ARTICLES

Early Primaries, Viability and Changing Preferences for Presidential Candidates

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Given the fluid context of primaries and observed swings in national polls, many Democratic voters likely switched candidate support over the course of the 2008 primary campaign. We examine how perceptions of early caucus and primary outcomes subsequently affected voter choice and candidate momentum. Although the 2008 calendar left many voters with a brief window to assess candidates, it nonetheless allowed a non–front-runner to benefit from momentum and win the Democratic nomination. This article employs a panel study of voters surveyed at two time points during the nomination contest to assess individual-level change in candidate support. Results from the earlier states sent signals about candidate viability to people who had not yet voted. We find that voters deciding after results were in from early states changed their perceptions of candidate viability and that this changed whom they intended to support. We conclude that momentum remains an important factor in presidential nominations.

The 2008 election witnessed many states pushing their presidential primary dates earlier than ever. By the end of February 2008, 38 states had already held caucuses and primaries, up from only two, Iowa and New Hampshire, that voted by March 1, 1976.

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AUTHORS' NOTE: Partial funding for this project was provided by the Western Washington University Office of Research and Sponsored Programs as well as the University of Washington Institute for the Study of Ethnicity, Race, and Sexuality. We received helpful feedback on an earlier version of this article from Caroline Tolbert, Christopher Parker, and Francisco Pedraza, from which we benefited greatly.

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Yet despite front-loading in 2008, the contest was especially protracted on the Democratic side. Given the fluid context of primaries and observed swings in national polls, many Democratic voters likely switched candidate support over the course of the 2008 primary campaign. In this article, we examine how perceptions of early state outcomes affected voter choice and candidate momentum. Early wins may have sent signals to voters about candidate viability, an important cue for some people. Although early primaries of 2008 left many voters with a relatively brief window to assess candidates, the calendar nonetheless allowed a non–front-runner candidate to benefit from momentum and win the Democratic nomination. But what are the dynamics of such a process?

Prominent observers of U.S. presidential nomination politics suggest that front-loading should advantage early front-runners and mute a non–front-runner's chance of building momentum from an early win (e.g., Polsby and Wildavsky 2008, 108; Wayne 2008, 121). At the outset of the 2008 Democratic contest Hillary Clinton led a crowded pre-Iowa field in opinion polls for over a year, and she had a 20 percentage point lead in national polls taken immediately prior to the 2008 Iowa caucus.[1] That soon transitioned into an exceptionally close contest between Clinton and Barack Obama.[2] Obama and Clinton both experienced important wins in early states, with their relative strength in national polls changing, at least in part, as voters switched their support from one candidate to another. How stable were voter preferences as these contests unfolded? Do voters form and change preferences in response to outcomes in earlier states? Although cross-sectional and aggregate data have helped answer these questions, there are, surprisingly, few panel surveys of primary voters.[3] We examine individual-level proclivity to change candidate preferences during a single primary season; and we assess how this is influenced by awareness of previous state outcomes, perceptions of viability, and shifting evaluations of candidates. This process illuminates the dynamics of momentum.

The 2008 presidential primary represents a particularly interesting case to observe momentum because the campaign itself started so early. In January 2007, almost all major candidates had announced their presidential campaign and started an aggressive outreach effort to make their case with voters. Indeed, by October 2007, still 13 months before the general election, the Democratic candidates had already participated in 10 nationally televised debates, and opinion polls suggested the public was more familiar with the candidates than in any previous open-seat year (Fox News Opinion Dynamics

1. To be sure, as Aldrich (2009) and Steger (2008) have pointed out, no one variable determines the competitiveness of a primary campaign. Other variables, such as organization, fundraising, involving party activists, and elite endorsements are important as well as poll ratings. Taken together, Clinton was certainly the front-runner, but Obama's organizing and fundraising ability may have made the race closer than an examination of poll numbers a month before the Iowa primaries would have suggested.

2. The Gallup Poll conducted most immediately before Iowa had Clinton (45%) ahead of Obama (27%) and Edwards (15%). The last Pew Survey before Iowa released December 31 2007 showed Clinton (46%) ahead of Obama (26%) and Edwards (14%). The post-Iowa national Gallup Poll (January 7, 2008) found Clinton and Obama tied, while Pew's post-Iowa poll showed Clinton with a 15% lead. Most national polls showed Clinton led Obama until February 4. http://www.realclearpolitics.com (accessed March 3, 2008; no longer available).

3. Although there are panel surveys during primaries (e.g., American National Election Studies 1988, National Annenberg Election Survey 2000, none measure awareness of winners in early contests *and* perceived candidate viability at multiple time points.

Poll 2007). Despite this prolonged period to "get to know" the candidates and high name familiarity for major candidates, substantial proportions of registered voters were undecided when asked to evaluate two of the three major Democratic candidates. In mid-October 2007, 39% of registered voter respondents in a national poll could not rate John Edwards as favorable or unfavorable, and 37% could not rate Barack Obama (CBS News Poll 2007). Hillary Clinton was able to maintain at least a 20-point lead over Obama and Edwards throughout the entirety of 2007.[4] Yet in the end she fell short, we argue, owing to the momentum that Obama generated throughout a string of victories that changed his perception with voters from merely likeable, to viable.[5]

Viability and Voting in Presidential Primaries

There are key differences in models explaining voting behavior in presidential primaries and general elections. General election models often include candidate qualities, ideology, issue preferences, and most importantly, partisan identification as explanatory variables in voter decision making (Stone, Rapoport, and Abramowitz, 1992). However, unlike general elections, voters in primaries lack clear partisan—and to a lesser extent ideological—cues in determining their vote; therefore decision making may be more complex. Moreover, information about candidate policy positions in primary elections is relatively rare, leaving voter decisions somewhat of an enigma, defaulting to name recognition and personal character traits (Polsby and Wildavsky 2008).

Studies attempting to explain voting behavior in presidential primaries have investigated myriad aspects of voter decision making. Aldrich and Alvarez (1994) showed that candidate issue-stances do matter to voters during presidential primary contests in terms of vote choice. Although Wattier (1983) suggested that ideology is an important explanatory variable, many studies demonstrate that voting behavior in primaries is determined primarily by candidate preference, not ideology (based on either policies or general likeability). In her study of the 1980 presidential primary elections, Norrander (1986) found that "candidate qualities" are the most consistent and frequent correlate of who people vote for. She concluded that electability (ability to win in November) played a role in vote choice but only for states holding primaries later in the nomination calendar. Other research indeed has shown that candidate traits are the most important in determining how primary voters vote (Gopoian 1982; Marshall 1984).

Additional studies have identified the role of viability (chances of winning the nomination) and electability (chances of winning the general) as important determinants in presidential primary voting (Abramowitz 1989). Some of the research posits that, in addition to the importance of candidate evaluation, voters are concerned with being on

4. In the survey data used in this article, in October 2007, Hillary Clinton maintained a 38% to 24% vote advantage over Barack Obama, with Edwards clinching 14% of the vote.

5. In our October survey data, compared to Clinton, Obama also began with slightly lower positives and slightly higher negatives—measured via thermometer ratings—among Democratic voters.

the "winning" side and that although viability does not directly influence candidate choice, it influences perceptions of electability, which in turn strongly influences vote choice (Abramowitz 1989).[6]

Other findings suggest that voters strongly consider viability in addition to candidate preference in casting votes. Indeed, it may be that voters and donors assess candidates in terms of expectations about their prospects for winning the nomination, their prospects for being elected in November, or both (e.g., Abramowitz 1989; Abramson et al. 1992; Mutz 1995). Cross-national literature also provides systematic evidence of "strategic" or "sophisticated" voting in many multiparty (multicandidate) choice settings (for a review,, see Cox 1997). For example, we have evidence that some voters may defect from their most preferred choice and vote for a lower-ranked option if they perceive their first option has little chance of winning (Blais and Nadeau 1996; Cain 1978; Karp et al. 2002). One causal mechanism driving this is voter response to information about a candidate's electoral prospects. This can come in the form of information about a party's historic strength in an electoral district, information about candidate standing in recent opinion polls, or other sources. (Bowler and Lanoue 1992; Johnston et al. 1992).

In nomination elections, voters also utilize information from early electoral events to adjust their voting intentions in response to changes in perceptions of viability (Abramson et al. 1992; Bartels 1985). Strategic voting associated with perceptions of viability is likely to be part of a broader phenomenon referred to as momentum—the process where candidates are advantaged because they are perceived to be leading or gaining ground. Scholars are divided as to what momentum "means"—whether it reflects learning or rational or irrational behavior (Bartels 1988; Brady and Johnston 1987; Kenney and Rice 1994; Mutz 1997). That said, we expect that one important way of learning about candidate viability is mass media attention to early election results (Popkin 1991).

These studies provide evidence that factors beyond initial candidate preference—notably viability—shape primary voting decisions. However, the findings by Abramowitz et al. (1992) are only a single cross-section. This makes it difficult to know whether voters shift preferences in response to actual caucus and primary election results, whether they gravitate toward a candidate regardless of awareness of the candidate's early electoral success, or whether they simply supported the candidate from the start. We need to know whom voters supported before the first caucus (Iowa) and then examine the same voters' preferences and perceptions after the early caucuses and primaries unfolded.

Stone, Rapoport, and Abramowitz's (1992) expected utility model is especially relevant to the current analysis as a way of explaining presidential primary voting behavior—especially momentum and vote switching. This model holds that voters combine both candidate preference and likelihood of winning (in the general election) as determinants of voting behavior. In their study of 1984 Iowa Democratic caucus

6. Voters are indeed concerned about electability. Atkeson (1993) found that in-group/out-group divisions brought about by competitive primary contests tends to assuage once the primary contest moves to the general.

attendees and Iowa Democratic convention delegates, Stone, Rapoport, and Abramowitz, (1992) found that the interaction of candidate traits, qualities, and electability was the strongest predictor of candidate support.[7] This supports the expected utility model as an explanation for voting behavior in presidential primaries, which this article extends and tests in the 2008 primary season.

Stone, Rapoport, and Abramowitz (1992) review and test three contending models of candidate choice in the 1984 Democratic presidential nomination campaign in Iowa. The first model, a preference model, suggests that ideological, issue, or candidate preferences drive vote choice. The second proposes that voter preference is driven more by interpretations of the of a candidate's chance of success in winning nomination or general election campaigns. The expected utility model is essentially a combination of the first two. In the end, Stone, Rapoport, and Abramowitz (1992) find that the expected utility model best predicts candidate choice in the 1984 Democratic presidential primary contest in Iowa.

Candidate chance models also assume that voters support candidates because they think those candidates have the best chances of winning. The key to this model is that "candidate chances" are twofold; that is, a voter must consider the candidate's chances in winning the nomination campaign ("viability") as well as winning the general election ("electability"). Regarding the former, interpretations of viability may form or shift as voters receive cues from election results in other states. In considering the latter, voters may be concerned with maximizing their party's chances in November. The expected utility model is a combination of the preference and candidate choice models. Stone, Rapoport, and Abramowitz's (1992) expected utility model holds that primary voters weigh both the policies proposed and the chances each candidate has of winning the general election. In other words, this model considers a voter's preference and interest in winning.

Although illuminating, the Stone, Rapoport, and Abramowitz (1992) study has a key shortcoming. With respondents drawn only from Iowa, it is unable to capture effects of information from early contests on decisions made by people voting later in the sequence of elections (Morton and Williams, 2001). Kenney and Rice (1994) make use of panel data from the 1988 Republican contest that measures whether voters knew who won New Hampshire. They found no effects of this information on momentum, but they did not assess how the information affected perceptions of viability. Moreover, much has changed since 1984 and 1988, including greater front-loading, the Internet, and 24-hour cable news. We propose that a panel study assessing changing perceptions of viability is an appropriate method to examine the dynamics of momentum in a presidential nomination contest.[8] A panel allows us to measure individual-level opinion change over the course of the campaign, after the results are in from early, high-visibility states.

7. Traits include judgments of a candidate's leadership ability, understanding of the issues, experience, and compassion.

8. McCann's (1995) use of a panel study is informative, although he investigated a different set of questions than this study. He used the *Active Minority* panel study in three caucus states (Iowa, Michigan, and Virginia) to examine how ideology is strengthened as a result of voter activism on account of primary candidates.

Viability Theory Revisited

Our theory of preference formation in the presidential nomination process assumes many voters make decisions not only on the basis of candidate-related and issue factors, but also based on perceptions of viability, with viability perceptions affected by events in early states. For either strategic or "bandwagon" reasons, some voters may weigh viability as an important factor when deciding whom to support (Bartels 1988). Although voter perceptions of candidates, perceptions of issue positions, and perceptions of candidate viability may all be fluid over the months of the nomination process, we expect that perceptions of viability may be particularly critical in affecting preferences for candidates.

It is especially important to observe these relationships in a context where voters have access to information about candidate performance in early contests. This is particularly relevant in primary seasons that include a front-loaded calendar and hence an earlier start to the campaigning. Some candidates become household names well before the first primary or caucus is held, and voters may perceive them to be viable (Dowdle, Adkins, and Steger 2009). However, with many candidates, voters may have no firm basis for evaluating viability. We assume that change in voter support for the nomination of a particular candidate is a reaction to new information that becomes available from real events occurring during the primary season (Popkin 1991). If a voter's preferred candidate does change, it is likely to be in favor of the candidate perceived to be more viable, not less. Perceptions of viability are likely to be affected by candidate performance in early contests, thus altering preferences for candidates among people deciding in states that vote later. Put differently, results in one state may fundamentally alter how the candidates are perceived in a contest held in the next state. A second important factor that previous cross-sectional research has pointed to is candidate evaluations. We agree that candidate evaluations (i.e., feeling thermometer ratings) are very likely to predict candidate support; however we assume that such evaluations of candidates are dynamic, and we have designed our study to measure this.[9] *Change* in candidate evaluations over time may be especially relevant, as this captures how voters alter their perceptions of candidates as various primary contests unfold.

We think that panel studies are a more appropriate method to study presidential primary campaign dynamics—especially momentum—as opposed to cross-sectional surveys, which is the technique employed by most previous research. Ideally, voters in a "typical" state should be interviewed before the first caucuses and primaries, and then again at some point after. This allows individual-level changes in perceptions of viability to be measured. To be sure, campaign dynamics are not static; name recognition of individual candidates can improve and front-runners are challenged. In short, a host of changes are possible after Iowa and New Hampshire vote.

We suggest that previous models may have placed too much emphasis on general electability, rather than on viability of winning the nomination. Although general election "electability" is an important consideration to some voters, primary viability

9. We also note possible issues with endogeneity, which is brought forth in the discussion section of this article.

may be a necessary first ingredient. In mid-2007, Republican Rudy Giuliani was the best-known and leading Republican contender nationally (CBS News Poll 2007), who many perceived as the most electable Republican in November 2008. However, he was not viable as a candidate in GOP primary elections. Joe Lieberman may have been in a similar position among the Democratic field in mid-2003,[10] yet he was never viable in the primaries. Thus, we place our emphasis on perceptions of viability of winning a party's nomination to predict primary vote choice. The 2008 Democratic primary campaign featured two well-positioned candidates, but one candidate (Clinton), who began as a front-runner, and another (Obama), who had to prove himself to voters before they would consider him as a serious contender.

Our study draws on panel survey data from Washington, a state that held caucuses and primaries in February. Table 1 illustrates that early polls in Washington produced results that were similar to national polls, showing Clinton far ahead of Obama three

TABLE 1
Candidate Preferences and Viability, October 07-February 08

	Oct. 07	*Jan. 08*	*Early Feb. 08*	*Late Feb. 08*
Candidate Preferences (US)	(Gallup)	(Gallup)	(Gallup)	(Gallup)
n	(500 LV)	(1021 LV)	(525 LV)	(1009 LV)
Clinton	47%	33%	44%	39%
Obama	26%	33%	47%	51%
Other	25%	24%	4%	2%
Don't Know	5%	9%	6%	7%
Who most likely to win	Oct. 07	Jan. 08		Late Feb. 08
Democratic nomination?	(CNN)	(Gallup)		(Gallup)
n	(485 RV)	(1021 LV)		(1009 LV)
Clinton	64%	30%	n/a	20%
Obama	16%	46%	.	73%
Other	.	15%	.	
DK	.	9%	.	7%
Candidate Preferences (WA)	Oct. 07		Feb. 7-18, 2008	
n	(303 RV)		(176 RV)	
Clinton	41%		38%	
Obama	27%		53%	
Others	25%		.	
Don't know	7%		8%	
Who most likely to win	Oct. 07		Feb. 7-18, 2008	
Democratic nomination? (WA)				
n	(601)		(299)	
Clinton	68%		29%	
Obama	14%		55%	
Other	9%		4%	
Don't Know	9%		12%	

Note: January Gallup poll conducted immediately after Iowa. Early February Gallup poll conducted 3 days after Super Tuesday (Feb. 8-9).

10. See Franklin (2007).

months before Obama won the Iowa caucus. National polls and the Washington poll also found that roughly two-thirds of respondents expected Clinton to be the eventual Democratic nominee prior to the Iowa caucuses. As the Gallup Organization noted when comparing Clinton's early position to front-runners from previous elections, "since the 1972 campaign . . . Democrats have rarely had a front-runner as dominant as Clinton."[11] Yet Obama began to gain ground and emerge as an equal, if not more viable candidate, by mid-February. Clinton subsequently closed the national preference gap in March with victories in Texas and Ohio, but perceptions about the candidates appear to have changed as each won early contests and exceeded, met, or underperformed expectations.

Abramowitz (1989) argues that viability indirectly affects vote choice because it informs voters' opinions of a candidate's electability. We contend, however, that candidate viability is a driving factor in informing the candidate chance component of vote choice and that momentum gained through primary victories is the surest path to viability. Moreover, we think that the proper way to assess viability is to measure changes in an individual voter's choice between time one and time two, as opposed to independent cross-sections.

Below, we examine how outcomes in early states affect perceptions of candidate viability. We then examine how perceptions of viability and changes in evaluations of candidates predict change in support for presidential candidates later in the primary campaign.

Data and Methods

To model change in individual-level candidate preference, we fielded a unique panel survey at two points during the 2008 presidential primary season. The first wave was conducted in late October 2007 as the presidential primary contest emerged as a major national news story. The second wave was conducted in February 2008, beginning February 7, two days after the 22-state Super Tuesday contest held February 5. Registered voters[12] were interviewed in Washington State, which held its presidential caucus on February 9 and its presidential preference primary on February 19. Washington was an ideal place to implement a panel survey to assess changes in voter preferences during the 2008 campaign. First, the Washington contests were late enough in the political season to register the effects of the front-loaded primary calendar. Second, Washington was not so late that the Democratic contest had already been decided. Third, the second wave of the panel was conducted in an environment where voters were being asked survey questions in the immediate context of their state's caucus and primary. Thus, the mid-February field date for the second wave of the panel provides an ideal political environment to test how outcomes early in the nomination process affected candidate

11. Gallup News Service (2007).

12. Registered voters were identified by way of the statewide database of registered voters, provided by the Washington secretary of state. Telephone numbers were provided by Labels and Lists, a firm specializing in registered voter databases. Interviews for both waves were conducted by Pacific Market Research. The initial panel was interviewed October 22-28, 2007. The second wave of interviews were done February 7-18, 2008.

preferences. Washington was uniquely positioned in 2008 in the middle of the primary calendar, with about half of the states voting before and half voting after. Although Clinton was the clear front-runner in October 2007, the Democratic contest was dead even immediately prior to the implementation of the second wave of the panel in mid-February.

Respondents were drawn randomly from a statewide database of registered voters. We completed 600 telephone interviews in October 2007 for the first wave. Using these same 600 records, we completed 300 reinterviews in February 2008 over a 10-day period, exactly a 50% panel retention rate. Although we prefer a higher retention rate, we needed to collect the second wave in a relatively short time to capture the immediate environment of the decision context[13]. The demographics of the second wave were very consistent with the first wave, and where there were statistically significant differences, the data were weighted so that the sample in wave two matched wave one. Therefore, if we observe differences in vote preference, it is not a result of response rates or bias but represents real change in candidate preference at the individual level.

Table 2 (below) reports the mean candidate feeling thermometer ratings given by respondents in our original October wave and distinguishes between in-panel respondents and those who dropped out. We find the included and excluded samples almost identical, suggesting there is no response bias in the voters we reinterviewed. For example, John McCain held a 48.6 mean feeling thermometer rating among all 600 respondents in the original wave. Among the 300 we recontacted, his mean rating was 48.6 and among those not contacted, 49.1. Likewise, there was no statistical difference in ratings for Obama. Further, as evidenced by Sherman's (2000) assessment of American National Election Studies panels, attrition in panel surveys is often justifiably ignorable. Likewise, Bartels states that "substantial panel biases are likely to be fairly rare," in his study on panel attrition in voter surveys (1999, 1). Thus, we are quite confident in the panel reliability.

Further, we think the October 2007 start date represents an ideal point for the first wave. More so than in past years, voters were informed about the presidential candidates in 2007. The campaigns had been running since January 2007, and by October nearly all

TABLE 2
Feeling Thermometer Ratings from October 2007

	All respondents	*Reinterviewed in February*	*Drop outs*
n	(601)	(299)	(302)
Obama	53.9	55.1	52.9
McCain	48.6	48.1	49.1
Bush	35.2	33.2	37.4

Note: Mean scores for each subgroup.

13. Other panel surveys that have a higher retention rate are typically in the field for the second panel for six weeks or more and include numerous follow-ups, post-card reminders, and call-backs. In this study, we wanted to limit the second panel survey to shorter time frame, just 10 days, to attempt to capture a relatively unique window during the Democratic primary.

survey respondents had heard of the main candidates (ABC News/*Washington Post* Poll 2007), although some respondents were unable to offer opinions about them (CBS News Poll 2007). This does not mean respondents were unable to form a candidate preference. Table 1 demonstrates that only 7% of Washington voters (compared to 5% nationally) were undecided in October of 2007, and only 9% said "don't know" when asked who was more likely to win the nomination. Thus, we start with a point at which voter opinions and perceptions were being formed on the basis of a year-long primary campaign, before any early contests had occurred. Voters obviously had opinions about the candidates in October 2007, yet only a panel study can tell us whether or not, and why, individual level change is occurring.

We utilize two dependent variables to model how outcomes in previous states, perceptions of viability, and evaluations of candidates produced changes in candidate preference during the 2008 Democratic nomination contest. The first measures expectations about viability, a known predictor of vote choice in presidential primaries. This measure comes from the second wave of our panel, when respondents were asked, "Regardless of who you plan on voting for president, which candidate do you think is the most likely to win the Democratic nomination—Hillary Clinton, Barack Obama, or some other candidate?" This measure of viability takes on a value of 1 if the respondent stated Barack Obama and 0 for all other responses.[14]

Second, we create a measure of change in candidate support that represents Democratic respondents who switched their candidate preference to *favor* Barack Obama. We restrict our analysis to those registered voters who stated they would take part in the Washington State Democratic[15] contest and compare their preferred candidate in October to their preferred candidate in February. Any respondent who intended to vote for Obama in February, but not in October, is coded as 1; all others are coded as 0. That means respondents who originally planned to vote for Obama and maintained their support are coded 0, just as respondents who originally planned to vote for Clinton and maintained their support for her are coded 0. Only respondents who switched their preferred choice from non-Obama to Obama are coded 1.

The ability to capture change in candidate preference is one of the most valuable contributions of this research endeavor. Rather than examining vote preference only in February and assuming that campaign events affected candidate preference, we can assess whether or not early election results intervene to affect voters' perceptions of viability and candidate preferences over the course of the nomination season. To this extent, looking only at the candidate preferences of voters deciding after the early contests, and assuming that awareness of previous state outcomes and momentum did or did not affect candidate preferences, can be quite misleading. Yet this type of inference from cross-sectional analysis is the basis for nearly all published research on primary vote choice. The reason it is misleading is that it assumes someone who prefers Obama (or any candidate) in

14. The full results for this question were, Obama 55%, Clinton 39%, and don't know, 6%.

15. The Democratic contest is especially interesting because it was far from being settled. In contrast, the results of February 5 Super Tuesday had solidified John McCain as the Republican nominee, and his closest challenger at that time, Mitt Romney, had dropped out and endorsed McCain.

TABLE 3
Summary of Vote Stability, October 2007 to February 2008

		Percent of All Democratic Voters		
		Obama	*October 2007* n = *176* *Other/Undec.*[16]	*Clinton*
—Feb 2008—	Obama	79% Stayed Obama	66% Switch to Obama	23% Switch to Obama
	Other/Undec	3% Switch to Undec.	8% Stayed Undec.	6% Switch to Undec.
	Clinton	18% Switch to Clinton	26% Switch to Clinton	70% Stayed Clinton

February is responding to campaign events when in fact they may have always supported the candidate for various other reasons. In fact, as shown in Table 3, we find that 79% of Obama supporters from October 2007 continued to support him in February 2008. Likewise, 70% of Clinton's supporters from October supported her in February.[17] To say that these voters' preferences in February were influenced by campaign events and outcomes in January is not plausible because they already supported the candidate in October 2007. However, Table 3 also illustrates something critical about the dynamics of the 2008 Democratic nomination contest. A plurality of panel respondents in this state that voted after Iowa and New Hampshire either had no Democratic preference before those early contests, or they supported a Democratic candidate who withdrew before most states voted in early February. In this state, most of these voters switched to Obama.

We seek to understand how shifting perceptions of viability—particularly perceptions associated with election events that intervened between October 2007 and February 2008—affected perceptions of Obama's viability. We assess how this was associated with Obama's increased support. Additional cross-tabulations similar to those reported in Table 3 illustrate that 90% of Clinton's supporters, 68% of Obama supports, and 55% of other Democratic respondents viewed Clinton as the most viable Democrat in October of 2007. Only 24% of Obama's supporters thought he was the most viable candidate in October 2007. One month after the New Hampshire primary, 78% of Clinton's supporters continued to see her as most viable, but 80% of Obama's (by then larger) pool of supporters had come to see him as the most viable Democratic candidate. It is essential to model individual-level changes in perceptions of viability and candidate preference to understand primary vote choice and this element of momentum.

16. A majority of this category were undecided voters. Only John Edwards had a small following among the "other" candidates, and his supporters split 2-1 for Obama over Clinton in February. Other candidates such as Richardson, Biden, Kucinich had very few supporters in October 2007.

17. Crosstabs demonstrate that women supporting Clinton in October were less likely (65% vs. 79%) than men to stay with Clinton. Undecided women were less likely than men (58% vs. 77%) to switch to Obama.

Models

Given its centrality to the theory, we are interested first in understanding how voters come to see a candidate as being the most viable contender for the nomination. Our measure of perceptions of viability in February is then used to predict who switched from preferring other candidates, or being undecided in late October 2007, to preferring Obama by February 2008.

We model perceptions of candidate viability as being a function of a voter's awareness of actual outcomes from nomination contests held in states that had already voted. Respondents in the February wave were asked if they could name who won the Democratic contests in Iowa and New Hampshire, and were coded accordingly. In Table 4, the variable "Obama won Iowa" is coded 1 if the respondent was able to correctly identify that Obama had won the January 3 Iowa caucus. Sixty-one percent were able to identify Obama as the Iowa winner. Likewise, the variable "Clinton won New Hampshire" is coded 1 if the respondent was able to identify Clinton as the winner of the January 8 New Hampshire primary; 53% named Clinton as the winner.[18] We find no difference between Clinton and Obama supporters in their perceptions of who won Iowa and New Hampshire.[19]

Our measure of awareness of the February 5 Super Tuesday contests is more subjective. Respondents were asked, "More than twenty states held presidential primaries and caucuses on Tuesday, February 5th. Best as you can remember, which Democratic presidential candidate did the best that day?" Responses reflect an outcome with no clear

TABLE 4
Predictors of Viability—Obama Will Win the 2008 Democratic Nomination

Independent vars.	*Coef.*	*S.E.*	*Chg. Prob.*∧
Obama won Feb. 5	0.283	(0.153)†	11.01%
Obama won Iowa	0.276	(0.164)†	10.78%
Clinton won NH	–0.323	(0.165)*	–12.62%
Interview post WA caucus	0.378	(0.148)**	14.76%
Constant	–0.116	(0.150)	
n	299		
Chi^2	15.30		
% pred. correctly	60.5%		
Prop. reduction error	8.5%		

† $p < .100$ * $p < .050$ ** $p < .010$ *** $p < .001$.
Dependent variable: Respondents were asked: "Regardless of who you plan on voting for President, which candidate do you think is the most likely to win the Democratic nomination—Hillary Clinton, Barack Obama, or some other candidate?" 1 = Obama, 0 = other.
∧ Change in predicted probability that dependent variable takes on value of 1, given a change in the independent variable from its minimum to maximum value.

18. For Iowa, 21% thought someone else won, and 20% did not know. For New Hampshire, 18% thought someone else won, and 31% did not know.

19. Fifty-two percent of Obama supporters and 54% of Clinton supporters said Clinton won New Hampshire. Sixty-one percent of Obama and Clinton supporters said Obama won Iowa.

winner: 37% indicated Clinton did best, 40% indicated Obama, 13% said it was a tie, and 10% said they did not know. The variable "Obama won Feb. 5" is coded 1 if the respondent stated Obama did best on Super Tuesday. This variable is perhaps the most interesting because there is not a factually correct answer, given the extremely close outcome on February 5. Thus, the February 5 variable may capture the perception of momentum more than awareness of specific events. A final variable capturing the effects of election outcomes represents the date the respondent was interviewed. Interviews for the second wave of the panel began on February 7. The Washington caucuses were held during the afternoon of Saturday February 9, and Obama's landslide victory was quickly reported statewide. Thus, a dummy variable identifies respondents who were interviewed on February 9, 10, or 11. Although this is not a factual "who won" question, it captures the days where there was potential for awareness of Obama's 68% to 31% win over Clinton in Washington's caucuses and further taps into momentum.

Although we restrict our measures of previous primary performance to just four contests—Iowa, New Hampshire, Super Tuesday, and Washington—other contests did take place. However, we chose to highlight the most recognized contests in order to avoid pressuring the respondents into a lengthy battery testing their knowledge of each state outcome. Other states such as Michigan and Florida held Democratic primaries prior to February that were not officially recognized, and considerably less attention was given to them by the candidates and the media. Nevada and South Carolina also held early contests and were arguably relevant, and could possibly have affected perceptions of viability in the manner as Iowa and New Hampshire. Measures of awareness of outcomes in these states would not necessarily be adding anything theoretical to the model. Given the centrality of awareness of Iowa, New Hampshire, Super Tuesday, and events most immediate to the time of interview, we settled on these as predictors of viability[20].

Our models also include measures of candidate evaluations. Respondents were asked to rate each candidate on a traditional feeling thermometer in both the October and February waves. Given that one of our dependent variables is changing to support Barack Obama, we created a variable to capture the change in feeling thermometer ratings for Obama called "Obama thermometer change." This measure subtracts the value a respondent assigned Obama at time 1 from the value assigned at time 2 and results in a variable ranging from −52 to +92. Overall, 23% of respondents held a lower rating in February, 13% held the exact same rating, and 64% held a higher rating of Obama in February 2008 as compared to October 2007.

It is also important to account for voter assessments of key candidate qualities and issues that candidates championed. To this end, we created two variables reflecting presidential candidate qualities and two variables representing voter issue concerns—similar to previous research on primary vote choice. Respondents were asked, "Which of the following do you think is the most important quality for a presidential candidate—can bring about change, cares about people, has experience, or ability to win in

20. One concern may be that voters who initially supported a candidate might be more likely to state they "won" a contest. In fact, this is not the case. Voters seemed to give answers to the "who won" question based on their own knowledge of the facts, independent of their candidate preference in wave 1.

November?" We used responses to this item two create two dummy variables: one identifying respondents who prioritized experience and another representing those who prioritized change. Although the change and experience variables may be unique to the context of 2008, including these types of candidate quality measures is quite common to primary vote choice models (Abramowitz 1989; Norrander 1986; Stone, Rapoport, and Abramowitz 1992). For issues, respondents were asked, "Thinking about the upcoming presidential primary elections, what general issues are most important to you as you decide how you will vote?" We use responses to this to create two additional dummy variables: one representing those who gave priority to the Iraq War and a second representing those most concerned about health care. We expect the candidate quality "experience" to be associated with maintaining support for Clinton and the quality "change" to be associated with shifting support toward Obama. As for issues, we expect voters who cared more about the Iraq War to support Obama and voters who ranked health care a priority to support Clinton, given how each candidate discussed these issues during the 2008 primaries.

Finally, we include control variables for age, education level, income, race, and gender.[21] Given the patterns of support evidenced by exit polls in the early primary states, we expect Obama to do well among younger, better educated, and higher-income voters, and to do better among men.

Findings

Results of our panel analysis suggest that awareness of outcomes in previous contests, evaluations of candidates, and expectations about viability, play an important role in predicting changes in preferences for candidates during a presidential primary season. These factors may be the basis of the less tangible phenomena of momentum. We discuss this in detail below.

Table 4 presents our models estimating expectations about viability. We argue that perceptions of previous state primary outcomes structure voter expectations about candidate viability. Quite simply, if a voter observes one candidate winning a contest in a previous state, they are likely to view that candidate as more viable, that is, more likely to win the party's nomination. Although other factors may also contribute to viability, we focus exclusively on awareness of previous state outcomes as explanatory variables. The extant literature and our own hypotheses do not suggest a role for demographic factors or issues in predicting viability; instead campaign events and outcomes are more relevant. The results in Table 4 suggest that primary election outcomes greatly shape perceptions of viability. All four of our variables are statistically significant and in the hypothesized direction. Respondents who (correctly) stated that Obama won the January 2008 Iowa caucus were significantly more likely to view Obama as viable in February. Likewise, respondents who (correctly) stated that Clinton won the January New Hampshire

21. Given the unique gender and racial dynamics of this election, we considered the theoretical possibility of including a gender-race interaction term; however, our sample includes too few nonwhites to produce anything statistically meaningful in the modeling.

primary were significantly less likely to view Obama as viable in February. The inverse of the New Hampshire variable further suggests the importance of *perceptions* of primary victories in explaining viability. Respondents who (incorrectly) thought Obama won New Hampshire were more likely to view him as viable. Recognition of who won Iowa and New Hampshire each accounted for an 11% fluctuation in viability. Respondents who recognized Obama won Iowa were 11% more likely to state he was viable, while those who recognized Clinton won New Hampshire were 11% less likely to state Obama was viable (see Chg. Prob. column, Table 4).

Perceptions of the 22-state Super Tuesday primary were also relevant, with voters who thought Obama did best on February 5 being statistically more likely to view him as viable, accounting for a 13% greater probability voters view Obama as viable. Finally, respondents who were interviewed immediately following Obama's 37-point win in the Washington caucuses were significantly more likely to view him as viable. In addition to capturing perceptions of Obama's victory in Washington State caucuses, the dummy variable for interview date of February 9 through 11 may also captures the effect of Obama's sweep of Nebraska, Louisiana, and Maine on February 9 and 10. People reinterviewed after February 9 were approximately 15% more likely to believe Obama would be the Democratic nominee than people reinterviewed a few days earlier.

Clearly then, by February, expectations about viability reflected awareness of actual election results that, objectively, defined the candidates' electoral prospects. People casting votes in later-voting states thus appear to have updated their perceptions of candidate viability in response outcomes in earlier states. In this case, they continued updating expectations after events in their own state.

How then, might the dynamics of expectations about viability affect changes in voter support for candidates? Washington State is rather unique in that it held both a caucus (on February 9) and a presidential primary election (on February 19) in 2008. Our questions about candidate preference were in the field around the time of the caucus, and prior to the primary. Expectations about candidate viability and vote intentions in February were thus measured in a "real-world" setting that captured the effects of campaign events in a sequential nomination process as they were unfolding. Taken together, the substantive effects of earlier state primary outcomes are quite robust. First, as demonstrated in Table 4, including only the four state primary variables, the model correctly predicts over 60% of the variance in candidate viability. Not only are these previous primary outcomes significant predictors of viability, but they account for substantively large shifts in assessments of candidate viability. Figure 1 estimates the predicted probability of viewing Obama as the more viable candidate, that is, thinking Obama would win the Democratic nomination, given voter perceptions of previous primary outcomes. Voters who thought Clinton won Iowa, New Hampshire, and Super Tuesday, and were not interviewed following Obama's win in Washington, had only a 33% probability of viewing Obama as more viable. In contrast, voters who answered that Obama had won all three contests, and were interviewed following his win in Washington, had a 79.4% probability of viewing him a more viable.

Table 5 reports estimates of the propensity to switch support to Obama between October 2007 and February 2008. Building on the results in Table 4, we are especially

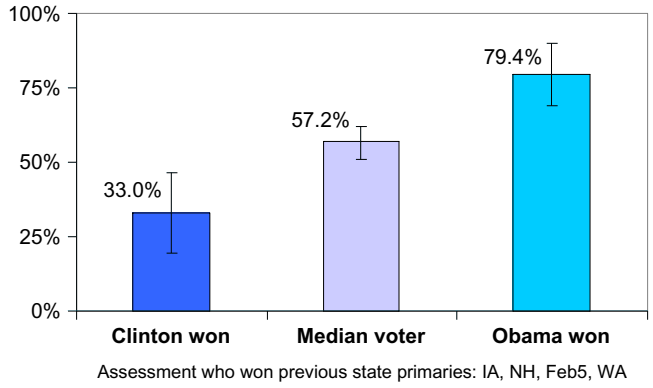

FIGURE 1. Probability of Thinking Obama Will Win Nomination.

interested in perceptions of viability as predictors of changing candidate preference. The major substantive relationship here is not surprising: people who came to see Obama in more favorable terms (measured as change in feeling thermometer ratings from October to February) were significantly more likely to switch to supporting Obama in February. This is consistent with the underlying logic of momentum described by Bartels (1988). As information about Obama became more widely disseminated, more people were able to rate Obama. This reduction in uncertainty corresponded with a gain in positive affect for the candidate, and corresponded with previously uncertain voters switching to Obama.

The other major factor predicting changes in intentions to support a candidate is expectations about viability. Table 4 demonstrates that expectations of viability had an important independent effect on candidate preference in February. Other factors held constant; people who came to see Obama as most likely to win the nomination were 33.8% more likely (see Chg. Prob. column, Table 5) to switch to supporting Obama than someone who thought he would not win the Democratic primary. In separate analyses, we specified the vote change model with previous state outcomes as independent variables, yet we found that awareness of election results in Iowa, New Hampshire, February 5, and even the Washington caucus had no direct, independent association with stability of vote intention (see Appendix). That is, shifting expectations about candidate viability predict shifts in candidate preference, but awareness of earlier election results may not have had a direct effect on changing candidate preference. This actually makes sense, given the causal process our theory is based on. As Table 4 illustrates, exposure to the immediate string of Obama's February 9 victories, and awareness of outcomes in Iowa and New Hampshire, and Super Tuesday, greatly shaped expectation about viability. In models estimating preference change in Table 5, expectations about viability capture the effects of how voters respond to candidate performance in early contests.

Above and beyond issue concerns, preferred candidate traits, and feelings about the candidate, people who came to see Obama as having a solid chance to win his party's nomination became substantially more likely than others to move toward supporting

TABLE 5
Predictors of Change in Candidate Preference in Favor of Obama

Independent vars.	*Coef.*	*S.E.*	*Chg. Prob.*∧
VIABILITY			
Obama thermometer change	0.027	(0.007)***	90.81%
Obama more viable	1.049	(0.261)***	33.80%
CANDIDATE TRAITS			
Experience more important	−1.257	(0.451)**	−31.05%
Change more important	−0.288	(0.257)	−9.60%
ISSUES			
Iraq most important	0.251	(0.244)	8.32%
Health care most important	−0.476	(0.261)†	−15.16%
DEMOGRAPHICS			
R's Education	0.275	(0.196)	16.74%
R's Age	−0.002	(0.008)	4.46%
R's income	0.214	(0.278)	7.44%
White	0.128	(0.412)	4.17%
Female	−0.308	(0.241)	−10.25%
IDEOLOGY			
Conservative higher value	−0.176	(0.089)*	−30.73%
Constant	−1.123	(0.959)	
n	176[22]		
Chi^2	46.06		
% pred. correctly	80.1%		
Prop. reduction error	43.9%		

† $p < .100$ * $p < .050$ ** $p < .010$ *** $p < .001$.
Dependent variable: (RVs who state they will participate in Democratic primary). The change from time 1 to time 2 in response to the question: "If the Washington Democratic presidential primary were held today, who would you vote for?" 1 = Switch vote to Obama; 0 = All others.
∧ Change in predicted probability that dependent variable takes on value of 1, given a change in the independent variable from its minimum to maximum value.

him. Underlying this variable, outcomes in other states had an important effect on shaping whether or not people saw a candidate as viable. Figure 2 reports predicted probabilities that a voter in Washington will have changed their primary candidate preference in favor of Obama, given their perceptions of viability. Holding all other values constant, voters who thought Clinton was more viable had just a 13.2% probability of changing their votes toward Obama. In contrast, respondents who identified Obama as the more viable candidate had a 51.4% probability of changing their votes preference in favor of Obama.

In addition to the role of candidate evaluations (feeling thermometer) and viability, we also find support for the role of candidate traits and issues. Respondents who stated

22. The final modeling case size is $n = 176$ because the model examines vote shift among Democratic primary voters only. While we acknowledge this is considerably smaller than the panel case size of $n = 299$, the fact that we see such statistically significant results, and patterns matching our expectations, arguably provides stronger weight for our theory than if our case size was larger, given the greater challenge of attaining statistical significance with smaller sample sizes.

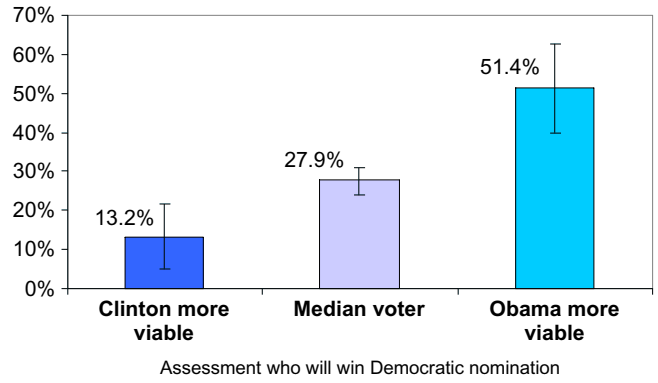

FIGURE 2. Probability of Switching Vote to Obama, $T_1 - T_2$.

experience was the most important candidate quality—a quality associated with the Clinton campaign—were significantly less likely to change their votes toward Obama. On issues, we found voters who rated health care as the most important issue—an issue championed by Clinton—were significantly less likely to change their votes toward Obama. Certainly endogeneity is an issue in voting models, and it is challenging to completely eliminate in the analysis of the present data. However, we believe that having panel data goes a long way in eliminating the potential for endogeneity present in cross-sectional data. Individual level panel data allow us to observe whether or not the two variables are correlated without direction at two points in time. In fact, looking at the panel data, we notice that changes in feeling thermometer and viability are not perfectly correlated with vote intention.[23] Indeed, many Clinton supporters begin to state in February that Obama is now more viable, yet they remain with Clinton. At the same time, we are able to observe those that change their perceptions of viability (or thermometer rating) from October to February, and it is where there is change that we see the biggest change in our dependent variable, vote choice.

None of the demographic variables—age, education, income, or gender—were significantly related to vote changing. Although demographics may have been related to overall vote support with younger voters supporting Obama and women supporting Clinton at higher rates, they are not related to the dynamic process of changing one's preferred candidate during the primary process. Finally, we find that liberal Democrats were more likely to switch their votes in favor of Obama. One possibility could be that more liberal Democrats had supported John Edwards, Dennis Kucinich, or another candidate, or were perhaps undecided in the first wave of the survey in October 2007 and viewed Obama as the more progressive candidate vis-à-vis Clinton in the second wave in February 2008.

23. While the change in Obama thermometer rating may appear endogenous to vote choice, it is not perfectly correlated with changing vote towards Obama. Further, inclusion of this variable makes the test of our competing hypotheses about viability more challenging. That is, we are controlling for change in thermometer rating from *T*1 to *T*2. Even with this control, we still find that our measure of viability produces a statistically significant result in predicting vote switching towards Obama.

Discussion

Between October 2007 and February 2008, Barack Obama went from a likable long shot to a serious contender for president of the United States. What explains that for nearly a year leading up to the primaries he was unable to close much ground on Hillary Clinton? An important consideration is how voters perceive candidate viability. His support increased after early success in Iowa and South Carolina reinforced the viability of his candidacy. Washington State held its nominating caucus at an opportune time for researchers to examine how voters reacted to outcomes in early primary states. Indeed, our panel survey suggests that undecided voters and supporters of other candidates came to see Barack Obama as the more viable candidate by mid-February, and many switched their votes in his favor.

When considering this we must ask if this evidence of momentum reflects something general, or if it was a fluke. It stands to reason that pre-Iowa front-runners are so advantaged that changes in voter preferences during primaries matter little. Much scholarship on the preprimary campaign period suggests that pre-Iowa front-runners—those with the most money, greatest media coverage, and the most early endorsements from party leaders (Cohen et al. 2001, 2008; Mayer 2003)—should be heavily advantaged by front-loading. Since the 1990s, front-loading is expected to have inhibited a non–front-runner's ability to build enough momentum to challenge a front-runner. Lesser-known candidates have less time to raise money and build organizations, leaving the nominee determined earlier in the process (Wayne 2008, 121). Polsby and Wildavsky (2008, 108) cite Bob Dole's 1996 campaign as an example: Dole failed to meet expectations in Iowa and lost New Hampshire, but his money and party organization support carried him. George H. W. Bush in 1988, Bill Clinton in 1992, George W. Bush in 2000, and Al Gore in 2000 may fit this model. All began with early advantages in fundraising, opinion polls, and/or support among their respective party elites. They were either never seriously challenged, or, if challenged, had the ability to endure and emerge early as the nominee.

There have been successful candidates who began less well known but built enough momentum to be competitive: Jimmy Carter in 1976 and Gary Hart in 1984 are classic examples. Pat Buchanan's 1996 candidacy might also fit here. But as Bartels (1988) notes, momentum has a short shelf-life, and Norrander (1993) observes that these momentum candidates generally lose. Carter was the anomaly who, under a less-compressed schedule, rode momentum from Iowa to secure his party's nomination. Thus, Polsby and Wildavsky note (2008, 102), "the strategy of non-frontrunners banking on early victories to generate funds and momentum is part of the history of the nomination process, not the present." Momentum candidacies should largely be things of the past.

However, theories suggesting that early front-runners are inevitable nominees do not fit well with Obama or McCain in 2008, nor with John Kerry in 2004. All trailed in early Gallup polls, and none had the upper hand in pre-Iowa fundraising. But each won Iowa or New Hampshire, and the nominations. McCain's 2000 candidacy also benefited from early success in New Hampshire, and Huckabee's 2008 run benefited from his upset win in Iowa. Neither of those won nomination, but both lasted longer in the process due to increased media attention associated with early wins Donovan and Hunsaker 2009; Redlawsk Tolbert, and Donovan 2011). Cohen et al. (2008) argue that front-runners will

become the consensus choice after a "long national discussion." The present study suggests that no consensus choice emerged prior to Iowa and New Hampshire, which is why Obama remained competitive despite being down early in the polls. Our results suggest that in states holding contests after Iowa and New Hampshire, voters who did not initially support these candidates began to do so after they learned that the candidates were potentially viable. Voters changed their assessments of the viability of lesser-known candidates in response to results from early states, and these assessments corresponded with increased support for those candidates. Simply put, momentum remains an important factor in presidential nominations—especially when a candidate fails to emerge as the consensus choice prior to the first caucus and primary.

This claim fits with studies showing that momentum never fully faded in importance. Several scholars point out that momentum is still prominent in primaries but more so in Democratic than Republican primaries (Adkins and Dowdle 2001; Adkins Dowdle, and Steger 2009; Steger 2008). Indeed, this may be due to differences in party culture. Berggren (2007) finds that since 1972, Democratic nominees tend not to be the front-runner with national profiles a year in advance of Iowa, whereas GOP nominees tend to have national profiles a year prior to Iowa. This may be because Republicans delegate allocation rules stress unity more so than Democrats and that their base voters tend to be more homogeneous (Mayer 1996). Furthermore, Steger (2008) finds that compared to their Republican counterparts, Democratic elites endorse later, less often, and more heterogeneously. Nor is it completely inconsistent with the literature showing substantial advantages for front-runners. Some note that increased media attention to Iowa and New Hampshire could strengthen a candidate's ability to generate momentum from there (Polsby and Wildavsky 2008, 108; Wayne 2008, 121). The expanded ability of candidates to raise money quickly via the Internet (Hull 2007), moreover, allows candidates to cash in on early wins more rapidly than before. With this considered, Obama's ability to ride momentum from an early Iowa victory all the way to the White House may not be such an aberration.

Our analysis demonstrates that voter preferences for candidates are dynamic and change in response to results from early contests.[24] This story is consistent with a view of the nomination contest as a sequential election process (Morton and Williams 2001) where voters gain information about candidates from earlier results. In terms of information processing theory, even when a candidate does not succeed in a contest, the perception that he or she succeeded can still have positive effects on voters' perceptions of their viability. Voters who incorrectly thought Obama won New Hampshire were more likely to say he was viable. With respect to information processing, voters may use events, media coverage, *and* perceptions—whether right or wrong—of said events to determine viability.

Regardless of the front-loaded 2008 calendar, most voters participating in the 2008 nomination contests did so after there was substantial media coverage of results from Iowa, New Hampshire, and a few other early states. Our findings demonstrate that results from

24. While endogeneity between candidate preferences and viability cannot be completed ruled out, compared to a cross-sectional survey, panel data is more appropriate in examining the relationship between candidate success in a contest and perceived viability.

the early states continued to shape voter perceptions of viability a month after Iowa and New Hampshire. Success in Iowa allowed Senator Obama to generate substantial media attention, raise money, and reduce voter uncertainty about the viability of his candidacy. Media attention to Senator Clinton's win in New Hampshire, likewise, generated information that muted perceptions that Obama was viable and allowed her to increase fundraising. Perceptions of viability, as we show, are an important predictor of whether people change their preference toward supporting a candidate whose prospects were uncertain.

This may be the reasoning process that is the basis of momentum. We suggest that momentum is a phenomenon that can benefit challengers or front-runners; but it stands to reason that lesser-known candidates will benefit more (Bartels 1988). A candidate who enjoys unexpected success in early contests may reduce uncertainty about viability and suddenly be seen as more viable. The marginal returns of this are likely to vary by how well known the candidate is initially. Given that front-runners are better known and receive more media attention, more voters will see them as viable early on, and they may have less to gain from early victories (but something to lose from early upsets by lesser-knowns). Lesser-known candidates not seen as viable may have more to gain from early success. The theory and results here may also have implications for discussions of future reforms of the nomination process. Any process that grants disproportionate attention to a state voting early is likely to give that state a critical role in shaping perceptions of viability, and voter choices, in subsequent states.

References

ABC News/*Washington Post*Poll. 2007. http://www.washingtonpost.com/politics/polling (accessed November 5, 2007; no longer available).

Abramowitz, Alan I. 1989. "Viability, Electability, and Candidate Choice in a Presidential Primary Election: A Test of Competing Models." *Journal of Politics* 51 (4): 997-92.

Abramson, Paul R., John H. Aldrich, Phil Paolino, and David W. Rohde. 1992. " 'Sophisticated' Voting in the 1988 Presidential Primaries." *American Political Science Review* 86 (1): 55-69.

Adkins, Randall E., and Andrew J. Dowdle. 2001. "How Important Are Iowa and New Hampshire to Winning Post-Reform Presidential Nominations?" *Political Research Quarterly* 54 (2): 431-44.

Adkins, Randall E., Andrew J. Dowdle, and Wayne P. Steger. 2009. "The Viability Primary: Modeling Candidate Support before the Primaries." *Political Research Quarterly* 62 (1): 77-91.

Aldrich, John. 2009. "The Invisible Primary and its Effects on Democratic Choice." *PS: Political Science and Politics* 42 (1): 33-8.

Aldrich, John H., and Michael Alvarez. 1994. "Issues and the Presidential Primary Voter." *Political Behavior* 16 (3): 289-317.

American National Election Studies. 1988. *The ANES Guide to Public Opinion and Electoral Behavior*. Ann Arbor: University of Michigan, Center for Political Studies (http://www.electionstudies.org).

Atkeson, Lonna Rae. 1993. "Moving Toward Unity: Attitudes in the Nomination and General Election Stages of a Presidential Campaign." *American Politics Quarterly* 21 (3): 272-89.

Bartels, Larry. 1985. "Expectations and Preferences in Presidential Nominating Campaigns." *American Political Science Review* 79 (3): 804-15.

———. 1988. *Presidential Primaries and the Dynamics of Voter Choice*. Princeton, NJ: Princeton University Press.

———. 1999. "Panel Effects in the American National Election Studies." *Political Analysis* 8 (1): 1-20.

Berggren, Jason D. 2007. "Two Parties, Two Types of Nominees, Two Paths to Winning a Presidential Nomination, 1972-2004." *Presidential Studies Quarterly* 37 (2): 203-27.

Blais, Andre, and Richard Nadeau. 1996. "Measuring Strategic Voting: a Two-step Procedure." *Electoral Studies* 15 (1): 39-52.

Bowler, Shaun, and David J. Lanoue. 1992. "The Sources of Tactical Voting in British Parliamentary Elections, 1983-1987." *Political Behavior* 14 (2): 141-57.

Brady, Henry E., and Richard Johnston. 1987. "What's the Primary Message: Horse Race or Issue Journalism?" In *Media and Momentum*, eds. G. Orren and Nelson Polsby. Chatham, NJ: Chatham House, 127-86.

Cain, Bruce. 1978. "Strategic Voting in Britain." *American Journal of Political Science* 22 (3): 639-55.

CBS News Poll. 2007. http://www.cbsnews.com/sections/opinion/polls (accessed October 25, 2007; no longer available).

Cohen, Marty, David Karol, Hans Noel, and John Zaller. 2001. "Beating Reform: The Resurgence of Parties in Presidential Nominations." Paper presented at the American Political Science Association meeting, San Francisco, CA.

———. 2008. *The Party Decides: Presidential Nominations before and after Reform*. Chicago: University of Chicago Press.

Cox, Gary. 1997. *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. Cambridge: Cambridge University Press.

Donovan, Todd, and Rob Hunsaker. 2009. "Beyond Expectations: Effects of Early Elections in U. S. Presidential Nomination Contests." *PS: Political Science & Politics* 42 (1): 45-52.

Dowdle, Andrew J., Randall E. Adkins, and Wayne P. Steger. 2009. "The Viability Primary: Modeling Candidate Support before the Primaries." *Political Research Quarterly* 62 (1): 77-91.

Fox News Opinion Dynamics Poll. 2007. http://realclearpolitics.com (accessed November 5, 2007; no longer available).

Franklin, Charles. 2007. "Primaries Past." http://www.pollster.com/blogs/primaries_past.php?nr=1 (accessed January 7, 2012).

Gallup News Service. 2007. "Fifty Percent of Democrats Back Clinton in Latest Trial Heat." http://www.gallup.com/poll/102001/Fifty-Percent-Democrats-Back-Clinton-Latest-Trial-Heat.aspx (accessed January 7, 2012).

Gopoian, J. David. 1982. "Issue Preferences and Candidates Choice in Presidential Primaries." *American Journal of Political Science* 26 (3): 523-46.

Hull, Christopher. 2007. *Grassroots Rules: How the Iowa Caucus Helps Elect American Presidents*. Stanford, CA: Stanford University Press.

Johnston, Richard, Andre Blais, Henry Brady, and Jean Crete. 1992. *Letting the People Decide: Dynamics of a Canadian Election*. Montreal, Canada: McGill-Queens University Press.

Karp, Jeffery, Jack Vowles, Susan Banducci, and Todd Donovan. 2002. "Strategic Voting, Party Activity, and Candidate Effects: Testing Explanations for Split Voting in New Zealand's New Mixed System." *Electoral Studies* 21 (1): 1-22.

Kenney, Patrick J., and Tom W. Rice. 1994. "The Psychology of Momentum." *Political Research Quarterly* 47 (4): 923-38.

Marshall, Thomas R. 1984. "Issues, Personalities, and Presidential Primary Voters." *Social Science Quarterly* 65 (3): 750-60.

Mayer, William G. 1996. *The Divided Democrats: Ideological Unity, Party Reform, and Presidential Elections*. Boulder, CO: Westview Pres.

———. 2003. "Forecasting Presidential Nominations." *PS: Political Science and Politics* 35 (2): 153-7.

McCann, James A. 1995. "Nomination Politics and Ideological Polarization: Assessing the Attitudinal Effects of Campaign Involvement." *Journal of Politics* 57 (1): 101-20.

Morton, Rebecca B., and Kenneth C. Williams. 2001. *Learning by Voting: Sequential Choices in Presidential Primaries*. Ann Arbor: University of Michigan Press.

Mutz, Diana. 1995. "Effects of Horse-Race Coverage on Campaign Coffers: Strategic Contributing in Presidential Primaries." *Journal of Politics* 57 (4): 1015-42.

———. 1997. "Mechanisms of Momentum: Does Thinking Make It So?" *Journal of Politics* 59 (1): 104-25.

National Annenberg Election Survey. 2000. http://www.annenbergpublicpolicycenter.org/. Philadelphia: Annenberg Public Policy Center of the University of Pennsylvania.

Norrander, Barbara. 1986. "Correlates of Vote Choice in the 1980 Presidential Primaries." *Journal of Politics* 48 (1): 156-67.

———. 1993. "Nomination Choices: Caucus and Primary Outcomes, 1976-88." *American Journal of Political Science* 37 (2): 343-64.

Polsby, Nelson, and Aaron Wildavsky. 2008. *Presidential Elections*. 11th ed. Lanham, MD: Rowman and Littlefield.

Popkin, Samuel L. 1991. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*. Chicago: University of Chicago Press.

Redlawsk, David, Caroline Tolbert, and Todd Donovan. 2011. *Why Iowa: How Caucuses and Sequential Elections Improve the Presidential Nominating Process*. Chicago: University of Chicago Press.

Sherman, Robert P. 2000. "Tests of Certain Types of Ignorable Nonresponse in Surveys Subject to Item Nonresponse or Attribution." *American Journal of Political Science* 44 (2): 362-74.

Steger, Wayne P. 2008. "Interparty Differences in Elite Support for Presidential Nomination Campaigns." *American Politics Research* 36 (5): 724-49.

———. 2009. "Polls and Elections: How Did the Primary Vote Forecasts Fare in 2008?" *Presidential Studies Quarterly* 39 (1): 141-54.

Stone, Walter J., Ronald B. Rapoport, and Alan I. Abramowitz. 1992. "Candidate Support in Presidential Nomination Campaigns: The Case of Iowa in 1984." *Journal of Politics* 54 (4): 1074-97.

Wattier, Mark J. 1983. "Ideological Voting in 1980 Republican Presidential Primaries." *Journal of Politics* 45 (4): 1016-26.

Wayne, Stephen J. 2008. *The Road to the White House 2008*. 8th ed. Boston: Thomson Wadsworth.

Appendix

Vote Change Model Replicated with State Outcomes as Independent Variables Predictors of Change in Candidate Preference in Favor of Obama

Independent vars.	*Coef.*	*S.E.*
Obama won Feb. 5	−0.319	(0.255)
Obama won Iowa	0.284	(0.276)
Clinton won NH	0.196	(0.282)
Interview post WA caucus	−0.473	(0.268)†
Obama thermometer change	0.032	(0.009)***
Obama more viable	1.337	(0.282)***
Experience more important	−1.317	(0.476)**
Change more important	−0.337	(0.272)
Iraq most important	0.335	(0.249)
Health care most important	−0.627	(0.283)*
R's Education	0.314	(0.209)
R's Age	−0.003	(0.008)
R's income	0.220	(0.291)
White	0.447	(0.540)
Female	−0.366	(0.242)
Ideology (Conservative +)	−0.115	(0.095)†
Constant	−2.180	(0.676)***
n	176	
Chi^2	46.74	
% pred. correctly	81.4%	
Prop. reduction error	47.4%	

† $p < .100$ * $p < .050$ ** $p < .010$ *** $p < .001$.

Wave 1 Demographics

Category	*Percent*	*Category*	*Percent*
Gender	%	Marital Status	%
Female (*n* = 299)	49.8	Married (*n* = 436)	72.5
Male (*n* = 302)	50.2	Single (*n* = 61)	10.1
Total (*n* = 601)	100	Separated (*n* = 5)	0.8
		Divorced (*n* = 42)	7
Party	%	Widowed (*n* = 52)	8.7
Democrat (*n* = 202)	33.6	DK (*n* = 2)	0.3
Republican (*n* = 153)	25.5	Ref (*n* = 3)	0.5
Ind/Other (*n* = 213)	35.4	Total (*n* = 601)	100
Neither/None (*n* = 20)	3.3		
DK (*n* = 4)	0.7	Age	%
Refused (*n* = 9)	1.5	18-34 (*n* = 52)	9.1
Total (*n* = 601)	100	35-49 (*n* = 144)	25.1
		50-64 (*n* = 210)	36.6
Race	%	65+ (*n* = 168)	29.3
White (*n* = 552)	91.8	Total (*n* = 574)	100
Black (*n* = 7)	1.2		
Asian (*n* = 4)	0.7	Income	%
Latino (*n* = 10)	1.7	Less than $20K (*n* = 35)	5.8
Native American (*n* = 4)	0.7	$20-40K (*n* = 68)	11.3
Other (*n* = 12)	2	$40-60K (*n* = 100)	16.6
DK (*n* = 2)	0.3	$60-80K (*n* = 77)	12.8
Ref (*n* = 10)	1.7	$80-100K (*n* = 71)	11.8
Total (*n* = 601)	100	$100-150K (*n* = 85)	14.1
		$150K+ (*n* = 45)	7.5
Education	%	DK (*n* = 31)	5.2
Grades 1-8 (*n* = 3)	0.5	Ref (*n* = 89)	14.8
Some HS (*n* = 14)	2.3	Total (*n* = 601)	100
HS Grad (*n* = 66)	11		
Some College (*n* = 216)	35.9		
College grad (*n* = 156)	26		
Post grad (*n* = 144)	24		
Ref (*n* = 2)	0.3		
Total (*n* = 601)	100		

Wave 2 Demographics

Category	*Percent*	*Category*	*Percent*
Gender	%	Marital Status	%
Female ($n = 142$)	47.5	Married ($n = 224$)	74.9
Male ($n = 157$)	52.5	Single ($n = 25$)	8.4
Total ($n = 299$)	100	Divorce ($n = 20$)	6.7
		Widowed ($n = 28$)	9.4
Party	%	DK ($n = 2$)	0.7
Democrat ($n = 121$)	40.5	Total ($n = 299$)	100
Republican ($n = 72$)	24.1		
Ind/Other ($n = 93$)	31.1	Age	%
Neither/None ($n = 10$)	3.3	18-34 ($n = 15$)	5.1
DK ($n = 2$)	0.7	35-49 ($n = 64$)	21.7
Ref ($n = 1$)	0.3	50-64 ($n = 115$)	39
Total ($n = 299$)	100	65+ ($n = 101$)	34.2
		Total ($n = 295$)	100
Race	%		
White ($n = 282$)	94.3	Income	%
Black ($n = 2$)	0.7	Less than $20K ($n = 16$)	5.4
Asian ($n = 1$)	0.3	$20-40K ($n = 35$)	11.7
Latino ($n = 4$)	1.3	$40-60K ($n = 51$)	17.1
Native American ($n = 3$)	1	$60-80K ($n = 44$)	14.7
Other ($n = 6$)	2	$80-100K ($n = 38$)	12.7
Ref ($n = 1$)	0.3	$100-150K ($n = 41$)	13.7
Total ($n = 299$)	100	$150K+ ($n = 25$)	8.4
		DK ($n = 12$)	4
Education	%	Ref ($n = 37$)	12.4
Grades 1-8 ($n = 1$)	0.3	Total ($n = 299$)	100
Some HS ($n = 6$)	2		
HS Grad ($n = 28$)	9.4		
Some College ($n = 95$)	31.8		
College Grad ($n = 82$)	27.4		
Grad School ($n = 87$)	29.1		
Total ($n = 299$)	100		