Beyond Expectations: Effects of Early Elections in US Presidential Nomination Contests

Todd Donovan Western Washington University donovan@cc.wwu.edu

ABSTRACT: Information from early nomination contests may affect media and/or voter expectations about candidate viability, and thus affect vote choice in later contests. I assess how media attention to (or expectations about) candidates in Iowa is associated with outcomes in Iowa, and how Iowa caucus results and media adjustments to candidate coverage post-Iowa affects results in New Hampshire and subsequent contests. Data include rudimentary measures of national media attention to candidates in Iowa two weeks before and one week after the Iowa caucus. A model that assumes media expectations are formed by early fundraising and poll standing, and that media attention affects results in the first contests, explains substantial variance in election results. Iowa results have no direct effect on nomination outcomes but Iowa, and press adjustments to expectations about who emerges from Iowa as front-runners, affect outcomes in New Hampshire. Results from New Hampshire predict subsequent outcomes, and the eventual nominee. These results suggest media interpretation of early events may have substantial consequences for final outcomes.

Working paper. January 2 2008. Thanks to Joey Dassler and Rob Hunsaker for help with data collection.

What kind of place is Expectations? inquired Milo.... Good question, good question, exclaimed the Whether Man. Expectations is the place you must always go to before you get to go where you are going. Of course, some people never go beyond Expectations, but my job is to hurry them along whether they like it or not.

Norton Juster, The Phantom Tollbooth

This paper explores how results from Iowa may affect outcomes in subsequent nomination contests. I suggest that how Iowa 'matters' may be determined, at least in part, by how voters and news media assess whether or not candidates met or exceeded expectations there. Using an analogy from the children's book quoted above, news media are assumed to play the role of Juster's 'Whether Man,' assessing whether or not results from Iowa merit directing greater or lesser attention to a candidate. Elections in later states are affected if voters there form evaluations based on information from Iowa. The analysis makes use of aggregate data to test assumptions based on individual-level behavior, so interpretations based on these results should be treated with caution. That said, analysis of aggregate data suggest Iowa results and media flow from Iowa affect results in New Hampshire, and that New Hampshire predicts the eventual nominees.

The American presidential nomination contests are rather unique in that they make use of a sequential election process where voters participating in latter contests have information about the results of earlier contests. The potential effects that this sequential voting has on information used by voters has been recognized, and a theory of sequential voting associated with this process has been developed and tested with laboratory experiments (Morton and Williams 2001). These elections are also characterized by the fact that they are intra-partisan, or de facto non-partisan contests.

Thus, voters are selecting from a number of candidates within a party. This lowers the range of policy differentiation across candidates for voters to assess (relative to a partisan contest), and removes major decision cues. Nomination contests with no incumbent remove the two dominant vote cues (party and incumbency) that voters regularly rely upon in candidate contests. Presidential nomination elections may thus be seen as a relatively low information multi-candidate choice setting where voters must rely upon readily available cues² to when making decisions (e.g. Lupia 1994; McDermott 1997, 1998).

Furthermore, scholars have recognized that choices in presidential nomination contests and other electoral settings may be affected by preferences for candidates (based either on policies or general likeability), and by expectations about a candidate's chances of success. Voters and donors may 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). There is also a rich, cross-national literature that provides evidence that expectations about viability are used in 'strategic' or 'sophisticated' voting in many multi-party (multi-candidate) choice settings (for a review see Cox 1997).

For example, we have evidence from elections in Canada, Great Britain, New Zealand, Japan and elsewhere that some voters may defect from their most preferred choice and vote for a lower ranked option if they expect that their first option has little

_

¹ In a few states, some voters have the initial decision of opting to participate in one of the two major parties contests. For most voters in most states, however, this is not an option.

² In ballot measure voting, cues may be endorsements and information about proponents and opponents of a measure. Race, gender, and "association with salient politician and social groups" may also serve as cues in candidate contests.

chance of winning (Cain 1978; Blais and Nadeau 1996; Karp et al 2002; Reed 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. Some voters are know to adjust vote intentions strategically in response to information from opinion polls (Bowler and Lanoue 1992; Johnston et al 1992), and to gravitate toward front-running candidates in response to opinion polls (a "bandwagon effect"). Supporters of candidates / parties at the margins of viability may be particularly attentive to, and responsive to, information about viability from opinion polls (McAllister and Studlar 1991). Voters also utilize information from early electoral events in sequential nomination contests and adjust their voting intentions in response to changes in perceptions of viability (Abramson et al 1992; Bartels 1985).³

Strategic voting and 'bandwagon' effects are likely to be part (a potentially small part) of a broader phenomena 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', and about whether voter support based on momentum reflects rational or irrational behavior (Mutz 1997; Bartels 1988; Brady and Johnston 1987). Mutz (1997) uses experiments to show that a large part of momentum may be due to voters learning more about candidates (more than just changing expectations about their electoral prospects). In a real world setting, a primary conduit of such information is likely to be mass media.

-

³ Bartels (1985) demonstrates that candidate preferences are strongly projected onto expectations, so the relationship is reciprocal; and that the effects of expectations depend on whether a contest is close or not.

Early Voting and Expectations

These strands of literature allow us to understand how, and why, early election events may have important effects on the final outcomes in presidential nomination contests. Specifically, how (and why) does the Iowa caucuses and New Hampshire primary affect the series of results in a sequential nomination process, even when these two earliest states play a trivial role in allocating the convention delegates who formally select the party nominees? Put differently, how do early events in small states contribute to candidate momentum in sequential nomination contests?

I propose a model of outcomes where early events "matter," in part, because news about outcomes in these states may serve as a major source of information about candidate viability in a relatively low information choice setting. Early nomination events receive disproportionate media attention (relative to their share of delegates), and much of that media attention relates to expectations about a candidate's performance in early contests. The former claim here is uncontroversial, and the latter has been noted elsewhere (Brady and Johnston 1987). In this model, the role of the media can be seen as somewhat analogous to the process where share market analysts set corporate earnings expectations. In share markets, when a firm exceeds its earnings expectations, its share price may rise. If it fails to meet expectations, its share price may fall. This model also grants the media substantial discretion in setting and adjusting expectations. Reporters, editors, and pundits define the criteria for determining whether a candidate scored an

_

⁴ As an extreme example, a CNN poll found that the average New Hampshire respondent reported hearing Howard Dean's post-Iowa 'scream' speech 9 (?) times before voting in their 2004 primary.

"easy win," an "upset," was "far behind" or suffered "defeat." There is substantial discretion in framing whether 25 % is a "Comfortable Second" (Clinton, 1992 New Hampshire), or 23% is a "Strong Second" (Buchanan, 1992 Iowa); or if 26% is a "Flat Tire" (Dole, New Hampshire 1996) or 26% is an "Overwhelming Defeat" (Dean, New Hampshire 2004).

Horse-race coverage of campaigns involves handicapping the candidate pool - with a substantial proportion of coverage focusing on who the frontrunners are expected to be, who the underdogs are, and who beats or fails to meet expectations. Initially, the decision to even report on one particular candidate rather than another, and the amount of attention granted, can be seen as the expression of media expectations. We can assume that candidates who are not expected to be players in a contest will receive less media attention - if for no other reason that media resources (column inches, minutes of news time, etc.) are finite. Attention must be rationed in favor of candidates who are expected to place relatively high.

Voters thus receive substantial information about media expectations of candidate viability, and of media interpretation of whether candidates met expectations, exceeded expectations, for failed to meet expectations. If some voters make choices on the basis of their expectations about who is viable or electable, election results from early contests and changes in media treatment of candidates associated with media interpretation of early results are likely to be a major source of readily available information for voters in subsequent contests. Although this argument is not wholly

-

⁵ These phrases are taken from *New York Times* headlines. Dean's 26% "Overwhelming Defeat" was a 12% second place showing in New Hampshire in 2004 Clinton's 25% "comfortable second" was 8% margin behind Paul Tsongas in 1992.

original, few (if any) studies have estimated outcomes in US presidential nomination contests as a sequential process that includes adjustments of media expectations associated with results from initial contests. Conventional accounts of outcomes in nomination contests emphasize the role of: 1) candidate's national opinion standings at the start of the process, 2) candidate financial resources at the start, and 3) home state advantages (Norrander 1993). Previous studies do not account for how media expectations might be set, nor have many previous studies considered how alterations in media attention to a candidate associated with an early outcome affect the candidate's prospects in subsequent contests.

Data.

Data from nomination contests from 1976 to 2004 are used to model press attention to candidates and candidate performance in nomination contests in Iowa and New Hampshire, and to model aggregate performance. These data include Gallup opinion measures of each candidate's national poll standing as measured prior to the Iowa event, measures of candidate fundraising in the calendar year prior to the first nomination event (Iowa), and measures of national media attention to candidates two weeks before and the days immediately after the Iowa caucus. A total of 76 candidacies are in the data set. The candidacies of two incumbent presidents who had serious primary challenges

_

⁶ Morton and Williams (2001) employ laboratory experiments to test their hypotheses about simultaneous vs. sequential elections. Most (all?) forecasting models estimate aggregate primary vote share or nomination outcome as a simultaneous election either with (Steger et al 2004; Adkins and Dowdle 2001) or without (Mayer 1996, 2003) accounting for New Hampshire as part of an additive model.

(Ford 1976 and Carter 1980) are included, while other incumbents who lacked serious challenge (Bush I 1992, Clinton 1996; Bush II 2004) are excluded.⁷

Modeling expectations.

Given that we have no readily available measure of 'media expectations about front running candidates', we make use of a relatively straightforward surrogate.

National media information flow describing expectations for each candidate are represented by the number of times a candidate's name appeared in *New York Times* stories about Iowa that ran two weeks prior to the caucus, and in stories that in the days after the caucus. The number of mentions of a candidate's name in stories referencing Iowa were coded, while mentions of candidates in stories about governing were omitted. We assume that candidates being mentioned most frequently across several stories are expected to be frontrunners. Figure 1 illustrates that press attention to Iowa has been somewhat uneven - with similar levels of attention from 1976 to 1984; nearly no attention in 1992 (when Tom Harkin ran), and much higher levels of attention in 1988 and latter years.

Figure 1 about here

Attention to individual candidates can be compared across time by accounting for the proportion of all candidate mentions that each Democrat, and each Republican received, respectively. Table 1 lists the top candidates on this measure based on *New York Times* stories that ran two weeks before Iowa, for both parties. Thus, Table 1

⁷ Substantive results are unaffected when sitting presidents are omitted.

7

illustrates who received the most press attention prior to the Iowa caucuses, which I assume to reflect initial (pre-Iowa) media expectations of candidate viability.

Table 1 about here

I also calculate how media attention to these candidates shifted in the days immediately after Iowa by counting candidate mentions in articles reporting on the Iowa caucuses that were published after the Iowa results were known. Table 2 lists the candidates with the largest net changes in how much they were mentioned in stories about Iowa before the vote, and after. For example, Pat Robertson was mentioned quite infrequently in stories about Iowa prior to the 1988 vote, but his proportionate share of references to GOP candidates increased by 21% (from just 10% to 31%) in stories about Iowa published immediately after his second place finish. This measure of change in media attention serves as a surrogate measure of how media expectations of candidate viability adjust after Iowa votes. Prior to the result, expectations (and attention) for Dole, Bush and Kemp were higher; after Iowa caucused, expectations about Robertson shifted, and he enjoyed greater media attention prior to New Hampshire. As another example, Gary Hart received relatively little notice prior to Iowa (10% of mentions of Democratic candidates in 1984). However, after posting a surprising second place finish in Iowa (well behind Walter Mondale), his share of media attention in post-result coverage of Iowa more than doubled (increasing 9 % to 19% overall), while Mondale's share of press attention declined relative to that given his rivals. Pat Buchanan enjoyed a similar phenomena after a 'surprise' second place finish in 1996.

Table 2 about here

How then, are initial media expectations set, and how might they predict voting in Iowa? More important, how do changes in expectations produced by the Iowa results affect voting in the next nominating event (New Hampshire)? Conventional wisdom and logic suggest several factors that drive the press to give some candidates more early attention: fundraising, poll standing, incumbency and home state advantages. I expect candidates who raised more money prior to Iowa, those with higher national poll standings, those from Iowa, and incumbents, to receive more media attention. I measure campaign fundraising as total funds raised the year prior to Iowa in terms of inflationadjusted (to 2000) dollars. These factors are used to estimate a candidate's share (proportionately) of total news mentions of candidate names prior to Iowa. Although some of these items are well correlated, the correlations are by no means perfect.

Table 3 about here

Table 3 reports results of our estimates of candidate share of press attention.¹³ We find that about 70% of variance in candidate share of press attention (our surrogate for expectations) can be explained by fundraising, poll standing, and the two candidate-

8

⁸ There is clearly a causal morass in arguing that press attention simply reflects expectations that are unique from pure reporting of results. The two are highly correlated (.82) - however changes in media attention from pre Iowa to post Iowa coverage is not correlated with Iowa vote/delegate share.

⁹ Ford in 1976; Carter in 1980.

¹⁰ This is limited to Tom Harkin of Iowa, who ran in 1992.

¹¹ Curiously, many presidential nomination forecasting models fail to use inflation adjusted dollars. When adjusted values are examined, the apparent trend toward ever increasing candidate fundraising appears muted - at least through 2004.

¹² The correlation between proportion of mentions and poll strength is .68; mentions and money is .53; the correlation between money and poll strength is .58.

¹³ These estimates, and all reported below, are robust. Significance tests produce the same substantive results when xtreg with random effects, fixed effects, and panel corrected standard errors; and with OLS using standard errors clustered by panel or candidate.

specific factors. Each additional 10% in opinion standing is associated with 5% greater media attention, and \$10 million adds an additional 4.8% share. These results about the determinants of press attention are not surprising, but they do illustrate that money and poll numbers are not perfect predictors of media attention. Part of press coverage likely involves setting expectations by interpreting if a less known but well financed candidate is deserving of attention as much attention as a well known office-holder. Indeed, these nomination contests are frequented by well-financed candidates who gain little traction with voters (John Connelly, \$19 million in 1980; John Glenn, \$11 million in 1984; Phil Gramm, \$22.3 million in 1996) and well-financed candidates who were relatively unknown quantities (Robertson, \$24 million in 1998; Steve Forbes, \$20 million in 1996). What then, are the potential effects of media attention/expectations, independent of candidate poll standing and fundraising? Or, forgetting pretense to causal arguments, what does media attention predict that spending and poll standing might not?

Table 4 about here

Table 4 reports estimates of Iowa caucus results from 1976 - 2004, using the standard variables included in models estimating nomination outcomes (Norrander 1993; Mayer 1996, 2003; etc.). When standard forecasting variables are used (Column 1), money and poll standing appear to have substantial power predicting results in Iowa. In contrast, when press attention to candidates is used to estimate results, the effects of money are eliminated, and the effects of poll standing disappear (when vote percent is modeled - but not when place of candidate finish is estimated). Iowa vote share is also estimated with an instrumental variable, where press attention estimated from the model reported in Table 3 is used to predict Iowa vote share. Again, we see that press coverage

of a candidate (predicted by the candidates fundraising and polling numbers) out performs models that use only polling and finance to predict outcomes in Iowa. How should these results be interpreted - what is the causal process at work? Why would media attention better predict (or predict as adequately) as direct measures of money and poll status?

Clearly, media attention to candidates covaries with fundraising, and there is no way to clearly sort out the alternate causal processes that may be at work here. Reporters and editors may be particularly savvy at using information beyond poll numbers to anticipating who will succeed in Iowa, and thus direct more of their attention to those candidates. That said, these results are consistent with process where candidates who receive more media attention gain electoral advantages beyond those associated with their fundraising and national standing in opinion polls.

The potential effects of Iowa on nomination contests in subsequent states is a more important matter. As good as reporters, editors, and pundits may be at anticipating outcomes in Iowa, they often find their initial expectations were off. One of the primary political functions of the news media is interpreting and framing events - that is - defining the meaning of such things as "victory," "second place" or "26%." Expectations are then adjusted, with increased attention directed at candidates who exceeded initial expectations (Hart in 1984; Robertson in 1988; Buchanan in 1996; Kerry in 2004) or were not expected to do well anyway (Clinton I and Paul Tsongas in 1992). Table 5 reports estimates of New Hampshire Primary results from 1976 to 2004. Candidate vote share (and place) are estimated as a function of the standard variables (early poll standing, finances, state of residence), and with two independent variables representing

the potential effects of Iowa: the candidate's vote share in Iowa, and the change in media attention directed at the candidate immediately after Iowa. ¹⁴ Again, the underlying assumption here is that some voters opt for candidates they expect to be more viable, and that they make use of election results, and media interpretation of results, to assess viability.

Table 5 about here

Results in Table 5, albeit estimated with aggregate data, are consistent with such a process. We see a robust association between a candidate's performance in Iowa, and their performance in New Hampshire. Iowa vote share, and Iowa place of finish (rank) are significant predictors of New Hampshire vote share, the likelihood of winning in New Hampshire, and place of finish in New Hampshire. This result holds when we control for the candidate's fundraising and initial standing in national polls. Independent of these effects, we also see that changes in media attention toward a candidate post Iowa also has a significant relationship with vote share and place of finish in New Hampshire.

Candidates like Hart, Robertson, Buchanan, and Kerry may have had an additional edge in New Hampshire because of the shift in media attention the candidates earned from their 'surprise' finishes in Iowa. Although there is no relationship between the shift in media attention toward a candidate and winning New Hampshire, the potential importance of Iowa on the eventual nominees should not be under estimated.

As Table 6 (and other studies) show, performance in New Hampshire is a strong predictor of aggregate primary vote (and thus delegate share) and of who the eventual nominees were. News about outcomes in Iowa may disseminate adjustments in media

_

¹⁴ Recall that these variables are not correlated with each other.

expectations about candidate viability prior to New Hampshire, and reporting on outcomes in New Hampshire likely disseminates another round of adjustments if candidates fail to meet (or exceed) expectations. One need not win Iowa to win New Hampshire, nor must one win New Hampshire to win a nomination (although it clearly helps). Performance in Iowa has no *direct* effect on overall primary vote share, nor on likelihood of winning the nomination. But the nomination contests are sequential, setting the stage for early events to have early effects that cascade over time; and early outcomes may shift media assessments of a candidate's viability.

Discussion and Implications.

The analogy here between the role of share market analysts and the media in setting expectations is obviously imperfect. In the market, the analyst sets expectations, and the market responds. In the election context, voters and media set initial expectations, and then voters *and* the media respond to how a candidate's early performance matched expectations. But where share market analysts face repercussions if their analyses are flawed (e.g. their clients suffer financial loss), there is no such mechanism policing the accuracy of media analysis of elections.

Models used in this paper employ a very crude measure of media effects that may be biased against capturing the full effects of media attention to events in early states.

News attention to and interpretation of whether the same number of votes is a "comfortable" second place for one candidate or a "crushing defeat" for another, may combine with interpretation of random moments in early states to amplify the effects of early states by altering perceptions of candidate viability in subsequent states. Models

reported here cannot account for such effects. But as an extreme example of an Iowa event having effects in New Hampshire, and on the eventual nomination outcome, consider Howard Dean's 2004 caucus night speech in Iowa. The information flow from Iowa to New Hampshire was not simply that Dean placed 3rd and failed to meet expectations, or that Kerry was more viable (and thus received more attention). A CNN Poll conducted prior to the New Hampshire primary estimated that 90% of respondents in New Hampshire saw or heard the speech before they voted. Forty-eight percent saw or heard it at least 6 times, with many saying they saw or heard it at least a dozen times. The framing and interpretation of events such as Dean's 'scream,' Muskie's 'crying', Reagan's "I paid for this microphone" scam, or Clinton being anointed the 'comeback kid,' combine with interpretation of objective outcomes, may affect which candidates appear (or become) viable to voters in the remaining contests.

In short, the sequential nomination process places substantial discretion with the press. Media response to vote margins that are nothing more than a handful of votes in early states - and interpretation about whether someone exceeds expectations based on narrow margins - may be enough to leave a better financed (or simply better) candidate stuck in third place with limited media attention. Consider the fate of Lamar Alexander, and the media bounce that Pat Buchanan enjoyed after Iowa in 1996. Buchanan beat Alexander by a scant 5000 votes to secure a 'surprise' second place in Iowa. The media boost associated with that may have helped Buchanan beat Dole (by a mere 2000 votes) and Alexander (by 9000 votes, 18% to 23%) in New Hampshire. A few thousand votes in Iowa was the difference between a surprising second versus a less notable third place

-

 $^{^{15}\} http://www.usatoday.com/news/polls/tables/live/2004-01-25-poll-results.htm$

finish for Buchanan, and it may have doomed Alexander. Iowa propelled Buchanan to New Hampshire, and New Hampshire drove media attention away from Alexander.

Or consider the fate of Wesley Clark's candidacy in 2004. Clark opted to ignore Iowa. He placed third in New Hampshire on January 27th, just ahead of Edwards (behind Dean and Kerry). The next nomination event deemed most worthy of reporting was the South Carolina primary on February 3rd. Edwards, being from North Carolina, was expected to do well there, and he did, winning 45% to 30% over Kerry. But that was Edwards only win in the seven contests conducted that day, in addition to two other second place finishes. Clark won one February 3rd state (Oklahoma), placed second in three (Arizona, New Mexico and North Dakota) and beat Edwards in most of the February 3rd states. Yet, even prior to February 3rd, NPR and other national media were reporting that 'it's now a two candidate race'; with the two candidates being Edwards and Kerry. Edwards experienced more of a media bounce than Clark post New Hampshire and post February 3rd, despite losing to Clark in most contests. In fact, Clark's proportion of media attention declined more than any other candidate (by 9%) after New Hampshire. Why? Clark hadn't followed the script: Iowa, then New Hampshire, then South Carolina. Media expectations were based on Iowa, New Hampshire, and South Carolina, not New Mexico, Oklahoma and Arizona. Clark didn't contest Iowa, and he did well in the wrong states, in the wrong time zones. The disproportionate attention directed at South Carolina in 2004 was driven by media discretion, not by party rules.

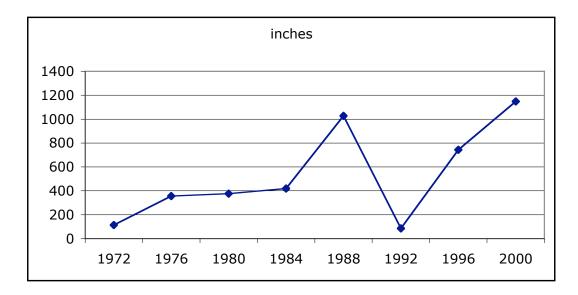
It is difficult to say what the 'correct' story about expectations and candidate viability should have been in 1996 or 2004, or what it should be in any year. The important point is that early contests generate information about viability, and the

American media may not have objective criteria for determining how outcomes in early contests should be interpreted. From this perspective, it doesn't matter which state goes first: having any particular state goes first establishes a process where interpretations of expected outcomes in the first event affect subsequent events. Iowa, however, is particularly problematic for the press. Iowa has a non-transparent caucus process that, as a result of non-transparency, may increase media influence over voter perceptions of candidate viability. The lack of transparency facilitates added discretion in interpretation of events, and may further amplify the power of the press to (unintentionally or not) change the course of elections by shifting attention from one candidate to another based on a small number of votes.

A two candidate contests between a 'frontrunner' and a 'surprising' opponent is a hard story for pundits and reporters to resist, because it is an easy story. It is easy, and more exciting, to report that a candidate had a 'surprise second' place or that someone failed to meet expectations than to explain how Iowa actually works. The reality of Iowa - for Democrats at least - is that vote totals are not reported (for Democrats), and that delegate allocation has as much to do with results from previous years as it has to do with how many people a candidate mobilizes. There is a weak link between the aggregate support a candidate receives across all the precinct caucuses and the 'delegate totals' that the media use to report how a candidate placed. The number of delegates per precinct is not affected by voter turnout; rural areas may be given a disproportionate share of delegates. In a close contest, it is possible that a candidate who mobilizes new voters and/or has strong support in urban areas will receive the most first preference votes across all precincts, but place second or third in the tally of delegates selected for the

county conventions. But someone must win, place, and show. The story will likely be that someone exceeded, or failed to meet, media expectations, even if the story has a "Dewey Defeats Truman" reality beneath it.

Figure 1: Press Attention to Iowa Caucus.



Column inches of articles reporting on the Iowa caucus published in the *New York Times*; two weeks prior to voting.

Table 1: Most Frequently Mentioned Candidates in Iowa Stories (pre caucus)

	Democrat		Republican	
1972	McGovern Muskie Humphrey	(.43) (.35) (.13)	n/a	
1976	Carter Bayh Udall	(.24) (.16) (.10)	Reagan Ford	(.52) (.48)
1980	Carter Kennedy	(.60) (.30)	Regan Bush Connelly	(.34) (.31) (.11)
1984	Mondale Glenn Askew	(.43) (.20) (.10)	n/a	(.11)
1988	Gephardt Dukakis Simon	(.31) (.21) (.19)	Dole Bush Kemp	(.42) (.27) (.15)
1992	Harkin Clinton	(.71) (.11)	n/a	
1996	n/a		Forbes Dole Gramm	(.40) (.22) (.13)
2000	Bradley Gore	(.54) (.46)	Bush Forbes McCain	(.55) (.22) (.15)
2004	Dean Gephardt Kerry	(.47) (.19) (.14)	n/a	

Cell entries are the candidate's proportionate share of all candidate mentions, per party.

Table 2: Largest Change in Media Attention to Candidate, Post Iowa Caucus

Harkin, 1992	(minus 39%)
Forbes, 1996 `	(minus 19%)
Bush, 2000	(minus 18%)
Ford 1976	(minus 12%)
Humphrey 1976	(minus 9%)
Bush, 1988	(minus 9%)
McCain, 2000	(minus 8%)
Gephardt, 2004	(minus 8%)
Dole, 1988	(minus 8%)
Kemp, 1988	(minus 8%)
Mondale, 1984	(minus 7%)
Kennedy, 1980	(plus 8%)
Gephardt, 1988	(plus 8%)
Forbes, 2000	(plus 8%)
Harris, 1976	(plus 9%)
Kerry 2004	(plus 9%)
Keyes, 2000	(plus 9%)
Hart, 1984	(plus 10%)
Reagan, 1976	(plus 12%)
Tsongas, 1992	(plus 15%)
Buchanan, 1996	(plus 17%)
Robertson 1988	(plus 21%)
Clinton, 1992	(plus 24%)

Table 3: Estimates of Media Attention to Iowa Candidates 1976 - 2004, pre caucus (Dependent variable = percent of all references to candidate)

Pre IA National poll %	.50 (.10)
Fundraising (millions of \$)	.48 (.16)
Incumbent	24.4 (10.7)
Home State (Harkin)	68.9 (10.6)
Constant	.74 (3.8)
R2 = Adjusted R2=	.72 .67

OLS coefficients. Standard errors in parentheses.

All models estimated with dummies for 1976, 1980, 1984, 1988, 1992, 1996 and 2000 (coefficients not reported).

Table 4: Estimating Iowa Caucus Results 1976 - 2004

	Vote percent				Place $(1st = 1)$ *		
Pre IA media attention		.76 (.11)	.76 (.06)			11 (.02)	
Predicted pre IA attn (instrument from Table 3)				.79+ (.12)			
Pre IA Natl Poll %	.46 (.12)	.07 (.11)			04 (.02)	.01 (.02)	
Fundraising (millions of \$)	.30 (.18)	09 (.15)			06 (.03)	007 (.03)	
Home state IA	77.3 (12.6)	24.9 (12.5)	18.5 (9.1)	27.2 (14.4)	-3.5 (2.0)	3.9 (2.2)	
Incumbent Pres.	26.5 (12.7)	8.1 (10.2)	10.3 (9.4)	7.4 (13)	-1.5 (2.0)	1.5 (1.8)	
Constant	4.1 (4.6)	3.6 (3.5)	1.0 (2.2)	0.9 (4.4)	5.6 (.75)	5.3 (.29)	
R2 Adj R2	.62 .55	.77 .73	.77 .74	.61 .55	.36 .25	.56 .47	
N	76	76	76	76	76	76	

⁺Instrument generated from Table 3, without dummies for year. * same substantive results w/ ordered probit.

OLS estimates. All models estimated with dummies for 1976, 1980, 1984, 1988, 1992, 1996 and 2000 (coefficients not reported).

Table 5: Estimates of New Hampshire Primary Results, 1976 - 2004

	vote share		win NH?*	place in NH+ $(1 = 1st)$
Iowa vote %	.39	.42	.043	067
	(.09)	(.09)	(.025)	(.015)
Change Media Attn (%) (pre IA to post IA)		.31 (.14)	2.3 (4.1)	67 (.26)
Pre-Iowa Natl Poll %	.47	.47	.048	041
	(.12)	(.11)	(.032)	(.018)
Fundraising (millions \$)	19	13	041	.002
	(.17)	(.17)	(.051)	(.027)
From nearby state	11.9	9.6	2.3	-1.3
	(4.2)	(4.2)	(1.1)	(0.7)
Constant	2.9	2.3	-4.1	5.8
	(4.1)	(4.0)	(1.5)	(.45)
R2 Adj R2 pseudo R2	.63 .56	.66 .59	.28	.51 .43
N	76	76	76	76

^{*} Logit estimates.

All models estimated with dummies for 1976, 1980, 1984, 1988, 1992, 1996 and 2000 (not reported).

⁺same substantive results via ordered probit.

Table 6: Estimates of Aggregate Primary Vote and Nomination Outcomes.

	Vote share		Won Nomination?*		
Pre-Iowa natl poll %	.64 (.12)	.74 (.11)	.59 (.13)	.07 (.04)	.32 (.21)
Fundraising (millions \$)	02 (.15)	02 (16)	08 (.17)	.07 (.09)	07 (.130
Iowa vote %	.06 (.09)	.15 (.08)	.01 (.10)	.02 (.04)	.09 (.08)
New Hampshire %	.30 (.15)		.70 (.12)	.13 (.06)	
Won New Hampshire?	19.2 (4.7)	25.3 (3.6)			10.1 (6.5)
Constant	1.2 (3.6)	2.7 (3.6)	-1.3 (3.9)	-7.5 (2.8)	-14.5 (8.7)
R2 Adj R2 Pseudo R2	.81 .77	.77 .76	.76 .72	.64	.81
N	76	76	76	76	76

^{*}Logit estimates, model with "won NH" variable excludes year dummies.

OLS estimates unless noted otherwise. All models estimated with dummies for 1976, 1980, 1984, 1988, 1992, 1996 and 2000 (not reported).