# When Winning Means Losing: Economic Managers and Economic Perceptions

Soren Jordan and Clayton McLaughlin Webb\*

April 13, 2014

#### Abstract

It is well established that economic conditions, or, more precisely, economic perceptions, play a large role in determining votes in elections. Yet that literature treats economic conditions as exogenous to elections and vice versa. There is strong reason to believe that this is incorrect. Specifically, we test whether pro-market challengers can affect economic conditions (and subsequently perceptions) through their viability in the election contests by inducing market forces to positively speculate on future returns under a pro-business administration. We find no such effect. In so doing, though, we find an interesting, seemingly counterintuitive market preference: markets seem to prefer incumbents to challengers, even when the challenger would lead to more ostensibly pro-market policies. This effect is robust across markets.

<sup>\*</sup>PhD Candidates, Department of Political Science, Texas A&M University, contact author email: sorenjor-dan@pols.tamu.edu.

## Introduction

October of 2012 seemed like a fantastic month for Republican nominee Mitt Romney. Especially after the first debate, in which he was able to emphasize his credentials as an economic manager (Dutton et al. 2012), his polling numbers pulled him to within a virtual tie with incumbent President Barack Obama, who had previously enjoyed a wide lead in polling through virtually all of the contest. Yet, of course, it was not enough, as Obama clinched a second term by a wide margin, 332 electoral votes to 206.

Yet what if Romney's stellar October actually contributed further to his *demise* at the polls in early November? What if the secondary effect of his surge in the polls—the subsequent speculation on election outcomes by investors—actually engineered a response in the electorate that ultimately hurt his election chances?

In this study we explore a heretofore unimagined role that markets might play in both responding to presidential election cycles and influencing individual economic perceptions in real time through the election cycle. Our theory predicts that, under certain circumstance, challengers might actually *harm* their electoral fortunes by performing better, relative to incumbents. Specifically, if pro-market challengers begin to poll well, relative to pro-regulatory incumbents, they might induce positive speculative market behavior. This positive speculative behavior could be seen as an increase in positive economic conditions by voters. Ironically, though, individuals attribute conditions to sitting *incumbents*, meaning that challenger gains might ultimately ruin their electoral fortunes. We discuss and test these conditions below.

#### Literature Review

Two well established arguments are critical to our argument: that individuals use economic conditions to form their vote choice, and that markets respond to political events. The first is firmly established. A principal driver in elections is economic voting (Duch and Stevenson 2008). The specific timeline of economic conditions individuals use is not particularly well defined. Some argue for a immediacy effect (like Abramowitz 2008), while others assume that

individuals take a longer view (Hibbs 2000). Moreover, the functional form of individual weights on economic conditions is also unclear (Wlezien 2014). Other factors condition economic voting, such as clarity of responsibility (Powell and Whitten 1993), but they tend to matter more cross-nationally than in the American context.

Something that is increasingly clear, however, is that individuals respond less to actual economic conditions as much as their perceptions of those conditions. This is important because individual perceptions might lag (considerably) behind actual changing conditions, due to inattention or misreporting by news agencies or other sources (Hetherington 1996). Overall, then, it is important to account for perceptions over actual conditions, though we expect that the two are related (that is, perceptions are related to actual conditions, though maybe not immediately).

The second is that markets respond to political events. It is well known that markets respond to political events, such as policy announcements (Pástor and Veronesi 2012). Moreover, they respond remarkably efficiently, processing information in a matter of minutes. Recall the fake White House Twitter hack in 2013: stocks dipped 128 points in a matter of seconds on news that a bombing had occurred, only to recover within the hour after the news was revealed to be false (Belton and Shell 2013).

To be clear, we do not argue that all component investors within a market behave in a strictly rational way. Instead, we argue that, on average, the market is an institution that efficiently and swiftly processes available information in a rational way, as an institution.

The gap in the literature is that our current understanding of economic voting assumes that individual perceptions are fixed before the election cycle begins. Individuals decide if the economy performed well or poorly under the incumbent and vote accordingly, but they do not account for changing economic conditions during the election cycle itself. This might have been plausible before, when economic conditions changed sluggishly. But the emergence of the market as a rational actor that processes political news with remarkable efficiency upends this conventional wisdom. Before, individuals might have made judgement

calls on economic performance before the election cycle because of a lack of economic data during the election (that is, economic reports like unemployment were only available monthly or even quarterly). Yet the market serves as a plausible mechanism by which individuals can update their perceptions in real time as the election unfolds.

We explore this new opportunity. In the next section, we theorize on what an active market, responsive to political events (including election campaigns) means for individual perceptions. Ultimately, this theory generates counterintuitive predictions for successful challengers under specific conditions. We turn to that theory in the next section.

# Theory

To reiterate: we seek to provide a theory linking ongoing economic conditions and perceptions to electoral cycle. Specifically, we identify one particular institution—investment markets—that should both actively respond to presidential election cycles and provide a means by which individuals can update their economic perceptions. First, we discuss the process by which markets should respond to electoral conditions. Second, we outline the way in which individuals should react to markets. Third, we generate predictions on the ultimate impact this behavior should have on the election.

Rationally, investors should speculate with regards to the relative market policies of the two candidates. Specifically, investors should approve of (and speculate positively on) promarket candidates over regulatory candidates, anticipating positive market returns under that administration's economic policy. A brief discussion of the relative economic reputations of Romney and Obama, respectively, is in order.

The portrait of Romney was as a capable economic manager with strong business acumen. Fueled by a strong track record at Bain Capital and the financial turnaround of the 2002 Winter Olympics, along with the traditional perception of Republican candidates as probusiness (Miller and Schofield 2003), Romney carried a strong latent perception as the more pro-market candidate. Election pundits echoed these perceptions. Dorsey Farr, co-founder of

The economy really needs a shot in the arm and that's going to take new leadership and some new policies. The market will do better with a president who understands business, appreciates the virtues of capitalism, and demonstrates a willingness and ability to work with Congress to lead on these tough issues.<sup>1</sup>

Obama, on the other hand, was consistently a candidate of market regulation and greater taxation. Whereas Romney sought an exemption of capital gains from taxation for individuals making up to \$100,000, Obama actively campaigned on using capital gains taxes as a lever for social equality, including increasing the top rate of tax on capital gains to 20% (Sahadi 2012). He also advocated policies such as an increase in the minimum wage, a move seen by a majority of small business owners as harmful to business owners and leading to reductions in their workforces (Dugan 2013). And, as a sitting incumbent, Obama increased taxes, especially on the most wealthy, as a provision of the enactment of the Affordable Care Act.

Ostensibly, then, 2012 offers a clear and easy choice for investors. The sitting incumbent is relatively more pro-taxation, especially of capital gains, relatively more pro-regulation, and relatively more pro-economic equality than the pro-business background, pro-investment challenger. Accordingly, as the likelihood of the challenger winning the election increases, markets should respond with positive speculative behavior, driving up market returns. Formally, then, we offer Hypothesis 1:

 $H_1$ : As the likelihood of a pro-market challenger winning an election increases, positive speculative market behavior should increase.

In sum, then, well performing pro-market challengers should increase market returns through positive speculation.

This speculation should not be without impact. Specifically, individuals should observe positive speculation (and rises in market gains) as an net positive increase in economic conditions. That is, increasing returns on investments in major markets should plausibly

<sup>&</sup>lt;sup>1</sup>As quoted in Yousuf (2012).

cause individuals to perceive the economy as doing better. The stock market is relatively easy to interpret (higher indexes mean better performance), and market numbers are widely reported on cable news as well as local and national news broadcasts. Thus, we introduce Hypothesis 2:

 $H_2$ : As positive speculative market behavior increases, individual perceptions of economic conditions should become more positive.

Individuals should be able to make relatively simple link that widely reported gains in markets are equated to increasing economic conditions.

We return to what this increase in perceptions means for the election cycle. Recall the essence of economic voting outlined above, in which individuals reward or punish incumbents for perceived economic conditions, especially recent conditions. Logically, then, individuals will reward or punish Obama on the basis of their shifting economic perceptions over the course of the election cycle. Our argument, however, is that markets speculate on the relative pro-market nature of the candidates. In our specific example, this speculation is caused by a pro-market challenger. Positive speculation is interpreted by individuals as an increase in economic conditions. Ironically, however, even if this increase in perceptions is caused by gains by a challenger, individual attribute economic perceptions to the incumbent. Thus, we introduce Hypothesis 3:

 $H_3$ : As individual perceptions of economic conditions become more positive, even if caused by a challenger, individuals should be more likely to vote for the incumbent.

When pro-market challengers become more likely to win elections, they induce positive economic activity that voters associate with incumbents. Thus, "winning" at the polls truly means "losing," in terms of the challenger's ultimate likelihood of winning the election.

This counterintuitive argument greatly changes our understanding of elections. Typically, we think that individuals have a set perception of the economy before the election cycle even starts and use that perception to form their vote choice. Our argument, however, revises this wisdom to allow perceptions to be shaped by the market behavior during the election

cycle itself. Most interestingly, however, we note that something challengers typically like—performing well during election polling—might decrease their actual likelihood of winning the election as a result of market activity, if they are relatively more pro-market than the sitting incumbent. We test this argument below.

#### Data and Methods

The theory outlined above describes three distinct variables needed to test the theory: the relative polling of the incumbent to the challenger, market activity, and individual perceptions of economic conditions. The relative candidate data come from 140 administrations of questions concerning individual relative likelihood of voting for Barack Obama or Mitt Romney, gathered beginning on May 29, 2012 (when Romney clinched the Republican nomination). Since the polls were fielded inconsistently by day, we created a daily series by running the series through the dynamic smoother WCALC. The final variable, *Obama to Romney*, is the ratio of the percent of voters likely to vote for Obama to the percent likely to vote for Romney. Values greater than one indicate Obama is relatively more likely to win the election. *Economic Manager* is similarly a WCALC series of 84 survey items asking individuals to rate whether Obama or Romney is better positioned to handle economic issues. The complete list of survey items is in the Appendix.

Daily Returns measures the daily returns across each of the major markets: the Dow Jones Industrial Average (DOW), NASDAQ, and the S&P 500. We restricted the sample to days on which the markets were open, which includes all weekdays except September 4th (Labor Day) and October 29th and 30th (on which the market was closed due to Hurricane Sandy). The resulting data for analysis is a daily series of 115 observations for all market open days from May 29, 2012 to November 8, 2012. Economic Perceptions come from Gallup's Economic Confidence Index.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>This index is itself a combination of two economic perception questions: the first asking individuals to rate conditions in this country today, the other asking if conditions are on the whole getting better, worse, or staying the same.

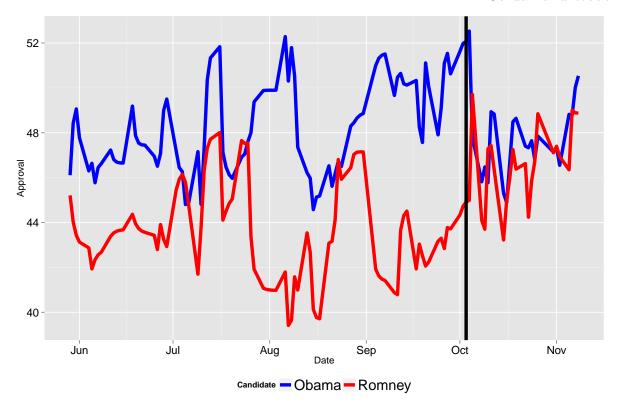


Figure 1: Relative Polling for Obama and Romney.

Figure 1 illustrates the polling numbers for Obama and Romney, the components of *Obama to Romney*, over the course of the election cycle. Note that Obama retains a distinct advantage over Romney for almost the entire cycle until the first presidential debate, illustrated with a vertical bar. After the first debate, which so happened to be on economic issues, Romney's polling relative to Obama skyrocketed, narrowing the gap to virtually nothing.<sup>3</sup>

Figure 2 illustrates the components of *Economic Manager*. Though these perceptions are not directly modeled, the data provide anecdotal evidence for a key component of the theory: Romney was widely perceived as a more competent economic manager than Obama. Perceptions as an economic manager might be noisy, meaning that there is no concrete way to determine exactly what leads an individual to evaluate a candidate as a strong "economic manager." The only claim we make, however, is that the popular perception during the

<sup>&</sup>lt;sup>3</sup>Uncommitted voters found Romney the winner of the first debate over Obama by a margin of two-to-one (Dutton et al. 2012).

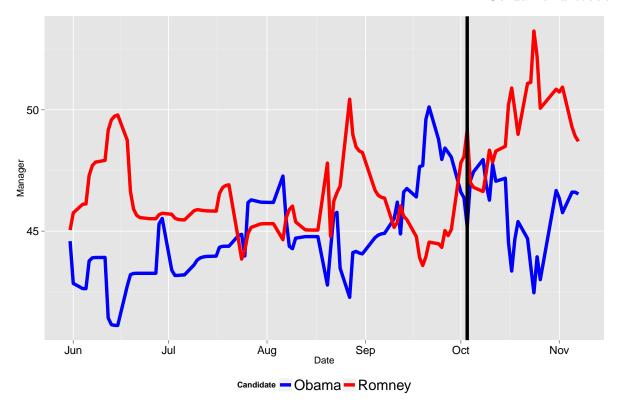


Figure 2: Perceptions as Economic Managers for Obama and Romney.

election cycle was that Romney was more perceived as more economically competent than Obama.

We now turn to modeling. Our theory explicitly assumes that none of these measures is exogenous to one another; rather, poll trends influence markets, which in turn influence perceptions, which in turn influence poll trends. Vector auto-regression (VAR) is exceptionally well equipped to handle such endogeneity. VAR analysis treats each variable in the system symmetrically. Unlike conventional regression techniques, VAR allows for two way relationships among the variables, includes strong controls for history, and affords the analyst the ability to track the temporal dynamics of the relationships through time. The variables of interest are organized as a system of equations where each variable is regressed on multiple lagged values of itself and multiple lagged values of the other variables in the system. We test our hypotheses with a three-variable (Obama to Romney, Daily Returns, and Economic Perceptions) VAR with four lags, as determined by likelihood ratio tests.

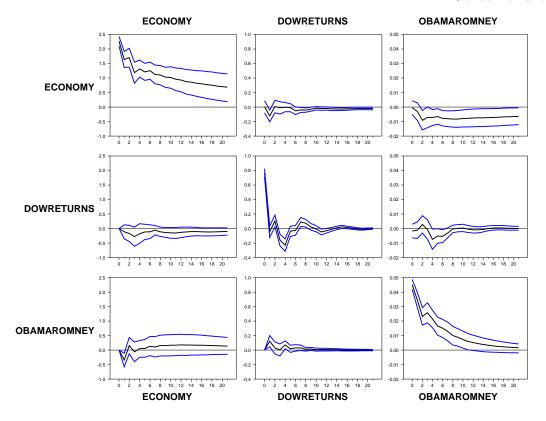


Figure 3: VAR Impulse Response Function.

#### Results

By its nature, VAR produces an unruly amount of output when estimating a system. An especially useful way to summarize this output is through impulse response functions.<sup>4</sup> Impulse response functions trace the responses to all variables in the system to a shock in a single variable. The variable being shocked runs along the y-axis, the variable responding

<sup>&</sup>lt;sup>4</sup>Each endogenous variable in the system can be shocked mathematically to produce a response in the other variables in the system. The responses to these simulated shocks take into account feedback across variables that can either suppress or accentuate the relationships. Plots of the resulting innovations—called impulse response functions (IRFs)—allow one to observe the behavior of the system through time. If two variables are related, a shock in one variable will cause an observable change in the other. In this study, confidence intervals for the MAR simulations are calculated using Monte Carlo integration and the fractile method recommended by Sims and Zha (1999). A feature that distinguishes VAR from other time series methods that warrants special attention concerns the issue of whether the variables in a VAR need to be stationary. Many, econometricians recommend against differencing even if a variable contains a unit root (Enders 1996; Sims 1980; Sims, Sock, and Watson 1990). The goal of a VAR analysis is to determine the interrelationships among the variables, not determine specific parameter estimates (Enders 2004). Differencing produces no gain in asymptotic efficiency in an autoregression, and throws away important information (Doan 2007; Fuller 1996). Similarly, the data should not be detrended. Enders (2004) notes that the "majority view" is that the form of the variables in the VAR should mimic the true data generating process.

along the x-axis. Thus, the diagonal is the variable responding to a shock in itself. Figure 3 depicts the impulse response function for the three-variable VAR described above.<sup>5</sup> The matrix offers a visual representation of how the system responds to changes in each of the endogenous variables of interest. The plots show the immediate and long-term effects of these changes and afford us the opportunity to track direct and indirect relationships among the variables. The variables being shocked are displayed along the diagonal. The plots in each row show how the other variables respond to a one standard error of regression increase in the variable being shocked. Confidence intervals are calculated for the responses. Responses are "significant" as long as these confidence intervals do not include zero. Zero is represented by the horizontal line in each of the plots. A response above the zero line denotes a positive effect. A response below the zero line denotes a negative effect.

The theory does not fare well.  $H_1$  predicts that a shock in *Obama to Romney* would lead to a negative decrease in *Daily Returns*. Observe in the third row, second panel, however, the exact opposite. Increases in Obama's polling, relative to Romney, are associated with positive increases in market returns. These increases are remarkably swift, decaying completely after a single period, indicating that the market efficiently processes polling data. But it does so in a manner opposite of our theory.

 $H_2$  predicts that increases in  $Daily\ Returns$  lead to increases in  $Economic\ Perceptions$ . The second row, first panel, depicting responses in perceptions to shifts in daily returns. There is no effect to observe. Individual perceptions of economic conditions seem wholly unrelated to daily returns in major markets.  $H_3$  predicts that increases in perceptions affect polling numbers, as individuals reward incumbents with economic voting. Observe in the first row, third panel, however, that this also seems unfounded. Perceptions, if anything, are negatively related to Obama's edge over Romney.

All three of our hypotheses receive no empirical support. There are pragmatic reasons why this might be the case, however. The main is that we might not accurately be capturing

<sup>&</sup>lt;sup>5</sup>We illustrate with the DOW, but the results are robust across all markets.

the timeframe in which voters update their perceptions of the economy. Our data are daily, and research suggests that individuals are not remarkably attentive to either the economy or to politics, so they might only update their perceptions of those events weekly or even monthly (Enns and Kellstedt 2008). On a very related note, it could be that our indicator of economic perceptions is too noisy. Quarterly indicators of economic performance, such as unemployment, are widely reported and salient for individual perceptions. Attempting to capture perceptions on a daily basis, then, might not be pragmatic.<sup>6</sup>

A more interesting explanation for our null findings is that the market might not be processing polling information in the way in which we theorized. That is, markets might not process electoral gains for the challenger as "good news." An alternative perspective is that markets have a preference for stability and uncertainty over all else (for instance Zhang 2006). Even if gains might be realized under different policy, markets would prefer instead to have less uncertainty over future policy. In our election scenario, even if a challenger is likely to offer more "pro-market" policies, investors prefer a continuation of a regime under which they are much more certain of the policies they are going to receive. Formally, we introduce Hypothesis 4:

 $H_4$ : As the likelihood of the incumbent winning the election increases, positive market speculation should increase.

We explore this alternative hypothesis—that markets prefer stability over uncertainty (that is, incumbents over challengers)—with auto-regressive distributed lag (ADL) models. Specifically, we model *Daily Returns* as a function of lagged returns (retaining the four-period lag estimated earlier), *Obama to Romney*, and a constant.

Table 1 provides the coefficient estimates. In this context, the coefficient on *Obama to Romney* is the immediate effect of a one-unit shift in the polling ratio on *Daily Returns*, and the coefficient on the lagged dependent variable is the requilibriating effect (the rate of decay of that one-unit shift in polling). The effects are much more useful when viewed graphically,

<sup>&</sup>lt;sup>6</sup>This perspective is also support by our seemingly bizarre finding that perceptions are negatively related to incumbent support, which runs contra to a longstanding corpus of literature on economic voting.

Table 1: ADL Model of DOW Returns

Variable	Coefficient	Standard Error
Lagged Returns	-0.291	$(0.091)^*$
Obama to Romney	1.879	$(0.916)^*$
Constant	-1.992	$(1.004)^*$
Adjusted $R^2$	0.1024	

Dependent variable is DOW returns

Four period lag determined by likelihood ratio

p < 0.05

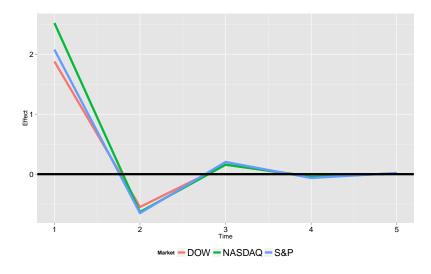


Figure 4: ADL Model: All Markets.

which we turn to next, but note first that the coefficient on *Obama to Romney* is positive and significant, suggesting that increases in the incumbent's probability of winning the election are positively related to market returns. Note also that the coefficient on lagged returns is negative, which means that the effect will oscillate over time (markets "correct" for excessive behavior in the positive direction with negative returns in the second time period).

Figure 4 graphically illustrates the effects for all three major markets (the coefficient estimates for the other two are available in the Appendix). Note first that this pro-incumbent effect is robust across all markets, providing strong support for the hypothesis. Note also that markets absorb polling information very quickly: the immediate (same day) effect of an increase in polls leads to a large and statistically significant increase in positive speculative

behavior. Any "excessive" positive behavior is quickly corrected by the second day. All effects beyond the second time period are insignificant, both substantively and statistically.

Our evidence, then, uncovers new evidence for a different type of market preference. Markets and their component investors seem to prefer much more a continuation of uncertainty, even if that uncertainty comes at the cost of potentially pro-market policies by a challenger.

### Conclusion

Our evidence is decidedly against the original theory, but we still uncover interesting patterns of market reactions to electoral cycles. First, the linkage between market returns and economic perceptions is completely void. Perhaps because they do not update their perceptions as often, or perhaps because they do not see markets as a reliable economic indicator from which to form economic perceptions, individuals just do not link market returns to their perceptions. In this case, traditional wisdom that individuals make economic evaluations on which to base their vote choice before the election cycle begins cannot be rejected.

Nor do markets behave as we initially supposed. Even though Romney was ostensibly the clearly more pro-market candidate, markets decidedly reacted negatively to his net gains in the polls. This is particularly demonstrative, as the sitting incumbent was ostensibly transparently pro-regulation.

But markets do have a clear, consistent pattern of behavior: they prefer incumbents. Even if the incumbent is relatively more pro-regulation than the challenger, markets would rather see a continuation of consistent policies than gamble on the uncertainty of a completely new administration. This effect is robust across markets.

Future research should continue to examine this effect. Unfortunately, appropriate data are rarely available. The theory requires that there is an incumbent to prefer (that is, that one of the two candidates offers the relative elimination of uncertainty). It also requires modern market institutions, which react swiftly and decidedly to political news and information. The latter largely rules out past elections; the former indicates that it will be at least two

election cycles before we can test the theory again. In the meantime, however, we have robust evidence that markets prefer certainty, even if that certainty comes at the price of a pro-market administration.

# References

- Abramowitz, Alan I. 2008. "Forecasting the 2008 Presidential Election with the Time-for-Change Model." PS: Political Science and Politics 41 (4): 691–695.
- Belton, Beth, and Adam Shell. 2013. "Stocks Plunge, Recover After Fake Tweet.". [Online; posted 23-April-2013].
  - **URL:** http://www.usatoday.com/story/money/markets/2013/04/23/stocks-tuesday-4-23/2105579/?AID=10709313&PID=6154686&SID=4r27ip5lp96e
- Duch, Raymond M., and Randolph T. Stevenson. 2008. The Economic Vote: How Political and Economic Institutions Condition Election Results. Cambridge: Cambridge University Press.
- Dugan, Andrew. 2013. "U.S. Small-Business Owners Split on Raising Minimum Wage.". [Online; posted 22-November-2013].
  - $\textbf{URL:} \ \ http://www.gallup.com/poll/165995/small-business-owners-split-raising-minimum-wage.aspx$
- Dutton, Sarah, Jennifer De Pinto, Anthony Salvanto, Fred Backus, and Lindsey Boerma. 2012. "Poll: Uncommitted Voters Say Romney Wins Debate.". [Online; posted 14-December-2012].
  - $\mathbf{URL:}\ www.cbsnews.com/news/poll-uncommitted-voters-say-romney-wins-debate$
- Enns, Peter K., and Paul M. Kellstedt. 2008. "Policy Mood and Political Sophistication: Why Everybody Moves Mood." *British Journal of Political Science* 38 (3): 433–454.
- Hetherington, Marc J. 1996. "The Media's Role in Forming Voters' National Economic Evaluations in 1992." American Journal of Political Science 40 (2): 372–395.
- Hibbs, Douglas A. 2000. "Bread and Peace Voting in U.S. Presidential Elections." *Public Choice* 104 (1-2): 149–180.
- Miller, Gary, and Norman Schofield. 2003. "Activists and Partisan Realignment in the United States." American Political Science Review 97 (2): 245–260.
- Pástor, Ľuboš, and Pietro Veronesi. 2012. "Uncertainty about Government Policy and Stock Prices." *The Journal of Finance* 67 (4): 1219–1264.
- Powell Jr., G. Bingham, and Guy D. Whitten. 1993. "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context." *American Journal of Political Science* 37 (2): 391–414.
- Sahadi, Jeanne. 2012. "Obama vs. Romney on Taxes.". [Online; posted 5-July-2012]. URL: http://money.cnn.com/2012/07/05/news/economy/obama-romney-taxes
- Wlezien, Christopher. 2014. "The Myopic Voter? On the Impact of Economic Conditions in US Presidential Elections." Presented at the Conference on Methodological Innovations in the Study of Elections in Europe and Beyond, College Station, TX.

Jordan and Webb 16

Yousuf, Hibah. 2012. "Wall Street Overwhelmingly Backs Romney.". [Online; posted 6-November-2012].

URL: http://money.cnn.com/2012/11/06/investing/stocks-election-obama-romney/

Zhang, X. Frank. 2006. "Information Uncertainty and Stock Returns." *The Journal of Finance* 61 (1): 105–137.

# Appendix

#### Table 2: List of Surveys Items Included in Each Measure

Obama to Romnes

Economic Manager

USGALLUP.12TR0529 USORC.060112A.R01 USGALLUP.12TR0601.Q02A USASFOX.060712.R03 USMONM.060712.R01 USTIPP.061112.R01 USGALLUP.12JNE007.R01A USIPSOSR.061212R.R.04 USPSRA.201206POL.Q10 USPSRA.062112.R10AUSWG.12JUN16.R41 USAP.062112G.R07 USSELZER.062012B.R21 USNBCWSJ.12JUN.R11 USASFOX.062712B.R03 USGALLUP.2012TR0625.Q04A USGREEN.12DCJUN.R39 USORC.070212A.R01 USTIPP.070612.R01 USQUINN.071112.R02 USABCWP.071012.R02 USZOGBY.070912WT.R01 USPSRA.071212.R10B USIPSOSR.071012R.R06USGALLUP.12TR0709.Q03 USMARIST.071612M.R1 USAYRES.12HLTCOUR.R13 USCBSNYT.071812.R08 USASFOX.071812.R02 USNBCWSJ.12JUL.R09 USGALLUP.201210.Q01A USGREEN.12DCJUL31.R31 USPSRA.080212A.RD02A USSSRS.12KAISWP2.R43 USIPSOSR.080812R.R05 USPSRA 042513I RD02 USASFOX.081012.R02 USORC.080912A.R01 USTARR.12BATT3.R10 USTIPP.081112.R01 USGALLUP.2012TR0806.Q06 USPRRI.12CLASS.R05 USMONM.082012.R01 USNBCWSJ.12AUG.R11 USAP.082212G.R06 USASFOX.082312.R03 USAYRES.12RESREPAUG.R21 USGALLUP.201212.Q02A USWG.12AUG22.R44 USORC 082412 R01 USABCWP.082712.R02 USCBS.082812.R03 USGREEN.12DCSEP.R28 USGALLUP.12TR0831.Q07 USORC.090412.R01 USGALLUP.12TR0907.Q03 USTIPP.091012.R01 USGALLUP.12SEP06.R01A USORC.091012.R01 USABCWP.091112.R03 USLANGER.12EYELEC2.R02 USIPSOSR.091212R.R04 USAP.102712G.R12A USASFOX.091212.R03 USCBSNYT.091412.R04 USGREEN.12DCSEP14.R30 USWG.12SEP24.R38 USPSRA.091912.R05 USNBCWSJ.12SEP.R09 USMONM.091712.R01

USAP.091912G.R09 USREASON.12SEP.R08 USGALLUP.2012TR0911.Q04 USUCONN.092012.R01 USGALLUP.2012TR0918.Q04 USFTI.100312.R03 USTARR.12BATT4.R09 USSELZER.092612B.R19 USASFOX.092712.R03 USTARR.12BRUSH1.R07 USGALLUP.201214.Q02A USPRRI.12VALUES.R06 USQUINN.100212.R01 USGREEN.12DCOCT03.R29 USNBCWSJ.12SEPA.R12 USORC.100112.R01 USTARR.12BRUSH2.R07 USGALLUP.12TR1004.QP02 USPSRA.100812.R05B USZOGBY.100812.R03 USASFOX.101012A.R03 USWG.12OCT08.R41 USMONM.101112.R01 USTARR.12BATT5.R12 USABCWP.101512.R04 USGALLUP.2012TR1013.QP02 USUCONN.101912.R01 USGALLUP.12TR1015.QP02 USTARR.12BRUSH3.R07 USGALLUP.12TR1017.QP02 USCBS.102212A.R04 USNBCWSJ.12OCT.R13 USABCWP.102212.R04 USGREEN.12DCOCT22.R25 USMONM.102212.R01 USABCWP.102312.R04 USORC.2012015.Q01 USAP.102612G.R09A USABCWP.102412.R03 USGALLUP.12TR1022.QP02 USABCWP.102512.R03 USGALLUP.2012TR1023.QP02 USTARR.12BRUSH4.R07 USABCWP.102612.R03 USAYRES.12RESREPOCT.R21 USABCWP.102812.R03 USABCWP.102912.R03 USPSRA.102912.R05 USCBSNYT.103012.R05 USABCWP.102912A.R03 USGALLUP.12TR1027.QP02 USABCWP.103012.R03 USABCWP.103112.R03 USASFOX.103112A.R03 USABCWP.110112.R03 USTARR.12BRUSH5.R07 USABCWP.110212.R03 USABCWP.110412.R03 USPSRA.110412.R05B USABCWP.110412A.R03 USNBCWSJ.12NOV.R08 USGREEN.12DCNOV.R28 USMONM.110512.R01 USABCWP.110512.R03 USORC.110412.R01 USTARR.12BRUSH6.R07 USWG.12NOV06.R27 USGREEN.12DCNOV09.R26 USGREEN.12DCNOV09A.R043 USAYRES.12RESREPNOV.R01

USORC.060112A.R11 USASFOX.060712.R24 USIPSOSR.061212R.R05B USPSRA.062112.R31A USAP.062112G.R11A USSELZER.062012B.R26 USSELZER.062012B.R34 USGREEN.12DCJUN.R46 USORC.070312.R07A USQUINN.071112.R21 USABCWP.071012.R13E USABCWP.071012.R11A USPSRA.071212.R18AF1 USMARIST.071612M.R5 USCBSNYT.071812.R36 USGALLUP.201210.Q10A USGREEN.12DCJUL31.R39 USIPSOSR.080812R.R06B USASFOX.081012.R.12 USTARR.12BATT3.R19A USMONM.082012.R06 USAP.082212G.R11A USASFOX.082312.R04 USGALLUP.12AUG20.R12A USORC.082612A.R07A USABCWP.082712.R10A USCBS.082812.R46 USGREEN.12DCSEP.R36 USORC.090412.R05A USORC.091012.R11A USABCWP.091112.R12A USIPSOSR.091212R.R05B USASFOX.091212.R11 USGREEN.12DCSEP14.R38 USCBSNYT.091412.R42 USMONM 091712 R06 USAP.091912G.R20A USFTI.100312.R13 USTARR.12BATT4.R20 USSELZER.092612B.R36 USASFOX.092712.R24 USTARR.12BRUSH1.R10 USGALLUP.12SET24.R13A USABCWP.100112.R10A USQUINN.100212.R13 USGREEN.12DCOCT09.R60 USORC.100112.R09A USORC.100312.R06A USTARR.12BRUSH2.R10 USASFOX 101012A B23 USMONM.101112.R04 USTARR.12BATT5.R20 USORC.101612.R04A USTARR.12BRUSH3.R10 USCBS.102212A.R26 USABCWP.102212.R10A USGREEN.12DCOCT22.R46 USMONM.102212.R06 USABCWP.102312.R08 USAP.102612G.R15A USABCWP.102412.R12 USABCWP.102512.R12A USABCWP.102612.R12 USTARR.12BRUSH4.R10 USAYRES.12RESREPOCT.R27 USABCWP.102812.R12A USABCWP.102812.R13D USABCWP.102912.R12A USCBSNYT.103012.R33 USABCWP.102912A.R12A

USABCWP.103012.R12A USABCWP.103112.R12A USASFOX.103112A.R22 USASFOX.103112A.R22 USABCWP.110112.R12A USTARR.12BRUSH5.R10 USABCWP.110412.R12A USABCWP.110412A.R12A USABCWP.110412A.R12A USABCWP.110512.R12A USABCWP.110512.R12A USABCWP.110512.R12A USABCWP.110512.R12A USABCWP.110512.R104 USTARR.12BRUSH6.R10 USGREEN.12DCNOV09.R31 USGREEN.12DCNOV13A.R051

Table 3: ADL Model of S&P Returns

Variable	Coefficient	Standard Error
Lagged Returns	-0.313	$(0.089)^*$
Obama to Romney	2.076	$(0.961)^*$
Constant	-2.185	$(1.053)^*$
Adjusted $R^2$	0.1238	

Dependent variable is S&P returns

Four period lag determined by likelihood ratio

Table 4: ADL Model of NASDAQ Returns

Variable	Coefficient	Standard Error
Lagged Returns	-0.250	$(0.091)^*$
Obama to Romney	2.520	$(1.133)^*$
Constant	-2.703	$(1.242)^*$
Adjusted $R^2$	0.0899	

Dependent variable is NASDAQ returns

Four period lag determined by likelihood ratio

p < 0.05

 $<sup>^*</sup>p<0.05$