Predicting Presidential Elections: 
An Evaluation of Forecasting

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Masters of Arts
In
Political Science

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May 13, 2004
Blacksburg, Virginia

Keywords: forecasting models, prediction, presidential elections, campaigns effects

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Abstract

Over the past two decades, a surge of interest in the area of forecasting has produced a number of statistical models available for predicting the winners of U.S. presidential elections. While historically the domain of individuals outside the scholarly community—such as political strategists, pollsters, and journalists—presidential election forecasting has become increasingly mainstream, as a number of prominent political scientists entered the forecasting arena. With the goal of making accurate predictions well in advance of the November election, these forecasters examine several important election “fundamentals” previously shown to impact national election outcomes. In general, most models employ some measure of presidential popularity as well as a variety of indicators assessing the economic conditions prior to the election. Advancing beyond the traditional, non-scientific approaches employed by prognosticators, politicos, and pundits, today’s scientific models rely on decades of voting behavior research and sophisticated statistical techniques in making accurate point estimates of the incumbent’s or his party’s percentage of the popular two-party vote. As the latest evolution in presidential forecasting, these models represent the most accurate and reliable method of predicting elections to date. This thesis provides an assessment of forecasting models’ underlying epistemological assumptions, theoretical foundations, and methodological approaches. Additionally, this study addresses forecasting’s implications for related bodies of literature, particularly its impact on studies of campaign effects.
Acknowledgements

I wish to thank my committee chair Dr. Richard Shingles for his guidance, encouragement, and collaboration on this thesis. Throughout this process, he has been a source of encouragement, direction, and support. I could not have had a better advisor, mentor, and friend. I extend a special thanks to Dr. Karen Hult and Dr. Craig Brians for their support and assistance on this project. I feel especially blessed to have had such a wonderful committee to help see this thesis to fruition. Thank you!

Additionally, I thank Dr. Charles Taylor, who has given me the encouragement and confidence needed to take this next step in my academic career. I will always be grateful for his guidance and encouragement throughout my time at Virginia Tech.

Lastly, I thank my family and friends, who have supported me along this journey – my Dad, Abbey, Ross, and Lindsey. Thank you all.
Dedication

This thesis is dedicated to the memory of my mom.

*I love you too many and too much.*
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Chapter One: Introduction

I. Introduction

Over the past two decades, a surge of interest in the area of forecasting has produced a number of statistical models available for predicting the winners of U.S. presidential elections. While historically the domain of individuals outside the scholarly community — such as political strategists, pollsters, and journalists — presidential election forecasting has become increasingly mainstream, as a number of prominent political scientists entered the forecasting arena. With the goal of making accurate predictions well in advance of the November election, these forecasters examine several important election “fundamentals” previously shown to impact national election outcomes. In general, most models employ some measure of presidential popularity as well as a variety of indicators assessing the economic conditions prior to the election. Advancing beyond the traditional, non-scientific approaches\textsuperscript{1} employed by prognosticators, politicos, and pundits, today’s scientific models\textsuperscript{2} rely on decades of voting behavior research and sophisticated statistical techniques in making accurate point estimates of the incumbent’s or his party’s percentage of the popular two-party vote. As the latest evolution in presidential forecasting, these models represent the most accurate and reliable method of predicting elections to date.

II. Purpose

The principal objective of this thesis is to provide a comprehensive explanation and examination of the statistical forecasting models employed to predict the outcomes of U.S. presidential elections. As such, this study provides a thorough explanation of the models’ underlying epistemological assumptions, theoretical foundations, and methodological approaches. In particular, discussion focuses on both the specific theories informing the models’ specification as well as those bodies of literature

\textsuperscript{1} Non-scientific forecasting approaches – those of prognosticators, pundits, and politicos – do not rely on theories of voting behavior, sophisticated methods of statistical estimation, or carefully formulated hypotheses which can be subjected to systematic tests. Most often, these approaches are based on spurious correlations between election outcomes and factors independent of the political process.

\textsuperscript{2} In contrast to the traditional forecasting methods, scientific forecasting models draw on leading theories of voting behavior and employ replicable, and thus testable, methods of predicting presidential elections.
essentially regarded by forecasters as extraneous to the purpose of predicting election outcomes. In assessing their value as predictive instruments, an exhaustive description of four prominent forecasting models is provided, including a detailed account of their progression over the past two decades. Additionally, a systematic comparison of the models draws attention to theoretical distinctions among the models as well as differences in the accuracy and reliability of their forecasts.

While the models’ predictive utility is an important criterion by which to assess forecasting, it is not the only evaluative criterion. Beyond the models’ efficacy in predicting election outcomes, this study attempts to identify any potential theoretical contributions made by forecasting to existing explanations of the electoral process. In particular, this discussion focuses on the various theories of voting behavior currently employed by forecasters in selecting the models’ key predictor variables. Arguably, the predictive accuracy of the forecasting models reflects how completely such theories explain voting behavior. With a variety of voting behavior theories directly informing the models, the performance of these models serves as an indirect measure of the value added by such theories. That is, the models’ successes, as well as their failures, should enhance current understanding of presidential elections and refine theoretical explanations of the factors influencing vote choice. As Rosenstone suggests, “forecasting presidential elections is merely a convenient vehicle for the more important question: What determines election outcomes?” Accordingly, this research is most significant for its direct bearing on the confidence afforded to established explanations of voting behavior.

An additional goal of this study is to examine the role candidates and their campaigns play in determining the outcome of presidential elections. By its very nature, the forecasting literature casts doubt on the importance of both political campaigns and candidates in predicting elections. With the development of statistical models capable of providing predictions at least two months prior to the fall election, forecasters are effectively predicting the election’s winner before the commencement of candidates’

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4 Rosenstone 1983, p. 5.
general campaign. This fact alone makes a fairly unambiguous statement about the perceived importance forecasters assign to the role of campaigns in influencing voters’ electoral decisions. The frequently implicit underlying assumption is that these models can make accurate predictions without any consideration of the electoral context or candidates involved.

In contrast to forecasters’ apparent disregard of campaign effects, recent decades have witnessed a significant growth in the campaign literature as well as increases in the size of candidates’ campaign “war chests,” the number and training of campaign consultants employed, and changes in the style of national electoral campaigns accompanying the technological advances in mass media. That is, while statistical models suggest campaigns play a relatively minor role in determining election outcomes, changes in the electoral process over the past thirty years imply a more substantial role for campaigns. It is this apparent inconsistency between the necessary omission of campaign variables inherent in election forecasting, on the one hand, and the growth in both the campaign consulting industry and the accompanying scholarly literature, on the other hand, that serves as the primary motivation for this study. Addressing these competing perspectives, this study attempts to answer why millions of dollars, effort, and attention are expended every four years on presidential campaigns, despite forecasters’ ability to predict election outcomes without considering the potential influence of the candidates’ general campaigns.

As such, this thesis squarely addresses the possible effects of candidates’ campaigns, providing a review of the most recent and comprehensive studies evaluating the impact of general campaigns in presidential elections. The specific findings of this research suggest campaign events are important to the extent they sway public opinion and mobilize the faithful to support campaigns and vote in the period following the parties’ nominating conventions. In particular, several studies find national conventions, presidential debates, as well as the systematic nature of campaigns have the potential to significantly impact election outcomes, even if they are secondary to the influence of prevailing national conditions prior to the postconvention campaign.

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5 The “proverbial kick off point” for modern presidential elections is generally considered to be around Labor Day. Accordingly, the term “general” election refers to the period of time between the parties’ nominating conventions and Election Day.
III. Prediction vs. Explanation

With explanation and prediction as the fundamental goals of any science, this research is additionally significant for its ability to illustrate how these two objectives interact in presidential election forecasting. While prediction and explanation serve distinct functions within the social sciences, they should not be viewed as entirely isolated endeavors. Aware of this existing interplay between explanation and prediction, Kaplan notes that the “success of prediction … adds credibility to the beliefs which led to it, and a corresponding force to the explanations which they provide.”6 Applying this same idea to the prediction of presidential elections, forecasting has much to offer explanatory research on elections and voting behavior, and that research also has a good deal to offer research into forecasting models.7 That is, forecasters benefit from the explanatory theories informing their models’ selection of predictor variables, and in return the performance of these forecasting models reflects back on the validity and utility of modern theories of elections and voting behavior. Operating under the assumption that good explanation leads to good predictions, the success or failure of forecasting provides a general assessment of political scientists’ understanding of elections and the factors most important in determining their outcomes.

Despite the fact that explanation and prediction can learn from each other, they do not share the same objective, and thus can often have competing purposes. As Campbell notes, it is necessary for those engaged in forecasting to bear in mind that forecasting and explaining elections are not the same enterprise. The former is concerned primarily with making the most accurate predictions as far before the election as possible, often at the expense of a deeper understanding of the causal mechanisms accounting for voters’ presidential preferences. As such, many of the forecasting models do not include “theoretically interesting” variables to account for the variance in vote choice. For instance, the widely used presidential popularity variable is not particularly informative from an explanatory viewpoint. That is, knowing voters supported a particular candidate because they liked him/her more than his/her opponent is not a very theoretically appealing explanation of presidential vote preference. Rather, presidential popularity is

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6 Kaplan 1964, p. 346.
7 Campbell 2000a.
used in forecasting as a “catch all variable” that reflects a number of factors influencing which candidate voters to choose to support at the polls. From a prediction standpoint, this indicator is ideal for the purposes of forecasting and determining the eventual outcome of presidential elections. However, it does not provide insight into why voters support a particular candidate. In short, it is important to recognize that a good forecasting model does not have to be a good explanatory model.8

In contrast to forecasters’ preoccupation with prediction, those attempting to explain presidential elections are more interested in understanding the specific factors responsible for shaping individual voting decisions, e.g. campaign strategies, state or county level dynamics, media effects, and the like. Moreover, not all focus on individual voters as the unit of analysis. Accordingly, these researchers are likely more concerned with answering why certain phenomena occur, i.e. discovering the causal factors accounting for a past event or the present state of affairs.9 For instance, theoretically minded researchers will want to know why voters preferred one candidate over another, and not simply that the majority of voters elected candidate A instead of candidate B. This is not to say that explanatory researchers do not strive to create explanatory theories that may also serve as good predictive instruments; however, prediction is more of a secondary concern.

Finally, this distinction between explanation and prediction has especially important methodological implications for how forecasters approach the task of predicting national elections. With prediction serving as their primary research goal, presidential election forecasters are less concerned with explaining individual vote decisions and more interested in election outcomes. As such, these forecasters seek to discover the factors capable of accounting for interelection changes in vote choice, while many explanatory models of voting behavior focus on the interindividual differences explaining vote decision within a single election.10 That is, the goal of predicting election outcomes requires forecasters to pay attention to the political and economic indicators that vary across a series of electoral contests, such as macro-economic conditions and presidential popularity ratings. In contrast to many explanatory theorists’ use of cross-

8 Campbell 2000a.
9 Isaak 1981.
sectional data to determine differences among voters during a single period of time, forecasters must rely on theories of voting behavior that can explain differences among election outcomes.\textsuperscript{11} Thus, while certain causal factors may be especially important for understanding individual-level vote decisions, forecasters typically need only to consider those causal factors that vary across elections to predict the eventual outcome.

For instance, decades of voting behavior research indicate partisanship is an extremely important factor shaping individual vote decisions. However, given the relatively stable nature of partisanship across elections, forecasters need not include measures of party identification (ID) in their models.\textsuperscript{12} That is, variations in party vote shares cannot be explained by a variable like partisanship that remains essentially constant over a series of elections.\textsuperscript{13} Likewise, measures of objective macro-economic conditions are unlikely to account for differing individual vote preferences in a single election, since they do not vary across voters within a single election. While regional effects may allow for differences in economic conditions across the nation during a single election, the overall macro-economic context is essentially identical for every individual and generally remains stable throughout the general election period.

IV. Model Selection

The construction of forecasting models in most studies is based on a common unit of analysis, prior presidential elections, using aggregate national indicators to predict national elections. As such, the few statistical models employing state-level variables are excluded from this analysis.\textsuperscript{14} While these models are capable of predicting national elections, they are arguably more appropriate for purposes of explanation considering their extensive list of independent variables and reliance on vast amounts of information, some of which is not available until after the election. Given the small number of cases, i.e. presidential elections, forecasters use to estimate their models, most predictive models are quite parsimonious, containing at most three or four aggregate-level

\textsuperscript{11} Rosenstone 1983.
\textsuperscript{12} As will be discussed later on, the stability of partisanship may no longer be a given as party ID declines and vote decision volatility increases.
\textsuperscript{13} See Markus (1988) and Campbell and Mann (1996) for a more in depth discussion of why partisanship is not a necessary variable in presidential forecasting models.
indicators. Additionally, the selection of models for this thesis is confined to those offering predictions for the last three presidential elections, 1992, 1996, and 2000. As a result, the forecasting models of Fair, Lockerbie, and Norpoth are not included in the following analysis.

V. Chapter Summary

The following chapters of this thesis provide a comprehensive treatment of presidential election forecasting. Chapter 2 offers a general introduction to forecasting, specifically focusing on the models’ theoretical foundations as well as their methodological approaches. While initial discussion relates generally to all forecasting models, the primary focus of this chapter is to provide a comprehensive comparison of the four specific models addressed by the thesis. A description of each model examines its’ underlying theoretical basis, operationalization of key indicators, and statistical methods. In particular, this section presents a detailed description of each model’s progression over the past two decades. By recounting forecasters’ frequent adjustments to the models’ variable specification and measurement, the gradual refinement of election forecasting is revealed. Lastly, this chapter provides a comparative assessment of the models, identifying important differences in their theories, methods, and prediction accuracy.

Chapter 3 assesses the models’ value as predictive instruments as well as their possible theoretical contributions. The first part of this chapter focuses on the models’ predictive performance in the three most recent presidential elections. Explanations are offered for the efficacy of forecasting in each electoral context, i.e. how different electoral landscapes possibly impact the models’ performance. Part two of this chapter focuses on the benefits of statistical forecasting and its usefulness for enhancing our understanding of presidential election outcomes. Specifically, comparisons are drawn between the statistical models and traditional, more ad hoc methods of forecasting elections. Advantages of the scientific models are then contrasted with the various shortcomings commonly associated with less scientific approaches to election forecasting.
Chapter 4 addresses the importance of presidential campaigns, reviewing both the prevailing arguments against campaign effects as well as the findings of more recent studies that point to a greater role for campaigns in determining electoral outcomes. The purpose of this discussion is to address how it is possible for campaigns to have an effect when presidential elections can be accurately predicted before the candidates’ general campaigns even begin. Additionally, this chapter offers general observations regarding when and under what conditions campaigns have mattered in the past and when they are most likely to be decisive in the future. Lastly, the implications of the campaign studies’ findings for election forecasting are discussed.

The concluding chapter summarizes important findings of the previous chapters and provides general conclusions regarding the overall theoretical and predictive value of forecasting. Perhaps ironically, the greatest contributions of forecasting may not be the models’ ability to provide early predictions of election outcomes, but rather their theoretical contributions to our current understanding of elections and voting behavior. As a final point, this chapter offers several suggestions for future studies of election forecasting.
Chapter Two: Multivariate Forecasting Models

Having briefly introduced the topic of forecasting, the purpose of this chapter is to provide a comprehensive description of four of the most prominent models: 1) Lewis-Beck and Rice (later Tien), 2) Abramowitz, 3) Campbell and Wink, and 4) Wlezien and Erikson. A systematic comparison of these models will address key similarities and differences in their underlying theoretical frameworks, operationalization of predictor variables, and the accuracy and reliability of the model estimates. Discussion begins with a general introduction to multivariate forecasting models, and then moves to a description and comparison of the specific models.

I. Overview of Forecasting Models

Over the past two decades, with a renewed interest in the field of forecasting, a number of multivariate models have evolved from the earlier bivariate prototypes first appearing in the late 1970s and early 1980s (e.g., Sigelman 1979, Hibbs 1982, Brody and Sigelman 1983). The recent wave of forecasters combine both economic and political variables to predict election outcomes. All the models adopt measures of presidential popularity\(^{15}\) and various measures of national economic conditions\(^{16}\) for predicting the incumbent party candidate’s percentage of the popular two-party vote. By incorporating these two types of indicators, today’s models have significantly increased their ability to accurately predict election outcomes, with many accounting for an impressive 80 to 90% of the variation in the presidential vote.

In making forecasts, all but two\(^{17}\) of the models employ aggregate, national-level time series data, for the period since WWII.\(^{18}\) Generally, anywhere from 9 to 13 presidential elections are used in the estimation of the various multivariate models. Examining historical data from a relatively small number of past elections years, forecasters attempt to identify general patterns in elections that accurately forecast the

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\(^{15}\) Sigelman 1979, Brody and Sigelman 1983.


\(^{17}\) Exceptions are the state-level models proposed by Rosenstone (1983) and Campbell (1992), which utilize pooled time series data from all fifty states in forecasting national elections. Additionally, Holbrook (1996a) offered a state-level model designed to explain national election outcomes.

\(^{18}\) This reliance on data after WWII is a result of unreliable or incomplete data series prior to this period.
vote in an upcoming election. The models are also informed by an extensive body of voting behavior research,\(^\text{19}\) which identifies various national-level influences impacting individual presidential preferences.

Once the relevant indicators have been established, the various values of each variable are then inserted into a statistical equation capable of providing a point prediction of the incumbent party candidate’s percentage of the two-party popular vote.\(^\text{20}\) Typically, these a priori or before-the-fact forecasts are made at least two months in advance of the November election from only a handful of key explanatory variables. For instance, most forecasting models combine leading macroeconomic indicators (e.g., change in economic growth, cumulative personal income, or inflation) with some measure of the public’s sociopolitical evaluations of candidates to make predictions about the incumbent party’s electoral prospects. The most common measure of public opinion is the Gallup Poll’s presidential approval ratings, which assess the incumbent’s job approval among the electorate. In short, this basic economy-popularity model of voting serves as the core specification of most multivariate models. However, there is no consensus beyond this core specification. Depending on the researcher, other indicators incorporated into the models include: incumbency,\(^\text{21}\) trial-heat polls,\(^\text{22}\) mid-term elections,\(^\text{23}\) presidential primaries,\(^\text{24}\) and cyclical patterns in presidential elections.\(^\text{25}\)

II. Methodology

To derive aggregate predictive models, forecasters examine historical patterns in data gathered on presidential elections from the post-World War II period (i.e. beginning in 1948). Seeking to account for observed fluctuations in the two-party vote during this time; forecasters formulate theories of vote choice and then translate these explanations

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\(^{19}\) See Rosenstone (1983) and Asher (1988) for more in depth discussion of factors influencing electoral outcomes.

\(^{20}\) While the dependent variable in almost all models is the percentage of the popular two-party vote received by the incumbent party’s candidate, the Lewis-Beck and Rice (1992) model forecasts incumbent’s share of the electoral college vote.


\(^{22}\) Lewis-Beck 1985, Campbell and Wink 1990.


into a statistical model capable of predicting the outcome of presidential elections. In general, the goal is to provide the “most accurate forecasts as possible with as few variables as necessary as far before the election as possible.” As such, forecasters rely on parsimonious models with a few key explanatory variables to predict the dependent variable, presidential vote share.

At present, all presidential forecasting models utilize multiple regression analysis to determine the best mathematical equation for predicting election outcomes. Multiple regression is designed for estimating the relationship between a continuous (interval level) dependent variable and two or more independent or predictor variables. For predictive purposes, regression models can be viewed as simple mathematical equations indicating how knowledge of one or more independent variables will improve our prediction of the dependent variable. Ideal for prediction, this statistical technique allows forecasters to make point estimates of the incumbent party’s percentage of the two-party popular vote. The simplest and most widely applied form of linear regression is the ordinary least squares (OLS) fitting technique. This statistical equation is designed to minimize the sum of the squared residuals (errors) from the regression line. Using this specific form of regression, forecasters employ the following equation to forecast presidential elections:

\[ \hat{Y} = a + b_1X_1 + b_2X_2 \ldots b_kX_k \]

Where:
- \( \hat{Y} \) = Estimated value of the dependent variable
- \( X \) = Independent variable(s)
- \( a \) = Y intercept or point where the regression line crosses the Y-axis (i.e. \( X = 0 \))
- \( b \) = Slope of the regression line indicating magnitude of the change in \( Y \) for 1 unit change in \( X \)

As evident from the above equation, a linear relationship is assumed to exist between the dependent variable (\( Y \)) and the independent variable (\( X \)), with expected values of \( Y \) depending on the value of \( X \). The constant (\( a \)), also referred to as the intercept, is the estimated value of \( Y \), when all independent variables are equal to zero,

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27 Holbrook, 1996, p. 29.
28 See Pindyck and Rubinfeld for a basic introduction to forecasting techniques, especially OLS regression.
i.e. where the regression line intersects the Y-axis. The unstandardized regression coefficients \((b)\), the slope estimates, indicate the amount of change expected in the dependent variable for every one-unit change in the independent variable (holding other IVs constant). The larger this number, the steeper the slope of the regression line and the greater change in Y for a unit change in X. In equations with more than one independent variable, the regression coefficients are partial unstandardized regression coefficients, representing the unique change associated with a given independent variable. As will become clearer in the example below, these regression coefficients are the weights, which forecasters use to project an estimate beyond the observed data. That is, the observed values of each predictor variable are multiplied by these unstandardized regression coefficients when making estimates of the vote share in a future presidential election.

To illustrate the forecasting process utilizing OLS regression, the simple retrospective model originally employed by Lewis-Beck and Rice (1984) is used here to predict the vote share for the 1996 election. The unit of analysis in this example is the year of the election, with 12 electoral contests being examined. The first step is to analyze the covariation between the dependent variable (popular vote share) and several leading predictor variables. With only a small number of prior elections included in their sample, the forecasters can easily determine the magnitude and linearity of a relationship between two variables by plotting the data from the twelve cases in a scatter diagram. For example, consider the scatter diagram in Figure 2.1 displaying the relationship between popular vote share and presidential popularity for the 12 elections from 1948 to 1992.

Scores on the variable of presidential popularity are marked along the horizontal axis and popular vote percentages won by incumbent party candidates are measured along the vertical axis. Each data point plotted in the scatter diagram represents the incumbent party’s popularity rating in July and share of the popular vote in the subsequent general election for that year. Presenting the data visually, it is easy to observe the strong linear relationship between the predictor variable and the forecasted event. Indicated by the upward sloping pattern, higher popularity ratings correspond to higher percentages of the popular vote share won by the incumbent party. Using this same process, a similar relationship is found by forecasters between economic growth
(G) and the vote share: as growth increases so does the incumbent party candidate’s percentage of the two-party vote.

Figure 2.1 Scatter Diagram: Presidential Popularity & Incumbent Party Popular Vote

![Presidential Vote Share and Presidential Popularity (1948-1992)](image)

Source: Lewis-Beck and Tien, 1996

Popular vote = percentage of popular vote for president received by the incumbent party

July popularity = presidential popularity as measured by the Gallup poll in July before the

After analyzing the bivariate relationships between the dependent variable and various independent variables, forecasters estimate the combined effect of multiple independent variables in a single equation to determine the regression line that best fits the observed data points. For this example, Lewis-Beck and Rice combine data on two independent variables measuring voters’ evaluations of the incumbent president’s past economic and political performance. In particular, the following two predictor variables are employed to forecast the incumbent party’s percentage of the popular vote: 1) presidential popularity (P) and 2) economic growth (G). For measuring presidential popularity, the forecasters rely on Gallup poll approval ratings in July of the election year. As for economic growth, they measure the percent change in gross national product during the first-half of the election year. Written as an equation, the original economy-popularity model is:

\[ \text{Presidential Vote} = a + b_1 \times \text{Economic conditions} + b_2 \times \text{Presidential popularity} \]
Estimating this model with data gathered on the 12 post-WWII elections between 1948 and 1992, the forecasters use the least squares fitting technique to determine the “best linear unbiased estimation” (BLUE). Again, this statistical technique is designed to estimate the coefficient for each independent variable that minimizes the sum of squared residuals (error) from the regression line. Table 2.1 presents the results from their regression analysis. According to the constant or intercept in the estimated equation, a president can expect to receive approximately 37% of the popular vote when the values of both independent variables (popularity and growth) are equal to zero. Interpreting the unstandardized regression coefficients in the left portion of the equation, a 1.29 percent increase in incumbent party vote share is estimated with every one-percentage point increase in economic growth. Similarly, a .29 percent increase in vote share is expected for every percent increase in presidential popularity.

Table 2.1 Economy-Popularity Model, 1948-1992

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( PV = 36.76 + 1.29G + .29P )</td>
</tr>
<tr>
<td>Presidential Popularity</td>
<td>0.29*</td>
</tr>
<tr>
<td></td>
<td>(4.71)</td>
</tr>
<tr>
<td>GNP Change</td>
<td>1.29*</td>
</tr>
<tr>
<td></td>
<td>(2.27)</td>
</tr>
<tr>
<td>Constant</td>
<td>36.76</td>
</tr>
<tr>
<td></td>
<td>(14.04)</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.85</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>0.81</td>
</tr>
<tr>
<td>SEE</td>
<td>2.70</td>
</tr>
<tr>
<td>MAE</td>
<td>2.01</td>
</tr>
<tr>
<td>N</td>
<td>12</td>
</tr>
</tbody>
</table>

NOTE: Values in parentheses are \( t \) scores. SEE = standard error of estimate, MAE = mean absolute error, GNP = gross national product growth from the 4th quarter of the year before the election to the 2nd quarter of the election year, Popularity = Gallup approval ratings for July of the election.
* \( p = .05 \), one tailed.

Using this equation to make a hypothetical forecast of the 1996 election, Lewis-Beck and Rice assume the following values for the two predictor variables: GNP change (G) = 1% and presidential popularity (P) = 42%. That is, President Clinton is assumed to have a July popularity of 42% and the nation’s economy is estimated to have had a
moderate growth rate of 1% during the first-half of the election year. Plugging these median values of popularity and growth into the equation, their retrospective model makes the following forecast for the 1996 election:

\[
\text{Vote Forecast} = 36.76 + 1.29(1) + .29(42) \\
= 36.76 + 1.29 + 8.78 \\
= 50.23 \\
= \text{Clinton Win}
\]

For assessing the accuracy and reliability of this prediction and others, forecasters rely on several descriptive and inferential statistics. Often referred to as “goodness-of-fit” measures, these are reliability statistics designed to evaluate the model’s performance as a forecasting instrument. For estimating a model’s explanatory power, forecasters utilize the coefficient of determination (R²), which is a PRE (proportional reduction in error) statistic indicating the proportion of total variation in Y (vote share) that is determined by its linear relationship with the independent variables. For the above equation, the R² value is .85, indicating an 85% reduction in error due to the variables included in the model. In other words, the model accounts for 85% of the variation in the popular vote for the 12 presidential elections included in the sample. The adjusted R² is simply the coefficient of determination taking into account the number of independent variables relative to the number of observations.

Two additional summary measures of a model’s performance are the standard error of the estimate (SEE) and the mean absolute error (MAE). These accuracy measures provide estimates of the model’s with-in sample and out-of-sample errors, respectively. The SEE is a common summary measure of prediction error, which reports the average error in the models’ estimates measured by the dispersion of the observations around the regression line (estimates). In other words, the SEE is the average absolute prediction error observed across all elections included in the sample. This error measure reveals how far off the regression estimates are, on average, from the actual vote. In the above equation, the standard prediction error of 2.70 indicates the models’ forecasts could easily be as much as 3 percentage points in either direction off the actual popular vote share.

While forecasters have traditionally relied on SEE to assess the models’ level of uncertainty, this with-in sample statistic alone does not adequately depict how well the
model will forecast future elections. In particular, this measure of accuracy is not a very stringent test of forecasting value, since the elections being predicted by the models are used in actual estimation of the models. A stricter test of forecasting accuracy is gained by examining the model’s out-of-sample predictions, which are calculated by omitting the specific election being forecast from the calculation of the estimates. That is, to make out-of-sample predictions, forecasters exclude the election being predicted, re-estimate the model with the remaining data, and then forecast the omitted election (Beck, 1999). For example, the expected 1992 vote would be calculated using coefficients estimated by a regression equation using only the 11 elections between 1948 and 1988.

By adding the mean absolute error (MAE) of out-of-sample forecasts across several elections, forecasters gain a more realistic assessment of their models’ accuracy in predicting elections not included in the sample. Since out-of-sample errors more closely approximate a real forecast, they are a good indicator of the models’ predictive performance in future elections. To calculate the MAE, forecasters simply add the absolute values of the out-of-sample prediction errors (sum of Column 3 in the table below) and divide that value by the number of observations included in the sample (in this case 12 elections). Using the information provided in Table 2.2, the out-of-sample forecasts for the above model are, on average, within 2 percentage points of the actual election results.

In sum, forecasters employ modern methods of statistical estimation, which have dramatically improved both the accuracy and reliability of presidential election forecasting. By utilizing OLS regression analysis, these models are capable of making specific point predictions of the incumbent party candidate’s expected vote from only a handful of independent variables. However, before taking advantage of the above statistical techniques, forecasters must first select the predictor variables to include in their regression equations. As the next section reveals, theoretically minded forecasters consult an extensive body of explanatory research on voting behavior when specifying their models.
Table 2.2 Out-of-Sample Forecasts, 1948-1992

<table>
<thead>
<tr>
<th>Year/incumbent party candidate (party)</th>
<th>(1) Actual Popular Vote</th>
<th>(2) Predicted Popular Vote</th>
<th>(3) Error (1) – (2)</th>
<th>Incumbent party predicted to win or lose</th>
<th>Forecast right or wrong?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948/Truman (D)</td>
<td>52.37</td>
<td>51.19</td>
<td>1.18</td>
<td>win</td>
<td>right</td>
</tr>
<tr>
<td>1952/Stevenson (D)</td>
<td>44.60</td>
<td>46.01</td>
<td>-1.41</td>
<td>lose</td>
<td>right</td>
</tr>
<tr>
<td>1956/Eisenhower (R)</td>
<td>57.76</td>
<td>56.84</td>
<td>0.92</td>
<td>win</td>
<td>right</td>
</tr>
<tr>
<td>1960/Nixon (R)</td>
<td>49.91</td>
<td>52.62</td>
<td>-2.71</td>
<td>win</td>
<td>wrong</td>
</tr>
<tr>
<td>1964/Johnson (D)</td>
<td>61.34</td>
<td>61.96</td>
<td>-0.62</td>
<td>win</td>
<td>right</td>
</tr>
<tr>
<td>1968/Humphrey (D)</td>
<td>49.60</td>
<td>51.93</td>
<td>-2.33</td>
<td>win</td>
<td>wrong</td>
</tr>
<tr>
<td>1972/Nixon (R)</td>
<td>61.79</td>
<td>58.19</td>
<td>3.6</td>
<td>win</td>
<td>right</td>
</tr>
<tr>
<td>1976/Ford (R)</td>
<td>48.95</td>
<td>52.65</td>
<td>-3.7</td>
<td>win</td>
<td>wrong</td>
</tr>
<tr>
<td>1980/Carter (D)</td>
<td>44.70</td>
<td>40.99</td>
<td>3.71</td>
<td>lose</td>
<td>right</td>
</tr>
<tr>
<td>1984/Reagan (R)</td>
<td>59.17</td>
<td>56.75</td>
<td>2.42</td>
<td>win</td>
<td>right</td>
</tr>
<tr>
<td>1988/Bush (R)</td>
<td>53.90</td>
<td>53.83</td>
<td>0.07</td>
<td>win</td>
<td>right</td>
</tr>
<tr>
<td>1992/Bush (R)</td>
<td>46.55</td>
<td>47.81</td>
<td>-1.26</td>
<td>lose</td>
<td>right</td>
</tr>
</tbody>
</table>


III. Theoretical Framework

In selecting the independent variables to include in their models, all forecasters employ similar criteria for determining the most appropriate combination of predictor variables. In general, forecasters rely on explanatory variables that (1) are based in theoretical and empirical explanations of vote choice, (2) are measurable well in advance of the presidential election, and (3) are available for as many past elections as possible.29 Selecting theoretically driven predictor variables, forecasters consult an extensive body of voting behavior literature, which is devoted to understanding the individual-level factors influencing presidential preference. Informed by this research, forecasters attempt to identify appropriate national-level variables to serve as proxy measures of the influences believed to exert the greatest impact on individual vote choice. Without this knowledge of the likely independent variables influencing candidate support, forecasters would be resigned to making a “best guess” of future election outcomes by simply relying on the mean value of the dependent variable. However, forecasters can

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29 To avoid reliability problems associated with small sample sizes (n), forecasters look for variables that can be measured over the greatest number of election years. However, the general lack of electoral data or inconsistencies within those data have largely restricted the models to information gathered after WWII.
significantly improve prediction accuracy by the careful selection of relevant predictor variables.

As evident from the indicators used in deriving the forecasts, the vast majority of predictive models adhere to the underlying assumptions of retrospective voting theory. That is, almost all follow the three basic tenets of retrospective voting theory established in Gerald Kramer’s influential article, “Short-term Fluctuations in U.S. Voting Behavior, 1896-1964,” published in 1971. According to Kramer, the electorate’s voting habits are largely viewed as (1) retrospective, (2) incumbency oriented, and (3) based upon outcomes of economic policy, and not the actual policies themselves. The “Kramer’s decision rule” is: if the incumbent’s performance is “satisfactory” according to some simple standard voters will retain the “governing party.” With these underlying assumptions guiding forecasters’ choice of indicators, it is not surprising that most models’ leading political and economic indicators are retrospective as well as results- and incumbency-oriented. Specifically, forecasters are employing aggregate level indicators to tap into voters’ long-term political tendencies and retrospective evaluations of the sitting president’s economic performance.

In accordance with this retrospective orientation, forecasters view presidential elections as referenda on the past economic and political performance of the current administration. First proposed by V. O. Key, Jr. in 1966, this basic “referendum” model of voting behavior is a simple reward-punishment model for explaining the electorate’s presidential preferences. According to Key, the electorate can be perceived as the “rational god of vengeance and reward” in its role as the appraiser of past events, past performance, and past actions. In fulfilling this role, voters are likely to vote for incumbents (or candidates of their party) with high popularity ratings during prosperous economic times. In contrast, when macroeconomic indicators are poor and approval ratings are low, voters are prone to punish the current administration by casting vote for the opposition party. Thus, Key’s basic premise is that incumbent performance and voters’ interpretation of that performance are key determinants of vote choice.

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30 Informed by recent studies on prospective voting theory, the forecasting models of Lewis-Beck and Tien (1996), Norpoth (1996), and Lockerbie (1996) also include prospective indicators.
31 Kiewiet and Rivers 1984.
32 Kramer 1971.
Role of the Economy

While retrospective voting can occur on a variety of non-economic issues, the vast majority of studies on voting behavior typically focus on the strong influence prevailing economic conditions exert on vote choice in national elections. In confirming the hypothesized relationship between election outcomes and economic performance, researchers have employed both time series analyses (making use of national-level and state-level vote totals across a number of elections) as well as individual-level survey data. In general, the findings of time series studies suggest that presidential vote totals have been strongly and consistently related to fluctuations in leading macroeconomic indicators, such as changes in real per capita income, unemployment, and real per capita GNP. Similarly, the studies utilizing individual-level data have found that individuals who reported being better off financially were more likely to vote for the incumbent party in presidential elections. In general, individual-level studies find that voters with a more favorable perception of recent economic performance are more likely to cast a vote for the incumbent party candidate. Interestingly, these studies have also found the effect of economic conditions to be conditional; i.e., fluctuations in the economy only significantly influence voting decisions when voters attribute responsibility for these changes to the incumbent president.

The relationship between macroeconomic economic conditions and presidential vote totals has been replicated by multiple studies. For example, Lewis-Beck and Rice analyze the correlations between the presidential vote share and four common macroeconomic indicators, each measured at various periods during the election cycle. Utilizing data from the eleven elections between 1948 and 1988, the researchers compare the different correlation coefficients between electoral vote share and the following economic variables: 1) unemployment, 2) inflation, 3) income, and 4) gross national product (GNP). While all four economic indicators have a relatively robust correlation, with an average correlation of .55, the strongest correlation existed between vote share

and change in GNP. These findings clearly demonstrate that an incumbent’s electoral success is largely influenced by the nation’s economic prosperity.

With this relationship well documented in both the voting behavior literature and forecasting research, it is now widely accepted that the fortunes of incumbent presidents depend upon the recent performance of the economy. However, reflecting the purely forecasting goals of the investigators, much more is known about what predicts election outcomes than why. The literature is strong on prediction, but short on explanation. Many questions remain unresolved. For example, how do fluctuations in leading economic indicators translate into increases or decreases in national vote totals? There is no consensus on which leading indicator has the greatest impact on presidential elections, let alone why. For instance, many find change in real GNP or GDP to be important, while others find unemployment and inflation rates to be significant determinants of election outcomes. Thus, the specific operationalization of economic performance that exerts the greatest influence on presidential vote totals remains a topic of debate in the literature. Lastly, no consensus exists as to the precise nature of the causal mechanism producing the relationship between vote share and economic conditions.

This is not to say that presidential election forecasts are not informed by theory, only that theoretical debates are unresolved, and that any further progress in forecasting is likely to be contingent on better explanatory theory. An example of how explanatory theory and experience with forecasting can work together to improve prediction is provided by recent theoretical debates regarding the role of the economy in national elections, which center on the scope, time frame, and sophistication of the electorate’s economic evaluations. Concerning the scope of voters’ economic evaluations, two competing hypotheses have been proposed in the voting behavior literature: 1) sociotropic voting and 2) the economic self-interest hypothesis. Specifically, these two hypotheses attempt to explain how voters formulate their economic evaluations of the current administration by determining what information voters primarily rely on when making their appraisals. That is, are voters evaluating politicians according to their

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39 The GNP change measured from the fourth quarter of the year prior to the election to the second quarter of the election year was more highly correlated with electoral vote share than any other indicator.
40 Kiewiet and Rivers 1984.
success in managing national economic conditions, or do they base their evaluations on changes in their personal financial well-being?\textsuperscript{42} According to the sociotropic perspective, voters’ presidential preferences are predominantly influenced by their perceptions of the nation’s economic welfare.\textsuperscript{43} In contrast, pocketbook or self-interested voters are typically swayed by recent fluctuations in their own finances.

Extensive research supports both hypotheses on sociotropic and pocketbook issues. However, the most recent research finds greater support for the sociotropic hypothesis and only weak effects associated with voters’ personal finances.\textsuperscript{44} To explain the minimal effect of pocketbook issues in shaping the electorate’s presidential preferences, several researchers theorize that voters hold themselves responsible for their own economic well-being and do not make the connection between changes in their own fortunes and the performance of the incumbent president.\textsuperscript{45}

A second source of uncertainty within the economic voting literature concerns the general time frame in which voters make their economic evaluations. That is, do voters have an overriding preoccupation with past and current economic conditions that influences their presidential preferences, or are they looking more toward the nation’s future economic welfare? Associated with this debate is the scholarly distinction between so-called “naïve” and “sophisticated” voting. Consistent with traditional retrospective voting theory, the “naïve” voting model suggests voters evaluate the performance of the incumbent party by looking at current and past economic outcomes.\textsuperscript{46} As retrospective voters, “naïve” voters are more concerned about actual outcomes than the particular policies implemented to achieve those results.\textsuperscript{47} In contrast to models of “naïve” voters, recent studies point to a changing electorate, which is gradually becoming more “sophisticated” in their assessments of incumbents’ economic performance. According to the “sophisticated” voter model, the expected electorate is deemed capable of making more intelligent assessments of the incumbent’s ability to handle the nation’s economy. Specifically, these voters recognize the inherent limitations in looking only at

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{42} Feldman and Conley 1991.
\item \textsuperscript{43} Kinder and Kiewiet 1981.
\item \textsuperscript{44} Kiewiet and Kinder 1981, Kiewiet 1983, Markus 1988.
\item \textsuperscript{46} Chappell and Keech 1991.
\item \textsuperscript{47} Fiorina 1981.
\end{itemize}
\end{footnotesize}
past outcomes and thus are more likely to take into account the present and future policy decisions likely to shape the nation’s economic prospects (Chappell and Keech, 1991).

A variant of the “naïve” and “sophisticated” voter models is presented by MacKuen, et al. They classify voters as either “peasants” or “bankers.” Like the earlier classification, this latter dichotomy is inherently intertwined with the theoretical debate concerning whether voters’ political evaluations are motivated by retrospective or prospective economic assessments. According to the “peasant” caricature, voters make economic evaluations solely from present personal experiences. In effect, the peasant voter is looking at the outcomes, like the “naïve” voter, and asking the question: “What have you [incumbent president] done for me lately?” From this myopic perspective, focused solely on the effect of recent economic outcomes on their personal finances, the “peasant” voter is deemed incapable of assessing future policy implications or economic forecasts. In contrast, the “banker” is largely indifferent to the past, except as it relates to the future. Accordingly, these voters are incorporating all relevant information and extrapolating from current information to predict the future. Like the “sophisticated” voter, the “banker” is future oriented, assessing the government’s policies and ability to manage the nation’s economy. Thus, the “banker” is asking, “What are your [incumbent president] prospects?”

Thus, the research on economic voting is incomplete and rather confusing, providing a conflicting image of voters’ economic evaluations. However, significant advancements have been made in our understanding of the economic influences in national elections. Specifically, the economic voting model has undergone considerable evolution from the simple “stimulus and response” notion originally offered by Key. Both continued research and better theory are necessary before forecasters have a clearer sense of the mechanism(s) linking economic conditions and electoral vote shares, which should lead to better forecasts. In particular, reaching a consensus on the time frame of voters’ economic evaluations will help forecasters improve the models’ specification by determining whether the models should include only past and present economic

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outcomes, forecasts of future outcomes, or observations of past and current policy. Furthermore, a more precise understanding of the scope and sophistication of voters’ economic evaluations will allow forecasters to continue to improve their predictive models.

**Role of Presidential Popularity**

While various measures of economic conditions have been shown to yield a sizable impact on incumbents’ electoral prospects, macroeconomic variables alone do not make for a robust forecasting model, i.e., one accounting for enough variance to make accurate and reliable predictions. Accordingly, presidential incumbents cannot rely solely on a prosperous economy to provide them with a winning share of the popular vote. Aware of this need to identify additional relevant influences, forecasters have looked to the many non-economic issues traditionally associated with individual vote choice. For example, Rosenstone’s explanatory model suggests the presidential vote is determined by an extensive list of twenty-five state-level variables, which include the following non-economic issues: New Deal social welfare issues, racial issues, war, incumbency, home-state advantage, and secular political trends. More recently, Lewis-Beck and Rice find that while economic issues are more consistently mentioned by respondents asked “What is the most important problem facing the country today?” several non-economic issues also appear with a good deal of frequency. In particular, various social, foreign, and personal concerns (e.g. civil rights, crime, government spending, threat of war, and drugs) seem to be on the minds of voters at election time.

However, before forecasters can tap into the various non-economic issues likely influencing voters’ decisions, they must first find an easily accessible macro-level measure of relevant attitudes. In contrast to the abundance of leading macro-economic indicators, the pool of macro-level non-economic indicators is rather small. Unfortunately, for example, there is no “national social problems index” comparable to

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52 See Rosenstone (1983) for a review.
54 Gallup Poll question.
the GNP measure of the nation’s economic conditions. However, many forecasters find the Gallup poll’s presidential approval question to be an adequate national-level proxy encapsulating several of the key components affecting individual vote choice. Specifically, presidential approval ratings are used as a surrogate for a multitude of non-economic issues likely to affect presidential preference, such as the incumbent’s handling of foreign affairs, personal charisma, positions on specific issues, and the like. As such, a number of forecasters have shown this measure of presidential popularity to be highly predictive of incumbents’ vote share in reelection efforts. The general findings of these studies suggest that if the sitting president has at least 50 to 51 percent approval ratings in mid-summer of the election year he can expect to be reelected. On average, in election years when the incumbent party won, the sitting president had a summer approval score of 57% and a 37% score when the incumbent party lost.

Serving as the basic rationale for the inclusion of presidential approval ratings in aggregate time series models is the underlying assumption that the electorate consciously evaluates the incumbent’s performance on varied issues and then arrives at an overall evaluation of the incumbent (and his party), which serves as the basis of their vote decision. In accordance with basic retrospective theory, if the public approves of the president’s overall job performance during the past four years, they are more likely to reelect him or cast a vote for the incumbent party’s candidate. Conversely, if the electorate is dissatisfied with his performance, they will likely vote for the candidate of the opposition party. Even if an incumbent is not running for reelection, research has shown that the incumbent’s party will be held accountable for the past president’s performance in office.

57 Since 1938, in some fashion the electorate has been asked the following question: “Do you approve or disapprove of the way ___ is handling his job as president?” However, consistent wording of this question is only from 1945. Thus most forecasters do not use the data prior to the 1948 presidential election.
58 See Campbell, et al. 1960
59 Holbrook 1996b.
Illustrating the hypothesized relationship between presidential popularity and presidential vote, Lewis-Beck and Rice\(^{65}\) account for an impressive 85% of the variation in vote share with a simple bivariate forecasting model, which utilizes June popularity ratings. More recently, the pair reported a remarkably robust correlation (\(r = .84\)) between incumbent approval ratings and presidential election outcomes.\(^{66}\) Perhaps more importantly they find only a moderate correlation between election year GNP and incumbent approval ratings (\(r = .48\)). Thus while many question whether the incumbent’s popularity ratings are solely driven by economic variables, the economy’s influence on approval ratings appears to be rather modest, with 24% of the variance being shared by the two indicators. With this study and similar ones confirming the importance of non-economic issues, various measures of incumbent popularity have become a staple proxy for voter concerns on unmeasured non-economic issues in today’s multivariate forecasting models.

IV. Multivariate Models

While forecasters are in no way confined to measures of macroeconomic conditions and the proxy for other issues, presidential popularity, when making election forecasts, the above economy-approval model serves as the core specification in many models. That is, despite the inclusion of other indicators, almost all the current forecasting models rely on some measure of the nation’s economic performance and some measure of presidential popularity when predicting election outcomes. As will be evident from the following discussion of four prominent models, this combination of both economic and political influences has been relatively successful in predicting the winners of presidential elections.


Opening up the field of presidential forecasting to political scientists,\(^{67}\) Lewis-Beck and Rice\(^{68}\) were the first to introduce presidential approval ratings into the same

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\(^{65}\) Lewis-Beck and Rice 1982.


\(^{67}\) The first multivariate regression models used to forecast presidential elections were developed in 1978 by two economists: Edward Tufte and Ray Fair.
model with economic indicators. Following the tradition of Tufte (1978), this early model emphasized the importance of both economic and political influences in determining the outcomes of national elections. Specifically, the multivariate model predicts the incumbent party popular vote percentage from the change in real GNP per capita (six months before the election) and spring presidential approval ratings. Including solely these two variables in one model, Lewis-Beck and Rice significantly strengthened the earlier bivariate models offered by Fair70 and Brody and Sigelman,71 the former using GNP growth and the latter establishing the influence of presidential popularity.

Lewis-Beck and Rice compared the performance of several bivariate forecasting models before settling on the above multivariate equation. Relying primarily on the statistical performance72 of these simple models to determine their preferred model, the selection of aggregate variables was not explicitly informed by any “sophisticated” theory of voting.73 Ignoring or “downplay[ing]” theory, the forecasters select indicators solely according to their prediction power.

Utilizing aggregate time series data from nine presidential elections (1948 to 1980) during the post-WWII period, Lewis-Beck and Rice evaluate the prediction accuracy of four simple models based on economic performance,74 international involvement, political expertise, and presidential popularity. Finding month of May popularity ratings to be the best predictor of the vote, the forecasters then combine, in turn, each of the previous variables in a multivariate model estimated using ordinary least squares (OLS) regression analysis. Surprisingly, they discover only one of variables, real growth in GNP (during the 2nd quarter), attains statistical significance after the popularity variable is introduced. Accordingly, they conclude that the other, non-economic variables must be important determinants of presidential popularity, and thus make no

70 Fair 1978.
71 Brody and Sigelman 1983.
72 Paying special attention to “goodness-of-fit” measures, such as $R^2$ and prediction error.
73 Lewis-Beck and Rice 1984.
74 For the simple bivariate models, four popular measures of economic performance were estimated using OLS regression: unemployment rate, inflation rate, real disposable income per capita, and real gross national product per capita.
statistically significant direct contribution to the amount of variance explained independent of the popularity variable. Their effect, as voting behavior theory would suggest, is solely indirect, through their links to overall evaluation of incumbents, whereas for some unexplained reason economic factors have both direct and indirect effects on election outcomes.

Overall, the final economy-popularity model appears to be a relatively good predictor of presidential elections, correctly predicting 7 out of the 9 races\(^{75}\) between 1948 and 1980. According to the “goodness-of-fit” statistics, the model accounts for over four-fifths (or 82 percent) of the variance in the presidential vote shares for these nine elections. Additionally, both the standard error (SE = ±3.68) and the average absolute error (±2.48) are quite low. Similarly, the model continues to be accurate when making before-the-fact forecasts as evident from its accuracy in making out-of-sample predictions. Specifically, without exhausting the degrees of freedom, the model correctly predicted five out of five elections. Finally, (and perhaps most importantly) the economy-popularity model is capable of making predictions a good six months in advance of the November election.

Updating this model in their 1992 book, *Forecasting Elections*, Lewis-Beck and Rice made several important adjustments to the original economy-popularity model. In comparison to the earlier model, the newer version has a stronger theoretical grounding, an expanded number of predictor variables, and a slight reduction in “lead-in” time. Additionally, the forecasters are concerned with forecasting the incumbent’s share of electoral college vote, instead of his percentage of the two-party popular vote.

In contrast to the “naïve” approach adopted in their earlier forecasting attempt, the 1992 model’s specification is derived from a dominant U.S. voting theory, which emphasizes the role of issues, candidates, and party in shaping voters’ electoral decisions.\(^{76}\) This more “theoretically attractive” model includes proxy variables derived from conventional explanations of individual vote choice in presidential elections.

Informed by these theories of voting, Lewis-Beck and Rice decided to retain the original

\(^{75}\) The two missed elections were the extremely close elections between Truman and Dewey in 1948 and Kennedy and Nixon in 1960. Like the 2000 election, these elections were too close to call for any forecasting model.

\(^{76}\) See Asher 1988.
economy-popularity core with only minor modifications, while also expanding it to include a more theoretically enhanced specification. Specifically, the 1992 model includes two of the most important factors influencing voter choice according to voting behavior research: 1) incumbent appeal, gauged by the performance of the incumbent party’s candidate in the presidential primary elections, and 2) party strength, measured by the change in the incumbent party’s number of U.S. House seats during the mid-term election. Assuming that presidential primaries are dominated by candidate attributes, the former variable is believed to provide an indirect measure of the candidates’ qualities by looking at their performance in the primaries. The latter measure, adapted from Rosenstone, serves as an indirect measure of the incumbent party’s strength.

Using the fit statistics to assess the model’s overall predictive performance, the model appears quite robust, with all the independent variables statistically significant at the .05 level and a high adjusted R² statistic. Specifically, the model accounts for 92% of the variation in the vote share for the eleven elections from 1948 to 1988. However, in comparison to the original economy-popularity model, the standard error of the estimate for electoral college votes is rather large (SEE = ±9.10). Obviously, this sizeable prediction error calls into question the reliability of the model’s forecasts. Moreover, the erroneous prediction of a Bush victory in 1992 further casts doubt on the model’s predictive capabilities. Thus, despite being more explicitly theoretically driven, the model appears to be mis-specified; it either contains irrelevant indicators or the measurement of those indicators is poor. Supporting the former assumption, Lewis-Beck and Tien find that by removing the newer indicators, the economy-approval model correctly predicts a Bush defeat in the 1992 election, with less than 2% forecasting error.

77 Specific modifications to the original specification include switching from May to July approval ratings and calculating GNP growth for the first half of the election year, rather than second quarter grow rates. However, by relying on this later measure of popularity, the model’s “lead-in” time, i.e. the amount of time in advance of the election that predictions are available, is slightly reduced.
78 Incumbent appeal is a dummy variable coded “1” for “strong” candidates (those with over 60% of the primary vote) and coded “0” for “weak” candidates receiving less than 60% of the vote.
79 Rosenstone 1983.
81 For comparative purposes, the authors report an estimated popular vote error of 2.13, which is based on the above SEE in the electoral college vote.
82 Lewis-Beck and Tien 1996.
Again trying to improve upon the original economy-popularity specification, Lewis-Beck takes on a new collaborator, Charles Tien, to help create a forecasting model for the 1996 presidential election. Maintaining the premise that good forecasting models should embody “sound tenets of voting behavior,” the pair consults a growing body of literature emphasizing the role of prospective economic evaluations and issue voting in presidential elections. According to these studies, presidential voting is to some degree determined by voters’ evaluations of the nation’s economic and political future.

Adopting this prospective approach, the team creates what it labels a “full-time” model (as opposed to “half-time” models that contain solely retrospective variables), which combines traditional retrospective indicators with prospective variables. While essentially retaining the original core specification but utilizing July approval ratings and first half GNP growth, the 1996 model contains an innovative “peace and prosperity” index. Created from two Gallup election year items, the prospective index provides a joint measure of voters’ economic and political expectations.

Assessing the predictive performance of the new “full-time” model, Lewis-Beck and Tien compare it to the earlier “half-time” model. According to the OLS estimates, the “full-time” model including popularity ratings, GNP growth, and the peace and prosperity index outperforms the model employing only retrospective indicators. Specifically, the full-time model is an improvement over the retrospective model in terms of its standard error (2.26 vs. 2.70) and out-of-sample prediction errors (2.41 vs. 3.11). Additionally, with the reduction in specification error, the 1996 model accounts for a greater percentage of the variance in presidential vote totals (adjusted $R^2 = .88$ vs. .81). With this strong statistical support, Lewis-Beck and Tien (1996) conclude that the parsimonious and theoretically driven adjustments to the original economy-popularity specification meaningfully improve the model’s forecasting accuracy in comparison to their earlier retrospective model.

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83 See Clarke and Stewart (1994), Lockerbie (1992), and MacKuen et al. (1992) for a discussion of prospective economic evaluations.
84 Miller and Wattenberg 1985.
85 The responses to the following questions are used in the creation of the “peace and prosperity” index: 1) “Looking ahead for the next few years, which political party do you think would be more likely to keep the United States out of war- the Republican or the Democratic Party?” and 2) “Which political party- the Republican or the Democratic- will do a better job of keeping the country prosperous?”
In the aftermath of the 2000 presidential election, Lewis-Beck and Tien\textsuperscript{86} made a slight adjustment to the GNP indicator included in the “full-time” model. In light of the erroneous forecast in 2000 and the recent paper by Nadeau and Lewis-Beck,\textsuperscript{87} the forecasters decided to incorporate the conditional effect of GNP, which takes into account whether or not an incumbent is running, using an interactive (multiplicative) term. With new research suggesting voters are largely retrospective in their evaluations of incumbents and prospective in open-seat races, the GNP variable is an interaction term, where GNP is multiplied by incumbent, scored 1 if an elected president is running and 0 = if not.\textsuperscript{88} Examining the utility of this re-measurement, Lewis-Beck and Tien find it to be a significant improvement over the performance of their original core specification (economy-popularity model). In comparison to their original model, the model combining approval ratings with the conditional measure of GNP had a 10-point increase in explained variance, reduced prediction error, and a more accurate 2000 forecast.

Abramowitz (1988, 1996)

Drawing on the original work of Lewis-Beck and Rice,\textsuperscript{89} Alan Abramowitz became the second political scientist to offer a multivariate model for forecasting the outcomes of U.S. presidential elections. Building on the well-established economy-popularity core found in earlier retrospective models, Abramowitz’s simple referendum model provides forecasts of presidential election outcomes utilizing time series data for the ten post-WWII elections from 1948 to 1984. Improving the accuracy and reliability of earlier specifications, Abramowitz uses a forecasting equation that also takes into account the incumbent party’s length of tenure in office. Specifically, the 1988 model incorporates the following predictor variables: 1) presidential popularity measured at the time of the November election, 2) growth in real GNP from the fourth quarter of the

\textsuperscript{86} Lewis-Beck and Tien 2001a.
\textsuperscript{87} Nadeau and Lewis-Beck 2001.
\textsuperscript{88} Lewis-Beck and Tien 2001a.
\textsuperscript{89} Lewis-Beck 1984.
previous year to the fourth quarter of the election year, and 3) a dummy variable measuring the incumbent party’s time in office.

Observing a substantial third-term penalty in presidential elections, Abramowitz asserts that regardless of a president’s approval rating or state of the economy, a growing sentiment exists among the public that it is simply “time for a change.” Essentially, the hypothesis supporting the inclusion of a time in office variable states that the incumbent party can expect to perform poorly in an upcoming election if it has held the White House for two or more terms. That is, the longer a party has been in office, the more likely the public is to feel that “it’s time for a change.”

Originally estimated with data available only after the presidential election, the model provided “retroactive” predictions. However, in a footnote Abramowitz reports the model’s performance using data on presidential popularity and real GNP change from the first half of the election year. According to the goodness-of-fit statistics (i.e. the internal measures of accuracy and reliability), the model appears to be a quite promising forecasting tool. In particular, the model accounts for 92 percent of the variance in the presidential vote. Thus, by including the “time for a change” conditional variable, Abramowitz is able to account for an additional 10 percent of the variation in vote shares beyond that explained by the Lewis-Beck and Rice model, which only employs measures of presidential approval and economic growth. Additionally, the Abramowitz model’s reliability is strong, with an average absolute error of only 1.2 percent for the ten elections from 1948 to 1984.

In 1996, Abramowitz offered an updated version of essentially the same forecasting model. Specifically, the 1996 model includes presidential popularity ratings in early June and the annual growth rate of real gross domestic product (GDP) during the first two quarters of the election year. With these minor adjustments in measurement, the model’s overall performance and lead time remain relatively static (see Table 2.3).

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90 This dummy variable is coded “0” if the incumbent party has held the White House for four years and “1” if the incumbent party has held the White House for eight years or longer.
93 GDP data utilized in the 1996 model are available in early August of the election year.
Again the results of the OLS regression analysis\(^{94}\) reveal very high levels of accuracy and reliability. Specifically, all three of the model’s predictor indicators are found to be statistically significant at the .01 level. Additionally, the model’s standard error (\(\pm1.728\)) and average absolute error of out-of-sample forecasts (\(\pm1.4\)) are both extremely low. Lastly, the model once again accounts for 92% of the variance in presidential vote share.

Campbell and Wink (1990 and [Campbell] 1996)

Again following the lead of Lewis-Beck and Rice,\(^{95}\) Campbell and Wink\(^{96}\) create a forecasting model incorporating pre-campaign preference polls with a traditional measure of economic growth. Also known as trial-heat polls,\(^{97}\) these Gallup preference polls ask survey respondents which candidate they would vote for if the presidential election were held that day. Estimated from data gathered on the eleven post-WWII elections from 1948 to 1988, this updated version of Lewis-Beck and Rice’s original trial-heat model includes second quarter real (inflation adjusted) GNP growth\(^{98}\) and trial-heat forecasts from early September. Specifically, the equation includes the percentage favoring the incumbent party’s candidate according to preference poll results. Originally intended to provide direct forecasts of the actual vote in presidential elections, Campbell and Wink compare the prediction potential of trial-heats in both bivariate and multivariate regression models to the success of raw trial-heat forecasts in predicting the vote.

While trial-heats can be interpreted simply as another measure of the incumbent party’s popularity, Campbell and Wink employ them in a statistical forecasting equation to address a key specification error found in models relying solely on retrospective indicators.\(^{99}\) Specifically, the traditional incumbency-oriented indicators in earlier

\(^{94}\) For the 1996 model, Abramowitz collected data from the twelve post-WWII elections between 1948 and 1992.

\(^{95}\) Lewis-Beck and Rice 1985.

\(^{96}\) Campbell and Wink 1990.

\(^{97}\) Since 1936, Gallup has asked the following trial-heat question: “If the presidential election were being held today, would you vote for the Republican candidate (name) or the Democratic candidate (name)?” However, this question was not asked on a regular basis until after 1948.

\(^{98}\) Eliminating the per capita adjustment used in the Lewis-Beck and Rice (1985) model, Campbell and Wink simply look at GNP growth over the same period, the second quarter of the election year (April-June).

models do not provide a measure of voters’ comparative candidate evaluations. Focused exclusively on the incumbent president’s economic performance and popularity, established retrospective indicators failed to consider voters’ reactions to candidates of the opposition party. Remedying this shortcoming, Campbell and Wink introduce trial-heats as a proxy measure of the relative strength of each candidate, not just support for the incumbent party’s candidate.\textsuperscript{100}

Conducting a series of successive regressions utilizing data from six different time periods, Campbell and Wink find that the early-September trial-heat/economy model provides the most accurate forecasts. Confirming the earlier findings of Lewis-Beck and Rice,\textsuperscript{101} no significant improvements are observed in the equation’s accuracy with the use of trial-heats closer to the November election. Employing this early-September model in the analysis of eleven elections from 1948 to 1988, ninety-four percent of the variance in presidential vote choice is explained. Additionally, the model has a good deal of reliability, with a sample standard error of less than two percentage points (±1.53) and an “out-of-sample” mean absolute error of only 1.12 percentage points. Lastly, this model is capable of providing forecasts approximately two months prior to presidential elections. While the trial-heat data included in the model are gathered in September, they are released a little later. Thus, the model’s lead time is actually a little less than two months.

In 1996, Campbell updates this earlier forecasting effort with Wink by slightly adjusting the economic growth measure. Specifically, the latest model substitutes second quarter growth in gross domestic product (GDP) for the earlier measure of second quarter growth rate in real GNP. Estimating the model on the twelve elections from 1948 to 1992, the fit statistics again report high levels of accuracy and reliability. Accordingly, the early-September/economy model accounts for 94% of the variation in presidential vote, with a standard error of 1.49 and an out-of-sample mean absolute error of 1.01 percentage points.

\textsuperscript{100} Jones 2001.
\textsuperscript{101} Lewis-Beck and Rice 1985.
Erikson and Wlezien (1992, 1996)

Similar to the preceding models, this final model also uses standard retrospective evaluations of presidential and economic performance to forecast election outcomes. Erikson and Wlezien include in their predictive model the following two indicators to estimate the incumbent party vote in the presidential elections from 1948 to 1988: 1) per capita disposable income growth (IG) and 2) net candidate evaluations. Essentially an updated version of Erikson’s 1989 model, the model’s specification is largely informed by the work of previous forecasters. For instance, the model’s measure of cumulative income growth is adapted from an earlier bivariate model proposed by Hibbs. Accordingly, the cumulative measure of income growth is a weighted average of quarterly per capita income growth calculated over the incumbent’s term in office (i.e., over each four year term). Believing economic effects throughout a president’s term are not likely to have an equal electoral impact, each quarter’s income growth is weighted 1.25 times the weight of the preceding quarter. Thus the economic effects closer to the election count more than those earlier in a president’s term. Supporting this weighting scheme, Erikson and Wlezien theorize that (1) memories of earlier effects are likely to lessen over time, and (2) voters are likely to discount those economic effects occurring early in a president’s term(s) in office.

Secondly, the model’s measurement of net candidate evaluations is derived from one of the first multivariate presidential forecasting models. Using data from the National Election Studies (NES) survey, this indicator measures the relative popularity of the major parties’ candidates. Specifically, this “net candidate advantage” (NCA) is calculated by assessing respondents’ answers to open-ended questions about the personal qualities of each candidate. Responses to these questions primarily reflect what each respondent likes and dislikes about the presidential candidates of the two major parties. Unlike traditional indicators of candidate popularity, which are largely retrospective and

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102 See Erikson and Wlezien 1994. Note that while the model was not published until 1994 in the Political Methodologist, it did provide a forecast for the 1992 presidential election.
103 Hibbs 1987.
104 Wlezien and Erikson 1996.
105 Tuft 1978.
incumbency-oriented, this indicator takes into account voters’ evaluations of the
incumbent party’s candidate as well as reactions to the opposition party’s candidate.

Utilizing these two forecasting indicators, the model proves to be a relatively
good predictor of the two-party presidential vote. However, the information used to
estimate the above model is not available until after the election. Specifically, the NES
data on candidates’ evaluations are not available until after the November election, with
the results of the NES post-election survey. With this insufficient “lead-in” time, the
model is incapable of providing \textit{a priori} predictions of the vote share. Remedying the
problem, Erikson and Wlezien estimate the likely net candidate advantage of the
incumbent party’s candidate by using indicators known well in advance of the election,
incumbency and Gallup approval ratings. Thus, the forecasting model employed in the
1992 presidential election included a measure of cumulative income growth and an
estimate of the incumbent’s net candidate advantage. Despite a minor reduction in
explanatory power and a slightly expanded standard error of the estimate (SEE), the
model\textsuperscript{106} is capable of accounting for 84\% of the variance in the incumbent party vote,
with an SEE below three percentage points.

In 1996, Erikson and Wlezien\textsuperscript{107} updated this initial forecasting effort, offering
several equations to predict the upcoming election. The first model, published in the
March edition of \textit{PS: Political Science and Politics}, continues to use cumulative personal
income growth as a predictor variable, but pairs it with the Gallup poll’s presidential
approval ratings instead of likes and dislikes of candidates. Estimated on the eleven
elections form 1952 to 1992, the model performs relatively well when incorporating data
from quarters close to the election. However, when using information from earlier
quarters, the model’s predictive performance decreases dramatically. For example, when
the model includes measures of presidential popularity and income growth from the
fourteenth quarter (ending in June), only 67\% of the variance in the vote is explained.
However, using data from the fifteenth quarter of the president’s term, the adjusted $R^2$
increases to .80, with a standard error of less than three percentage points. While no
doubt more accurate, this “lead-in” time of approximately one month is half the time

\textsuperscript{106} This model, which includes cumulative income growth and an estimated net candidate advantage, was
used to forecast the 1992 presidential election.

\textsuperscript{107} Erikson and Wlezien 1996.
interval of most forecasting models. Additionally, the usefulness of the model is
decreased since the election’s outcome is already becoming clear in many polls by late
September-early October.

Addressing this shortcoming in 1996, Wlezien and Erikson\textsuperscript{108} published a second
model in the October edition of \textit{American Politics Quarterly}. Relying on data available
earlier in the election year, this model combines the average presidential approval ratings
in the fourteenth quarter (April-June) with the Index of Leading Economic Indicators
(LEIG) through the 13\textsuperscript{th} quarter.\textsuperscript{109} Based on ten quantitative indicators of economic
activity, the LEIG index is designed to provide forecasts of the nation’s economic state
approximately three to six months in advance. Similar to their measurement of
cumulative income growth, monthly changes in the index, starting with the first quarter
of an incumbent’s term, are calculated and then weighted. Again placing greater
emphasis on more recent quarters, each quarter’s impact in the cumulative total is 1.11
times greater than the preceding quarter.

Using this weighting scheme, the maximum correlation between presidential vote
and LEIG cumulative index values is observed with data from the 13\textsuperscript{th} quarter of the
incumbent’s term. Accordingly, the model’s final specification for forecasting the 1996
presidential election included quarter 13 cumulative index values and presidential
approval ratings (14\textsuperscript{th} quarter).\textsuperscript{110} Outperforming the model published in March, this later
model has a slightly increased adjusted $R^2$, longer “lead-in” time, and improved
reliability. In particular, the model accounts for 83\% of the variation in past election
outcomes, with a standard error of the estimate equal to 2.69 percentage points.
Additionally, the model performs well under the more stringent test of out-of-sample
forecasts, with a prediction error of only 2.2 percentage points.

\textsuperscript{108} Wlezien and Erikson 1996.
\textsuperscript{109} Jones 2001.
\textsuperscript{110} For the 2000 presidential election, the forecasters offered a slightly revised model employing approval
ratings from the 15\textsuperscript{th} quarter. However, the model still utilized cumulative index values from the 13\textsuperscript{th}
quarter.
<table>
<thead>
<tr>
<th>Multivariate Models</th>
<th>Theory</th>
<th>Explanatory Variables</th>
<th>N (Elections)</th>
<th>Adjusted R²</th>
<th>SEE</th>
<th>Out-of-Sample Error</th>
<th>Lead-In Time</th>
</tr>
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<tbody>
<tr>
<td>Lewis-Beck and Rice (1984)</td>
<td>Retrospective</td>
<td>Presidential Approval (May), GNP Growth</td>
<td>9 (1948-80)</td>
<td>.82</td>
<td>3.68</td>
<td>---</td>
<td>6 Months</td>
</tr>
<tr>
<td>Lewis-Beck and Rice (1992)</td>
<td>Retrospective</td>
<td>Presidential Approval (July), GNP Growth, Party Strength, Incumbent Appeal</td>
<td>11 (1948-88)</td>
<td>.92</td>
<td>2.13&lt;sup&gt;a&lt;/sup&gt;</td>
<td>---</td>
<td>4 months</td>
</tr>
<tr>
<td>Lewis-Beck and Tien (1996)</td>
<td>Retrospective and Prospective</td>
<td>Presidential Approval (July), GNP growth, Peace &amp; Prosperity</td>
<td>11 (1952-92)</td>
<td>.88</td>
<td>2.26</td>
<td>2.41</td>
<td>2 months</td>
</tr>
<tr>
<td>Abramowitz (1988)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Retrospective and Incumbency theory</td>
<td>Presidential Approval (May), GNP growth, Incumbency</td>
<td>10 (1948-84)</td>
<td>.92</td>
<td>1.2</td>
<td>1.9</td>
<td>4 months</td>
</tr>
<tr>
<td>Abramowitz (1996)</td>
<td>Retrospective and Incumbency theory</td>
<td>Presidential Approval (June), GDP Growth, Incumbency</td>
<td>12 (1948-92)</td>
<td>.92</td>
<td>1.7</td>
<td>1.4</td>
<td>3 months</td>
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<tr>
<td>Campbell and Wink (1990)</td>
<td>Retrospective</td>
<td>Trial-Heats (Early Sept.), GNP growth</td>
<td>11 (1948-88)</td>
<td>.94</td>
<td>1.53</td>
<td>1.12</td>
<td>1 1/2 months</td>
</tr>
<tr>
<td>Campbell (1996)</td>
<td>Retrospective</td>
<td>Trial-Heats (Early Sept.), GDP Growth</td>
<td>12 (1948-92)</td>
<td>.94</td>
<td>1.49</td>
<td>1.33</td>
<td>2 months</td>
</tr>
<tr>
<td>Erikson and Wlezien (1992)</td>
<td>Retrospective</td>
<td>Net Candidates Evaluations (est.), Income Growth</td>
<td>11 (1948-88)</td>
<td>.84</td>
<td>2.48</td>
<td>---</td>
<td>2 months</td>
</tr>
<tr>
<td>Erikson and Wlezien (1996)</td>
<td>Retrospective</td>
<td>Presidential Approval (15&lt;sup&gt;th&lt;/sup&gt; q.), Income Growth</td>
<td>11 (1952-92)</td>
<td>.80</td>
<td>2.88</td>
<td>---</td>
<td>1 month</td>
</tr>
<tr>
<td>Wlezien and Erikson (1996)</td>
<td>Retrospective</td>
<td>Presidential Approval (14&lt;sup&gt;th&lt;/sup&gt; q.), Index of Leading Economic Indicators</td>
<td>11 (1952-92)</td>
<td>.83</td>
<td>2.69</td>
<td>2.2</td>
<td>4 months</td>
</tr>
</tbody>
</table>

Notes: With forecasters publishing several versions of their models, it is difficult to select which ones to include. For this table, forecasters’ preferred models, those from which predictions were made, are included. However, to get a fuller picture of each model one will need to consult the original publications.

a. For comparative purposes, Lewis-Beck and Rice (1992) provide an estimate of popular vote error based on the electoral vote SEE of 9.10.

b. Erikson and Wlezien (1992) use an estimated value of NCA calculated from August approval ratings and incumbency. (See *The Political Methodologist*, 1994)

c. Unfortunately, forecasters, especially prior to 1996, did not always report their models’ out-sample-error.
V. Conclusion

In sum, a comparative assessment of the various forecasting models and their progression over the past twenty years reveals a good deal of similarity and sophistication. Evident in Table 2.3, only minor deviations exist in the models’ underlying theory, selection and measurement of key explanatory variables, sample size, lead-in time, and statistical performance. However, a few key distinctions and commonalities among the models should be highlighted before turning to an evaluation of the models’ predictive performance and potential contributions to explanatory theory in the next chapter.

As previously mentioned, the majority of current multivariate models adhere to the basic tenets of retrospective voting theory. That is, almost all forecasters view presidential elections as referenda on the past economic and political performance of the sitting president. Moreover, these so-called “referendum” models share a common outlook on presidential elections, which implies election outcomes can be accurately predicted from only a handful of key variables well in advance of the “official” campaign and even candidates’ nominations. With these basic premises guiding forecasters’ selection of predictor variables, it is not surprising to find that the total number and selection of aggregate indicators are also quite similar. That is, following the basic core specification introduced earlier, a handful of measures of past economic and political performance that have demonstrative predictive power have become the dominant indicators employed in forecasting presidential elections.

The majority of explanatory variables listed in Table 2.3 are retrospective and incumbency-oriented measures, which focus primarily on the current administration’s past economic and political performance. For instance, all four of the models published in 1996 include very similar, if not identical, measures of the nation’s past and present economic conditions. Specifically, three of the four models measure economic growth during the election year by calculating change in either gross national product (GNP) or gross domestic product (GDP). The only deviation is Wlezien and Erikson’s 1996 model, which provides a refined variant of this method by employing a cumulative economic growth measure based on the Index of Leading Economic Indicators (LEIG).

111 Abramowitz 1996.
As with the designated macroeconomic variables, forecasters employ similar (again often identical) measures of presidential popularity. With a smaller selection of adequate national-level indicators of non-economic issues, forecasters predominantly rely on incumbent approval ratings as a proxy measure of the various sociopolitical influences impacting presidential preference at the individual-level. Quickly becoming the default measure of presidential popularity, three of the four models published in 1996 utilize Gallup poll approval ratings. In particular, most models rely on incumbents’ early to mid-summer (May-July) election year approval ratings. Overlooking any potential impact of out-party candidates, most models’ popularity measures are solely focused on the incumbent. With this exclusive reliance on voters’ assessments of incumbents, these forecasters are essentially implying that candidates of the opposition party are of little importance in predicting election outcomes.

However, several forecasters have been critical of the assumption that opposition candidates have no significant impact in presidential elections. In particular, Campbell\textsuperscript{112} and Erikson and Wlezien\textsuperscript{113} employ indicators that measure the relative popularity of both major party candidates. Specifically, Campbell deviates from the norm by utilizing trial heat results in early-September to assess voters’ reactions to both candidates. In contrast to the traditional incumbency-oriented variable, the trial-heat variable provides a prospective\textsuperscript{114} measure of voters’ comparative candidate evaluations. Similarly, Erikson and Wlezien use net candidate evaluations to assess voters’ feelings toward both candidates. However, this variable was not included in their 1996 model, since the data for calculating incumbents’ net candidate advantage are not available until several months after the election.

A second important distinction among the models’ variable specification also concerns the inclusion of prospective variables. Specifically, recent challenges to the models’ conventional specification question the utility of an entirely retrospective approach. That is, recent studies find voters to be making both retrospective and prospective evaluations of the nation’s economic and political well-being. In particular,

\textsuperscript{112} Campbell 1996.
\textsuperscript{113} Erikson and Wlezien 1992.
\textsuperscript{114} Trial-heats are prospective to the extent they ask voters to assess future promises and policy agendas proposed by candidates of the opposition party.
such research has found voters to be especially future-oriented in open-seat elections.\textsuperscript{115} Sensitive to this changing sentiment in the voting behavior literature, Lewis-Beck and Tien\textsuperscript{116} employed both traditional retrospective theory and contemporary prospective theories to inform the specification of their 1996 and 2000 models. Taking their lead from several studies of prospective voting, Lewis-Beck and Tien are among the first to offer a predictive model that measures both retrospective and prospective evaluations.

A third deviation from the economy-popularity specification is Abramowitz’s inclusion of incumbency theory, which observes a cyclical phenomenon in political parties’ control of the White House. Like all forecasters, Abramowitz attempts to discern general patterns in past presidential elections that will help predict the outcomes of future elections. Analyzing the correlations between presidential election outcomes and incumbency, Abramowitz finds support for taking into account the timing of presidential elections. Specifically, Abramowitz concludes political parties in office for more than two consecutive terms are likely to lose in their bid for a third term. In addition to this “two-term penalty,” traditional incumbency theory also finds a “one-term reward,” in which the incumbent party is likely to win its bid for a second consecutive term.\textsuperscript{117}

Even with these adjustments to core specification, the models are still highly comparable in terms of their theoretical foundations and measurement of key variables. The slight differences described here do not result in any significant disparities in the accuracy and reliability of predictions. Utilizing roughly the same number of past elections to estimate their models, all models presented in Table 2.3 account for approximately 80 to a little over 90% of the variation in presidential vote shares. Furthermore, almost all of the models have standard prediction errors (SEE) and out-of-sample errors below 3-percentage points.\textsuperscript{118} Lastly, the models also have comparable lead-in times, with most forecasts being made approximately 2 to 3 months prior to the November election.

A final similarity among the forecasting models concerns their methods, i.e. the statistical techniques employed to predict incumbents’ percentage of the two-party vote.

\textsuperscript{115} Nadeau and Lewis-Beck 2001.
\textsuperscript{116} Lewis-Beck and Tien 1996.
\textsuperscript{117} Jones 2001.
\textsuperscript{118} Only the original Lewis-Beck and Rice (1984) model has an SEE over 3% points.
With the purpose of predicting the values of a continuous dependent variable, share of the actual vote, all presidential forecasting models utilize ordinary least squares (OLS) regression analysis to determine the winners of presidential elections. In accordance with a linear specification, each predictor variable is assumed to have a constant causal effect, which is easily added in a forecasting equation to get the combined predictive power. However, recent advancements in forecasters’ understanding of the possible impacts of electoral context have introduced more sophisticated predictor variables, which take a more holistic approach. In particular, this progression to more advanced measures is evident in Lewis-Beck and Tien’s recent inclusion of an interaction variable in their “full-time” model. Taking into account the specific electoral context, such as whether or not an incumbent is running for reelection, these forecasters are leading the way in improving models’ specification by adopting more powerful and precise measures of existing leading indicators.

In conclusion, it will be interesting to see if these minor deviations in the models’ variable specification and measurement of aggregate indicators significantly impact their ability to accurately forecast the outcomes of presidential elections. Addressing this question, the next chapter provides an assessment of the models in regards to both their predictive performance in recent presidential elections and their potential theoretical contributions to existing bodies of research. While the value of forecasting models is most often thought of in terms of predictive capability, Chapter 3 draws attention to the models’ contributions to specific theories of voting behavior. Illustrating the interplay between prediction and explanation, an assessment of the models’ theoretical contributions demonstrates how the models’ successes, as well as their failures, reflect back on the larger bodies of literature that inform the models’ selection of aggregate indicators. However, before assessing how the forecasting models enhance current understanding of the key pre-campaign fundamentals influencing individuals’ vote decisions, the following chapter turns to an assessment of the models’ value as predictive instruments in the past three presidential elections from 1992 to 2000.
Chapter Three: Predictive and Theoretical Assessment

I. Introduction

The purpose of this chapter is to provide a general assessment of forecasting both in terms of the models’ value as forecasting instruments as well as their possible theoretical contributions. Analysis presented here of the models' predictive performance in varied electoral contexts focuses on forecasts in the three most recent presidential elections; 1992, 1996, and 2000. Explanations are presented for the efficacy of forecasting in each electoral context, i.e. how different electoral landscapes possibly impact the models’ performance. Part two of this chapter focuses on the benefits of statistical forecasting and its usefulness for enhancing current understanding of presidential election outcomes. Evaluating the value added by statistical forecasting, comparisons are drawn between the statistical models and traditional methods of forecasting elections. Advantages of the scientific models will be contrasted with the various shortcomings commonly associated with non-scientific approaches. Specifically, this discussion concentrates on the distinctions between these different forecasting methods in regards to their accuracy, reliability, objectivity, and methodological and theoretical contributions.

While any number of past elections could be used to evaluate the models’ performance, the elections from 1992 to 2000 seem particularly relevant for several reasons. First, it is logical to assume that the last two decades of forecasting presidential elections represent a refining process in which forecasters have continually improved their models. Assuming the presence of a learning curve, one would expect more recent models, which have benefited from the work of earlier forecasters, to be better specified and more accurate. Secondly, prior to 1992, very few political scientists were involved in forecasting elections. However, a record number of new forecasters entered the field between the 1988 and 1992 presidential elections. Accordingly, 1992 marked the year in which the greatest number of new models was employed in predicting a presidential  

119 Unless otherwise specified, analysis is confined to the sample of models selected for this study. Statements regarding forecasting performance in specific elections are solely based on the performance of these four models.
election. The final rationale for selecting these particular elections concerns the specific electoral contexts in each year. As will be elaborated below, each election provides a different macro-electoral context in which to assess the models’ performance. Thus an analysis of the models’ forecasts in each setting will allow tentative observations to be made about the specific electoral conditions under which models do best. For example, are referendum models more accurate in certain electoral contexts than others, and if so which ones?

II. Presidential Elections, 1992-2000

In 1992, the prevailing wisdom regarding the electoral context was often summed up with the now famous quote, “It’s the economy stupid.” Obvious from this simple cliché, the national economy was considered the primary factor determining vote choice and the subsequent defeat of incumbent George H. W. Bush. According to both popular and scholarly explanations for the outcome, the 1992 election represented a referendum on the “lackluster performance” of the national economy during Bush’s term in office. According to National Election Studies data on public opinion, an unprecedented number of survey respondents were concerned about the economy. Despite Bush’s protestations to the contrary, three-quarters of the public (the highest proportion ever) described the economy as either “somewhat bad” or “bad.” On Election Day, 64% of exit poll respondents cited the economy as the single most important problem facing the nation. When asked whether over the past year the nation’s economy had “gotten better or worse,” an astonishing 73% of the NES respondents chose the latter.

Looking at the extent to which these negative economic evaluations are attributed to the incumbent, NES data estimate 80% of respondents held a negative view of Bush’s handling of the economy. Not surprisingly, Bush’s overall job approval rating was well below the 50% mark in mid- to late summer of the election year. According to a July Gallup poll, Bush’s popularity had dropped to a low of 32% just three months prior to the

120 Frankovic and McDermott 2001, p. 75.
123 Traditionally, incumbents with approval ratings below 50% in mid-summer of the election year lose in the upcoming election. Specifically, in the 12 elections from 1948 to 1992, incumbents with a July approval rating exceeding 50 percent went on to win the election (Campbell and Mann, 1996).
election. No doubt the rapid drop in his approval rating can be largely attributed to the relatively poor economic performance during his time as president. With negative cumulative income growth through the second quarter of 1992 and only meager GDP growth reported in the six months prior to the election, voter evaluations of national economic conditions were shaping up to be the primary factor influencing the vote in 1992.

Table 3.1 Forecasts of the 1992 Presidential Election

<table>
<thead>
<tr>
<th>Forecaster</th>
<th>Forecast</th>
<th>Error</th>
<th>Predictors (1992 values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abramowitz</td>
<td>46.7</td>
<td>-0.2</td>
<td>Change in GDP 2nd quarter (0.35%) Presidential Approval early July (31%) More than second term (1)</td>
</tr>
<tr>
<td>Campbell</td>
<td>47.1</td>
<td>-0.6</td>
<td>Change in Real GNP (.345), Early Sept. Trial-Heats (42.5%)</td>
</tr>
<tr>
<td>Lewis-Beck and Rice</td>
<td>51.5</td>
<td>-5.0</td>
<td>Change in real GNP (1.1%), Presidential Approval July (32%), Party Strength (-8), Incumbent Appeal (1)</td>
</tr>
<tr>
<td>Erikson and Wlezien</td>
<td>46.8</td>
<td>-0.3</td>
<td>Per Capita Disposable income growth (-.03), Net Candidate Advantage (.141)</td>
</tr>
<tr>
<td>Actual</td>
<td>46.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
All four models have the same dependent variable (i.e., the incumbent party’s percentage of the two party vote).

a. The “time for change” variable in Abramowitz’s model is a dummy variable that takes on the value of 0 when party has been in power four years and 1 if the party has been in office for eight or more years.

b. The party strength value of -8 indicates the incumbent’s party lost a total of eight House seats in the mid-term election.

c. The “net candidate advantage” (NCA) is the mean (for major parties only) net number of in-party candidate likes and out-party candidate dislikes minus the out-party candidates likes and in-party candidate dislikes, based on respondents’ answers to open-ended NES survey questions on the candidates’ personal qualities. However, since this information is not available until after the election, the Erikson and Wlezien use a NCA estimated by plugging in a +1 for incumbency and the presidential approval rating in July 1992 (see Erikson and Wlezien, The Methodologist, 1994). The positive number suggest the in-party candidate (Bush) has a slight advantage over the out-party candidate (Clinton).
In this macro-electoral context, it is not surprising to find that most forecasting models performed extremely well, with all but one (Lewis-Beck and Rice) correctly forecasting a Bush defeat. In particular, the weak economy and low presidential approval ratings made the 1992 presidential election a very predictable race for most forecasting models. Looking at Table 3.1, the models by Campbell, Abramowitz, and Erikson and Wlezien were all less than one percentage-point off the actual vote share received by the incumbent. In comparison to the models’ out-of-sample prediction errors discussed in the previous chapter, the models performed better than expected. Excluding the erroneous forecast of Lewis-Beck and Rice, the mean absolute prediction error for these three models is an impressive .4%.

The only outlier in the above table is the forecast offered by the updated version of the original Lewis-Beck and Rice forecasting model.124 Despite being described as more “theoretically attractive,” the model’s 1992 forecast incorrectly predicted a Bush victory, with a sizable prediction error of 5% points. Explanations for the model’s inaccuracy suggest it may have been mis-specified. In particular, Nathaniel Beck suggests the model’s scoring of President Bush on the candidate appeal variable led to the mistaken forecast of a Bush reelection.125 Specifically, Bush scored a 1 on the candidate appeal variable for receiving over 60% of the primary vote, which exaggerated his electoral prospects. With the greater party unity typically enjoyed by incumbents during the nominating process, Bush’s electoral chances were classed with Nixon and Reagan. However, given the perceived poor economic conditions126 during his term in office, his reelection prospects were actually closer in comparison to those of Ford and Carter. Considering the model’s other independent variables127 take into account Bush’s poor political and economic performance, this explanation seems quite plausible.

126 Note the economy was actually doing better by the election; however, many voters continued to hold negative perceptions of the economy.
127 The other variables in the Lewis-Beck and Rice model include: presidential popularity (32%), real GDP growth (1.1%), and party strength (net loss of 8 seats in the midterm election).
Believing their model was in fact mis-specified due to “irrelevant inclusions” or “faulty operationalizations,” Lewis-Beck and Rice\textsuperscript{128} dropped the two most “suspect”\textsuperscript{129} variables, party strength and candidate appeal, creating a re-estimated equation of their original model, containing solely two variables: economic and presidential popularity estimates. Using this equation to forecast the 1992 presidential election, the model predicts a Clinton victory, with the incumbent receiving only 48.25% of the popular vote share. Thus by reverting back to the economy-popularity core specification, the forecasting error for the 1992 election was less than two percentage points (48.25% - 46.6% = 1.7). While this value is still large relative to the prediction errors presented in Table 3.1, the out-of-sample forecasting accuracy is greatly improved by the elimination of arguably irrelevant or poorly measured variables.

In sum, the 1992 presidential election gave voters the opportunity to hold the incumbent president accountable for his allegedly poor handling of the national economy. While popular explanations of the election outcome also consider the possible effects of specific campaign issues,\textsuperscript{130} ideology, and Perot’s third party candidacy, the dominant factor determining voter choice in 1992 appears to have been the electorate’s economic perceptions.\textsuperscript{131} Supporting this assertion, Alvarez and Nagler employ a multinominal probit model to estimate the probability of a hypothetical individual voting for any three of the candidates based on different values of various independent variables. The researchers estimate that respondents feeling the economy had deteriorated were 25% more likely to vote for Clinton. Additionally, they estimate that the economic change between the 1988 and 1992 elections cost President Bush 8.5% points relative to Clinton. Thus, despite other macro-electoral factors, the perceived state of the economy was by far the most important factor motivating individuals to support one candidate over the other.

Similar to the 1992 election, voter perceptions of the nation’s economy appeared to be the dominant factor accounting for the outcome of the 1996 presidential election. Of course, voters in the 1996 election were rewarding, not punishing, the incumbent for

\textsuperscript{128} Lewis-Beck and Rice 1996.
\textsuperscript{129} Lewis-Beck and Rice question the relevance of these two variables since: (1) they appear in no other forecasting models and (2) they may be poorly measured.
\textsuperscript{130} Alvarez and Nagler (1995) found that certain issues brought up during the campaign affected voter preference. In particular, vote choice was strongly affected by candidates’ positions on abortion, with Bush’s pro-life stance found to be a quite costly position.
\textsuperscript{131} Alvarez and Nagler 1995.
his handling of the economy. Again, popular explanations for President Clinton’s reelection suggest the economy had a much greater impact than other macro-electoral conditions, such as the effects of voter positions on other issues, partisanship, or ideology. As in 1992, Alvarez and Nagler found changes in voters’ perceptions of the national economy produced large changes in support for both major party candidates.\textsuperscript{132} In 1996, the hypothetical voter was 38% more likely to support Clinton over Dole if he/she saw the national economy as better rather than worse. Demonstrating the strong relationship between individuals’ economic evaluations and vote choice, Abramson, et al. estimate that 79\% of the voters who supported Clinton in 1996 felt the economy had improved.\textsuperscript{133}

In contrast to the 1992 election, voters in 1996 voiced less concern over the economy. With a prosperous economy serving as the backdrop for the 1996 election, fewer voters were citing the economy as the single “most important problem” facing the nation. In comparison to the 64\% of NES respondents who felt the economy was a concern four years earlier, less than a third of the respondents felt that way in 1996.\textsuperscript{134} Satisfied with the economy’s exceptional growth and a low unemployment rate in 1996, voters turned their attention to other issues, especially issues involving social welfare and public order. In particular, voters appeared to be concerned with those issues emphasized by the news media and the candidates during their campaigns. For instance, in 1996 voters seemed particularly interested in issues of health care, welfare policy, education, and abortion. However, even with the increased interest in such issues, the economy evidently remained the single most important issue shaping individuals’ vote decisions. Finding voters’ evaluations to be closely related to voter choice, Abramson, et al. report that voters satisfied with the incumbent’s handling of the economy were very likely to vote for the in-party candidate. In 1996, seventy-nine percent of those satisfied with Clinton’s performance actually voted for the President.

Despite voters’ increased concern over non-economic issues, forecasts of the 1996 presidential election are relatively similar to those in 1992. Looking at Table 3.2, all models accurately predicted a Clinton victory over Dole in 1996. However, in

\begin{itemize}
  \item \textsuperscript{132} Alvarez and Nagler 1998.
  \item \textsuperscript{133} Abramson, et al. 1996, p. 154.
  \item \textsuperscript{134} Abramson, et al. 1996, p. 124.
\end{itemize}
comparison to the 1992 election, the models’ forecasts for 1996 were slightly less similar and also less accurate. Greater variation exists among the models’ forecasts, and each forecaster, except Lewis-Beck and Tien, offers a prediction somewhat less accurate than their 1992 prediction. Again, the models overestimated the incumbent’s percentage of the two-party vote, with an average prediction error of less than two percentage points. Despite slightly higher forecasting errors, the models still performed better than the final preelection polls, which overestimated Clinton’s vote share by about three percentage points.\textsuperscript{135}

Table 3.2 Forecasts of the 1996 Presidential Election

<table>
<thead>
<tr>
<th>Forecaster</th>
<th>Forecast</th>
<th>Error</th>
<th>Predictors (1996 values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abramowitz</td>
<td>56.8</td>
<td>2.1</td>
<td>Change in GDP through 2\textsuperscript{nd} quarter, Presidential approval early June, Less than two terms (0)\textsuperscript{a}</td>
</tr>
<tr>
<td>Campbell</td>
<td>58.1</td>
<td>3.4</td>
<td>GDP growth rate 2\textsuperscript{nd} quarter, Early Sept. Trial-Heats</td>
</tr>
<tr>
<td>Lewis-Beck and Tien</td>
<td>54.8</td>
<td>0.1</td>
<td>GNP change 6 months prior to election (1.67), Presidential Approval July (57%), Peace and Prosperity (109.3)\textsuperscript{b}</td>
</tr>
<tr>
<td>Wlezien and Erikson</td>
<td>56.0</td>
<td>1.3</td>
<td>Presidential Approval June (52%), Index of Leading Economic Indicators (0.1405)</td>
</tr>
<tr>
<td>Actual Vote</td>
<td>54.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: American Politics Quarterly, October 1996.
\textsuperscript{a} The value of zero indicates the incumbent party has been in office less than two terms.
\textsuperscript{b} The “peace and prosperity” index is created from respondents’ answers to two Gallup Poll questions designed to measure economic and political expectations. By adding the percentage of the two-party opinion favorable to the incumbent party on each item, the index can theoretically range from 0 to 200.

As in 1992, the forecast by Lewis-Beck is again an outlier; however, this time the model’s forecast is noteworthy for its exceptional accuracy. With a new “full-time”

\textsuperscript{135} Wlezien 2001.
model, employing both retrospective and prospective indicators, the Lewis-Beck and Tien forecast was less than one tenth of a point off the incumbent’s actual vote share! While such accuracy might be attributed to the inclusion of prospective variables, it is still too early to draw any concrete conclusions about the efficacy of models employing variables that take into account voters’ expectations regarding the future. Given the small sample size used to estimate models’ unstandardized coefficients, it may be simple luck accounting for the model’s extremely accurate prediction.

The final electoral context in which to assess the models’ forecasting performance is the 2000 presidential election. In some respects, the electoral landscape in the 2000 election was quite similar to that in the 1996 election. Most notably, the economy continued to prosper and the incumbent’s approval ratings remained over the 50% mark. In 2000, public evaluations of the economy had never been higher, with 9 in 10 Americans viewing the national economic performance as “good” just one month prior to the November election.136 However, in stark contrast to both the 1992 and 1996 elections, the economy did not seem to play a major role in 2000. Despite expectations to the contrary, the prosperous economy failed to become a central factor in the election. Confirming the marginal role of the economy in 2000, polls taken on Election Day found little concern over the economy among voters. In contrast to the 43% who said the economy was the top issue in their vote in 1992, only 18% of exit poll respondents cited the economy in 2000.137 A second important factor distinguishing the 2000 election from the two preceding presidential elections was the absence of an incumbent running for reelection. With President Clinton unable to run for a third term, the election was an open seat race.

In this electoral context, all of the forecasting models predicted a Gore victory, with many forecasting a near landslide win for the Vice President. In contrast to the 1992 and 1996 elections, forecasters’ optimistic predictions of a Gore victory in 2000 were directly at odds with many of the preelection polls. Looking at Table 3.3, the models’ forecasts for the 2000 election were again less accurate when compared to forecasts of the previous two elections. Again, the forecasters overestimated the

136 Frankovic and McDermott 2001, p. 75.
137 Frankovic and McDermott 2001, p. 76.
incumbent party’s percentage of the vote share, with an average prediction error of almost four percentage points (3.95%).

As shown in the below table, forecasts by Abramowitz and Campbell were the most accurate, with estimates of the vote share less than three percentage points too high; Lewis-Beck and Tien and Wlezien and Erikson were off by approximately five percentage points. In addition to the greater prediction error, the variance of the forecasts was also quite large in 2000. While the specific forecasts of the models above only range from 52.8 to 55.4, the variance among all forecasts was a striking 7.5% points. Thus, out of the three most recent elections, forecasts for the 2000 election had the greatest amount of variance and the least prediction accuracy.

Table 3.3 Forecasts of the 2000 Presidential Election

<table>
<thead>
<tr>
<th>Forecaster</th>
<th>Forecast</th>
<th>Error</th>
<th>Predictors (2000 values)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abramowitz</td>
<td>53.2</td>
<td>2.9</td>
<td>Change in GDP through 2nd quarter, Presidential approval early June, More than second term (1)</td>
</tr>
<tr>
<td>Campbell</td>
<td>52.8</td>
<td>2.5</td>
<td>GDP growth rate 2nd quarter, Early Sept. Trial-Heats</td>
</tr>
<tr>
<td>Lewis-Beck and Tien</td>
<td>55.4</td>
<td>5.1</td>
<td>GNP change 6 months prior to election, Presidential Approval July, Peace and Prosperity</td>
</tr>
<tr>
<td>Wlezien and Erikson</td>
<td>55.2</td>
<td>4.9</td>
<td>Presidential Approval June, Index of Leading Economic Indicators</td>
</tr>
<tr>
<td>Actual Vote</td>
<td>50.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


III. Observations

While no definitive conclusions can be drawn from the above analysis of only three presidential elections, several interesting findings are suggestive of the specific electoral contexts in which forecasting models perform best. In general, the models’
predictive performance is quite impressive in all three elections, despite the unusually high error in 2000. However, three of the models were particularly accurate in the 1992 election, in which poor economic conditions were the primary factor influencing vote choice. Clearly, the 1992 presidential election reflects the basic retrospective theory of voting, in which elections serve as referenda on the incumbent president’s past political and economic performance in office. Considering the models’ impressive performance in this election, it may be that forecasting is likely to “work better when the economy is failing than when it is thriving” because vote choice is largely informed by individuals’ economic evaluations when times are bad.\textsuperscript{138} Further bolstering this argument, the above analysis finds the models, as a group, were the least accurate in the one open seat election, in which the economy was not a central component of the election. With the impact of national economic conditions on the presidential vote well documented in both the voting behavior and forecasting literature, it seems plausible that the models might perform best during poor economic times.

However, looking beyond the performance of the four models selected for this analysis, such an assumption does not explain why a second prominent forecasting model also failed in 1992. In addition to the erroneous forecast by Lewis-Beck and Rice, the well-known model offered by economist Ray Fair was also off the mark, overestimating Bush’s 1992 vote by nine percentage points. This fact is particularly damaging, since the Fair model is primarily built on presidential incumbency and election-year economics.\textsuperscript{139} With such mixed performance, modesty is key when making generalizations regarding the failure or success of forecasting in specific electoral contexts.

As for the inaccurate forecasts in the 2000 presidential election, a number of explanations suggest the distinctive electoral context of open seat elections may weaken the economy’s potential influence on voters’ decision-making. While a wide-range of explanations exist for the forecasting errors in the 2000 election, the most plausible suggest open-seat contests without an incumbent running are: (1) likely to be more competitive and thus harder to predict, and (2) less of a referendum on incumbents’

\textsuperscript{138} Frankovic and McDermott 2001, p.76.
\textsuperscript{139} Campbell and Mann 1996.
economic stewardship and popularity.  Addressing the latter claim, a recent study by Norpoth finds that the economy has a much greater influence on the vote in U.S. presidential elections when a sitting president is on the ballot.  Analyzing the relationship between incumbent party vote and economic conditions in U.S. presidential elections since 1872, this research finds the electoral value of the economy is considerably less for the incumbent-party candidate in open-seat races. According to Norpoth, incumbents are likely to reap greater rewards in prosperous economic times and harsher punishment in poor economic times than would a non-incumbent candidate of the president’s party. Applying this theory to the 2000 election, Gore’s perceived advantage resulting from a prosperous economy under the Clinton administration may have been slightly overestimated. However, had Clinton been allowed to run for a third term, he would have likely benefited more from voters’ positive economic evaluations.

In sum, only speculative notions regarding forecasting’s utility in specific electoral settings are currently available. As Lewis-Beck and Tien point out, a good deal of forecasting accuracy is attributable to “good theory” and some of it is just “good luck.” However, the above analysis does make two important observations about forecasting presidential elections. First, both the 1992 and 1996 elections confirm earlier claims that third parties and independent candidates do not impede the models’ ability to forecast election outcomes. Secondly, analysis of the models’ performance suggests “voters are not cash registers.” While economic conditions obviously play an important role in determining the presidential vote, measures of public opinion on non-economic issues are also necessary to make accurate predictions of election outcomes; for example, in some years, national security, abortion, and other key issues are more salient in voters’ minds.

IV. Scientific vs. Non-scientific Forecasting Approaches

Despite variations in the accuracy of the models’ predictions in the last three presidential elections, all are superior to earlier nonscientific forecasts. Over the past two

140 Campbell 2001.
141 Norpoth 2004.
142 Lewis-Beck and Tien 2001b, p. 302.
143 Campbell and Mann 1996, p. 28.
decades, the *science* of forecasting presidential elections has evolved from the traditional, non-scientific methods to approaches employing sophisticated methods of statistical estimation. In contrast to modern forecasting techniques, earlier non-scientific approaches - those of prognosticators, pundits, and politicos – do not rely on theories of voting behavior or carefully formulated hypotheses, which can be subjected to systematic tests. As such, these approaches can be considered “pseudo-explanations,” which make little to no contribution to existing explanatory research on voting behavior or scholarly understanding of presidential election outcomes. Addressing these shortcomings, scientific forecasting models draw on leading theories of voting behavior and employ replicable, and thus testable, methods of predicting presidential elections. As the following comparison reveals, such advanced forecasting methods have a number of important advantages over a variety of ad hoc forecasting methods traditionally employed to predict election outcomes. In particular, current forecasting models have greater degrees of reliability, accuracy, objectivity, usability, lead-in time, and theoretical specification.

First, comparing scientific approaches to the forecasting devices employed by election prognosticators, several important advantages are evident, especially with regard to accuracy and reliability. For instance, predictions made by prognosticators are reliant on signs or rules that are typically independent of the political process. Several classic examples include “rules of thumb” based on the winner of the World Series, the quality of the Beaujolais wine harvest, and candidates’ height or name length. These specific events and candidate qualities are simple coincidences based on spurious correlations, which have been identified prior to the election and systematically vary with the success of a particular political party. For example, if the wine harvest is good, the Democratic candidate will win the presidency. Additionally, the bellwethers extensively employed by Louis H. Bean in the late 1940s are examples of predictions based on coincidence.

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144 Campbell 1996.
145 Isaak 1981.
146 This comparison draws on criteria suggested by Lewis-Beck (1985) for identifying key elements of a “good” forecasting model.
147 Bellwethers refer to political units, most often states or counties, whose votes in previous elections closely parallel the national vote and are therefore perceived as good indicators of future electoral outcomes (Rosenstone 1983, p. 21). The basic premise is illustrated in the adage “as your state [or county] goes, so goes the nation” (Bean 1969, p. 99).
In stark contrast to today’s scientific forecasting models, the predictive power of prognostications is entirely contingent on coincidences that have no causal connection to the particular event being predicted. Not surprisingly, forecasts derived from popular prognosticators are often unreliable and inaccurate. According to the laws of probability, each of these rules or signs will sooner or later fail in its predictions. Chance alone is likely to produce events that coincide with one another, but they are unlikely to covary forever. While some have been luckier than others, their overall utility as a forecasting instrument is exclusively dependent upon chance. As such, the accuracy and reliability of this forecasting method are understandably quite poor. Additionally, the lack of plausible causal explanations guiding their forecasts further reduces the value of prognostications in terms of their potential contributions to current understanding of the electoral process. That is, with no theoretical specification informing this approach, the success or failure of such forecasts does not reflect back on the usefulness of any particular explanatory theory.

A second non-scientific approach to election forecasting is provided by “politicos” or “political insiders,” e.g. campaign workers, party regulars, officeholders, and even candidates themselves. Compared to prognosticators, the forecasts of politicos are more closely tied to specific events, informal networks, or observations of presidential elections. Advancing beyond a rudimentary reliance on events with no ostensible connection to the political process, these forecasts are based less on coincidence than the previous method. However, in comparison to scientific forecasting approaches, forecasts offered by politicos are less reliable and less objective. Due to their close affiliation with a particular candidate, these individuals almost always predict a greater margin of victory for their own candidate or party. In effect, their partisan bias contaminates their forecasts and renders them largely unreliable.

Similar to the predictions of politicos are those offered by political pundits, e.g. journalists, think-tank scholars, political analysts, and other learned critics. In contrast to politicos, these so-called experts are “freer of partisan bias” since they most likely have no immediate interest in the success of any particular candidate or party. Despite

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the possibility for greater detachment, election forecasts made by pundits are also largely unreliable and especially difficult to replicate. With their prediction process based on informal processes (e.g., informal observations, conversations, and insights), pundits themselves have difficulty repeating the correct “formula” a second time, much less relaying it to an outsider. As such, the usability and reliability of this particular forecasting approach are quite low. Therefore, predictions made by political pundits are regarded as too imprecise to qualify as a “good” forecasting method.

A final method employed to forecast presidential elections comes from political pollsters. Compared to earlier approaches, predictions made by pollsters are more scientific with their reliance on modern techniques of research and sampling. Overcoming several of the limitations apparent in the above methods, pollsters appear to be the closest rival to statistical forecasting models. However, these forecasts also have several drawbacks. In particular, public opinion polls are especially problematic because of their relatively short lead-in time. In comparison to the lead of statistical forecasting models, projections made by the various polling organizations like Gallup and Harris are only reliable quite late in the election year. Due to their susceptibility to minor fluctuations in public opinion during the campaign period, their forecasts are often quite unreliable and inaccurate early in the election. Specifically, key events, such as the parties’ nominating conventions and presidential debates that have been shown to influence public opinion, are likely to temporarily throw-off forecasts based on these polls.\textsuperscript{150} Additional drawbacks of polling include high costs, poor interviewer quality, and defective questionnaire designs and survey execution.\textsuperscript{151} As such, opinion polls are considered inadequate forecasting instruments with their short lead-in time, inferior accuracy, and problems of usability.

V. Theoretical Contributions of Scientific Forecasting

Beyond their value as accurate and reliable forecasting instruments, statistical models are in the unique position to contribute to decades of explanatory research on voting behavior and presidential elections. Over the past twenty-five years, valuable

\textsuperscript{150} See Holbrook (1996) for a complete discussion on the effects of specific “marquee” campaign events, like national conventions and debates. 
\textsuperscript{151} Lewis-Beck and Rice 1992.
insights into the electoral process have been gained from experience with forecasting models. Displaying the interplay between explanation and prediction, forecasting models have clearly benefited from explanatory research on elections and voting behavior, while at the same time reflecting back on the utility of this research. In contrast to non-scientific approaches, this extensive body of explanatory research theoretically informs forecasting models. As noted in the previous chapter, forecasters’ selection of the best combination of predictor variables is primarily guided by sound tenets of voting behavior. Drawing on electoral research to accurately predict presidential elections, the performance of forecasting models is an effective assessment of the plausibility of specific causal explanations of voting behavior. Accordingly, the models’ successes as well as their failures have enhanced understanding of presidential elections and refined theoretical explanations of the factors influencing vote choice.\textsuperscript{152} Specifically, these models have provided valuable insights into the effects of presidential incumbency, voters’ economic and political evaluations, partisanship, and presidential campaign effects.

Enhancing understanding of the role incumbency plays in presidential elections, several forecasting models provide valuable insights into the effects of incumbency. With the past two decades of incumbency research focused on \textit{congressional} incumbency, the contributions of forecasting in this area are especially useful to presidential election research. In particular, both Abramowitz and Norpoth offer valuable insights into incumbency effects by including in their models direct measures of the in-party’s term in office. As described in Chapter 3, the former’s model specification is guided by the assumption that voters “place a positive value on alteration in power by political parties.”\textsuperscript{153} That is, parties in power for eight years or more are likely to be disadvantaged in an upcoming election because of the growing sentiment among the populace that it is “time for a change.” Testing the utility of this incumbency theory, Abramowitz finds a substantial third-term penalty. With a coefficient of -4.4 for the term variable, the model indicates in-party candidates seeking a third term or more are likely to receive approximately four percentage points less of the popular vote than

\footnotesize
\textsuperscript{152} Campbell 1996.
\textsuperscript{153} Abramowitz 1996, p. 436.
candidates seeking only to extend their party’s occupancy of the White House for a second term. Similarly, Norpoth’s analysis of cyclical patterns in presidential elections points to a significant incumbency advantage for candidates seeking a second term in office. In particular, Norpoth finds that the immediately preceding presidential vote for a party has a positive impact on its predicted vote in the next election. In contrast, the party’s vote eight years earlier, i.e. two elections ago, has a negative effect on the party’s electoral prospects.\textsuperscript{154} Accordingly, the in-party is most advantaged when seeking a second term.

While both models find support for an incumbency effect, it is still unclear whether there exists a “third-term penalty” for the incumbent party (as Abramowitz suggests) or a second-term advantage that is simply absent for candidates seeking more than two terms. However, the latter interpretation of the incumbency effect seems most accurate once the indirect contributions of additional forecasting models are taken into account. As noted by Campbell, several forecasting models indirectly find support for an incumbency advantage. Despite the absence of incumbency in their theoretical specifications, the models of Campbell and Lewis-Beck and Tien indicate incumbents seeking a second term are likely to have an advantage over their opponents. For example, Campbell’s economy and trial-heat model reveals that five out of six in-party candidates seeking a second term for their party since 1948 held leads over their opponents in the polls going into the fall campaign.\textsuperscript{155} In contrast, the seven in-party candidates seeking a third term for their party trailed the opposition in the Labor Day polls. Similar support for a second-term advantage is seen in the Lewis-Beck and Tien model, which typically finds in-party candidates seeking a second term have “higher presidential approval ratings\textsuperscript{156} (56.5\% to 40.0\%, medians), stronger first-half year economies (2.4 to 1.9), and stronger scores on the peace and prosperity index (111 to 90).”\textsuperscript{157}

\textsuperscript{154} Campbell 1996.
\textsuperscript{155} Campbell 1996.
\textsuperscript{156} These higher presidential approval ratings may also reflect the fact that several of the incumbents in trouble during the post-WWII period chose not to run for reelection, e.g. Truman in 1952 and Lyndon Johnson in 1968.
\textsuperscript{157} Campbell 2000a, pp. 179-80.
A second important contribution of forecasting research includes a greater understanding of the key variables informing voting behavior in presidential elections. In particular, forecasting models are important for identifying the key roles played by voters’ economic and political evaluations. All forecasting models’ predictions are consistent with the idea that national economic conditions have a strong effect on the presidential vote. In general, forecasting models find broad support for several economic theories of voting behavior. Specifically, the utility of retrospective and sociotropic theories of economic voting has been established by forecasting research. With the success of several popular measures of the national economy as predictor variables, the models suggest voters are primarily concerned with incumbents’ handling of the national economy, as opposed to changes in their own financial well being, when making voting decisions. Accompanying concern with economic conditions, voters’ perceptions of the incumbent’s political performance in office also impact presidential vote. Finding objective measures of the economy alone are insufficient for accurately predicting the outcomes of elections, forecasting models refute an economic determinism model of voting behavior. While the economy is a central component in voters’ incumbent evaluations, it is not the sole factor determining candidates’ vote share in presidential elections. As such, forecasters acknowledge important roles for both economic and non-economic evaluations of the in-party’s performance for understanding vote choice in presidential elections.

Additional theoretical contributions of forecasting research come not from specific findings of the models themselves but instead from things the models have not found.\textsuperscript{158} That is, forecasting research has broader implications for those bodies of literature not consulted in the models’ theoretical specifications. For example, not one of the current forecasting models includes partisanship as a predictor variable. This notable absence of partisanship is especially incongruous, since extensive survey research shows partisanship to exert a strong influence on individuals’ vote choice. Interpreting this apparent inconsistency, several forecasters suggest the effect of partisanship may be entirely indirect. That is, partisanship only affects the vote through voters’ reactions to the candidates and issues. As such, partisanship effects are likely embedded in the

\textsuperscript{158} Campbell 1996.
models’ existing public opinion measures, such as presidential approval ratings and trial-heat scores. Thus, once forecasters know voter attitude toward the incumbent candidate, a separate measure of partisanship is not required for accurate prediction.\(^{159}\)

Additionally, it may be that the stability of partisanship does not allow party ID to have a significant impact on election outcomes in the models. As noted in Chapter 1, some research suggests the stable nature of partisanship prevents it from accounting for electoral variations in party vote shares across a series of elections.\(^{160}\)

Similarly, forecasters’ necessary disregard of campaign effects and their ability to accurately call elections without this information have raised questions about the importance of political campaigns. With the models’ proficiency in making accurate forecasts of the expected vote before the general campaign,\(^{161}\) researchers remain undecided about the possible effects of campaigns. Several scholars have suggested events taking place during the campaign may have only a marginal impact on voters’ presidential preference, as many early deciders have already picked their candidate. However, this interpretation is inconsistent with today’s unprecedented amount of resources and funding being channeled into candidates’ general election campaigns. With literally millions of dollars spent and an increasing number of political actors involved in the process, parties, candidates, interest groups, the media, and (some) voters are obviously convinced that campaigns do indeed matter a great deal.\(^{162}\)

Addressing the effectiveness of partisanship and general election campaigns in shaping presidential vote choice, the following chapter provides a review of the early voting behavior research and the key variables believed responsible for determining election outcomes. In particular, Chapter 4 attempts to explain the recent successes in presidential election forecasting despite the absence of direct measures of partisanship and specific campaign events in the models’ specifications. Focusing on the influences of postconvention campaigns, this discussion is designed to enhance our current understanding of how the popular vote can be predicted so accurately and so early without consideration of the potential impact of campaigns. Providing additional

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159 Campbell and Mann 1996.
161 Traditionally, the beginning of the general election campaign is after Labor Day (Campbell and Mann, 1996).
rationale for why the models work, it is the intent of this next chapter to assist in “bridg[ing] the gap between predicting and explaining elections.”163 By explaining how campaigns influence public opinion during the fall campaign, we gain a better idea of how the models are able to predict candidates’ share of the two-party vote in presidential elections prior to the start of the general campaign.

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163 Campbell 1996, p. 422.
Chapter Four: Implications for Campaign Effects

I. Introduction

With the recent successes in forecasting, the last decade has witnessed a renewed interest in the debate over the efficacy of political campaigns in determining the outcome of presidential elections. Corroborating decades of extensive voting behavior research, advancements in forecasting elections seem to support the conventional wisdom among many political scholars that campaigns have only a limited or “minimal” effect on the vote decision in presidential elections. In particular, both individual-level models of voting behavior and the aggregate forecasting models suggest vote decisions in presidential elections are primarily a product of long-standing predispositions (party identification) and retrospective evaluations of the incumbent party’s performance in office. According to this perspective, the potential effects of political campaigns are secondary to and largely determined by fundamental factors exogenous (unrelated) to presidential campaigns. That is, most political scholars believe events taking place during the general campaign have only a moderate impact on individual vote choice and rather negligible consequences for the electoral outcome presidential elections.

While this view of campaign effects is held by most political scientists and is well supported in the scholarly literature, it is obviously not the only interpretation of the significance of presidential campaigns. This is evident from the unprecedented amount of attention, resources, and energy afforded contemporary presidential campaigns. In contrast to the prevailing wisdom in the academic community, a number of political actors – campaign strategists, journalists, and political consultants – pay very close attention to campaigns, with the firm belief each event is likely to have a significant impact on the outcome of the election.

Addressing these competing perspectives on the importance of campaigns, this chapter will review both the prevailing arguments against campaign effects as well as the findings of recent studies that point to a greater role for campaigns in determining electoral outcomes. Additionally, this discussion attempts to answer how it is possible

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164 Holbrook 1996b.
165 Finkel 1993.
for campaigns to have an effect when presidential elections can be accurately predicted before the general election campaigns even begin. To resolve this seeming paradox, attention will be focused on the findings of the most recent and comprehensive analyses of campaigns, in particular, the influential works of Holbrook\textsuperscript{167} and Campbell.\textsuperscript{168} Lastly, this chapter provides general observations regarding when and under what conditions campaigns have mattered in past presidential elections and when they are \textit{most likely} to be decisive in the future.

II. Arguments Against Campaign Effects

\textit{Early Voting Behavior Research}

Since the 1940s, extensive research has been devoted to determining the factors most influential in guiding voting behavior. Much of this electoral research has focused on the role of underlying political attitudes or predispositions in shaping vote decision in presidential elections. In particular, the seminal studies conducted by Lazarsfeld, Berelson, and their colleagues examined vote decisions in the 1940 and 1948 presidential elections.\textsuperscript{169} Using panel data, which allowed the researchers to question the same respondents multiple times during the course of the campaign, these studies were able to track the evolution of voters’ candidate preferences from May to October of the election year. According to the studies’ results, individual vote decisions were primarily driven by underlying political predispositions, which were based on the individual’s social class, religion, and place of residence.\textsuperscript{170} Relying on these predispositions, most voters make up their minds either by early spring or shortly after the second nominating convention (before the general campaign) and tend not to change their expressed vote during the campaign. Specifically, data from the second study in 1948, \textit{Voting}, found nearly four out of five voters had already decided which candidate they would support by the end of the parties’ nominations.\textsuperscript{171} Even for those initially undecided voters, Lazarsfeld, et al. point to preexisting political attitudes as the primary determinant of vote choice, with most late deciders voting in accordance with their latent predispositions.

\textsuperscript{167} Holbrook 1996b.
\textsuperscript{168} Campbell 2000.
\textsuperscript{169} Lazarsfeld, Berelson, and Gaudet 1944; Berelson, Lazarsfeld, and McPhee 1954.
\textsuperscript{170} Finkel 1993.
\textsuperscript{171} Campbell 2000, p. 7.
Perhaps most importantly, the conclusions reached by these early studies suggest
the highly prevalent and sustainable political predispositions among the electorate leave
little room for campaigns to influence voting behavior. However, the studies do suggest
campaigns play a secondary and primarily indirect role in shaping vote choice “because
they [campaigns] activate latent predispositions.”\textsuperscript{172} That is, campaigns are important to
the extent that they reinforce existing political predispositions for those expressing a vote
intention and activate latent predispositions among those still undecided.\textsuperscript{173} Supporting
what has been termed the “activation” model of vote behavior, these studies find that
individual vote decisions are primarily determined by long-standing attitudes that are
present well in advance of the campaign. Subsequent research also confirms the
“activation” model of voting by finding that campaigns’ primarily function to “enlighten”
voters and “activate” their underlying predispositions.\textsuperscript{174} Serving as voters’ primary
source of political information, campaigns are also influential in mobilizing as well as
demobilizing potential voters. Additionally, campaigns may work to “heighten voter
awareness of the prevailing economic conditions and the electoral relevance thereof.”\textsuperscript{175}
Thus, it would appear that individual vote decisions are largely determined by voters’
pre-campaign dispositions and not changes in political attitudes or information acquired
during the campaign.\textsuperscript{176}

A second prominent study responsible for shaping political scientists’ view of
electoral behavior is the seminal work, \textit{The American Voter}, published in 1960.\textsuperscript{177}
Refining the notion of “political predispositions” introduced by Lazarsfeld, et al., this
later study introduced the concept of party identification as a summary indicator of
individuals’ political attitudes.\textsuperscript{178} Credited with perhaps the most influential development
in modern electoral behavior research, Angus Campbell and colleagues demonstrate the
central role of partisanship in shaping voters’ attitudes toward candidates, issues, and
political events.\textsuperscript{179} As described by the authors, partisanship can be understood as a

\textsuperscript{172} Lazarsfeld, Berelson, and Gaudet 1944, p. 74.
\textsuperscript{173} Holbrook 1996b.
\textsuperscript{174} Finkel 1993; Gelman and King 1993.
\textsuperscript{175} Markus 1988, p. 152.
\textsuperscript{176} Finkel 1993.
\textsuperscript{177} Campbell, Converse, Miller, and Stokes 1960.
\textsuperscript{178} Finkel 1993.
\textsuperscript{179} Dalton 2000; Holbrook 1996b.
“perceptual screen,” through which voters process information that is compatible with their partisan orientation and filter out any inconsistent or opposing information.\textsuperscript{180}

Similar to the earlier findings by Lazarsfeld, et al., the authors find existing political attitudes, in this case one’s partisan orientation, to be the single most important factor influencing individual vote choice in presidential elections. In particular, the study finds individuals’ political predispositions, especially toward one of the two major parties, to be the “primary determinant of attitude formation and political behavior.”\textsuperscript{181} Providing additional support for the irrelevance of campaigns, the study also finds most individuals tend to make up their mind early, usually deciding which candidate to vote for by the end of August just before the kick-off of the general election campaign. As a result, Campbell, et.al conclude that campaigns are largely inconsequential in determining vote choice in presidential elections, since most voting decisions are influenced by partisanship and made prior to the start of the campaign, and indeed very early in life. That is, partisanship tends to be handed down from one generation to the next. Accordingly, the best predictor of one’s party ID is often that of their parents.

Beyond the classic voting behavior studies focusing on the impact of long-term predispositions and party identification, subsequent electoral research has examined the explanatory power of several other factors exogenous to political campaigns. In particular, these studies suggest elections are in large part determined by: 1) retrospective evaluations of incumbent performance, 2) variations in personal and national economic conditions, and 3) environmental factors, such as presidential approval and consumer sentiment.\textsuperscript{182} Developments in this school of thought are primarily traced back to the early contributions of V.O. Key and Gerald Kramer, who established the basic tenets of retrospective voting theory.\textsuperscript{183} As Chapter 3 discussed, the work of Key established the basic referendum (reward-punishment) model of voting, which suggests presidential vote is largely based on voters’ interpretation of an incumbent’s past performance in office. Providing additional support for the retrospective interpretation, Kramer found voting behavior to be largely retrospective and incumbency oriented.

\textsuperscript{180} Dalton 2000, p. 21.
\textsuperscript{181} Holbrook 1996b, p. 6.
\textsuperscript{182} Althaus, Nardulli, and Shaw 2001.
\textsuperscript{183} Key 1966; Kramer, 1971
In contrast to earlier studies focusing on the impact of partisanship, the retrospective voting literature suggests individuals are not entirely reliant on social determinants or partisan cues when deciding which candidate to support. Instead, voters appear to play a more dynamic role by making assessments of the in-party’s performance and policy preferences, and then incorporating that information into their voting decision. While in some respects a departure from the earlier work on voting behavior, the conclusions of retrospective studies continue to support the prevailing view of campaigns. That is, the works of both Key and Kramer suggest campaign effects are not a significant determinant of the vote. According to Key, the performance of the incumbent administration and voters’ interpretations of that performance were much more influential than “the fireworks of the campaign itself.”

Building on these earlier works, subsequent research on retrospective voting has provided additional insight into the exact nature of voters’ retrospective evaluations. Specifically, the work of Fiorina has found voters to be more “results-oriented” in their evaluations of an incumbent’s performance. Perhaps presenting a somewhat more realistic picture of the electorate’s political sophistication, Fiorina finds voters need not be familiar with the administration’s policies but rather need only to determine how satisfied they are with the presumed outcomes/results of those policies. Additionally, Fiorina’s work is significant for its ability to integrate the findings of earlier studies focusing on the impact of partisanship with the more recent retrospective model of voting behavior. Incorporating partisanship, Fiorina suggests voters’ partisan orientation is partially a function of their retrospective evaluations of the parties’ performance. Thus retrospective evaluations have both a direct and an indirect effect on vote choice.

**Aggregate Data**

In addition to the above studies, which primarily focus on factors affecting individual voting behavior, a good deal of aggregate evidence also suggests campaigns play only a trivial role in determining vote choice in national elections. Specifically, this related body of research includes both the aggregate forecasting models presented in

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184 Key 1966, p. 9.
186 Holbrook 1996b.
Chapter 2 and the explanatory models of voting behavior that inform them. Attempting to explain and/or predict election outcomes, several aggregate level studies have found election outcomes to be easily accounted for by a few fundamental variables. In particular, the explanatory models offered by Kramer and Tufte have found a close relationship between presidential outcomes and several non-campaign variables, such as objective measures of economic performance and presidential popularity. As we have seen, more recently such models of voting behavior have shifted their focus from explanation to prediction with the increased interest in forecasting presidential elections. However, both types of models support the minimal effects perspective of campaigns. Using only party strength and retrospective evaluations to make accurate predictions, these later models imply campaigns and candidate strategies are not important in determining election outcomes. Accounting for anywhere between 80 to 90% of the variance in the presidential vote, there appears to be little room for campaigns to exert a meaningful and independent effect on vote choice. However, with at least 10% unexplained variance remaining, campaigns may still be decisive, especially in close electoral contests which are typically won at the margins.

Lastly, a more recent study directly addressing the effects of political campaigns confirms the conclusion that campaigns are unlikely to have much of an influence on presidential vote. In contrast to the earlier voting behavior research, the work of Finkel explicitly focuses on the potential influence of general election campaigns on vote choice. Prior to this study, the “minimal effects” perspective of presidential campaigns was largely inferred from the findings of earlier studies, which point to non-campaign variables, such as partisanship and incumbent evaluations, as the primary factors shaping voters’ presidential preferences. With these pre-campaign variables accounting for most of the variation in vote choice, many had concluded that campaigns themselves are not significant determinants of presidential electoral outcomes. Thus the strongest arguments against campaign effects are rooted in circumstantial evidence from studies demonstrating the importance of non-campaign variables. Accordingly, the lack of evidence to support campaigns effects may be accredited to classic voting behavior

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188 Kramer 1971; Tufte 1978.
189 Holbrook 1996b
studies that “fail to uncover significant campaigns effects because they are not looking for them.”¹⁹⁰

Examining the extent of campaign influence at the individual and aggregate levels of analysis, Finkel finds support for both the “activation” model of campaigns as well as the “minimal” effects interpretation. Similar to the study by Lazarsfeld, et al., Finkel employs panel data from the 1980 National Election Study (NES) to assess how voters’ political preferences evolve over the course of the general campaign. According the study’s findings, campaigns may produce significant changes in public opinion during the campaign but such changes are largely trivial when compared to the influence of pre-campaign attitudes and evaluations of incumbent performance. While fluctuations in political attitudes were observed during the campaign, “the magnitude of the changes was not large enough to alter many individuals’ vote predictions.”¹⁹¹ Thus, in order for campaigns to be influential, Finkel concludes that: 1) campaigns must produce more substantial changes, and 2) those changes must be “disproportionately in favor of one candidate or the other.”¹⁹²

**Reasons to Doubt Campaign Effects**

In general, the above studies of individual-level voting behavior and explanations of aggregate outcomes suggest political campaigns are largely irrelevant in determining vote decisions. Most find campaigns have only a limited effect on individuals’ vote choice and are inconsequential in determining electoral outcomes, except in close races, such as the 1960, 1968, and 2000 presidential elections. Supporting this conclusion, most studies find the majority of voters have already decided who to vote for prior to the start of the general campaign and rarely change their intended vote over the course of the campaign. According to data gathered from 1952 to 1988, approximately 64% of voters reported they had already made their vote decision by the end of the second nominating convention.¹⁹³ In addition to the observed stability in vote choice, campaigns are thought

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¹⁹⁰ Holbrook 1996b, p. 43.
¹⁹¹ Finkel 1993, p. 18.
to have only minimal effects since individual voting decisions are found to be primarily
determined by voters’ preexisting political preferences and incumbent evaluations.

Beyond the pervasiveness of partisanship, the prevalence of early deciders, and
the stability of vote choice, two additional arguments are commonly cited in the scholarly
literature for why political campaigns are considered electorally inconsequential. The
first concerns voters’ lack of political sophistication and interest in politics and
government. In general, extensive research has found American voters to be largely
uninvolved and uninformed about politics and elections. With most individuals not
interested in political information, it seems unlikely that they will “seek out” relevant
information or even take the time to process the political information to which they are
exposed. Under such circumstances, it is reasonable to assume that an uninformed and
uninterested electorate is likely to reduce the potential effects of political campaigns.
Explaining this phenomenon, the “minimal effect conundrum” suggests that these
uninformed individuals are the ones most likely to be persuaded by campaigns, since they
are least likely to hold strong political opinions based on prior knowledge. Given that
these individuals have little prior knowledge and only weakly held opinions on most
campaign issues, they are considered more susceptible to candidate promises made
during the campaign. However, they are also the least likely to be attentive to campaign
information and less likely to actually vote. Thus it appears that campaigns are unlikely
to have an effect on those individuals perceived as the most open to persuasion by
campaign information.

A final argument against campaign effects suggests the potential influence of
campaigns is additionally limited by issue voting. With research showing voters select
the candidate who most closely resembles their policy positions; it would initially seem
that the prevalence of issue voting would allow a greater role for campaigns to impact
vote choice. Since campaigns serve as the primary medium through which candidates
voice their stances on policy issues, it is logical to assume campaigns would play an
important role in informing voters about the issues. However, research on issue voting

194 Berelson, Lazarsfeld, and McPhee 1954; Campbell, et al. 1960; Converse 1964; Lazarsfeld, Berelson,
and Gaudet 1944.
195 Shaw 1999, p. 388.
196 Campbell 2000, p. 12.
197 Key 1966.
suggests that the information voters use in making issue-based decisions is available well in advance of the general campaign. Many of these issues and associated partisan loyalties are recurring factors that generally define the fundamental differences between the two political parties. Consequently, many voters are already aware of each party’s stance on the key issues before the campaign gets underway. That is, the “fundamental continuity” of issues across political campaigns makes it relatively easy for voters to determine early on which party’s candidate is likely to favor stricter environmental policy or take a pro-choice stance on abortion. Under these circumstances, issue voting has been described as largely “retrospective and highly partisan in nature.” Accordingly, voters’ assessments of candidates’ stances on the issues are not determined by campaign rhetoric and candidate promises made over the course of the campaign but rather from preexisting knowledge about the important issue differences between the two major parties.

To conclude, the scholarly community has doubted the potential effects of campaigns for a number of reasons. Most notably, decades of voting behavior research suggest the impact of political campaigns on election outcomes is limited by: 1) vote choice stability, 2) early vote decisions, 3) a stable partisan electorate, 4) retrospective issue voting, and 5) a generally unsophisticated (uninformed) electorate. More recently, the success of presidential forecasting models has continued to cast doubt on the effects of campaigns. However, the previous review of the classic voting literature represents only one side of the debate surrounding campaigns effects. Presenting the “not so minimal effects” perspective, the next section draws attention to several prominent arguments for why campaigns may actually matter.

III. Arguments for Campaign Effects

Challenging the conventional wisdom suggesting political campaigns have only a “minimal effect” in presidential elections, several studies suggest that under certain conditions campaign information and events may actually affect individual vote decisions

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198 Campbell 2000.
199 Campbell 2000, p. 88.
and electoral outcomes.\textsuperscript{201} Despite extensive electoral research to the contrary, a number of arguments have recently emerged in the literature that suggest “campaigns do matter or at least have the potential to matter.”\textsuperscript{202} While the prevailing interpretations of campaign effects find election outcomes to be a product of political and economic national conditions and long-standing predispositions, several significant changes in the American electorate are indicative of an increasing opportunity for campaigns to influence individuals’ vote choice. In particular, recent studies suggest political campaigns may have a greater impact on vote choice due to: 1) the decline in partisan loyalties, 2) rise in the proportion of late deciders, 3) increased volatility in party vote shares, and 4) a greater impact of “campaign-related” factors.

As previously noted, much of the electoral research supporting the minimal effects perspective of political campaigns took place in the late 1940s and 1950s. As such, these studies were conducted in a period primarily distinguished by a “deeply entrenched” sense of party identification.\textsuperscript{203} Within the electoral environment following the New Deal realignment, most voters were thought to hold relatively strong and stable partisan preferences. As a result, much of the early voting behavior research focused primarily on the role of partisanship and for the most part dismissed the possible effects of campaigns.\textsuperscript{204} However, as the political realities of this period began to fade, significant changes in the electorate’s composition have encouraged some researchers to reassess their understanding of the dominant factors influencing individual vote choice.

Since the mid-1960s, a noticeable decline in partisan loyalties has taken place among American voters.\textsuperscript{205} During this time, researchers have observed a gradual weakening in voters’ degree of partisanship, especially among those classified as “strong” party identifiers. In particular, the past forty-four years from 1952 to 1996 witnessed a dramatic weakening of partisan attachments, with the percentage of self-identified partisans decreasing by approximately sixteen percent.\textsuperscript{206} According to National Election Studies (NES) survey data from around the same period (1952 to

\textsuperscript{201} Holbrook 1994, 1996b; Campbell 2000.
\textsuperscript{202} Holbrook 1996b, p. 12 (emphasis added).
\textsuperscript{203} Salmore and Salmore 1989, p. 6.
\textsuperscript{204} Salmore and Salmore 1989.
\textsuperscript{205} Dalton and Wattenberg 2000; Dalton 2000; Dalton, McAllister, and Wattenberg 2000.
1992), the percentage of the electorate considering themselves partisan decreased from an average of 73% during the 1950s and 1960s to 61% by 1992.\textsuperscript{207} Accompanying this decline in partisanship, survey data also indicate a steady increase in the proportion of voters who identify themselves as independents. In particular, the forty years from 1952 to 1992 witnessed a 17% increase in the percentage of independents among the electorate.\textsuperscript{208}

With the partisan dealignment and subsequent rise in the number of independents, recent studies have observed an increasing trend among voters to delay their vote decision until after the beginning of the general election campaign.\textsuperscript{209} According to survey data, the number of individuals delaying their final vote decision until the campaign gets underway has “increased from 25% in 1948 to highs of 45% in 1976 and 40% in both the 1980 and 1988 presidential elections.”\textsuperscript{210} While the overwhelming majority of voters (63%) still decide who to vote for by the end of the nominating conventions, over a third of voters (37%) decide after the start of the general election campaign.\textsuperscript{211} Moreover, this proportion of late deciders is expected to be even greater in open-seat elections. For instance, in the 2000 presidential contest between Al Gore and George W. Bush, approximately forty-four percent of voters were considered late deciders.\textsuperscript{212}

An additional symptom of electoral change, most likely a consequence of the recent rise in initially “uncommitted” voters, is the increased volatility in candidate preferences during the campaign.\textsuperscript{213} Indicative of this increase in volatility is the decline in partisan vote consistency and subsequent rise in split-ticket voting in recent elections. Without the partisan ties binding voters to a specific party, voters are expected to more freely shift their support among candidates both within and across campaigns.\textsuperscript{214} Finding late deciders to be significantly more volatile than those making their vote decision before the start of the campaign, researchers suggest vote choice in future elections may

\textsuperscript{207} Holbrook 1996b, p. 13.
\textsuperscript{208} Holbrook 1996b, p. 13.
\textsuperscript{209} Holbrook 1996b; Campbell 2000; McAllister 2002.
\textsuperscript{210} Finkel 1993, p. 2.
\textsuperscript{211} Holbrook 1996b, p. 12.
\textsuperscript{212} McAllister 2002, p. 24.
\textsuperscript{213} Finkel 1993; Shaw 1999; McAllister 2002; Holbrook 1994.
\textsuperscript{214} Dalton, McAllister, and Wattenberg 2000.
be less predictable and more open to the short-term impact of mass media and other campaign stimuli.\textsuperscript{215} In particular, several studies suggest campaign-related factors, such as candidate personality judgments, media coverage, and television advertising, are beginning to have greater influences on voters’ electoral decisions.\textsuperscript{216}

As a result of changes in the electoral landscape in recent decades, it has been suggested that campaigns may have a greater opportunity to influence individual voting decisions in presidential elections. With the “sheltering effect” of partisanship waning, party identification may no longer “protect” voters from the short-term influence of campaign events.\textsuperscript{217} Additionally, the electoral impact of partisan dealignment has resulted in an unprecedented number of voters who are “potentially available for conversion during the course of an election campaign.”\textsuperscript{218} As political parties become “less relevant as a voting cue,” many voters are now delaying their final vote decision until after the start of the general campaign.\textsuperscript{219} Entering the campaign season with an open mind, these individuals are expected to be somewhat more susceptible to the influence of various campaign events and candidate rhetoric.

Lastly, it has been suggested that campaigns may becoming increasingly important as voters grow ever more knowledgeable and attentive to political information generated by general election campaigns. According to recent research on voters’ involvement in campaigns, the observed decline in partisanship may represent a “modernization” process taking place in advanced industrial democracies in which voters possess a greater degree of political sophistication. With the increase in individuals’ education levels and the media’s and internet’s ability to decrease the costs of acquiring political information, the “functional need for partisanship” may very well be declining.\textsuperscript{220} Thus campaigns may play an even greater role in determining electoral outcomes as they “fill the void” left by declining partisan loyalties.\textsuperscript{221}

\textsuperscript{215} Finkel 1993; McAllister 2002; Lachat and Sciarini 2002.
\textsuperscript{216} Finkel 1993; Gelman and King 1993; Holbrook 1994; Shaw 1999.
\textsuperscript{217} Lachat and Sciarini 2002, p. 43.
\textsuperscript{218} McAllister 2002, p. 22.
\textsuperscript{219} Holbrook 1996b; McAllister 2002.
\textsuperscript{220} Dalton 2000, p. 32.
\textsuperscript{221} Holbrook 1996b, p. 14.
IV. Studies of Campaign Effects

In an attempt to reconcile the competing perspectives regarding campaign effects, two prominent studies addressing the importance of campaigns in presidential elections have shed light on the coexistence of predictable election outcomes and influential campaign effects. Conducted by presidential election forecasters, both studies essentially address the same question: “To what extent do general election campaigns have an impact on the national vote?” While each analysis differs in its methodology, time frame, and interpretations of key concepts, both come to the similar conclusion that campaigns do indeed matter. According to their findings, Holbrook and Campbell suggest that campaigns significantly impact public opinion during the period between the nomination of the candidates and election day. However, the magnitude of these campaign effects is relatively small in comparison to the influence of key pre-campaign fundamentals. In particular, the authors find the limited effects of general election campaigns to be constrained by prevailing national conditions, both political and economic, and the systematic nature of campaigns.

Before examining the significance of these two studies in relation to our current understanding of campaign effects, it may be beneficial to initially point out several important differences between them. The first difference is the time frame or number of presidential elections included in each analysis. In Do Campaigns Matter, Holbrook conducts a pooled time-series analysis using trial-heat poll results for the 1984, 1988, and 1992 presidential elections. In contrast to Holbrook’s rather narrow focus on only three presidential elections, Campbell includes the thirteen presidential elections from 1948 to 1996. Moreover, some portions of his analysis, for example the impact of presidential incumbency, extend as far back as the 1868 presidential election.

A second important variation between the two studies is their definition of general election campaigns. Taking an “events perspective,” Holbrook’s defines campaigns as

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222 Holbrook 1996b; Campbell 2000.
223 Campbell 2000, p. xxi.
224 See the preface of Campbell (2000) for a more complete discussion of the various differences between the two studies.
225 Ideally, Campbell would have extended the study’s scope to include all 33 elections from 1868 to 1996. However, the lack of consistent polling data prior to the post-WWII period made such a study impossible.
226 As noted by Wlezien and Erikson (2001), most political scientists studying the importance of campaigns “typically focus on the effects of particular [campaign] events” (420). Usually, they focus on the most
a series of formal activities conducted either by the presidential candidates themselves or by their official campaign organizations. Alternatively, Campbell’s analysis employs a more inclusive perspective of political campaigns. Beyond the official actions of candidates and their political organizations, he views campaigns as a time period (from September to Election Day) encompassing specific campaign events as well as a variety of “electoral communications” that can potentially influence the actual vote. According to Campbell, any type of campaign-related communication, such as an informal conversation with friends, should be included as part of the campaign.

A third important distinction concerns the authors’ treatment of pre-campaign fundamentals, e.g. the election-year economy and other non-campaign variables. For Holbrook, such pre-campaign variables as the state of the economy and presidential popularity work to establish an “equilibrium level” of candidate support before the campaign. According to Holbrook, voters in each presidential election are believed to be “naturally predisposed” toward a certain outcome depending on the political and economic climate established prior to the campaign.227 The idea of an “equilibrium” vote closely resembles the earlier concept of a “normal” vote established by Converse.228 Here, however, the normal or expected vote is determined by the prevailing national conditions before the campaign rather than by party identification.229 Similar to the limiting effects of partisanship, Holbrook finds that the magnitude of campaigns effects on the outcome of presidential elections is limited by the “equilibrium” vote. For instance, the equilibrium vote is expected to favor the challenging party when an unpopular incumbent is running during less than prosperous economic times. Conversely, the equilibrium vote is expected to favor the in-party when the current in-party candidate is popular and the nation’s economy is relatively strong. In sum, significant fluctuations in public opinion are expected during the campaign, especially following key campaign events, but it is largely around this equilibrium level of support that one should expect to see “campaign-induced shifts in public opinion.”230

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visible events, which are believed to have the greatest potential to influence the most people (e.g., nominating conventions and presidential debates).

227 Holbrook 1996b, p. 49.
228 Converse 1966.
229 Holbrook 1996b, p. 49.
230 Holbrook 1996b, p. 49.
Also acknowledging the importance of pre-campaign conditions, Campbell identifies three campaign fundamentals – the election-year economy, incumbency and political competition – which “systematically” structure the course of the campaign and voters’ reactions to it.231 According to Campbell’s “theory of the predictable presidential campaign,” these three systematic components create a stable electoral context that establishes the boundaries for the possible impact of campaign effects.232 Similar to the limiting nature of the political and economic climate cited in Holbrook’s study, Campbell’s work suggests that pre-campaign variables represent systematic components of the campaign, which shape how responsive the voting public is to candidate messages. Additionally, Campbell suggests campaign effects are limited by early vote decisions, partisanship, ideology, issue voting, and retrospective evaluations of the candidates.233

A final important difference deserving mention relates to the studies’ methodology and data analysis. As previously noted, Holbrook’s study analyzes the change in aggregate candidate support by examining trial-heat poll time series from early June through election day (excluding final election results). To assess the dynamic nature of public opinion, Holbrook examines the “ebb and flow” of candidate support over the four months prior to the November election.234 In determining the variation in public opinion that is due to campaign effects within each election, Holbrook uses a simple multiple regression model of each presidential election. However, to assess the impact of national conditions across the three campaigns, he pools the data from all three elections into one data set before performing the regression analysis. Similarly, Campbell employs trial-heat data but compares polling data collected at various times throughout the election season, using the candidates’ actual shares of the two-party vote. In order to determine the “net effects” of presidential campaigns, Campbell analyzes the difference between the actual vote for the in-party candidate on election day and support for the in-party candidate at the beginning (early September) of the general campaign.235

231 Campbell 2000, p. 29.
233 Note these factors largely mirror the reasons presented earlier for doubting the effects of general election campaigns. See chapter 1 in Campbell (2000) for a complete description of each factor.
235 Campbell 2000, p. 76.
Campaign Events vs. National Conditions

Analyzing shifts in candidate support during the campaign, Holbrook’s study concludes that both campaigns and national conditions “jointly” account for the significant changes observed in public opinion over the course of the campaign. However, the two types of variables do not have an equal influence on public opinion. Comparing the net effects of both variables, campaign events tend to have a greater impact on candidate support within a given campaign, whereas the political and economic context of an election is primarily responsible for influencing the “general or equilibrium” level of support across campaigns. Despite the critical role specific campaign events play in shaping candidate support during an election, the national conditions established prior to the start of the campaign season “carry more weight” in determining the eventual outcome of presidential elections.

Additionally, the macro-context of each election is thought to determine the potential effect campaign events will have on voters’ opinions in a given election year. That is, the magnitude of campaign effects is largely dependent on the disparity between existing levels of candidate support and the equilibrium or expected level of support, which is determined by national conditions. By examining the complicated interaction between campaign effects and national conditions, Holbrook finds campaign events are likely to have the greatest impact when a candidate’s standing in the polls is out of equilibrium. In the three elections studied, campaign effects were the largest in the 1988 and 1992 presidential elections, in which the disparity between early levels of candidate support and the expected outcome was the greatest. Conversely, the general election campaign had the smallest net effects in the 1984 presidential election, in which the level of candidate support was “relatively in sync” with the equilibrium level of support.

Elaborating the relationship between campaign effects and national conditions, Holbrook’s study significantly enhances current understanding of the interaction between the national context shaping presidential elections and the variety of campaign effects that influence public opinion during the campaign. By analyzing the effects of both types

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236 Holbrook 1996b, p. 151.
237 Holbrook 1996b, p. 146.
238 Holbrook 1996b, p. 150.
of variables, this study takes an important step in explaining how it is possible to have “strong campaign effects on public opinion and highly predictable election outcomes.”

According to Holbrook, such a conclusion is not contradictory given the magnitude and predictability of the national level variables affecting presidential election outcomes. Under these circumstances, it is relatively easy for forecasters to accurately predict the outcome of presidential elections solely from knowledge of the prevailing economic and political conditions present before the campaign. Demonstrating the prominent role of national conditions in determining election outcomes, presidential forecasters typically need not take into consideration the events occurring during the general campaign but rather only those conditions responsible for shaping the macrocontext of each election.

Additionally, this study makes a significant contribution to existing research identifying important, specific campaign events. Corroborating findings of previous studies, Holbrook illustrates the sizable impact “marquee” campaign events, such as the parties’ nominating conventions and presidential debates, have on candidate support during a given campaign. In particular, Holbrook confirms the findings of earlier research supporting the presence of a significant increase in the candidate’s poll standing following their party’s nominating convention. On average, the parties’ nominating conventions generated a 6.5 percentage point shift in the polls for the three presidential elections from 1984 to 1992. The averages for the two major parties were similar, yet the Democratic party received a slightly higher average boost in the polls than did Republican candidates (7.9 versus 5.1). This is expected considering the large pool of undecided voters at this point in the campaign and the initial lack of information about the challenging party’s candidate.

In addition to the parties’ nominating conventions, Holbrook finds that the two or three presidential debates held after the conventions also have a significant influence on

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239 Holbrook 1996b, p. 50.
240 For the specific impact of each of these events, see Holbrook 1994 and 1996.
241 For earlier studies on the effects of nominating conventions, see Campbell, Wink, and Cherry (1992).
242 Holbrook 1996b, p. 79.
243 The first nominating convention is held by the challenging party at a time in the campaign season when campaign information is relatively scarce and many voters are still undecided. Conversely, the in-party’s convention is less likely to produce large boosts in the polls since most voters are more informed about the incumbent candidate and have made their vote decisions prior to the nominating convention.
According to Holbrook’s analysis of the seven presidential debates from 1984 to 1992, the average “debate bump” resulted in approximately a two percentage point (2.17%) surge in the polls for the candidate judged the debate winner. In comparison to the magnitude of convention bumps, the minor shifts in public opinion produced by presidential debates do not appear to be as influential in determining the outcomes of all but the closest elections. Yet in each of the three election years, at least one presidential debate generated shifts in the polls of nearly 3 to 3.5 percentage points. While such shifts in support are comparatively small and usually dissipate to some degree in the week following the debate, Holbrook concludes that presidential debates are nonetheless a “notable source of influence on individual voting behavior.”

A final benefit stemming from Holbrook’s research is the subsequent increase in attention paid to the impact of general election campaigns in presidential elections. As “the first comprehensive and rigorous examination of presidential campaigns effects,” Holbrook’s study has heightened the interest of other researchers and will likely encouraged future studies on the effects of campaigns (Campbell 2000, xvi). For instance, the subsequent work by James Campbell was primarily inspired by Holbrook’s study of campaign effects.

**Predictable Campaigns**

Addressing several of the perceived shortcomings in Holbrook’s study, the work of Campbell provides further explanation of the apparent paradox between forecasters’ ability to predict election outcomes and the presence of significant campaign effects. According to Campbell, elections are predictable not because campaigns do not matter, but rather because campaign effects themselves are limited and largely predictable. As above noted, campaigns are limited by many of the same factors supporting the minimal effects perspective of campaigns. That is, campaign effects are muted by voters’ early vote decisions, partisanship, and retrospective evaluations. As such, general campaigns exert only a secondary influence on the outcome of presidential elections. Moreover,

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244 For additional studies on the effects of presidential debates see Lanoue (1991) and Geer (1988).
245 Holbrook 1996b, p. 108.
246 Holbrook 1996b, p. 119.
Campbell suggests campaign effects are for the most part predictable. Due to the stable electoral context established by the systematic components of campaigns, the overall course of the campaign and voters’ response to it are largely determined before the campaign gets underway. In particular, Campbell identifies three important “campaign fundamentals” responsible for shaping the electoral context of presidential campaigns.

The first pre-campaign condition systematically shaping the course of the campaign is presidential incumbency. Examining the effects of incumbency in the thirty-three presidential elections from 1868 to 1996, Campbell finds that campaigns generally work to the benefit of the in-party candidate. During this period, two-thirds of the incumbents seeking reelection and two-thirds of the in-party candidates seeking a second term for their party successfully won the presidency. Explaining this tendency for voters to “stay the course” and return the in-party candidate to office, Campbell identifies a variety of benefits traditionally associated with incumbency. For instance, voters often perceive the president as “rising above politics,” perhaps because of their ability to practice the “Rose Garden” strategy when running for reelection. Additionally, voters are more likely to give the incumbents the benefit of the doubt, often by granting them another four years to fully implement their policy objectives. Lastly, incumbents frequently have an advantage over their opposition due to the appearance of a unified party base and an easy nomination at their party’s national conventions. Conversely, the challenger is often involved in a “divided nomination contest” that can quickly deplete valuable campaign resources and leave the challenger even more vulnerable. With these advantages and the simple fact that incumbents are likely to have learned from their experience running for the presidency four years earlier, Campbell suggests campaigns systematically favor incumbents and in-party candidates trying to extend their party’s reign for a second term.

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248 The Rose Garden strategy is a campaign strategy often employed by incumbent presidents, in which they campaign “by simply appearing presidential” (Campbell 2000, 118). This type of “non-campaign campaigning” works by allowing incumbents to take advantage of the national symbolism surrounding the institution of the presidency (118-19).
249 Campbell 2000, p. 41.
250 Campbell 2000, p. 114.
251 Similar to the findings of Abramowitz (1988, 1996) and Norpoth (1996), Campbell finds no in-party candidate advantage for those candidates attempting to extend their party’s reign for three terms or more.
A second important factor responsible for establishing a stable electoral context is the economic climate shaping voters’ candidate perceptions. As an important factor influencing the vote choice of early deciders, the perceived economic performance of incumbents during their term in office helps to establish the “parameters of the campaign.” As such, the in-party’s and out-party’s ability to attract votes is largely determined by past economic performance attributed by voters to the current administration. In other words, the state of the economy indirectly affects the campaign by setting the electorate’s general mood toward the in-party candidate. According to Campbell’s estimates, presidential candidates can expect to receive a one and a quarter percentage point increase in the two-party vote for every one percent increase in economic growth over the first half of the election year. In conclusion, the economic climate is an extremely influential factor responsible for shaping the mood of voters during the campaign. For instance, Campbell asserts that economic well-being will generally “foster a more positive outlook and a more generous assessment of presidential leadership” among voters.

A final systematic component structuring the effect of campaigns on the vote is the intense political competition characteristic of U.S. presidential elections. Comparable to the effects of incumbency and economic conditions, political competition is responsible for making campaign effects predictable by setting the course of the election campaign. In general, the competitive nature of the two-party system works to “tighten up” the race by narrowing the frontrunner’s lead over the course of the campaign. Examining change in preference poll leads of frontrunners in the thirteen presidential elections from 1948 to 1996, Campbell observes a systematic “narrowing effect” in the disparity between voters’ support for the two major party candidates. Specifically, half of the frontrunner’s average lead of eight percentage points is lost between Labor Day and election day. Benefiting from this loss of support amongst frontrunners, trailing candidates traditionally gain ground over the course of the campaign.

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252 Campbell 2000, p. 127.
253 Campbell 2000, p. 129.
254 Campbell 2000, p. 137.
255 Campbell 2000, p. 140.
In sum, each of the above systematic components has a significant influence on the development of campaigns as well as the final outcome of presidential elections. Employing regression analysis to estimate the influence of these factors, Campbell’s analysis indicates that the systematic components of campaigns account for a good deal of the fluctuation in public opinion from early September to election day. Specifically, these three systematic components jointly account for about 90% of the change in candidate support during the postconvention campaign.256 Using the standardized regression coefficients to determine the relative importance of each component, Campbell finds the greatest impact is exerted by the narrowing effect of political competition, followed by economic effects and then the influence of incumbency. Together, these systematic campaign effects have, on average, produced a four-percentage point shift in the eventual vote.257 However, in almost half of the presidential elections from 1868 to 1996, the “net effect”258 of predictable campaign factors has been a five percentage point shift or more in the final two-party popular vote.

While the systematic effects of campaigns are most important in determining the outcome of presidential elections, the impact of random variables -- that is, the unforeseen events in a campaign, such as candidate gaffes, unanticipated issues, and scandals -- should not be entirely disregarded. As Campbell’s study indicates, these unpredictable effects may also influence the outcome of presidential elections, especially in elections classified as “near dead heats.”259 However, with the typical unsystematic effect estimated to be only a one and a half percentage point shift in the popular vote, these events are less likely to play a decisive role in presidential elections. Additionally, Campbell finds that two-thirds of the presidential elections from 1868 have been won by large enough popular vote margins that unsystematic effects were not an important determinant of the final outcomes.260 However, in those elections close enough to be affected by fairly small campaign effects, Campbell estimates that 4 to 6 (12% - 18%) of the past thirty-three presidential elections may have been decided by unsystematic

256 Campbell 2000, p. 191.
257 Campbell 2000, p. 77.
258 Campbell calculates the net effect of both systematic and unsystematic campaign effects by subtracting the level of support for a candidate before the campaign from the candidate’s actual share of the two-party popular vote.
259 Campbell 2000, p. 184.
260 Campbell 2000, p. 185.
effects. Outside of these very close electoral contests, however, the likelihood of
unexpected campaign events having a decisive impact on the outcome of a presidential
election is said to be “quite remote.”261

In conclusion, both Holbrook and Campbell have made significant contributions
to our understanding of the effects of presidential general election campaigns. In
particular, these studies provide a good deal of evidence suggesting that campaigns do in
fact matter in shaping public opinion and may be influential in determining the eventual
outcome of presidential elections. However, these studies do not address when and how
often the general election campaign has been decisive in deciding which candidate
actually won a plurality of the two-party popular vote. While studies do suggest
campaigns matter, perhaps the more interesting question is whether these campaigns have
mattered enough to determine the outcome of presidential elections. That is, have
campaigns been able to reverse what would have otherwise been the “normal” or
“equilibrium” outcome of the election? And if so, under what conditions are campaigns
most likely to make the difference in presidential elections? In an attempt to answer
these questions, the final section of this chapter discusses the recent findings of
Campbell’s latest study addressing the questions of whether, when, and how often
campaigns have decided the outcomes of presidential elections.

V. Decisive Campaigns

Beyond the initial question of whether campaigns matter, Campbell’s most recent
study attempts to determine when and how often general election campaigns have been
decisive in deciding the outcome of presidential elections. Specifically focused on the
post-World War II period, the study analyzes the “net impact” of the fourteen presidential
elections from 1948 to 2000. As in his earlier study, the net effects of campaigns are
defined as the change in the vote distribution that occurs between the start of the
postconvention campaign and the vote on Election Day.262

Measuring the net effects of presidential general election campaigns on the
national popular vote, Campbell employs two different approaches. The first, also used

261 Campbell 2000, p. 184.
262 See Campbell 2001. In this study, Campbell defines the start of the postconvention campaign as
beginning immediately after the second national party nominating convention.
in his earlier study, measures the net effects of campaigns by conducting a “pre-post analysis” of the disparity between the candidates’ standing in the pre-campaign preference polls and the post-campaign vote (i.e., the two-party popular vote). According to Campbell, the intervening campaign may have been an important factor in determining the outcome if the majority of voters during each of these periods supported a different candidate. For example, if the clear frontrunner in the early preference polls loses his lead and receives less than a plurality of the popular vote on election day, then it is reasonable to suspect the intervening campaign may have made the difference.

Campbell’s second approach to examining the impact of campaigns evaluates the vote choices of those deciding how to vote prior to the start of the campaign and those making their vote choice during the campaign. Using the time of decision analysis, campaigns may be decisive if the votes of the late deciders “reverse the verdict” of the early deciders.\(^{263}\) The logic underlying both approaches suggests that something during the campaign season is responsible for altering voters’ perceptions of the candidates and influencing their vote towards the candidate initially trailing the frontrunner in early preference polls and/or among earlier deciders.

According to the study’s findings, both approaches employed in measuring the net impact of postconvention campaigns suggest that at least several of the presidential contests during this period were decided by the campaign. Interpreting the results of the pre-post analysis, it appears that in two of fourteen elections the general election campaign was probably responsible for reversing the public’s vote decision. The strongest case for the campaign playing a decisive role is the Truman-Dewey race of 1948, in which the actual\(^{264}\) change in support for Truman was a gain of almost 9 percentage points during the postconvention campaign. The second electoral contest believed to be decided by the postconvention campaign is the close race between John Kennedy and Richard Nixon in 1960. Despite Nixon’s postconvention lead, Kennedy narrowly won the presidency with only 50.08% of the popular vote and 58% of the electoral college votes. While of a somewhat smaller magnitude, the actual popular vote

\(^{263}\) Campbell 2001, p. 439.

\(^{264}\) The actual change is simply the difference between the in-party candidate’s percentage of the two-party and his standing in the early preference polls. However, concerned with the accuracy of these polls, Campbell also provides the change in preferences for the in-party during the campaign adjusting for both poll error and the effects of the convention bump.
shift of -3.3 percentage points was still large enough to reverse the expected outcome of the election and provide Kennedy with a slim plurality of the popular vote.

In addition to the 1948 and 1960 presidential elections, the pre-post analysis also suggests that two other presidential elections, the Carter-Reagan race in 1980 and the Gore-Bush contest in 2000, may have been decided by the postconvention campaign. However, the evidence suggesting the general election campaign was responsible for making the ultimate decision in these elections is somewhat ambiguous. While both Carter and Gore held the narrowest leads in the postconvention polls, they did not go on to win the White House. However, Carter’s mid-August lead of approximately 1% point and Gore’s slight lead after his postconvention surge make it difficult to determine whether these candidates were in fact the true frontrunners. Even if these elections were decided by the postconvention campaign, the pre-post analysis indicates that in ten of the fourteen presidential elections from 1948 to 2000, general election campaigns were not likely to have been decisive factors in determining the outcome.

Similar to the pre-post analysis, the time of decision analysis is also suggestive of decisive campaign effects in the 1948 and 1960 presidential races. In both of these elections, the trailing candidates were able to capture enough of the late deciders’ votes to reverse the expected outcome of the election. Comparing the voting decisions of early deciders and late deciders in the 1948 election, a large group of voters deciding prior to the postconvention campaign gave Dewey a slight lead over Truman. However, the late deciders in this election reversed the almost certain Dewey victory, with voters deciding during the campaign divided almost two to one in favor of Truman. Similarly, the 1960 election witnessed a reversal in support for the two candidates, with Kennedy receiving the support of more than 60% of the late deciding voters. With this mass support among late deciders, the verdict of a Nixon win by those deciding before or at the time of the nominating conventions was effectively reversed.

While both approaches find the postconvention campaigns in the 1948 and 1960 presidential elections to be decisive in determining the eventual outcome, they disagree about the impact of the other general election campaigns. For instance, the pre-post

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265 While Gore did win the popular vote, he did not secure enough electoral college votes to win the presidency.
analysis suggests the 1980 contest between Carter and Reagan may have been determined by the campaign. According to the early preference polls, Carter led the eventual winner Reagan by the narrowest of margins. However, the time decision data paint a different picture, with Reagan leading Carter among both early and late deciding voters. Thus, the campaign did not appear to reverse the verdict of those voters deciding prior to the campaign. An additional inconsistency between the two approaches is the impact of the 1976 postconvention campaign, Carter versus Ford. According to Gallup poll results, Carter remained the frontrunner throughout the campaign season despite the slight weakening in his support as Election Day neared. However, the time decision data find that the early deciders in 1976, which accounted for roughly half of all voters, strongly favored Ford. Yet, this initial support for Ford was then later trumped by the late deciders who overwhelmingly supported Carter. Because of these discrepancies between the approaches’ findings, it remains unclear whether the campaigns in 1976 and 1980 were in fact decisive in determining the outcome.

Inconsistencies aside, the various measures of campaign effects suggest that postconvention campaigns were not likely to have played a decisive role in at least 9 of the 14 presidential elections in the past half century. Most likely the general election campaigns have only been decisive in the 1948 and 1960 elections; however, they may have also been in one or all of the following elections: 1976, 1980, and/or 2000. Making a “conservative estimate,” Campbell concludes that postconvention campaigns have probably been the deciding factor in only a quarter of the past presidential elections since 1948. While an important finding in itself, perhaps the study’s most interesting contribution is Campbell’s observations on when and under what conditions campaigns are most likely to be decisive.

Comparing the different campaign contexts of those elections probably affected by campaigns and those likely not affected, Campbell discovers a couple of commonalities among the elections most likely determined by postconvention campaigns. For instance, in both the 1980 and 2000 presidential elections, neither major party candidate held a commanding lead at the start of the fall campaign. Thus, it may be that campaigns are more likely to play a decisive role when there is no clear frontrunner present at the beginning of the campaign season. While support for this hypothesis is
limited to only two cases, this conclusion does concur with the previous studies’ findings that campaigns are most likely decisive in especially close contests. A second commonality observed in campaign-decided elections concerns the parties’ lack of cohesiveness during the nominating process. For instance, during the 1948, 1960, and 1976 presidential elections, at least one of the major parties (most often the majority party) was “highly divided going into the campaign.” According to Campbell, the existence of these party divisions may prompt voters to withhold their judgment until after the campaign gets underway. By delaying their vote decision, these individuals may be more susceptible to candidate promises made during the campaign. As previously mentioned, general election campaigns may have a greater chance of influencing public opinion in elections where there is a high number of late deciding voters. By entering the campaign season undecided, these voters are likely to be more open to the political information generated by the candidates’ campaigns.

While such speculation regarding the conditions under which campaigns are likely to have altered the outcomes of presidential elections is insightful, it would be unwise to make generalizations from only a handful of elections. Moreover, as Campbell notes, it is impossible to determine with absolute certainty that the campaigns in these elections did in fact make the difference. However, there does appear to be at least one condition that “virtually” ensures the postconvention campaign will have little effect on the eventual outcome of presidential elections. According to Campbell, the presence of a popular incumbent is likely to overshadow the potential impact of the campaign. In support of this conclusion, three of the four elections in which campaigns were probably decisive did not involve a popular incumbent. In 1948, 1976, and 1980 presidential elections, all three incumbents running for office faced rather difficult reelection prospects for one reason or another. Moreover, there are numerous examples in the post-World War II period of popular incumbents being reelected by

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266 Campbell 2001, p. 454.
267 The presidential election of 1960 was an open-seat election and thus did not involve a popular or unpopular incumbent.
268 Specifically, Truman had to contend with deep-seated inter-party divisions; Ford was an unelected incumbent “carrying the burden” of the Watergate scandal and a serious in-party challenge from Reagan; and Carter faced one of the worst election year economies in recent memory (Campbell 2001, 454).

In conclusion, given the relatively low frequency of decisive campaigns, it is difficult to determine exactly what, if any, distinguishing factors were present in these elections that might have allowed campaigns to make the difference. With only four possible cases where campaigns appear to have played an influential role in the outcome, it is virtually impossible to draw definite conclusions regarding the electoral context most susceptible to campaign effects. Even so, Campbell’s study is significant for providing at least tentative answers to the questions of whether and how often postconvention campaigns have been decisive in the presidential elections from 1948 to 2000.

VI. Conclusion

While much of the early voting behavior research suggests general election campaigns play only a very minimal role, if any, in determining the outcome of presidential elections, recent studies challenging the conventional wisdom find campaigns do sometimes matter in the outcome of presidential elections. As the above studies suggest, general campaigns are not usually decisive, but they are also not always inconsequential to the eventual outcome.269 Although such a conclusion does not completely refute the traditional minimal effects perspective, recent research is important for providing a greater understanding of exactly how campaigns may matter, e.g. how specific events and the nature of campaigns themselves affect public opinion. Perhaps more importantly, however, these studies also explain how the recent success in presidential forecasting does not necessarily negate the potential for strong campaign effects.

By examining the nature of campaign effects, two important explanations have emerged to account for the apparent contradiction between the existence of strong campaign effects and predictable elections: 1) the importance of national conditions and 2) the limited and systematic nature of campaigns. The first factor explaining forecasters’ ability to make accurate predictions without considering general campaign effects is the predominant role of national conditions in presidential elections. As

269 Campbell 2001, p. 455.
Holbrook’s study illustrates, the national political and economic context of an election plays a more important role than campaign events in determining the eventual outcome of presidential elections. Specifically, voters’ evaluations of the incumbent’s performance and the state of the nation’s economy serve as the most important factors shaping the electorate’s vote choice. Demonstrating the magnitude of the effect national conditions have on elections, various forecasting models find measures of presidential popularity and the election year economy account for anywhere between 80 and 90% of the variation in the presidential vote. Thus, given the greater impact of the macro-context in presidential elections, it is not surprising that forecasters can accurately predict the election’s winner before the general campaign even begins using only national-level variables.

A second important factor allowing for the recent successes in forecasting is the limited and systematic nature of campaigns. As discussed by Campbell, the effects of general election campaigns are limited for a number of reasons, most notably the large number of voters making their vote decision before the start of the fall campaign and the effects of partisanship. In addition to being limited, the effects of campaigns are also systematic and therefore largely predictable. Specifically, the significant effects of presidential incumbency, political competition, and election year economy are easily predicted prior to the start of the campaign. For this reason, Campbell suggests presidential elections are predictable not because campaigns do not matter but because the effects of campaigns are also predictable. Accordingly, the systematic nature of pre-campaign fundamentals makes it relatively easy for forecasters to accurately predict election outcomes.

Beyond the greater importance of national conditions and the systematic nature of campaigns, the success of presidential forecasting also can be explained by the average size of the popular two-party vote plurality in the fourteen presidential elections from 1948 to 2000. As shown in table 4.1, the average percent by which these elections have been won is almost five percentage points (4.6%). Comparing this average to forecasting models’ average prediction accuracy, both the mean within sample and out-of-sample
prediction errors\textsuperscript{270} are significantly lower than the average two-party vote plurality of 4.6 percentage points. With both the standard error and out-of-sample error less than half the size (2.0 and 1.8, respectively) of the winning candidate’s vote plurality, forecasting models have a good chance of correctly predicting the outcomes of most elections.

However, when presidential contests are especially close — as they were in the 1948, 1960, 1968, 1976, and 2000 elections — the forecasting models’ standard error may be larger than the candidate’s margin of victory. As such, there is a greater chance for these forecasts to be erroneous.

Table 4.1 Post-World War II Presidential Election Results, 1948 to 2000

<table>
<thead>
<tr>
<th>Election</th>
<th>Winning Candidate and Political Party</th>
<th>Losing Candidate</th>
<th>Popular Vote Percentage</th>
<th>Plurality</th>
<th>Electoral College Vote % for the Winner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948</td>
<td>Truman (D)</td>
<td>Dewey</td>
<td>52.32</td>
<td>2.32</td>
<td>61.6</td>
</tr>
<tr>
<td>1952</td>
<td>Eisenhower (R)</td>
<td>Stevenson</td>
<td>55.41</td>
<td>5.41</td>
<td>83.2</td>
</tr>
<tr>
<td>1956</td>
<td>Eisenhower (R)</td>
<td>Stevenson</td>
<td>57.75</td>
<td>7.75</td>
<td>86.2</td>
</tr>
<tr>
<td>1960</td>
<td>Kennedy (D)</td>
<td>Nixon</td>
<td>50.08</td>
<td>0.08</td>
<td>58.0</td>
</tr>
<tr>
<td>1964</td>
<td>Johnson (D)</td>
<td>Goldwater</td>
<td>61.34</td>
<td>11.34</td>
<td>90.3</td>
</tr>
<tr>
<td>1968</td>
<td>Nixon (R)</td>
<td>Humphrey</td>
<td>50.40</td>
<td>0.40</td>
<td>61.2</td>
</tr>
<tr>
<td>1972</td>
<td>Nixon (R)</td>
<td>McGovern</td>
<td>61.79</td>
<td>11.79</td>
<td>96.8</td>
</tr>
<tr>
<td>1976</td>
<td>Carter (D)</td>
<td>Ford</td>
<td>51.05</td>
<td>1.05</td>
<td>55.2</td>
</tr>
<tr>
<td>1980</td>
<td>Reagan (R)</td>
<td>Carter</td>
<td>55.30</td>
<td>5.30</td>
<td>90.9</td>
</tr>
<tr>
<td>1984</td>
<td>Reagan (R)</td>
<td>Mondale</td>
<td>59.17</td>
<td>9.17</td>
<td>97.6</td>
</tr>
<tr>
<td>1988</td>
<td>Bush (R)</td>
<td>Dukakis</td>
<td>53.90</td>
<td>3.90</td>
<td>79.2</td>
</tr>
<tr>
<td>1992</td>
<td>Clinton (D)</td>
<td>Bush</td>
<td>53.46</td>
<td>3.46</td>
<td>68.7</td>
</tr>
<tr>
<td>1996</td>
<td>Clinton (D)</td>
<td>Dole</td>
<td>54.74</td>
<td>4.74</td>
<td>70.4</td>
</tr>
<tr>
<td>2000</td>
<td>Bush (R)</td>
<td>Gore</td>
<td>47.8</td>
<td>-2.2</td>
<td>50.3</td>
</tr>
</tbody>
</table>

Mean 8 Republicans, 6 Democrats

PMEU 54.6 4.6 74.97

Note: The popular two-party vote plurality is for the winning candidate less 50 percent (i.e., 50% subtracted from the winning candidates’ popular vote percentage). In the 2000 election, the plurality is negative, indicating the candidate winning the majority of the electoral college votes did not win the plurality of the popular vote.

Exacerbating the difficulty of forecasting close elections, the effects of campaigns in these elections may also make it more difficult to predict the eventual outcome.

\textsuperscript{270} The average out-of-sample and standard errors are calculated for the four forecasting models presented in Chapter Two. For each model, the error for the most updated model was used.
Looking at the above table, four of the five close presidential elections\textsuperscript{271} from 1948, were identified by Campbell as elections probably influenced by the general campaign. As such, these elections may be especially difficult for the models to forecast. While campaigns do not typically elect presidents, the models will not perform as well in close electoral contests, in which voters are more likely to be influenced by the postconvention campaign. However, with less than half of the elections qualifying as close contests, the forecasting models’ standard error is most often less than the plurality by which the election was won. Therefore, forecasters can afford some imprecision in their point predictions as long as they have predicted the correct candidate to win.

In conclusion, the overall net impact of campaign effects does not appear to impede forecasters’ ability to accurately predict the outcomes of most presidential elections. Compared to the impact of national conditions shaping voters’ perceptions of the candidates, the effects of the general election campaign are not likely to make the ultimate difference in the majority of presidential elections. However, in the handful of especially close electoral contests, these effects may be decisive in determining the eventual outcome. With a larger number of initially undecided voters in close presidential elections, the postconvention campaigns in these elections are expected to have a greater likelihood of significantly influencing an individual’s vote choice. Outside of these close electoral contests, however, general election campaigns do not appear to be the driving force determining the winning candidate’s popular vote percentage. Accordingly, campaigns may not be as significant as the “campaign-fixated” perspective of journalists implies, but they also are probably not as irrelevant as the minimal effects perspective would suggest. As such, Campbell observes these “different outlooks on campaign effects may be merely the difference between seeing the glass as one-quarter full or three-quarters empty.”\textsuperscript{272}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{271} Close presidential elections are defined here as elections with a plurality of 2.5\% points or less. Accordingly, the presidential elections of 1948, 1960, 1968, 1976, and 2000 are consider close electoral contests.
\item \textsuperscript{272} Campbell 2001, p. 455.
\end{itemize}
\end{footnotesize}
Chapter Five: Conclusion

The principal purpose of this thesis has been to provide a comprehensive evaluation of presidential election forecasting. The preceding chapters have explicitly addressed the theoretical and methodological approaches of forecasting, the models’ value as predictive instruments as well as their contributions to explanatory research, and the impact this research has on our understanding of political campaign effects. To conclude this discussion, this chapter provides general observations regarding the overall value of election forecasting and the various questions raised by this body of literature. Additionally, it reflects on the probable implications of forecasting for related bodies of literature and proposes several general suggestions for future studies of forecasting.

I. Value of Forecasting

The utility of election forecasting must be measured both in terms of the models’ predictive capabilities as well as the contributions this body of literature makes to our understanding of national elections and voting behavior. As previously illustrated, recent advancements in forecasting have produced a number of statistical models with the capacity to make accurate election predictions approximately two months before the start of the general campaign season. With an average out-of-sample forecasting error of less than two percentage points, the models examined here have been quite successful in predicting the outcome of presidential elections. Perhaps even more important, forecasting research has made significant contributions to current understanding of the influence exerted by the national context in which campaigns are conducted. By constructing models capable of accounting for anywhere from 80 to 90% of the variation in vote choice, these models reveal the important role structural variables—most notably the prevailing macroeconomic conditions and presidential popularity—play in determining which candidate wins the White House.

While forecasting research has made considerable inroads in identifying the importance of economic and political factors assumed to be exogenous to campaigns, many questions remain to be answered. Returning to the distinction between prediction and explanation, the indicators employed to predict election outcomes reveal little about
the exact casual factors explaining why voters support one candidate over another. Thus, while these variables are extremely useful from a prediction standpoint, they fail to explain how specific economic and political factors shape voters’ presidential preferences. For instance, all forecasting models agree the state of the nation’s economy is a particularly important factor influencing vote choice in presidential elections. Yet no consensus exists on which macroeconomic indicators are most salient in voters’ minds when they are in the voting booth. For example, are measures of economic growth, e.g. change in GDP or GNP, most important or are voters’ concerns over unemployment and per capita income the primary determinants of vote choice? Such questions are particularly relevant for the upcoming 2004 presidential election considering the economy’s “jobless recovery,” in which recent economic growth has not been accompanied by a corresponding decrease in the unemployment rate. In such an environment, is it possible for a relatively popular incumbent to win reelection when the national economy is experiencing growth but unemployment remains unusually high? That is, will President Bush be able to secure a second term on economic growth alone? Moreover, questions remain concerning whether voters are more influenced by these objective measures of the economy or whether they are guided more by subjective perceptions of the economy’s wellbeing.

These specific questions are particularly difficult to answer given the differential effects economic conditions can have on a diverse electorate. That is, some individuals are likely to benefit more from certain changes in the economic environment, while others are either unaffected or possibly disadvantaged. For instance, parts of the economy (e.g., rising value of stocks) benefit some people (those who invest in the stock market), but not others. Additionally, changing economic conditions may impact certain regions more than others. For instance, increases in unemployment – e.g., in the manufacturing industry – are likely to have particularly devastating effects in certain areas, leaving many without a job. Accordingly, these short-term alterations in the economic climate are unlikely to have a universal effect on all citizens’ financial well being. Consequently, the multidimensional nature of both the electorate and the economy makes explanation and prediction of these effects all the more difficult.
In addition to the ambiguity associated with economic indicators, forecasters’ reliance on presidential popularity provides little insight into the specific factors most influential in voters’ evaluations of an incumbent’s performance. For purposes of prediction, popularity ratings are very useful as a “catch all variable” reflecting a number of factors influencing which candidate voters support at the polls. From a forecaster’s point of view it is not necessary to know why voters support a particular candidate, only that they do. Forecasters are primarily interested in making accurate and early predictions, and not providing theoretically interesting variables that maintain a strict analytical separation between the dependent and predictor (independent) variables. From an explanatory perspective, the various measures of public opinion employed by forecasters – such as presidential popularity and trial-heat polls – may be “too conceptually close to the vote itself”\textsuperscript{273} to be useful for explanatory purposes. However, what makes the predictive power of presidential popularity interesting and important to forecasters is that it predicts before the general election campaign starts.

Yet, from an explanatory perspective, this indicator is lacking in its ability to clarify the specific factors incorporated into incumbents’ popularity evaluations. While no doubt economic conditions and partisan identification\textsuperscript{274} factor into incumbents’ popularity ratings, a number of other factors are likely to impact voters’ assessment of the in-party’s performance in office. For instance, the “judgmental criteria”\textsuperscript{275} employed by voters to assess candidate quality are likely to account for some portion of an incumbent’s overall popularity score. Specifically, voters’ performance related criteria\textsuperscript{276} for evaluating candidates’ personal integrity, competence, trustworthiness, and reliability are possibly important components of an incumbent’s overall popularity. Additional factors incorporated into the presidential popularity variable likely include incumbents’ handling of foreign policy, national security, social services, and the like. In sum, presidential popularity is a surrogate for a host of independent variables that \textit{jointly} influence the formation of incumbents’ overall popularity ratings. However, forecasting

\textsuperscript{272} Campbell 2000a, p. 182.
\textsuperscript{273} Campbell, Converse, Miller, and Stokes 1960.
\textsuperscript{274} Miller, Wattenberg, and Malanchuk 1986.
\textsuperscript{275} See Miller, Wattenberg, and Malanchuk (1986) for a more complete discussion of the various dimensions of the candidate assessments voters employ in U.S. elections.
research does not allow for a deeper understanding of these causal factors and the relationships among them.

Beyond the predictive and explanatory value of forecasting, an additional drawback involves the models’ use of the in-party candidate’s percentage of the popular vote as the dependent variable. Almost all aggregate-level forecasting models do not take into account candidates’ percentage of the electoral college vote, which actually decides who wins presidential elections. While historically the candidate winning a plurality of the popular vote goes on to win the majority of the electoral votes, this has not always been the case. The most recent presidential election, the Gore v. Bush contest in 2000, serves as a prime example in which the candidate winning the greater percentage of the two-party vote did not receive enough votes in the electoral college to secure the White House. Given candidates’ increased reliance on statewide campaigning strategies designed to increase their electoral college votes, the models’ focus on popular vote alone represents a potential weakness among forecasting models.

II. Implications of Forecasting

Arguably, the most controversial impact of forecasting research is its implications for studies of the effects of political campaigns. As previously noted, the recent success of forecasting models based on objective measures of the macro-electoral context surrounding presidential elections has been taken as evidence that candidates’ general election campaigns are not important determinants of voters’ candidate choices. That is, the predictability of elections has been taken as a sign campaigns are largely inconsequential and exert little, if any, significant influence on election outcomes.277 The structural explanations of election outcomes offered by forecasters provide additional support for the conventional wisdom that campaigns have only “minimal effects” on presidential elections. However, recent empirical studies suggest we should be cautious in interpreting the models’ success as an indication that campaigns do not matter.278

Alternative points of view suggest campaigns matter and play a large and important role in determining outcomes. While a number of studies have been performed,

277 Sanders 2004.
research challenging the minimal effects interpretation is not sufficiently developed enough to draw conclusions regarding the validity of the minimal effects explanation of campaigns. Thus, at this time, it is impossible to reach closure on the debate surrounding the efficacy of presidential candidates’ general election campaigns. Illustrating the continued debate among scholars is the recent book prospectus by Mitchell Sanders, which “challenges the conventional academic wisdom that campaigns are largely inconsequential.”279 According to Sanders, the results of his study “show that for each election there are a range of possible outcomes, including the possibility of a different winner, and that the campaign is critical for determining the actual outcome.”280 Additional evidence of alternative viewpoints is also drawn from my personal correspondence with a professor of communications, who had the following to say in regards to the minimal effects literature: “In short, those of us in political communication are well familiar with the quantitative studies resulting in minimal effects. However, we find such naive in many ways.”281 Still others criticize this tendency among some scholars to view the structural and campaign-based explanations of presidential elections as mutually exclusive.282 More recently, there as been a growing realization that these two perspectives are actually complementary and not competing explanations. In short, as new research emerges on the influence of general election campaigns, it will be interesting to see how these two perspectives are combined in a more comprehensive theory of campaign effects.

Several studies find strong evidence that “campaigns do matter and can be pivotal”283 in determining the outcomes of presidential elections. Citing specific theoretical and methodological shortcomings of forecasters’ treatment of campaign “effects,” these studies suggest such aggregate time-series analyses are unsuitable for measuring the potential electoral contribution of political campaigns. According to this literature, forecasters’ aggregate time-series research is conceptually flawed by their reliance on a particularly narrow definition of campaign “effects” that focuses solely on

280 Sanders 2004, p. 2.
281 Personal correspondence with Dr. Robert Denton professor of political communications at Virginia Polytechnic Institute and State University, April 14, 2004.
282 Shaw 1999.
changes in vote choice (public opinion) over a limited time period between Labor Day and election day. Preoccupied with the persuasion effects of general campaigns, the forecasting literature necessarily ignores other important campaign effects, most notably the ability of campaigns to mobilize (or demobilize) likely voters. While forecasters’ interest in campaigns’ ability to shape presidential vote decisions is warranted, they may very well be overlooking additional effects that can also impact outcomes. That is, campaigns also may influence electoral outcomes by encouraging or discouraging participation. While the general campaign is unlikely to alter most voters’ predispositions, the primary effect of political campaigns is to activate voters’ latent predispositions, effectively mobilizing a party’s core constituents as well as strong opponents. Additionally, campaigns are thought to have the greatest potential to influence vote choice among independents or those individuals with only loosely held partisan predispositions. As such, the candidate whose campaign is most successful at mobilizing the growing number of late deciding independents will likely have a significant advantage over his/her opponent. In short, campaigns are most likely to affect which party’s candidate wins the White House by working as agents of mobilization encouraging both the party’s core constituents and swing voters to support its candidate on election day. Thus, the candidates’ campaigns need not persuade voters to change their long-held partisan loyalties to significantly impact the outcomes of presidential elections.

In addition to being theoretically compromised, several studies have suggested forecasters’ aggregate time-series research is also methodologically limited. First, this research is not intended to specifically address the role of political campaigns in presidential elections. Consequently, its findings can only provide circumstantial evidence regarding the potential effects of campaigns.\textsuperscript{284} Secondly, forecasting models are limited due to their reliance on survey data, which are often inaccurate due to both systematic and random measurement error. As Chapter 2 described, most forecasting models depend on Gallup or NES survey data in the measurement of key predictor variables. However, a good deal of inaccuracy and unreliability in survey respondents’ self-reports can potentially distort a study’s findings, possibly even attenuating potential

\textsuperscript{284} Holbrook 1996.
campaign effects. Such methodological problems are especially worrisome for those models dependent on trial-heat data, net candidate advantages (NCA), and various subjective measures of the nation’s economic wellbeing, e.g. the consumer sentiment index (CSI).

Given these methodological shortcomings as well as the theoretical limitations, proponents of campaign effects do not consider these forecasting studies ideal for assessing the effects of campaigns and suggest they may actually be predisposed toward a minimal effects interpretation. This is especially likely given the off-setting nature of U.S. presidential campaigns. That is, presidential campaigns may in fact have considerable effects on individual vote choice; however, these effects may be masked by the relative equality of expertise, information, and funding available to each major party presidential candidate. In this more evenly matched context, it is possible that campaign effects are simply difficult to observe because the effects of each candidate’s campaign are cancelled-out by their opponent’s compensatory campaigning efforts.

Further challenges to the minimal effects perspective suggest candidates’ electoral college strategies may have a significant impact on the outcomes of presidential elections. In particular, studies examining the impact of instrumental resources, such as television advertisements and candidate appearances, find these aspects of presidential campaigns can have a significant impact on the eventual outcome. Using data on presidential candidates’ appearances and advertising purchases, Shaw assessed the effects of campaigning on statewide outcomes in the 1988, 1992, and 1996 elections. According to his cross-sectional and pooled time-series analyses, presidential campaigning influences statewide support for candidates. More specifically, this study finds important interaction effects between campaigning differentials — candidate appearances and TV advertising — and the percentage of undecided voters in a state and the statewide historical vote average for the Republican party. For instance, an increase in a candidate’s statewide TV advertising and a simultaneous increase in the number of

285 See Iyengar and Simon (2000) and Bartels (1993, 1997) for more complete discussion on how measurement error can reduce estimates of the effects of political campaigns.
286 The CSI variable is employed by the University of Michigan to assess consumer confidence in the present state of the economy. Usually anywhere from 250 to 500 telephone interviews are used in the measurement of this indicator.
undecided voters in the state will result in an increase in support for that candidate. Similarly, an increase in a Republican candidate’s appearances coupled with an increase in the average statewide Republican vote will increase his/her vote share. A follow-up study conducted by Althaus, Nardulli, and Shaw289 analyzing the 1992, 1996, and 2000 presidential election outcomes confirmed the core finding that instrumental campaign resources affect candidates’ statewide support. The authors caution, however, that despite the study’s finding of statistically significant effects, the impact of candidate appearances and TV advertising is often substantively small and usually canceled out by the “compensatory activities” of the opposition.290

Proponents of campaign effects suggest future research exploring other facets of vote behavior will continue to undermine the case for minimal effects. In particular, Iyengar and Simon291 find the more subtle campaign influences of voter “learning” and “agenda setting” are likely to significantly impact the eventual election outcome. According to their review of the latest studies on campaign effects, stronger empirical evidence of campaigning’s influence on election outcomes is likely to accompany the recent conceptual and methodological advances in campaign research. In addition to the emergence of several methodological advances — particularly in experimentation, content analysis, and survey techniques, a continued increase in interdisciplinary efforts among political science, communications, and allied disciplines is likely to find that campaigns play a greater role than originally suggested.

However, in order to reverse the expected outcome of presidential elections, these campaign “effects” will need to be of a greater magnitude than the average popular two-party vote plurality of the winning candidates in presidential elections. With the average margin of victory close to five percentage points (4.6%) for the past fourteen elections (1948-2000), campaign effects would need to produce shifts in public opinion greater than 5% in order to have a significant impact on election outcomes. However, a good deal of variance exists around this average plurality, indicating elections are won by only several tenths of a percentage point to over ten percentage points in some cases. In these close contests, the net effects of the candidates’ general election campaigns may only

need to produce a 1 or 2 percentage point shift to be decisive in the eventual outcome. While some may consider a two percentage point shift “minimal,” these campaign effects may actually matter in determining electoral outcomes in especially close presidential elections.

III. Future Research Recommendations

In spite of the recent advances and refinements in explanatory theories of voting behavior in presidential elections, a good deal of uncertainty surrounding the exact causal factors responsible for voters’ candidate preferences still exists. As more sophisticated theories and methods emerge, it is likely these remaining ambiguities in vote choice will be addressed. However, such advances do not guarantee a bright future for presidential election forecasting. That is, we should be cautious when making projections about the models’ future forecasts and not necessarily assume these models will continue to provide accurate and reliable predictions. Given the limited number of observations (elections) informing the models’ predictive equations and the variable electoral environment, projections beyond the models’ narrow range of observations are probably premature at this stage in election forecasting.\textsuperscript{292} In fact, it is likely given the changing electoral climate that the existing conditions governing the relationships among the models’ indicators will change, making sound projections more challenging. Just because the models have performed well in the past, there is no statistical rationale for making predictions about the accuracy and reliability of the models’ future forecasts. It may be the case that the models will continue to improve, or just as likely their predictive accuracy could decline over time.

To improve our understanding and prediction of presidential elections, future research will need to address many of the questions raised by the renewed interest in presidential forecasting. As previously discussed, several substantive questions regarding the role of the economy and voters’ retrospective evaluations in determining vote choice remain to be answered. Future studies focusing on these questions should aim to provide a more detailed explanation of retrospective voting and the important factors guiding

\textsuperscript{292} See Tufte (1974) for a more in depth discussion of the difficulties associated with making extrapolations from a narrow range of observations with limited variance among the cases.
voters’ candidate preferences. Additionally, recent evidence pointing to a greater role for prospective voting, especially in open seat presidential contests, may prove valuable as forecasters continually work to improve the accuracy and reliability of the models’ predictions. Most likely this research will allow for improvements in the models’ variable specifications as well as forecasters’ operationalization of key indicators.

Given the recent successes in forecasting, it seems likely that forecasters have already correctly identified at least some of the important factors bearing on vote choice; however, future research may offer even better predictor variables as well as better ways of operationalizing and measuring current predictor variables. Additionally, the changing electoral landscape – as indicated by the decline in partisanship, the rising number of independents and late deciding voters, and the increased volatility in voters’ candidate preferences – may require forecasters to make significant alterations to their models’ current variable and methodological specifications. That is, as important changes take place – especially in presidential campaigning strategies and technologies, political parties, and the U.S. electorate – the current predictor variables and relationships among them may change substantially in ways that require forecasters to replace or modify existing indicators and/or their measurement. For example, record increases in presidential candidates’ campaigning funds may represent an important variable for future forecasting models to consider. As candidates continue to surpass the spending levels in previous elections, these ever expanding “war chests” could allow the candidates’ messages to reach better targeted audiences, potentially influencing and mobilizing even more voters. As a result, the effects of the candidates’ general election campaigns may increase. With the candidates’ combined campaign spending expected to reach well over the $300 million mark in the 2004 presidential election, campaigns may become more important in determining the eventual outcome of U.S. presidential elections.

In addition to the need for continued efforts at improving the models’ variable specification, a final recommendation for future research is to encourage a more collaborative, interdisciplinary approach to the study of voting behavior, presidential elections, and campaign effects. One surprising discovery while conducting the research

for this thesis was a deficiency in researchers’ acknowledgement (or perhaps awareness) of opposing bodies of literature both within and outside of their own discipline. For instance, when reviewing the literature on campaign effects, I observed several of the authors were engaged in entirely separate conversations, virtually isolated from the implications of one another’s work. That is, there appears to be only minimal discourse among related research areas, especially across disciplines. In particular, I found the disconnect between the forecasting literature and studies of campaign effects to be especially disconcerting. While reducing researchers’ tendencies to talk past one another is often cited as a needed improvement in almost all areas of the social sciences, it seems especially appropriate for those bodies of research — such as forecasting, voting behavior, and campaign effects — which are inextricably tied together. Without a doubt, our understanding and prediction of presidential elections could benefit a great deal from the combined efforts of those in such related disciplines as political science, communications, and psychology.
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