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Candidate-Centered Voting and Political Sophistication

in Brazil 2002

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Candidate-Centered Voting and Political Sophistication

in Brazil 2002

by

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Abstract

Candidate-Centered Voting and Political Sophistication

in Brazil 2002

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More and more, elections around the world seem to be won or lost on the basis of the candidates’ personal qualities rather than their policies. Despite its prevalence and consequences, we still know very little about what explains such candidate-centered voting, particularly in new democratic contexts. I argue that variation in candidate-centered voting is largely a function of political sophistication: voters with higher levels of political sophistication are better able to process information relating to policy and performance, which tends to be more cognitively demanding than information relating to candidate’s personalities. To test this argument, I estimate models of vote choice and electoral utility using survey data from the 2002 presidential election in Brazil. The results largely support my contention that political sophistication conditions the weight of candidate considerations relative to policy and performance considerations.
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Chapter 1
Introduction

More and more, elections around the world seem to be won or lost on the basis of the candidates’ personal qualities rather than their policies. Such candidate-centered voting has long characterized elections in the United States and other established democracies. Now it appears to be characterizing elections in newer democracies as well. This is a matter of concern for the quality and the stability of democratic governance.

Despite its prevalence and consequences, we still know very little about what explains candidate-centered voting, particularly in new democratic contexts. I argue that variation in candidate-centered voting is largely a function of political sophistication: voters with higher levels of political sophistication are better able to process information relating to policy and performance, which tends to be more cognitively demanding than information relating to candidate’s personalities.

This contention is not new. Political sophistication stands front and center in many existing studies that examine variation in the extent of candidate-centered voting.\(^1\) The empirical support for political sophistication’s conditioning role, however, is mixed.\(^2\) Many studies find no evidence of such a conditioning effect (Glass 1985; Miller et al. 1986; Rahn et al. 1990; Pierce 1993; Sniderman et al. 1991) while others do (Luskin and Globetti 2002; Iyengar et al. 2007; Lavine and Gschwend 2006).

Whether the extent of candidate-centered voting is a function of political sophistication thus remains an open question. This study will move our understanding of

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\(^1\) Note that studies differ in their terminology for and measures of political sophistication, but all refer to the same underlying concept.

\(^2\) See Luskin and Globetti (2002) for an extended discussion of potential explanations as to why these studies have reached such varied conclusions.
This issue forward in at least two respects. First, I focus on the weight of candidate considerations relative to policy and performance considerations, which is likely to depend on political sophistication, rather than on the absolute weight of candidate considerations, which is not. Most existing work has focused on the question of why candidate considerations matter so much in an absolute sense. But this, I shall argue, is the wrong question. The right question is why policy and performance considerations matter so little relative to candidate considerations.

Second, I examine the issue in a new electoral context. Nearly all the existing studies limit their empirical focus to U.S. presidential elections in the 1980s. I test my argument using survey data from the 2002 Brazilian presidential election. This electoral context is an interesting one in which to examine this question for at least two reasons. Because Brazil has a relatively weak party system, we can explore the relationship between political sophistication and candidate-centered voting in a context where party identification does not dominate vote choice or complicate the effects of other factors. Moreover, the 2002 presidential election is a noteworthy election in both the Brazilian and Latin American political contexts more generally. Luiz Inácio “Lula” da Silva’s victory was one of the first in the wave of leftist electoral victories that has recently swept across Latin America. While his election was popularly interpreted as a mandate to govern from the left (see Baker et al. 2006; Hunter and Power 2007), Lula’s personal appeal was crucial to his victory (see Hunter and Power 2007).

This report is organized as follows. After a discussion of why candidate-centered voting raises concerns for the quality of democracy, I present the reasoning behind my argument regarding political sophistication’s conditioning role. The next two chapters introduce the models and data employed in the analysis of Brazilians’ electoral decisions.
in 2002, followed by a presentation of the estimation results. The final chapter summarizes and concludes.
Chapter 2
Candidate-Centered Voting and Democracy

Voters may take a variety of considerations into account when evaluating candidates and making electoral decisions. *Considerations* are the reasons (beliefs, attitudes, perceptions, and values) guiding voters’ electoral decisions, whatever they may be.\(^3\) *Policy considerations* relate to candidates’ policies. *Performance considerations* relate to candidates’ or their party’s record in office. *Candidate considerations* relate to candidates’ personal traits and demeanor, which together form candidate images (Rahn et al. 1990; Luskin and Globetti 2002). Most voters probably take considerations of more than one type into account in their electoral decisions; the question is one of degree, both in an absolute sense and relative to other considerations. To the extent that candidate considerations dominate policy and performance ones, voters engage in *candidate-centered voting*.

Candidate-centered voting has long been of concern in established democracies and is of growing concern in Third Wave democracies. As early as *The American Voter* (Cambpell et al. 1960), the voting behavior literature recognized candidate considerations as important factors in vote choice. Subsequent research has continued to highlight the importance of these considerations in both the United States (see Bartels 2002) and other established democracies, like Great Britain, France, and Canada (see King 2002).

Despite speculation that they have become increasingly ideological, Latin American elections look similar. Studies throughout the region have found that candidate considerations – rather than ideology or issues – often stand out as the strongest predictors of vote choice. For example, Mexican voters weighed candidates’ competence

\(^3\) The term “considerations” is borrowed from Zaller (1992); note, however, that his usage of the term is more general, not limited to reasons for vote decisions.
more than their policy stands in evaluating the presidential candidates in both 2000 (Zechmeister 2003) and 2006 (Greene 2009). And, as I show below, candidate personality is one of the most important factors informing Brazilians’ vote choices (see also Silveira 1998).

The neglect of policies and performance in favor of candidate images poses problems for the quality and functioning of democracy. Candidate-centered voting undermines the potential for democratic representation, defined roughly as the correspondence between the policies citizens want and the policies they get. Representation should be enhanced to the extent that voters focus on policy and weakened to the extent that they focus on anything else. Candidate images are largely policy-irrelevant, making candidate-centered voting a distraction from the type of voting that would serve representation.

Candidate-centered voting also weakens democratic accountability. Punishing leaders and political parties for performing poorly in office requires attending to what they do and incorporating this information into subsequent evaluations. While candidate images may be more performance- than policy-relevant, they are still a weak and unreliable proxy. In this light, too, they are largely a distraction, an impediment to holding parties and officials accountable.

There have been real reasons to question the extent of representation and accountability in Latin American democracies over the past two decades. Indeed, these concerns have motivated much research on representation in the region (e.g., Hagopian 1998; Stokes 2001; Luna and Zechmeister 2005). They even led O’Donnell (1993) to introduce a new term to refer to many Latin American democracies; rather than representative democracies, many of region’s democracies are best described, he argues,
as “delegative democracies" in which “whoever wins election to the presidency is thereby entitled to govern as he or she sees fit” (59).

Neglected in most of this research, however, has been consideration of the role played by voters in fostering democratic representation. If elites’ democratic responsibility is to govern in a way consistent with the electorate’s mandate, it is voters’ responsibility to provide such a mandate. Doing so requires that voters base their electoral decisions on substantive criteria like candidates’ policy and performance. To the extent that these types of criteria are outweighed by distractions like candidates’ personalities, the potential for democratic representation is weakened.

While candidate-centered voting poses problems for democracy in any context, it can be particularly detrimental in newly democratic ones where political institutions tend to be under-developed, limiting horizontal mechanisms of accountability. Recent history shows how easily leaders whose power rests in their personal appeal among the masses can chip away at democratic institutions and blur the line between democratic and authoritarian rule. Salient examples include leaders like Hugo Chávez in Venezuela and Vladimir Putin in Russia who won election (and re-election) thanks in large part to their personal appeal among voters.

Why do candidates’ personal qualities so often dominate voters’ electoral decisions? I argue that candidate-centered voting is largely an information problem. Voters may lack the ability to process information relating to policy and performance, which tends to be more cognitively demanding than information relating to candidate’s personalities. I develop this argument in the following section.
Chapter 3
Political Sophistication’s Conditioning Role

Voters are bombarded with information during election campaigns. Nobody can notice, interpret, and store it all. We all have cognitive limits – a fact that has underlain decades of research on information processing in social and political psychology. Voters use schemata – pre-existing cognitive structures, consisting of phenomenal objects and cognitive connections between them – to process new information. Schemata affect what information gets processed, how it is organized and stored in memory, and when and how it may be retrieved (Fiske and Linville 1980; Lau and Sears 1986; Conover and Feldman 1984). Schemata may be more or less developed. Borrowing from Luskin’s (1987) definition of political sophistication, a schema is more or less developed depending on its size, breadth, and interconnectedness.

The development of schemata determines the reception of new information and use of the stored information they contain. Reception refers to the process of noticing, interpreting, and storing new information.4 Note that reception is distinct from exposure. People exposed to the same message may receive different amounts and types of information depending on the relevance, development, and accessibility of their existing schemata. Use refers to the process retrieving stored information to evaluate an object (e.g., forming an opinion on an issue or to evaluating a candidate). The extent to which a schema is developed determines whether and how much information relating to that schema is available for use in these evaluations.

It is important to note that the cognitions stored in political schemata are not limited to raw bits of political information. As people process more and more information

4 The term reception is borrowed from Zaller (1992).
and their political schemata become more developed, they make more connections between how the raw information they receive relates to their predispositions. These connections – and any subsequent subjective assessments related to them – are themselves cognitions in schemata.

A person’s political belief system contains all his or her politically relevant schemata (Converse 1964). The belief-system-level version of schema development is political sophistication (Luskin 1987). In other words, to the extent that a person’s political belief system is developed, he or she is more or less politically sophisticated.

Most voters follow politics quite distantly if at all, and their political belief systems tend to be poorly developed. This has at least two important (and related) implications for the question at hand. First, these less sophisticated voters encounter new information without having previously thought much about politics and probably without many developed political opinions. Second, such voters cannot receive much of the political information in election campaigns, even if exposed to it. Equipped with better developed political belief systems, the more politically sophisticated will tend to have political opinions and be better able to manage the new information as they encounter it. Because they are more likely to receive policy- and performance-relevant information, they are more likely to use it to evaluate candidates. Accordingly, the absolute weights of both policy and performance considerations should increase in magnitude as political sophistication increases.

This is especially true of policy considerations. In order to vote on the basis of a policy, voters need to be able to identify their own positions in light of their interests and to identify the candidates’ positions on the relevant issue. Previous research shows that voters have a difficult time identifying candidates’ policy positions and that this undermines the influence of policy considerations in electoral decisions (Alvarez et al.
1994; Peterson 2005.). While not often (if ever) acknowledged in the issue-voting literature, many voters’ also have difficulty identifying their own positions on issues, and this too undermines the influence of policy considerations. As political sophistication increases, however, voters are better able to process policy-relevant information and better able to identify both their own and candidates’ policy positions.

Performance considerations are less cognitively demanding than policy considerations. Voters need only know who (or which party) has been in office, what they think of his, her, or its performance, and how this information relates to the current candidates. While such “retrospective voting” is often portrayed as a simple exercise that even uninformed voters can do (Fiorina 1978), it is not always so simple. Performance considerations require some understanding the political environment, actors, and developments.

Furthermore, it can often be difficult to determine how performance-relevant information relates to current candidates. This is particularly true in contexts lacking strong party systems where electoral competition tends to be volatile from election to election (this point that will be addressed in more depth below). Thus, while I expect political sophistication’s conditioning effect to be more pronounced for policy considerations than performance considerations, more politically sophisticated voters should still be better able to process performance-relevant information and use it in evaluating candidates.

Unlike policy and performance, candidate considerations require little (if any) cognitive effort. As a result, political sophistication should not condition the effect of candidate considerations. All voters, regardless of their political sophistication, have well-developed and accessible “personality schemata” – knowledge gained from a lifetime of experience interacting with, observing, and evaluating those around them –
that facilitate the reception and use of information related to others’ personalities. Indeed, social psychologists have found that people perceive personality traits “automatically,” meaning without having to think much at all, upon encountering even the slightest bit of information about others (McCulloch et al. 2007).

Such “automaticity” (Bargh and Chartrand 1999) in person perception means that voters should be more or less equally likely to have assessments of candidates’ images and thus equally able to use them in subsequent electoral evaluations of candidates. In this light, we should not be surprised that candidate considerations are often important determinants of voters’ electoral decisions and evaluations. Compared to policy and performance, evaluating candidates on the basis of personality is, after all, easy. As such, the absolute weight of these considerations should not concern us too much. The cause for concern is not that candidate considerations matter at all or even a lot. Rather, it is fact that the more substantive bases – like policy and performance – on which voters could (and should) evaluate and choose candidates matter so little, leaving candidate considerations to dominate electoral decisions almost by default. Candidate considerations dominate, and often by extreme degree, simply by virtue of the ease with which voters hold them.

The task, therefore, is to explain variation in the weight of candidate considerations relative to the weights of policy and performance considerations. The relative weight of candidate considerations depends on the extent to which a voter has well-developed schemata relating to political matters like policy, political actors, government actions and so forth. The more developed such schemata, the more voters can receive and use political information to form political opinions and evaluate candidates. Thus, as political sophistication increases, policy and performance

5 The phrase “relative weight of candidate considerations” and variations thereof will refer to the weight of these considerations relative to policy and performance considerations henceforth unless stated otherwise.
considerations gain footing as counterparts to candidate considerations in voters’ electoral decision-making.
Chapter 4  
Modeling Electoral Decisions

I assume that the vote decision results from a process of comparing the voter’s electoral utilities for the candidates. The primary considerations entering into these utilities concern policies, performance, and candidates. The absolute and relative weights, I argue, depend on the voter’s political sophistication. The extent to which a voter identifies with a candidate’s political party should also matter, although not in the same way. Controlling for the effect of policy considerations, party identification’s effect on candidate utilities should be purely affective, reflecting only emotional attachment to the given political party. I therefore assume its effect to be independent of political sophistication.

Electoral utility and vote choice modeling strategies provide two avenues for examining voters’ considerations in electoral decisions. The former models utilities directly.\(^6\) The latter models the realized (or, more precisely, reported) vote choice, which is informed by voters’ utilities in addition to their strategic calculations. In line with theories of strategic voting behavior, voters may weigh utilities by the (perceived) probability that the candidates will win the election before determining for which candidate to vote. Because we typically do not know whether, how, or to what extent such strategic calculations change the ways in which utilities correspond to vote choice, the vote choice model limits our ability to analyze how voters arrive at their utilities for candidates.

On the other hand, the primary advantage of the vote choice model lies in the measurement of the dependent variable. Unlike utility, vote choice is a realized and, in

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\(^6\) See van der Brug et al. (2003) and van der Eijk et al. (2006) for a discussion of studies that use a similar approach.
principle, observable outcome, measurable by response to questions asking for whom the respondent voted or intends to vote. In contrast, measurement of electoral utilities is much fuzzier. Utilities are inside-the-head constructs, not directly observable even in principle. I use candidate “feeling thermometer” scores to measure them, on the assumption that these scores reflect voters’ overall evaluations of the candidates.

The utility model makes use of measurement of each voter’s utility for each of the candidates. In the vote choice model, the only thing we know is whether the voter voted for each candidate. All we can say of Brazilians who voted for Lula in 2002, for example, is that they did vote for Lula and did not vote for Serra, Garotinho, or Gomes. We have no idea of their preference orderings for the other three candidates nor how much they liked or disliked any of them. In the electoral utility model, in contrast, we have a measure of each voter’s utility for each of the four candidates. This is particularly appealing in multicandidate elections (van der Eijk et al. 2006) like Brazil’s 2002 presidential elections.

I employ both modeling strategies to test my arguments regarding the extent of candidate-centered voting and political sophistication. To the extent that estimation results from both models are consistent with one another, we can be all the more confident in the substantive conclusions implied therein. The utility models for each election all take the general form of (1) below. Let $U_{ij}$ represent the $i^{th}$ voter’s utility for the $j^{th}$ candidate. Then we can write the following utility model:

\begin{align*}
(1) \quad U_{ij} &= \beta_0 + \beta_1 TRAITS_y + \beta_2 POLICY_y + \beta_3 j PERFORM_i + \beta_4 PID_y + \beta_5 j SOPH_i + \\
&\quad \beta_6 (TRAITS_y * SOPH_i) + \beta_7 (POLICY_y * SOPH_i) + \beta_8 j (PERFORM_i * SOPH_i) + \varepsilon_{ij}
\end{align*}
where $TRAITS_{ij}$ is the $i^{th}$ voter’s summary evaluation of the $j^{th}$ candidate’s personal qualities on various dimensions; $POLICY_{ij}$ is a summary measure of the extent to which the $i^{th}$ voter agrees with the $j^{th}$ candidate on policy issues; $PERFORM_i$ is the $i^{th}$ voter’s summary evaluation of the incumbent’s or incumbent party’s performance in office; $PID_{ij}$ is a dummy variable indicating whether the $i^{th}$ voter identifies with the $j^{th}$ candidate’s political party; and $SOPH_i$ is the $i^{th}$ voter’s level of political sophistication.\(^7\)

As this model suggests, rather than estimate voters’ utilities for individual candidates separately, I estimate them all together using a single equation. Thus, if there are $n$ voters and $J$ candidates, the number of observations used to estimate the utility model is $n \times J$; the units of observation can be thought of as voter-candidate dyads. Model (1) will be estimated using a generalized estimating equations approach. Note that in estimation, I account for the fact that the disturbances for a given voter are likely to be correlated across the $J$ candidates, but I assume nonautocorrelation among the disturbances across voters. I also assume the disturbances to have constant variance across all voters and all candidates.

The utility model in (1) informs the vote choice counterpart, which runs as follows. Let $U_{ij}^*$ represent the $i^{th}$ voter’s unobserved utility for the $j^{th}$ candidate in (2a):

\[
(2a) \quad U_{ij}^* = \gamma_0 + \gamma_1 TRAITS_{ij} + \gamma_2 POLICY_{ij} + \alpha_{ij} PERFORM_i + \gamma_4 PID_{ij} + \alpha_{2j} SOPH_i + \gamma_5 (TRAITS_{ij} \times SOPH_i) + \gamma_6 (POLICY_{ij} \times SOPH_i) + \gamma_7 (PERFORM_i \times SOPH_i) + \e_{ij}
\]

This can be rewritten more succinctly in matrix notation as:

\[
\begin{align*}
(2a) \quad U_{ij}^* &= \mathbf{X}_{ij} \beta + \mathbf{Z}_{ij} \gamma + \mathbf{W}_{ij} \alpha + \epsilon_{ij} \\
\end{align*}
\]

\(^7\) Note that this model is similar to the models presented in Luskin and Globetti (2002) and Iyenger et al. (2007); they posit political sophistication to condition all the right-hand-side variables (i.e., including PID), however.
where $Z_{ij}$ is a matrix containing the variables that vary both across voters and across candidates (i.e., $TRAITS_{ij}$, $POLICY_{ij}$, $PID_{ij}$, and the products of these variables with $SOPH_{ij}$); $\gamma$ is a vector containing the coefficients corresponding to each of these candidate-specific variables; $X_i$ is a matrix containing the voter-specific variables (i.e., $PERFORM_i$, $SOPH_i$, and their product); and $\alpha_j$ is a matrix with $J$ coefficients corresponding to each of these voter-specific variables.

Given (2b), we can write the following probability model cast in conditional logit form.\(^8\) Let $P_{ij}$ be the probability that the $i$th individual votes for the $j$th candidate. Then we can write:

\[
(2c) \quad P_{ij} = \frac{\exp(\gamma Z_{ij} + \alpha_j X_i)}{\sum_{k=1}^{J} \exp(\gamma Z_{ik} + \alpha_k X_i)}
\]

where, for the purpose of estimation, one candidate ($j = 1$) serves as the reference or base category and only $J - 1$ coefficients are estimated in the coefficient vectors of the $\alpha_j$ matrix, with the elements corresponding to $j = 1$ normalized to 0. This probability equation is the basis for the Maximum Likelihood Estimator (MLE) used to produce estimates of the coefficients.\(^9\)

\(^8\) Ideally, one would use a probit specification instead of logit; probit is probably more appropriate given its relaxation of IIA assumption. Attempts to use probit were unsuccessful, however; as is often the case with probit models, convergence was not achieved, making estimation impossible. That being said, the results between the probit and logit should not be too different. Also note that what I call “conditional logit” is sometimes referred to as “mixed logit” because it allows for a combination of individual-specific and alternative-specific variables.

\(^9\) Using the following log likelihood equation: \(\log L = \sum \sum y_{ij} P_{ij}\), where $y_{ij} = 1$ if the $i$th individual votes for the $j$th candidate.
Measurement and Expectations

The data employed to estimate these models come from Baker et al.’s (2006) 2002 panel study of eligible Brazilian voters. The dependent variables are utilities for and vote choice from among the top four vote-getters in the first round vote. This includes Lula (winning 46.4%), Serra (23.2%), Garotinho (17.9%), and Gomes (12%), who together won over 99% of the total first round vote. Utilities are measured with responses to “feeling thermometer” items in which respondents are asked to indicate how much they like each candidate on a scale from 0 to 10.

Vote choice is measured with responses to a question asking respondents for whom they would cast their vote if elections were held the day of the interview. The reported vote proportions for each candidate in the sample correspond well to actual election results: 56.9% for Lula, 23.4% for Serra, 8.5% for Gomes, and 11.2% for Garotinho. Lula serves as the base category \( j = 1 \) for the purposes of estimating the effects of the individual-specific variables (i.e., economic retrospective evaluations and political sophistication) in the vote choice model.

I measure voters’ summary evaluations of the candidates’ personal qualities, \( TRAITS_j \), by averaging the extent to which a given voter perceives a candidate to be “honest,” “compassionate,” “decisive,” and “intelligent.” There are four possible response options for these items; for example, respondents could indicate that Lula was “not intelligent (0),” “a little intelligent (1),” “intelligent (2),” or “very intelligent (3).” To avoid losing too many observations, if a respondent gave a substantive answer (i.e., not “don’t know” or no response at all) for at least three of these four trait items, they were retained in the sample with their mean trait evaluations adjusted accordingly. These

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10 This a six-wave survey panel study conducted in Caxias do Sul and Juiz de Fora. Nearly all the data employed here are drawn from the study’s third wave, conducted in October 2002 between the first and second election rounds (i.e., between October 6 – 27, 2002).
averages were then divided by 3 to keep the values of $TRAITS_{ij}$ between 0 and 1. These trait evaluations should have a positive influence on the utility and probability of voting for a given candidate; as $TRAITS_{ij}$ increases, so too should the voter’s utility and probability of voting for that candidate.

Measures of voters’ summary policy agreement with the candidates, $POLICY_{ij}$, are based on answers to questions asking respondents to place themselves and the candidates on three scales relating to land reform, social spending, and privatization. These are all of the issue areas in which respondents were asked to place both themselves and the candidates. For each of these issue areas, respondents were asked to indicate their position on a given policy from five response options ranging, in ideological terms, from the most “left” position (0) to the most “right” position (4). If $R_{i,k}$ is the $i^{th}$ respondent’s position on the $k^{th}$ issue, and $C_{j,k}$ is the $j^{th}$ candidate’s position on that issue, then my measure of policy agreement between the $i^{th}$ voter and the $j^{th}$ candidate is:

$$
(3) \quad POLICY_{ij} = \left(-1\right) \left( \frac{\sum_{k=1}^{K} \left( C_{j,k} - R_{i,k} \right)^2 / n_i \right) / 4 \right)^{1/2},
$$

where $n_i$ is the number of issues for which the $i^{th}$ respondent gives substantive answers regarding their own position (i.e., not “don’t know” or no response). To avoid losing too many cases due to missing values, respondents are included so long as $n_i \geq 2$.\textsuperscript{11} The candidates’ issue positions, $C_{j,k}$, are “objective” measures, measured by the sample

\textsuperscript{11} It is precisely for this reason that I use “mean” Euclidean distance rather than the more straightforward and common simple Euclidean distance (or quadratic distance measure). Because is not constant across respondents, we must rescale the measure (which I do by weighting the Euclidean distance by ) to be comparable across all respondents. Note that Luskin and Globetti (2002) follow a similar measurement strategy.
mean placement of the $j^{th}$ candidate on the $k^{th}$ issue. The mean Euclidean distance across the three (or two) issue areas (i.e., in the numerator above) is divided by 4 to keep the values of $POLICY_j$ between 0 and 1. And the resulting quantity is then multiplied by -1 so that increasing values represent increasing policy agreement or proximity (rather than distance). Policy agreement should have a positive effect; as $POLICY_j$ increases, one’s utility of voting for that candidate and the probability that they will vote for him should also increase.

Evaluations of the incumbent party’s performance, $PERFORM_i$, are measured by voters’ retrospective evaluations about the national economy. Specifically, respondents were asked whether the national economic situation had “worsened a lot (0),” “worsened a little (1),” “stayed the same (2),” “improved a little (3),” or “improved a lot (4)” over the past twelve months. Responses were divided by 4 to make $PERFORM_i$’s values run from 0 to 1. This measure should tap into the extent to which the voter views President Fernando Henrique Cardoso’s administration to have performed well in office.

Since this variable is individual-specific (varying across voters, but not across candidates), its effect is allowed to (but not restricted to) affect the utilities and probability of voting for the candidates in different ways. We should expect retrospective evaluations to have the greatest effect for Serra, the candidate representing the incumbent president’s party, Brazilian Social Democratic Party (PSDB). The effect of these evaluations should be positive for Serra; as performance evaluations of Cardoso increase, so too should the utility of voting for Serra and the probability of voting for Serra over Lula (the base or reference category in the choice model). While these evaluations should not have any impact on the probability of voting for Gomes or Garotinho over Lula (in terms of the vote choice model), it is less clear how they should shape the utilities for non-incumbent party candidates. If they have any effect, they should be
negative, indicating that as retrospective evaluations increase, one’s utility of voting for the other candidates decreases; of all the non-incumbent party candidates, we might expect this effect (should it exist) to be most pronounced for Lula since he was the leading opposition candidate.

Identification with a political party, $PID_y$, is measured by a dummy variable indicating whether a given voter identifies with a given candidate’s political party. While it is trending toward stabilization, the Brazilian party system has historically been rather unstable, limiting the potential for citizens to develop attachments to political parties. Of all the parties with presidential candidates, the Workers’ Party is the only one with any strong foundation in the electorate. Indeed only about 50% of the sample indicated identifying with any political party with about two-thirds of these identifying with the Workers’ Party. Of course, party identification’s effect should be positive; identifying with a candidate’s political party should increase one’s utility and probability of voting for that candidate.

Political sophistication, $SOPH_i$, is based on responses to factual items – following Luskin (1987), Zaller (1992), and Delli Carpini and Keeter (1993). For respondents that participated in the first three waves of the survey, $SOPH_i$ is measured as the proportion of correct answers given out of nine factual knowledge questions relating to domestic politics and leaders (six from the wave 1 instrument, three from wave 3’s). For respondents new to wave 3 of the study, $SOPH_i$ is measured as the proportion of correct answers out of the three factual items included in wave 3. Being a proportion, $SOPH_i$ naturally runs from 0 to 1.

I have no expectations regarding political sophistication’s direct effect on the dependent variables. My interest in political sophistication centers on its potential to condition the absolute weights – i.e., effect magnitudes – of policy and performance
considerations and, thus, the weight of candidate considerations relative to these. In accordance with my argument, we should expect the weight of policy considerations to increase as political sophistication increases. That is, the effect of $POLICY_y$ should become increasingly positive as political sophistication increases.

We should expect the weight of performance considerations to increase as political sophistication increases as well, but this expectation is limited to choices involving Serra, the candidate for the incumbent PSDB. In other words, the effect of $PERFORM_i$ should become increasingly positive as political sophistication increases. As discussed above, I do not have any strong expectation that these performance evaluations should affect the utilities or probabilities of voting for the other candidates. Likewise, I have no clear expectations regarding how political sophistication would condition these effects should they exist.

I do not expect political sophistication to condition the absolute weight of candidate considerations. As discussed above, candidate considerations should matter more or less equally for voters regardless of level of political sophistication. What should vary is the weight of these considerations relative to the more substantive considerations involving policy and performance. Thus, as political sophistication increases, the weight of candidate considerations relative to policy and performance should decrease.

Descriptive statistics pertaining to all the dependent and independent variables described here can be found in Appendix A. Additional descriptive statistics are provided for the various items used to construct the $TRAITS_y$ and $POLICY_y$ measures in Appendix B.
Chapter 5
Results

Estimation results for the utility model and vote choice model are presented in Tables 1 and 2, respectively. Before considering the results regarding political sophistication’s conditioning effect, it is interesting to note the role of partisanship in Brazilians’ electoral decisions. In Table 1 we see that identifying with a candidate’s political party increases one’s utility for the candidate by about 1.8 points on the 0-10 utility scale. Likewise, in Table 2 we see that it makes one about 7.8 times more likely to vote for the candidate, all else equal. Thus, while party identification is not as widespread among Brazilians as it is in more developed party systems like the U.S. party system, its effect on voting behavior appears to be similarly influential.

Given the interactions of candidate, policy, and performance considerations with political sophistication in the models, interpretation of their effects is not straightforward. Table 3 presents the estimated effects for each of these on candidate utilities by level of political sophistication. Given the additional non-linearity in the parameters, interpretation is even more cumbersome for the vote choice model results. To ease interpretation of these results, I have calculated the change in predicted probabilities of voting for the top two candidates, Lula and Serra, as each variable of interest moves from its minimum to its maximum. This information is presented by level of political sophistication in Table 4.
Table 1: Model of Candidate Utilities with Political Sophistication

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Common Coefficients</th>
<th>Candidate-Specific Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lula</td>
</tr>
<tr>
<td>Trait Evaluation</td>
<td>8.877 ***</td>
<td></td>
</tr>
<tr>
<td>* Political Sophistication</td>
<td>-0.609 *</td>
<td></td>
</tr>
<tr>
<td>Policy Agreement</td>
<td>1.062 **</td>
<td></td>
</tr>
<tr>
<td>* Political Sophistication</td>
<td>1.083 *</td>
<td></td>
</tr>
<tr>
<td>Political Party Identification</td>
<td>1.819 ***</td>
<td></td>
</tr>
<tr>
<td>Economic Evaluation</td>
<td>0.230</td>
<td>0.918 **</td>
</tr>
<tr>
<td>* Political Sophistication</td>
<td>-0.881 *</td>
<td>1.257 **</td>
</tr>
<tr>
<td>Political Sophistication</td>
<td>-0.188</td>
<td>-0.809 *</td>
</tr>
<tr>
<td>(Conditional Means)</td>
<td>1.877 ***</td>
<td>0.834 ***</td>
</tr>
</tbody>
</table>

N = 4640

* prob < .05; ** prob < .01; *** prob < .001 (two-tailed tests)

Note: Standard errors have been adjusted for individual-level clustering.
# Table 2: Model of Vote Choice with Political Sophistication

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Odds Ratios Based on Common Coefficients</th>
<th>Odds Ratios Based on Candidate-Specific Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Serra</td>
</tr>
<tr>
<td>Trait Evaluation</td>
<td>4337.377 ***</td>
<td></td>
</tr>
<tr>
<td>(2775.38)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trait Evaluation</td>
<td>3.920</td>
<td></td>
</tr>
<tr>
<td>* Political Sophistication</td>
<td>(3.78)</td>
<td></td>
</tr>
<tr>
<td>Policy Agreement</td>
<td>1.820</td>
<td></td>
</tr>
<tr>
<td>(0.94)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy Agreement</td>
<td>10.969 ***</td>
<td></td>
</tr>
<tr>
<td>* Political Sophistication</td>
<td>(8.03)</td>
<td></td>
</tr>
<tr>
<td>Political Party Identification</td>
<td>7.785 ***</td>
<td></td>
</tr>
<tr>
<td>(0.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Evaluation</td>
<td>1.055</td>
<td>0.687</td>
</tr>
<tr>
<td>(0.42)</td>
<td>(0.42)</td>
<td>(0.27)</td>
</tr>
<tr>
<td>* Political Sophistication</td>
<td>2.864 †</td>
<td>1.218</td>
</tr>
<tr>
<td>(1.69)</td>
<td>(0.99)</td>
<td>(1.24)</td>
</tr>
<tr>
<td>Political Sophistication</td>
<td>1.631 *</td>
<td>2.817 ***</td>
</tr>
<tr>
<td>(0.39)</td>
<td>(0.90)</td>
<td>(0.17)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.408 ***</td>
<td>0.200 ***</td>
</tr>
<tr>
<td>(0.07)</td>
<td>(0.05)</td>
<td>(0.11)</td>
</tr>
</tbody>
</table>

N: 3958
Pseudo R-squared: 0.508

† prob < .10; * prob < .05; ** prob < .01; *** prob < .001 (two-tailed tests)

Note: Standard errors have been adjusted for individual-level clustering.
Table 3: Effects on Candidate Utilities, by Level of Political Sophistication

<table>
<thead>
<tr>
<th>Level of Political Sophistication</th>
<th>Trait Evaluation</th>
<th>Policy Agreement</th>
<th>Economic Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lula</td>
</tr>
<tr>
<td>Minimum</td>
<td>8.877 ***</td>
<td>1.062 **</td>
<td>0.230</td>
</tr>
<tr>
<td></td>
<td>(0.22)</td>
<td>(0.34)</td>
<td>(0.27)</td>
</tr>
<tr>
<td>1 Standard Deviation Below Mean</td>
<td>8.732 ***</td>
<td>1.319 ***</td>
<td>0.021</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.25)</td>
<td>(0.20)</td>
</tr>
<tr>
<td>Mean</td>
<td>8.512 ***</td>
<td>1.710 ***</td>
<td>-0.297 *</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.17)</td>
<td>(0.14)</td>
</tr>
<tr>
<td>1 Standard Deviation Above Mean</td>
<td>8.292 ***</td>
<td>2.101 ***</td>
<td>-0.615 ***</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.22)</td>
<td>(0.19)</td>
</tr>
<tr>
<td>Maximum</td>
<td>8.267 ***</td>
<td>2.145 ***</td>
<td>-0.651 ***</td>
</tr>
<tr>
<td></td>
<td>(0.17)</td>
<td>(0.23)</td>
<td>(0.20)</td>
</tr>
</tbody>
</table>

* prob < .05; ** prob < .01; *** prob < .001 (two-tailed tests)

Note: Estimates based on model presented in Table 1.
Table 4: Effects on Predicted Probabilities, by Level of Political Sophistication

<table>
<thead>
<tr>
<th>Level of Political Sophistication</th>
<th>Predicted Probabilities of Voting for Serra</th>
<th>Predicted Probabilities of Voting for Lula</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.002</td>
<td>0.886</td>
</tr>
<tr>
<td>1 Standard Deviation Below Mean</td>
<td>0.001</td>
<td>0.899</td>
</tr>
<tr>
<td>Mean</td>
<td>0.001</td>
<td>0.916</td>
</tr>
<tr>
<td>1 Standard Deviation Above Mean</td>
<td>0.001</td>
<td>0.931</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.001</td>
<td>0.932</td>
</tr>
</tbody>
</table>

Note: Predicted probabilities based on model presented in Table 2; party identification held to its mode (0) and all other variables held at sample means.
The results largely support my argument regarding political sophistication’s conditioning role. The absolute weights of policy and performance considerations appear to be increasing functions of political sophistication. Consider the effects of policy agreement. In the utility model results presented in Table 3, we see that a shift from the minimum \((SOPH_i = 0)\) to the maximum \((SOPH_i = 1)\) in political sophistication doubles the effect of on electoral utilities. Moving from the minimum level of policy agreement \((POLICY_{ij} = -1)\) to the maximum \((POLICY_{ij} = 0)\) increases the least sophisticated (but otherwise average) voter’s utility for a candidate by about 1.1 points. This same shift increases the most sophisticated (but otherwise average) voter’s utility by about 2.2 points.

In Table 4, we see that the effect of \(POLICY_{ij}\) on the probabilities of voting for Lula or Serra are more than four times greater for the most sophisticated voters compared to the least sophisticated. For example, least sophisticated voters who disagree maximally with Lula on policy (but are otherwise average) have a 37% chance of voting for him anyway; if these voters maximally agree with him, this probability increases to 51%, making the effect of \(POLICY_{ij}\) on the probability of voting for Lula among this group of voters about 15%. This shift in \(POLICY_{ij}\) among the most sophisticated results in an effect of about 61%. The results regarding predicted probabilities for Serra are similar: the effect of \(POLICY_{ij}\) is about 9% among the least sophisticated and about 40% among the most sophisticated voters.

The results regarding political sophistication’s conditioning effect on performance considerations follow a similar pattern. In the utility model results in Table 3, we see that moving from the most negative \((PERFORM_i = 0)\) to the most positive \((PERFORM_i = 1)\) retrospective economic evaluations makes the least sophisticated \((SOPH_i = 0)\) (but
otherwise average) voter’s utility for Serra increase by about 0.9; this same shift increases utilities for Serra by about 2.2 among the most politically sophisticated (SOPH = 1).

From the predicted probabilities for Serra in Table 4, we see that performance considerations do not seem to play much of a role at all among the least political sophisticated; moving from the most negative (PERFORM = 0) to the most positive (PERFORM = 1) retrospective economic evaluations makes increases one’s probability of voting for Serra by less than 1%. In contrast, this shift increases the predicted probability of voting for Serra by about 19% among the most politically sophisticated.

The estimated effects of performance considerations on the utilities and probabilities regarding the non-incumbent party candidates are consistent with my prior expectations. While they do not seem to have any effect for Gomes and Garotinho, they do seem to matter – if minimally – for Lula, the leading opposition candidate. Furthermore, they matter in ways consistent with my argument regarding political sophistication. In Table 3, we see that the estimated effect of economic evaluations on Lula utilities is statistically indistinguishable from zero for all but the most politically sophisticated. For these voters, a shift from the most negative to the most positive retrospective economic evaluations results in a decrease of about two-thirds of a point on the utility scale. From Table 4, we see that the effect of performance considerations increases from about 0.50% for the least sophisticated to about 11% for the most sophisticated on the probability of voting for Lula.

I have argued that political sophistication should not condition the effect of candidate considerations. While the results do not offer strong support for this contention at first glance, they are largely consistent with it. In the utility model, political sophistication does appear to condition the weight of candidate considerations contrary to my expectations; the more sophisticated tend to assign less weight to trait evaluations.
than the less politically sophisticated. This difference between the least and most sophisticated voters is statistically significant (i.e., nonzero); it is not, however, very substantively significant. Whereas moving from the minimum trait evaluation ($TRAITS_{ij} = 0$) to the maximum ($TRAITS_{ij} = 1$) tends to increase the least sophisticated voters’ utilities for a candidate by about 8.9, it increases the most sophisticated ones’ by about 8.3; a difference of about 0.61 on the 0-10 utility scale. Likewise, the same shifts in trait evaluations produced similar changes regardless of level of political sophistication in the predicted probabilities based on the vote choice model. As shown in Table 4, the effect on the probability of voting for Lula is about 96% for the least sophisticated and about 98% for the most sophisticated. The effect in the case of Serra is about 89% for the least sophisticated and about 93% for the most.
Chapter 6
Discussion and Conclusion

It seems, then, that political sophistication conditions voters’ considerations in ways consistent with my argument. First, as political sophistication increases, so too do the absolute weights of policy and performance considerations. Second, political sophistication seems to have very little conditioning effect on the absolute weight of candidate considerations. Trait evaluations matter a great deal regardless of level of sophistication. Third, and necessarily, the relative weight of candidate considerations decreases as political sophistication increases.

Tables 5 and 6 shed more light on political sophistication’s effect on the relative weight of candidate considerations in the utility and vote choice models, respectively. The “relative weight” here is simply the absolute value of the ratio given by dividing the effect of $TRAITS_y$ by the effect of $POLICY_y$ or $PERFORM_y$. In both tables, it is clear that as political sophistication increases, the dominance of candidate considerations diminishes. Consider, for example, the effect of candidate considerations relative to policy. Moving from the least sophisticated to the most sophisticated in the utility model, the weight of candidate considerations relative to policy considerations decreases from about 8.4 to 3.9. In the vote choice model, the relative weight decreases from about 6.6 to 1.6 for Lula and from about 10.1 to 2.4 for Serra.
Table 5: Relative Effects of Candidate Considerations on Candidate Utilities, by Level of Political Sophistication

<table>
<thead>
<tr>
<th>Level of Political Sophistication</th>
<th>Trait Evaluation vs. Policy Agreement</th>
<th>Trait Evaluation vs. Economic Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lula</td>
</tr>
<tr>
<td>Minimum</td>
<td>8.36</td>
<td>---</td>
</tr>
<tr>
<td>1 Standard Deviation Below Mean</td>
<td>6.62</td>
<td>---</td>
</tr>
<tr>
<td>Mean</td>
<td>4.98</td>
<td>28.62</td>
</tr>
<tr>
<td>1 Standard Deviation Above Mean</td>
<td>3.95</td>
<td>13.47</td>
</tr>
<tr>
<td>Maximum</td>
<td>3.85</td>
<td>12.70</td>
</tr>
</tbody>
</table>

Note: Relative effects are calculated by taking the absolute value of the ratio of the effect of TRAITS over the effects of POLICY and RETRO. Calculations based on effects reported in Table 3.
Table 6: Relative Effects of Candidate Considerations on Predicted Probabilities, by Level of Political Sophistication

<table>
<thead>
<tr>
<th>Level of Political Sophistication</th>
<th>Trait Evaluation vs. Policy Agreement</th>
<th>Trait Evaluation vs. Economic Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lula</td>
<td>Serra</td>
</tr>
<tr>
<td>Minimum</td>
<td>6.55</td>
<td>10.14</td>
</tr>
<tr>
<td>1 Standard Deviation Below Mean</td>
<td>3.47</td>
<td>5.44</td>
</tr>
<tr>
<td>Mean</td>
<td>2.13</td>
<td>3.31</td>
</tr>
<tr>
<td>1 Standard Deviation Above Mean</td>
<td>1.63</td>
<td>2.43</td>
</tr>
<tr>
<td>Maximum</td>
<td>1.60</td>
<td>2.36</td>
</tr>
</tbody>
</table>

Note: Relative effects are calculated by taking the absolute value of the ratio of the effect of TRAITS over the effects of POLICY and RETRO. Calculations based on effects reported in Table 4.

To be sure that these results are not statistical artifacts of the measures I have employed, I estimated additional models using alternative measures for policy and performance considerations. The first alternative measure for policy considerations is the negative Euclidean distance between the ith voter and jth candidate on a five-point “left-right” ideological dimension. The second alternative measure of policy considerations simply takes account of whether the voter and candidate were on the same side of the policy issues rather than how strongly they agree or disagree. As an alternative measure for performance, I use respondents’ feeling thermometer ratings for the incumbent president, Fernando Henrique Cardoso of the PSDB.

Despite some differences in the absolute weights of policy and performance considerations, the results (not shown here) from estimating the utility and vote choice model...
models with these alternative measures are consistent with those discussed above. The weight of policy considerations increases for all voters when measured in the more simple construction and decreases for all when measured in terms of ideology. When measured in terms of feelings toward the incumbent president, performance considerations gain more explanatory power. Importantly, however, candidate considerations continue to dominate, and the patterns concerning the extent to which they dominate maintain: the weight of candidate considerations relative to policy and performance decreases as political sophistication increases.

I estimated an additional model specification that includes sociodemographic variables in addition to the politico-psychological variables. These include: respondent education, income (natural log), and dichotomous variable indicating whether the respondent is Catholic. Again, the absolute weights associated with the various considerations change, but the pattern regarding their relative weights as political sophistication increases maintains.

We have seen that the extent candidate-centered voting indeed seems to be a function of political sophistication at the individual level. Voters with higher levels of political sophistication give candidate considerations less weight relative to policy and performance considerations compared to their less sophisticated counterparts. This pattern is robust across various alternative model and measurement specifications would appear to hold even if candidate traits are conceptualized as more global candidate evaluations themselves.

Political sophistication’s conditioning effect should generalize both to Brazilian elections beyond 2002 and elections in contexts beyond Brazil. That is, individual-level variation in the extent of candidate-centered voting should be explained (at least in part) by voters’ political sophistication any electoral context. We should, however, expect
variation in the aggregate extent of candidate-centered voting across contexts. Indeed, a fruitful topic for future research should involve exploring such variation across countries and across elections within countries.
## Appendix A

### Descriptive Statistics for Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Measures(^a)</th>
<th>Individual-Specific</th>
<th>Candidate-Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lula</td>
<td>Serra</td>
</tr>
<tr>
<td>Vote</td>
<td>0.578</td>
<td>0.224</td>
</tr>
<tr>
<td></td>
<td>(0.49)</td>
<td>(0.42)</td>
</tr>
<tr>
<td>Utility</td>
<td>7.018</td>
<td>4.940</td>
</tr>
<tr>
<td></td>
<td>(3.13)</td>
<td>(3.20)</td>
</tr>
<tr>
<td>Trait Evaluation</td>
<td>0.604</td>
<td>0.580</td>
</tr>
<tr>
<td></td>
<td>(0.20)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>Policy Agreement(^b)</td>
<td>-0.376</td>
<td>-0.460</td>
</tr>
<tr>
<td></td>
<td>(0.17)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Political Party Identification</td>
<td>0.342</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>(0.47)</td>
<td>(0.15)</td>
</tr>
<tr>
<td>Economic Evaluation</td>
<td>0.278</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.26)</td>
<td></td>
</tr>
<tr>
<td>Political Sophistication</td>
<td>0.599</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.36)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Sample means are reported with standard deviations in parentheses. Sample based on observations included in Model 1 estimation.

\(^a\) With the exception of Policy Agreement, all measures run from 0 to 1.

\(^b\) Policy Agreement runs, in theory, from -1 to 0. In contrast to all other measures included in the models, neither its theoretical minimum or maximum are observed in the sample. The observed minima and maxima for Policy Agreement are: (-.793, -.041) for Lula; (-.697, -.077) for Serra; (-.597, -.065) for Gomes; and, (-.681, -.084) for Garotinho.
## Appendix B

Descriptive Statistics for Original Trait and Policy Items

<table>
<thead>
<tr>
<th>Measures</th>
<th>Self Placement</th>
<th>Candidate Placement</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lula</td>
<td>Serra</td>
<td>Gomes</td>
<td>Garotinho</td>
<td></td>
</tr>
<tr>
<td>Trait Items&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent</td>
<td>1.876</td>
<td>2.104</td>
<td>1.963</td>
<td>1.781</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.79)</td>
<td>(0.69)</td>
<td>(0.73)</td>
<td>(0.71)</td>
<td></td>
</tr>
<tr>
<td>Honest</td>
<td>1.803</td>
<td>1.470</td>
<td>1.386</td>
<td>1.481</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.74)</td>
<td>(0.75)</td>
<td>(0.70)</td>
<td>(0.74)</td>
<td></td>
</tr>
<tr>
<td>Decisive</td>
<td>1.972</td>
<td>1.830</td>
<td>1.773</td>
<td>1.722</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.81)</td>
<td>(0.74)</td>
<td>(0.76)</td>
<td>(0.76)</td>
<td></td>
</tr>
<tr>
<td>Compassionate</td>
<td>1.932</td>
<td>1.542</td>
<td>1.457</td>
<td>1.652</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.77)</td>
<td>(0.78)</td>
<td>(0.74)</td>
<td>(0.78)</td>
<td></td>
</tr>
<tr>
<td>Policy Items&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Spending</td>
<td>0.870</td>
<td>0.968</td>
<td>1.533</td>
<td>1.413</td>
<td>1.103</td>
</tr>
<tr>
<td></td>
<td>(1.45)</td>
<td>(1.48)</td>
<td>(1.66)</td>
<td>(1.57)</td>
<td>(1.47)</td>
</tr>
<tr>
<td>Land Reform</td>
<td>1.497</td>
<td>0.724</td>
<td>2.250</td>
<td>1.830</td>
<td>1.465</td>
</tr>
<tr>
<td></td>
<td>(1.65)</td>
<td>(1.27)</td>
<td>(1.66)</td>
<td>(1.61)</td>
<td>(1.57)</td>
</tr>
<tr>
<td>Privatization</td>
<td>1.444</td>
<td>0.938</td>
<td>3.073</td>
<td>1.952</td>
<td>1.519</td>
</tr>
<tr>
<td></td>
<td>(1.57)</td>
<td>(1.42)</td>
<td>(1.40)</td>
<td>(1.61)</td>
<td>(1.57)</td>
</tr>
</tbody>
</table>

Note: Sample means are reported with standard deviations in parentheses. Sample based on observations included in Model 1 estimation.

<sup>a</sup> Each of the trait items has a minimum of 0 to a maximum of 3 (with increases representing increasing trait attribution).

<sup>b</sup> Each of the issue items has a minimum of 0 and a maximum of 4 (with increases representing increasingly ideologically "rightist" positions)
References


Pierce, Patrick. 1993. “Political Sophistication and the Use of Candidate Traits in

Social-Cognitive Model of Candidate Appraisal.” In John A. Ferejohn and James
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