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The Role of the Mass Media in Presidential Campaigns: The Lessons of the 1976 Election

*by Thomas E. Patterson**

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CONTEMPORARY PRESIDENTIAL ELECTION CAMPAIGNS are essentially mass media campaigns. It is not that the mass media entirely determine what happens in the campaign, for that is far from true. But it is no exaggeration to say that, for the large majority of voters, the campaign has little reality apart from its media version. Moreover, the media have become the primary focus of the candidates' campaign efforts. Today's entrepreneuring candidates primarily direct their activities toward getting their messages through the media as often and as favorably as they can.

This new character of presidential elections led the Council in 1974 to appoint a Committee on Mass Communications and Political Behavior.[1] The committee was established to stimulate, plan, and coordinate research on mass communications and political behavior during the 1976 presidential election. Through different research teams, the committee studied the media process from the formation of the media agenda (i.e., the content of the media) to the impact of the agenda on the American people.

The present study addressed two more specific questions. What is the nature of the election messages

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The Editor

[1] The 1979-80 membership of the committee was Kenneth Prewitt, Social Science Research Council, chairman; Ben H. Bagdikian, University of California, Berkeley; Leo Bogart, Newspaper Advertising Bureau (New York); Richard A. Brody, Stanford University; Steven H. Chaffee, University of Wisconsin; Herbert Hyman, Wesleyan University; F. Gerald Kline, University of Minnesota; Thomas E. Patterson, Syracuse University; Ithiel de Sola Pool, Massachusetts Institute of Technology; Forrest P. Chisman, National Telecommunications and Information Administration, consultant; and Robert A. Gates, staff.

that are transmitted through the media during the presidential campaign? And how do these messages affect the public's response to today's campaign? In order to answer these questions, the study used two sources of evidence.

First, a panel survey of voters was carried out. Beginning in February 1976, before the primaries began, and ending in November after election day, the 1,200 respondents in the panel were interviewed as many as seven times each about their media use, their impressions of the candidates and the campaign, their awareness of the election's issues, their interest in the campaign, and similar topics. The interviews were timed to bracket the major stages of the campaign—the early primaries, the late primaries, the conventions, the debates, and the general election. Five of the waves involved hour-long personal interviews; two of the waves were conducted by telephone.[2]

Second, a content analysis of the news media's coverage of the 1976 presidential election was conducted. Examined was the entire election year's reporting of the three major commercial television networks—ABC, CBS, and NBC; four daily newspapers—the Los Angeles *Times*, the Los Angeles *Herald-Examiner*, the Erie *News*, and the Erie *Times*; and *Time* and *Newsweek* magazines.

News coverage of the campaign

In its coverage of the 1976 presidential campaign, the press concentrated on the strategic game played by the candidates in their pursuit of the presidency, thereby de-emphasizing questions of national policy and leadership. Half or more of the election coverage in each of the news outlets studied dealt with the competition between the candidates. Winning and losing, strategy and organization, appearances and tactics were the dominant themes of day-to-day election news. The substance of the election, on the other hand, received much less emphasis. The candidates' policy positions, their personal and leadership characteristics, their private and public histories, background information on the election's issues, and group commitments for and by the candidates accounted for only about 30 per cent of election coverage.

This represents a major change from presidential elections in the past. In the 1940 election, for example, Lazarsfeld, Berelson, and Gaudet found that about 35 per cent of election news dealt with the fight to gain the presidency; a considerably larger amount, 50 per cent, was concerned with subjects of policy and leadership.[3] In 1976, those proportions were reversed.

The increase in the number of primaries is one reason why contestual themes now dominate. It is clear, however, that the explanation goes beyond the primaries. A comparison of the 1940 and the 1976 coverage, including only the convention and general election periods, indicates a substantially greater orientation toward the contest in 1976.

Substance received more attention in the 1940s because campaigns then were shorter, a condition which worked to maintain the candidates' control of the agenda. What they had to say about policy and leadership was the focus of election news because it held its news value and supplied sufficient material to fill most of the needs of the press for coverage. The fact is, however, there is not enough fresh issue and leadership material for the candidates to control the news during the 300-odd days of the present campaign or to meet the press's increased demand for news about the election.

The press thus has more opportunity to base its news selections on its values, which results in greater emphasis on the contestual aspects of the campaign. In part, this reflects the tradition in journalism that news is to be found in an activity rather than in the underlying causes of that activity. "The function of news," wrote Walter Lippmann, "is to signalize events."[4] Election activity and voting are the most visible aspects of the campaign and are therefore most likely to be used by the press as election news. Heavily emphasized are the simple mechanics of campaigning, as well as voting projections and returns. Moreover, although journalists consider the

[2] The panel studies were conducted in two communities, Erie, Pennsylvania, and Los Angeles, California. Erie is an industrial city with a relatively homogeneous population of 270,000; over 60 per cent of the families make their livelihood in blue-collar occupations. It is a heavily Roman Catholic city whose residents are mostly of German, Italian, or Polish extraction. In contrast, Los Angeles, the nation's second largest metropolis, has a broad economy that employs slightly more white-collar than blue-collar workers. Except for a large Mexican-American population, no minority population predominates. The interviewing was conducted by experienced interviewers employed by the Response Analysis Corporation, Princeton, New Jersey. The questionnaires were prepared by the author.

[3] Paul F. Lazarsfeld, Bernard Berelson, and Hazel Gaudet, *The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign*. Third edition (New York: Columbia University Press 1968), pages 115–119. First published in 1944.

[4] This and all subsequent statements by Walter Lippmann are from *Public Opinion* (New York: Macmillan, 1922). A paperback edition was published by the Free Press in 1965.

campaign to have more than ritual significance, they tend not to view it primarily as a battle over the directions of national policy and leadership. Rather, it is seen mainly as a power struggle between the candidates. "The game is a competitive one," wrote Paul Weaver in describing this journalistic paradigm, "and the player's principal activities are those of calculating and pursuing strategies designed to defeat competitors. . . . Public problems, policy debates, and the like . . . are noteworthy only insofar as they affect, or are used by, players in pursuit on the game's rewards."[5]

This journalistic model affects presidential campaign coverage in almost every respect. A case in point is the 1976 Democratic nominating process. In theory, there is nothing total about a narrow victory or even a landslide in a state's presidential primary. First, a single primary is just one indicator of the candidates' popularity in a system of 50 state contests. Second, a presidential primary lacks the finality of the general election; the difference in the popularity of one candidate who gets 51 per cent of a state's primary vote and another who gets 49 per cent is insignificant. Recognizing this, the Democratic party has in recent years outlawed "winner-take-all" primaries; a state's delegates are not awarded in total to the first-place finisher, but are distributed among the candidates in proportion to the votes they receive.

Press coverage of the 1976 Democratic primaries, however, operated on different principles. The press tended to project a single state's results to the nation as a whole, and something close to a "winner-take-all" rule applied to its coverage. New Hampshire's primary provides an example. Jimmy Carter, the lone centrist candidate, received 28 per cent of the vote. The remaining four candidates, all from the party's liberal wing, who together received 60 per cent of the vote, were led by Morris Udall with 23 per cent. Yet Carter was termed "the unqualified winner" by the press and received the balance of news coverage until the next primary. *Time* and *Newsweek* put Carter's face on their covers and his story in 2,600 lines of its inside pages. The second-place finisher, Udall, received 96 lines; all of Carter's opponents together received only 300 lines. The television and newspaper coverage given Carter that week was about four times the average amount given each of his major rivals.

This pattern held throughout the Democratic primaries. In the typical week following each primary, the first-place finisher received nearly 60 per cent of the news coverage, the second-place finisher only 20 per cent, the third-place finisher about 15 per cent, and the fourth-place finisher about 5 per cent. As the most frequent first-place finisher, Carter received about half of all news coverage given the Democratic candidates during the 1976 primaries; his eight active opponents shared the other half.

In the signal tradition of which Lippmann wrote, the naming of a winner in each primary meets almost every criteria for good news. The "winner" is the real story, and reporters are careful not to submerge this story in the intricacies of the presidential nominating system, for to do so would be to ignore the limited news space available, the gravitation toward the most salient fact about an event, and the need to capture what Lippmann called "the easy interest."

Journalistic norms also play a significant part in which issues are emphasized in election news coverage. The issues which the candidates stress most heavily are *not* those which are displayed most prominently in the news. In their campaign speeches and televised political advertising, the candidates talk mostly about "diffuse" issues, ones in which the differences between the candidates are either indirect or mostly those of style and emphasis. These include appeals to separate constituencies and broad policy proposals, as in the commitment to maintain a healthy economy. Such issues in 1976 accounted for over half of the issue appeals in candidate-controlled communications. These issues, however, accounted for only about 20 per cent of the issue messages in election news.

The news was dominated by what Colin Seymour-Ure has called "clear-cut" issues, those which neatly divide the candidates, provoke conflict, and can be stated in simple terms, usually by reference to shorthand labels, such as "busing" and "detente."[6] Clear-cut issues have a special appeal to the press because they conform to traditional news values—they are both colorful and controversial. They also frequently build upon themselves, leading to charges and countercharges, creating what James David Barber identifies as the common type of developing news story, that of "action–reaction."[7]

The press also has a liking for "campaign" issues. Campaign issues are ones that develop from incidents, usually errors in judgment by the candidates, such as Ford's remark in 1976 during the second presidential debate that Eastern Europe was free

[5] Paul Weaver, "Is Televised News Biased?" *The Public Interest*, Spring 1972:69.

[6] Colin Seymour-Ure, *The Political Impact of the Mass Media* (Beverly Hills, California: Sage, 1974), page 223.

[7] James David Barber, "Characters in the Campaign: The Literary Problem," in James David Barber, editor, *Race for the Presidency* (New York: Prentice-Hall, 1978), page 117.

from Soviet domination. For a week or more after they first break, campaign issues are major news items, often appearing in the headlines and at the top of television newscasts. In contrast, "policy" issues seldom receive this kind of attention from the press. They generally are not placed in the headlines nor are they covered for more than two days consecutively. In 1976, over 50 per cent of the campaign issues received "heavy" news coverage; only 15 per cent of the policy issues received such coverage.

Thus, issue news in the present campaign reflects the press's interests more than the candidates' interests. And this too is a change from earlier campaigns. In their panel study of the 1948 election, Berelson, Lazarsfeld, and McPhee found that issue news coverage originated largely with the candidates' "official" statements and speeches in which they talked "past each other, almost as if they were participating in two different elections."[8] Although this description applies to candidate-controlled communication in 1976, it does not apply to press-controlled communication. In the news, the major issues arose from the candidates' blunders and their off-the-cuff attacks on the opposition.

In all of these tendencies, the print and television media were more alike than different. Every news outlet studied emphasized the contest, the "winner," and clear-cut and campaign issues. The tendencies, however, were, in every instance, more extreme on television. It was on the network evening newscasts, more than in the newspapers, that journalistic values were most evident in coverage of the campaign.

The voters' response

The impact of the media's messages was found to depend on whether individuals followed the news closely or casually and whether they relied primarily on the newspaper or on television. Because these differences varied from one effect to another and interacted with other factors, they cannot be presented in this brief article. Thus, the following findings are presented with some loss of probity. The interested reader is referred to the full study.

Early election researchers studied the mass media's impact on the voters' basic *attitudes* and, upon finding that attitudes generally were unaffected by the campaign, concluded that mass communication was not a significant influence on the voters' behavior. But the power of mass communication rests largely in its ability to affect voters' *perceptions*. What the voters see on television and in the newspaper affects what they perceive to be the important events, critical issues, and serious contenders. And, as V. O. Key Jr., Benjamin Page, and others have noted, the voters' decisions may depend on what they perceive to be at stake when they make their choice.

By emphasizing certain campaign events, simply by placing them repeatedly and prominently in the news, the press signals their importance to the public. By neglecting and underemphasizing other aspects, the press almost seems to suggest their unimportance. This power was evident during the 1976 election. Election news emphasized the race rather than matters of policy and leadership, and it was the race that people thought of when asked about the election's "most important aspect." Indeed, although matters of policy and leadership were at the top of people's lists in the interviews conducted just *before* the campaign, they sank to the bottom *during* the campign, replaced by a concern with the candidates' electoral success.

The substantive side of the campaign in fact appears to have lost ground in the bid for the voters' attention. In their study of the 1948 election, Berelson et al. reported that 67 per cent of voters' conversations were concerned with the candidates' policy positions and qualifications. Only about a fourth of voters' discussions in that election focused on the question of which candidate would win.[9] In 1976, however, only about 34 per cent of people's conversations were concerned with substance, while 50 per cent focused on the contest, mostly in direct response to news stories about the race.

The focus of election news also affected which candidates the voters came to know in 1976. Before the first primary in New Hampshire, the Democratic contenders were largely unknown to the voters—only 20 per cent felt they "knew" Carter, Udall, Harris, Bayh, Brown, Church, or Jackson.[10] Subsequent news coverage focused on Carter, and he was the sole Democrat to become dramatically more familiar to the voters. During the primaries, the percentage of the electorate which felt it "knew" Carter rose to over 80 per cent, a 60 per cent increase from the pre-primary level. In contrast, recognition levels rose by only 14 per cent for Udall, Brown, and Jackson; by

[8] Bernard Berelson, Paul F. Lazarsfeld, and William N. McPhee, *Voting: A Study of Opinion Formation in a Presidential Campaign* (University of Chicago Press, 1954), page 236.

[9] *Ibid.*, page 106.

[10] For each candidate, respondents were asked whether they "had never heard of him before" or "had heard his name, but know nothing about him" or "knew something about him." The last category—whether people felt they "knew" a candidate—proved to be the recognition level that was important to people's behavior. This method of measuring recognition was validated by open-ended questions.

only nine per cent for Church; remained fairly constant for Harris; and even declined for Bayh.

These differences affected the outcome of the Democratic primaries. Although voters in primary elections are more informed than other citizens, they do not necessarily "know" each of the candidates on their ballots. Among Democrats who actually voted in their party's 1976 primaries, for example, about 90 per cent felt that they "knew" Carter, but less than 60 per cent "knew" Jackson, Udall, or Brown. This becomes significant when it is realized that voters limit their choice to familiar candidates; upwards of 95 per cent of the Democratic voters in 1976 cast their ballot for a candidate they "knew." Carter was the beneficiary. He gained many votes from his recognition edge on his rivals; there was a minority of voters who felt they "knew" only Carter and nearly all of them supported him.

The themes of election news also had an impact on the voters' images of the candidates. News of the candidates concentrated on how well they were running the race, and the impressions that voters acquired correspondingly tended to be *stylistic*, associated with the candidates' campaign styles and performance. About 65 per cent of the impressions that voters gained of the candidates in 1976 were stylistic in nature. Only 35 per cent were *political*—those concerning the candidates' governing capacities and policy proposals.

Substantial consequences resulted. News messages about the candidates' campaign styles and performance were much less likely than messages about their politics and governing capacities to evoke partisan bias. During the primaries particularly, voters tended to develop favorable stylistic impressions of winning candidates and unfavorable impressions of losing candidates, pretty much regardless of the party of the candidate or the voter. This tendency followed the direction of news messages. In 1976, there were two favorable stylistic news messages for every unfavorable one about candidates who were conducting successful primary campaigns. In contrast, stylistic news messages about unsuccessful candidates were, on balance, unfavorable.

Once the primaries were over, the voters' partisanship intensified, but this partisanship did not completely override earlier effects. Those individuals who had developed favorable impressions of a candidate's style during the primaries were more likely to have favorable ones afterwards and were more likely to develop favorable ideas about the candidate's politics. Liking his style, they were also more likely to come to appreciate his leadership capacities and policy leanings. This is not to suggest that partisanship and political impressions were less important to the voters' behavior than their thoughts about a candidate's style. Indeed, political influences played a greater role in vote choice in the general election. But stylistic impressions acted to dampen partisan effects, were positively associated with general election preferences, and had a close relationship to primary election choice. News messages about the race, then, are persuasive, in large part because they do not directly challenge the voters' basic political attitudes.

The themes of election coverage also affect what voters do not learn about today's campaign. In their study of the 1948 election, Berelson and his colleagues found that, in August, two months before election day, 37 per cent of the voters knew three-fourths of the issue positions taken by the candidates. In August 1976, however, only about 25 per cent of the voters knew three-fourths of the candidates' positions and, by October, the proportion had risen to only 33 per cent.[11] Despite the fact, then, that the 1976 campaign was much longer and more intensely reported than the 1948 campaign, voters actually learned less about the issues. That policy issues were placed less prominently in the news in 1976 than they had been in 1948 is certainly a major reason for the difference.

Disorganized politics

Disorganization is the hallmark of the present electoral system. The primaries are waged between entrepreneuring candidates interested mainly in selling themselves. The result is an extraordinary burden on voters, one Key identified in his classic study of one-party politics in the South: "The voter is confronted with new faces, new choices, and must function in a sort of state of nature."[12]

Today's general election also places heavy demands on voters. When party leaders controlled nominations, the nominee was linked to the party's traditional constituencies and policies, and a line of responsibility was established between the nominee and his party's performance in office. Voters thus were assured about the nature of the nominee's politics and had the opportunity to reward or punish him for the actions of his party. Today's nominee cannot

[11] Berelson et al. did not measure issue awareness in the interviews conducted just before election day, but commented that if they had done so, the level of awareness "almost certainly" would have been higher by that time (page 228).

[12] V. O. Key, Jr., *Southern Politics in State and Nation* (New York: Vintage Press, 1949), page 303.

be measured so easily. Every nominee, of course, has some enduring ties, including those to party, but the fact that the candidate now organizes his own campaign increases his independence. Moreover, there is little that prevents a candidate from disclaiming responsibility for the actions of any preceding administration.

It is this chaotic electoral system that the press is expected by its critics and apologists alike to make intelligible to the voters. Reporters themselves often claim they can perform this task. And even if journalists did not want the responsibility, it is theirs by virtue of an electoral system built upon numerous primaries, self-generated candidacies, and weak party leaders. The burden on the press is particularly severe during the nominating phase of the campaign. Communicating with each voter for a few minutes daily, the press may be asked to create an electorate that can understand what a half dozen previously unfamiliar candidates represent.

It is an unworkable arrangement. It fails because the press is not a political institution and has no stake in organizing public opinion. "The press is no substitute for institutions," wrote Lippmann. "It is like the beam of a searchlight that moves restlessly about, bringing one episode and then another out of darkness into vision. Men cannot do the work of the world by this light alone. They cannot govern society by episodes, incidents, and interruptions." Although the press and the political party both serve to link candidates with voters, these two intermediaries are very different in kind. The parties have an incentive to identify and represent those interests that are making demands for symbolic and policy representation. The press has no such incentive. It is in the news business, and its inadequacy as a linking mechanism becomes obvious once the nature of election news is understood. The news simply is not an adequate guide to political choice. Its major themes are dictated by journalistic values, not political ones.

Moreover, it is a fiction that the press can make up for defective political institutions. As Lippmann noted, the press inevitably magnifies the system's deficiences, as is plainly evident in the 1980 campaign. Today's nominating system, for example, naturally gives added influence to voters in states holding early contests, a bias magnified by the press's build-up of these contests and its determination to call and cover the winners. And although changes in the campaign have increased the voters' need for information about the candidates' politics, election news now contains proportionately less information of this kind.

The public's attention to politics is also an obstacle to the soundness of press-mediated elections. Casual daily news exposure is not a sufficient condition for informed citizenship. It results only in an awareness of those subjects that are placed at the top of the news again and again. Consequently, voters develop more impressions of the candidates' styles than of their leadership capacities and know more of the candidates' victory chances and tactical blunders than of their platforms.

The need for stronger political parties

The problem of today's campaign thus lies deeper than the nature of the press. The real weakness of the present system is that it is built upon the dismantling of the political party, which, in Everett Carll Ladd's words, is "the one institution able to practice political planning."[13] Although individual voters cannot readily and at no cost to themselves discover the politics of several contenders for their party's nomination, party leaders, because they specialize in politics, can make this determination. And judging from the most recent campaigns, party leaders are more adept than the voters themselves at selecting nominees who meet the public's desires for policy and leadership. Parties have an overriding reason—the need to win elections—for selecting nominees who will meet with the approval of the voters.

Public and elite opinion would not sanction a nominating process that was controlled entirely by party leaders, but the time has come to find ways to increase the party's influence in a nominating system that blends popular participation and party influence. A workable system must take into account what the people, the parties, and the press can and cannot do. However appealing the image of the omnicompetent citizen, and however attractive the idea of the press as the corrective for defective political institutions, these beliefs are not the basis for a sound presidential election system. □

[13] Everett Carll Ladd, *Where Have All the Voters Gone?* (New York: Norton, 1978), page 72.

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The Editor

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RECESSION HEADLINE NEWS, CONSUMER SENTIMENT, THE STATE OF THE ECONOMY AND PRESIDENTIAL POPULARITY: A TIME SERIES ANALYSIS 1989–1993

Deborah J. Blood and Peter C. B. Phillips

ABSTRACT

During the 1992 American presidential election, the media were accused of portraying the economy in a negative light, with both economic and political consequences for the country. Such criticism was based on assumptions concerning relationships among four variables: economic news coverage, public perception of the state of the economy (consumer sentiment), the actual state of the economy, and presidential popularity. This paper seeks to examine the relationships among all four variables in a way that accounts for inherent time series characteristics of the data including: potential non-stationarities (or tendencies for the series to drift over time) and co-movements among the series. Hypotheses concerning the nature and direction of influence among the four variables are proposed and time series analyses are conducted to test each hypothesis. We use recession-related headlines from the *New York Times* to represent economic news. Each series is analyzed to isolate its principal characteristics, and tests for co-movement (formally, cointegration) between the series are conducted. Vector autoregression is used to model the joint determination of the series, and tests for Granger causality are conducted. The results show some causal evidence for a media effect: recession headlines were a significant prior influence on the determination of consumer sentiment in this study. There is some limited evidence of an adversarial press effect, wherein the president's growing popularity rather than real world economic conditions appears to have led an increase in the number of recession headlines.

During the 1992 American presidential election, the media were accused by some of portraying the economy in an unfairly negative light, with both political and economic consequences for the country. Economic news reports were criticized for being 'relentlessly negative' (Glassman 1993). Some argued that the negative economic coverage played a role in the delay of the anticipated economic upturn (see Shrager 1992), a phenomenon labeled 'media malady' (Kurtz 1990; Stevenson *et al.* 1991). And President Bush's failure to secure a

second term of office was attributed in part to adverse economic news (see Graber 1993). Such observations of economic news coverage and its subsequent impact upon the economic and political landscapes are based on any of three assumptions: first, the media's portrayal of the economy is negatively biased; second, economic news coverage is capable of driving public perception of the state of the economy; and third, adverse economic news may ultimately influence the economic and political environment. Yet studies are inconclusive concerning the direction and degree of influence among the four key variables underlying these assumptions: economic news coverage, the state of the economy, public perception of the state of the economy (commonly measured as consumer sentiment), and presidential popularity.

REVIEW OF PAST STUDIES

In the main, research efforts have been directed at determining the nature of bivariate relationships between these four variables, and many of the results have been contradictory (e.g. Fan 1993, Stevenson *et al.* 1991). Some related studies have explored connections between news and public concern, controlling for real world conditions (MacKuen 1981, Behr and Iyengar 1985, Stevenson *et al.* 1991). MacKuen, Erikson, and Stimson (1992) examined the relationships among consumer sentiment, economic conditions and presidential popularity, using consumer perceptions of economic news (rather than actual economic news reported in the press). To our knowledge, no studies to date have attempted to examine the interrelationship of all four variables and potential interactions such as that of economic news and presidential popularity, while controlling for the effect of the other variables. We also seek to take account in our statistical analysis of the inherent time series properties of the data, such as their tendency to drift stochastically over time (which is manifest in the presence of unit roots), cointegrating links among them (Engle and Granger 1987), as well as evidence of any causal effects.

A review of past studies exploring the relationships between these variables reveals that there is a fully crossed matrix of hypothesized effects that is of interest. These effects are laid out in Table 1.

Economic News and State of the Economy

With respect to the relationship between economic news and real world economic conditions, some researchers have focused their attention on the effect of unfavorable economic news reports on the economy, the so-called 'media malady' (Kurtz 1990; see Stevenson *et al.* 1991). Others have been concerned with the inverse direction, i.e. the correspondence between the state of the economy

TABLE 1 Matrix of effects

		Effect			
		Headlines	*Consumer Sentiment*	*Economy*	*Presidential Popularity*
Cause	*Headlines*	unit root (bias reporting)	powerful-effects media influence	media malady	priming
	Consumer Sentiment	consumer-driven reporting	unit root	Katonian hypothesis	economic approval
	Economy	event-driven reporting	non-mediated experience	unit root	structural factor
	Presidential Popularity	adversarial press	bully pulpit	bandwagon effect	unit root

and the tone and amount of subsequent economic news coverage (so-called event-driven reporting). For instance, the Institute for Applied Economics (1984) reported that, from July to December 1983, 95 percent of the economic statistics were positive whereas 85 percent of the indepth stories were primarily negative, amounting to some empirical evidence against event-driven reporting in this instance.

ECONOMIC NEWS AND CONSUMER SENTIMENT

The connection between economic news and consumer sentiment has received considerable attention. Those who argue that negative economic news undermines consumer confidence are espousing a powerful-effects model (see Severin and Tankard 1992), wherein the mass media are believed capable of achieving considerable influence over their audiences' attitudes and actions. In testing both directions, Fan (1993) reported a clear direction of influence from the media to consumer confidence. MacKuen, Erikson, and Stimson (1992) found that people's recollections of economic news contributed to business expectations. Others have found the relationship to be in the other direction, with public perception influencing subsequent media content (Stevenson *et al.* 1991), which supports the notion that news reporting is ultimately consumer-driven, i.e. media personnel are merely providing news of interest to their audiences.

STATE OF THE ECONOMY AND CONSUMER SENTIMENT

Researchers have also conjectured relationships in either direction between the state of the economy and consumer sentiment. Adherents to the school of psychological economics established by George Katona believe that consumer behavior is a dominant influence on the economy (Katona 1964, Curtin 1982). Indeed, Katona argued that changes in consumer sentiment can serve as a leading indicator of future economic activity. Many studies have shown support for Katona's hypothesis (Strumpel *et al.* 1972).

Now looking at the other direction, the direct effect of real world economic conditions upon subsequent consumer confidence would constitute an unmediated experience. Authors such as Linden (1982) argue that people are indeed sensitive to personal day-to-day economic experiences, and do not follow the economic news with any degree of sophistication in forming their perceptions of the state of the economy. Some contrary evidence is offered by MacKuen, Erikson, and Stimson (1992) whereby consumer expectations appeared to be based on perceptions of economic news. Whether the effect of real world conditions upon consumer sentiment is direct or mediated by economic news remains unclear.

No studies to date have considered the simultaneous relationship between economic news data, the state of the economy, public opinion of the state of the economy (consumer sentiment), and presidential popularity. A specific question that is worthy of empirical attention in our study arises from the suggestion (Graber 1993) that negative economic news was the cause of Bush's failure to secure a second term of office; that is: was negative economic news coverage rather than the actual state of the economy a stronger predictor of presidential approval during the period under study?

STATE OF THE ECONOMY AND PRESIDENTIAL APPROVAL

With respect to the relationship between the state of the economy and presidential approval, many argue that a president's support depends most importantly upon the economic health of the nation (e.g. Kinder and Sears 1985, MacKuen 1983). The economy is often viewed as a structural factor by political scientists and economists in explaining the degree of support for a party or candidate. However, there is also evidence that presidential popularity may influence the state of the economy in the form of a bandwagon effect such as with post-election excitement (see Spiers 1993).

CONSUMER SENTIMENT AND PRESIDENTIAL APPROVAL

The effect of consumer confidence upon presidential popularity is reflected in the evaluation of the president's performance, particularly in economic affairs,

which we label an 'economic approval' effect. MacKuen, Erikson, and Stimson (1992) found evidence to support this effect; however, they reported that it was consumer expectations about the economic future that determined presidential approval rather than consumer perceptions of current economic conditions.

The difference between the effect of economic conditions on presidential popularity (a structural factor) and the effect of *public perception* of economic conditions on popularity (economic approval rating) becomes important when the public's view of the health of the economy is not supported by the economic statistics. According to Seymour Martin Lipset, 'the problem for Bush and for Fair's [spelling corrected] model was that many people thought conditions were worse than they were. Even if it were true that the recession was not as bad as some previous ones, Americans thought it was the worst they had experienced since World War 2' (from Patterson 1993, p. 113).

As for the inverse direction (presidential popularity influencing consumer confidence), Page, Shapiro and Dempsey (1987) found that presidents, when popular, appear to have a small but positive effect upon public opinion. Thus, a popular president stands at a 'bully pulpit' (p. 115). Of course, Juster reminds us (see Thevanayagam 1993) that a president's problems may also serve to dampen the public's enthusiasm.

Presidential Approval and Economic News

Concerning the relationship between presidential popularity and the news, Stevenson, Gonzenbach and David (1991) noted that the negative coverage of the economy in their study appeared to grow in direct relation to Bush's approval ratings over his handling of the Persian Gulf War crisis. They suggest that the press may have turned adversarial eyes towards the economy at a time when Bush was strongly supported on foreign policy. We label this the 'adversarial press hypothesis'.

Looking at the possible influence of economic news on presidential popularity, it has been noted that changes in presidential approval ratings are highly correlated with the favorability of news stories (Graber 1993, p. 293). Even the mere dominance of economic news stories, regardless of favorability, over other issues in the media may be sufficient to influence presidential popularity. Iyengar and his associates call this process 'priming' (see Iyengar and Kinder 1984) whereby the attention paid to some issues rather than others by the media is thought to alter the criteria by which people evaluate politicians.

Unit Root Effects

Finally, it was noted in an early agenda-setting study that the past values of a variable are often its own best predictor. In the Charlotte study of media agenda setting, Shaw and McCombs (1977) performed a cross-lagged correlation on media content and public opinion at two time periods. While they found evidence of newspaper influence upon subsequent opinion, the largest correlation of all was between the public agenda at time period 1 and time period 2. At .94, this correlation is close to unity, suggesting that the public was more affected by its previously held opinions than by the media. From a time series perspective, this high serial correlation indicates persistence in the data or, in formal terms, the presence of a unit root in the mechanism that generates the time series. Accordingly, in the matrix of effects given in Table 1, hypotheses representing 'unit root effects' are given along the diagonal elements of the matrix. This allows in each case for the possibility that the immediate preceding value of the data may be the dominant element in determining its future.

As is apparent from the above discussion, there are many possible explanations for the observed relationships between economic news coverage, consumer sentiment, the state of the economy and presidential popularity, and many potential interrelationships of interest between these variables. This study sets out to identify the nature and direction of the empirical influences among these variables over the period 1989–93 and to evaluate support in the data for the competing hypotheses summarized in the matrix of effects.

THE DATA

The four variables of interest in this study (economic news, consumer sentiment, the state of the economy, and presidential popularity) can best be regarded as being jointly determined as a vector of stochastic processes. The series are modeled singly in order to isolate their main individual characteristics, and jointly to determine their co-movements and causal dependencies over time. The methods we employ allow for non-stationarities in the data and potential (cointegrating) links between them. The software package COINT 2.0 (see Ouliaris and Phillips 1994) of time series procedures for cointegrating regressions was used for the data analysis.

As a measure of economic news, Recession Headlines were chosen because during a substantial part of the time frame under investigation (February 1989 to July 1993) the recession, prospects of a recession, and recovery from recession were focal points in economic news reports (see also Stevenson *et al.* 1991 for a similar choice of news data). Further, psycholinguistic theories point to the importance of headlines in influencing the retention of subsequent material and the reader's attitudes towards the subject matter (Bock 1978). Recession Headlines data were collected by counting the number of U.S. economy-related headlines containing the word 'recession' that appeared each month in the *New*

York Times. The data were retrieved from the *New York Times* Library of the NEXIS database and constituted a time series of 68 monthly observations covering the period from January 1988 to August 1993. The *New York Times* was chosen because of its position as an élite newspaper and its role as a model for other newspapers (Stevenson *et al.* 1991, Winter and Eyal 1981, Crouse 1972, Neuman 1990, Kinder and Sears 1985) as well as its influence upon television network news coverage (Brown 1971). Compilation of the series revealed the presence of emotive headlines that might well be expected to influence readers' attitudes towards the subject matter, and subsequently affect consumer sentiment: for example, 'Blame Bush for the Recession' (Nov. 3, 1991); 'Drop in Births Reported, and Recession is Blamed' (Nov. 3, 1991); 'Recession and Re-election Don't Mix' (Oct. 9, 1991); 'Helping Children Cope with Recession' (June 30, 1991); 'Who's Afraid of the Big, Bad Recession?' (Dec. 23, 1990); 'What Recession? It's a Depression' (Nov. 29, 1990).

A comparison of the Recession Headline series obtained with that of recession stories collected by Stevenson, Gonzenbach and David (1991) for the July 1988 to February 1991 time frame reveals similar patterns in both series. Each demonstrate a similar take-off point in the number of recession stories/headlines after July of 1990 and peaks in the December 1990–January 1991 period.

The Consumer Sentiment series was drawn from the monthly Index of Consumer Sentiment, conducted by the Survey Research Center at the University of Michigan and based on the answers to five questions (Appendix 1). Our series comprised 68 observations for the time period January 1988 to August 1993.

The aggregate present and prospective state of the economy was represented by the composite measure of the Leading Economic Indicators, issued by the United States Department of Commerce (Appendix 2). The series included 67 observations, from January 1988 to July 1993. The leading indicator series is prospective because it is a composite series of indicators (such as stock prices) that are thought to turn before the aggregate economy. Clearly, there are many other quantitative measures of aggregate economic activity (such as unemployment statistics, interest rates, inflation, aggregate output, the budget deficit, etc.) that could be used to represent the state of the economy. Some of these measures might well be more appropriate in a study that focused on one specific feature or another of the economy, like the labor market or financial sector. We used the leading indicator series because it is an aggregate measure that reflects economic activity as a whole and is prospective or forward looking in the sense that it anticipates general movements in the economy, at least from the point of view of the latest available statistical information. In this latter respect it is a series that might be expected to have a relevant relationship with economic news and consumer sentiment towards the economy.

As noted earlier (Stevenson *et al.* 1991), there is endogeneity in any system

that seeks to explain leading variables and consumer sentiment, because there is a component of the index of consumer sentiment (specifically, the component that measures consumer expectations) that itself appears as a component of the leading economic indicator composite. This means that consumer sentiment and leading indicators share a common element (the index of consumer expectations) and are therefore jointly dependent. Such endogeneity is common in multiple time series analysis. It arises, for example, when one studies aggregate output and its various components like consumption and investment expenditures. An advantage of the vector autoregressive (VAR) methods that we use here is that endogeneities of this type are permitted—all variables in the system are allowed to be jointly determined.

The Presidential Popularity series was based on overall monthly presidential performance ratings (i.e. 'Do you approve or disapprove of the way George Bush is handling his job as President?') obtained from national opinion polls (including Yankelovich Clancy Shulman, CBS/*New York Times*, and Gallup Organization survey houses) and archived at the University of Connecticut Roper Center. The time series covers the period February 1989 to July 1993. This series has a starting date of February 1989 as opposed to January 1988 (used for the other series) in order to give focus to the years of the Bush presidency, which is the main concern for this paper. Analysis revealed that the greatest volatility in the Recession Headlines and Presidential Popularity series occurred during the Bush tenure. Longer data series of presidential approval ratings (in conjunction with our other series) could be analyzed by methods similar to those used here, but should also allow for the possibility of structural breaks between presidential regimes. Such analyses are potentially of great interest but are outside the scope of the present paper.

The time frame (February 1989 to July 1993) for the complete four variable study covers the entire Bush presidency and the first few months of the Clinton administration, providing 54 observations in all. For the Recession Headlines, Consumer Sentiment and Leading Economic Indicator series, earlier observations from January 1988 were included for the individual analyses of these data, but were truncated in the analyses involving presidential popularity, where our focus of attention was the Bush presidency, the 1991 recession, and the slow economic recovery.

ANALYSIS AND RESULTS

Features of the Individual Series—Unit Roots and Random Wandering

First, each series was analyzed to isolate its principal characteristics. Many time series of economic data are non-stationary in the sense that they display secular

growth characteristics (like Gross National Product or Industrial Production), or 'random wandering' behavior (like that of exchange rates and financial prices), characteristics that are also evident in the behavior of leading and coincident economic indicators. Such time series are called stochastically non-stationary in the sense that they have a systematic but random tendency to drift away from any given value over time—in other words, there is no tendency for them to fluctuate around a constant (mean) value as there is when a series is stationary.

To determine whether there is empirical support for such random wandering behavior in our series we conducted several unit root tests. Unit root tests in the econometric literature (see Hamilton 1994, for a recent textbook overview of the subject) include the Phillips (1987) Z(a) and Z(t) tests, and the Said and Dickey (1984) ADF tests. The closer the observed outcome in these tests is to zero, the more likely it is that the time series has a unit root, significantly so if the outcome is closer to zero than the test's critical value.[1]

The results of the unit root tests shown in Table 2 reveal that the Leading Indicator series is non-stationary. There is also strong evidence from all these tests that the Consumer Sentiment series and the Presidential Approval series are non-stationary. However, the results show mixed evidence in support of a unit root for the Recession Headline series (two of the tests favor non-stationarity, two do not). This outcome seems to be due to differences in the pattern of observations between the early, middle and latter part of the series. In the early and latter periods the Recession Headlines series appears to be stationary about a fixed mean level, whereas in the intervening period (from July 1990 to the January 1991 period) the series is volatile with no apparent mean level and two dramatic peaks in news headlines. The four series are depicted together in Figure 1. The random wandering characteristic is especially evident in the Presidential Approval and Consumer Sentiment series.

Linkages Among the Series—Co-movement and Cointegration

Our central hypotheses concern potential links between the series, for example whether presidential popularity influences the number of recession headlines (the adversarial press theory). One way of examining such links is to consider whether the series themselves move together in a meaningful way over time. If the series individually are non-stationary (i.e. wander randomly or have unit

[1] Unit root test procedures have been critiqued in some recent econometric literature. In particular, difficulties of size distortion and low power have been noted by some authors (see Phillips and Perron 1988, Schwert 1987, and DeJong *et al.* 1992). These difficulties are partly alleviated by the use of the data-based procedures we use here to determine lag length (in the construction of the ADF test) and long-run variance parameter in the semi-parametric Z(a) and Z(t) tests—see Andrews (1991), and Lee and Phillips (1994).

Table 2 **Unit root tests on the series**

	Headline	*Consumer sentiment*	*Leading indicators*	*Presidential approval*
Sample size	68	68	67	54
Tests with fixed lag = 3				
1. Z(a)	−21.41	−12.73*	−5.49*	−8.92*
2. Z(t)	−3.63	−2.63*	−1.67*	−2.49*
3. ADF	−2.08*	−3.09	−2.10*	−2.49*
Tests with data-based long-run variance estimates[a]				
1. Z(a)	−22.25	−13.07*	−5.74*	−9.55*
2. Z(t)	−3.65	−2.64*	−1.69*	−2.31*
ADF test with data-determined lag[b]				
ADF	−2.63*	−2.71*	−1.65*	−2.49*

* unit root hypothesis is not rejected at the 5 percent level.
[a] Z(a) and Z(t) tests computed with data-based estimates of the lag truncation parameter and a data-based bandwidth in the kernel estimate (see Andrews 1991).
[b] ADF test with lag length in the autregression determined by the Schwarz (1978) criterion BIC.

roots) then any joint behavior or co-movement among them that eliminates the random wandering behavior is known as cointegration between the series. The concept of cointegration was explored by Engle and Granger (1987) and statistical tests for the presence of cointegration have been developed by Phillips and Ouliaris (1990) and Johansen (1988) in the econometrics literature.

We conducted empirical tests for cointegration on our data using some of these recently developed tools. The residual-based test procedure that we employ adopts the approach of Phillips and Ouliaris and proceeds as follows. A regression equation is set up between the variables of interest, designating either variable (like Consumer Sentiment) as the dependent variable but permitting the regressor variables (Recession Headlines, Leading Indicators) to be co-dependent. The effect of cointegration is to reduce the variability of the individual time series so much that the residual in the regression loses the random wandering behavior and is stationary.

Our single equation analyses enable us to focus explicitly on the links between the series that we have identified *a priori* as being of primary interest. To

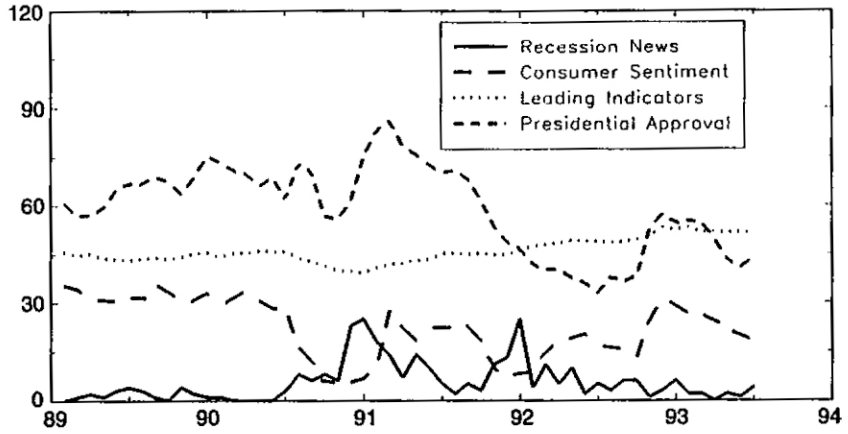

FIGURE 1 **Recession Headlines, Consumer Sentiment, Leading Indicators and Presidential Approval: February 89–July 93.**

estimate these linkages directly, we use a statistically appropriate regression technique (fully-modified [FM] regression, see Phillips and Hansen 1990) whose results can be analyzed in the same way as conventional least squares regressions. In reporting our regression results below, we use unstandardized *betas*, because non-stationary data do not have fixed population standard deviations to serve as the basis for standardizing the regression coefficients.

In analyzing the relationship between Consumer Sentiment and Recession Headlines, the empirical results show a strong degree of cointegration between the two series, as evidenced by the stationarity of the residual (Table 3). Further, the *beta* coefficients reveal that Recession Headlines are a significant predictor of and have a strong negative impact on Consumer Sentiment ($beta = -1.42$, $t = -4.91$, $p < .05$). Thus, increases in the number of Recession Headlines clearly depress consumer sentiment.

Analysis of Consumer Sentiment and Leading Economic Indicators reveals no co-movement in these two series. The presence of a unit root in the residual suggests that the two series are unrelated in levels. Formally speaking, the regression is spurious (see Granger and Newbold 1974, and Phillips 1986), and the *beta* coefficient (for Leading Indicators) in the regression equation therefore does not have the usual meaning of a regression coefficient.

The third column of Table 3 shows the results of the cointegration analysis for Leading Indicators and Recession Headlines. Both Z tests reveal some evidence of cointegration between these series, whereas the ADF tests are not

TABLE 3 **Linkages between headlines, leading indicators and consumer sentiment**
Residual-Based Tests for Cointegration

	Headlines and Consumer Sentiment[a]	*Leading Indicators and Consumer Sentiment*[a]	*Leading Indicators and Headlines*[a]	*Headlines, Leading Indicators and Consumer Sentiment*[a]
Sample size	68	67	67	67
Tests with fixed lag=3				
1. Z(a)	−27.41*	−8.55	−22.69*	−38.85*
2. Z(t)	−4.02*	−2.10	−3.85*	−5.11*
3. ADF	−2.45	−2.27	−2.15	−3.34
Tests with data-based long-run variance estimates[b]				
1. Z(a)	−22.78*	−7.85	−21.72*	−33.27*
2. Z(t)	−3.70*	−2.01	−3.76*	−4.83*
ADF Test with data-determined lag[c]				
ADF	−2.61	−2.11	−2.64	−3.28
FM regression estimates[d]				
beta coeff.	91.00 (constant)	155.06 (constant)	20.65 (constant)	139.72 (constant)
t-ratios (in brackets)	(42.19)	(3.04)	(0.31)	(9.01)
	−1.42* (head.) (−4.91)*	−1.56 (lead. ind.) (−1.39)	−0.11 (lead. ind.) (−0.24)	−1.62* (head.) (−8.17)*
				−1.05* (lead ind.) (−3.13)*

[a] dependent variable.
[b] cointegration hypothesis 'accepted' at the 5 per cent level.
[c] Z(a) and Z(t) tests computed with data-based estimates of the lag truncation parameter and a data-based bandwidth in the kernel estimate (see Andrews 1991).
[c] ADF test with lag length in the autoregression determined by the Schwarz (1978) criterion BIC.
[d] Fully modified (FM) least squares regression—see Phillips and Hansen (1990).

significant. The sign of the regression estimates shows that improvements in the Leading Indicator series depress the number of recession headlines, as would be anticipated, but the relationship is not significant.

Next, Consumer Sentiment was regressed on both the Recession Headlines and Leading Indicators series (Table 3, fourth column). The results of this regression show that Recession Headlines ($beta = -1.62$, $t = -8.17$, $p < .05$) remain a highly significant predictor of Consumer Sentiment over and above any influence of Leading Indicators. Interestingly, Leading Indicators are also marginally significant in this regression, but have the wrong sign ($beta = -1.05$, $t = -3.13$, $p < .05$). This outcome accords with the spurious relationship found in the bivariate regression between Consumer Sentiment and Leading Indicators over this time period, as discussed above.

To sum up, Recession Headlines turns out to be the key variable in both two-variable and three-variable cointegrating relationships between Consumer Sentiment, Recession Headlines and Leading Indicators, offering preliminary support for the powerful effects model of media influence. There is no evidence of a direct relationship between Consumer Sentiment and Leading Indicators, or between Leading Indicators and Recession Headlines.

Turning now to the Presidential Approval series, results of the cointegration tests reveal little evidence of cointegration between Presidential Approval and the Leading Indicator series. While the regression equation itself indicates that the Leading Indicator series may have a strong negative influence upon presidential popularity ($beta = -2.49$, $t = -9.24$, $p < .05$), the absence of co-movement between the two series cautions us that this effect is spurious. There is also no evidence for cointegration between the Presidential Approval and Consumer Sentiment series.

Finally, analysis of the Presidential Approval and Headlines series reveals some evidence for cointegration between these two series, offering preliminary support for either the adversarial press theory or the priming effect. But results from the two-variable regression do not yet confirm a strong relationship ($beta = .08$, $t = .70$, $p > .05$).

Linkages Over Time—Causality and Vector Autoregression

To explore linkages between the series over time and potential causal influences, we fitted several vector autoregressions (VAR) to the time series. VAR's allow for temporal dependence within and across different series as well as co-movement over time of the type we would expect to occur for cointegrated series. VAR's also provide a natural framework for conducting causality tests to determine whether one series, such as consumer sentiment, is better predicted

using the recent history of other series, like recession headlines, than it is using only its own past history.

It has been widely recognized that there are difficulties of interpretation with respect to such tests. Specifically, the tests focus on predictability rather than causality *per se*, as our discussion has emphasized. However, predictability is one of our own major interests in this study, e.g. is there a media effect (powerful effects model) upon consumer sentiment? Clearly, the process by which such an effect takes place and the nature of the causal influence is complex at the general aggregate level and certainly varies substantially even at the individual level. It would be naive to suppose that these manifold influences could be captured by a mechanism as simplistic as a VAR. However, as stressed above, our purpose is not to disentangle the complexity of the causal process itself, merely to determine whether such an influence takes place or not. And this can indeed be done through the mechanism of a causality test in a VAR.

We commence our analysis of causal effects with bivariate VAR's for Recession Headlines and Consumer Sentiment, and Leading Indicators and Consumer Sentiment respectively. The results are presented in Table 4. Wald tests were constructed to test the hypothesis of non-causality in the VAR's, allowing for lag lengths in the autoregression from 1–4 lags. As the asymptotic chi-squared critical values may not be very satisfactory at longer lengths than this (due to the small number of observations in the series), only 4 lags are reported. The table gives the results of this test at the various lag lengths for the following effects: Recession Headlines on Consumer Sentiment, Consumer Sentiment on Recession Headlines, and Leading Indicators on Consumer Sentiment. The results show empirical support at all lag lengths for the powerful-effects model of media influence: recession headlines are a significant prior influence on the determination of consumer sentiment after allowing for the past history of that series itself. There does not seem to be a strong influence in the other direction, i.e. of Consumer Sentiment on Recession Headlines, which represents the consumer-driven reporting theory—the Wald tests are only marginally significant at the 5 percent level only for lag 1.

The last column of Table 4 gives the results for the bivariate VAR of Leading Indicators and Consumer Sentiment. These show no evidence of causal influence of Leading Indicators on Consumer Sentiment, as would be predicted by the Katonian hypothesis, except in the case of the VAR at lag 2. Overall, the powerful-effects model of media influence as revealed by the impact of Recession Headlines on Consumer Sentiment appears the dominant influence.

Next trivariate VAR causality tests involving Recession Headlines, Leading Indicators, and Consumer Sentiment were conducted. We examined the effect of Recession Headlines on Consumer Sentiment controlling for Leading Indicators, the effect of Consumer Sentiment on Headlines controlling for Leading

TABLE 4 **Linkages between headlines, economic indicators and consumer sentiment**
Bivariate tests for causality (Wald tests)

Lag	*Chi-squared Critical Value*	*Effect of Headlines on Consumer Sentiment*	*Effect of Consumer Sentiment on Headlines*	*Effect of Leading Indicators on Consumer Sentiment*
1.00	3.841	4.11*	3.87*	1.02
2.00	5.991	8.74*	4.48	6.70*
3.00	7.815	9.41*	5.31	6.63
4.00	9.488	15.69*	8.82	8.80

* significant at the 5 percent level.

Indicators, and the effect of Leading Indicators on Consumer Sentiment controlling for Headlines. Since the causality tests that examine these effects are conducted in a trivariate system, in every case we are in effect controlling for the past influences of the third variable. For instance, in assessing the causal influence of Recession Headlines on Leading Indicators, we are controlling for the effects of the past history of Consumer Sentiment because lags of Consumer Sentiment appear in the regression equation for Leading Indicators in the VAR. Of all of these tests, only those of Recession Headlines on Consumer Sentiment (while controlling for Leading Indicators) are significant at the 5 percent level (for lags 2 and 4). These results offer additional evidence in support of the powerful-effects model of media influence on consumer sentiment and are entirely consistent with the outcome of the causality tests in the bivariate VAR, where no attempt was made to control for the third variable (in this case the economy itself, via the Leading Indicator variable).

We also examined the effect of Recession Headlines on Leading Indicators controlling for Consumer Sentiment, and Leading Indicators on Headlines controlling for Consumer Sentiment. Results show no evidence for causal effects in either case, thus lending no support for the media malady hypothesis, nor the event-driven reporting hypothesis.

Causal tests in either direction between Leading Indicators and Presidential Popularity show no evidence for a causal effect in either direction. Thus both the structural factor hypothesis and the bandwagon effect are rejected. Similarly, causality tests between Headlines and Presidential Popularity show no evidence for a causal effect. However, our earlier tests indicated that these two series were cointegrated. Therefore causal tests were conducted again on these series in the context of a trivariate VAR which controlled for a third variable, Leading Indicators. The results show evidence of a causal relationship: Presidential

Popularity appears to have a determining effect at every lag on the number of Recession Headlines when controlling for Leading Indicators, thus lending support to the adversarial press theory.

DISCUSSION

Our conclusion is that there is evidence of a causal influence of headline recession news upon consumer sentiment over the time frame of this study. This causal effect appears to be robust to different lag settings in the vector autoregression itself and to the presence or absence of the third variable, i.e. the present and prospective state of the economy, as represented by the Leading Indicators series. There is some evidence (at the first lag) of effects in the other direction, i.e. from consumer sentiment to headlines, so that recession headlines do appear to have been somewhat influenced by consumer-driven reporting. Overall, however, the powerful-effects media model is the dominant one. In effect, growing numbers of headlines referring to the recession appear to have had a depressing effect upon consumer sentiment.

The actual state of the economy as represented by the Index of Leading Indicators does not appear to have influenced consumer sentiment, suggesting that consumers were not forming their impressions of the state of the economy through unmediated (direct) experience. And, as consumer sentiment is not related to the state of the economy (in the sense of the two series being cointegrated), the Katonian hypothesis (wherein consumer sentiment is seen as a dominant influence on the economy) is not supported.

Further, recession headlines are not related to the actual state of the economy over the period of the study. This suggests that the trend in negative recession coverage during this period was not a reflection of the true state of the economy (as measured by the leading economic indicators) and may have contributed to an excessively pessimistic consumer sentiment. But, there is no evidence that the prolonged number of recession headlines had a negative impact on the state of the economy, thus refuting the 'media malady' argument.

Tests on the relationship between the state of the economy and presidential popularity revealed an apparently spurious relationship, i.e. a sluggish economy appeared to coincide with boosted presidential ratings. These results are not consistent with the role the economy plays as a structural factor in presidential popularity, nor the bandwagon effect of a popular president on the state of the economy. Within the time period of our study, President Bush's overall ratings were substantially increased, due to public approval of his handling of the Persian Gulf crisis. It is extremely likely that this 'foreign policy' effect operated as an additional variable, offsetting the expected downward impact of an economy perceived by the public to be in a state of serious recession. A full investigation

of this effect would require the presence of a fifth variable in the VAR analysis and longer data series to accommodate the additional variable, but would be a valuable extension to this line of enquiry for future research.

As for the relationship between presidential popularity and consumer sentiment, there is no evidence, at least in this time period, to support the bully pulpit hypothesis (e.g. where a popular president heightens consumer sentiment), or the economic approval effect (where presidential popularity is influenced by consumer sentiment).

However, there was strong evidence of a causal effect of presidential popularity on recession headlines when controlling for real world economic conditions. Growing numbers of recession headlines appeared to be better predicted by Bush's increasing popularity (and diminishing numbers by his faltering popularity) rather than the actual state of the economy. This offers the first empirical support for the conjecture by Stevenson, Gonzenbach and David (1991), based on their time series data, of an adversarial press during the Bush tenure, specifically during the time of the Persian Gulf crisis.

As we have indicated earlier, it seems worthwhile to extend the statistical analysis here to longer data sets that allow for different presidential regimes and periods of economic expansion as well as recession. Longer time series make it possible to include additional variables that seem important (e.g. foreign policy effects on presidential popularity) and to perform level-break analyses between presidential regimes. We hope to pursue such extensions in later work.

As it was our purpose to extend research reported by Stevenson, Gonzenbach and David (1991), only economic news reported by the *New York Times* was used in this study. Which media outlet, print or television, is more influential has long been the subject of debate. While many earlier studies reported newspapers to have stronger effects than television (McCombs and Shaw 1972, Benton and Frazier 1976, Eyal 1979, McCombs 1977, Patterson and McClure 1976, Weaver 1977), recent scholars argue that television deserves more thorough investigation. For example, the case for studying television is argued by Iyengar and Kinder (1987, pp. 1–2) as follows: 'Our purpose here is to establish that television news is in fact an educator virtually without peer, that it shapes the American public's conception of political life in pervasive ways; that television news is news that matters'. In the light of our findings, we would strongly advocate a future examination of broadcast economic news reporting and its interrelationship with consumer sentiment, the state of the economy, and presidential approval.

Over and above shedding light on the possible economic and political consequences of negative economic news reporting, it is hoped that the empirical results given here demonstrate the potential usefulness of statistical tools that are now available to us from the field of econometrics. These techniques seem

well suited to analyzing data sets with the time series characteristics that are common to many topics of enquiry in the field of communication research.

APPENDIX 1 INDEX OF CONSUMER SENTIMENT

Survey Research Center, University of Michigan

1. Would you say that you (and your family living there) are better off or worse off financially than you were a year ago?
2. Now looking ahead—do you think that a year from now you (and your family living there) will be better off financially, or worse off, or just about the same as now?
3. Now turning to business conditions in the country as a whole—do you think that during the next 12 months we'll have good times financially, or bad times or what?
4. Looking ahead, which would you say is more likely—that in the country as a whole we'll have continuous good times during the next 5 years or so, or that we will have periods of widespread unemployment or depression, or what?
5. Generally speaking, do you think now is a good or a bad time for people to buy major household items?

Source: Curtin (1982).

APPENDIX 2 COMPONENTS OF THE U.S. DEPARTMENT OF COMMERCE'S LEADING ECONOMIC INDICATORS

1. Average weekly hours, manufacturing.
2. Average weekly initial claims for unemployment.
3. New order, consumer goods and materials.
4. Vendor performance.
5. Contracts and orders for plant and equipment.
6. Building permits.
7. Change in unfilled orders, durable goods.
8. Change in sensitive materials prices.
9. Stock prices.
10. Money supply.
11. Index of consumer expectations.

Source: *Business Conditions Digest.*

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