

## Daily Effects on Presidential Candidate Choice

**Jonathan Day**  
University of Iowa

### Introduction

At 11:00pm Eastern time all three major cable networks, CNN, MSNBC, and FOX, projected Barack Obama to be the 44<sup>th</sup> President of the United States. Obama's final vote count was 53.25% of the total two party popular votes. Amid concerns from many people that a black candidate could not be elected to the presidency, all doubt was put to rest on November 4, 2008. The United States of America had made history by electing its first black president.

In this historic 2008 presidential election Barack Obama raised \$639 million from approximately 3 million campaign donors, whereas John McCain raised only \$360 million from approximately 1 million campaign donors<sup>1</sup>. What is perplexing about the 2008 presidential election is that an average of the forecasting models predicted, without taking into account the disparity in the campaigns, that Barack Obama would receive 53.1% of the total two party popular votes. The forecasting models included the state of the economy and the approval of George W. Bush in July of 2008. Was the large advantage in campaign money raised by Obama only able to squeak out 0.15% of the voting population to his advantage over what was predicted?

Despite this very small difference in actual vote results from the forecasted results, we know that campaigns matter for several reasons. First, campaigns are needed to inform voters about who is running and why a candidate is the best person for the job. Second, campaigns are necessary because if one candidate chooses not to campaign, the other candidate will campaign and probably win overwhelmingly. In this sense, campaigns are like an arms race in

---

<sup>1</sup> Data found here:

<<http://www.cnn.com/ELECTION/2008/map/fundraising/>>.

that when one candidate begins a campaign the other candidate must react and campaign as well. Each candidate, however, knows the other candidate will campaign, so both begin their campaigns simultaneously. Third, campaigns serve to “enlighten” voters about the political and economic context of the election and who they should vote for given that context (Gelman and King, 1993). As Daron Shaw put it, “even forecasters... admit that campaigns are necessary to educate their voters about the external reality upon which their predictions are based.” (2006: 22)

The magnitude of campaign effects are contested in the minimal vs. substantial effects debate. The minimal effects side of the argument argues that campaigns do not have an effect because both campaigns have enough money to compete, enough information to level the playing field, enough experience to balance the amount of strategic thinking, and use tit for tat strategies to cancel out any bounce effects (Shaw, 2006). However, several scholars have found that there are more than minimal effects. Finkel (1993) finds a net movement of 2 – 3%; Erickson and Wlezien (1999) find campaign effects equaling 5%; Campbell (2008) finds an effect of about 4%; Bartels (1993) finds campaigns to have an effect of 2 – 3%. Other authors have found that there are campaign effects that result because not every voter has decided before the campaigns begin (Hillygus and Shields, 2008; Holbrook, 1996). Finally, candidate appearances in states appear to boost the support of the candidate within that state (Shaw, 1999b; Holbrook, 2002).

One question still remains: Why do the national polls vary daily, when presidential election results are so predictable (Gelman and King, 1993)? Gelman and King (1993) refute possible answers to this question such as, measurement error (polls don’t tell us actual results, question wording problems, and non-response bias), campaign effects (gaffes, advertisements, unbalanced campaign spending), and incomplete information about the candidates.

Gelman and King (1993) provide a possible answer which they call the “enlightenment hypothesis”. This hypothesis states that voters respond to polls based on their ‘enlightened preferences,’ which is based on the information that they currently have gathered. Voters

during the campaign also change the weights of the fundamental variables, such as the economic condition and political context. By Election Day, voters are fully 'enlightened' and vote how the forecasters have predicted. In this paper, I seek to provide a more straightforward test of this enlightenment hypothesis by looking at the day-to-day fluctuations in the polls over time and what explains these fluctuations.

There are two major influences that might enlighten voters independent of the campaigns themselves. The first is the daily economic conditions. If the economy gets significantly worse, then one candidate might benefit from this over another. The second is the amount of news coverage that the candidates receive. If one candidate is receiving the bulk of news coverage, then that candidate might benefit from the additional exposure. These two major influences may have profound effects on enlightening voters on which presidential candidate to support.

### **Theory of 'Candidate Choice' Effects**

It has long been theorized that the economy has a major impact on voting behavior. Both in retrospective and prospective voting, economic conditions, or more importantly what people think of the economy, persuades voters how to vote (Key, 1964; Lewis-Beck, 1988; Lewis-Beck, Jacoby, Norpoth, and Weisberg, 2008). The party that currently resides in the White House is blamed or receives credit for the health of the economy. If the economy is doing well, people may be persuaded to vote for the in-party. If the economy is doing poorly, the in-party may not effectively persuade voters. Many forecasters have shown that actual economic performance is a powerful predictor of the actual vote total on Election Day (Fair, 1978; Lewis-Beck and Rice, 1992; Campbell, 1992; Campbell and Garand 2000; Abramowitz, 2008; Lewis-Beck and Tien, 2008). These forecasters use the economic conditions that are reported in the summer before the campaign season leading up to the November general election. However, the question remains; does the daily changing economic conditions have an effect on voter support throughout the campaign season? Political commentators were

clamoring that as the stock market was declining in October 2008, presidential candidate Barack Obama was being helped by this decline. If the stock market is the way that voters measure the health of the economy, then it is certainly reasonable to believe that as the stock market drops, voters will be more likely to support the out-party candidate. Thus the first hypothesis is:

H<sub>1</sub>: As the Stock Market declines the percentage of support for Barack Obama (the out-party candidate) will increase.

The second major influence is the amount of news coverage that each candidate receives. If one candidate receives overwhelming news coverage, then this should at least temporarily increase the amount of support that they receive. However, what is not accounted for is the type of coverage they receive. If a candidate receives overwhelming amounts of negative news coverage, this could lower the candidate's support. If the news that the candidate receives is generally positive or neutral, this could increase the candidate's percentage of support. What will be assumed in this paper is that they type of coverage is random. This means that an increase or decrease in the balance of coverage for one candidate is neither an increase nor a decrease in amount of positive or negative coverage. But increased exposure should lead to an increase in support for a couple of reasons. First, voters usually are passive viewers. They only get news that is shown to them. Thus, if one candidate receives more news coverage, then voters, especially undecided voters, will have lopsided information presented to them about that candidate. Voters may be persuaded to vote for the candidate who receives the most attention because it may be seen as an endorsement of that candidate by the media. Second, voters may feel more comfortable voting for the candidate who they have more information about because there is less uncertainty about that candidate (Alvarez, 1997). This would be the revelation of the enlightenment effect and uncertainty hypothesis: More news coverage means more voters are likely to support that candidate. For

138

these two reasons, more news coverage of one candidate may increase the amount of support for that candidate. Thus the second hypothesis is:

H<sub>2</sub>: As Barack Obama receives more news coverage compared to John McCain, support for Obama will increase.

The independent variables in these two hypotheses will be termed “daily Stock Market average” and “daily percentage of news coverage”. In order to test these hypotheses, daily data is collected on both these variables and time series analysis is used to empirically analyze their relationship.

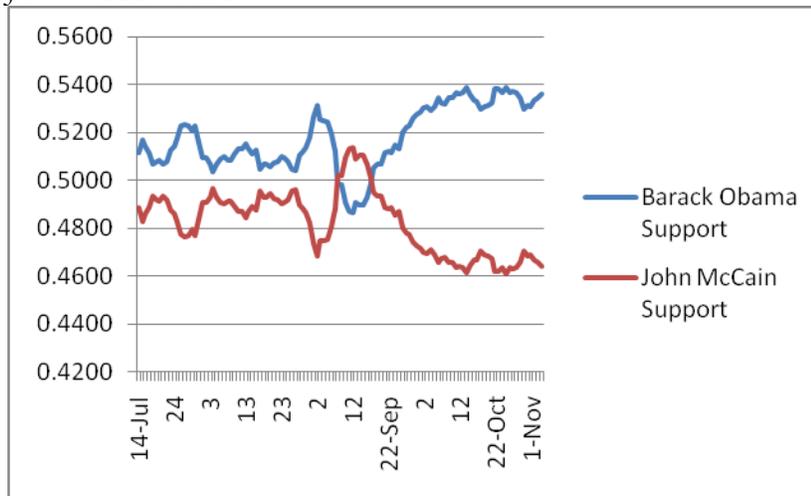
### **Data**

The dependent variable ‘Obama support’ is measured by a daily tracking poll from July 15 through November 4<sup>th</sup> taken from a number of national polls. A total of over 300,000 people were sampled during this 110 day period. At least 1,800 people were polled each day. If we used the daily poll results, then we would expect to have a margin of error of around 2.5%. However, this sample error is too high and we could wrongly mistake these errors as campaign effects (Hillygus and Jackman, 2003). To lower our sample error, we can use a daily poll average. We create a polling average by treating each poll as a multinomial distribution with three distinct choices. One category is for Barack Obama supporters, one category is for John McCain supporters, and another category is for undecided or third party supporters. We combine these multinomial distributions using Bayes’ theorem. This is essentially an average of the polls weighted by their respective sample size. Other poll averages incorrectly combine polls into an average and treat each poll with equal weight (RealClearPolitics and CNN). This wrongly gives too much weight to polls with lower sample sizes, which have larger sampling error and are thus more variable. The weighted poll averages also has the advantage of having a margin of error. A six day moving window poll average was then created by combining all

of the polls taken during a six day period. As each day progressed, only those polls within the last six day period were used.

Thus each day's poll average estimate is just the combination of polls from the previous six days weighted by their sample size. This creates the 6 day moving window poll average. Figure 1 shows the data over the time period from July 15 through November 4<sup>th</sup> for Barack Obama and John McCain and the percentage of two party support each received.

Figure 1: 6 day moving window poll average: Barack Obama vs. John McCain 2008



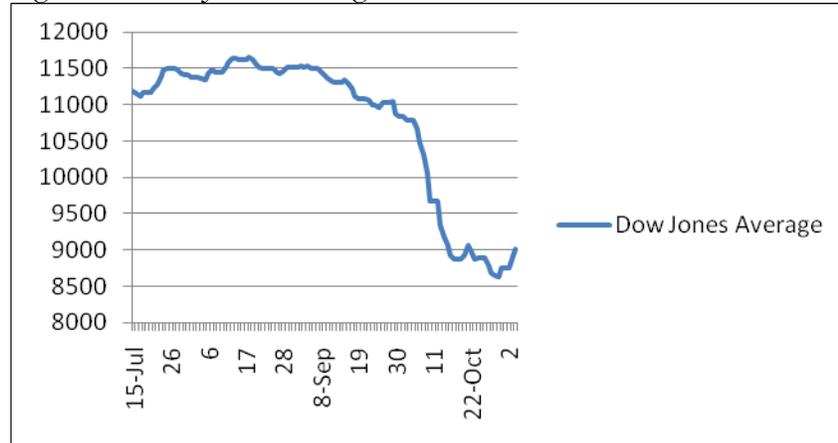
To correct for house sampling effects, I will split up the dependent variable into subsamples. One sample will be using the Gallup poll, the second with the Rasmussen poll, and the third combining the Gallup, Rasmussen, and all other national polls.

The first independent variable is the “daily Stock Market average”. The most visible measure of the economic health of the U.S. economy to voters is the Dow Jones Index. Almost every day, the Dow Jones Index is reported on all three major cable news channels. It is also reported on the network news, newspapers, and online news sources. The value of the Dow Jones Index is used by

commentators to report on the stability of the U.S. economy by comparing the change in the value from the previous day and it is used to comment on the overall health of the economy by the assessing the total value. The Dow Jones Index may not be the best measure for an economic analysis, but it allows commentators to relate information to voters in a comprehensible way and helps to facilitate discussions about the health of the U.S. economy. The Index is based on the 30 largest corporations in the U.S. and many people have stock in these companies, which means their outlook about the economy may be reflected in the overall health of this index. The S&P 500, which is based on the 500 largest corporations in the U.S. is where most people's 401k resides. This means as the S&P 500 changes, this may change people's outlook on the economy. While the S&P 500 may be a good measure for people's outlook on the economy, it is not reported as much as the Dow Jones. Also, the S&P 500 follows very closely the movements of the Dow Jones Index. For this reason, the more visible measure, the Dow Jones, is preferred.

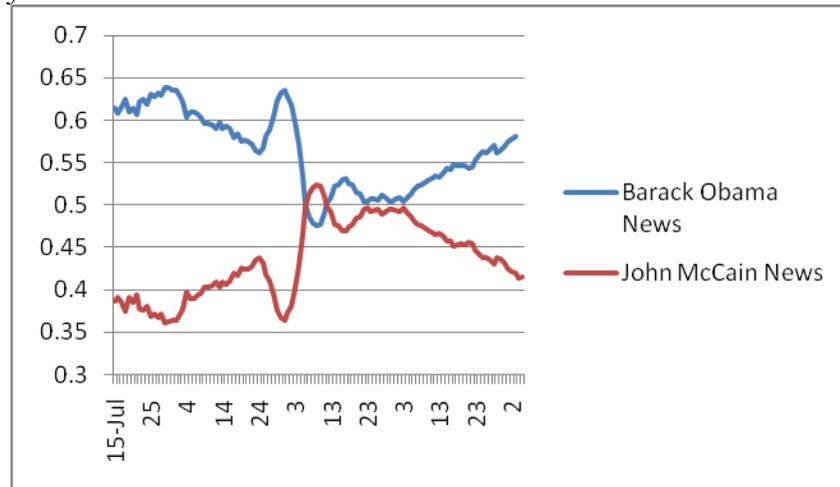
The data on the "daily Stock Market average" was taken by recording the daily Dow Jones Index at closing time from July 7<sup>th</sup> through November 4<sup>th</sup>. Then a 6 day moving average was created in the same way as the poll average. This yielded a point estimate for the average every day from July 15 through November 4<sup>th</sup> on the weekdays. For the weekends, the Dow Jones Index at the close of Friday was recorded for both Saturday and Sunday. The value of the Dow Jones over time is shown in Figure 2. The overall trend in the stock market over time looks like it corresponds to Obama's support (Figure 1) as the theory predicts in hypothesis 1.

Figure 2: Dow Jones Average 2008



The variable for “daily percentage of news coverage” is calculated in the following manner. First, the number of articles that mention Barack Obama and John McCain in major U.S. news and world publications is collected each day from July 7 through November 4<sup>th</sup>. The number of articles can be found by using LexisNexis, which searches articles from every source they have from the Toronto Star to the Washington Times. Then a six day moving average is calculated by taking the average number of articles for each candidate from the previous six days, which provides us with a point average for each day from July 15 through November 4<sup>th</sup>. Next, these numbers are turned into percentages by taking Obama’s six day average number of articles divided by the number of articles for both Obama and McCain. The values for this variable for the entire time period are shown in Figure 3.

Figure 3: 6 day moving window news average: Barack Obama and John McCain 2008



What is initially surprising is the similarity in the pattern of Obama and McCain's percentage of support (Figure 1) and the percentage of articles on Obama and McCain (Figure 3). The patterns seem to correspond extremely well with the predictions in hypothesis 2. Barack Obama stays relatively high compared to John McCain in both the poll average and news coverage (albeit a little higher in his news coverage than his poll support). Then during Obama's Europe trip, Obama gets a spike in news coverage along with a spike in poll support. During the Republican National Convention, John McCain gets an increase in news coverage, which is the only time he has more news coverage than Barack Obama. This is also the only time John McCain has higher poll support than Barack Obama. Finally, the news slowly increases over time until Election Day for Barack Obama, along with his poll support. The relationship is not perfect, but certainly follows a very similar trending pattern.

Finally, a trend variable and three intervention variables are used in the model. The trend variable is necessary to account for the trend in the dependent variable. The three intervention variables are

the major events that took place during the campaign. The first is the Europe trip that Obama took in late July and is coded 1 for the week of the trip and 0 otherwise. The second is the Democratic Party National convention, which is coded 1 for that week and 0 otherwise. Finally, the economic crisis that the news focused on is coded 1 at the start in late September through Election Day and 0 before. These three events are also used because they are the most likely events to create positive news coverage for Obama. Therefore, the model's independent variable "daily percentage of news coverage" will more likely capture the independent effects of amount of news coverage.

### **Results and Discussion**

The Rasmussen and Gallup subsamples were found to be trend stationary, so we can use a simple OLS regression model with several lags of the dependent variable as independent variables and a trend variable. After graphing the partial auto-correlation function, the first and fourth lags of the dependent variables show significant influence on the dependent variable. Therefore, we need to include the first and fourth lags of the dependent variable as independent variables. This type of time series model allows us to easily interpret substantive results of the relationship between the variables. The results of the regression model are reported in Table 1.

Table 1: OLS Time Series Regression Model: Effect of the change in daily news coverage and change in Dow Jones public opinion (Obama vote)

	Rasmussen Model Coefficient (p-value)	Gallup Model Coefficient (p-value)	All Polls Model Coefficient (p-value)
Obama Support Lag 1	.538 (.001)	.678 (.001)	.888 (.001)
Obama Support Lag 4	.112 (.142)	-.078 (.242)	-.137 (.03)
daily Stock Market average	.001 (.008)	.001 (.104)	.001 (.09)
daily percentage of news coverage trend variable	.097 (.009) .001 (.0001)	.157 (.004) .001 (.0001)	.053 (.006) .001 (.0001)
Obama's Europe trip	.005 (.256)	.005 (.398)	.004 (.026)
Democrat Party Convention	-.001 (.812)	-.003 (.497)	-.001 (.974)
economic crisis	.006 (.114)	.004 (.432)	.004 (.071)
constant	.014 (.822)	.009 (.904)	.054 (.135)
R square	.86	.88	.96

From July 15<sup>th</sup> to November 4<sup>th</sup>, an increase in the stock market by 1 point corresponds to a .001% increase in Obama's percentage of supporters. This result is very surprising given that it completely opposes hypothesis 1. However, in two of the three models, the relationship does not achieve statistical significance at the .05 level. There is really no substantive significance either, since it

takes a great deal of change in the stock market to make any difference in the amount of support for Obama.

The second variable, “daily percentage of news coverage”, had a positive relationship with the dependent variable, “Obama support” thus confirming hypothesis 2. As the amount of news coverage increased by 1% for Obama, the percentage of support for Obama increased between .05% and .15%. This is consistent with the theoretical relationship between the news and Obama’s support. As Obama received more news coverage, his support in the general public increased, either because it was seen as an endorsement from the news media or because they were less uncertain about Obama as compared to McCain at that time. This is independent of such events as Obama’s trip to Europe in late July and the Democratic Party National Convention, where he also received increased news coverage.

The trend variable was found to be significant, showing that Obama’s support increased over time after accounting for all other variables, but the magnitude of this increase is not large. The three intervention variables; Obama’s Europe trip, the Democratic Party National Convention, and the economic crisis, all were generally insignificant.

### **Conclusion**

The results of these time series models show us that two major influences work to increase or decrease the level of support that a candidate has during the campaign season, independent of the actual campaigns themselves. The fluctuations of the economy as seen by the Dow Jones Index and the amount of news coverage one candidate receives in relation to the other can help to influence the amount of support that a candidate receives. These results also provide another answer to one question that has been asked by political scientists before: “Why Are American Presidential Election Campaign Polls so Variable When Votes Are so Predictable” (Gelman and King, 1993)? The partial answer provided here is that voters are influenced by the changing economic conditions and changing news coverage even on the day-to-day progression during

the campaign season. These models also provide support to Alvarez's (1997) uncertainty hypothesis in the aggregate: the more uncertain voters are about a candidate the less likely they are to support that candidate.

There are several questions this research provokes. First, who are the voters that are changing their minds based on the economic fluctuations and amount of news coverage? Are they primarily undecided voters, independent voters, or weak party identifiers? Second, this research assumed that the amount of news coverage was independent of whether the news was positive or negative about the candidate. Is more news coverage correlated with an increase in negative news coverage? And does controlling for negative versus positive news help us to better understand the fluctuations in the polls throughout the campaign season. Finally, the most provoking question, is why does the increase in the daily stock market value help to increase the out-party candidate's support (Barack Obama), when all past theories would predict the opposite. If bad economic news is good for the out party in the aggregate, why does a falling stock market hurt the out party?

The answers to these three questions would help us better understand what causes the fluctuations in the polls that we see throughout the campaign season that are independent of the actual campaigns themselves.

### References

Abramowitz, Alan I. 2008. "Forecasting the 2008 Presidential Election with Time-for-Change Model. *PS: Political Science and Politics*. 41(4): 691-696.

Abramowitz, Alan I. 2008. "It's about time: Forecasting the 2008 presidential election the time-for-change model." *International Journal of Forecasting*. 24: 209-217.

Alvarez, R. Michael. 1997. *Information and Elections*. Ann Arbor, University of Michigan Press.

Bartels, Larry. 1993. "Electioneering in the United States." In *Electioneering: A Comparative Study of Continuity and Change*. Ed. David Butler and Austin Ranney, 244 – 277. Oxford: Clarendon Press.

Berg, Joyce E., Forrest D. Nelson and Thomas A. Rietz. 2008. "Prediction market accuracy in the long run." *International Journal of Forecasting*, 24: 285-300.

Campbell, James E. 2008. *The American Campaign: U.S. Presidential Campaigns and the National Vote. 2<sup>nd</sup> Edition*. College Station: Texas A&M University Press.

Campbell, James E. 2008. "Evaluating U.S. presidential election forecasts and forecasting equations." *International Journal of Forecasting*, 24: 259-271.

Campbell, James E. 2008. "Editor's Introduction: Forecasting the 2008 National Elections." *PS: Political Science and Politics*, 41(4): 679-682.

Campbell, James E. 2008. "The Trial-Heat Forecast of the 2008 Presidential Vote: Performance and Value Considerations in an Open-Seat Election." *PS: Political Science and Politics*, 41(4): 697-702.

Campbell, James E. 1992. "Forecasting the Presidential Vote in the States." *American Journal of Political Science*, 36(2): 386 – 407.

Campbell, James E. and James C. Garand. 2000. *Before the Vote: Forecasting American National Elections*. Thousand Oaks: Sage Publications.

Abramowitz, Alan I. 1996. "Bill and Al's Excellent Adventure: Forecasting the 1996 Presidential Election." *American Politics Quarterly*, 24(4): 434-442.

- Campbell, James E. 1996. "Polls and Votes: The Trial-heat Presidential Election Forecasting Model, Certainty, and Political Campaigns." *American Politics Quarterly*. 24(4): 408-433.
- Erickson, Robert S. and Lee Sigelman. 1996. "Poll-Based Forecasts and the House Vote in Presidential Election Years, 1952-1992 and 1996." *American Politics Quarterly*. 24(4): 520-531.
- Hillygus, D. Sunshine and Simon Jackmon. 2003. "Voter Decision Making in Election 2000: Campaign Effects, Partisan Activation, and the Clinton Legacy." *American Journal of Political Science*. 47(4): 583-596.
- Holbrook, Thomas M. 1996. "Reading the Political Tea Leaves: A Forecasting Model of Contemporary Presidential Elections." *American Politics Quarterly*. 24(4): 506-519.
- Lewis-Beck, Michael and Charles Tien. 1996. "The Future in Forecasting: Prospective Presidential Models." *American Politics Quarterly*. 24(4): 468-491.
- Norpoth, Helmut. 1996. "Of Time and Candidates: A Forecast for 1996." *American Politics Quarterly*. 24(4): 443-467.
- Wlezien, Christopher and Robert S. Erickson. 1996. "Temporal Horizons and Presidential Election Forecasts." *American Politics Quarterly*. 24(4): 492-505.
- Campbell, James E. and Michael Lewis-Beck. 2008. "US presidential election forecasting: An Introduction." *International Journal of Forecasting*. 24: 189-192.
- Cuzan, Alfred G. and Charles M. Bundrick. 2008. "Forecasting the 2008 Presidential Election: A Challenge for the Fiscal Model." *PS: Political Science and Politics*. 41(4): 717-722.

- Damore, David F. 2002. "Candidate Strategy and the Decision to Go Negative." *Political Research Quarterly*. 55(3): 669 – 685.
- Erickson, Robert S. and Christopher Wlezien. 1999. "Presidential Polls as a Time Series: The Case of 1996." *Public Opinion Quarterly* 63: 163 – 177.
- Erickson, Robert S. and Christopher Wlezien. 2008. "The economy and the presidential vote: What leading indicators reveal well in advance." *International Journal of Forecasting*. 24: 218 – 226.
- Erickson, Robert S. and Christopher Wlezien. 2008. "Leading Economic Indicators, the Polls, and the Presidential Vote." *PS: Political Science and Politics*. 41(4): 703-708.
- Fair, Ray C. 1978. "The Effect of Economic Events on Votes for President." *Review of Economics and Statistics*. 60(2): 159-173.
- Farrell, David M. and Rudiger Schmitt-Beck. 2002. *Do Political Campaigns Matter? Campaign effects in elections and referendums*. London: Routledge.
- Finkel, Steven E. 1993. "Reexamining the 'Minimal Effects' Model in Recent Presidential Campaigns." *Journal of Politics*. 55(1): 1-21.
- Gelman, Andrew and Gary King. 1993. "Why are American Presidential Election Campaign Polls so Variable When Voters Are so Predictable?" *British Journal of Political Science*. 23(4): 409-451.
- Gelman, Andrew, David Park, Boris Shor, Joseph Bafumi, and Jeronimo Cortina. 2008. *Red State, Blue State, Rich State, Poor State*. Princeton, NJ: Princeton University Press.

Hillygus, D. Sunshine and Todd G. Shields. 2008. *The Persuadable Voter: Wedge Issues in Presidential Campaigns*. Princeton, NJ: Princeton University Press.

Holbrook, Thomas M. 1996. *Do Campaigns Matter?* Thousand Oaks, CA: Sage Publications.

Holbrook, Thomas M. 2002. "Did the Whistle-Stop Campaign Matter?" *PS: Political Science and Politics*. 35(1): 59-66.

Holbrook, Thomas M. 2008. "Incumbency, National Conditions, and the 2008 Presidential Election." *PS: Political Science and Politics*. 41(4): 709-712.

Holbrook, Thomas M. and Scott D. McClurg. 2005. "The Mobilization of Core Supporters: Campaigns, Turnout, and Electoral Composition in United States Presidential Elections." *American Journal of Political Science*. 49(4): 689-703.

Jones, Randall J. 2002. *Who will be in the White House? Predicting Presidential Elections*. New York: Addison Wesley Longman Educational Publishers Inc.

Key, V.O. 1966. *The Responsible Electorate: Rationality in Presidential Voting 1936 - 1960*. Cambridge, MA: The Belknap Press of Harvard University Press.

Key, V.O. 1964. *Politics, Parties, and Pressure Groups*. 5<sup>th</sup> edition. New York: Crowell

Klarner, Carl. 2008. "Forecasting the 2008 U.S. House, Senate, and Presidential Elections at the District and State Level." *PS: Political Science and Politics*. 41(4): 723-728.

Lau, Richard R. and David P. Redlawsk. 2006. *How Voters Decide: Information Processing during Election Campaigns*. New York, NY: Cambridge University Press.

Lewis-Beck, Michael S., William G. Jacoby, Helmut Norpoth, Herbert F. Weisberg. 2008. *The American Voter Revisited*. Ann Arbor: University of Michigan Press.

Lewis-Beck, Michael S. and Charles Tien. 2008. "Forecasting presidential elections: When to change the model." *International Journal of Forecasting*. 24: 227 – 236.

Lewis-Beck, Michael S. and Charles Tien. 2008. "The Job of the President and the Jobs Model Forecast: Obama for '08?" *PS: Political Science and Politics*. 41(4): 687-690.

Lewis-Beck, Michael S. and Tom W. Rice. 1992. *Forecasting Elections*. Washington D.C.: Congressional Quarterly, Inc.

Lewis-Beck, Michael S. 1988. *Economics and Elections: The Major Western Democracies*. Ann Arbor: University of Michigan Press.

Lichtman, Allan J. 2008. "The keys to the white house: An index forecast for 2008." *International Journal of Forecasting*. 24: 301-309.

Lockerbie, Brad. 2008. "Election Forecasting: The Future of the Presidency and the House." *PS: Political Science and Politics*. 41(4): 713-716.

Mayer, William G. 2008. *The Swing Voter in American Politics*. Washington D.C.: Brookings Institution Press.

Nicholson, Stephen P. 2005. *Voting the agenda: Candidates, elections, and ballot*. Princeton, New Jersey: Princeton University Press.

Rosenstone, 1983. *Forecasting Presidential Elections*. New Haven: Yale University Press.

Sidman, Andrew H., Maxwell Mak, and Matthew J. Lebo. 2008. "Forecasting non-incumbent presidential elections: Lessons learned from the 2000 election." *International Journal of Forecasting*. 24: 237 – 258.

Shaw, Daron. 2006. *The Race to 270: The Electoral College and the campaign strategies of 2000 and 2004*. Chicago: The University of Chicago Press.

Shaw, Daron. 1999a. "The Methods behind the Madness: Presidential Electoral College Strategies, 1988 – 1996." *Journal of Politics*. 61(4): 893-913.

Shaw, Daron. 1999b. "The Effect of TV Ads and Candidate Appearances on Statewide Presidential Votes, 1988 – 1996." *American Political Science Review*. 93(2): 345-361.

Wolak, Jennifer. 2006. "The Consequences of Presidential Battleground Strategies for Citizen Engagement." *Political Research Quarterly*. 59(3): 353-361.