# News Coverage, Economic Cues, and the Public's Presidential Preferences, 1984–1996

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Much research demonstrates the importance of *national*, rather than *personal*, economic conditions on voting behavior, yet relatively unexplored is how citizens develop what scholars have called "rough evaluations" of the economy. We argue that campaign news coverage about the nation's economic health provides cues to the public; in turn, these cues supply the criteria for sociotropic voting, thereby shaping presidential preferences during the course of campaigns. Examining news stories in each of the past four presidential elections, we (1) categorize coverage as economic or noneconomic, (2) measure its volume and valence, and (3) model candidate coverage against presidential preference polls. Results suggest that economic candidate coverage, although accounting for only a fraction of content, strongly and consistently predicts variation in presidential preference during all four elections, suggesting that voters gain sociotropic criteria for evaluating candidates from news media coverage of campaigns.

One common criticism of news media is that political coverage depends too heavily on public officials. The basic critique is that reporters, in an attempt to be efficient and timely, rely on information and ideas from those in power and generally give them positive coverage (Bagdikian 1997; Bennett 1988; Edelman 1988). The result, scholars argue, is a proincumbency bias in media coverage during presidential elections (Hofstetter 1978; Page and Shapiro 1992; Sigal 1973), which may benefit incumbents at the polls.

Studies on the 1992 election paint a somewhat more complicated picture. Just et al. (1996) did find that incumbent George Bush received more media attention than challengers Ross Perot or Bill Clinton. However, while coverage of his opponents emphasized personalities and campaigns, coverage of Bush predomi-

nantly focused on his performance as a leader, which may have hurt Bush among the public, particularly since the "conviction [spread] among journalists that the campaign was about George Bush's management of the economy" (Just et al. 1996, 116). As Patterson (1993) contends, 1992 news coverage followed the same theme as that of the 1976 and 1980 elections: "incumbent president as a weak candidate." According to this perspective, when incumbents run for reelection while presiding over a weak economy, coverage tends to be mean and superficial, thereby likely undermining their electoral aspirations.

Clearly, whether media coverage is favorable or unfavorable to a particular candidate in presidential campaigns matters only if such coverage is persuasive enough to influence public opinion. That news about the economy may be especially persuasive to voters is suggested by Hetherington (1996), who found that media portrayals of national economic conditions in 1992 had more influence on vote outcomes than actual economic indicators such as GDP growth and inflation rates. During this election, he argues, voters' perceptions of the economy—explained in part through their consumption of news coverage—contrasted sharply with a relatively favorable economic reality and contributed to decreased support for Bush's candidacy.

These insights suggest the intriguing possibility that news coverage about the economy substantially influences the electoral fortunes of presidential candidates. If so, there should be a relationship between economically focused media coverage of incumbents—as well as of challengers, perhaps—and the public's presidential preference across differing campaign contexts. This suggests some testable propositions. If and when news content favors incumbents, as some scholars claim often occurs, do sitting presidents benefit at the polls? Do journalists adjust campaign coverage in relation to the state of the economy? Stepping back a bit further, just how persuasive is media coverage about presidential candidates? And does all news coverage—economic or noneconomic, incumbent or challenger—similarly affect public opinion?

To address these questions, we link research on sociotropic politics and retrospective and prospective voting with studies of media effects on public opinion. Merging insights from these areas, we analyze news media coverage of principal candidates in the past four presidential elections (1984–1996), intentionally distinguishing economic from noneconomic news. We then use this coverage, *alone,* to predict changes in presidential preference as measured by national polls during each campaign. This research, therefore, explores whether variation in candidate news coverage, particularly in attention to the economy, is linked to presidential preferences within four differing campaign contexts that include periods of economic upturns and downturns.

By combining content analysis of leading news media with aggregate-level analysis of changes in public opinion, this effort avoids methodological problems associated with cross-sectional work, which typically measures media exposure or political interest without assessing the content of media (e.g., Hetherington

1996) and analyzes data on an election-by-election basis, severely limiting variation in objective national economic conditions (see Markus 1988). Our focus on over-time change in opinion and a comparative analytical approach offers insight into the conditions under which coverage affects candidate preferences *during the course of each election,* rather than only forecasting election or vote outcomes, as is the case with many economic voting models (Campbell 1992; Erikson 1989; Lewis-Beck and Rice 1992; Rosenstone 1983).

## Economic Voting

Despite arguments to the contrary (Downs 1957; Kramer 1971), scholars often have found that voters do not evaluate economic conditions through their own pocketbooks. That is, in considering candidates, citizens tend to focus less on personal circumstances and more on *national* economic conditions, thereby engaging in what has been termed *sociotropic* voting (Feldman 1982; Kinder, Adams, and Gronke 1989; Lewis-Beck 1988; Weatherford 1983). To be clear, sociotropic voting is not necessarily altruistic; it merely reflects a concern with economic information beyond an individual's own circumstances (Abramson, Aldrich, and Rohde 1994).

While it may seem that such behavior demands too much of citizens given the informational requirements of monitoring the state of the economy, Kinder and Kiewiet (1981) contend that sociotropic analyses need not be overly sophisticated. Indeed, they argue that "voters must only develop rough evaluations of national economic conditions, and then credit or blame the incumbent party accordingly" (131). So how might voters acquire such evaluations? News media are one obvious answer, since their "role as an intermediary is most evident at election time, when the media are the primary conduits for information on the campaign" (Dalton, Beck, and Huckfeldt 1998, 111). It seems plausible, then, that coverage linking presidential candidates to economic conditions may influence citizens' assessments of the state of the economy.

Some support for this perspective may be drawn from Hetherington (1996), who found that the quantity of political information consumed by citizens in the 1992 presidential campaign helped explain cross-sectional variation in evaluations of the national economy, which in turn influenced voting behavior. However, an explanation focusing solely on media *consumption* seems unable to account for over-time changes in voters' candidate preferences—which, as polls showed, fluctuated widely during the three-way race in 1992—because consumption patterns also would need to vary widely, which seems unlikely. Rather, we suggest that variations in media *coverage* of candidates and economic conditions, such as volume and favorability of news content, may be a key predictor of aggregate-level change in presidential preference (see Gelman and King 1993). Such a view does not require significant shifts in media consumption in a short time span, yet recognizes that news media may be filling the vacuum cre-

ated by declines in party mobilization, civic engagement, and other traditional sources of campaign information (Putnam 1995; Rosenstone and Hansen 1993).

In addition to sociotropic politics, *retrospective* judgments of presidential performance also may play an important role in voters' electoral evaluations. The theory of retrospective voting posits that citizens base their vote choice on a running tally of evaluations of prior party promises and performance (Fiorina 1981). Candidates who fulfill past pledges and have a favorable record of achievement receive positive evaluations, whereas those who do not receive negative evaluations. In particular, research has found that judgments about past economic performance exert a strong influence on the vote (e.g., Niemi and Weisberg 1993).

Using individual-level data from a number of Western democracies, Lewis-Beck (1988) shows that citizens, across varied election contexts, consistently employ retrospective evaluations of the economy in voting decisions. In elections, incumbents tend either to be punished for economic downturns or rewarded for periods of prosperity. Further, Lewis-Beck suggests that people use evaluations of economic *prospects* when making vote choices. Research that models changes in public opinion based upon media coverage in the 1996 presidential election provides mixed evidence for these claims. Domke et al. (1997) found that, in the context of a healthy economy, the balance of positive and negative coverage of the principal candidates was irrelevant because the coverage of challenger Bob Dole, regardless of valence, had far less impact on public opinion than coverage of incumbent Clinton. These studies, then, suggest that retrospective economic voting is an important concern for presidential incumbents, while the extent and influence of prospective voting for challengers is much less clear.

Both sociotropic politics and retrospective voting perspectives have met with some opposition, however. Most often, these challenges have resulted from failures to detect an economy-voting relationship in certain countries or time periods (see Just et al. 1996; Madsen 1980; Paldam 1991; Whiteley 1980). Countering this critique, Kramer (1983) argues that the effects of economic conditions on voting may be more readily observed in aggregate studies than at the individual level because the economic environment changes across elections, while voters in any single election, particularly at a given cross-sectional period, most likely experience basically similar economic conditions (see also MacKuen, Erikson, and Stimson 1992; Markus 1988).

However, much of aggregate-level research, due to a focus on voting behavior and forecasting election outcomes (e.g., Campbell 1992; Erikson 1989; Lewis-Beck and Rice 1992; Rosenstone 1983), fails to account for the often substantial variation in public opinion toward candidates that occurs *during* campaigns (Gelman and King 1993). In contrast, we argue that changing media portrayals of candidates, especially content that links them with news about the economy, can account for shifts in citizens' presidential preferences. Thus, our aggregate-level

analysis attempts to explain over-time variation in public opinion during campaigns, rather than only predicting the winner of an election or the final distribution of votes. In so doing, we acknowledge the importance and relative constancy of objective economic conditions during campaigns but argue that media portrayals of these conditions fluctuate more widely, thereby shaping opinion during elections.

## Two Models of Media Effects

Considerable evidence suggests that public opinion on many topics is influenced by *cues* provided by elites and news media (Jasperson et al. 1998; Sniderman, Brody, and Tetlock 1991). This line of theorizing posits that many citizens do not directly experience politics or engage in effortful information gathering, nor do they hold strong attitudes about most topics; rather, people form attitudes "on the fly," often in response to certain ideas or individuals in the information environment (Zaller 1992). In essence, then, cues serve as heuristics that allow citizens to make cognitive shortcuts when processing information about issues and candidates (Kuklinski and Hurley 1994; Mondak 1993).

As a result, patterns of news coverage may alter the mix of cognitions that are most readily accessible when forming political judgments (Krosnick and Brannon 1993; Shah, Domke, and Wackman 1996). Particularly relevant for this study, research has shown that media coverage can *prime* the public to focus attention on particular issues—or *particular dimensions within issues*—thereby changing the criteria voters use when evaluating politicians (Domke, Shah, and Wackman 1998; Iyengar and Kinder 1987; Johnston et al. 1992). Given the importance of economic factors in voting behavior, it seems plausible that shifts in campaign coverage of the economy would considerably influence citizens' political judgments (Pan and Kosicki 1997). This seems particularly likely if one accepts that "the mass media have become the nearly uncontested provider of political information" available to convince the public to support one candidate over another during elections (Hetherington 1996, 374; see also Dalton, Beck, and Huckfeldt 1998).

In merging these insights with findings on sociotropic politics and retrospective and prospective voting, we offer two models of media effects on public presidential preferences: one applies indiscriminately to candidate coverage, and one distinguishes between economic and noneconomic coverage. While recognizing that factors other than media coverage may influence the public's presidential preferences, we choose to limit the scope of our analysis because our primary interest is whether news treatment of candidates, particularly coverage focusing on the economy, can predict the distribution of opinions measured in national polls. In our models, media coverage of the campaign is posited to have persuasive information that is favorable or unfavorable to the

candidates.[1] When there are two major candidates, A and B, information could be pro–Candidate A, con–Candidate A, pro–Candidate B, or con–Candidate B, at any given time t.

Our first model is based on the simple premise that a candidate's current level of support is a function of the level of previous support, the recruitment of the opponent's previous supporters stimulated by media coverage favorable to the candidate or unfavorable to the opponent, and the loss of the candidate's own previous supporters stimulated by media coverage unfavorable to the candidate or favorable to the opponent.

In mathematical terms, the model is

$$\text{OpinCandA}_{(t)} = \text{OpinCandA}_{(t-1)} + [k_{\text{ProCandA}} F_{(\text{ProCandA},t)} + k_{\text{ConCandB}} F_{(\text{ConCandB},t)}] \text{OpinCandB}_{(t-1)} - [k_{\text{ProCandB}} F_{(\text{ProCandB},t)} + k_{\text{ConCandA}} F_{(\text{ConCandA},t)}] \text{OpinCandA}_{(t-1)}$$

where OpinCandA and OpinCandB are opinion favoring the two candidates, respectively, and the $k$ parameters are the persuasibility constants describing the percentage of the population recruited by the corresponding paragraphs translated into persuasive force functions F. $\text{OpinCandA}_{(t)}$ and $\text{OpinCandB}_{(t)}$ add to 100% since all undecideds are excluded and the numbers renormalized.

Since Ross Perot's support rarely exceeded 10% in 1996 he was excluded for that election. Perot's support was high enough to warrant inclusion in 1992. A variant model was used for the 1992 election since it contained three candidates; this model presumes that persuasive information unfavorable to a candidate persuades supporters of that candidate to move to the two other candidates in proportion to their opinion shares (for this three-candidate model, see Fan 1996).

However, a potential weakness of this initial model (whether for two or three candidates) is its failure to isolate coverage of economic issues. Economic voting research (e.g., Fiorina 1981; Hetherington 1996; Kinder, Adams, and Gronke 1989; Lewis-Beck 1988; MacKuen, Erikson, and Stimson 1992) suggests that positive and negative coverage of those running for office may have an especially powerful impact on opinion if it makes reference to the state of the economy. By providing voters with economic criteria to use in their evaluations of incumbents and challengers, the news media may help to create the

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[1] In our formal *ideodynamic model*, persuasive information is treated as time-dependent persuasive force functions: F(ProCandA,t), F(ConCandA,t), F(ProCandB,t), and F(ConCandB,t). These persuasive force functions indicate the amount of information available at time t to influence the public to favor a particular idea. Each function F for time t is the sum of the number of paragraphs in news media coverage of the appropriate valence, each one given its maximal value on the story date followed by an exponential decay with a one-day half-life. Previous research indicates that the one-day decay rate for the loss in ability to persuade provides a good fit for the relationship between media coverage and public opinion polls (Domke et al. 1997; Fan 1988; Fan and Tims 1989). The results reported here use this rate of decay.

context in which sociotropic, retrospective, or prospective judgments become possible. Thus, we specify a second model of media effects in which economic and noneconomic candidate coverage is entered into the equation as separate variables.

In mathematical terms, this second model is

$$
\begin{aligned}
\text{OpinCandA}_{(t)} = {}& \text{OpinCandA}_{(t-1)} + [k_{\text{ProCandAEcon}}\ F_{(\text{ProCandAEcon, t})} + \\
& k_{\text{ConCandBEcon}}\ F_{(\text{ConCandBEcon, t})} + k_{\text{ProCandANonEcon}} \\
& F_{(\text{ProCandANonEcon, t})} + k_{\text{ConCandBNonEcon}}\ F_{(\text{ConCandBNonEcon, t})}] \\
& \text{OpinCandB}_{(t-1)} - [k_{\text{ProCandBEcon}}\ F_{(\text{ProCandBEcon, t})} + \\
& k_{\text{ConCandAEcon}}\ F_{(\text{ConCandAEcon, t})} + k_{\text{ProCandBNonEcon}} \\
& F_{(\text{ProCandBNonEcon, t})} + k_{\text{ConCandANonEcon}}\ F_{(\text{ConCandANonEcon, t})}] \\
& \text{OpinCandA}_{(t-1)}
\end{aligned}
$$

where Econ and NonEcon refer to economic candidate coverage and noneconomic candidate coverage, respectively. Otherwise, the equation is the same as the previous one.

Both of these ideodynamic equations differ from standard time-series models in multiplying the persuasive force by the percent of the opponent supporters, those who can be persuaded to change their minds. This multiplication gives the correct result that no more recruitment is possible regardless of the strength of the favorable information when there are no opponent supporters left. Besides being necessary for theoretical reasons, the multiplication also has the advantage that it enables the prediction of the entire opinion time series without use of measured opinion from previous times as explanatory variables after a single starting opinion value to initialize the computation. In other words, the computation is made iteratively beginning with the use of $\text{OpinCandA}_0$ to compute $\text{OpinCandA}_1$. Then this calculated $\text{OpinCandA}_1$ is used as $\text{OpinCandA}_{(t-1)}$ to compute $\text{OpinCandA}_2$, and so on in a recursive fashion. The final form of the resulting nonlinear, high-order polynomial equation is given in Fan (1996).[2]

## Data

Two types of data were used in this study. First, daily news media coverage of the principal candidates in the 1984, 1988, 1992, and 1996 presidential cam-

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[2] It is possible to use computed prior opinion (in place of the empirically measured previous opinion entered into standard autoregressive models) because of the multiplication of persuasive forces by opinion values, all necessarily 100% or less. With this multiplication, the errors stabilize to a constant size and do not increase without limit, even though they are accumulated from the start of the computation (Fan 1996; Fan, Brosius, and Kepplinger 1994; Hertog and Fan 1995). Omitting prior measured opinion from the prediction has the practical benefit that opinion predictions can be made at 24-hour time intervals, even early in the campaign when polls are infrequent and unevenly spaced in time. Also, the model is much more sensitive to effects of persuasive information because the variance does not include any contributions from prior opinion after the initial value.

paigns was examined for positive and negative appraisals of candidates. Second, a time series of public opinion polls were used to estimate citizens' presidential preferences throughout each campaign. Together, these data allow modeling of media effects in each election.

### News Media Content

For all elections, campaign stories by various news media were drawn at random from the NEXIS database if they mentioned the last names of at least two candidates or contained at least three occurrences of any one candidate's last name. Retrieval in electronic form (1) allowed vast quantities of news content to be downloaded for analysis and (2) permitted texts from newspapers and television newscasts to be coded with a computer program. The news sources and time periods analyzed, the number of stories identified and then sampled for analysis, and the volume of these stories in megabytes are shown in Table 1.[3]

The stories were analyzed using the InfoTrend computer content analysis program, which reads a computer program in the FiltScor language (Fan 1988). The analyst uses the computer language to enter words and word relationship rules that allow combinations of ideas to give more complex meaning. For each election, retrieved stories first were filtered to remove text not relevant to the election, such as those focusing on the candidates' spouses. Remaining paragraphs were then coded for positive and/or negative coverage of the candidates.

Based upon extensive rules established to address the syntactical structures of sentences, the valence coverage of the candidates was coded using virtually identical rules for all four elections. The rules were merely adjusted to account for shifts in candidates, idiosyncratic phrases, and events particular to an election. For each election, paragraphs were coded as pro or con for the candidates. Although rarely the case, each paragraph could be scored as positive and/or negative to all candidates within a given campaign, depending on the ideas expressed in the text.[4]

An example of text that would be scored pro-Clinton is this statement: "Clinton has been successful at attracting women voters." In this sentence, the words "Clinton" and "successful" were in close proximity and led to the scoring of the idea pro-Clinton. Moreover, the statement "Clinton attacked Bush on his lack of leadership on the economy" would be coded as con-Bush. This scoring

[3] The number of sources available through NEXIS increased considerably across the four elections. During the 1984, 1988, and 1992 elections a comparable number of stories were downloaded for coding purposes. This number was increased for 1996 to draw enough stories from each of the news sources analyzed for this election.

[4] Allowing each paragraph to be scored in several categories is a coding strategy advocated by several scholars. For example, Buchanan (1991, 180) argues that such an approach "provides a much more accurate reflection of the nature of news coverage than arbitrarily classifying each story"—paragraph in our case—"into one and only one category, as political content analysis has occasionally done."

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TABLE 1

## Identified and Sampled Stories for Four Elections

| Election | Candidates Analyzed | Dates Analyzed | Stories Identified | Stories Sampled | Megabytes of Text |
|---|---|---|---|---|---|
| 1984[a] | Reagan Mondale | 3/1/84–11/7/84 | 24,773 | 8,198 | 24.3 |
| 1988[b] | Bush Dukakis | 3/1/88–11/8/88 | 18,678 | 5,920 | 19.3 |
| 1992[c] | Bush Clinton Perot | 3/15/92–11/3/92 | 40,395 | 7,358 | 28.5 |
| 1996[d] | Clinton Dole | 3/10/96–11/6/96 | 70,116 | 12,215 | 31.3 |

[a] News stories about the 1984 election were downloaded from The Associated Press, *The New York Times, The Washington Post,* and United Press International electronic archives.

[b] News stories about the 1988 election were downloaded from The Associated Press, *Chicago Tribune, Los Angeles Times, Louisville Courier-Journal, The New York Times, St. Petersburg Times,* and *The Washington Post* electronic archives.

[c] News stories about the 1992 election were downloaded from ABC News, The Associated Press, *The Boston Globe,* Cable News Network, *Chicago Tribune, Los Angeles Times, Louisville Courier-Journal, New York Newsday, The New York Times, Orlando Sentinel Tribune, St. Petersburg Times, San Francisco Chronicle, Seattle Times, USA Today,* and *The Washington Post* electronic archives.

[d] News stories about the 1996 election were downloaded from ABC News, *Arizona Republic, The Atlanta Journal-Constitution, The Baltimore Sun, The Boston Globe, The Boston Herald, Buffalo News,* Cable News Network, *Chicago Sun Times, Chicago Tribune, The Christian Science Monitor, Cleveland Plain Dealer, Columbus Dispatch, The Dallas Morning News, Denver Post, The Detroit News, Fort Lauderdale Sun-Sentinel, Hartford Courant, Houston Chronicle, Houston Post, Indianapolis Star, Kansas City Star, Los Angeles Times, Louisville Courier-Journal, Minneapolis Star Tribune, New Orleans Times-Picayune, New York Daily News, New York Newsday, The New York Times, Omaha World Herald, The Orange County Register, Orlando Sentinel Tribune, The Phoenix Gazette, Pittsburgh Gazette, Rocky Mountain News, The Sacramento Bee, St. Petersburg Times, San Diego Union Tribune, San Francisco Chronicle, Seattle Times, Tampa Tribune, USA Today,* and *The Washington Post* electronic archives.

was based on the words "Clinton," "attacked" and "Bush," with coding rules recognizing that "attacked" should precede the candidate for it to be coded as "con." Rules also incorporated negation produced by such words as "not." For example, the statement that "Dole has not been successful at attracting women voters" would be coded as con-Dole.

Two people selected a sample of paragraphs and coded them as a check against the reliability of the computer coding. For 1988, human coders and machine agreed on 198 of 240 paragraphs, yielding a .83 reliability coefficient. For 1992, human coders and machine agreed on 166 of 204 paragraphs, for a .81 reliability. For 1996, human coders and machine agreed on 177 of 230 paragraphs,

for a .77 reliability. These were based on paragraphs already determined to be relevant to the candidates and hence represent a more stringent criterion than scoring for all paragraphs in campaign stories.

This level of computer–human agreement reflects the limitations inherent in any computer-based content analysis. Confidence in findings would be substantially diminished, however, only if systematic biases (e.g., overscoring of con-Mondale or underscoring of con-Reagan paragraphs) existed in the coding; such biases were not apparent at any stage in the development of the coding rules or during the intercoder reliability checks. The lack of bias was reinforced by the use of the same modifiers in the same conditions for all candidates. Due to the randomness of any coding errors, the large volume of paragraphs that could be analyzed made application of the computer content analysis a strength of the research.

Finally, paragraphs containing positive or negative coverage of candidates were subjected to another filtration step: they were separated into economic and noneconomic categories based on the presence or absence of keywords. This was done to identify coverage about broad economic issues, not specific policies. Accordingly, paragraphs containing the following words or word segments were coded as economic: econom>, <employ>, inflation, jobless>, jobs, prosperity, and/or recession, where < > means that leading or trailing letters are permitted. Remaining paragraphs were coded as noneconomic.[5]

## Public Opinion Polls

The dependent variable in the ideodynamic model is the proportion of poll respondents supporting Candidate A out of the total respondents supporting Candidate A and Candidate B (and Candidate C in 1992). For each election, data were developed from polls available in the Roper Center's POLL database for the span of time paralleling analysis dates for news media coverage. Toward the end of campaigns, when there was more than one poll per day, at most two polls were chosen per day using the criteria of high number of respondents and low number of days from beginning to the end of the survey.

The basic question for the POLL database polls was, "If the [year] election were being held today, and the candidates were [Democratic candidate] for President and [running mate] for Vice President, the Democrats, and [Republican candidate] for President and [running mate] for Vice President, the Republicans, would you vote for [Democratic candidate and running mate] or for

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[5] Since "economic" was merely an idea category and not a more complex combination of rules, intercoder analysis was not formally performed. Nonetheless, a less formal assessment of the coding indicated that this filter performed in a reliable and unbiased manner. As an additional precaution, we tested the degree to which this coverage overlapped with horserace content. A crosstab was performed between the economy idea category and previously validated rules for coding horserace content in the 1996 election (see Domke et al. 1997). Only 5.6% of economic coverage had a horserace component in this election, allaying concerns that one type of content might substantially extend into the other.

[Republican candidate and running mate]?" The vice presidential candidates were included in the question only after party conventions. During 1992 and, to a lesser degree 1996, some polls included Perot and his running mate as candidates. Perot was included in the 1992 analysis but not the 1996 analysis, mainly due to his more substantive role in the 1992 election campaign. Ninety poll points were used for 1984, 137 for 1988, 55 for 1992, and 173 for 1996.[6]

## Results

Data analysis proceeded in two stages. First, in all four campaigns news content was analyzed for favorable and unfavorable coverage of the candidates. Then, this content was modeled against public opinion concerning presidential preference for each race to assess the influence of media coverage on public opinion.

### Content Analysis

Campaign news content was analyzed by volume and valence for each candidate for each election. In addition, economic coverage was differentiated. The results of the content analysis are charted in Figures 1 and 2.[7]

For the 1984 campaign, Reagan, who was running as the incumbent, received the most coverage, with a positive-to-negative paragraph ratio of 1.22. Mondale had slightly fewer positive and significantly fewer negative paragraphs, giving him a much more favorable ratio of 1.60, the highest of any candidate in the four elections. Reagan, however, received more favorable economic coverage: Reagan's pro-to-con ratio was 1.30, while Mondale's was 1.19. Further, while economic coverage accounted for only 5.5% of coded paragraphs, Reagan's coverage accounted for nearly three-fourths of such content.

During the 1988 race, which did not contain an incumbent seeking reelection, Bush received roughly the same amount of coverage as Dukakis, yet the positive-to-negative paragraph ratio was 1.36 for Bush compared to 1.56 for Dukakis. Dukakis also received more favorable economic coverage: Dukakis' pro-to-con

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[6] The inclusion of Perot reduced the number of usable polls in 1992. In this election from mid-July to early October, when Perot temporarily withdrew from the race, he was no longer included in the standard poll questions. Questions posing hypothetical scenarios that included Perot were occasionally asked to survey respondents. Due to substantial differences in question wording, these alternative questions were not included in our analysis, resulting in a gap for the period Perot exited the campaign. For the 1996 election campaign, after August 26, some polls included Perot as a candidate. Perot's supporters favored Clinton and Dole in essentially the same ratios as the population at large in these polls. Therefore, in the 1996 election, all poll data were renormalized to 100% after removing those who were undecided or supported Perot.

[7] Due to the extremely large case count for these analyses, it is virtually inevitable that differences would be significant at $p < .05$, and indeed all the differences featured in these charts are statistically significant at this criterion. Accordingly, we do not report probability values in these charts, relying instead on the magnitude of the differences in our discussion of results.

FIGURE 1

Total Favorable and Unfavorable Coverage by Candidate, 1984–1996
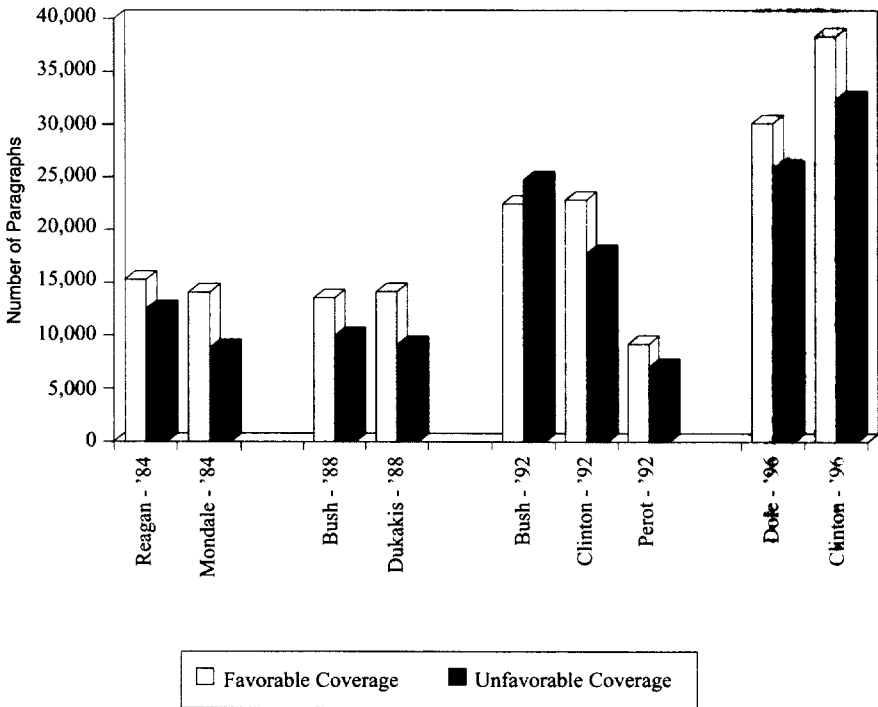


ratio was 1.40, while Bush's was 1.30. The candidates did receive nearly equal amounts of economic coverage, but only 4.8% of content was economic in nature, the lowest amount across the four elections.

For the 1992 campaign, incumbent Bush received a majority of coverage in the three-candidate race. However, the valence of coverage did *not* favor Bush, whose positive-to-negative paragraph ratio of 0.91 made him the only candidate in the four elections to receive more negative coverage. In contrast, Clinton and Perot had nearly equal favorable ratios of 1.28 and 1.31, respectively. Notably, 11.9% of coverage in this campaign was economic in nature, more than twice as much as any other election. Bush dominated this content, but this worked to his detriment as he received much more unfavorable economic coverage than his opponents. His pro-to-con ratio of .77 for economic content was the lowest across the types of coverage considered in this study, while Clinton had a much better 1.14 ratio and Perot a 1.25 ratio.

FIGURE 2

## Favorable and Unfavorable Economic Coverage
## by Candidate, 1984–1996
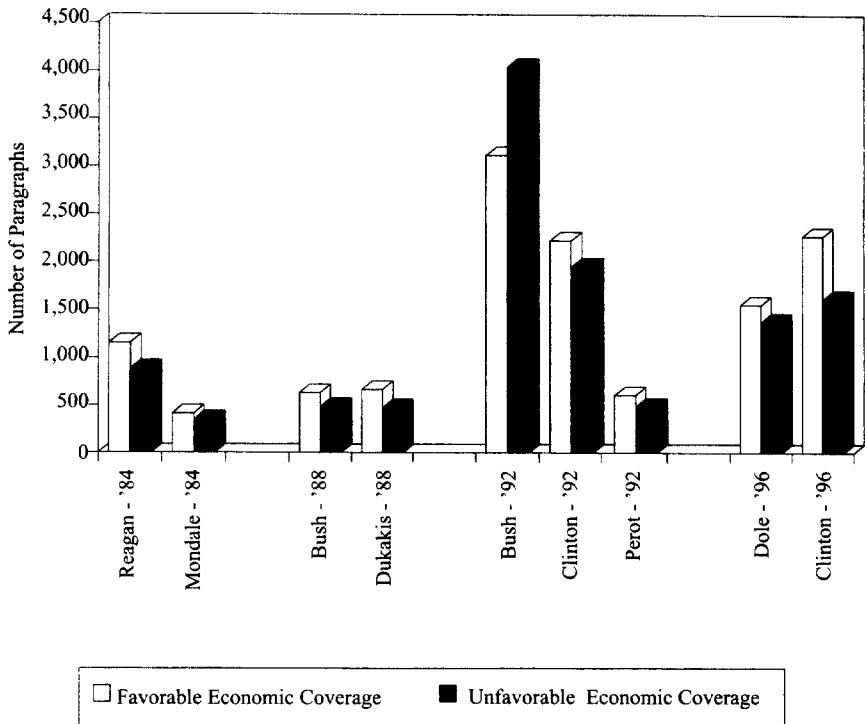


During the 1996 campaign, the positive-to-negative paragraph ratios for Clinton and Dole were remarkably similar: 1.18 for Clinton and 1.17 for Dole. Overall, Clinton, the incumbent, received a majority of these paragraphs. Economic coverage, however, was *not* similarly balanced. Clinton received substantially more pro than con paragraphs for a ratio of 1.41—the highest economic ratio of any candidate—while Dole had a ratio of 1.13. In addition, Clinton received slightly more economic coverage than Dole, though only 5.4% of content fit this category.

### Discussion of Content Analysis

In terms of volume, incumbents appear to have an advantage (or, in some instances, the disadvantage) of receiving more coverage. The percentage of total

valence paragraphs for the incumbent was roughly 55% for 1984 and 1996, and 45% for 1992, when Bush accounted for a plurality of coverage in a three-way race. In contrast, during the open election of 1988, Bush and Dukakis received nearly equal amounts of coverage. Thus, these results suggest that incumbents do receive more coverage by virtue of being in office.

While the volume of news content across these four elections consistently favors the incumbent, the valence of coverage does not. If anything, it appears that news media favor Democratic challengers, as in 1984 and 1992. One interpretation might be that journalists favor underdogs in order to make the race more interesting (see Domke et al. 1997). For these elections, coverage of Democratic challengers had a substantially more favorable positive-to-negative ratio than coverage of Republican incumbents. In fact, Bush in 1992 was the only candidate across the four elections to receive more negative than positive coverage, a finding consistent with Patterson's (1993) contention that coverage presented the "incumbent president as a weak candidate." The 1992 election also had Perot as an independent challenger; his ratio of positive-to-negative coverage was almost identical to Clinton's.

However, in the one election in this analysis that contained a Democratic incumbent, 1996, Clinton and challenger Dole had virtually identical pro-to-con ratios, suggesting that Republicans may not garner a similar advantage in the ratio of positive-to-negative coverage when they are challengers. The possibility of a bias against conservative candidates is further suggested by the content analysis of the 1988 election, in which there was no incumbent seeking reelection. Over the course of this campaign, Bush received substantially less favorable coverage than his Democratic opponent, Dukakis. Indeed, the pro-to-con coverage ratio of Republican candidates was worse than that of the Democratic candidates in all four elections considered by this study.

A different pattern emerges for economic coverage. Popular incumbents overseeing economic upturns and declines in unemployment (Reagan in 1984 and Clinton in 1996) received advantages in two ways: first, the incumbent received substantially more of the economic coverage; second, that coverage was more favorable than the challengers.' In contrast, Bush did receive more economic coverage than his opponents in 1992, but *it was substantially more negative*. In particular, his pro-to-con economic content ratio of .77 indicates very negative treatment by news media, likely resulting from the 1990–91 recession and the increasing unemployment rate (up more than two percentage points from 1989) that Bush, as president, oversaw.

Patterns in media content for these three elections can be contrasted with the open election of 1988, when both candidates received roughly equivalent amounts of economic coverage, with a slight advantage in favorability to Dukakis. With no incumbent to credit for stable GDP growth, declining unemployment (down more than four percentage points since 1982), and high consumer confidence

(index = 115.2), media coverage furnished voters with favorable and balanced economic coverage of the candidates. These findings suggest that news media, like the public, reward incumbents for economic upturns and punish them for downturns. As a result, receiving more coverage is not always beneficial for incumbents.

Finally, the data also suggest that news media respond to economic downturns by devoting more coverage to economic issues. In particular, during the 1992 campaign, when the nation was recovering from a significant recession and unemployment was at a decade-long high, about 12% of campaign coverage dealt with economic issues. Compared to the other three elections, coverage during the 1992 election was atypical. For 1984, 1988, and 1996, roughly 5% of news content was economic in nature, with the least amount of such coverage in 1988 when indicators pointed to a particularly favorable economic climate. Thus, news media appear to respond to recent economic performance by altering the valence *and* volume of candidate coverage.

### Predictions of Presidential Preference

As the second stage of analysis, news media content was modeled against public opinion in an effort to predict presidential preferences based solely on press coverage. For each election, two different models were tested: the first simply included positive and negative coverage of the candidates; the second used the same content but differentiated economic coverage from noneconomic coverage (i.e., all content not economic in nature).

For the 1984 election, the four $k$ parameters of the estimated model using only positive and negative candidate coverage show similarly strong effects for pro-Reagan and con-Reagan. Con-Mondale is statistically significant at .05 but considerably weaker, while pro-Mondale is not significant (see Table 2).[8] The $R^2$ is 0.29 with root mean squared residuals at 2.9%. The low level of variance explained is not surprising, given the limited variance in the time trend. The level of public support for Reagan as predicted *solely from news media coverage* and modeled against actual poll results is presented as the dotted line in Figure 3.

The eight $k$ parameters of the expanded model show strong effects for pro-Reagan and pro-Mondale economic coverage. In contrast, con-Reagan and con-Mondale economic coverage are negligible predictors of presidential prefer-

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[8] Parameter estimates are presented to the least significant digit (times 0.000001), with the 95% confidence intervals in parentheses. To determine the relative contribution, or predictive power, of any given parameter, each parameter estimate was contrasted against the performance of all other parameters within that equation. The following criteria were applied: the most powerful estimates within a particular equation were considered strong predictors; estimates not within a factor of 3 but within a factor of 10 of the most powerful predictors were considered moderate predictors; remaining estimates that achieved statistical significance were considered weak predictors; others were considered negligible predictors. This analytical approach was applied to all modeling.

TABLE 2

## Parameter Estimates for Media Effects on Presidential Preference in the 1984 Election

| Base Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Reagan | 0.75 | (0.71, 0.79) | Strong |
| Con-Reagan | 0.61 | (0.58, 0.65) | Strong |
| Pro-Mondale | 0.00002 | (0, 0.028) | Negligible |
| Con-Mondale | 0.11 | (0.045, 0.18) | Moderate |

$R^2 = 0.29$
RMSR = 2.9%

| Expanded Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Reagan Economic | 3.5 | (2.5, 4.6) | Strong |
| Con-Reagan Economic | 0.011 | (0, 0.93) | Negligible |
| Pro-Mondale Economic | 5.0 | (3.0, 7.1) | Strong |
| Con-Mondale Economic | 0.0072 | (0, 3.5) | Negligible |
| Pro-Reagan Noneconomic | 0.72 | (0.63, 0.81) | Moderate |
| Con-Reagan Noneconomic | 0.93 | (0.87, 1.0) | Moderate |
| Pro-Mondale Noneconomic | 0.078 | (0.020, 0.14) | Weak |
| Con-Mondale Noneconomic | 0.87 | (0.73, 1.0) | Moderate |

$R^2 = 0.34$
RMSR = 2.8%

ence. Noneconomic coverage is notable for its consistent moderate contribution in most cases. The $R^2$ is 0.34 with root mean squared residuals at 2.8%. Thus, this model provides the better fit with presidential preferences during the 1984 election. The level of public support for Reagan predicted by this second formulation is modeled against actual poll results in Figure 3, solid line.

For 1988, all four $k$ parameters of the estimated base model are strong predictors. The negative paragraphs have stronger predictive power, with con-Bush the strongest. For positive coverage, pro-Bush is the stronger predictor, whereas pro-Dukakis has about 40% of the predictive power as con-Bush (see Table 3). The $R^2$ is 0.72 with root mean squared residuals at 2.8%. The level of public support for Bush as predicted from news coverage and modeled against actual poll results is presented in Figure 4, dotted line.

When economic coverage is distinguished from noneconomic coverage, the eight $k$ parameters of the estimated model show that both pro and con economic coverage of Bush and Dukakis are strong predictors. Noneconomic coverage is again notable for its moderate contribution. The $R^2$ is 0.78 with root

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FIGURE 3

## Percent Who Would Vote for Reagan "If the 1984 Election Were Being Held Today"
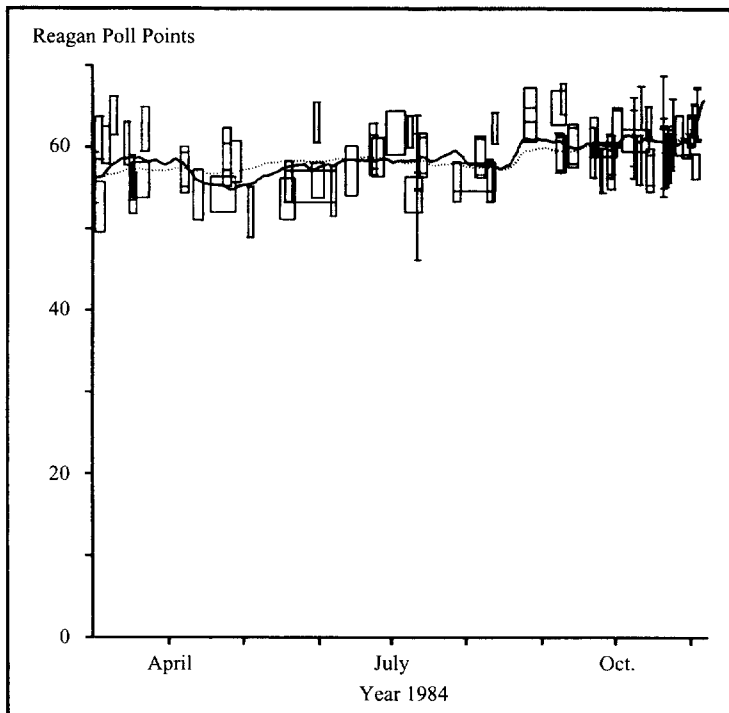


The dotted line is the prediction of the base model; the solid line is the prediction of the expanded model, which distinguishes economic coverage from noneconomic coverage. The width of the hash mark symbols in the figures correspond with the beginning and ending dates of the survey, and the height gives a 95-percent confidence interval.

mean squared residuals at 2.5%. Therefore, the model distinguishing economic coverage from noneconomic coverage again provides a better fit with public opinion than the base model. The level of public support for Bush predicted by this second formulation is modeled against poll results in Figure 4, solid line.

Six $k$ parameters in the base model were estimated for the three-way race in the 1992 election. These estimates indicate that positive coverage of each candidate strongly predicted public opinion. Pro-Bush and pro-Perot are the strongest predictors, both nearly 60% more powerful than pro-Clinton. In contrast, negative coverage is not very predictive (see Table 4). The $R^2$ is 0.40 for Bush, 0.85 for Clinton, and 0.83 for Perot, with root mean squared residuals at

TABLE 3

Parameter Estimates for Media Effects on Presidential Preference
in the 1988 Election

| Base Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Bush | 1.4 | (1.3, 1.5) | Strong |
| Con-Bush | 2.2 | (2.1, 2.4) | Strong |
| Pro-Dukakis | 0.94 | (0.88, 1.0) | Strong |
| Con-Dukakis | 1.9 | (1.7, 2.0) | Strong |

$R^2 = 0.72$
RMSR = 2.8%

| Expanded Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Bush Economic | 6.6 | (5.6, 7.8) | Strong |
| Con-Bush Economic | 5.4 | (4.1, 6.8) | Strong |
| Pro-Dukakis Economic | 3.9 | (2.9, 4.8) | Strong |
| Con-Dukakis Economic | 2.6 | (1.2, 4.0) | Strong |
| Pro-Bush Noneconomic | 0.64 | (0.59, 0.70) | Moderate |
| Con-Bush Noneconomic | 0.48 | (0.41, 0.55) | Moderate |
| Pro-Dukakis Noneconomic | 0.45 | (0.40, 0.50) | Moderate |
| Con-Dukakis Noneconomic | 0.38 | (0.30, 0.46) | Moderate |

$R^2 = 0.78$
RMSR = 2.5%

3.6%. The lower amount of variance explained for opinion about Bush partly reflects a lack of variance in his poll trend. Public support for each candidate as predicted from news coverage is modeled against actual poll results in Figure 5, dotted lines.

The twelve $k$ parameters of the expanded model show powerful effects for pro-Bush and pro-Clinton economic coverage, with Clinton coverage a somewhat stronger predictor of change in public opinion. However, pro-Perot economic coverage does not achieve statistical significance. Consistent with earlier elections, positive noneconomic coverage of all three candidates contributes moderately to predictions of presidential preference. Interestingly, negative coverage of candidates, both economic and noneconomic, is a weak predictor of polls in almost all cases. The $R^2$ is 0.36 for Bush, 0.94 for Clinton, and 0.85 for Perot, with root mean squared residuals at 3.1%. Again, this expanded model provides a better fit with presidential preference than the base model, particularly in explaining support for Clinton. Poll support predicted by this model for each candidate is modeled against poll results in Figure 5, solid lines.

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FIGURE 4

## Percent Who Would Vote for Bush "If the 1988 Election Were Being Held Today"
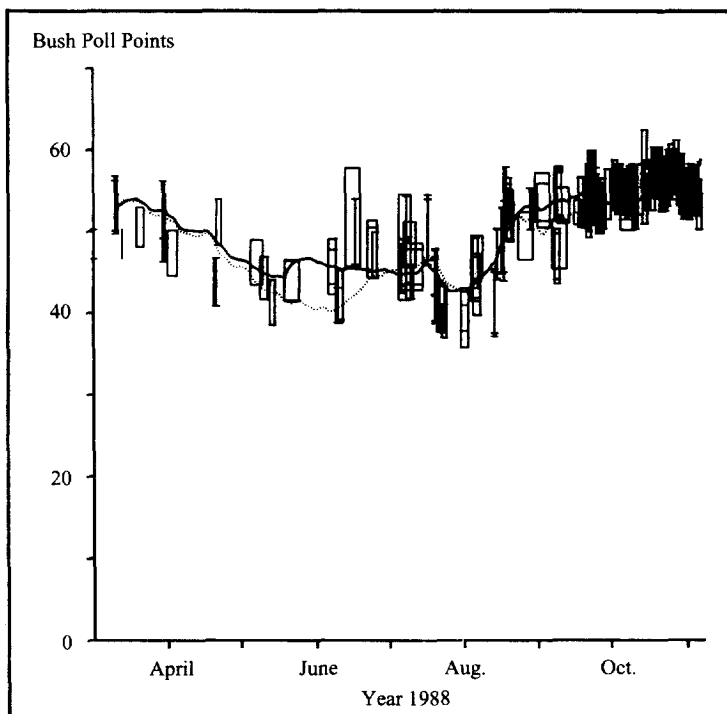


The dotted line is the prediction of the base model; the solid line is the prediction of the expanded model, which distinguishes economic coverage from noneconomic coverage. The width of the hash mark symbols in the figures correspond with the beginning and ending dates of the survey, and the height gives a 95-percent confidence interval.

The four $k$ parameters of the estimated base model for 1996 show that positive and negative Clinton paragraphs strongly influence the polls, with pro-Clinton coverage more powerful. Pro-Dole coverage has a statistically significant, but considerably weaker effect, while con-Dole paragraphs have no influence on the opinion polls (see Table 5). The $R^2$ is 0.54 with root mean squared residuals at 2.7%. The level of public support for Clinton as predicted from news coverage is modeled against actual poll results in Figure 6, dotted line.

The estimated model distinguishing economic from noneconomic candidate coverage reveals an interesting finding: pro-Dole and con-Dole economic cover-

TABLE 4

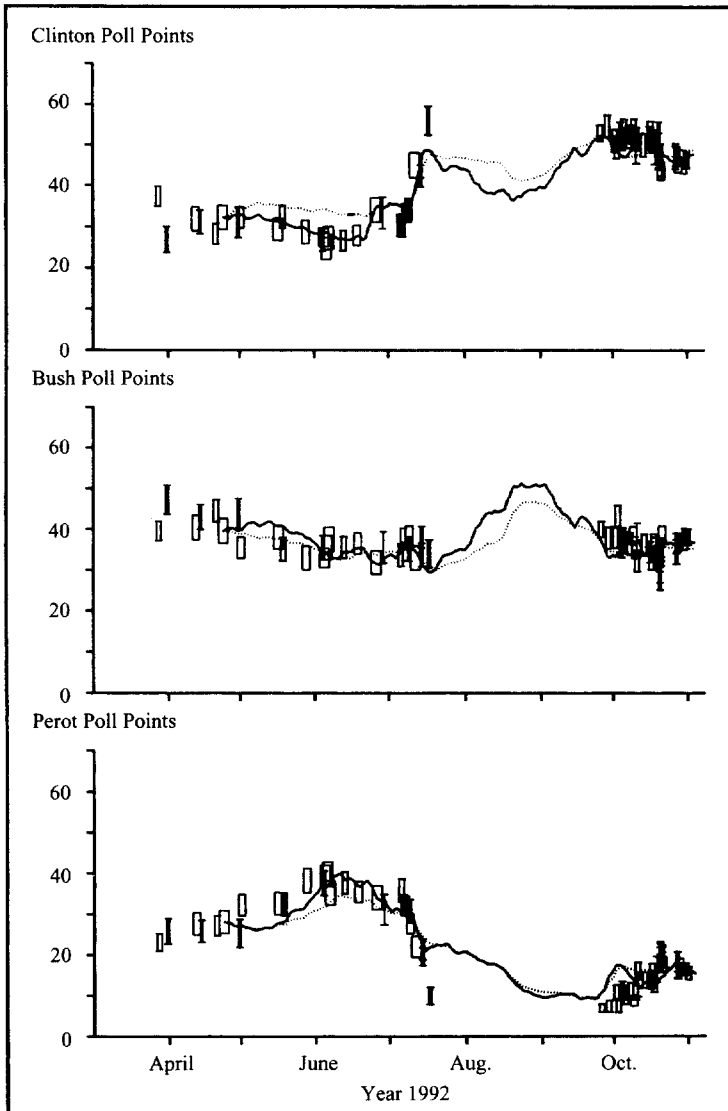## Parameter Estimates for Media Effects on Presidential Preference in the 1992 Election

| Base Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Bush | 0.98 | (0.91, 1.0) | Strong |
| Con-Bush | 0.014 | (0.013, 0.016) | Weak |
| Pro-Clinton | 0.58 | (0.52, 0.66) | Strong |
| Con-Clinton | 0.000004 | (0, 0.0012) | Negligible |
| Pro-Perot | 0.99 | (0.88, 1.1) | Strong |
| Con-Perot | 0.028 | (0.021, 0.034) | Weak |

$R^2$ for Bush = 0.40
$R^2$ for Clinton = 0.85
$R^2$ for Perot = 0.83
RMSR = 3.6%

| Expanded Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Bush Economic | 5.0 | (4.3, 5.9) | Strong |
| Con-Bush Economic | 0.12 | (0.10, 0.13) | Weak |
| Pro-Clinton Economic | 6.2 | (5.3, 7.2) | Strong |
| Con-Clinton Economic | 0.061 | (0.035, 0.086) | Weak |
| Pro-Perot Economic | 0.0027 | (0, 1.9) | Negligible |
| Con-Perot Economic | 0.33 | (0.18, 0.47) | Moderate |
| Pro-Bush Noneconomic | 1.1 | (0.95, 1.2) | Moderate |
| Con-Bush Noneconomic | 0.0056 | (0.0026, 0.0089) | Weak |
| Pro-Clinton Noneconomic | 0.57 | (0.44, 0.70) | Moderate |
| Con-Clinton Noneconomic | 0.0052 | (0.0014, 0.0086) | Weak |
| Pro-Perot Noneconomic | 1.9 | (1.7, 2.1) | Moderate |
| Con-Perot Noneconomic | 0.038 | (0.029, 0.048) | Weak |

$R^2$ for Bush = 0.36
$R^2$ for Clinton = 0.94
$R^2$ for Perot = 0.85
RMSR = 3.1%

age are strong predictors. In contrast, Clinton's positive economic coverage is not predictive of public opinion, but his negative economic coverage is, albeit only moderately. In considering the noneconomic coverage, both pro and con coverage of Clinton contributes moderately to the model. The $R^2$ is 0.56 with root mean squared residuals at 2.7%. The expanded model, then, explains only an additional 2% of variance in presidential preference polls over the base model. The level of public support for Clinton predicted by the expanded model is plotted against poll results in Figure 6, solid line.

FIGURE 5

## Percent Who Would Vote for Clinton/Bush/Perot
## "If the 1992 Election Were Being Held Today"



The dotted line is the prediction of the base model; the solid line is the prediction of the expanded model, which distinguishes economic coverage from noneconomic coverage. The width of the hash mark symbols in the figures correspond with the beginning and ending dates of the survey, and the height gives a 95-percent confidence interval.

TABLE 5

### Parameter Estimates for Media Effects on Presidential Preference in the 1996 Election

| Base Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Clinton | 0.25 | (0.24, 0.26) | Strong |
| Con-Clinton | 0.16 | (0.15, 0.17) | Strong |
| Pro-Dole | 0.039 | (0.031, 0.048) | Moderate |
| Con-Dole | 0.00023 | (0, 0.015) | Negligible |

$R^2 = 0.54$
RMSR = 2.7%

| Expanded Model | | | |
|---|---|---|---|
| Type of Content | Parameter Estimate | Confidence Interval | Relative Strength |
| Pro-Clinton Economic | 0.0043 | (0, 0.24) | Negligible |
| Con-Clinton Economic | 0.39 | (0.15, 0.63) | Moderate |
| Pro-Dole Economic | 1.6 | (1.4, 1.9) | Strong |
| Con-Dole Economic | 2.5 | (2.1, 2.9) | Strong |
| Pro-Clinton Noneconomic | 0.35 | (0.34, 0.37) | Moderate |
| Con-Clinton Noneconomic | 0.19 | (0.17, 0.20) | Moderate |
| Pro-Dole Noneconomic | 0.071 | (0.057, 0.085) | Weak |
| Con-Dole Noneconomic | 0.0000041 | (0, 0.023) | Negligible |

$R^2 = 0.56$
RMSR = 2.7%

### Discussion of Opinion Predictions

For all four elections, we are able to predict public opinion polls from the valence coverage in news media. In all instances, our predictions are within poll error. Almost without exception, the model distinguishing economic from noneconomic candidate coverage outperforms the basic pro-con formulation, both in terms of greater total variance explained and lower root mean squared residuals. Thus, it seems that campaign news coverage concerning the economy has a pronounced impact on presidential preference across the elections considered in this study.

Although not readily apparent when the predictions are considered in succession, patterns do emerge when the results are arrayed to contrast elections that contain strong incumbents presiding over economic upturns against elections that feature an open race between nonincumbent candidates or that follow a period of economic difficulty. Of the elections studied, two (1984 and 1996) fall into the first category and two (1988 and 1992) into the second.

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## Percent Who Would Vote for Clinton "If the 1996 Election Were Being Held Today"
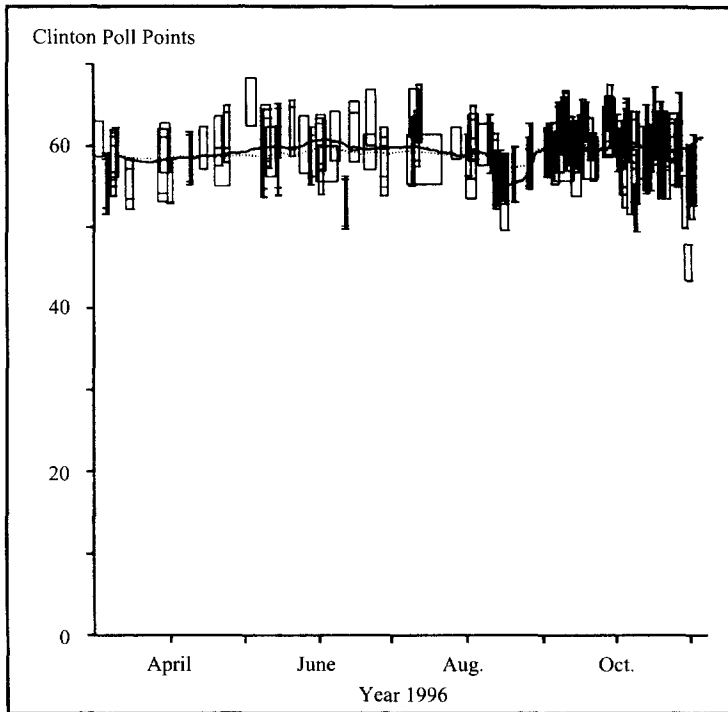


The dotted line is the prediction of the base model; the solid line is the prediction of the expanded model, which distinguishes economic coverage from noneconomic coverage. The width of the hash mark symbols in the figures correspond with the beginning and ending dates of the survey, and the height gives a 95-percent confidence interval.

The elections of 1984 and 1996 had a popular incumbent overseeing a bullish economy. In 1984, Reagan presided over two years of substantial GDP growth (+7% in 1984 and +4% in 1983). Further, by election day unemployment had decreased to 7.2% from a high of almost 10% in 1982, while consumer confidence rose 40 index points. Similarly, in 1996 Clinton could point to four straight years of modest growth in GDP, as well as declining unemployment (down to 5.4% from 7.5% in 1992) and rising consumer confidence (up 43 points in his term). Our content analysis indicated that the total volume of coverage favored these incumbents, and both enjoyed a greater degree of positive economic coverage than their opponents.

Unlike 1984 and 1996, the elections of 1988 and 1992 did not have a popular incumbent running for reelection. In 1988, Bush and Dukakis faced off without a clear incumbency advantage to either candidate. Surprisingly, serving as Reagan's vice president during six straight years of growth in GDP did not seem to carry over to Bush. In contrast to incumbent candidates, Bush had a lower ratio of positive-to-negative coverage than Dukakis across all types of media content examined, and received roughly the same amount of coverage as his challenger. When Bush did become an incumbent in 1992, unemployment concerns, a 50-point drop in consumer confidence, and the recession of 1990–91 apparently spurred negative news coverage. While, as Hetherington (1996) notes, the economy had improved by election day in 1992, our analysis revealed that Bush was the *only* candidate to receive more negative than positive coverage, with economic coverage particularly negative.

By comparing the opinion prediction results for 1984 and 1996 with those for 1988 and 1992, patterns in the persuasiveness of types of information—incumbent or nonincumbent, economic or noneconomic—may be assessed across these different electoral contexts. In considering the persuasiveness of candidate coverage estimated by the base model, a number of notable differences emerge between 1984/1996 and 1988/1992. In elections containing a popular incumbent overseeing a strong economy, the time trend predictions are essentially dependent on the valence coverage of that incumbent. However, when the election lacks an incumbent or includes an unpopular one, valence coverage of both candidates (or all three in 1992) is important in predicting the polls. In combination, this suggests that information about the challenger is relatively unpersuasive to the public when the incumbent is well regarded.

When the parameter estimates distinguishing economic from noneconomic coverage are considered, another series of patterns becomes discernible. In general, across all elections, economic coverage is a much more powerful predictor of presidential preference than noneconomic coverage; in fact, noneconomic parameters *never* contribute strongly to the time trend predictions. Interestingly, in the 1984/1996 elections, economic coverage of the *challengers* outperforms economic coverage of the incumbent in predicting public opinion. In contrast, during the 1992 election, economic coverage of both incumbent Bush and challenger Clinton was particularly persuasive. Although limited to four elections, these findings suggest that voters give economic coverage of incumbents little attention during periods of prosperity, but give it substantial weight in times of concern.[9]

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[9] Since it is possible that patterns observed across elections might be the result of changes in the news outlets included, analysis was performed to test whether differences in the outlets produced differences in the predictions. The patterns observed are virtually identical in terms of total explained variance and individual parameter estimates when only the two prestige newspapers (*The New York Times* and *The Washington Post*) were used as the basis for modeling public opinion.

## Conclusion

By using media content to account for changes in presidential preferences over the course of four elections, our analysis avoids many of the methodological shortcomings of cross-sectional research while simultaneously embracing the campaign dynamics ignored by most aggregate-level studies. It is this focus on the linkage between news coverage and public opinion that particularly distinguishes this research from studies attempting to predict the final distribution of votes or individual-level support for a particular candidate. As a result, this study offers several insights into *(a)* the nature of media content during campaigns, and *(b)* the persuasiveness of this content on public preferences for presidential candidates during these four elections. Confidence in these conclusions is strengthened by our analysis of news content from a wide range of sources and our examination of four very different campaigns—including elections that followed periods of economic upturns and downturns and that contained both Republican and Democratic incumbents.

Analysis of news content reveals that incumbents received a majority of coverage during these four elections; however, the valence of that content was not clearly in their favor. In 1984 and 1992, the Democratic challengers and Perot, the one independent challenger, had more favorable positive-to-negative coverage ratios than the Republican incumbents. Coupled with the fact that news coverage did not similarly favor Republican candidates in 1988 (during an open election) and 1996 (with Clinton as the Democratic incumbent), the pattern across these four elections is suggestive of a media bias in favor of Democratic challengers.

In terms of economic coverage, the data suggest that incumbents presiding over periods of prosperity garner significantly more as well as more favorable economic coverage than opponents. In contrast, incumbents overseeing recessionary periods appear to receive substantially more negative economic coverage than challengers, as occurred in 1992. Further, news media appear to respond to economic problems by increasing their reporting of economic issues: during the 1992 election, for example, nearly 12% of election coverage was devoted to economic issues, more than double that of other elections considered in this study. Of course, these observations are based on only four elections—contests that may not be typical of all presidential races. Nonetheless, the comparative differences are suggestive.

Perhaps more important, predictions of presidential preference polls solely on the basis of news media content yields a number of insights into the role of media in politics. First, we find that media coverage of presidential candidates, particularly news content attending to the state of the economy, is predictive of presidential preference within poll error in each of the four elections considered. This provides strong support for the perspective that

campaign content, especially economic cues, affects public opinion toward the candidates.[10]

These results also indicate that when the state of the economy is strong, valence coverage of the *incumbent* primarily predicts public opinion. This finding is consistent with the model of retrospective voting. In such circumstances, it seems reasonable that members of the public would only attend to and be influenced by the valence coverage of the sitting president. Voters, in order to avoid effortful processing, may not cull through information about the challenger, who is not given much chance of winning.

During the two elections included in our analysis that lacked a popular incumbent, however, valence coverage of all candidates influenced public opinion. Perhaps in this type of race, voters are less satisfied with what they see when they retrospectively evaluate the administration. This seems to be the situation Bush confronted in 1992. As a result, voters may have taken prospective criteria into account, and in so doing been influenced by the valence coverage of the incumbent *and* the challengers. For this type of election, the challengers, in part due to the coverage they garner from news media, pose a real threat to the incumbent.

Citizens may also apply prospective criteria when they do not have a candidate to evaluate on a retrospective basis, as is the case during open elections. Notably, during the 1988 election, coverage of Bush and Dukakis was comparably persuasive to the public. Thus, when neither candidate can be credited or blamed for the existing economic climate, voters must take news information on all viable candidates into account. The pattern of findings across these four elections indicates that the impact of candidate coverage is not restricted to either incumbents or challengers and suggests that voters engage in both retrospective and prospective evaluations depending on the economic context and type of electoral competition.

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[10] Of course, the possibility exists that the observed relationships do not flow in the direction of the press to public opinion, but rather from opinion to the press. To examine this prospect, Granger tests were performed for the 1984, 1988, and 1996 elections. Such analysis was not conducted with the 1992 data because of the large gap in usable poll data during Perot's three-month departure from the race. For the three elections subjected to tests of reverse causality, no significant effects ($p < .05$) were observed for the influence of public opinion on press content. In contrast, the press-to-opinion relationship was observed for the 1988 election (one to two lags, $p = .015$; one to four lags, $p = .006$). Due to the flatness of the time trends for 1984 and 1996, it is not surprising that we failed to find significant influence from media content on opinion using standard linear autoregressive computations, which are much less sensitive than the ideodynamic model, which uses only news coverage to predict opinion and does so on a daily basis. Thus, we do not have to see a media effect on top of the prior measured opinion value as one must in standard autoregressive models that employ empirical values of prior opinion as predictors.

When we distinguish among types of news content, the findings show that campaign coverage of the economy is particularly important for understanding media effects on presidential preferences. The expanded model not only consistently outperforms the base model in terms of variance explained and fit with poll points, but economic coverage consistently plays a more powerful role in predicting public opinion than noneconomic coverage. This is particularly noteworthy considering that economic coverage, in terms of volume, was considerably smaller than noneconomic coverage: in most elections, economic content only amounted to about five percent of total campaign coverage and it never exceeded 12% of total content.

That coverage of the nation's economic status is closely linked to presidential preferences strongly suggests that the public is influenced by sociotropic criteria acquired via news media. In essence, news coverage during the campaign likely provides the public with information about the state of the economy. In turn, this news appears to play a powerful role in public opinion about candidates. Previous research has not adequately explored where citizens receive the sociotropic information on which they make economic voting decisions. The results here indicate that shifting economic cues in campaign news coverage serve as a key source for what Kinder and Kiewiet (1981) call voters' "rough evaluations" of the status of the national economy. In considering the influence of campaign news on citizens' political judgments, then, it may not be appropriate for scholars or political strategists to lump together all kinds of coverage, since different types of information appear to have differential impact on the public. In particular, economic information linked to candidates seems to be markedly important.

Whether the news media are responsive to *actual* economic conditions remains an open question. Our data across elections suggest that news coverage of the presidential elections does change in line with shifts in the economic status of the nation, which seems only logical. However, whether these shifts in campaign coverage precede, occur concurrent to, or lag behind actual economic trends is not something we are able to answer. One might remember the claim of the Bush campaign in 1992 that negative news coverage of the economy did not accurately capture the positive changes under way during the campaign. Indeed, Hetherington (1996) suggests this claim had some validity. Further examination of the link between the "economic reality" calculated by economists and the "economic reality" constructed in news coverage would seem to be an important topic for future research, since our results strongly suggest that the reality citizens find in news coverage exerts considerable influence upon their presidential preferences.

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