

Issue Emphasis in U.S. Presidential Elections*

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Abstract

In this paper, I consider the effect of issue emphasis in political campaigns on U.S. Presidential election outcomes from 1952 to 2004. Since political campaigns are determined through political competition, I construct a structural model to account for this endogeneity. Noting the similarity between two campaign-setting political candidates and two price-setting oligopolists, I borrow from the applied microeconomic literature on product demand estimation to estimate the model. I construct a data-set of issue emphases using the primaries' acceptance speeches and I use it in conjunction with the American National Election Studies data-set to find that issue emphases on economic policy, political authority and corruption, and traditional values issues are all significant determinants of vote choice and the effect of each varies by the party and position of a Presidential candidate, and the unemployment level in the economy.

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1 Introduction

Political campaigns are multidimensional objects pertaining to a multitude of issues; economic policy, national defense, and so on. This paper examines the effect of emphasizing various issues in a political campaign on election outcomes. I consider all facets of a politician's platform and characteristics as well as demographic characteristics and preferences of the US electorate. Noting that political campaigns are simultaneously determined by competing politicians, I build a structural model that allows me to account for this endogeneity. I construct a data-set of issue emphases using the Party Nominating Conventions' acceptance speeches and in conjunction with the American National Election Studies dataset I estimate my model using techniques from the applied microeconomics literature on demand estimation. I find that issue emphasis on the quality of the two parties, traditional values and the economy are all significant determinants of voter choice. The magnitude and sign of each campaign effect depends on the perceived position and party of the politician campaigning as well as the unemployment level of the economy.

The contribution of this paper is three-fold. First, by accounting for the importance of non-economic issues and the tools that politicians have to affect voters' preferences on them, I shed new light in the pre-election literature in political economics. The role of non-economic dimensions in determining outcomes has been considered in the literature,¹ but in this approach preferences on non-economic issues are exogenous to the setup. In this paper, through campaigning, politicians are able to manipulate the preferences of voters by changing the salience of various issues.² Understanding US voters' preferences given a multi-dimensional political campaign is key to understanding election outcomes and consequently policy outcomes. In fact, the findings support the hypothesis that campaigning on non-economic issues affects election outcomes.

Second, in the political science literature, voter preferences and campaigns have been examined thoroughly but seldom in a setting that considers the interaction of the two and allows for the fact that campaigns are set through political competition and are thus

¹Most recently through the papers of De La O and Rodden (2008), Lee and Roemer (2006), Shapiro et al. (2008) among others.

²Glaeser et al (2005) in a similar flare examine the reasons behind the recent "extreme" statements of political candidates in terms of traditional values issues.

endogenous. This paper provides an interdisciplinary bridge between political science and economics, by considering essential topics from political science and using sophisticated techniques from economics to address them.

Third, the newly constructed data-set on acceptance speeches can shed new light in the political history of the United States and in conjunction with the provided setup one can run policy experiments to examine how certain events shaped election outcomes³ and also forecast future election outcomes. It can also be used to compare promised and implemented promises of US Presidential candidates (see Grypari (2012)).⁴

To address the importance of non-economic issues I start theoretically by building upon the probabilistic voting framework of Lindbeck and Weibull (1987), to provide a tractable model of political platforms that endows political candidates with *both* economic and non-economic instruments for political targeting. Politicians are endowed with campaign time which can be distributed amongst a multitude of issues (both economic and other). Although politicians' positions are fixed by party affiliation, campaigns can differentially emphasize the various aspects of the politician's agenda. Issue emphasis can be thought of as a signal of the time a politician will spend once in power on that issue. The effect of emphasis on voters' payoffs is allowed to be different across politicians, issues and demographic groups of voters. This is consistent with differences in campaign technology due to media exposure as well differences resulting from which party voters think can best handle a particular problem, i.e. the idea of "issue ownership" Petrocik (1996). It is the way voters trade off utility among different issues, their political power (in terms of sheer numbers) and their preferences for one politician over the other, on different issues, that determine equilibrium issue emphasis and vote shares.

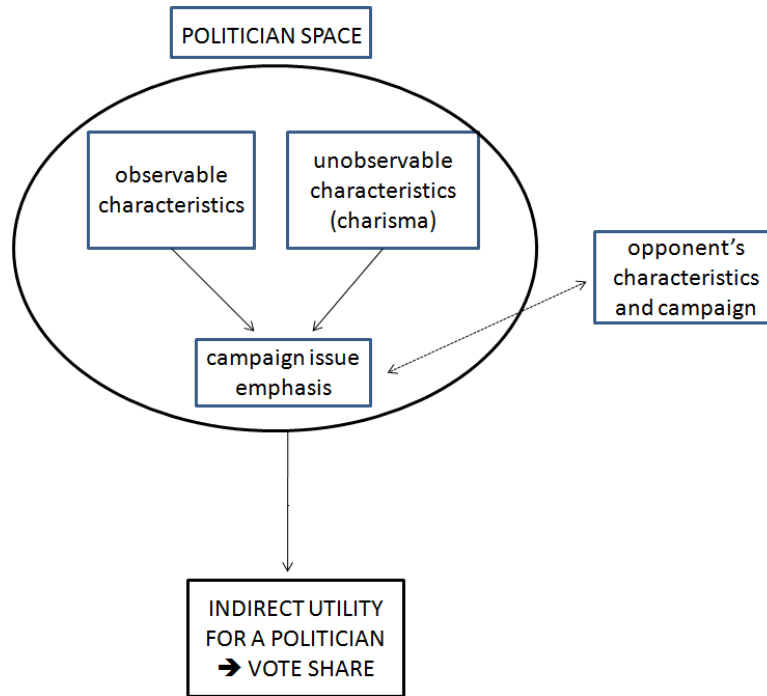
Empirically, I estimate the demand for a politician, i.e. the share of votes a politician receives given her campaign. I enrich the model so that the voting decisions of agents are also influenced by observed and unobserved politician characteristics (Figure 1). The former refer to demographic and career characteristics of the politician⁵ and the latter

³An example for that being, examining what would have happened in the 2004 election were there not wars on Iraq and Afghanistan.

⁴Note that content analysis on acceptance speeches has been done in the past (Benoit) but with regards to issue emphasis the methodology here is better suited, as will be discussed later on.

⁵See the Appendix for a list.

Figure 1: Politician Space



to personality traits such as charisma that are not observable by the econometrician. To allow for the fact that campaign effects vary with the position of a politician, I introduce interaction terms for the different issue dimensions. In other words, each issue enters the estimation of vote shares in three ways: (i) the effect of campaign time on that issue, (ii) the effect of the politician’s position on that issue and (iii) the effect of the two interacted. Although, the focus of this paper is on issue emphasis and the positions of politicians are thought to be set outside the model, I treat all three terms as endogenous.⁶

In order to estimate the model, I construct my own data-set, using the party Presidential Nominating Convention acceptance speeches for each candidate, that take place in the spring before the election. The content analysis follows the one done by the Comparative Manifesto Project (CMP) on party platforms. Namely, each sentence is broken down to “quasi-sentences,” defined as a part of the sentence in which an idea is self-contained. The largest possible quasi-sentence is the whole sentence. Each quasi-sentence belongs to one of

⁶In fact, the positions of politicians never enter significantly in the estimation.

Figure 2: Average Indirect Utility

$$\left(\begin{array}{c} \delta^j, \text{ average} \\ \text{indirect utility} \\ \text{if } j \text{ wins} \end{array} \right) = \underbrace{\left(\begin{array}{c} \text{various issue} \\ \text{preferences} \end{array} \right)}_{\text{depends on politician campaign}} + \left(\begin{array}{c} \text{observed} \\ \text{politician} \\ \text{charact.} \end{array} \right) + \left(\begin{array}{c} \text{unobserved} \\ \text{politician} \\ \text{charact.} \end{array} \right)$$

fifty six minor issue categories and to one of the seven major ones.⁷ I added an “oratory” category to place the introductory sentences that were meant to get the attention of the audience. I created the measure of issue emphasis by counting the total number of quasi-sentences (excluding the oratory ones), and the number in each category. I use this data-set in conjunction with the National Election Studies data-set that contains voter-level data on demographics, the perceived positions of Presidential candidates, voting and opinions from 1952 till today.

To estimate the demand for a politician, I break down a voter’s indirect utility from a politician in two parts. A population average δ and an individual level component, ν^i , where i denotes a voter. The former, δ , includes the *average* effects of campaign and politician characteristics on voter payoffs (Figure 2).

Voters vote for the politician that gives them the highest expected payoff $\delta + \nu^i$. Note that when solving for the share of votes a politician receives, δ enters non-linearly. The complication of the estimation of campaign effects arises from the endogeneity of campaigns. A politician chooses her campaign given the campaign, observed and *unobserved characteristics* of her opponent, who in turn chooses her campaign to best respond. Thus, the unobserved characteristics of a politician affect both her campaign (through political competition) and the vote share she receives directly.

Noting the similarities between two campaign-setting political candidates and two price-setting oligopolists (i.e. they set campaigns/prices to sell as many votes/goods given characteristics), I use techniques from the discrete choice demand estimation literature to account for the endogeneity of campaigns. I extend Berry’s (1994) techniques to this setup and show that there exists a unique mapping from the vote share politicians receive to δ . I estimate δ given this mapping and the campaign effects can now be estimated using standard

⁷See the appendix for a list of categories.

instrumental variable techniques.

Since, the dependent variable is the average voter utility if a specific politician wins, I can use various measures of the campaigns and characteristics of the two parties *in other years* as instruments. For example, looking at the indirect utility of voters if Bush won the 2004 election I note that Bush's charisma (unobserved characteristic) is most likely uncorrelated with the campaign of all democratic candidates in the 1952 - 1996 elections. The latter however should be highly correlated with Bush's campaign through party linkages and competition. Thus various measures of past (and future) campaigns and politician characteristics are used as instruments.

I find that issue emphasis on the political system,⁸ economics and traditional values issues are all significant determinants of vote shares. The effect of the political system depends on the party affiliation of the presidential candidate. It is negative for Republican and positive for Democratic candidates.

Issue emphasis on economics has a statistically significant and positive effect for any presidential candidate. A 5 percentage points increase in the share of time on economics (from 20% to 25% of total campaign time) leads to an average increase of 8.3 percentage points in votes. The effect varies because economic issue emphasis enters quadratically in the demand for a politician, revealing that the campaign technology is "better" in terms of turning issue emphasis into votes the more time a politician spends in economics. One can see this as a credibility effect. Changes in economic policy are in general hard to pass through Congress, the more time a politician spends on them the greater the marginal effect of issue emphasis as voters become more convinced the policy will pass.

In terms of issue emphasis on traditional values issues (such as gay marriage, abortion and anything else pertaining to traditional morality) the effect depends on the perceived position of the politician. The more conservative a politician is perceived to be the larger the effect of issue emphasis. A 5 percentage points increase in the share of time on traditional values issues by a politician considered to be conservative to extremely conservative will increase her share of votes on average by 4 percentage points (at most 12), for a moderate on

⁸Governmental and administrative efficiency, political corruption, political authority/party competence.

average 2.8 percentage points (at most 7.6) and for a liberal to extremely liberal politician on average 1.3 percentage points (at most 3.5 percentage points), on the margin. A reason for this may be that the voters for which the exogenous salience of traditional values issues is the highest are the more conservative ones and thus the ones that will respond the most to politicians in agreement with their preferences.

In a robustness check, without yearly fixed effects but with “state of the world” variables such as the unemployment level and whether or not the United States was in a major war, I find that emphasis on economic policy enters as an interaction term with the unemployment level. The higher the unemployment level, the greater the effect on emphasis on economic issues, indicating that in fact as the exogenous salience of an issue increases, emphasis on it becomes more profitable in terms of votes.

In the following, section 2 presents the simple model, section 3 the enriched one, in section 4 I describe the data and in 5 the identification strategy. Section 6 presents the results and section 7 concludes.

2 Simple Model

In this section I present the basic setup. Consider a static endowment economy with two politicians $j \in \{R, D\}$ and a continuum of voters $i \in [0, 1]$ each belonging to a group $g \in G$, with π_g being the fraction of voters in group g . $g = \{g_y, g_d\}$ where g_y denotes the endowment of a voter, $g_y \in \{0, M\}$, $0 < M < \infty$ and $g_d \in \{0, 1\}$ a non-income dimension such as gender, location, race, religiosity and so on.

There are two payoff-relevant issues, $n = e$ is the economic and $n = s$ the social issue. Politicians campaign by spending time on/talking about these two issues. t_e^j is the time politician j spends campaigning on the economic issue and t_s^j on the social one. The positions of politicians are implicit.

Definition 2.1 *A campaign t^j , $j = R, D$, is feasible if $t_e^j + t_s^j = 1$, $t_n^j \in [0, 1]$, for all $n \in \{e, s\}$.*

Note that politicians have to spend all of their campaign time on the two issues. Voters vote one of the two politicians, $b \in \{R, D\}$. Politicians maximize the fraction of votes they receive⁹ and voters their winner-contingent payoffs.

For voter i in group g , her payoff **if politician j wins** is

$$u_g^{ij} = w_{eg}^j(t_e^j)v_g^j + w_{sg}^j(t_s^j)\varepsilon_g^{ij}$$

where $w_{ng}^j(\cdot), \forall n = e, s$ are weight functions for the two issues that are increasing in campaign time, v_g^j is the utility of a voter in group g from politician j 's implicit position on the economic issue and is exogenous. ε_g^{ij} is the *private* social issue utility for the voter. It is distributed according to F_g^j which is known to both politicians.

Campaign time on an issue should be thought of as a signal of the time a politician will spend on an issue once in power. More time on an issue thus increases the salience of it in voters' payoffs, $w' > 0$. Note that if ε_g^{ij} is negative, campaigning on the social issue hurts the politician. Given this setup, a voter will vote for politician D if

$$w_{eg}^D(t_e^D)v_g^D + w_{sg}^D(t_s^D)\varepsilon_g^{iD} \geq w_{eg}^R(t_e^R)v_g^R + w_{sg}^R(t_s^R)\varepsilon_g^{iR}$$

An *equilibrium* in this economy is campaigns for both politicians $t^j, j = R, D$ such that they each maximize the fraction of votes they receive given the campaign of their opponent t^{-j} . Note that the actual payoff function of politicians matters only to the extent that it makes politicians best respond to each other. It is because of this competition that the endogeneity problem is created and instruments are required, but whether or not politicians maximize the fraction of votes they receive or the probability of winning the election is irrelevant in what follows.

⁹Note that this is not a restriction since *given the fraction of votes politicians receive and their campaigns I estimate the effect of issue emphasis*. In other words in the estimation I make no assumption on the optimality of campaigns, I only assume that the politicians are in competition

3 Enriched Model

In this section, I present the enriched version of the model previously described that will be estimated using data from U.S. Presidential Elections from 1952 - 2004.

The specification I take to the data has the following characteristics. There are several issue dimensions $n \in \{1, \dots, N\}$ and two choices for each voter: R (Republican), D (Democrat). I also introduce a $1 \times K$ vector of observable (to the econometrician) politician characteristics, X^j , such as the party she belongs to, political history and so on and I denote with ξ^j the unobserved politician characteristics, such as charisma. t_p^j is an interaction term with elements $t_n p_n$, where p_n is the position of a politician on issue n and t_n the campaign time on the issue.¹⁰ This is to allow for a differential effect of issue emphasis depending on party position. For voter i , **if politician j wins**

$$u^{ij} = \underbrace{t^j}_{1 \times N} \alpha + \underbrace{t_p^j}_{1 \times N} \beta + \underbrace{p^j}_{1 \times N} \gamma + \underbrace{X^j}_{1 \times K} \zeta + \xi^j + \nu^{ij}$$

where ν^{ij} are independently and identically distributed across voters and politicians with Type I extreme value distribution so that

$$P_\nu(\nu) = -\exp(-\exp(-\nu))$$

We can break down these payoffs into a population average and an individual deviation.

$$u^{ij} = \delta^j(t^j, p^j, X^j, \xi^j; \theta) + \nu^{ij}$$

¹⁰In the estimation, I also allow for non-linearities, but simplify it here for notational convenience.

where

$$\begin{aligned} \delta^j &= t^j\alpha + t_{-p^j}\beta + p^j\gamma + X^j\zeta + \xi^j, && \text{mean utility of politician } j \\ \nu^{ij} &&& \text{heterosc. dev. from pop. average} \\ \theta &= (\alpha, \beta, \gamma, \zeta), && \text{parameters} \end{aligned}$$

Let $A^j(\delta)$ be the set of individuals that vote for j given the vector of average utilities δ , for all $j \in \{Rep, Dep\}$. We have

$$A^j(\delta, \mathbf{t}, \mathbf{p}, \mathbf{X}) \equiv \left\{ \{\nu^{ij}\}_j \mid u^{ij} \geq u^{il}, \forall l \in \{R, D\} \right\}$$

Assuming ties occur with zero probability, the vote share of the j th politician is just an integral over the mass of voters in region A^j .

$$s^j(\delta, \mathbf{t}, \mathbf{X}) = \int_{A^j} dP^*(\nu)$$

for $j = R, D$ where $P^*(\cdot)$ denotes the population distribution function.

Lastly, in the estimation I also use party and year fixed effect so that ξ^j is the deviation of charisma from the party and year averages. Note that ξ^j still creates an endogeneity problem as there are many examples of variation in charisma and other unobserved characteristics across both parties (within the same year) and years (within the same party).

4 Data

I am using data from US Presidential Elections from 1952 to 2004 to estimate the model. Individual level data on voting choices and voter characteristics come from the National Election Studies (NES).¹¹ I have constructed my own campaign data using presidential candidate acceptance speeches at the Republican and Democratic party presidential nominating conventions. I estimate issue emphasis as the fraction of the acceptance speech on

¹¹<http://www.electionstudies.org/>

Table 1: Summary Statistics

VARIABLE	Mean	
	<i>Rep</i>	<i>Dem</i>
t_{econ}	28.1%	27.9%
$t_{foreign}$	23.8%	24.1%
t_{poli}	8%	9.3
t_{civil}	21.7%	20.3%
t_{envi}	5.4%	5.1%
t_{trad}	2%	2.4%
t_{welf}	9.1%	8.2%

a specific issue. The content analysis is done following the methodology of the Comparative Manifesto Project (CMP).¹² Each sentence of the acceptance speech is broken down to “quasi-sentences,” defined as a part of the sentence in which an idea is self-contained. The largest possible quasi-sentence is the whole sentence. Each quasi-sentence belongs to one of fifty six minor issue categories, seven major ones.¹³ I added an “oratory” category to place the introductory sentences that were meant to get the attention of the audience. I created the measure of issue emphasis by counting the total number of quasi-sentences (excluding the oratory ones), and the number in each category. Table 1 presents some summary statistics on issue emphasis.

where t_{econ} is issue emphasis on economics, $t_{foreign}$ on national defense and foreign policy, t_{poli} on the political system and corruption, t_{civil} on civil rights issues, t_{envi} on the environment, t_{trad} on traditional values issues and t_{welf} on welfare.

The position of politicians on different issues p^j are calculated using the answers in various NES questions on the perceived positions of specific Presidential candidates.

The observed politician characteristics that I include in X^j are listed in table 4 in the appendix. The observed voter characteristics that are used for robustness checks include demographics, self-proclaimed partisanship, a personal assessment of the state of the economy and self-proclaimed most important problem (MIP) for the United States (table 5 in the

¹²Klingemann, et al (2006).

¹³See the appendix for a list of categories.

appendix). The assessment of the state of the economy has been found to be an important determinant of voter choice in the political science literature, and the MIP was selected to account for changes in exogenous factors over time.

Since I do not consider independent candidates, I exclude the years 1968 and 1992 from the analysis when George Wallace and H. Ross Perot got more than 10% of the total vote share (13.5% and 19.60% respectively).

In order to isolate the campaign effects on actual vote choice, voter turnout is excluded from the estimation.¹⁴ Thus, the votes shares used in the estimation are conditional on voting for one of the two major candidates.

4.1 Choice of Acceptance Speeches and Methodology

There are four sources of campaign data that I could have used in this paper. Political platforms, acceptance speeches, campaign tv advertisements and Presidential debates. Political platforms were not chosen as they represent a wider set of party preferences as opposed to the specific candidate's. Presidential debates, although closer to the actual election, are problematic since the issues emphasized are chosen by the moderator. Lastly, campaign advertisements are on the one hand a good measure of issue emphasis since they run throughout the entire campaign, but on the other hand different advertisements are shown in different locations across the United States which may make the assumption that issue emphasis is a signal of the campaign time a politician will spend once in power on an issue invalid. Regardless, they would provide a much richer data set, but as the advertisement transcripts are not publicly available, acceptance speeches provide the best measure of campaigns available.

In terms of the methodology, an alternative one would be a word counting measure (as used by Benoit) where the number of words pertaining to an issue are counted and compared to the total number of words on a speech. Consider the following sentence:

I improved the quality of our education by lowering teacher to student ratios

quasi-sentence 1, issue: education

¹⁴A decision of the voter whether or not to vote is influenced by several factors besides the campaign and can enter the decision problem in a multitude of ways, as is well-documented in the literature.

and health care by giving free blood tests.

quasi-sentence 2, issue: health-care

Using the content analysis of CMP and this paper there are two issues addressed in this sentence: education and health-care (one quasi-sentence for each). Word-counting however would give three entrees to the education category for the words “education,” “teacher” and “student,” thus over-counting the issue emphasis.¹⁵

4.2 Defining a Market

In this discrete choice, characteristic-based approach of demand estimation a politician is completely described by (t, p, X, ξ) and when defining a market it is important that the characteristics of a politician are perceived to be the same by all voters in that market. Specifically, since it has been well-documented that voters often misperceive the positions of a politician I use survey questions from NES to separate voters into groups (within each year). If voter i thinks that politician j is planning to start a new war, but voter l thinks that politician j is supportive of peace, then if we place i and l in the same market the estimates of the effects of the national defense issue emphasis for politician j will be meaningless because essentially politician j is not the same for voter i and voter l . One can think of this as separating voters into groups depending on how informed/sophisticated they are. I control for the correlation of errors of voters within a group using either fixed effects or robust clustered standard errors.

The question from the NES I use to create groups in the population is one about the liberal to conservative placement of a political party. Although it is not ideal because liberal and conservative has a subjective interpretation, it is the position question that is the least correlated with a campaign. Other questions, such as whether or not a specific candidate is likely to start a war, although they have a more objective interpretation they are likely to be influenced by the campaign of a politician. For the same reason I use the position of the party, rather than that of the specific individual. Note that the NES is conducted anywhere

¹⁵It should be noted that Benoit does not use this measure as issue emphasis, but rather as a way to construct data on positions.

between 3 months to 1 day before the election. A liberal to conservative party scale is a distinction which was most likely made by voters before the presidential campaign starts.

With this manipulation, a market is defined as the year and the group in the population agreeing on a politician's position and there are ten groups of voters in each year. Group fixed effects are also included in the estimation.

Table 7 in the appendix provides summary statistics of the data.

5 Identification Strategy

I use the methodology of Berry (1994) to estimate the model. Given the assumption of individual level errors, the following Proposition is true.

Lemma 5.1 *(Berry 1994) Given the previous assumptions, there is a unique mapping from vote shares to δ , the average utility in the population for voting for a specific candidate. Specifically:*

$$\ln(s^{jm}) = \delta^j = t^{jm}\alpha + t_p^{jm}\beta + p^{jm}\gamma + X^j\zeta + \xi^{jm}$$

where m denotes the market.

Note that the two politicians are competing and thus set their campaigns to best respond to their opponent. One candidate, for example the Democrat D , sets t^D taking into consideration (t^R, p^R, X^R, ξ^R) so that t^D is a function of all these. The Republican candidate does the same thing so that we can write $t^D(t^R, p^D, X^D, \xi^D), p^R, x^R, \xi^R$. Thus we have that ξ^D affects both t^D and δ^D , creating an endogeneity problem. Using Berry's result ξ^j now enters linearly and standard instrumental variables techniques can be used to estimate the effects of campaigns.

5.1 Instruments

Since the error term ξ^j is correlated with campaigns t^j , I need a set of instruments to consistently estimate the model. Under the assumption that ξ^j is composed of personal traits of

a politician (such as charisma), I use different measures¹⁶ of politician characteristics (BLP 1995) and campaigns (Hausman instruments) in other years, excluding the years with the same Presidential candidate. For example, the charisma of President Bush in the 2004 election is most likely uncorrelated with the campaign of all Republican and Democratic candidates from 1952 to 1996, but those campaigns are highly correlated with Bush's 2004 campaign through party linkages and political competition. In all the results presented in the paper, I have conducted tests for the validity and strength of the instruments, they can be found in the appendix.

¹⁶E.g. the sum.

Table 2: Main Results

Variable	OLS	IV
t_{econ}^2	24.38*** (8.89)	3.32* (1.94)
t_{poli}^2	-2.87 (19.31)	-29.56** (12.54)
$t_{poli}^2 \times Dem$	65.84*** (10.38)	48.34*** (9.5)
$t_{welf}^2 \times pos_{welf}$	23.52 (14.55)	-4.16 (8.9)
t_{trad}^2	-532.07*** (176.56)	
$t_{trad}^{0.5} \times pos_{trad}$	7.77*** (1.42)	2.13* (1.16)
$t_{envi}^{0.5}$	-7.50** (2.94)	
Measures of Fit	0.5	5%

Notes: * significant at 10%, ** significant at 5%, *** significant at 1%.

The measure of fit for OLS is the adjusted R-squared, and for IV 5% implies that the Wald F-Statistic passes the Stock Yogo relative bias test at the 5% level, so that the instruments are strong.

5.2 Results

Table 2 presents the results of the main specification.

Issue emphasis enters in these non-linear forms as these are the ones that best fit the data. Table 8 in the appendix contains the results for other specifications and details on the data used. I find that issue emphasis on the political system,¹⁷ economics and traditional values issues are all significant determinants of vote shares.

The effect of the political system depends on the party affiliation of the presidential candidate. It is negative for Republican and positive for Democratic candidates. Since this category includes mentions of corruption and scandals, one potential explanation of this result is that effect of the Watergate scandal was so significant that it negatively affected

¹⁷Governmental and administrative efficiency, political corruption, political authority/party competence.

Republican Presidential candidates for subsequent years. If there was data on the number of such events per year and per party, one could verify the source of this effect.

Issue emphasis on economics has a statistically significant and positive effect for any presidential candidate on the margin. A 5 percentage points increase in the share of time on economics (from 2% to 25% of total campaign time) leads to anywhere from a 3% to 30% increase in the share of votes, an average increase of 8.3 percentage points in votes. The effect varies because economic issue emphasis enters quadratically in the demand for a politician, revealing that the campaign technology is better in terms of turning issue emphasis into votes the more time a politician spends in economics. One can see this as a credibility effect. Changes in economic policy are in general hard to pass through Congress, the more time a politician spends on them the greater the marginal effect of issue emphasis as voters become more convinced the policy will pass.

In terms of issue emphasis on traditional values issues (such as gay marriage, abortion and anything else pertaining to traditional morality) the effect depends on the perceived position of the politician. The more conservative a politician is perceived to be, the larger the effect of issue emphasis. A 5 percentage points increase in the share of time on traditional values issues by a politician considered to be conservative to extremely conservative will increase her share of votes on average by 4 percentage points (at most 12), for a moderate on average 2.8 percentage points (at most 7.6) and for a liberal to extremely liberal politician on average 1.3 percentage points (at most 3.5 percentage points). A reason for this may be that the voters for which the exogenous salience of traditional values issues is the highest are the more conservative ones and thus they will respond the most to politicians in agreement with their preferences.

It is clear that the OLS estimates are biased upwards. Variations in valuation of politician charisma and other traits beyond the party average are, as predicted, correlated with political campaigns. The larger the variation of charisma for year, group and party averages, the greater the effect of issue emphasis. This could indicate an effect of “surprising” candidates. If one is wildly charismatic or un-charismatic her campaigning may draw a lot of attention and thus have a larger effect on election outcomes.

Table 3: Incumbents & State of the World

Variable	IV
t_{poli}^2	-16.22** (7.13)
$t_{poli}^2 \times Dem$	43.9*** (10.74)
$t_{welf}^2 \times pos_{welf}$	-20.23*** (7.81)
$t_{trad}^{0.5} \times pos_{trad}$	8.26*** (2.07)
$t_{econ} \times unemployment$	2.80* (1.63)
Measures of Fit	5%

Notes: * significant at 10%, ** significant at 5%, *** significant at 1%.
5% implies that the Wald F-Statistic passes the Stock Yogo relative bias test at the 5% level, so that the instruments are strong.

5.2.1 State of the World & Incumbents

Lastly, I consider the possibility that campaign effects may vary depending on the state of the world or whether or not the Presidential candidate is an incumbent. I remove the year fixed effects to allow for more flexibility and instead include the following interaction terms

$$t_{econ} * unemployment$$

$$t_{foreign} * major_war$$

$$t_{econ} * incumbent$$

where *unemployment* denotes the unemployment level in the economy, *major_war* is a dummy variable taking the value of 1 if the United States is participating in a major war and *incumbent* is a dummy variable concerning the incumbency status of a political candidate. I also include these terms separately and interacted with the emphasis and position interaction terms, *t_p*.

Note that issue emphasis on economic issues now only enters as the interaction term

with the unemployment level (Table 3). The effect is positive and significant at the 10% level. The higher the unemployment level the higher the effect of issue emphasis, which confirms the intuition that the tougher the economic climate, the more people respond to hearing about economic policy. As in the previous regression, time on economics enters by itself (the actual position is not relevant) although in this case the effect is smaller.

Issue emphases on the political system and traditional values issues have the same qualitative effects as in the previous regression. The effect of emphasis on traditional values issues is much larger and more significant (from 10% to 1% level). This, however, may be misleading as there was no state of the world variable with regards to traditional values issues and the year fixed effects (previous regression) may be necessary to control for the correlation of traditional values issues across years.

Lastly, a new variable enters significantly: $t_{welf}^2 \times pos_{welf}$. The effect is negative and significant at the 1% level indicating that campaigning on welfare issues (such as social services, social security, health and education) has a negative effect on vote shares. Moreover, the more to the right a politician is the larger the negative effect, which is not surprising given that these issues are thought to be more rewarding for Democratic rather than Republican Presidential candidates. However, on the margin even Democrats are hurt by addressing these issues. A possible explanation for the negative effect is that these issues are thought to be very divisive amongst the US electorate and on average because of the wide disagreement on policy the effect is negative.¹⁸

5.3 Conclusion

This paper examines the effects of economics and non-economic issues on political campaigns of U.S. Presidential elections from 1952 to 2004. I provide a tractable model that allows for heterogeneity in voter demographics and preferences over issues, accounts for the endogeneity of political campaigns and controls for unobserved politician characteristics. This framework can be used to examine the effects of events in the political history of the United States in determining election outcomes, as well as for predicting future elections.

¹⁸The robustness of the results have been tested across different specifications and the only issue emphasis that changes from significant to insignificant depending on the specification is the one on welfare issues.

I estimate the model using the techniques of Berry (1994). I find that issue emphasis on the economy, political authority and corruption and traditional values issues are the only significant campaign determinants of vote choice, with the effects of each varying depending on the position and party affiliation of the politician campaigning and the unemployment level in the economy. These results shed light on the importance of various issues in determining election outcomes and should be taken into consideration when examining the effects of political competition in determining both election and policy outcomes.

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Appendix

Table 4: Politician Characteristics

VARIABLE	DESCRIPTION
<i>party</i>	party of a politician
<i>age</i>	age of a politician
<i>years_milit</i>	number of years in the military
<i>years_poli</i>	number of years in politics
<i>no_kids</i>	number of children
<i>divorced</i>	dummy variable, value 1 if politician was ever divorced
<i>lawschool</i>	dummy variable, value 1 if politician went to lawschool
<i>incumbent</i>	dummy variable, value 1 if politician is an incumbent in this election
<i>vp</i>	dummy variable, value 1 if politician was ever a vice president
<i>ran_nc</i>	dummy variable, value 1 if politician ever ran a national campaign before

These variables were constructed.

Table 5: Voter Characteristics

VARIABLE	DESCRIPTION
<i>vincome</i>	income group of a voter
<i>vedu</i>	education level of a voter
<i>vreligious</i>	religiosity of a voter
<i>vrace</i>	race of a voter
<i>vgender</i>	gender of a voter
<i>vunemployed</i>	dummy variable, value 1 if voter unemployed
<i>vpartisan</i>	voter's degree of partisanship
<i>vmip</i>	voter's answer to "most important problem in the economy" question
<i>veconomy</i>	voter's answer to "state of the economy" question

This data comes from the National Election Studies.

Table 6: Issue Emphasis

t_{econ} - campaign time on economic policy: Free enterprize, incentives, market regulation, economic planning, corporatism, protectionism, economic goals, Keynesian demand management, productivity, technology and infrastructure, controlled economy, nationalization, economic orthodoxy, growth, labor groups, farmers, middle class and professionals.

t_{civil} - campaign time on civil rights issues: Freedom and human rights, democracy, constitutionalism, social justice, law and order, social harmony, multiculturalism, underprivileged minority groups, non-economic demographic groups.

$t_{foreign}$ - campaign time on foreign relations issues: Foreign relations, imperialism, colonialism, military, peace, internationalism, European integration, national way of life/protectionism.

t_{poli} - campaign time on political system issues: Decentralization (not economic), federalism, government and administrative efficiency, political corruption, parties and political authority.

t_{envi} - campaign time on culture and the environment: Environmental protection, need for spending on culture and leisure (museums, facilities, etc).

t_{welf} - campaign time on welfare issues: Social services, social security, public health services and education.

t_{trad} - campaign time on traditional morality issues: Traditional moral values, prohibition, censorship and suppression of immorality and unseemly behavior, maintenance and stability of family, religion, abortion, etc.¹⁹

Table 7: Summary Statistics

VARIABLE	Mean	
	<i>Rep</i>	<i>Dem</i>
<i>tecon</i>	28.1%	27.9%
<i>tforeign</i>	23.8%	24.1%
<i>tpoli</i>	8%	9.3
<i>tcivil</i>	21.7%	20.3%
<i>tenvi</i>	5.4%	5.1%
<i>ttrad</i>	2%	2.4%
<i>twelf</i>	9.1%	8.2%
<i>age</i>	61.9	53.2
<i>years_milit</i>	11.8	3.5
<i>years_poli</i>	12.9	15
<i>no_kids</i>	3.1	3.25

Variable	No Candidates	
	<i>Rep</i>	<i>Dem</i>
<i>divorced</i>	3	3
<i>lawschool</i>	4	6
<i>incumbent</i>	4	3
<i>vp</i>	2	2
<i>ran_nc</i>	8	6

Table 8: Aggregate Effects

VARIABLE	(i)	(ii)	(iii)	
		OLS	OLS	IV
$t_{econ}^{0.5}$	13.21*** (3.49)			
t_{econ}^2			24.38*** (8.89)	3.32* (1.94)
$t_{econ}^{0.5} \times pos_{econ}$		0.21 (1.01)		
$t_{civil}^2 \times pos_{civil}$		-8.86 (5.48)		
$t_{foreign}^2 \times Dem$		5.69 (5.69)		
$t_{poli}^{0.5}$	-10.86*** (3.19)			
t_{poli}^2			-2.87 (19.31)	-29.56** (12.54)
$t_{poli}^2 \times Dem$		131.91*** (34.74)	65.84*** (10.38)	48.34*** (9.5)
$t_{poli} \times Rep$		0.10** (0.05)		
$t_{welf}^2 \times pos_{welf}$		59.40*** (19.31)	23.52 (14.55)	-4.16 (8.9)
$t_{trad}^{0.5}$	-16.24*** (4.62)			
t_{trad}^2			-532.07*** (176.56)	
$t_{trad}^{0.5} \times pos_{trad}$	(4.62)	6.32*** (1.42)	7.77*** (1.16)	2.13*
$t_{envi}^{0.5}$	-22.5*** (7.8)		-7.50** (2.94)	
Measures of Fit	0.34	0.48	0.5	5%

Note: * significant at 10%, ** significant at 5%, *** significant at 1%. The measure of fit for OLS is the adjusted R-squared, and for IV 5% implies that the Wald F-Statistic passes the Stock Yogo relative bias test at the 5% level, so that the instruments are strong. pos_n varies from extremely liberal to extremely conservative.