inferences with a high degree of internal validity about the effect of information on voting behavior, and unlike previous studies, we are able to examine the effects not only of the incumbent, but also of the challenger.

Specifically, we take 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 election for mayor 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. During the week prior to the elections, we administered two treatments: the first was a flier informing voters that Kassab appeared on the Dirty List and gave information about the nature of his conviction, and the second was a flier that did the same for Suplicy. We then randomly assigned voting precincts that would receive the Kassab or Suplicy flier, and also 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

[1] Winters and Weitz-Shapiro (2013), in a nationally representative survey experiment in Brazil, similarly find that voters tend to reject corrupt politicians when information about the corruption is delivered in a specific, credible, and accessible manner.

flier, and 200 precincts were in the control group. In the week prior to the election, we distributed a total of 187,177 fliers to individual households. To measure the effect of the intervention, we examined electoral outcomes.[2]

Our results varied by individual candidate. The Kassab flier had no effect on vote choice, number of spoiled ballots or on turnout. The Suplicy flier, by contrast, moved votes on average relative to the control group by 2.6 percentage points, had no effect on spoiled ballots, and a negative 1.8-1.9 percentage point average treatment effect on voter turnout. The turnout results are particularly surprising given that Brazil has mandatory voting. We believe the results of our study suggest limits to theories positing that more informed voters are more likely to turn out (Wolfinger and Rosenstone, 1980; Palfrey and Poole, 1987; Feddersen and Pesendorfer, 1996).

To explain these divergent effects measured using aggregate vote returns in our field experiment, we rely on individual-level data from a survey and an embedded experiment that we fielded the week after the election. We find that Suplicy's and Kassab's voters do not differ in intensity of support, ex-ante knowledge about the corruption accusations, or the degree to which they view the accusations as serious. We do find, however, that Suplicy's voters place much greater importance on corruption when evaluating candidates than do Kassab's supporters. Not only do Suplicy supporters claim that a candidate's record on corruption is important to them at higher rate than Kassab voters, but we also find that they are much more sensitive to corruption accusations in our survey experiment. Kassab supporters do not change their evaluation of Kassab when they learn about his placement on the Dirty List. Suplicy voters, however, do judge their favored candidate more negatively upon learning about her record, which is consistent with our field experiment findings. Overall, these contrasting results place important scope conditions on when information campaigns are likely to increase accountability through the democratic process.

2.2 Corruption Information and Voting Behavior

An important precondition for electoral accountability is whether or not voters have access to information about corrupt behavior of public officials, which may prompt them to vote against such candidates on election day. A theoretical literature focused on the effects of information on voting behavior concludes that under certain conditions, information improves accountability to mass publics (Alvarez, 1998; Lupia and McCubbins, 1998; Przeworski, S. C. Stokes, and Manin, 1999; Besley and Burgess, 2002). However, the empirical literature is still relatively scant on understanding the conditions under which

[2]We obtained data from the São Paulo Regional Electoral Tribunal (*Tribunal Regional Eleitoral*, or TRE).

information about corruption results in electoral accountability.[3] Making valid causal inferences about information effects is difficult, in large part because availability of information about the corruption of politicians is confounded by factors such as socioeconomic status and partisanship. A number of studies with non-experimental data that attempt to examine the effects of corruption charges on electoral performance find only modest effects (J. Peters and Welch, 1980; McCann and Dominguez, 1998).[4] In a study of municipal governments in Brazil, Ferraz and Finan (2008), exploiting randomized corruption audits, find relatively large effects that ultimately decrease the probability of incumbent politicians being reelected. Their important work, which examines the effects municipal-level corruption audits, however, does not include candidate-specific treatments, and their intervention also only involves incumbent politicians.

Field experiments that examine the effects of corruption on voting behavior have only recently emerged in the literature. To the best of our knowledge, our experiment conducted in October 2008; Banerjee, D. Green, et al. (2010)'s and Banerjee, Kumar, et al. (2010)'s studies in India, conducted in March-April 2007 and December 2008, respectively; and Chong et al. (2015)'s work, conducted in Mexico in June and October 2009, are among the first field experiments that attempt to randomize informing voters about politicians' performance in order to examine the effects on voting behavior. Focusing on the consequences of transparency for *incumbent* electoral performance, these other studies have generally found that revelations about corruption have negligible effects on incumbent vote share relative to challengers' vote share. The effects on turnout have been more mixed. The Banerjee, Kumar, et al. (2010) study found that distribution of information about the criminal records of New Delhi politicians increased turnout by about 3.6 percentage points. Chong et al. (2015), on the other hand, found a negative effect of 4 percentage points when voters are given information about corruption from government corruption audits in municipalities with highly corrupt incumbents.

Revealing the corruption record of a candidate could be loosely viewed as a negative attack, even if it does not come from the opposing campaign. From this perspective, a relevant body of work is the negative campaign advertising literature, which focuses overwhelmingly on the US context. This largely observational empirical literature has been inconclusive on the consequences of negative attack ads for candidate electoral performance (Lau, Sigelman, and Rovner, 2007), though no studies have focused on advertisements that emphasize corruption. With respect to political participation, Ansolabehere and Iyengar (1995), initially relying on laboratory experiments, argued that negative ad-

[3]Notable exceptions include Adserà, Boix, and Payne (2003), Chang (2005), Reinikka and Svensson (2005), Olken (2007), Ferraz and Finan (2008), Banerjee, D. Green, et al. (2010), and Banerjee, Kumar, et al. (2010), and Chong et al. (2015).

[4]One observational study that is an exception is Pereira, Melo, and C. M. Figueiredo (2009), which finds large negative effects on the probability of reelection when examining the effect of state corruption audits in the state of Pernambuco, located in northeast Brazil.

vertising demobilizes the electorate. One of the mechanisms they cite is particularly relevant: negative campaigns could lower the probability of voting for the target of the attacks without simultaneously increasing the probability of voting for the attacking candidate, prompting voters to simply abstain. Thus, while not necessarily provoking vote switching, negative campaign advertising could still punish targeted candidates via decreased turnout of their supporters. The observational empirical evidence for this contention, however, has been mixed (Finkel and Greer, 1998) and has not been tested experimentally by examining actual turnout behavior.

The contrasting results of these studies motivate important questions about the mechanisms that explain variation in the voting behavior in these different contexts. Whether or not a voter actually changes his behavior due to the revelation of information will depend on a number of factors, but a useful framework for explaining heterogenous effects is the spatial model of elections (Enelow and Hinich, 1984). The spatial model underscores the important mechanism of how political factors such as ideological attachments can mediate the effect of corruption information in the minds of voters. Voters receiving a large amount of subjective utility from a particular candidate's victory ("core" supporters) will be unlikely to change their vote or abstain unless the corruption charge is particularly serious or they place a high degree of importance on corruption in their vote decision. For more marginal ("swing") supporters, however, revelation about corruption is more likely to push voters to either abstain, cast a spoiled ballot, or switch their vote to the opposing party. When the costs of voting relative to abstaining are high, then marginal supporters who learn about corruption charges are particularly likely to abstain. Following a similar logic, learning about corruption could mobilize non-voters to vote for the opposition, as the difference in utility between abstaining and voting for the opposition would decrease after the information revelation.

Under this spatial framework, one would expect that the effects of experimental interventions revealing information about corruption would depend upon the distribution of core and swing voters in the electorate, as well as the importance supporters and non-voters place on corruption.[5] If the proportion of marginal supporters is large, then one would expect that the revelation of corruption information would induce abstention (if the costs of voting relative to abstention are high) or casting spoiled ballots (if the costs of voting relative to abstention are low) or even vote switching. Casting spoiled ballots is a particularly attractive strategy for disappointed marginal voters when fines for abstention are substantial in countries with mandatory voting. Similarly, if voters place a high degree of importance on corruption as an issue, then increased transparency could induce many core supporters to abstain, spoil their ballot, or change their vote. On the

[5]Another important background condition that could explain divergent effects is pre-existing perceptions of the candidate's propensity to engage in corruption. If voters already believe that a given candidate is corrupt or know about the specific allegations, then increased transparency is unlikely to affect behavior since voters' decisions have already incorporated this information.

other hand, if there are many abstainers with sympathies for the opposition party, then increasing information about corruption could induce these citizens to vote on election day and thus increase total turnout. The key point is that the aggregate effect of information revelation on turnout and vote shares will depend on the ex-ante distribution of voters' preferences, the relative importance of corruption in voters' decision-making, and the cost of abstention relative to voting.

This discussion suggests that the effects of corruption revelation could vary by candidate, even if both are equally corrupt. If two candidates accused of corruption compete against each other, as is the case in our study, the impact of information revelation about each candidate's record could vary substantially because of any one of these factors. We offer evidence that partisan attachments can overlap with corruption preferences – a factor the extant literature on corruption overlooks – and can be an important mediating variable that shape whether voters punish corrupt politicians. Of course, while we have emphasized factors linked to the distribution of voter preferences, other variables such as candidate skill and background could shape voters' reaction to increased information. The existing experimental literature has largely ignored heterogeneity across different types of candidates, despite the fact it is quite likely that candidates' susceptibility to increased transparency is likely to depend on the contextual factors we have highlighted. In the following analysis, we pay particular attention how candidates' supporters differ and how these differences affect their response to increased information.

2.3 The Brazilian Electoral Context

São Paulo's 2008 Municipal Elections and the AMB's *Lista Suja*

On October 26, 2008, Kassab and Suplicy ran against each other in the run-off election for mayor of São Paulo. Kassab, the incumbent mayor, assumed the position in 2006 upon the resignation of José Serra, who became governor of the state of São Paulo and belonged to the Brazilian Social Democratic Party (PSDB or *Partido da Social Democracia Brasileira*). Kassab's Democratic Party is a center-right party that formerly was the PFL or *Partido da Frente Liberal*, one of parties that splintered from ARENA, the official party of the military regime that held power in Brazil from 1964 until 1985. Suplicy, who was mayor of São Paulo from 2001 until 2004, served as the Minister of Tourism in the federal government for a year starting in 2007, before resigning to run for mayor. At the time of the election, President Luiz Inácio da Silva (Lula), a co-partisan of Suplicy, enjoyed widespread popularity; however, other PT candidates did not maintain the same level of support.

Suplicy's party, the PT, was traditionally associated with both leftist ideology and clean and participatory governance (Samuels, 2004). While the party moderated its ideologi-

cal positions over time, the PT deliberately cultivated its brand as a party with a more ethical mode of governance and its leaders stressed the need for broader participation of the citizenry and civil society in policymaking (Hunter, 2010, p. 84). The PT heavily criticized Brazil's other major parties as corrupt and clientelistic and at least some of PT candidates' success could be attributed to the fact that they developed an image of promoting transparency in government. The São Paulo branch of the PT contributed to the creation of this brand in the early 1990s when Suplicy's former husband, Eduardo Suplicy, a federal senator, spearheaded corruption investigations against numerous municipal officials, including four past presidents of the city council (Hunter, 2010, p. 85). The PT's reputation for clean government, however, has been tarnished in recent years by national scandals involving bribery of legislators (such as the *Mensalão* scandal in 2005) and illegal campaign finance schemes involving contracts of the state-controlled oil company, Petrobras, revealed in 2014. In the case of Mensalo, the national-wide broadcasted trial that led top PT politicians to jail was conducted only in 2012, thus the negative impacts on the reputation of the party as anti-corruption were not widely disseminated at the time we conducted this research.

The brand of Kassab's party, the Democratic Party (DEM, formerly known as the PFL), was less distinctive than the PT's. Nominally a center-right party, the DEM 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. The party did not have a notable anti-corruption record, given its image of being composed of "traditional" politicians with more particularistic styles of governance. One major blemish on its national record related to corruption was the party's strong support for the failed presidency of Fernando Collor de Mello, who resigned in the wake of an influence peddling scandal involving one of his main advisors. In São Paulo, the local DEM party supported the administration of Paulo Maluf, a two-time mayor of the city who was later convicted of corruption charges involving illegal government contracts, and is associated with the phrase *rouba mas faz* (he robs, but he gets things done). Perhaps because of its past record, Kassab did not tend to emphasize his party in his campaign appeals and instead stressed his technocratic credentials and experience in government.

The AMB, the main professional association for Brazilian judges, established the Dirty List in order to publicize the corruption proceedings of candidates seeking political office. The Dirty List has generated controversy in Brazil, in terms of the criteria that one must meet to be on it and for selectively ignoring proceedings against politicians (Barros de Mello and Bragon, 2008). For example, the AMB's decision to include candidates that have been absolved by a court drew criticism from a number of judges and legal scholars. Gilmar Mendes, the president of the Federal Supreme Court (*Supremo Tribunal Federal*, or STF), for instance, declared the Dirty List as populist and politicized (D'Agostino, 2008).

The AMB included Kassab on the Dirty List because a court convicted him of "admin-

istrative impropriety" in 1997. At the time, Kassab 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 an advertisement paid for with municipal funds in which they allegedly defended their own "personal interests" in newspapers 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 was based on 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 the Sexual Orientation Research Work Group (*Grupo de Trabalho e Pesquisa em Orientação Sexual*, or GTPOS), an NGO focused on advocacy for and increasing awareness of sexual orientation issues. The municipality awarded the contract to GTPOS to train São Paulo school teachers in issues pertaining to sexual orientation. Suplicy founded the NGO in 1990 and served as its honorary chairman until 2000 (MercoPress 2005). At the time of the election, the decision was under appeal.

Corruption featured prominently in the campaign, as both candidates accused each other of engaging in improprieties while in elected office, particularly after the first round which Kassab won with 34 percent of the vote versus Suplicy's share of 33 percent. Suplicy's campaign in particular emphasized corruption. In one Suplicy television advertisement, for example, Kassab was accused of using public funds for electoral purposes. 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 tended to focus on Suplicy's record on public works when she was mayor between 2000 and 2004, but his campaign also raised corruption as an issue. In fact, Kassab's campaign, early in the election period before he was placed on the Dirty List, attacked Suplicy for being declared as "dirty" by the AMB. Despite the closeness of the first round, polls showed Kassab with a consistent lead throughout the second-round campaign and he subsequently won with a decisive 60 percent of the vote.

Mandatory Voting In addition to the context-specific factors that took place during the 2008 municipal elections, mandatory voting also plays an important role in the electoral behavior of Brazilian voters. Although Brazil maintains a system of mandatory voting, absenteeism rates in recent elections have hovered around 15 to 20 percent nationally.[6] Specifically, citizens are required to vote from age 18 to 70, with some exceptions. Voting is voluntary from ages 16 to 18, and for those 70 or older.

[6]These rates contrast with a number of other countries that maintain mandatory voting including countries like Argentina, Australia, Belgium, and New Zealand, all of which have voter absenteeism rates in single-digit percentages.

Those who fail to vote without justifying their absence within 60 days are required to pay a small fine ranging from R$1.05 to R$3.51 (approximately US$0.44 to US$1.47). Non-pecuniary costs of absenteeism borne by the voter include the time involved in a three-step process to pay a fine in which the voter typically must: (1) go to the local electoral notary (*cartorio eleitoral*) and obtain a paper stating they are fined, (2) go to a bank to pay the fine, and (3) return to the electoral notary showing that he or she paid the fine. Until the fine is paid, citizens are barred from applying for government jobs and other services, such as receiving or renewing their passport or driver's licenses, or requesting loans with public funds. It is important to note that public services affected by unjustified abstentions tend to be important to middle class and educated voters, not working class and poor voters.[7] A voter is not penalized for absenteeism if he or she is out of town on election day (Brazil does not have absentee voting); voters may also file a form with a judge giving the reason why they did not vote in the election within 60 days. Electoral judges have discretion to determine whether the excuse is legitimate or not.

2.4 Research Design

Our empirical strategy for understanding how voters respond to information about a candidate's record on corruption relies on three distinct components: a survey, a field experiment, and a survey experiment. Before presenting estimated effects of information revelation on behavior in an election, we present basic descriptive statistics from a post-election survey that provides useful context for understanding our findings. Subsequently, we present results from the field experiment and then show survey experimental evidence that supplement our findings from the field experiment.

We conducted the research in São Paulo for a number of reasons. First, it was the only city in which both candidates in the run-off election appeared on the Dirty List. We received funding from non-profit U.S. universities, and U.S. law prohibits political advocacy of candidates in elections by non-profit (501(c)(3)) organizations.[8] As a result, we treated the same number of precincts and produced the same flier design for both candidates. Second, São Paulo is the financial center of Brazil, and the city's mayor carries significant weight in Brazilian politics. The 2008 election had an ex-governor of the state of São Paulo and the runner-up presidential candidate in the 2006 election; in addition, Brazil's most recently elected democratic presidents (Fernando Henrique Cardoso and Luiz Inácio da Silva (Lula)) maintain strong ties to the city. Finally, as a result of São Paulo's immense size it is the largest city in Brazil and the seventh largest in the world with an estimated population of 11 million and 8,198,282 voters in 2008 within the municipality itself the

[7] Additionally, welfare payments are not suspended as a result of absenteeism.

[8] For a more in-depth treatment of this issue, please see the discussion of legal and ethical issues in Appendix I.

city offers considerable heterogeneity in the education and socioeconomic status of individual voters.

Did Voters Already Know About the Dirty List?

A necessary, but insufficient, condition for information about candidates' corruption record to have an effect on voting behavior is voter ignorance about the candidates' placement on the Dirty List. To find out whether or not voters already knew about the accusations, in the week after the election, we conducted a survey (N=200) of São Paulo residents living near polling stations in the field experiment control group with the aim of obtaining information on voters' pre-treatment knowledge of the Dirty List, as well as their opinions related to corruption in government. Since the treatment was never administered in these precincts, knowledge among surveyed voters should reflect knowledge among voters prior to the intervention. We used cluster sampling, in which we chose 20 control group precincts, and then randomly sampled ten households with the vicinity of the selected precincts.

Was the São Paulo electorate aware of the Dirty List and the fact that the two major candidates were included on it? Our survey data suggests that this is not the case as only 25 percent of respondents answered that they had heard of the Dirty List. Of those who knew about the Dirty List, only 48 percent knew that both candidates were on it, 30 percent identified only Suplicy as being on the Dirty List, and 22 percent identified only Kassab as being on the Dirty List. Thus, only 12 percent of all respondents could correctly place both Kassab and Suplicy on the Dirty List. Given this relatively low level of knowledge, informing voters potentially could change their views of the candidates and consequently their behavior on election day.

2.5 Behavioral Responses to Increased Information: Field Experimental Evidence

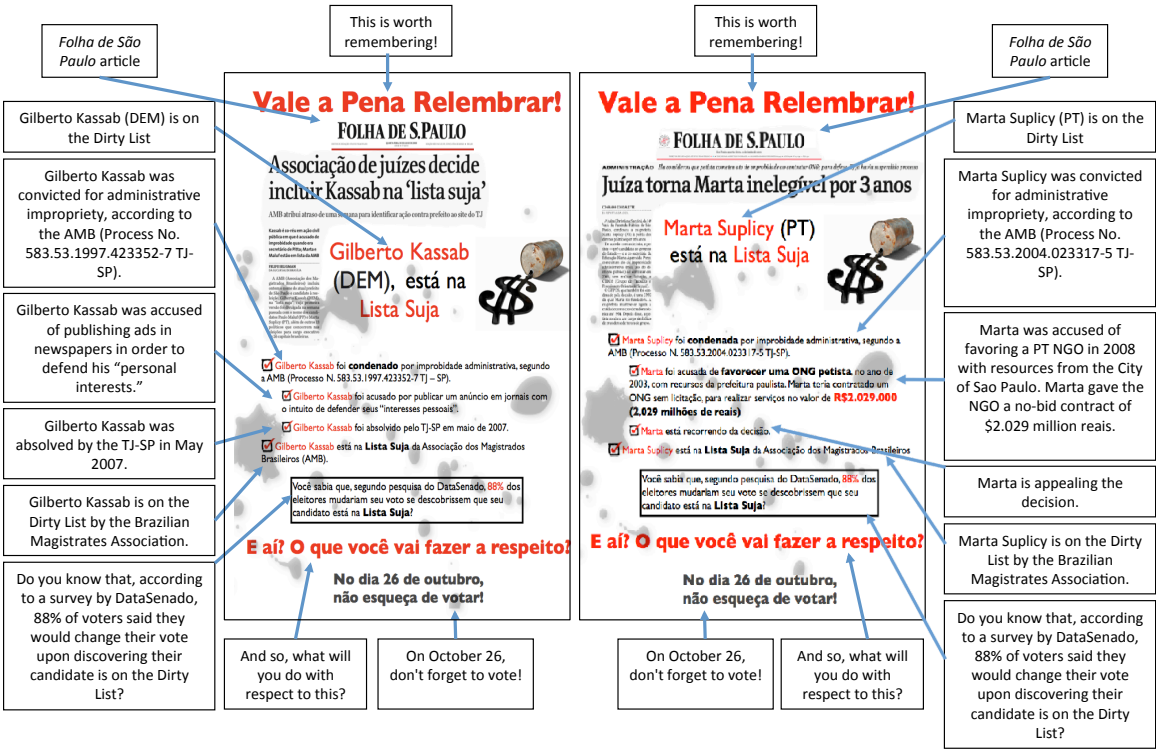
The Intervention

To inform voters of the corruption convictions of politicians, we designed two fliers – one for each candidate in the run-off election. The fliers are pictured in Figure 1 with their respective translations.[9] The flier design incorporates aspects of political propaganda that are similar to other political marketing material in Brazil, while also intending to

[9]The fliers were designed in consultation with a local graphics designer and political experts, with reference to a large sample of electoral propaganda. We also consulted with experts in constructing the design of the flier. In addition, we informally conducted semi-structured interviews with two dozen voters to get their reaction to various flier prototypes. Based on the responses of these individuals, we developed finalized versions of the fliers that would be used in the field and survey experiments.

have credibility in the information it is conveying. Both fliers have newspaper articles from *Folha de São Paulo*, one of the country's most respected periodicals, 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.

Figure 2.1: The Fliers



The Unit of Analysis and the Randomization Group

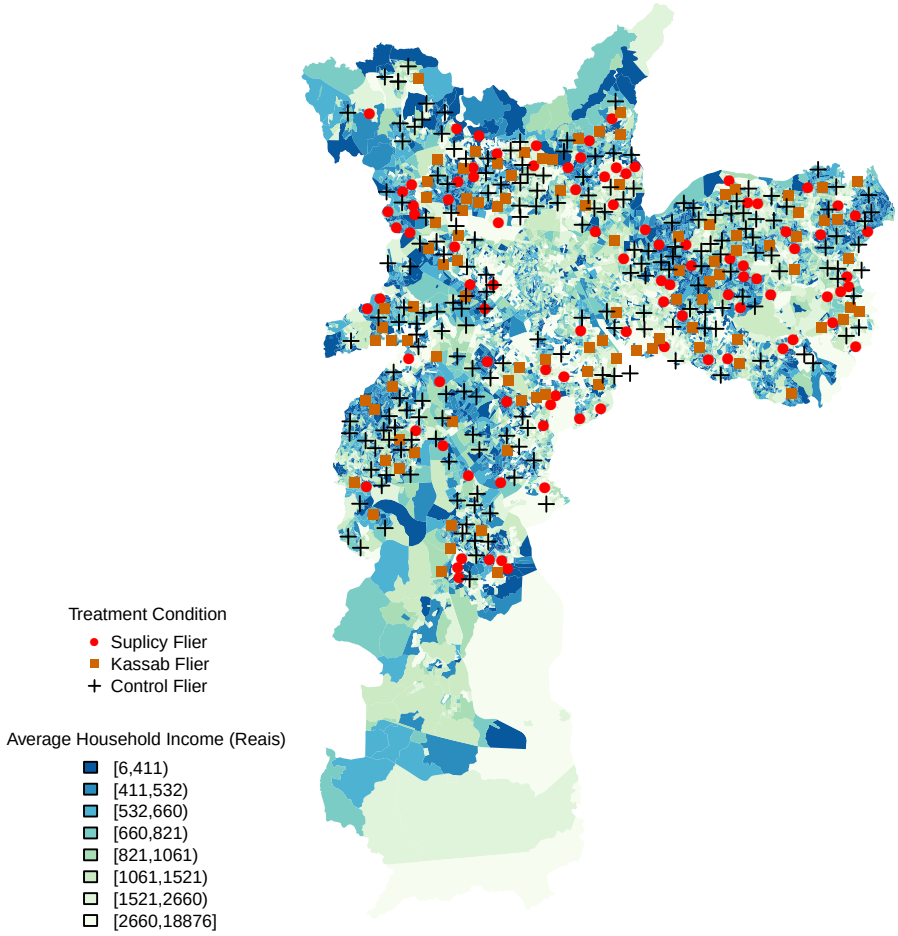
The unit of analysis for the experiment is the *local de votação*, or voting precinct. Voting precincts are the smallest units for which we could administer a treatment, while obtaining vote share data for individual candidates and turnout data for voters. In selecting the group of precincts in the randomization 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 the next section.
(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.[10] 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 elec-

[10]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 (2011).

Figure 2.2: Distribution of Voter Precincts



tions, 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. Figure 2 shows a map of São Paulo with the distribution of precincts in the treatment and control groups.

Flier Delivery

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.[11]

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

[11]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.

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.

Descriptive Statistics and Baseline Balance

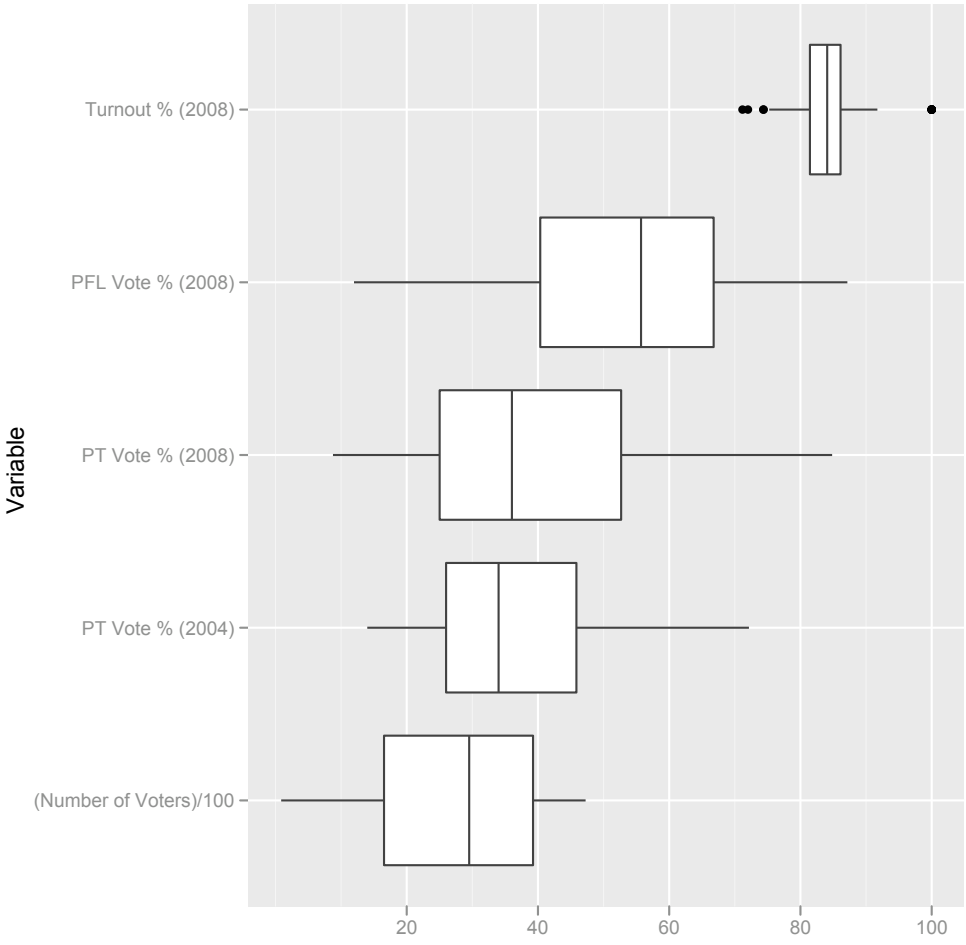
Box plots showing the distributions of the data used in the analyses below are presented in Figure 3. Consistent with the overall election results though with a smaller spread between the two candidates, the center-right candidate, Gilberto Kassab, received about 14 percentage points more of the vote than the center-left candidate from the PT.[12] Furthermore, turnout is high, with an average of 83 percent of registered voters casting a ballot. To check baseline balance on observables, as well as to improve precision in some of our estimates, we also use election data from the most recent past elections.

To check if our randomization procedure was successful, we examined whether preexisting differences existed across treatment and control precincts. As is well known, in expectation there will be no differences between treatment assignment groups, but for any given randomization, some imbalances can remain. To check baseline balance, we conducted simple difference-in-means tests across thirteen baseline covariates. The covariates include voting outcomes from previous elections, as well as voting results from the first round of the 2008 election. In addition to testing balance on each variable separately, we use an omnibus test found in Hansen and Bowers (2008) that jointly appraises balance on each covariates, as well as their linear combinations.[13] Table 2.1 shows the results for each separate variable, reporting mean differences, standard errors of the difference, t-test p-values, and the Kolmogorov-Smirnov Test p-values. For twelve of the thirteen covariates, we find no substantial imbalances. The number of voters variable, however, exhibits

[12]In the actual election, Kassab received 60.7 percent of the vote, while Suplicy received 39.3 percent of the vote.

[13]The omnibus statistic, called as d^2 in Hansen and Bowers (2008), is a weighted sum of squares of differences in means, though in our application, the weights are constant. This statistic has a large sample χ^2 distribution.

Figure 2.3: Descriptive statistics for the field experiment.



Data obtained from the São Paulo TRE (Regional Electoral Tribunal); N=400

some imbalance, with a mean difference of 298 additional voters in treatment precincts versus control. In some of our analyses below, we check the robustness of our findings to adjust for this imbalance. The omnibus test which tests the hypothesis of no difference on any of the baseline variables, as well their linear combinations, has a p-value of 0.17. Thus, while we find some imbalance on the number of registered voters, on all other variables, treatment and control are statistically indistinguishable overall.

Table 2.1: 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

Results

We present two sets of results for each of our three dependent variables: vote share, turnout, and spoiled ballots. Our quantity of interest is the average treatment effect on precincts, not individual voters, as individual level data is unavailable. 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 the Suplicy intervention and the Kassab 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 potentially increase the precision of our estimates. We also adjust for number of voters because we detected some imbalance in this covariate after randomization, as discussed in the previous section. 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 2.2: The effect of distributing information on corruption convictions involving Marta Suplicy, the PT mayoral candidate, on election outcomes.

	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-value	0.2	0.01	0	0	0.72	0.86
Covariates	No	Yes	No	Yes	No	Yes

N=200 precincts, with 100 treated units. Estimates without covariates are from the simple ITT estimator. Estimates with covariates are from a linear model, including a treatment indicator, PT vote share in 2004, total number of registered voters, and block fixed effects.

Table 2.2 presents the effect of the distribution of the fliers with information on the corruption convictions of the PT mayoral candidate on the vote share of the candidate, turnout, and spoiled ballots.[14] For vote share (votes as a percent of total votes cast), we find a negative effect of about 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-value = 0.2), but the adjusted estimate, which is also -2.6 percentage points, is statistically significant at conventional levels. 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? Theoretically, the lower vote share in treatment precincts could be due to either increased abstention by Suplicy supporters or vote switching to Kassab by voters who previously supported the PT candidate. Our data is more consistent with the former story as opposed to the latter. 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

[14]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, and found that all estimates were statistically indistinguishable from 0.

Table 2.3: The effect of distributing information on corruption convictions involving Gilberto Kassab, the DEM/PFL mayoral candidate, on election outcomes.

	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-value	0.32	0.15	0.77	0.95	0.68	0.49
Covariates	No	Yes	No	Yes	No	Yes

N=200 precincts, with 100 treated units. Estimates without covariates are from the simple ITT estimator. Estimates with covariates are from a linear model, including a treatment indicator, PT vote share in 2004, total number of registered voters, and block fixed effects.

cast), we find an insignificant increase of about 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, it would appear that abstention was the primary response by voters to the intervention.

Further evidence that the intervention affected electoral outcomes primarily through decreased turnout is presented in the second two columns of Table 2.2, where we find a significant negative effect of -1.9 percentage points. This effect estimate represents an average decline of about 450 voters. 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.

This abstention response is particularly surprising given that failing to vote is punished with fines, albeit very small ones (less than US $2). The fact that turnout is sensitive to the distribution of a flier suggests that either voters find the fines to be trivial or that the consequences of not paying the fine are low for many Suplicy voters. Nonvoters who fail to pay the fine or provide an adequate excuse are prevented from receiving benefits that are most valuable to educated, middle-class Brazilians such as the ability to renew a passport and drivers license and eligibility for the civil service. In our survey data, we found that Suplicy's base is substantially poorer than Kassab voters, with about half of Suplicy voters earning less than twice the minimum wage, compared to 30 percent of Kassab supporters. While we cannot know for sure why voters are willing to bear the costs of abstention, one possibility is that the punishment for not voting is inconsequential for a substantial portion of Suplicy's base. Kassab voters, because of their comparative education and wealth, are more likely to view the administrative restrictions that result from abstention as more costly.

The estimated effects of the distribution of fliers with information on the center-right candidate of the DEM/PFL are found in Table 2.3. Surprisingly, the point estimate on the DEM/PFL candidate's vote share is positive at about 1.5-1.9 percentage points, depending on the specification. This result, however, is estimated rather imprecisely and consequently not statistically significant at conventional levels. Furthermore, the estimate appears to be somewhat sensitive to covariate adjustment. The estimates for the other two outcome variables – turnout and spoiled ballots – are small and not statistically insignificant.[15]

To contextualize these estimated effects, it is worth comparing their magnitude to effects documented in other studies using experimentally administered interventions to increase voters' awareness about corruption.[16] In the Chong et al. (2015) study on Mexican mayoral elections, a flier campaign informing voters of the result of corruption audit had a negative overall effect of 1.10 percentage points on turnout or slightly more than half of what we document. Their flier intervention, however, had a larger turnout effect of -4 percentage points in municipalities with higher rates of corruption and, in contrast to our findings, had similar effects on both incumbent and challenger supporters. An important difference between our results and their study, however, is that they informed voters only about incumbent performance, as well as the fact that abstention in Mexico is not fined.[17] In the Banerjee, Kumar, et al. (2010) study in New Delhi that provided voters with "report cards" on incumbent performance, additional information *increased* turnout by about 3.6 percentage points, but these leaflets included information on a range of activities. While the report cards did not have corruption indicators, they did report whether or not the candidate was a criminal. The effects of the intervention, however, did not vary by candidate's criminal status. Thus, our results are more in line with the Chong et al. (2015) study, with the important caveat that we compare two candidates in the same municipality while their study emphasizes comparisons across municipalities.

2.6 Testing Mechanisms: Individual Level Evidence

To understand the heterogeneous behavioral effects of the fliers observed in the aggregate electoral data, we now turn to individual level data. This data, gathered in the survey,

[15]The point estimate for the difference in the effect of the two fliers on vote share (with covariates) is 4.1 percent, with a standard error of 1.4. Without covariates, this difference is estimated less precisely but it is still significant at the 10 percent level. Similarly, the point estimate for the difference in the effect on turnout between the Suplicy and Kassab fliers—with or without adjusting for covariates—is statistically significant. For the covariate adjusted estimates, the difference is 1.8 percent with a standard error 0.61.

[16]In the extensive experimental get-out-the-vote (GOTV) literature on US elections, we are not aware of studies that provide information about politicians' corruption records. The literature on the effects of distributing GOTV leaflets or fliers on turnout suggest very small effects on the order of about 0.5 percentage points (D. P. Green and Gerber, 2008, p. 51).

[17]While voting is technically compulsory in Mexico, there are no legal sanctions for not voting.

described in Section 2.4, contains descriptive data on voters opinions about the corruption record of each candidate, ex-ante evaluations of the candidates, and the importance that voters place on corruption in their political decision-making. In addition to collecting basic attitudinal data, we also use an embedded survey experiment to observe individual level attitudinal responses to the information contained on the fliers used in the intervention.

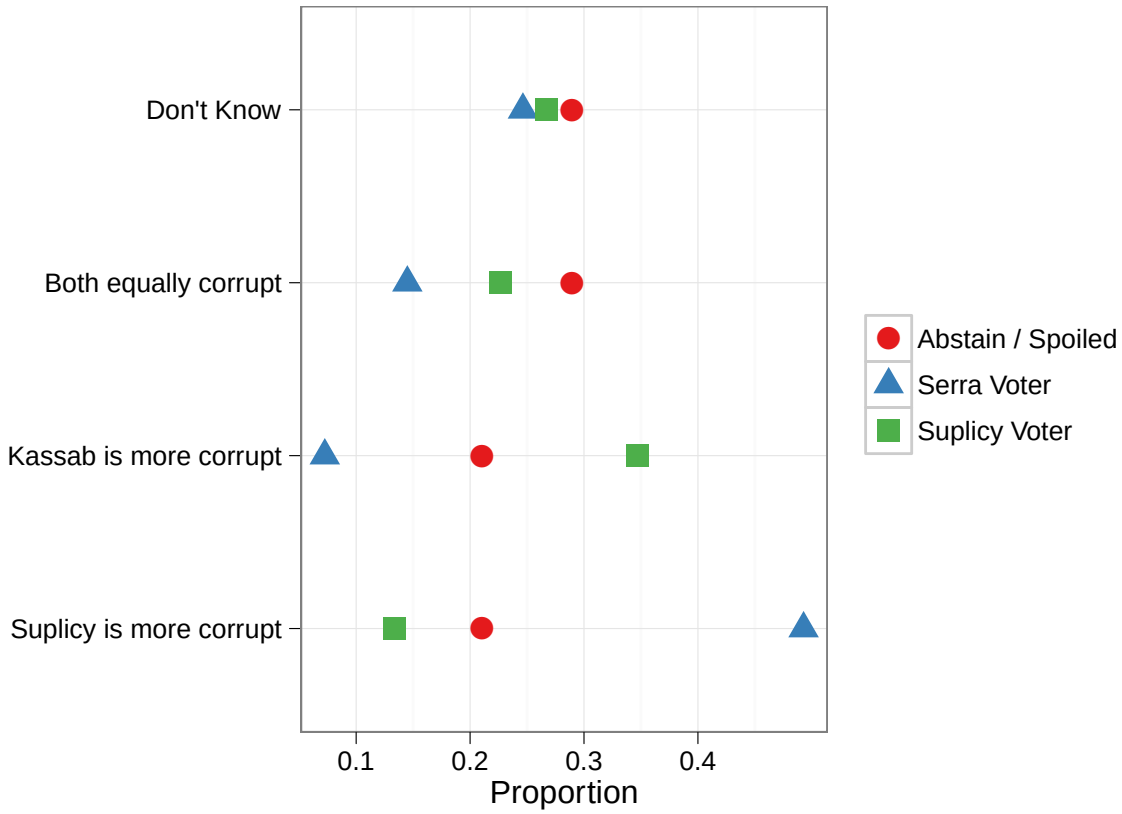
As discussed in Section 2, voters may already have existing beliefs about how corrupt each candidate is and these beliefs will affect their response to new information. If voters already perceive a candidate to be corrupt, learning about their placement on the Dirty List may not change their attitudes or their behavior. It is possible, for example, that voters already assumed that Kassab was corrupt and thus the flier would not affect their evaluation of the candidate. To check for this possibility, the survey asked voters to rank each candidate by their perceived level of corruption. 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 of voters named Kassab. 20 percent of voters said both were equally corrupt, while another 30 percent stated they did not know. These figures suggest that while a plurality of voters considered Suplicy the more corrupt candidate, the vast majority of voters believed the candidates to be equally corrupt or could not make the comparison. Overall, these figures suggest that the differential effects we detected in the field experiment are unlikely to be attributable to diverging ex-ante evaluations of the candidates on the corruption issue as Suplicy, on average, was viewed as somewhat more corrupt already.

These aggregate figures, however, mask considerable heterogeneity when voters are disaggregated by their past political behavior. Figure 2.4 shows how voters rank each of 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. It is clear that the political leanings of each voter strongly predicts how voters evaluate each candidate on the corruption issue. 34 percent of voters who cast a ballot for Suplicy 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 one might predict, voters who abstained or cast a spoiled ballot in the 2004 election were more likely to claim that each candidate was equally corrupt.

Given the fact that voters' ex-ante perception of the candidates on corruption varied

[18]The pattern is very similar if we stratify by 2008 vote choice. We use 2004 vote choice as a stratification variable to show that heterogeneity in voters' evaluations coincide with political cleavages that existed prior to the 2008 election.

Figure 2.4: Ranking Candidates on Perceived Corruption by Vote in 2004



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 as a result of the revelation of information. In this election, we find no evidence of a divergence in the intensity of preferences among the supporters of each candidate. To assess this, we asked each voter 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 unlikely to be an 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 accusations could diverge if a candidate's supporters differ in the importance they place on clean government. There is reason to believe that divergence would exist given that Suplicy's party, the PT, has a long history of emphasizing transparency in government and this may cause voters who care about this issue to support her. In fact, we do find a marked difference between Suplicy supporters and other voters in the importance placed on corruption. For voters who supported Suplicy, 70 percent professed that when deciding who to vote for in the 2008 election, corruption was "very important" or "important" in their decision. In 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 voters 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 say that corruption is an important factor when choosing among 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.

Evidence from a Survey Experiment

To better understand our findings and to take advantage of individual-level data, we embedded a survey experiment modeled after the field experiment in the post-election survey discussed in Section 2.4. While we are interested in the overall impact of the fliers on voter attitudes, the survey experiment also allows us to test some of our hypotheses explaining the divergent effects found in the field experiment. In particular, we take advantage of the survey experiment to test our 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.

Working only in field experiment control precincts, we randomly assigned 200 respondents with equal probability to be given the Kassab flier, the Suplicy flier, or a placebo flier showing basic biographical information for both candidates (shown in Appendix II).[19] After the respondents read the fliers, the interviewers asked the interviewed voters to "grade" Kassab and Suplicy on a scale from 0 to 10, where 0 indicated being strongly

[19]Like with the field experiment, we checked to see if the randomization procedure achieved reasonable balance in pre-treatment covariates. We checked for differences on pre-treatment feeling thermometer scores of the two candidates, self-reported turnout, self-reported vote intention, party identification, presi-

against the candidate and 10 indicated that the respondent was strongly in favor of the candidate.

After asking respondents to read the fliers, we asked the interviewed voters about the believability of the accusations, as well as their seriousness. If voters perceived the Suplicy accusations to be 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 that the accusations were mostly or completely true. For those exposed to 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 there were few differences 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 voters perceptions of the two fliers provides evidence that differences in the fliers or their content are not an explanation for why the Marta flier was more effective at changing voting behavior than the Kassab flier.

Table 2.4: Survey experiment results for the Suplicy (PT) and Kassab (DEM/PFL) fliers.

	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-value	0.02	0.3	0.2

The dependent variable is the post-treatment minus pre-treatment candidate evaluation on feeling thermometer on a scale of 0 to 10.

We also examine the overall effects of the fliers on voters' evaluations of the candidates by comparing voters' evaluations of Suplicy (Kassab) when they view the Suplicy (Kassab) flier versus when they are given the placebo flier. These results are shown in the first two columns of Table 2.4. 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 different than 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

dential vote, and household income. None of the differences across the three different treatment conditions were statistically significant from each other. The Hansen and Bowers (2008) omnibus test that jointly appraises covariate balance and their linear combinations gives a p-value of 0.56.

difference is not statistically significant. Overall, these individual-level estimates are in keeping with the field experiment evidence: the Suplicy flier harms voters evaluations of her, while the Kassab flier has weaker effects. Thus, the design also contributes to a nascent literature (Barabas and Jerit, 2010) that examines the external validity of survey experiments through its pairing of a field experiment with a survey experiment.

Table 2.5: Heterogeneity in survey experiment results for the Suplicy (PT) and Kassab (DEM/PFL) fliers.

	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-value	0.24	0.02	0.02	0.4
n	85	48	62	72

The dependent variable is the post-treatment minus pre-treatment candidate evaluation on feeling thermometer on a scale of 0 to 10.

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 2.5 show the effect of the Suplicy flier, as compared to the placebo flier, on those who did not vote for Suplicy and those who did (self-reported). The estimate for Suplicy voters is more than three times the size of the estimate for Non-Suplicy voters: -1.29 versus -0.38. Unsurprisingly 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 2.5, 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 distinguishable from 0, it is distinguishable from the effect of the flier among non-Kassab voters. Among 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 provides 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, when asked, Suplicy's base professes to place more importance on corruption than Kassab's base. It is plausible that this difference in how each candidate's voters view the importance of corruption resulted in a differential behavioral response to the release of information 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 as well as, to a lesser degree, switch their vote to Kassab. Kassab voters, because they view corruption as less central to their political decision-making, failed to change their views or their behavior.

2.7 Conclusion

Good government activists and reformers frequently argue that increased transparency about politicians' records can make democratic institutions more effective at incentivizing clean governance. Increased transparency, the argument typically goes, will induce voters to punish corrupt politicians at the voting booth and thus better align the interests of politicians with the electorate. As we document in this work, publicizing a candidate's record on corruption does have the potential to alter voters' behavior, but its effects are contingent upon the importance voters place on clean governance in their decision-making. Furthermore, the degree to which voters view a candidate's corruption record as important can be correlated with 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 wherein one politician may be punished when his corruption record is revealed while another may not be.

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 intervention designed to inform voters about candidates' placement on a so-called Dirty List compiled by a civil society organization. Despite the fact that voters viewed the accusations against each candidate as equal in seriousness, our field experimental evidence revealed that only the PT's candidate, Marta Suplicy, was punished at the ballot box when voters learned about her placement on the Dirty List. Data from our public opinion survey and an embedded survey experiment provides evidence of a mechanism: Suplicy's supporters are much more sensitive to information about corruption than are Kassab's supporters. As a result of this increased sensitivity, the information provided to voters induced some of Suplicy's supporters to abstain and, 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 speculate that the PT's historical cultivation of a brand as a "different" type of party that has 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, corruption and ethical issues may be central to their political identity. Kassab's party, the Democrats (formerly the PFL) if anything, has developed a brand as a party whose candidates may rob, but "get things done." As a result, Kassab voters may have had lower expectations about their candidate's probity in office and consequently new information about past misdeeds failed to change their behavior.

More generally, our results suggest voters can develop a "norm of accountability" but that this norm can be less than universally held. In a different context, S. C. Stokes (2006) documented variation in the degree to which voters across Argentina abided by informal voting rules that sanctioned poor performance. In towns where democratic institutions worked more effectively, voters tended to expect politicians to govern ethically and were quite willing to withdraw their support when this was not the case. Our findings suggest that this norm of accountability can interact with partisanship and have important consequences for the outcomes of campaigns where corruption is an issue. 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.

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 from winning office, even if they tend to be less corrupt than candidates from parties like the Democrats. 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. Still, the heterogeneity across candidates that we document suggests the possibility that information campaigns can actually increase the incidence of corruption in government by disproportionately punishing "clean" parties.

It is by no means clear, however, that PT politicians are still less corrupt than non-PT politicians. In recent years, political observers have actively debated whether or not the PT has abandoned its historical position as a more ethical party and now is just a normal (that is a corrupt) party. The outstanding electoral performance of candidate Marina Silva a former PT politician with a highly praised ethical reputation during the presidential elections of 2010 and 2014 was likely fueled by former PT voters disappointed with the partys record on the corruption issue. Moreover, the mass protests against corruption in

2013 during the presidency of Dilma Roussef from the PT are another important signal that the party has been losing its ethical reputation. In a recent article, Samuels and Zucco (2014) suggest the PT has consolidated more of an identity of a party that stands for more participatory modes of governance and equitable policies than an ethical party. Brazilian voters in recent elections might react accordingly to this change.

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 can depend 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 will need to address more systematically how these antecedent factors affect voters' response to increased transparency. As we have documented, the relationship between information and accountability is by no means a simple one.

Chapter 3

Corruption, Policy, Candidate Attributes, and the Voter's Decision: Evidence from a Conjoint Experiment

3.1 Introduction

Despite voters' distaste for corruption, across the world, corrupt politicians frequently get reelected. In Romania, more than one quarter of the country's 41 mayors elected in the June 2016 election were either under investigation or placed under preventative arrest for corruption (Bucureasa, 2016). In 2014, nearly one third of the members of the Indian Parliament had criminal cases pending against them (Varghese, 2014). Similarly, as of May 2016 in Brazil, 59 percent of Senators at the federal level either had convictions or had a criminal investigation in the past, and roughly the same proportion were in the same situation in Brazil's lower house (S. Smith, 2016). This phenomenon is not limited to developing countries; from 2009 until 2015, 16 New York state legislators had criminal convictions that included federal corruption, bribery, embezzlement, extortion, tax evasion, and perjury (Craig, Rashbaum, and Kaplan, 2016). In all of these cases, polls showed high voter dissatisfaction with corruption, yet significant numbers of politicians with corruption allegations and convictions running against "clean" candidates got reelected.[1] In choosing a candidate, voters aggregate preferences across multiple policy issues and candidate attributes[2]

[1]Bucureasa (2016) states in a poll taken two months before the election, "more than 82 per cent of Romanian voters wouldn't cast their ballots for a person who is under investigation or on trial on corruption charges." Varghese (2014) states that a report by the Association for Democratic Reforms showed that in India "the [chance] of winning was higher for candidates with criminal cases, compared to the candidates with a clean record."

[2]The literature on preference aggregation in elections is well-established, dating back to the seminal work of Downs (1957), who drew on Hotelling (1929)'s spatial model of firm competition and Black (1958)'s

Why do voters keep reelecting corrupt politicians? To what extent do corruption type, court decisions, candidate attributes and policy positions factor into the voter's choice when the voter is faced with a corrupt candidate? Understanding how voters make decisions when faced with a corrupt candidate is a complex process. Voters are forced to prioritize and aggregate their preferences along numerous dimensions, including candidate attributes and policy positions, and ultimately choose a candidate or decide not to vote.[3] When faced with a candidate accused of corruption, that choice often involves making tradeoffs along other dimensions.

Those tradeoffs have significant implications for electoral accountability and for understanding how voters make multidimensional choices. The deleterious effects of corruption are well-documented[4]. Corruption erodes trust and legitimacy in democratic institutions (e.g. Della Porta, 2000; Anderson and Tverdova, 2003), reduces electoral turnout (e.g. M. F. P. d. Figueiredo and Hidalgo, 2010; Chong et al., 2015; Klašnja, Tucker, and Deegan-Krause, 2016), and can undermine prospects more broadly for the rule of law (e.g. Fisman and Miguel, 2007; Klašnja and Tucker, 2013).

This research contributes to a new area of research that seeks to understand the extent to which voters weigh personal attributes versus policy positions of candidates. While there is a long-standing literature on the effect of candidate attributes and the extent to which policy weighs in the voter's decision, few (if any) studies have weighed the tradeoffs that voters make between candidate attributes and policy positions, especially with respect to corruption. The very recent literature using conjoint analysis tends to look at candidate attributes in isolation from policy positions (and vice versa). Horiuchi, D. M. Smith, and Yamamoto (2016a) and Horiuchi, D. M. Smith, and Yamamoto (2016b) are a clear example; they authored two insightful recent working papers, with one dedicated to understanding candidate attributes and the other focused on the policy positions of parties. Teele et al. (2015) focus exclusively on personal attributes such as gender, age, number of children, current occupation, years in politics, and spouse's occupation to the exclusion of policy.

The research also makes a methodological contribution by using a conjoint experiment to address the multidimensional preferences that voters have in selecting candidates. Frequently used in consumer marketing, conjoint analysis has only recently been used in political science. The method is based on the measure theory work by Debreu (1960) and Luce and Tukey (1964) and discrete choice models developed by McFadden (1974). To the best of my knowledge, this is the first time that it is being used to examine the effect of candidate corruption on vote choice, and compares personal attributes with policy

median voter theorem (Dewan and Shepsle, 2011). For reviews of this literature, see Powell (2007) and Dewan and Shepsle (2011).

[3] In systems with compulsory voting, there is also a decision as to whether to cast a spoiled ballot.

[4] For a recent review of this literature, see Rose-Ackerman and Palifka (2016).

positions.

The conjoint experiment thus provides a richer, multivariable-based framework for understanding voter preferences in light of candidate corruption. Prior work trying to explain when and why voters punish or support corrupt politicians fails to address fully the complexity of this decision process. Studies solely relying on observational data are subject to endogeneity since vote choice may influence one's perception of corruption, instead of the other way around, as a number of studies have mentioned (e.g. Anderson and Tverdova, 2003; Anduiza, Gallego, and Muñoz, 2013; Klašnja and Tucker, 2013). Field experimental work informing voters of candidate corruption and looking at the effects on voting behavior (e.g. Banerjee, Kumar, et al., 2010; Banerjee, D. Green, et al., 2010; Humphreys and Weinstein, 2012; Chong et al., 2015), including the work presented in Chapter 2, is effective in addressing the causal effect of the information on voting behavior, but typically fails to rigorously test mechanisms that lead the voters to punish or support corrupt politicians. Survey experiments attempting to address mechanisms are often limited by the number of treatment conditions that can be implemented because of statistical power constraints (e.g. Winters and Weitz-Shapiro, 2013; Botero et al., 2015; Winters and Weitz-Shapiro, 2015; Botero et al., 2016).

Finally, the research informs questions of institutional design and normative issues. For instance, if overt or less subtle forms of gender discrimination are taking place against female politicians, should reforms such as quotas, debiasing interventions, or party recruitment procedures be considered? Should court rulings about candidate corruption be made more salient if voters are responsive to them in a survey experimental setting?

The results show that voters punished politicians based on the type of corruption and based on court rulings on political corruption. Voters are most likely to punish private enrichment corruption, rather than corruption that benefits their campaign, in contrast with theories that suggest that voters equate corruption across candidates and tend to privilege other dimensions. We also find that voters are responsive to candidate policy positions, although the effects are not as strong as their responsiveness to party labels. Finally, the candidate's gender neither helped nor harmed his or her probability of receiving a vote. Other attributes such as proven leadership ability and closeness to the people were borderline in terms of their chances of increasing the probability of the vote for a candidate, but high intellect had a stronger effect. Taken together, party labels had the strongest chance of increasing voters' favorable view of the candidate, and corruption allegations had the strongest impact on reducing the probability of a candidate receiving a vote. The impact of court rulings on candidate corruption and policy positions were roughly the same in magnitude, followed by candidate attributes. The results, at least in the case of Brazil, offer some hope for the possibility of voters holding politicians accountable for corruption and being more programmatic in their orientation.

3.2 Candidate Corruption and the Voter's Multidimensional Decision

Corruption Type. Do different types of corruption by politicians lead voters to change their chances of voting for a candidate? A number of scholars have posited important distinctions between corruption, including "grand" versus "petty" corruption, and corruption of high level political officials versus bureaucrats versus private individuals (Botero et al., 2016). The focus of this research is predominantly on elected officials, unless, as was stated in Chapter 1, an individual decides to run for office, and a corruption allegation while the individual was a bureaucrat or private citizen factored into voting behavior. Previous literature that has examined the impact of corruption type on voter attitudes has shown that the impact of scandals unrelated to the candidate's office and undermining the individual's moral standing had a larger impact on voters than corruption involving abuses of power in office (Funk, 1996; Welch and Hibbing, 1997).

Two previous studies are particularly close to the corruption types in this study. Using survey data in Nepal, Truex (2011) examines the reaction of individuals to petty corruption (favoritism and small gifts) versus large-scale bribery in Nepal and finds toleration of petty corruption. Similarly, in a more recent survey experiment in Argentina, Botero et al. (2016) randomized whether a candidate offered employment and construction materials; misused public funds and increased his personal wealth; or had not been accused of any corruption. Their experimental design also allowed the authors to test the effect of partisanship and socioeconomic status had an effect on candidate evaluations. The authors found that voters punished corruption involving private enrichment more harshly. Surprisingly, they also found that wealthier respondents did not find one type of corruption less acceptable than the other, whereas the poor differentiated between the two corruption types, selecting the clientelist candidate over the one who engaged in large-scale bribery (Botero et al., 2016, p. 19). Their results contrasted with Weschle (2016), who found the opposite result in a survey experiment in India when manipulating how a politician spends funds he receives from a company for a political favor. Like the Botero et al. (2016) study, this study randomizes corruption types, ensuring that unobserved factors correlated with the type of corruption are not confounding results. This study also examines effects relative to other voter preferences, which give a greater sense of the tradeoffs voters are making, and also likely results in magnitudes that map more closely to actual voting behavior.

Court Decisions. One important contrast in the field experiment presented in Chapter 2 was the difference in court decisions that both candidates had experienced going into the election. Kassab had a conviction that was later overturned, while Suplicy had a conviction that was being appealed at the time of the election. A number of national legislators in Brazil either have been convicted of corruption and other crimes, or have

cases pending against them. Yet, to date, little work has examined the effect of court decisions on corruption on voting behavior. A survey experiment conducted by Botero et al. (2015) examined the effect of different sources of corruption information on voter attitudes, and found that accounts published in newspapers were the most likely to result in voter punishment, in contrast with information disseminated by courts and NGOs.

One could imagine citizens responding in a variety of ways to court decisions involving corruption. If voters trust the judiciary and understand the nature of its rulings, then court decisions on corruption, whether they are convictions or not, are likely to be seen as credible information educating voters of corruption. If there is distrust in the judiciary, then two outcomes are most likely: (1) all else equal, voters who perceive the court to be committing more Type II errors (failing to convict the guilty) than Type I errors (convicting the innocent) and will only be responsive to judicial decisions when a conviction is handed down; or (2) *ceteris paribus*, the court decision will have no effect on the voters decision. In addition, if the probability of voting for a candidate decreases based on a case being filed by a prosecutor – even if the defendant is found to be not guilty – possible conclusions to be drawn include a high respect for prosecutors, or a high disenchantment with politicians and/or the judiciary.

Policy Positions. To what extent do voters factor in policy positions of candidates in their voting decision? Understanding the extent to which individual policies factor into vote choice allows us to examine the extent to which the preferences of individuals within a given area align with their representative's voting decisions and policies. Voters may knowingly vote for a corrupt politician, because of their alignment with the candidate's policy preferences and expected delivery on policies that are of benefit to the voter (Pande, 2011; Winters and Weitz-Shapiro, 2013). Winters and Weitz-Shapiro (2013) term this dynamic the "tradeoff hypothesis," and evidence from the literature includes Rundquist, Strom, and J. G. Peters (1977) (finding in lab experiments that voters are less likely to punish candidates whose policies align with their own preferences), J. Peters and Welch (1980) (finding variation in punishment of candidates for the U.S. House of Representatives), and Banerjee, Kumar, et al. (2010) (finding that voters in northern India punished based on the candidate's ethnicity and performance).

Party. In new democracies, the role of parental socialization during recent democratic transitions is oftentimes much less pronounced (Converse, 1969; Jennings and Niemi, 1981; Achen, 2002) than in settings with more entrenched political parties. Although the socialization process might be different, there is evidence of stable partisan identification and preferences in some newer democracies (see, e.g. Samuels (2006) for Brazil and McCann and Lawson (2003) for Mexico).

At the same time, however a number of forces, work against this trend. Inter-generational partisan attachments are often not present when a host of new parties have emerged after

a recent democratic transition. Moreover, Mainwaring and Torcal (2006) rightly point out that most democracies in developing countries also have high electoral volatility, weak ideological and programmatic links with voters, and strong direct links between candidates and voters. Thus, voters in settings with weak party institutionalization are likely to respond to corruption allegations differently than those in advanced industrialized countries. All else equal, overall levels of partisanship will be lower, party ties are less likely to induce loyalty in the face of corruption allegations, and candidate switching and spoiled ballots cast either as "voice" or "exit" will be higher (Gingerich, 2009; Klašnja and Tucker, 2013; Winters and Weitz-Shapiro, 2015).

One other important mechanism at work that emerged from the field experiment in Chapter 2, and also mentioned by Klašnja, Tucker, and Deegan-Krause (2016), is the salience of corruption brought about by the presence of an anti-corruption party in the electoral arena. Specifically, the authors point to how an anti-corruption party raises the salience of corruption in society, leading large segments of society to engage in *sociotropic corruption voting*, or "vote choice influenced by [the] perception of corruption in society" (Klašnja, Tucker, and Deegan-Krause, 2016, p. 70). Although the PT arguably had a reputation as an anti-corruption party in the years before the field experiment took place, by the time this conjoint experiment was completed, that was completely gone in the wake of the *Mensalão*, Petrobras, and *Lava Jato* scandals. In addition, legislators were seriously considering launching impeachment proceedings against President Rousseff.

Gender. One possible reason why female politicians are underrepresented in positions of political power could be that voters discriminate against them. The sources of this discrimination can come from voters, who may believe women are ill-suited for politics, or are inferior. They also could stem from more subtle biases involving gender discrimination that the voter is not yet aware of.[5]

Two recent conjoint experiments cut against the discrimination hypothesis. Similar work by Broockman et al. (2014) suggested that female politicians not only did not encounter overt discrimination from respondents, they even received a favorable rating from voters relative to similarly situated male politicians. Teele et al. (2015) find strong positive increases in the probability that one would vote for a female candidate relative to a similarly situated male. They argue that party gatekeepers are discriminating against women, which ultimately limits the candidate pool.

Gender has become an important issue in Brazilian politics. On August 31, 2016, the Senate impeached President Dilma Rousseff, Brazil's first female president, by a vote of 61-20 for relying on *pedaladas fiscais* – using public bank funds to finance social programs – a violation of budgetary laws. The motivations for the impeachment are complex, but

[5]For a more extensive review of the gender discrimination literature, see Teele et al. (2015).

sexism was raised as a factor in her impeachment. Groups such as *Mulheres Pela Democracia* (Women for Democracy) were created to support Rousseff. The press and feminist groups mentioned that male politicians who had committed similar acts or even engaged in corruption for personal enrichment were not prosecuted, and protesters in the streets cited gender bias in the impeachment (Fávero, 2016; Globo, 2016), so it is credible that discrimination could be alive and well.

Scholars have long noted the importance of attributes in the voting decision (Pitkin, 1967; Cain, Ferejohn, and Fiorina, 1987, e.g.). Yet, to date, few have been able to isolate rigorously the effect of attributes on voting behavior and also quantify their effects relative to other factors in the voting decision. The challenge of investigating attributes is that they are highly correlated with many other observed and unobserved factors. The random assignment of attributes to candidates in the conjoint design results in a more rigorous approach where the impact of the attribute is isolated. The selection process for attributes is discussed in greater detail in the section that follows.

3.3 Experimental and Survey Design

The survey was part of Ipsos's national omnibus survey in Brazil, which included a probability sample of 1,200 face-to-face interviews in 72 municipalities throughout the country. The sample is representative of urban areas in Brazil, and has a margin of error of 3 percentage points. The research team conducted training sessions with interviewers, and piloted the survey prior to the launch of the omnibus survey in the field. Based on the piloting of the survey, we have good reason to believe respondents understood the exercise and took it seriously.

One advantage of the conjoint design is that it does not directly ask about candidate corruption, policy positions, and personal attributes. In addition, the respondents and respondents are not told about gender, corruption, and policy positions of the candidates out of concern for social desirability bias among respondents.

Figure 3.1 shows a sample conjoint table from the experiment. Names were chosen from the most common first and last names in Brazil that clearly identified the gender of the candidate. We selected "generic" last names that were not tied to dynastic political families. We also chose not to explicitly have gender as an attribute, both to increase external validity (by simulating a real ballot) and to reduce the chances of social desirability bias.

Table 3.1 shows the universe of attributes and levels used in the conjoint experiment. The first attribute, corruption type offers the candidate not facing any corruption allegations. This level was one of the few cases where the level had to be "linked" to a level for another attribute; if the candidate did not have corruption allegations, he or she could not be

Figure 3.1: Sample Conjoint Table Given to Respondents (in Portuguese)

Perfil		
Candidato	**Luiz Santos**	**Camila Barbosa**
Cargo	**Ex-vereador**	**Ex-vereador**
Partido	PMDB	PT
Acusações de corrupção	Não foi acusado de nada.	Foi acusada por aceitar um suborno para um contrato de uma obra.
Situação dos processos judiciais	Não foi acusado de nada.	Foi condenada em primeira instância e está recorrendo da decisão.
Maioridade Penal	A favor da redução da maioridade penal.	A favor da redução da maioridade penal.
Posição do candidato frente ao aborto	Contra a legalização do aborto.	A favor da legalização do aborto.
Posição a respeito do gasto publico (ajuste fiscal do governo)	Melhorar a saúde, a educação e asistência social mesmo que deva aumentaro o gasto público.	Melhorar a saúde, a educação e asistência social mesmo que deva aumentaro o gasto público.
Principal característica do candidato	Com grande capacidade intelectual e profissional.	Próximo do povo/conhece seus problemas.

subject to court proceedings.[6] Both in the pilot and in field interviews with survey experts and political consultants, we found that voters widely understood the wording of the level for the kickback to be a form of corruption that resulted in private enrichment. We chose the three selected policy issues based on their salience in newspapers, accessibility to voters, and high ranking in opinion polls as important issues at the time.

Brazil's party system is highly fragmented, and so party labels do not convey high informational content in the way they do in countries with more highly institutionalized party systems. In the 2016 elections, there were 35 registered parties, and 12 more parties awaited registration from the TSE. This point is discussed in greater detail in the next section, but because of the highly fragmented nature of the party system, we felt justified in doing a full randomization of parties and policy positions. The four parties chosen – DEM, PMDB, PSDB, and PT – are large parties that represent a broad ideological spectrum. The personal attributes chosen were based on the existing literature (e.g Funk, 1996; Broockman et al., 2014); surveys in Brazil focused on candidate attributes (e.g. Corrales, Adrogué, and Armesto, 2011); and conversations with public opinion scholars and political consultants. Gender emerged not only because of literature positing that voters punished female politicians more harshly for corruption (e.g. Anduiza, Gallego, and Muñoz, 2013; Esarey and Chirillo, 2013), but also because gender was an important difference between the two candidates in the field and survey experiment discussed in Chapter 2.

3.4 Estimation Strategy

Following the estimation approach described in Hainmueller, Hopkins, and Yamamoto (2014) and Hainmueller and Hopkins (2015), I estimate average marginal component effects (AMCEs). In this case, the AMCE represents the average difference in the probability of being preferred for voting when comparing two different values of an attribute, and allows for relative comparisons to be made across attributes. As an example, the AMCE comparing a candidate accused of accepting an illegal campaign contribution versus another accused of accepting a bribe for a government contract is an average effect that is taken over all possible combinations of the other candidate attributes. Because attributes are randomly assigned, the attributes of a candidate with the illegal campaign contribution will, on average, have the same distribution for all other attributes as the candidate accused of taking a bribe.

Specifically, each respondent, indexed by i, where $i \in \{1, ..., N\}$ is given k choice tasks, where $k \in \{1, 2, 3, 4\}$. For each task, the respondent, i, chooses the most preferred candi-

[6] Since Portuguese has gendered nouns and adjectives, we also had to link candidates with the proper gendered wording, but we have no reason to believe this linking would have an effect on outcomes.

Table 3.1: Candidate Attributes and Levels

Attributes	**Levels**
Corruption Type	[No corruption allegations]
	Accused of accepting an illegal campaign contribution
	Accused of accepting a kickback for a government work contract
Court Proceedings	[No court proceedings]
	Found guilty by a trial court
	Found not guilty by a trial court
	Found guilty by a trial court and currently appealing the decision
	Found not guilty in the trial court, and the prosecution is appealing the decision
	Found not guilty in the trial court, and guilty on appeal
	Found guilty in the trial court, and not guilty on appeal
Abortion	[Against legalizing abortion]
	In favor of legalizing abortion
Criminal Age of Majority	[Against reducing the criminal age of majority]
	In favor of reducing the criminal age of majority
Public Spending	[Reduce public spending, even if it would reduce funding for health, education and social assistance]
	Improve health, education and social assistance even if public spending increases
Party	DEM
	PMDB
	PSDB
	[PT]
Names (Gender)	*[Male] Names:* Matheus Oliveira, Luiz Santos, João Silva, Pedro Souza
	Female Names: Julia Almeida, Camila Barbosa, Vitória Lima, Luiza Rodrigues
Principal Characteristic	[Experience in public administration]
	High intellectual and professional capacity
	Proven leadership ability
	Close to the people/knows their problems

Note: Baseline levels are in brackets.

date between j possibilities, where $j \in \{1, 2\}$. The model estimated to obtain the AMCEs is an ordinary least squares (OLS) model of the following form:

$$Y_{ijk} = \beta_0 + \beta_1[ALLEGATION]_{ijk} + \beta_2[PROCEEDING]_{ijk} + \beta_3[ABORTION]_{ijk}$$
$$+\beta_4[JUVENILEAGE]_{ijk} + \beta_5[PUBLICSPENDING]_{ijk} + \beta_6[PARTY]_{ijk} + \beta_7[GENDER]_{ijk}$$
$$+\beta_8[PRINCIPALCHARACTERISTIC]_{ijk} + u_{ijk}$$

Y_i is the outcome of interest, the candidate chosen by the respondent. Table 3.1 details the attributes and the respective baseline levels that are withheld in the specification and used as a reference category. Cluster-robust standard errors are clustered for each respondent, since the choices for each candidate pairing by an individual respondent are not independent. The specification has 9,600 observations, since the 1,200 respondents in the survey each completed 4 tasks involving a comparison of two candidates.[7]

Hainmueller, Hopkins, and Yamamoto (2014) show that the estimator for the AMCEs is non-parametrically identified, and does not impose any functional form assumptions on the voter's utility function. While it has been common in the market research literature to estimate AMCEs with binary dependent variables using a conditional logit, Hainmueller, Hopkins, and Yamamoto (2014) show that OLS provides unbiased estimates of the AMCEs.

One potential threat to the identification strategy is that respondents may not independently support the policy, but only choose the policy because the individual supports the party (Horiuchi, D. M. Smith, and Yamamoto, 2016b). If respondents are doing this systematically, it would undermine the goal of isolating the effect of the voter's policy preference on their vote choice, since partisan attachment would be conflated with the policy preference.

While the possibility exists that respondents had strong partisan attachments and did not actually support the policies, a number of contextual factors mitigate this possibility. First, the programmatic content of party labels in Brazil is low relative to countries with institutionalized party systems, and even relative to other countries in Latin America. In 2014, the *Tribunal Superior Eleitoral* (TSE, or Superior Electoral Tribunal) reported that some 15.3 million of the country's 142.8 million voters were affiliated with parties. A

[7] We had to link choices between corruption accusations and outcomes of judicial proceedings to avoid a combination where a candidate without corruption allegations was found guilty of corruption. For these linked outcomes, we followed Hainmueller, Hopkins, and Yamamoto (2014) by using a generalized linear model (GLM) that included an interaction term with allegation and proceeding clustered by respondent. We then generated a weighted average treatment effect for every interaction of the treatment with other factors.

nationally representative survey conducted in March 2016 by Datafolha, one of Brazil's leading polling firms, showed that only some 30 percent of the country had a preferred party (Datafolha, 2016). Scholars have documented forces that cut against the importance of party labels in Brazil. Brazil has a newly formed party system; consequently, forces like parental socialization that are formative in countries like the United States are not nearly as important. Brazil also has one of the most highly fragmented party systems in the world (e.g. Mainwaring, 1999; A. C. Figueiredo and Limongi, 2000; Kitschelt et al., 2010); the large number of parties creates difficulties for the voter in discerning ideology among them. Moreover, institutions such as proportional electoral rules and open-list legislative elections increase difficulties for voters to understand party ideology and result in party coalitions that frequently change, undermining the brand that party labels can convey (Samuels and Zucco, 2014). Nevertheless, there is one party – the PT – where the label arguably is connected to policy positions. However, at the time that the conjoint experiment was conducted, the party was in flux with corruption scandals and the President's impeachment, resulting in ambiguity in the party's policies. Although the PT had a steady rise in individuals who identified with the party, reaching 25 percent by 2010, at the time that the conjoint experiment was launched, only 12 percent of respondents stated their preferred party was the PT (Datafolha, 2016). Thus, there is good reason to believe the experiment captures policy preferences of the respondents independent of their party preferences.

3.5 Results

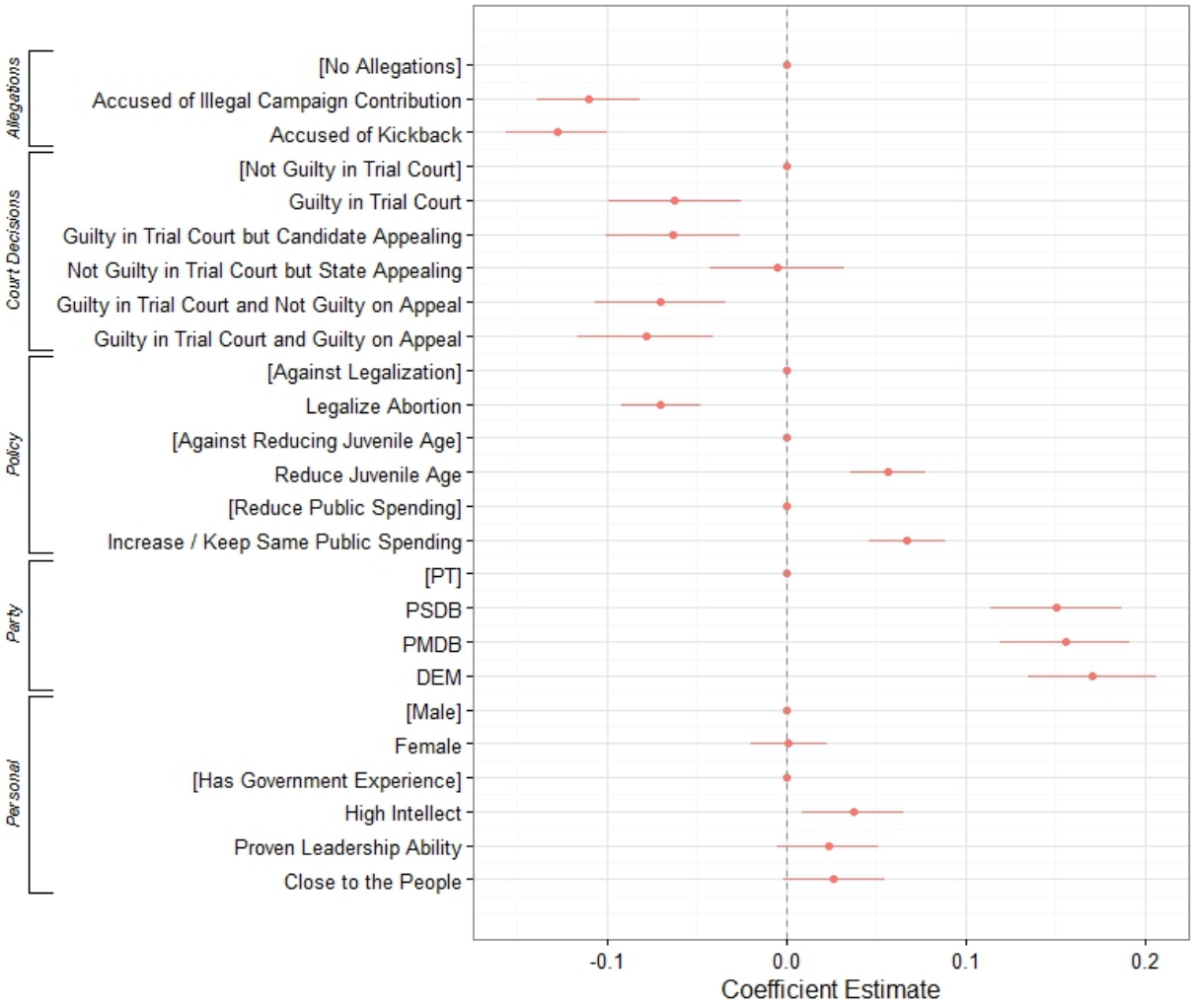
Pooled results of the experiment are first presented. Results from a subgroup analysis that shows how the AMCEs differ based on voters' income follows the discussion of the pooled results.

Overall Results

Figure 3.2 shows the results for all candidate attributes for all respondents. Dots indicate the point estimates and lines show the 95 percent confidence intervals for the ACME for each level within an attribute for the probability that the respondents will choose a particular candidate. The baseline levels (also referred to as reference categories) are indicated with a dot without a line, and the variable name also appears in brackets. Following Hainmueller, Hopkins, and Yamamoto (2014) and Hainmueller and Hopkins (2015), we include all of the pairwise interactions for linked attribute levels that impose restrictions on the randomization. For these AMCEs, we take the weighted average over the relevant attribute levels.

The results show that voters distinguish and vote based on the type of corruption allegation. When the candidate is accused of accepting an illegal campaign contribution, the

Figure 3.2: Effects of Candidate Attributes on Vote Choice



probability of winning a vote decreases by 11 percentage points (SE = 0.01) relative to a candidate with no corruption allegations. When the candidate is accused of accepting a kickback where there is private enrichment, the point estimate for the probability of re-election decreases by 12.8 percentage points (SE = 0.01), suggesting that voters are more repulsed by private enrichment forms of corruption. One the one hand, the large effect that illegal campaign contributions would have in leading to the electoral punishment of a candidate is somewhat surprising, since field interviews with political consultants, polling experts, and political scientists in Brazil suggested that voters would be more tolerant of *caixa dois* (under-the-table campaign contributions). On the other hand, the salience of Rousseff's impeachment, along with the corruption of other politicians involved in the *Lava Jato* and Petrobras scandals that were prominent in the news, are likely increase the probability of voters to punishing candidates for this type of corruption. Substantively, the results fall in line with the results of Botero et al. (2016, p.16), who also find that private enrichment corruption is punished more harshly than clientelistic corruption.[8] This work contrasts with that of scholars who claim that voters equate corruption across candidates or show that corruption is not that salient for voters (Anderson and Tverdova, 2003; Chang and Golden, 2004; Rennó, 2007; Almeida, 2008).

Court decisions on corruption cases also have an important effect on corruption. If a candidate has only received a not guilty verdict, whether or not that verdict is being appealed by the prosecutor, the case has no effect statistically distinguishable from zero. This pattern suggests two important features in the responsiveness of voters to court decisions. First, even if a court found a candidate not guilty, one could imagine that voters might punish a candidate who was investigated by a prosecutor and who decided to pursue a trial. Second, voters may also distrust the courts, and think judges, in large part, are inclined to let politicians off. Neither of these appears to be the case in Brazil, which is somewhat surprising given the overall distrust in the state during the political situation when this survey was completed. In all of the instances where a defendant had been judged not guilty (and had no other guilty verdict), the effect was not statistically distinguishable from zero. This lack of effect is also the case when the candidate is found not guilty, but the prosecution is appealing the decision (Estimate = -0.005, SE = 0.02). However, once there is a guilty verdict, whether or not it is being appealed or has been overturned, a candidate's chances of reelection decrease between 6.2 and 7.8 percentage points (SE all equal 0.02). The results suggest that voters do not distinguish between levels and sequencing of courts.

[8]Botero et al. (2016, p. 12) have a treatment condition where a clientelistic candidate "offer[ed] employment in public institutions and construction materials under the condition that [voters] would vote for him and participate in political events" and another candidate engaging in corruption for the purposes of private enrichment that misused public funds and could not justify a 450 percent increase in his wealth while he was in office. They found that private enrichment corruption reduced the candidate's support by 10 percentage points relative to the clientelistic candidate (Botero et al., 2016, p. 16).

The policy positions taken by candidates all had an impact on the voter's decision. The baseline category for the three issues – abortion, age of majority for criminal responsibility, and fiscal spending – all involve the status quo at the time the survey was conducted. One pattern that is striking is that the magnitude of the AMCEs for the policy issues is roughly half of the magnitude of the impact of corruption allegations, but the magnitudes are in line with the impact of court decisions on corruption. A position favoring legalization of abortion, for example, reduces the probability of a vote by 7 percentage points (SE = 0.01), while support for reducing the criminal age of jurisdiction increases the probability of a vote by 5.7 percentage points (SE = 0.01). Support for expanding public spending increases one's vote probability by 6.3 percentage points (SE = 0.01). Although policy positions are often closely related to party, for reasons stated earlier we believe the context where this conjoint experiment was conducted gives good reason to believe that party preferences are independent of policy positions.

Political party had the greatest impact of any attribute on the respondent's vote choice. Point estimates for the three major parties – PSDB, PMDB, and DEM – relative to the PT were 15.0, 15.5, and 17.1 percentage points (SEs = 0.02 for all three estimates). The difference relative to the PT is not surprising given the turmoil the party faced with corruption scandals and at the time the survey was conducted, a president facing impeachment. The strong results for the Democratic Party align with recent electoral trends favoring the right; in 2014, Brazilian voters elected the most conservative Congress in the last 50 years. However, in the October 2016 municipal elections, only 44.3 percent of mayors from the Democratic Party were reelected, relative to 53.1 and 47.3 percent for the PSDB and PMDB, respectively. The 2016 elections had high rate of spoiled ballots and absenteeism (32.5 percent, up from 26.5 percent in 2012), so the possibility exists that a forced choice question may not account for possibilities of abstention and casting a spoiled ballot.[9]

Turning to attributes, I find no support for the hypothesis that the candidate's gender leads to harsher or weaker punishment by voters, relative to similarly situated male candidates. The point estimate is 0.001 and the standard error is 0.01, so the results are small and not statistically significant (p = 0.91). The results contrast with the work of Teele et al. (2015), who find in conjoint experiments in the United States and a number of other countries that voters respond favorably to female candidates. The results are in line with a number of studies showing that overt discrimination against female candidates is uncommon (e.g. Lawless and Pearson, 2008; Broockman et al., 2014; Horiuchi, D. M. Smith, and Yamamoto, 2016a). The conjoint experiment also included candidate attributes such as government experience, intellect, leadership ability, and being "close to the people." Having high intellect increased the probability of a vote by 3.7 percentage points (SE =

[9]Subsequent iterations of this work will incorporate that analysis, since we did offer absenteeism as a possible outcome that respondents could choose.

0.01). The remaining two attributes, closeness to the people and proven leadership ability, have similar effect sizes (2.7 and 2.3 percentage points, respectively). Though the standard errors are similar in size (SEs = .01) for the two attributes, the smaller magnitude of the coefficients lead them to be borderline in terms of conventional levels of statistical significance (p = 0.07 for closeness to the people, and p = 0.11 for proven leadership ability).

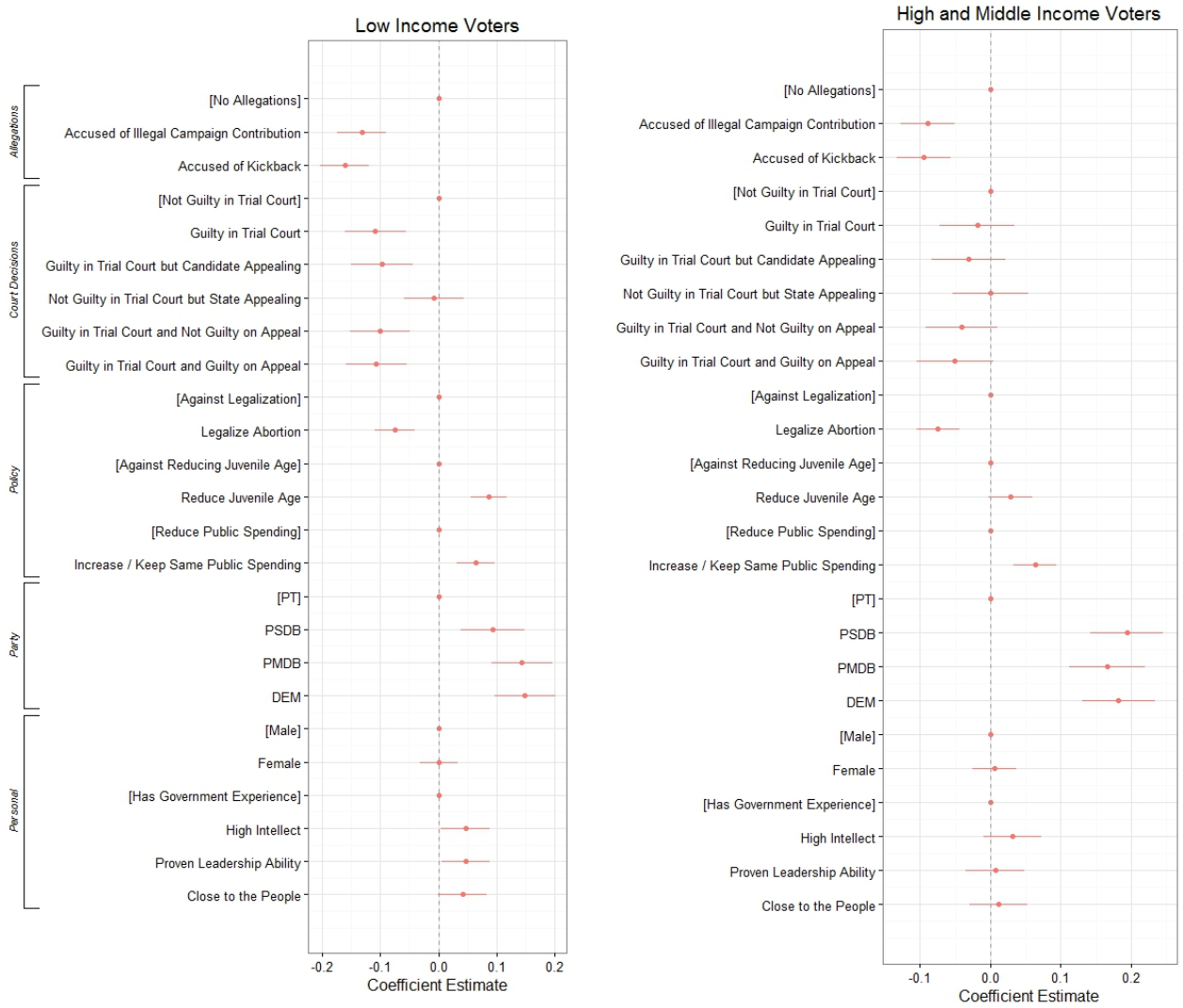
Results by Respondent Income

Moving to subgroup analysis, Figure 3.3 shows heterogeneity in preferences based on the respondent's level of income. Though Brazil has made significant strides to reduce income inequality in recent years, income inequality remains very high. The gap between the lowest and highest decile of income earners is five times as wide as in advanced economies (Samans et al., 2015). Consequently, the preferences for these two groups is likely to be distinct.

As was discussed earlier, one highly debated question in the literature relates to whether poor voters distinguish and punish based on corruption type. The results show not only that the poor distinguish based on corruption type, but they are more likely to punish the candidate with corruption allegations. The poor are almost 1.5 times more likely to punish a candidate accused of an accepting illegal campaign contribution. The probability of punishment moves from 9.0 percent for the middle and high income respondents to 13.2 percent for the low income respondents (SEs are 0.02 for both subgroups). When a candidate engages in private enrichment, the poor are almost 1.7 times more likely to punish the candidate. The probability of punishment for the middle and high income respondents of 9.6 percent (SE = 0.02) jumps to 16.2 percent (SE = 0.02) for the poor respondents.

Surprisingly, the poor are also more likely to punish the candidate based on court decisions. For middle and high income respondents, the probability of punishment was statistically distinguishable from 0 only in two situations when there was an appeal. When the candidate received a guilty verdict that was overturned on appeal, middle and high income respondents were 5 percent less likely to vote for the candidate (SE = 0.03). When the candidate had been found guilty by a trial and appellate court and not guilty on appeal, the probability of a candidate's receiving a vote from the same respondents decreased by 4.1 percentage points (SE = 0.03). Curiously, when the candidate had a guilty verdict and was in the process of appealing, the probability of the candidate receiving the vote of this subgroup decreased by 3.1 percentage points; this result, however was close to the border of achieving statistical significance at conventional levels, but did not do so (p = 0.12). Poor respondents, by contrast, were responsive to all court decisions with a guilty verdict. The probability did not vary much according to the verdict; it ranged from -9.8 to -10.8 percent (all SEs = 0.03). The results suggest greater trust in the courts and prosecutors, a higher cynicism toward politicians found guilty at any stage of the court

Figure 3.3: Effects of Candidate Attributes on Vote Choice by Income



process, or some combination of those two possibilities.

The point estimates and confidence intervals were similar across policy positions and parties for both groups. The two exceptions were lowering the age of criminal responsibility and the PSDB party label. A candidate favoring a reduction of the age increased the probability of a vote by 2.8 percentage points (SE = 0.02) for middle and high income respondents versus 8.6 percentage points (SE = 0.02) for the poor. The PSDB is a party known to be preferred by middle and high income voters. The PSDB party label increased the probability of a favorable vote from middle and high income respondents by 19.4 percentage points (SE = 0.03), more than twice that of poor respondents, whose probability of voting for a PSDB candidate increased by 9.3 percentage points (SE = 0.03). These results are relatively unsurprising, since the PSDB is known to have a stronger base among middle and high income voters (Samuels and Zucco, 2014).

Finally, with the exception of gender, income divided respondents in terms of their responsiveness to candidate attributes. The poor responded favorably to all three personal attributes of the candidates – high intellect, proven leadership, and closeness to the people. The probabilities of increasing their vote across the three attributes were similar; they ranged from 4.2 to 4.7 percentage points, and the SEs were all 0.02. This trend contrasted with wealthier respondents, who were not responsive to leadership or closeness of the candidate to the people (point estimates were 1.1 and 0.6 percentage points, but with SEs of 0.02, they were statistically indistinguishable from 0). The point estimate for intellect – the one attribute that had an effect in the pooled results – was higher at 3.1 percentage points, but with a p-value of 0.14, it did not achieve statistical significance at conventional levels.

3.6 Conclusion

Taken together, the results shed light on the mechanisms that lead voters to reward or punish corrupt politicians. All else equal, corruption accusations and court decisions on corruption diminish the probability of a candidate winning an election, but the effect of party labels outweighs the impact of the corruption allegation, irrespective of whether the allegation involved private enrichment or illegal campaign contributions. The effect of candidate party labels in combination with policy positions of the candidate and attributes also lead voters to reelect corrupt candidates. However, the effects of candidate policy positions and attributes are not enough for those factors alone to undermine the effects of corruption allegations and an adverse court proceeding involving corruption. Brazilian voters weigh policy positions of the candidate more heavily than their attributes, and I find no evidence that women are punished more harshly when they are accused or have proceedings involving corruption.

A number of divergent trends emerge when comparing low income voters to middle and high income voters. Corruption allegations, irrespective of the type of corruption, have a similar effect in reducing the probability of a vote for a candidate, but middle and high income voters are much less responsive to court rulings on candidate corruption. The responsiveness of low income voters to court rulings, suggest they are likely to be more trustworthy of courts in this instance. The contrasting results could have implications for the trust that middle and high income voters place in the judiciary in these cases. The two groups are similar in how tradeoffs are weighed with the policy positions of candidates, and party labels exert a stronger influence on middle and higher income voters. These trends not only stand in contrast to work that claims that the poor are not sensitive to corruption information (e.g Almeida, 2008) and beliefs that they do not differentiate information from complex institutions such as courts. The stronger effects of party labels on middle and high income voters also shows how corruption scandals undermined the PT's stronger links with the poor. Finally, a contrast between the two income groups is seen – perhaps not surprisingly – in the higher responsiveness to attributes by low income voters.

The results have a number of implications for limiting corruption in the electoral arena. First, interventions targeting middle and high income voters that increase the legitimacy of courts in terms of their decision making in corruption cases would increase the salience and efficacy of corruption information in elections. Second, the high impact of party labels suggest the importance of placing less emphasis on candidate parties in disseminating corruption information. Finally, interventions targeting the poor should take into account the potential impact of candidate attributes that resonate with that population.

Appendix A

Legal and Ethical Issues for the São Paulo Field Experiment

We faced some legal and ethical issues in carrying out this project, and responded by putting a number of safeguards in place. The concerns involved legal and ethical issues not only in Brazil, but also in the United States.

We received funding from the University of California, Berkeley, and Yale University to carry out the project. Both are non-profit (501(c)(3)) institutions that are prohibited from engaging in political advocacy. We inquired with Yale Law Schools Non-Profit Organizations Clinic to make sure that we complied with this restriction, and drew on the experience of previous electoral field experiments done in the United States as a precedent for complying with this prohibition. This prohibition partly factored into our choice of São Paulo as the site where we conducted the field experiment. We not only performed the intervention in a place where both candidates had corruption convictions, but we chose the run-off election so as not to have effects on the vote shares of other candidates that could affect the outcome of the election. We also obtained approval from human subjects committees at Berkeley and Yale, and spoke with university officials, political scientists, and political consultants in Brazil about the project.

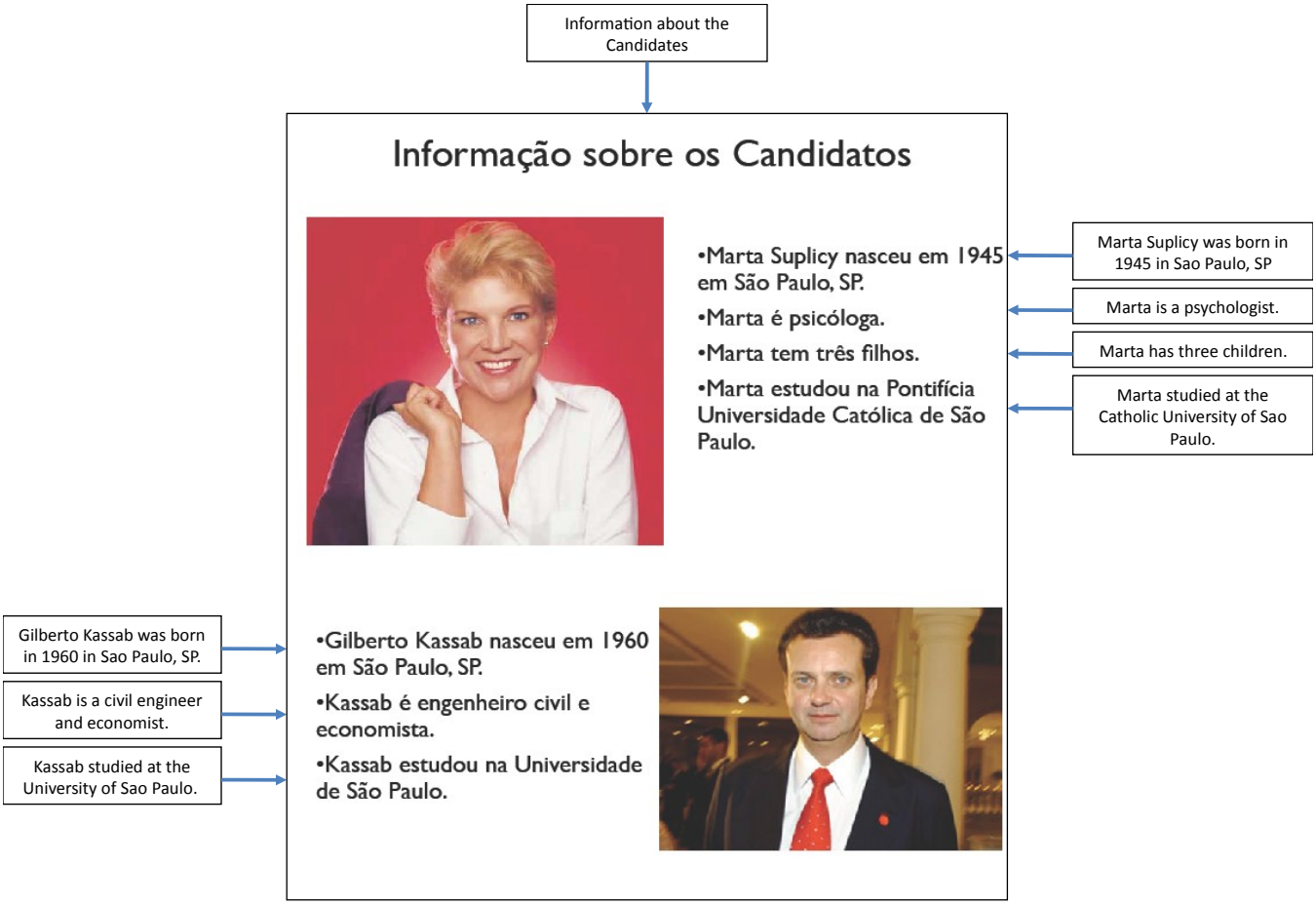
Polls immediately prior to the election from leading polling organizations such as Datafolha and Ibope showed that Kassab had roughly a twenty percentage point lead over Suplicy. Our treatment of 200 precincts reached an estimated six to seven percent of the electorate of Sã Paulo. Even if every voter responded to the treatment, we believe the likelihood of the field experiment affecting the overall outcome was extremely unlikely. Though to our knowledge there were no prior electoral field experiments of this sort conducted in Latin America, we examined the findings of electoral field experiments conducted in other regions. The largest treatment effect for this sort of project that we found was slightly below nine percentage points (Gerber, D. P. Green, and Larimer, 2008; D. P. Green and Gerber,

2008). In addition, we delivered the fliers immediately prior to the election (from October 22 until October 25, 2008) to minimize the likelihood of the information spreading to other areas, and also to decrease the chances of the parties reacting strategically to the experiment.

While in São Paulo, we sought counsel from an election lawyer to make sure we were in compliance with Brazilian electoral laws. The lawyer assured us that so long as we were not affiliated with any candidate or party, we would be in compliance with the Brazilian Electoral Code. We also sought the opinion of a former electoral judge, who believed that the study was in compliance with local laws. Finally, we informed an electoral judge of the research design and also gave him the fliers prior to the launch of the field experiment.

Appendix B

Placebo Flier for the São Paulo Survey Experiment



Bibliography

Achen, Christopher H. (2002). "Parental Socialization and Rational Party Identification". In: *Political Behavior* 24.2, pp. 151–170.

Adamopoulos, Anastassios (2015). *Voter Turnout in Greek Elections Drops to New Historic Low: Infographic*. URL: http://greece.greekreporter.com/2015/09/21/voter-turnout-in-greek-elections-drops-to-new-historic-low-infographic/.

Adserà, Alícia, Carles Boix, and Mark Payne (2003). "Are You Being Served? Political Accountability and Quality of Government". In: *Journal of Law, Economics and Organization* 19.2, pp. 445–490.

Aguilar, Rosario et al. (2015). "Ballot Structure, Candidate Race, and Vote Choice in Brazil". In: *Latin American Research Review* 50.3, pp. 175–202.

Almeida, Alberto Carlos (2008). *A cabeça do eleitor: Estratégia de campanha, pesquisa e vitória eleitoral*. Editor Record.

Alvarez, R. Michael (1998). *Information and Elections*. Ann Arbor, MI: University of Michigan Press.

Anderson, Christopher J. and Yuliya V. Tverdova (2003). "Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies". In: *American Journal of Political Science* 47.1, pp. 91–109.

Anduiza, Eva, Aina Gallego, and Jordi Muñoz (2013). "Turning a Blind Eye: Experimental Evidence of Partisan Bias in Attitudes Toward Corruption". In: *Comparative Political Studies* 46.12, pp. 1664–1692.

Ansolabehere, Stephen and Shanto Iyengar (1995). *Going Negative: How Attack Ads Shrink and Polarize the Electorate*. New York: The Free Press.

Ansolabehere, Stephen and James M. Snyder Jr. (2000). "Valence Politics and Equilibrium in Spatial Election Models". In: *Public Choice* 103.3/4, pp. 327–336.

Arceneaux, Kevin (2007). "Can partisan cues diminish democratic accountability?" In: *Political Behavior* 30.2, pp. 139–160.

Auyero, Javier (2001). *Poor People's Politics: Peronist Survival Networks and the Legacy of Evita*. Durham, NC: Duke University Press.

Banerjee, Abhijit, Donald Green, et al. (2010). "Can Voters be Primed to Choose Better Legislators? Experimental Evidence from Rural India". Working Paper.

Banerjee, Abhijit, Selvan Kumar, et al. (2010). "Do Informed Voters Make Better Choices? Experimental Evidence from Urban India". Working Paper.

Barabas, Jason and Jennifer Jerit (2010). "Are Survey Experiments Externally Valid?" In: *American Political Science Review* 104.2, pp. 226–242.

Bardhan, Pranab (1997). "Corruption and Development: A review of Issues". In: *Journal of Economic Literature* 35.3, pp. 1320–1346.

Barros de Mello, Fernando and Ranier Bragon (2008). "'Lista suja' da AMB ignora 7 procesos contra Marta". In: *Folha de São Paulo* August 15.

Barry, Brian (1974). "Review Article: 'Exit, Voice, and Loyalty'". In: *British Journal of Political Science* 4.1, pp. 79–107.

Bartels, Larry M. (2002). "Beyond the Running Tally: Partisan Bias in Political Perceptions". In: *Political Behavior* 24.2, pp. 117–150.

Bartolini, Stefano and Peter Mair (1990). *Identity, Competition and Electoral Availability: The Stabilisation of European Electorates, 1885–1985*. New York: Cambridge University Press.

Bélanger, Éric (2004). "Antipartyism and Third-Party Vote Choice: A Comparison of Canada, Britain, and Australia". In: *Comparative Political Studies* 37.9, pp. 1054–1078.

Besley, Timothy and Robin Burgess (2002). "The Political Economy of Government Responsiveness: Theory and Evidence from India". In: *Quarterly Journal of Economics* 117.4, pp. 1415–1451.

Black, Duncan (1958). *The Theory of Committees and Elections*. New York: Cambridge University Press.

Botero, Sandra et al. (2015). "Says Who? An Experiment on Allegations of Corruption and Credibility of Sources". In: *Political Research Quarterly* 68.3, pp. 493–504.

– (2016). "Are All Types of Corruption Created Equal in the Eyes of Voters?" Working Paper.

Brody, Richard A. and Benjamin I. Page (1973). "Indifference, Alienation and Rational Decisions: The Effects of Candidate Evaluations on Turnout and the Vote". In: *Public Choice* 15.1, pp. 1–17.

Broockman, David et al. (2014). "Who's a Good Candidate? How Party Gatekeepers Evaluate Potential Nominees". Working Paper.

Brooks, Deborah J. and Michael Murov (2012). "Assessing Accountability in a Post-Citizens United Era: The Effects of Attack Ad Sponsorship by Unknown Independent Groups". In: *American Politics Research* 40.3, pp. 383–418.

Bucureasa, Cristina (2016). *Romanian Mayors Re-Elected Despite Corruption Probes*. URL: `http://www.balkaninsight.com/en/article/romanian-politicians-investigated-for-corruption-re-elected-mayors-06-06-2016`.

Cain, Bruce E., John A. Ferejohn, and Morris P. Fiorina (1987). *The Personal Vote: Constituency Service and Electoral Independence*. Cambridge: Harvard University Press.

Campbell, Angus et al. (1960). *The American Voter,* New York: Wiley.

Chang, Eric C. C. (2005). "Electoral Incentives for Political Corruption under Open-List Proportional Representation". In: *Journal of Politics* 67.3, pp. 716–730.

Chang, Eric C. C. and Miriam A. Golden (2004). "Does Corruption Pay? The Survival of Politicians Changed with Malfeasance in the Postwar Intalian Chamber of Deputies". Working Paper.

– (2007). "Electoral Systems, District Magnitude and Corruption". In: *British Journal of Political Science* 37.1, pp. 115–137.

Cheng, Hong and Daniel Riffe (2008). "Attention, Perception, and Perceived Effects: Negative Political Advertising in a Battleground State of the 2004 Presidential Election". In: *Mass Communication and Society* 11.2, pp. 177–196.

Chong, Alberto et al. (2015). "Does Corruption Information Inspire the Fight or Quash the Hope? A Field Experiment in Mexico on Voter Turnout, Choice, and Party Identification". In: *Journal of Politics* 77.1, pp. 55–71.

Clark, Michael (2009). "Valence and electoral outcomes in Western Europe, 1976–1998". In: *Electoral Studies* 28.1, pp. 111–122.

Clark, William Roberts, Matt Golder, and Sona N. Golder (2013). "An Exit, Voice, and Loyalty Model of Politics". Working Paper.

Converse, Philip E. (1969). "Of Time and Partisan Stability". In: *Comparative Political Studies* 2.2, pp. 139–171.

Corrales, Barbara, Gerardo Adrogué, and Melchor Armesto (2011). ""Você decide!". Usando a Conjoint Analysis para entender o voto dos eleitores do Brasil e Argentina". Working Paper.

Craig, Susanne, William K. Rashbaum, and Thomas Kaplan (2016). *The Many Faces of New York's Political Scandals*. URL: http://www.nytimes.com/interactive/2014/07/23/nyregion/23moreland-commission-and-new-york-political-scandals.html.

Curini, Luigi (2015). "The Conditional Ideological Inducement to Campaign on Character Valence Issues in Multiparty Systems: The Case of Corruption". In: *Comparative Political Studies* 48.2, pp. 168–192.

Curini, Luigi and Paolo Martelli (2010). "Ideological proximity and valence competition. Negative campaigning through allegation of corruption in the Italian legislative arena from 1946 to 1994". In: *Electoral Studies* 29.4, pp. 636–647.

D'Agostino, Rosanne (2008). "AMB Divulga 'Lista Suja'; São Paulo tem Maluf e Marta". In: *UOL* July 22.

Datafolha (2016). "Imagem dos partidos políticos". In: Report No. PO813850. URL: http://media.folha.uol.com.br/datafolha/2016/03/21/imagem_dos_partidos_politicos.pdf.

Debreu, Gérard (1960). "Review of R. Duncan Luce: Individual Choice Behavior: A Theoretical Analysis". In: *American Economic Review*, 50.1, pp. 186–188.

Della Porta, Daniella (2000). *Social Capital, Beliefs in Government, and Political Corruption*. Princeton, NJ: Princeton University Press.

deSousa, Luís and Marcelo Moriconi (2013). "Why voters do not throw the rascals out? A conceptual framework for analysing electoral punishment of corruption". In: *Crime, Law and Social Change* 60, pp. 471–502.

Dewan, Torun and Kenneth A. Shepsle (2011). "Political Economy Models of Elections". In: *Annual Review of Political Science* 14, pp. 311–330.

Dollar, David, Raymond Fisman, and Roberta Gatti (2001). "Are women really the "fairer" sex? Corruption and women in government". In: *Journal of Economic Behavior and Organization* 46.4, pp. 423–429.

Dowding, Keith et al. (2000). "Exit, voice and loyalty: Analytic and empirical developments". In: *European Journal of Political Research* 37, pp. 469–495.

Downs, Anthony (1957). *An Economic Theory of Democracy*. New York: Harper and Row Publishers.

Enelow, James M. and Melvin J. Hinich (1984). *The Spatial Theory of Voting: An Introduction*. New York: Cambridge University Press.

Esarey, Justin and Gina Chirillo (2013). ""Fairer Sex" or Purity Myth? Corruption, Gender, and Institutional Context". In: *Politics and Gender* 9, pp. 361–389.

Fávero, Bruno (2016). *Movimentos feministas fazem ato anti-Cunha e pró-Dilma em São Paulo*. URL: http://www1.folha.uol.com.br/poder/2016/03/1747762-movimentos-feministas-fazem-ato-anti-cunha-e-pro-dilma-em-sao-paulo.shtml.

Feddersen, Thomas J. and Wolfgang Pesendorfer (1996). "The Swing Voter's Curse". In: *American Economic Review* 86.3, pp. 408–424.

Ferraz, Claudio and Frederico Finan (2008). "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes". In: *Quarterly Journal of Economics* 123.2, pp. 703–745.

Figueiredo, Argelina Cheibub and Fernando Limongi (2000). "Presidential Power, Legislative Organization, and Party Behavior in Brazil". In: *Comparative Politics* 32.2, pp. 151–170.

Figueiredo, Miguel F. P. de and F. Daniel Hidalgo (2010). "Does Targeted Redistribution Create Partisans? Evidence from Brazil". Working Paper.

Finkel, Steven G. and John G. Greer (1998). "A Spot Check: Casting Doubt on the Demobilizing Effect of Attack Advertising". In: *American Journal of Political Science* 42.2, pp. 573–595.

Fiorina, Morris P. (1981). *Retrospective Voting in American National Elections*. New Haven, CT: Yale University Press.

Fisman, Raymond and Edward Miguel (2007). "Corruption, Norms, and Legal Enforcement: Evidence from Diplomatic Parking Tickets". In: *Journal of Political Economy* 115.6, pp. 1020–1048.

Funk, Carolyn L. (1996). "The Impact of Scandal on Candidate Evaluations: An Experimental Test of the Role of Candidate Traits". In: *Political Behavior* 18.1, pp. 1–24.

Gallie, W. B. (1956). "Essentially Contested Concepts". In: *Proceedings of the Aristotelian Society* 56, pp. 167–198.

Gans-Morse, Jordan, Sebastián Mazzuca, and Simeon Nichter (2014). "Varieties of Clientelism: Machine Politics during Elections". In: *American Journal of Political Science* 58.2, pp. 415–432.

Gehlbach, Scott (2006). "A Formal Model of Exit and Voice". In: *Rationality and Society* 18.4, pp. 395–418.

Gerber, Alan S., Donald P. Green, and Christopher W. Larimer (2008). "Social Pressure and Voter Turnout: Evidence from a Large-Scale Field Experiment". In: *American Political Science Review* 102.1, pp. 33–48.

Gingerich, Daniel W. (2009). "Corruption and Political Decay: Evidence from Bolivia". In: *Quarterly Journal of Political Science* 4.1, pp. 1–34.

Globo (2016). *Grupo protesta em SP contra Temer e a favor de Dilma*. URL: `http://g1.globo.com/sao-paulo/noticia/2016/05/grupo-protesta-em-sp-contra-presidente-em-exercicio-michel-temer.html`.

Gordon, Sanford C. (2009). "Assessing Partisan Bias in Federal Public Corruption Prosecutions". In: *American Political Science Review* 103.4, pp. 534–554.

Gordon, Sanford C. and Gregory A. Huber (2009). "The Political Economy of Prosecution". In: *Annual Review of Law and Social Science* 5, pp. 135–156.

Green, Donald P. and Alan S. Gerber (2008). *Get Out the Vote: How to Increase Voter Turnout*. 2nd. Washington, DC: Brookings Institution Press.

Green, Donald P., Bradley Palmquist, and Eric Schickler (2002). *Partisan Hearts and Minds: Political Parties and the Social Identities of Voters*. New Haven, CT: Yale University Press.

Green, Jane (2007). "When Voters and Parties Agree: Valence Issues and Party Competition". In: *Political Studies* 55.3, pp. 629–655.

Hainmueller, Jens and Daniel J. Hopkins (2015). "The Hidden American Immigration Consensus: A Conjoint Analysis of Attitudes toward Immigrants". In: *American Journal of Political Science* 59.3, pp. 529–548.

Hainmueller, Jens, Daniel J. Hopkins, and Teppei Yamamoto (2014). "Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments". In: *Political Analysis* 22.1, pp. 1–30.

Hansen, Ben B. and Jake Bowers (2008). "Covariate Balance in Simple, Stratified and Clustered Comparative Studies". In: *Statistical Science* 23.2, pp. 219–236.

Hayes, Danny (2005). "Candidate Qualities through a Partisan Lens: A Theory of Trait Ownership". In: *American Journal of Political Science* 49.4, pp. 908–923.

Heidenheimer, Arnold J. and Michael Johnston, eds. (2011). *Political Corruption: Concepts and Contexts*. 3rd. Piscataway, NJ: Transaction Publishers.

Helmke, Gretchen and Bonnie M. Meguid (2010). "Endogenous Institutions: The Origins of Compulsory Voting Laws". Working Paper.

Hirschman, Albert O. (1970). *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge: Harvard University Press.

Hooghe Marc, Sofie Marien and Teun Pauwels (2011). "Where Do Distrusting Voters Turn to if there is no Viable Exit or Voice Option? The Impact of Political Trust on Electoral Behaviour in the Belgian Regional Elections of June, 2009". In: *Government and Opposition* 46.2, pp. 245–273.

Horiuchi, Yusaku, Daniel M. Smith, and Teppei Yamamoto (2016a). "Identifying Voter Preferences for Politicians' Personal Attributes: A Conjoint Experiment in Japan". Working Paper.

Horiuchi, Yusaku, Daniel M. Smith, and Teppei Yamamoto (2016b). "Party Manifestos and Voters' Multidimensional Policy Preferences: Identi cation via a Conjoint Experiment". Working Paper.

Hotelling, Harold (1929). "Stability in Competition". In: *Economic Journal* 39.153, pp. 41–57.

Humphreys, Macartan and Jeremy M. Weinstein (2012). "Policing Politicians: Citizen Empowerment and Accountability in Uganda – Preliminary Analysis". Working Paper.

Hunter, Wendy (2010). *The Transformation of the Workers' Party in Brazil, 1989-2009*. New York: Cambridge University Press.

Jackman, Simon and Paul M. Sniderman (2002). "Political Psychology". In: ed. by Kristen Renwick Monroe. Mahwah, NJ: Lawrence Erlbaum Associates Publishers. Chap. Institutional Organization of Choice Spaces: A Political Conception of Political Psychology, pp. 209–225.

Jackson, Michael and Rodney Smith (1996). "Inside Moves and Outside Views: An Australian Case Study of Elite and Public Perceptions of Political Corruption". In: *Governance* 9.1, pp. 23–42.

Jennings, M. Kent and Richard G. Niemi (1981). *Generations and Politics*. Princeton, NJ: Princeton University Press.

Johnston, Michael (1986). "The Political Consequences of Corruption: A Reassessment". In: *Comparative Politics* 18.4, pp. 459–477.

Judicial Watch Blog Corruption Chronicles (2012). *Corruption Scandals Don't Stop U.S. Reps from Winning Reelection*. URL: `http://www.judicialwatch.org/blog/2012/11/corruption-scandals-dont-stop-u-s-reps-from-winning-reelection/`.

Kang, Won-Taek (2004). "Protest Voting and Abstention Under Plurality Rule Elections: An Alternative Public Choice Approach". In: *Journal of Theoretical Politics* 16.1, pp. 79–102.

Key Jr., V. O. (1966). *The Responsible Electorate Rationality in Presidential Voting 1936-1960*. Cambridge: Harvard University Press.

Kinder, Donald R. (1986). "Presidential Character Revisited". In: *Political Cognition: The Nineteenth Annual Carnegie Symposium on Cognition*. Ed. by Richard R. Lau and David 0. Sears. Vol. 19. Hillsdale, NJ: Erlbaum.

Kitschelt, Herbert et al. (2010). *Latin American Party Systems*. New York: Cambridge University Press.

Klašnja, Marko (2016). "Uninformed Voters and Corrupt Politicians". Working Paper.

Klašnja, Marko and Joshua A. Tucker (2013). "The Economy, Corruption, and the Vote: Evidence from Experiments in Sweden and Moldova". In: *Electoral Studies* 32, pp. 536–543.

Klašnja, Marko, Joshua A. Tucker, and Kevin Deegan-Krause (2016). "Pocketbook vs Sociotropic Corruption Voting". In: *British Journal of Political Science* 46.1, pp. 67–94.

Koger, Gregory, Seth Masket, and Hans Noel (2009). "Partisan Webs: Information Exchange and Party Networks". In: *British Journal of Political Science* 39.3, pp. 633–653.

Kunicová, Jana and Susan Rose-Ackerman (2005). "Electoral Rules and Constitutional Structures as Constraints on Corruption". In: *British Journal of Political Science* 35.4, pp. 573–606.

Kurer, Oskar (2005). "Corruption: An Alternative Approach to Its Definition and Measurement". In: *Political Studies* 53.1, pp. 222–239.

Lau, Richard R., Lee Sigelman, and Ivy Brown Rovner (2007). "The Effects of Negative Campaigning: A Meta-Analytic Reassessment". In: *Journal of Politics* 69.4, pp. 1176–1209.

Lawless, Jennifer L. and Kathryn Pearson (2008). "The Primary Reason for Women's Underrepresentation? Reevaluating the Conventional Wisdom". In: *Journal of Politics* 70.1, pp. 67–82.

Levitsky, Steven (2003). *Transforming Labor-Based Parties in Latin America*. New York: Cambridge University Press.

Luce, R. Duncan and John W. Tukey (1964). "Simultaneous conjoint measurement: A new type of fundamental measurement". In: *Journal of Mathematical Psychology* 1.1, pp. 1–27.

Lupia, Arthur and Mathew D. McCubbins (1998). *The Democratic Dilemma: Can Citizens Learn What They Need To Know?* New York: Cambridge University Press.

Mainwaring, Scott (1999). *Rethinking Party Systems in the Third Wave of Democratization: The Case of Brazil*. Stanford, CA: Stanford University Press.

Mainwaring, Scott and Mariano Torcal (2006). "Party System Institutionalization and Party System Theory After the Third Wave of Democratization". In: *Handbook of Political Parties*. Ed. by Richard S. Katz and William Crotty. London: Sage Publications, pp. 204–227.

Malhotra, Neil and Alexander G. Kuo (2008). "Attributing Blame: The Public's Response to Hurricane Katrina". In: *Journal of Politics* 70.1, pp. 120–135.

Mancuso, Maureen et al. (1998). *A Question of Ethics. Canadians Speak Out*. New York: Oxford University Press.

Manski, Charles F. (2011). "Identification of Treatment Response with Social Interactions". Working Paper.

Markon, Jerry (2009). *Ex-Rep. Jefferson (D-La.) gets 13 years in freezer cash case*. URL: `http://www.washingtonpost.com/wp-dyn/content/article/2009/11/13/AR2009111301266_pf.html`.

Markus, Gregory B. (1982). "Political Attitudes during an Election Year: A Report on the 1980 NES Panel Study". In: *American Political Science Review* 76.3, pp. 538–560.

Mauro, Paolo (1995). "Corruption and Growth". In: *Quarterly Journal of Economics* 110.3, pp. 681–712.

McCann, James A. and Jorge I. Dominguez (1998). "Mexicans React to Electoral Fraud and Political Corruption: An Assessment of Public Opinion and Voting Behavior". In: *Electoral Studies* 17.4, pp. 483–503.

McCann, James A. and Chappell Lawson (2003). "An Electorate Adrift? Public Opinion and the Quality of Democracy in Mexico". In: *Latin American Research Review* 38.3, pp. 60–81.

McFadden, Daniel (1974). "Frontiers in Econometrics". In: ed. by Paul Zarembka. New York: Academic Press. Chap. Conditional Logit Analysis of Qualitative Choice Behavior, pp. 105–142.

Miller, Warren E. and J. Merrill Shanks (1996). *The New American Voter*. Cambridge: Harvard University Press.

Myerson, Roger B. (1993). "Effectiveness of Electoral Systems for Reducing Government Corruption: A Game-Theoretic Analysis". In: *Games and Economic Behavior* 5.1, pp. 118–132.

Nye, Joseph S. (1967). "Corruption and Political Development: A Cost-Benefit Analysis". In: *American Political Science Review* 61.2, pp. 417–427.

Olken, Benjamin A. (2005). "Corruption and the Costs of Redistribution: Micro Evidence from Indonesia". National Bureau of Economic Research.

– (2007). "Monitoring Corruption: Evidence from a Field Experiment in Indonesia". In: *Journal of Political Economy* 115.2, pp. 200–249.

Palfrey, Thomas R. and Keith T. Poole (1987). "The Relationship between Information, Ideology, and Voting Behavior". In: *American Journal of Political Science* 31.3, pp. 511–530.

Pande, Rohini (2011). "Can Informed Voters Enforce Better Governance? Experiments in Low Income Democracies". In: *Annual Review of Economics* 3, pp. 215–237.

Pereira, Carlos, Marcus Andre Melo, and Carlos Mauricio Figueiredo (2009). "The Corruption-Enhancing Role of Re-Election Incentives? Counterintuitive Evidence from Brazil's Audit Reports". In: *Political Research Quarterly* 62.4, pp. 731–744.

Persson, Torsten, Guido Tabellini, and Francesco Trebbi (2003). "Electoral Rules and Corruption". In: *Journal of the European Economic Association* 1.4, pp. 958–989.

Peters, John and Susan Welch (1980). "The Effects of Charges of Corruption on Voting Behavior in Congressional Elections". In: *American Political Science Review* 74.3, pp. 697–708.

Pitkin, Hanna F. (1967). *The Concept of Representation*. Berkeley: University of California Press.

Powell, G. Bingham (2007). "Oxford Handbook of Comparative Politics". In: ed. by Carles Boix and Susan C. Stokes. New York: Oxford University Press. Chap. Aggregating and Representing Political Preferences, pp. 653–677.

Przeworski, Adam (2003). "Freedom to Choose and Democracy". In: *Economics and Philosophy* 19, pp. 265–279.

Przeworski, Adam, Susan C. Stokes, and Bernard Manin, eds. (1999). *Democracy, Accountability, and Representation*. New York: Cambridge University Press.

Reinikka, Ritva and Jakob Svensson (2005). "Fighting Corruption to Improve Schooling: Evidence from a Newspaper Campaign in Uganda". In: *Journal of the European Economic Association* 3.2, pp. 259–267.

Rennó, Lúcio R. (2007). "Escândalos e voto: as eleições presidenciais brasileiras de 2006". In: *Opinão Pública* 13.2, pp. 260–282.

Rich, Timothy S. (2014). "When Compulsory Voting Isn't: Evidence from Mixed Electoral Systems". In: *Midsouth Political Science Review* 15.2, pp. 2330–6882.

Romero, Simon (2016). *As a Distracted Brazil Mourns, Lawmakers Gut a Corruption Bill*. URL: http://www.nytimes.com/2016/11/30/world/americas/brazil-corruption.html.

Romero, Simon and Vinod Sreeharsha (2016). *Dilma Rousseff Targeted in Brazil by Lawmakers Facing Scandals of Their Own*. URL: http://www.nytimes.com/2016/04/15/world/americas/dilma-rousseff-targeted-in-brazil-by-lawmakers-facing-graft-cases-of-their-own.html.

Rose-Ackerman, Susan and Bonnie J. Palifka (2016). *Corruption and Government: Causes, Consequences, and Reform*. 2nd. New York: Cambridge University Press.

Rundquist, Barry S., Gerald S. Strom, and John G. Peters (1977). "Corrupt Politicians and Their Electoral Support: Some Experimental Observations". In: *American Political Science Review* 71.3, pp. 954–963.

Samans, Richard et al. (2015). *Is Brazil making progress on inequality?* Tech. rep. World Economic Forum Insight Report. URL: https://www.weforum.org/agenda/2015/09/is-brazil-making-progress-on-inequality.

Samuels, David J. (2004). "From Socialism to Social Democracy: Party Organization and the Transformation of the Workers' Party in Brazil". In: *Comparative Political Studies* 37.9, pp. 999–1024.

– (2006). "Sources of Mass Partisanship in Brazil". In: *Latin American Politics and Society* 48.2, pp. 1–27.

Samuels, David J. and Cesar Zucco (2014). "The Power of Partisanship in Brazil: Evidence from Survey Experiments". In: *American Journal of Political Science* 58.1, pp. 212–225.

Scott, James C. (1972). *Comparative Political Corruption*. Upper Saddle River, NJ: Prentice-Hall.

Slomczynski, Kazimierz M. and Goldie Shabad (2012). "Perceptions of political party corruption and voting behaviour in Poland". In: *Party Politics* 18, pp. 896–917.

Smith, Sebastian (2016). *Brazil's Congress – A Den of Corruption*. URL: `https://www.yahoo.com/news/brazils-congress-den-corruption-173041998.html`.

Stephenson, Matthew C. (2015). "Greed, Corruption, and the Modern State: Essays in Political Economy". In: ed. by Susan Rose-Ackerman and Paul Lagunes. Northampton, MA: Edward Elgar Publishing. Chap. Corruption and Democratic Institutions: A Review and Synthesis, pp. 92–133.

Stokes, Donald E. (1963). "Spatial Models of Party Competition". In: *American Political Science Review* 57.2, pp. 368–377.

Stokes, Susan C. (2006). "Do Informal Rules Make Democracy Work?" In: *Informal Institutions and Democracy: Lessons from Latin America*. Ed. by Gretchen Helmke and Steven Levitsky. Baltimore: Johns Hopkins University Press.

Stokes, Susan C. et al. (2013). *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics*. New York: Cambridge University Press.

Swamy, Anand et al. (2001). "Gender and Corruption". In: *Journal of Development Economics* 61.1, pp. 25–55.

Szwarcberg, Mariela (2012). "Uncertainty, Political Clientelism, and Voter Turnout in Latin America: Why Parties Conduct Rallies in Argentina". In: *Comparative Politics* 45.1, pp. 88–106.

Teele, Dawn Langan et al. (2015). "Understanding Women's Access to Political Power: Evidence from Elite and Voter Conjoint Experiments". Working Paper.

Treisman, Daniel (2000). "The Causes of Corruption: A Cross-National Study". In: *Journal of Public Economics* 76.3, pp. 399–457.

Truex, Rory (2011). "Corruption, Attitudes, and Education: Survey Evidence from Nepal". In: *World Development* 39.7, pp. 1133–1142.

United Kingdom Electoral Commission (2006). "Compulsory Voting Around the World". Policy Report.

Varghese, Johnlee (2014). *186 Indian Members of Parliament Have Criminal Cases Including Murder and Rape*. URL: http://www.ibtimes.co.in/186-indian-members-parliament-have-criminal-cases-including-murder-rape-600584.

Warner, Benjamin R. and Mary C. Banwart (2016). "A Multifactor Approach to Candidate Image". In: *Communication Studies* 67.3, pp. 259–279.

Weber, Till (2011). "Exit, Voice, and Cyclicality: A Micrologic of Midterm Effects in European Parliament Elections". In: *American Journal of Political Science* 55.4, pp. 906–921.

Weitz-Shapiro, Rebecca and Matthew S. Winters (2014). "Discerning Corruption: Credible Accusations and the Punishment of Politicians in Brazil". Working Paper.

Welch, Susan and John R. Hibbing (1997). "The Effects of Charges of Corruption on Voting Behavior in Congressional Elections, 1982-1990". In: *Journal of Politics* 59.1, pp. 226–239.

Weschle, Simon (2016). "Punishing Personal and Electoral Corruption: Experimental Evidence from India". In: *Research and Politics* 3.2, pp. 1–6.

Wesleyan Media Project (2016). URL: http://mediaproject.wesleyan.edu.

Winters, Matthew S. and Rebecca Weitz-Shapiro (2013). "Lacking Information or Condoning Corruption: When Do Voters Support Corrupt Politicans?" In: *Comparative Politics* 45.4, pp. 418–436.

– (2015). "Political Corruption and Partisan Engagement: Evidence from Brazil". In: *Journal of Politics in Latin America* 7.1, pp. 45–81.

Wolfinger, Raymond E. and Steven J. Rosenstone (1980). *Who Votes?* New Haven, CT: Yale University Press.

Zaller, John (1992). *The Nature and Origin of Mass Opinion*. New York: Cambridge University Press.

Zarazaga, Rodrigo (2014). "Brokers Beyond Clientelism: A New Perspective Through the Argentine Case". In: *Latin American Politics and Society* 56.3, pp. 23–45.

Zhang, Nan (2015). "Anti-Corruption Efforts and Public Opinion in China: Evidence from a Natural Experiment in an Autocratic Regime". Working Paper.

Zipp, John F. (1985). "Perceived Representativeness and Voting: An Assessment of the Impact of "Choices" vs. Echoes". In: *American Political Science Review* 79.1, pp. 50–61.