

Attitudes toward the News Media and Voting Behavior

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Abstract:

As an institution, the news media are highly unpopular. Yet, we know little about the consequences of this unpopularity for mass political behavior. This paper examines the effect of attitudes toward the news media on voter decision-making. Utilizing a simple Bayesian model of vote choice, I predict those with negative attitudes toward the press will vote more based on their partisan predispositions and less based on contemporary messages. Analyses of American National Election Studies and General Social Survey data are consistent with these expectations. Among those with more negative attitudes toward the news media, party identification has more influence and current economic conditions less influence on voting preferences. I calculate declining confidence in the institutional press could account for approximately 47 percent of the increase in partisan voting over the past 35 years. Negative attitudes toward the media appear to be an important source of polarization in American politics.

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I remember being sent, as a child, from Louisiana on summer visits to my grandparents in New Jersey. My grandfather, who was a pediatrician in the town of Perth Amboy, would sit in his easy chair on Sundays reading the [*New York Times*] in a spirit not dissimilar to that of someone taking the sacrament. After finishing one article, he'd begin the next—who was he to decide what, of the material the *Times*' editors had chosen to publish, he had the right to skip? Quite often, the aural accompaniment to this exercise was the soothing music of WQXR, the *Times*' radio station, which between segments of classical music would occasionally air interviews with *Times* correspondents and critics—men, I inferred from their calm, distinguished voices, with neat Vandyke beards, their heads wreathed in contemplative clouds of pipe smoke.
Nicholas Lemann (2005)

...the notion of a neutral, non-partisan mainstream press was, to me at least, worth holding onto. Now it's pretty much dead, at least as the public sees things...It's hard to know now who, if anyone, in the "media" has any credibility.
Howard Fineman (2005)

1. Introduction

The news media play a central role in the functioning of modern democracies. In these nations, citizens rely on agents like the media for information about the content and consequences of the actions of their elected leaders. As Lippmann (1997 [1922]) eloquently puts it,

Each of us lives and works on a small part of the earth's surface, moves in a small circle, and of these acquaintances knows only a few intimately. Of any public event that has wide effects we see at best only a phase and an aspect...Inevitably our opinions cover a bigger space, a longer reach of time, a greater number of things, than we can directly observe. They have, therefore, to be pieced together out of what others have reported and what we can imagine. (53)

While an earlier generation of scholars was more skeptical (i.e. Klapper 1960; Patterson and McClure 1976), a large body of political science research in recent decades has confirmed the strong influence of mass media on the public's beliefs and opinions. The power of media messages to shape the people's views of the political world seems more "massive" than "minimal" (Zaller 1992; Bartels 1993; Hetherington 1996; Zaller 1996; Kinder 1998b, 1998a; Mutz 1998; Kahn and Kenney 2002; Kinder 2003; Druckman and Parkin 2005; Gabel and Scheve 2005; Gerber, Karlan, and Bergan 2006; Graber 2006, 2007; DellaVigna and Kaplan forthcoming).¹ In Petrocik's (1995, 136) words,

¹ Even when citizens acquire information through social networks, the messages usually originate from the press (Lazarsfeld, Berelson, and Gaudet 1948; Katz and Lazarsfeld 1955; Katz 1957; Huckfeldt and Sprague 1995).

The press is consequential because voters need information about candidates in order to make a choice that corresponds to their preferences. Limits on what a person can know and experience make the press the source of that information for most of us.

As one stream of research documents the persuasive power of the news media, the more general literature examining the psychology of persuasion emphasizes the central role of source credibility in the process (Druckman and Lupia 2000). While academics across the disciplines of political science, economics and psychology have active research interests in persuasion and have developed several distinct models of the process, almost all share the view that when the persuader is trustworthy (or has attributes that signal trustworthiness) persuasion is much more likely to occur.²

These two largely distinct literatures focusing on source credibility and news media persuasion lead one to wonder whether the extent of the news media's influence depends on the public's attitudes toward them. This question is especially salient because public opinion toward the press has changed dramatically over the past four decades. It is difficult to detect trends in opinion toward the media before the early 1970s because, while commercial survey firms did sometimes ask relevant questions, no consistent wording was used over time (Erskine 1970-1971). Since 1973, however, the General Social Survey (GSS) has included an item probing *Confidence in the Press* in the battery of questions measuring

² In the receive-accept-sample persuasion model conceived by McGuire (1969) and adapted by Zaller (1992), source credibility is relevant at the acceptance stage. Here, "partisan resistance" (Zaller 1992, 121) occurs when an individual perceives the message as coming from a source with a different political predisposition.

In psychology, the elaboration-likelihood model (Petty and Cacioppo 1986) and the heuristic-systematic model (Chaiken 1980; Eagly and Chaiken 1993) (known as "dual-process" (Chaiken and Trope 1999) theories of persuasion) see source credibility as a heuristic individuals use to decide whether to accept an argument when they lack the desire or ability to analyze the content of the message. Zaller (1992) argues that, in the context of modern American politics, virtually the entire population processes political information by the heuristic route, where source credibility is central. The vast majority of the public is neither involved nor interested enough by the standards of Chaiken and Petty and Cacioppo's experiments (Converse 1964; Delli Carpini and Keeter 1996; Lippmann 1997 [1922]; Kinder 1998b, 1998a). As Zaller (1992, 47) characterizes it, in American politics, "The stakes are theoretically high, but people find it hard to stay interested."

Game theoretic models of strategic communication (called in some incarnations "cheap talk" or "signaling" models), while varying in their specifications, all predict source credibility will be a key factor in determining if people are influenced by informative messages (Crawford and Sobel 1982; Gilligan and Krebbiel 1987, 1989; Lupia and McCubbins 1998). The key source criteria in these models are whether the source is knowledgeable and has the same interests as the individual receiving the message. Studies where people use cues from elites who share their ideology as information shortcuts when forming their opinions are of a similar intellectual lineage and posit similar source credibility criteria (Popkin 1991; Sniderman, Brody, and Tetlock 1991; Lupia 1994).

confidence in American institutions included in its frequent surveys.^{3,4} Confidence in the Press dramatically declined over this period. As Figure 1 shows, in 1973, Confidence in the Press was reasonably high regardless of partisanship and very similar to that of other institutions.⁵ Lipset and Schneider (1987) claims at this time the news media was respected by the public as a “‘guiding’ institution, outside the normal political and economic order...” (cited in Cook, Gronke, and Rattliff 2000, 1). Since then, public opinion toward the press has become dramatically more negative. So much so that by 1996, Fallows (1996) bluntly declares, “Americans hate the press” (cited in Cook et al. 2000, 2). By the 1998 GSS survey, Confidence in the Press is lower than for any other institution in the battery (Cook et al. 2000; Cook and Gronke 2001; Gronke and Cook 2002). As Figure 2 illustrates, in the 2006 survey, Confidence in the Press is lower than for all other institution except television and only somewhat higher among Democrats than among Republicans.^{6,7}

Few studies, to my knowledge, have examined the role public opinion toward the press plays in media persuasion. An exception is Miller and Krosnick (2000), which finds, in a laboratory experiment,

³ For more details on the General Social Survey, see <http://www.norc.uchicago.edu/projects/gensoc.asp>. The GSS data and codebooks with question wordings are archived at the Inter-University Consortium for Political and Social Research and available at <http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/04295.xml>.

⁴ Psychologists conventionally define an attitude as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly and Chaiken 1993, 1). In this case the attitude object is the institution itself. This is not as concrete an object to evaluate as a particular media outlet such as a newspaper, local television station or cable network, leading to the concern that evaluating the “press” or the “media” as an institution may have little meaning to most people because they only have opinions about particular news outlets. A related concern is that some people may associate the word “press” only with printed media.

Ladd (2006b) addresses this concern using open-ended “stop and think” style questions (Zaller 1992; Zaller and Feldman 1992) to examine the “considerations” brought to mind by questions probing trust (or confidence) in the “press” and the “media” and finds that different question wordings prompt very similar responses from respondents. In addition, Ladd (2006a, 25-29) examines responses to questions probing trust in the media as an institution over time in ANES panel surveys and finds these attitudes to be quite stable over time, even when dramatic events occur such as a change in the party of the president or terrorist attacks. These results suggest the media (or press) as an institution has a clear meaning to members of the mass public. When asked to evaluate this institution, responses do not seem to be examples of “nonattitudes” (Converse 1964).

⁵ Here and throughout this paper, all variables are coded to range from 0 to 1.

⁶ While the general level of confidence in all institutions declined during this time, Cook and Gronke (2001) show that attitudes toward the press display a distinct downward trend that departs from the trend in overall confidence.

⁷ As Figures 1 and 2 illustrate, confidence in television manifests a somewhat similar pattern to Confidence in the Press. This is likely because these attitude objects, while different, have some overlap. The main difference is that, while television may refer to television news, it may prompt people to think about (and evaluate) entertainment television at least as frequently. In contrast, the press confidence question directly prompts evaluations of journalism and the news media (see Ladd 2006b).

that newspaper priming does not occur among those who distrust the media. Another is Druckman (2001), which, also in a laboratory experiment, finds only trustworthy newspapers produce framing effects. While these findings are suggestive, so far no one has examined media source credibility effects outside the laboratory or on direct media persuasion.

This paper examines how attitudes toward the media as an institution shape how people use the press to form electoral preferences. Considering potential voters receive most of their information about politics from the news media, examining the voting decision allows one to observe the extent to which citizens rely on their predispositions or are swayed by informative media messages.⁸ Below, Sections 2 and 3 discuss two major influences on electoral preferences and present evidence suggesting both are largely exogenous in the short term. Section 4 lays out a simple voting model incorporating these influences and derives comparative statics predictions. Sections 5 and 6 test those predictions using a variety of available data. Section 7 discusses the implications of these results for polarization and electoral accountability in the American political system. Section 8 briefly concludes.

2. The Role of Party Identification in the Voting Decision

Few political phenomena have been studied more extensively than the individual citizen's *Vote Choice*. While a definitive and widely accepted model of the voting process is still elusive, several empirical regularities are quite robust. First, voters have strong psychological orientations toward the major political parties. These attachments, labeled *Party Identification*, are relatively (though not entirely) stable over time and shape voters' decisions in powerful ways. When voters confront a new or unfamiliar election decision, their starting point is their "standing decision" (Key 1961) among the parties.⁹ Second, despite *Party Identification*'s powerful influence, voters can be persuaded to vote contrary to their *Identification* if given persuasive reasons to do so. New information about the relative benefits of

⁸ Ladd (2004; 2006a, ch. 3) presents evidence suggesting people update their beliefs about the state of the political world differently depending on their attitudes toward the news media as an institution. He finds evidence for this in perceptions of the national economy, national security and in several other policy areas. Unlike this paper, Ladd (2004; 2006a, ch. 3) focuses only on beliefs about national conditions rather than on the formation of preferences for political candidates.

⁹ In this way, *Party Identification* can serve as a heuristic, allowing voters to make decisions about candidates when they have little other information to guide them (Conover and Feldman 1989; Rahn 1993).

competing candidates, acquired mostly through mass media, can persuade some voters to abandon their standing decision and vote for another candidate. I first discuss Party Identification, then, in Section 3, discuss more short-term influences on Vote Choice.

What exactly is Party Identification? The most influential description of the role of party attachments in the voting decision is Campbell et al. (1980 [1960]). It describes Party Identification as a “firm but not immovable attachment” (148), as a psychological trait that is “characterized more by stability than by change – not by rigid, immutable fixation on one party rather than the other, but by a persistent adherence and resistance to contrary influence” (146). Observing the strong relationship between Party Identification and Vote Choice, it asserts:

Few factors are of greater importance for our national elections than the lasting attachments of millions of Americans to one of the parties. These loyalties establish the basic division of electoral strength within which the competition of particular campaigns takes place (Campbell et al. 1980 [1960], 121; cited in Bartels 2001, 7).

It notes that, while stable partisan attachments serve as the starting point for electoral choice, voters can also be influenced by more transitory forces, such as national conditions or the personalities of particular candidates (Stokes 1966; Campbell et al. 1980 [1960]). This new information also alters Party Identification itself, but the effect is small. It takes dramatic or long lasting messages to fundamentally alter the partisan balance in the electorate (Campbell et al. 1980 [1960], 531-535).

Subsequent scholars have disputed various aspects of Campbell et al.’s (1980 [1960]) depiction of voter psychology and particularly the role of Party Identification. Of most relevance here is the causal relationship between Party Identification and more transitory beliefs and opinions.¹⁰ While all agree that

¹⁰ This section focuses on the causal relationship of both perceptions of candidates and other political attitudes on Party Identification, concluding they have little effect on Identification in the short term. Most political opinions and perceptions tend to be unstable over-time and highly responsive to current media messages (Converse 1964; Zaller 1992, 1994; Berinsky 2006). Thus, studies of their effect on Party Identification also indirectly test the effect of contemporary media messages.

Measuring the effect of self-reports of candidate attributes, perceptions of campaign events, or current national conditions on Party Identification is also complicated by the fact that, as Section 3 explains, these reports tend to be rationalizations of respondents’ Vote Choice. As described in Section 3, one can measure the effect of messages about national conditions on other variables by using objective measures of those conditions rather than self-reports or other proxies. Studies taking this approach find that economic variables do affect Party Identification

each affects the other, their relative power has been debated in the literature. While recursive models using cross-sectional survey data have produced a wide range of findings,¹¹ more powerful research designs, particularly those using panel surveys, have tended to support the claim that Party Identification is more stable and influential than other beliefs and opinions (Jennings and Niemi 1981; Gerber and Green 1998; Miller 1999).¹²

Related to disputes about the causal power of Party Identification are debates about its instrumental content. Campbell et al.'s (1980 [1960],) claim that party attachments tend to be passed down from generation to generation (see also Jennings and Niemi 1981) and relatively stable over time seems to imply that one's Party Identification is not particularly rational. Those claiming Party Identification is heavily influenced by contemporary messages have also often depicted it as a more purposeful choice among the parties. For example, Fiorina (1977; 1981) argues Party Identification might be a sensible way for voters to summarize the costs and benefits they anticipate receiving from the parties without expending unnecessary effort acquiring information about each election contest.¹³ Achen (1992; 2002) extends this line of reasoning by showing that conceptualizing Party Identification as a running

over time (Erikson, MacKuen, and Stimson 2002), but the effect is still small in the short term, such as the several months of a presidential campaign.

¹¹ Findings from these analyses tend to be very sensitive to model specification. Recursive statistical models tend to find that Party Identification plays a dominant role in shaping all other opinions and beliefs (Goldberg 1966; Miller and Shanks 1996). But these models simply beg the question by assuming at the outset that causation flows from Party Identification to other attitudes rather than the reverse. One potential solution is to use non-recursive structural equation models that attempt to estimate the reciprocal effects between Party Identification and other attitudes. However, attempts to estimate models of this type have produced contradictory results. The main trouble is that these models still require the researcher to assume some political opinions are exogenous. Arbitrary differences in these unrealistic assumptions tend to lead to very different conclusions (Bartels 2001), with some models showing that causation mostly flows from Party Identification to beliefs, opinions, and candidate evaluations (Markus and Converse 1979), and some showing the reverse (Jackson 1975; Page and Jones 1979; Fiorina 1981).

¹² For example, Miller (1999) finds that, for almost all groups of voters, over time, political opinions are more likely to change to match partisanship than the reverse. Alan Gerber and Donald Green (1998) examines a series of ANES panel surveys using a Kalman filter statistical model to examine the stability of Party Identification over time, finding that Party Identification is much more stable over time than some earlier work implied (Jackson 1975; Page and Jones 1979; Fiorina 1981).

Some research has examined the stability of Party Identification by examining aggregate, rather than individual-level data. At the aggregate level, the proportion of the population identifying with the two parties tends to fluctuate in response to variables such as the state of the economy and evaluations of the president (MacKuen, Erikson, and Stimson 1989; Erikson et al. 2002). However, this responsiveness tends to be modest in size and relatively slow. Aggregate movement in Party Identification is small when measurement error (solely random fluctuation) is accounted for (Green, Palmquist, and Schickler 1998, 2002).

¹³ On the irrationality of expending effort to acquire political information, see Downs (1957).

tally updated in a Bayesian manner (Zechman 1979; Calvert 1980) is consistent with many of the empirical regularities first observed in Campbell et al. (1980 [1960]), such as its tendency to be more likely to change when voters' social and economic circumstances change and to become more stable as people age. Thus, one can interpret Party Identification either as an instrumental choice or as a less rational psychological attachment, while still acknowledging that it is relatively stable and influential.

In some ways, empirical research into the causal connections between Party Identification, contemporary messages, and Vote Choice has come full circle. While theoretical interpretations differ, the accumulated evidence and recent work broadly support Campbell et al.'s (1980 [1960]) empirical claims in this area (Green et al. 2002; Johnston 2006).¹⁴ For example, Green et al. (2002) states, "The group affinities of the electorate tend to endure, whereas the special conditions that help propel a candidate to an unusual margin of victory seldom do" (227).¹⁵ The next section considers these "special conditions" that influence voting.

3. Contemporary Influences on the Vote

While most voting research gives partisanship a central role in voter psychology, it also emphasizes the importance of campaign messages on voting behavior.¹⁶ Researchers have looked at candidates' personal attributes and issue positions as potential causes of voting decisions, but have had trouble convincingly documenting these effects. Perhaps most importantly, it is very difficult to measure voters' perceptions of candidates' characteristics and issue positions in any way other than simply asking

¹⁴ Green et al. (2002) make traditional empirical claims about Party Identification while adding its own evidence and a new theoretical interpretation. It sees Party Identification as a kind of social group identification. Partisans identify with the type of people popularly associated with one party or another.

¹⁵ This is not to say that there is no disagreement in this literature. There continues to be debate over how stable party identification is and how much it is influenced by contemporary considerations. While there is some consensus that party identification is more stable and influential than recent concerns, the magnitude is still open to some debate. In the words of a recent review of this literature: "The claim that party identification moves other features on the political landscape is remarkably robust" (Johnston 2006, 329) and "Party Identification, at least in the United States and as measured, is a mover but not entirely unmoved" (347). See Johnston (2006) for a more complete review of this literature.

¹⁶ Bartels (2001) points out it would have been difficult for Campbell et al. (1980 [1960]) to ignore current perceptions, considering that the book is based on survey data from two presidential elections (1952 and 1956) in which the Republican candidate won despite the Democrats' large aggregate advantage in party identification. It accounts for this by arguing that Republican candidate Dwight Eisenhower's tremendous personal popularity convinced many Democrats and independents to support him.

the voters. Unfortunately, most voters answer survey questions in ways that rationalize their Vote Choice (Berelson, Lazarsfeld, and McPhee 1954; Brody and Page 1972; Page and Brody 1972; Kramer 1983; Rahn, Krosnick, and Breuning 1994; Bartels 2002b; Achen and Bartels 2006; Lenz 2006b), making their reported perceptions unhelpful in determining the true causal effect of these variables.¹⁷ As a result, it is difficult to know with certainty, based on current evidence, what effect perceptions of candidate attributes, issue positions, and campaign activity have on voting behavior.¹⁸

A contemporary variable whose influence on voting has proved easier to document is national *Economic Performance*. At the aggregate level, voters tend to reward presidential candidates of the party in the White House when the economy is doing well and punish them when the economy is sluggish (Rosenstone 1983; Hibbs 1987; Lewis-Beck 1990; Bartels 1992; Gelman and King 1993; Hibbs 2000; Lewis-Beck and Stegmaier 2000; Bartels and Zaller 2001).¹⁹ Survey researchers have also examined individual-level effects, finding that personal perceptions of national Economic Performance are highly related to Vote Choice (Kinder and Kiewiet 1979; Fiorina 1981). However, these reported perceptions are as likely as other survey responses to be rationalizations (Kramer 1983; Wilcox and Wlezien 1993; Achen and Bartels 2003). Fortunately, unlike candidate personal characteristics or issue positions, there are available objective measures of Economic Performance, allowing one to estimate its effect on individual voting behavior with pooled cross-sectional survey data using objective measures of the economy as

¹⁷ In an attempt to determine if more moderate presidential candidates were more appealing to voters, Rosenstone (1983) polled political science faculty to determine the one-dimensional ideological position of candidates. But since these professional ratings could also be endogenous to election outcomes, this method has not caught on (but see Bartels and Zaller 2001; Zaller 2004).

¹⁸ Aggregate change in voter preferences during campaigns does seem to respond to prominent campaign events (Bartels 1988; Wlezian and Erikson 2002; Hillygus and Jackman 2003). However, studies showing an increase in the correlation between some survey responses and Vote Choice over the course of a campaign (i.e. Johnston et al. 1992) are often less helpful in documenting causation because, except in the case of purely demographic variables, one cannot know whether the campaign increased the influence of certain attributes on Vote Choice or merely increased voter rationalization.

¹⁹ The aggregate performance of congressional candidates of the president's party is also correlated with the state of the economy (Kramer 1971; Tufte 1975). However, this seems to be at least as much a result of strategic behavior by quality congressional candidates as a direct effect of the economy on Vote Choice (Jacobson and Kernell 1981; Jacobson 1989).

explanatory variables. Models using this approach find a clear relationship between national Economic Performance and individual voting decisions (Markus 1988, 1992; Zaller 2004).^{20, 21}

While the evidence that Economic Performance influences Vote Choice is fairly strong, analyses of other contemporary influences outside the laboratory have been counter-intuitively inconclusive (Bartels 1992; Holbrook 1994; Ansolabehere 2006).²² One obstacle is the endogeneity of cross-sectional survey responses, mentioned above. Additionally, studies measuring changes in voter preferences during presidential campaigns tend to find the main influence of campaign coverage is generally to make voters more politically knowledgeable (Anderson, Tilley, and Heath 2005) and particularly to make current state of the economy more salient and influential (Gelman and King 1993; Holbrook 1994; Campbell 2000; Ansolabehere 2006; Bartels 2006). Ansolabehere (2006, 30) calls this the “reinforcement effect.” Thus, while one can’t rule out other campaign media effects, a main way recent political messages influence voters is by sending signals about Economic Performance.

In summary, current evidence suggests that voting decisions are affected by two major factors: long-term party loyalties and more transitory signals about the relative quality of the two parties, the most established being the recent national economy. In this way, predispositions and contemporary information are combined to form a citizen’s Vote Choice. Based on this existing literature, in the theoretical models in Section 4 and the statistical tests in Sections 5 through 7, I assume Economic Performance Economic Performance and Party Identification have exogenous effects on Vote Choice.²³

²⁰ While other measures of macroeconomic performance produce similar results, growth in real disposable income per capita tends to be most strongly related to voting behavior in the United States (Bartels and Zaller 2001).

²¹ Assigning all voters in a given year a certain value on the Economic Performance variable creates econometric complications because the disturbances will likely be clustered in each year. It is necessary to account for this clustering when calculating standard errors of these coefficients (Snijders and Bosker 1999; Steenbergen and Jones 2002). This paper does this, as described in Section 7.

²² Ansolabehere (2006, 37) puts it succinctly: “The inclusion of debates, conventions, and other election related events adds little to the predictive power of economic models [of voting].”

²³ To be clear, I do not contend that other contemporary factors like evaluations of candidate character necessarily have no effect on the voting decision. I only assert that first, it has been very difficult to design studies where inferences about these effects overcome endogeneity concerns, and second, those few studies that have used other approaches like panel data to disentangle the direction of causation have predominantly found evidence of rationalization of electoral choices (Rahn et al. 1994; Lenz 2006a, 2006b). Thus, existing scholarship suggests that the effect of these factors is minimal, although not necessarily zero.

4. A Simple Model of Electoral Choice

To structure my empirical analysis, I employ (with some refinements in interpretation) Zechman's (1979) simple Bayesian model of voter decision-making, which Achen (1992) points out is consistent with much of the empirical literature on Party Identification and Vote Choice.²⁴ While it (like any model) undoubtedly represents a simplification of the psychological processes involved in voter decision-making, it does encompass the several important and reliable empirical generalizations reviewed above: Party Identification provides an initial baseline for candidate choice, but voters can sometimes be swayed from their Identification by contemporary forces such as Economic Performance.²⁵

I represent each voter's initial preference among the candidates as a normal distribution with mean PID_i and precision P_{iPID} .²⁶ The voter then receives a message from the news media providing new information about the relative quality of the candidates, such as recent Economic Performance. This message is represented as a normal distribution with mean M_i and precision P_{iM} . The voter then combines her initial candidate preference with the new information to form a final voting preference, which I

²⁴ As a decision-theoretic, not game theoretic, model it does not incorporate strategic behavior on the part of voters or an equilibrium concept to make predictions. Voters are purposeful only in that they vote based on their posterior beliefs about the relative quality of the two candidates. This is consistent with Fiorina's (1990; 1996; 2000) argument that, while elites likely behave strategically, the mass public does not. He argues the cognitive effort required, combined with the low probability of influencing outcomes, makes strategic behavior by the mass public uncommon, and, in a sense, irrational itself. For an attempt to develop a game theoretic model of media persuasion where media organizations and the mass public behave strategically, see Bovitz et al. (2002).

For other examples of using Bayesian models to represent voter learning, see Calvert (1980; 1986), Calvert and MacKuen (1985), Bartels (1993), Gerber and Green (1998), Achen (2002), and Ladd (2004; 2006a). Fiorina (1977; 1981, ch. 4) presents a similar mathematical model of party choice that can be easily adapted a Bayesian framework (Calvert 1980). For examples of apparent deviations from Bayesian learning by voters see Bartels (2002a). For more on Bayesian updating with normal prior, message (or likelihood), and posterior distributions, see Gill (2002, 89-100) and Gelman et al. (2004, 48-49). While the mathematics are the same, Gill (2002) and Gelman et al. (2004) use Bayes' rule for purposes of statistical inferences rather than modeling citizen learning. For work outside of political science that applies Bayes' rule in similar ways to this paper, see work in Bayesian decision theory such as Wald (1950), Robert (1994), and Winkler (2003).

²⁵ As Cameron and Morton (2002, 793) point out, formal models, even when incomplete or stylized, can improve empirical work by serving as "devices for structuring [that] empirical work." While admitting this model is a simplification, I use it to generate specific hypotheses because it is broadly consistent with existing empirical results (Achen 1992) and "at some level, all models are inadequate" (Cameron and Morton 2002, 788). On these points, see also Morton (1999). My approach is also broadly consistent with what Clarke and Primo (2005) call the "semantic" style of theorizing. As Clark and Primo (2005, 12) describe semantic theorizing, "The question we should ask of this model is not whether it is 'true,' but rather, is it similar in certain aspects, and for certain uses, to a system in the real world."

²⁶ Here, the precision of a distribution is defined as the inverse of its variance.

represent as another normal distribution with mean V_i and precision P_{iv} . The voting decision is related to Party Identification and the media message such that $V_i = \frac{PID_i P_{iPID} + M_i P_{im}}{P_{iPID} + P_{im}}$.²⁷ In slight contrast to previous Bayesian voter learning models (i.e. Zechman 1979; Achen 1992), this model intends to represent simply the formation of candidate preference in a given election, rather than change in Party Identification itself. Considering the effects are small in the short term and thus unlikely to bias the analysis here, for purposes of this paper I do not test the extent to which voters' Party Identification itself is altered by campaign messages. I merely postulate that Party Identification during the campaign affects the vote, serving as a starting point for the electoral decision, with contemporary messages having their own effect.

As the most well established contemporary influence on Vote Choice, I use Economic Performance to represent a message transmitted by the news media.²⁸ I interpret the term P_{im} , the perceived precision of the media's message, to be some positive function of the individual's overall evaluation of the news media. I expect P_{im} to be larger when an individual has a positive attitude toward the news media and smaller when she has a negative attitude toward the press. Thus, each person's election preference (V_i) is a weighted average of her Party Identification (PID_i) weighted by its precision (P_{iPID}) and the media message she receives about the incumbent party's Economic Performance (M_i) weighted by its precision (P_{im}), which is directly related to her attitude toward the press.

This leads to several straightforward predictions regarding the effect of attitudes toward the press on voter decision-making. For interpreting comparative statics, a key point is that both P_{iPID} and P_{im} , because they represent the inverse of the variance of normal distributions, must be positive by definition. Given this, the model not only implies that Party Identification and Economic Performance have positive

²⁷ The precision of voter i 's election preferences can be represented as $P_{iv} = P_{iPID} + P_{im}$.

²⁸ While I represent the media message as one normal distribution, this distribution could actually represent (and fully summarize) multiple messages about the state of the economy. Because normal distributions are conjugate to one another, an unlimited number of normal distributions could be combined to create one media message distribution and that distribution would summarize all the media messages about the economy that citizen i receives.

effects on Vote Choice ($\frac{\partial V_i}{\partial PID_i} = \frac{P_{iPID}}{P_{iPID} + P_{iM}} > 0$ and $\frac{\partial V_i}{\partial M_i} = \frac{P_{iM}}{P_{iPID} + P_{iM}} > 0$), but also that the effects

of both these variables depend on P_{iM} . Given $\frac{\partial(\frac{\partial V_i}{\partial M_i})}{\partial(P_{iM})} = \frac{P_{iPID}}{(P_{iPID} + P_{iM})^2} > 0$ and

$\frac{\partial(\frac{\partial V_i}{\partial PID_i})}{\partial P_{iM}} = \frac{-P_{iPID}}{(P_{iPID} + P_{iM})^2} < 0$, I expect the effect of Party Identification on the vote will be

positively related to P_{iM} , while the effect of media messages on the vote will be negatively related to P_{iM} .²⁹ The assumption that P_{iM} is positively related to one's attitude toward the news media leads to the following predictions: When voters dislike the press, their voting behavior should be both more strongly related to their Party Identification and less strongly related to contemporary messages such as Economic Performance.³⁰

5. Trust in the Media and Partisan Voting

I test these predictions with survey data from the American National Election Studies (ANES) and the GSS. While each survey has limitations, both offer opportunities to test the predictions stated above. The main limitation of the ANES is that it only probes respondents' attitudes toward the media in recent years. *Trust in the Media*, the only question to be asked consistently over time, was measured in

²⁹ These equations also indicate that both relationships depend on P_{iPID} , the precision of one's Party Identification, a point I return to below.

³⁰ Ideally, one might want to parameterize and estimate a version of the model, $V_i = \frac{PID_i P_{iPID} + M_i P_{iM}}{P_{iPID} + P_{iM}}$,

directly, rather than testing comparative statics. If one could do this, it would account for the fact that while increases in P_{iM} always increase the relationship between Party Identification and Vote Choice and decreased the relationship between a media message and the Vote Choice, its effects on both relationships are nonlinearly related to the

existing values of P_{iPID} and P_{iM} . This can be seen clearly in $\frac{\partial(\frac{\partial V_i}{\partial M_i})}{\partial(P_{iM})} = \frac{P_{iPID}}{(P_{iPID} + P_{iM})^2}$ and

$\frac{\partial(\frac{\partial V_i}{\partial PID_i})}{\partial P_{iM}} = \frac{-P_{iPID}}{(P_{iPID} + P_{iM})^2}$. Unfortunately, Bayesian learning models are very difficult to identify (Bartels 1991;

Achen 1992; Bartels 1993). To successfully estimate their parameters through a method like maximum likelihood or nonlinear least squares usually requires one to make very restrictive assumptions about quantities in the model. For example, Bartels (1993) estimates a Bayesian model of voter learning by assuming prior precision is proportional to message precision. Unfortunately, because the goal here is to look at the effect of variation in message precision particularly, that approach would not work in this case. Given that direct estimation of the model is not possible, I follow the advice of Cameron and Morton (2002) and Morton (1999) and test comparative statics (see Mas-Colell, Whinston, and Green 1995; Silberberg and Suen 2000).

the 1996, 1998, 2000 and 2004 time-series surveys.³¹ With only four congressional elections and three presidential elections, these surveys don't include enough variation in national Economic Performance to estimate its effect with interactions, but they do allow one to test if partisan voting depends on Trust in the Media. The GSS has conducted national surveys almost every year since 1972. In years following presidential elections, it asks respondents which candidate they voted for, which party they identify with, and their Confidence in the Press as an institution. These data provide an opportunity to test how attitudes toward the press moderate the effects of both Party Identification and Economic Performance on Vote Choice.³²

Starting with the ANES data, I estimate a probit model of presidential voting in 1996, 2000 and 2004, where Vote Choice is a function of Party Identification, Trust in the Media, the interaction between Trust in the Media and Party Identification, and year fixed effects (not reported). I expect the interaction term's coefficient to be negative. Coefficient estimates presented in column 1 of Table 1 show the interaction is, in fact, negative and statistically significant, confirming expectations that greater Trust in the Media reduces the effect of Party Identification on Vote Choice.

As the theoretical discussion in Section 4 makes clear, when estimating the effect of attitudes toward the press, it is important to control as well as possible for the certainty of respondents' Party Identification. A variable that serves as a good measure of measure of the certainty of political predispositions this is respondents' level of objective *Political Knowledge*, determined by a brief battery of objective knowledge questions (Zaller 1992).³³ In addition, recent scholarship suggests that other forms of political trust like *Trust in Government* and social capital are widely influential political attitudes (Hetherington 1998, 1999; Putnam 2000; Hetherington and Globetti 2002; Hetherington 2004). To ensure

³¹ The question asks "How much of the time do you think you can trust the media to report the news fairly? Just about always, most of the time, only some of the time, or almost never?" While not given as an option, "none of the time" is sometimes volunteered as a response to this question. Exact question wordings of all other ANES variables are available at www.electionstudies.org. All ANES variable numbers are in the Appendix.

³² Unfortunately, the GSS does not ask respondents about their congressional votes.

³³ It is also consistent with the notion in the Bayesian framework that the precision of an individual's prior beliefs is equivalent to his or her level of information. As discussed above, in the Bayesian learning model both trust in the media and political information would moderate the effect of predispositions nonlinearly. But because of data limitations, here I test only comparative statics and estimate their moderating effect linearly.

that omitted variable bias does not distort the effect of Trust in the Media, I estimate the model while including as control variables Political Knowledge, the interaction between Political Knowledge and Party Identification, Trust in Government, the interaction between Trust in Government and Party Identification, *Trust in People* (as a measure of social capital), and the interaction between Trust in People and Party Identification. The results in column 2 indicate the interaction between Party Identification and Trust in the Media is largely robust to the inclusion of these controls, remaining negative and statistically significant.³⁴

Since the substantive sizes of probit coefficients are not directly interpretable, I simulate first differences.³⁵ Setting all other explanatory variables to their means, I simulate (based on the model in column 2 of Table 1) the effect of moving from being a weak Democratic to a weak Republican identifier if one trusts the media “just about always,” finding this increases one’s probability of voting for the Republican presidential candidate by .57 (standard error=.08). In contrast, when someone trusts the news media “just about never,” this shift in Party Identification increase one’s probability of voting for the Republican by .84 (standard error =.03).³⁶ Party Identification’s large effect on presidential Vote Choice gets even larger when voters lack Trust in the Media.

Next, I estimate the same models as in Table 1, but now predicting Vote Choice for the House of Representatives. Table 2 presents the resulting coefficient estimates. Again, the effect of Party Identification is always large but significantly greater when one distrusts the media, a difference that persists when one controls for Political Knowledge, Trust in Government and Trust in People. Based on

³⁴ Results in Tables 1 and 2 indicate that Trust in Government may moderate the effect of Party Identification in a similar way to Trust in the Media. However, as Tables 3 and 4 will show, the effect of Trust in Government on the relationship between Party Identification and Vote Choice is not consistent across different surveys and model specifications. In some models, lack of Trust in Government appears to increase the influence of Party Identification and in other models it appears to have either no effect or possibly the opposite effect.

³⁵ Kam and Franzese (forthcoming) and Brambor et al. (2006) point out that political science models with interactions are often interpreted incorrectly. Both advise presenting substantively meaningful marginal effects to illustrate results, which is the strategy pursued here. Throughout this paper, I simulate first differences using the CLARIFY computer program (King, Tomz, and Wittenberg 2000; Tomz, Wittenberg, and King 2003).

³⁶ Throughout this paper, I illustrate the effect of Party Identification by simulating the effect of moving from weak identification with one party (a score of .167) to weak identification with the other (a score of .833). In all cases, the results are substantively the same if one calculates the effect of moving from strong identification with one party (a score of 0) to strong identification with the other party (a score of 1), the only difference being that all effects become larger.

the model in column 2 of Table 2, again holding all other variables at their means, moving from being a weak Democratic to a weak Republican identifier if one trusts the media “just about always” increases one’s probability of voting for a Republican congressional candidate by .49 (standard error =.04). In contrast, if one trusts the media “just about never,” this change increases one’s probability of voting Republican by .66 (standard error =.03). As in presidential voting, those who distrust the media are more likely to rely on their partisanship when deciding whom to support for Congress.

6. Replicating the Analysis with Panel Data

One who believes Party Identification is strongly influenced by contemporary campaign messages may doubt these results. Achen (1992) points out that, if a respondent’s Party Identification changes in response to campaigns, one should measure it before the campaign to determine its true effect on Vote Choice.³⁷ More broadly, endogeneity between Vote Choice and all explanatory variables in Tables 1 and 2 could bias all parameter estimates. To at least partially ease these concerns, I test whether these results are robust when explanatory variables are measured prior to the current campaign.³⁸

Panel surveys measuring explanatory variables several years before the current election would serve this purpose.³⁹ Unfortunately, to my knowledge, only a couple existing panel surveys include questions about respondents’ attitudes toward the media. One is the 1992-1996 ANES panel study, where all relevant explanatory variables are measured in 1994 except Trust in the Media and Trust in People, which are only measured in 1996. While not ideal, I can use these data to model Vote Choice in 1996 as a function of Party Identification, Political Knowledge, and Trust in Government measured in 1994 as well as Trust in the Media measured in 1996. Columns 1 and 2 of Table 3 present these models, specified

³⁷ As explained in Section 3, I believe this problem to be minimal because of the large amount of evidence suggesting that party identification is very stable over time.

³⁸ Measuring these variables in the ANES pre-election survey is not sufficient because it is conducted during the campaign rather than before it (Achen 1992, 208).

³⁹ Panel data have the disadvantage of possibly introducing biases resulting from panel conditioning or panel attrition. While certainly not settling the matter, existing scholarship is reassuring on this point, finding panel effect in the ANES to be small (Bartels 1999).

similar to those in Tables 1 and 2.⁴⁰ The results are inconclusive but highly suggestive. The key coefficient is again the interaction between Party Identification and Trust in the Media. With and without controls, this coefficient is negative, as expected, similar in magnitude to Table 1 and larger than in Table 2. However, these coefficients' standard errors are much larger than in the 1996-2004 pooled cross-sectional data, most likely resulting from the much smaller sample size. As a consequence, p-values for the interaction are .14 and .28.

While Trust in the Media was not asked prior to 1996, panel respondents who participated in the 1993 ANES pilot study were asked their level of agreement with the statement: "Media coverage of politics often reflects the media's own biases more than facts." Columns 3 and 4 of Table 3 present results from models identical to those in columns 1 and 2, except that this earlier question is used to measure Trust in the Media. Finally, as an alternative specification, columns 5 and 6 of Table 3 show models where all explanatory variables are measured in 1996 but instrumented with their values in earlier panel waves. Instruments are the exact same questions, but asked in 1994, for all except Trust in the Media, where the instrument is the 1993 pilot study question.⁴¹ While the models in columns 3 through 6 have the advantage of measuring all explanatory variables several years before the election, sample sizes are less than 350 because they must only include respondents interviewed in the 1993 ANES pilot study, reducing the precision of all parameter estimates. Therefore, as in columns 1 and 2, the results in columns 3 through 6 provide only cautious support for expectations. While the interaction between Party Identification and Trust in the Media has a consistently negative coefficient, standard errors are large enough that the estimates are not significant at conventional levels. Thus, Trust in the Media appears to have the same moderating effect on Party Identification if explanatory variables are measured several

⁴⁰ Because Trust in People was not asked prior to the 1996 survey wave, it is not included in the models in Table 3. If Trust in People, measured in 1996, is included in the models in columns 1 through 4 of Table 3, the results are substantively unchanged. Trust in People, measured in 1996, cannot be included in the models in columns 5 and 6 of Table 3 because there is no prior measure of Trust in People with which to instrument its 1996 values.

⁴¹ Because the models in columns 5 and 6 of Table 3 and columns 3 and 4 of Table 4 use an instrumental variables regression models with robust standard errors, these are linear probability models (Aldrich and Nelson 1984) and their coefficients are not directly comparable in size to probit coefficients. Because all variables are coded to range from 0 to 1, in these models the coefficient directly represents the effect (in probability) of moving from the lowest to the highest value of the explanatory variable.

years before the current election, but because of the limited sample size in this panel, one cannot be certain of the results.

A second dataset to better address this question is the 2000-2004 ANES panel study. This study allows one to model Vote Choice in 2004 while measuring *all* explanatory variables several years prior. Columns 1 and 2 in Table 4 present coefficient estimates from models, specified as in previous tables, where all explanatory variables are measured in 2002 except Trust in the Media, which was not asked in 2002 and is instead measured in 2000.⁴² These results are even more supportive of expectations than those in previous tables. The interaction between Party Identification and Trust in the Media is negative, larger than in any of the previous models, and statistically significant despite a sample size well less than 700. Simulating first differences with all other variables set to their means (based on the model in column 2 of Table 4), moving from being a weak Democrat to a weak Republican increases one's probability of voting Republican by just .45 (standard error =.25, $p=.07$) if one trusts the media "just about always" and by .86 (standard error =.05) if one trusts the media "just about never." Models in columns 3 and 4 are analogous to those in columns 1 and 2 except that each explanatory variable is measured in 2004 and instrumented with itself measured in previous waves of the panel. These results are again consistent with expectations, although the interaction between Party Identification and Trust in the Media is marginally statistically significant ($p=.15$). Calculating first differences at different levels of Trust in the Media is especially helpful here because these are linear probability models (with robust standard errors) whose coefficients are not directly comparable to probit coefficients. The coefficient estimates in column 4 of Table 4 indicate that moving from being a weak Democrat to a weak Republican increases one's probability of voting Republican by just .39 (standard error =.12) if one trusts the media "just about always" and by .90 (standard error =.09) if one trusts the media "just about never." Thus, all models in Table 4 produce very similar substantive findings.

⁴² The 2002 or 2004 waves did not ask a battery of objective political knowledge questions. Instead, I use interviewer ratings of respondents' "general level of information about politics and public affairs" to measure Political Knowledge in these years. In surveys where both are measured, interviewer ratings tend to be highly correlated with results from objective political knowledge questions (Zaller 1985).

To summarize, the effect of Trust in the Media on partisan voting is always consistent with expectations and sometimes quite large. The size and direction of the effect is robust even when the explanatory variables are measured several years prior to the campaign, although the use of panel data does reduce the sample size considerably, sometimes preventing the results from being statistically significant.

7. Confidence in the Press, Party Identification, and Economic Voting

Next, I examine how attitudes toward the media alter the bases of the voting decision using data pooled from the first GSS survey conducted after each presidential election since the GSS began in 1972.⁴³ The virtue of GSS data is their usefulness, because they probe respondents' Confidence in the Press over a longer period of time, for testing not only how Confidence in the Press moderates the effect of partisan predispositions, but also cautiously testing how Confidence moderates the effect of Economic Performance. A disadvantage is that none of these surveys have a panel component, preventing one from measuring explanatory variables prior to the election campaign, as in the ANES. A second disadvantage is, even though the GSS spans more elections than any other survey probing respondents' attitudes toward the media, it still only spans eight elections. With essentially only eight observations of the Economic Performance variable, one has very limited statistical power to estimate its effect with interactions.

Column 1 of Table 5 shows probit results testing how Confidence in the Press moderates the effect of Party Identification in the GSS data.⁴⁴ The negative coefficient on the interaction between Party Identification and Confidence in the Press indicates, consistent with the analyses of ANES data in Sections 6 and 7, Party Identification is more influential among those with less Confidence in the Press.⁴⁵ The model in column 2 estimates this interaction with control variables. I use respondents' total years of

⁴³ The 1984 presidential election is excluded because the GSS survey following this election did not probe respondents' Confidence in the Press.

⁴⁴ This specification is directly analogous to those in the first columns of Tables 1-4 as well as columns 3 and 5 of Table 3 and column 3 of Table 4.

⁴⁵ The models in Table 5 are similar to those in previous Tables with some necessary differences. Rather than being coded 1 for a Republican vote and 0 for a Democratic vote, the Vote Choice variable is 1 for a vote for the incumbent party's candidate and 0 for a vote for the opposition party's candidate. Party Identification is also recoded so that higher values indicate greater identification with the incumbent president's party. This recoding is necessary to allow modeling of the effect of Economic Performance.

Education as a measure of certainty of predispositions because the GSS does not include a battery of Political Knowledge questions. The GSS also does not include questions probing general Trust in Government or Trust in People in these surveys.⁴⁶ As an attempt to account for Trust in Government, I control for *Confidence in the Executive Branch* and its interaction with Party identification.⁴⁷ While including these controls reduces somewhat the magnitude of the interaction between Confidence in the Press and Party Identification, it is still negative and statistically significant. Simulating first differences based on the results in column 2 of Table 5, holding other variables at their means, moving from weakly identifying with the opposition party to weakly identifying with the president's party increases one's probability of voting for the incumbent party's presidential candidate by .69 (standard error =.02) if one has "a great deal" of Confidence in the Press and by .75 (standard error =.01) if one has "hardly any" Confidence in the Press. While the difference is smaller than in the ANES data, likely resulting from different question wordings, even in the GSS the effect of Party Identification is larger among those with more negative attitudes toward the press.

The models in columns 3 through 6 of Table test how Confidence in the Press moderates the effect of Economic Performance on the Vote Choice. This puts a heavy strain on the GSS data because objective economic conditions are the same for all respondents in a given election and thus this variable only takes on eight different values.⁴⁸ One is left estimating effect of Economic Performance's and at least one highly collinear interaction term with only eight observations of this variable. As a consequence, conclusions are necessarily tentative. Consistent with previous studies of economic voting (Markus 1988, 1992; Hibbs 2000; Bartels and Zaller 2001; Zaller 2004), I measure national Economic Performance with the percentage change in real disposable income per capita, as reported by the Bureau of Economic

⁴⁶ In GSS surveys after five of the seven elections (1972, 1988, 1992, 1996, and 2000), the GSS did probe respondents' Trust in People. If one estimates the model in column 1 on data from only these five years and includes Trust in People and the interaction between Party Identification and Trust in people, the interaction between Party Identification and Confidence in the Press still has a statistically significant, large negative coefficient.

⁴⁷ The results are substantively unchanged if one instead includes *Confidence in Congress* as a proxy for Trust in Government.

⁴⁸ The obvious alternative is to use respondents own perceptions of national Economic Performance, however these are as likely to be rationalizations of Vote Choice as causes of it (Kramer 1983).

Analysis, United States Department of Commerce. Achen and Bartels (2004) find that, when income growth is measured quarterly, only Economic Performance in the first three quarters of the election year affect Vote Choice, so I focus on these quarters.⁴⁹

As a baseline, column 3 of Table 5 shows results from a probit model where presidential Vote Choice is a function of Party Identification, Confidence in the Press and Economic Performance in the first three quarters of the election year. As expected, Economic Performance and Party Identification are both significant predictors of Vote Choice. With other variables set to their means, moving from the worst Economic Performance in the dataset (-1.2 % growth 1980) to the best Economic Performance in the dataset (6.8 % growth in 1984) increases the probability of a citizen voting for the incumbent party's candidate by .11 (standard error = .07, $p = .099$). The model in column 4 tests how Confidence in the Press moderates Economic Performance's influence by including the interaction between Economic Performance and Confidence in the Press. The results are inconclusive. Consistent with expectations, the interaction term's coefficient is positive (indicating that confidence in the press increases receptivity to economic messages) but less than half the size of its standard error.

To investigate this relationship in more detail, an alternative specification would be, following Achen and Bartels (2004), to measure Economic Performance in different quarters separately. The model in column 5 estimates the separate effect of Economic Performance in the first two quarters and in the third quarter of the election year. The results suggest both affect Vote Choice, although the effect of the third quarter Economic Performance is more than twice as large.⁵⁰ The model in column 6 tests how Confidence in the Press moderates both these economic effects. These results illuminate why the column

⁴⁹ Achen and Bartels (2004) finds that, when real disposable income growth per capita during these 3 quarters is controlled for, income growth in no other quarter of the presidential term has any discernable effect on the outcome of the next presidential election. The fourth quarter of the election year does not conclude until after the election has taken place and statistics on Economic Performance during this quarter are not available until early in the next year. Because of this, there is no reason to believe this final quarter could affect voting behavior. Annualized Economic Performance was calculated as $\Delta RDI_t = (400/n) * [\ln(RDI_t) - \ln(RDI_{t-n})]$, where t is the last quarter of the time period whose Economic Performance is being calculated and n is the number of quarters in the time period (see Achen and Bartels 2004, 8).

⁵⁰ This results contrasts with Achen and Bartels (2004), which finds, using aggregate voting returns as the dependent variable and data going back to the end of World War II, that the first two quarters of election years have a somewhat larger effect than the third quarter.

4 results were inconclusive. The effect of first and second quarter Economic Performance does not depend on respondents' Confidence in the press. Its coefficient is the same size as in columns 4 and 5 and the coefficient on its interaction with Confidence in the Press is insignificant and very small.⁵¹ In contrast, the effect of third quarter Economic Performance on Vote Choice does appear to depend on respondents' Confidence in the Press. The coefficient on the interaction between third quarter Economic Performance and Confidence in the Press is positive and statistically significant. Again using first differences to illustrate the effect, moving from the worst third quarter Economic Performance in the dataset (2.5 % growth 1980) to the best third quarter Economic Performance in the dataset (7.2% growth in 1972) increases one's probability of voting for the incumbent party's candidate by .11 (standard error = .02) if one has "a great deal" Confidence in the Press and by an insignificant .04 (standard error = .04) if one has "hardly any" of Confidence in the Press. These results seem to indicate those with more Confidence in the Press are more receptive to informative economic messages, at least when those messages come in the last quarter before the election. Ideally, one would want to include numerous control variables to test the robustness of this finding. Unfortunately, with only eight elections, there is simply not enough data to estimate additional interaction terms with any precision.⁵² Consequently, while these results are consistent with expectations outlined in Section 5, they should be considered only suggestive, not conclusive.⁵³

In summary, analyses of pooled GSS data are generally supportive of expectations and (when applicable) consistent with the ANES data. In the GSS, those with more negative attitudes toward the news media rely more on their partisan predispositions when making voting decisions. In addition, while the data in this area are weaker and thus conclusions more cautious, the effect of economic conditions also appears to depend on attitudes toward the media. Consistent with predictions outlined in Section 5,

⁵¹ I checked to see if the interaction would be significant for one of these first two quarters, but it is not. If one estimates the effect of Economic Performance in the first two quarters separately and the interactions between both of these variables and confidence in the press, both interaction coefficients are negative and not significant.

⁵² When additional control variables with interaction terms (such as Education and Confidence in the Executive Branch) are included in the model, all the standard errors become very large. As noted above, there is simply not enough information in these data to estimate so many interaction terms.

⁵³ Achen and Bartels (2004) include a measure of the number of years the incumbent party has held office in their model of presidential Vote Choice. All the results in Table 5 are substantively unchanged if this variable is included in the models.

negative attitudes toward the media again tend to reduce the power of new messages and increase the influence of predispositions.

8. Discussion

These results, from a variety of datasets and model specifications, all broadly support the simple predictions put forth in Section 5. They suggest attitudes toward the news media change the weight given to two of the most important influences on Americans' voting decisions. Those with positive attitudes toward the news media rely less on partisan predispositions and appear more willing to accept new information, specifically recent messages about the national economy. In contrast, those who distrust the press resist new information, basing their political choices less on recent messages and more on their predispositions.

What are the broader implications of this for the American political system? While public attitudes toward the media have become more negative over the past 35 years (Cook et al. 2000; Cook and Gronke 2001; Gronke and Cook 2002), the relationship between Party Identification and Vote Choice has increased over time (Miller 1991; Bartels 2000). Figure 3 illustrates these two trends. On the right vertical axis, graphed with a dashed line, are probit coefficients reflecting the relationship between Party Identification and presidential Vote Choice in the GSS for each election since 1972.⁵⁴ The results are very similar to those produced by Bartels (2000) using ANES data and a somewhat different statistical procedure. It shows the relationship between Party Identification and Vote Choice has increased substantially since the early 1970s. On the left vertical axis and graphed with a solid line is the average Confidence in the Press in the GSS over these same years.⁵⁵ Simulating first differences, I find that in 1972, changing from a weak Democrat to a weak Republican increases one's chances of voting for the

⁵⁴ In all models in this Section, like those in Section 7, Vote Choice is coded such that 1 indicates a vote for the incumbent party's candidate and Party Identification is coded such that 1 indicates strong identification with the incumbent president's party.

⁵⁵ Both the decline in Confidence in the Press and the increase in the effect of party attachments on the vote over time are statistically significant. I test the relationship between time and Confidence in the Press by regressing Confidence on the calendar year. I test the relationship between time and partisan voting by estimating a probit model where Vote Choice is a function of Party Identification and the interaction between Party Identification and the calendar year.

Republican candidate by .59 (standard error = .02). In 2004, the same change increases the probability voting Republican vote by .78 (standard error = .01). At the same time, average Confidence in the Press has declined from .54 after the 1972 election to .35 after the 2004 election.

Considering less Confidence in the Press tends to induce more partisan voting, one can estimate how much of this increase in partisan voting since 1972 can be accounted for by the decline in public Confidence in the Press. To calculate this, I simulate (based on the parameter estimates in the column 2 of Table 5) the effect of taking 1972 voters and adjusting their Confidence in the Press downward to 2000 levels and calculate the size of the resulting change in the effect of Party Identification. Dividing this by the difference in the effect of partisanship between 1972 and 2004 indicates about 47 % of the increase in the association between Party Identification and Vote Choice can be accounted for by the decline in Confidence in the Press.⁵⁶ While more negative public attitudes toward the media clearly explain only a portion of this trend,⁵⁷ it is one cause of a phenomenon—the increased polarization in the electorate—with potentially serious consequences.

The notion that the electorate rewards and punishes political leaders based on their performance is often thought to be a central meritorious feature of democratic systems of

⁵⁶ Comparisons are made using the marginal effects of moving from weakly identifying with the opposition party (a party identification score of .167) to weakly identifying with the incumbent party (a party identification score of .833). This marginal effect increases by .195 (from .589 to .784) between 1972 and 2004. I then calculate the marginal effect of the same movement of Party Identification, based on the model in column 2 of Table 5, when all explanatory variables are set to their 1972 means and year fixed effects are set to 1972. Next, I calculate this same marginal effect with Confidence in the Press at its mean in 2004, year fixed effects set to 2004, and all other variables still at their 1972 means. The difference between these two marginal effects is .09. I then divide .09 by .195 (the increase in the marginal effect of Party Identification between 1972 and 2004). If one uses this same procedure, but makes all comparisons using the marginal effect of moving the full length of the Party Identification variable (from strongly identifying with the opposition party to strongly identifying with the incumbent party) the decrease in Confidence in the Press accounts for 50% of the increase in the effect of Party Identification between 1972 and 2004.

Using Confidence in the Press as a measure of respondents' attitudes toward the media potentially underestimates the portion of the increase in partisan voting that can be explained by public animosity toward the press. For example, the results in Sections 5 and 6 suggest that when the ANES's Trust in the Media question is used, it has a much stronger moderating effect on partisan voting than Confidence in the Press does. Unfortunately, one cannot use this possibly better measure of the public's attitudes toward the press in this analysis because the question was not asked prior to 1996. There is no way of knowing how much Trust in the Media has declined since 1972 and thus no way to calculate the effect of that decline on partisan voting.

⁵⁷ The remainder of the increase in partisan voting may be the result of, among other things, more extreme candidates, more polarized Congressional voting, or more income inequality (Hetherington 2001; Fiorina 2002; Fiorina, Abrams, and Pope 2005; McCarty, Poole, and Rosenthal 2006).

government and an important reason to prefer them to other systems. An electorate where a significant fraction is willing to change its vote to reward and punish politicians based on their record in office creates strong incentives for those politicians to respond to the public's needs (Downs 1957; Key 1968; Fiorina 1981; but see Achen and Bartels 2004). As increasingly more of the electorate becomes inclined to ignore information it receives and vote based on predispositions regardless, the activities of politicians have less effect on the number of votes they receive on Election Day. It is hard to imagine this does not reduce, at least somewhat, the incentives politicians face to be responsive to the mass public and govern the country well generally. Thus, increasingly negative attitudes toward the press and other causes of electoral rigidity and polarization should concern those who care about the quality of democratic governance in the United States.

9. Conclusion

While previous research has examined possible causes of increasingly negative public attitudes toward the news media (Jamieson 1992; Patterson 1993; Fallows 1996; Cappella and Jamieson 1997; Cook and Gronke 2001; Gronke and Cook 2002; Crawford 2006), few have studied the consequences of this trend (Miller and Krosnick 2000; Druckman 2001). Using a simple Bayesian voting model, I predict those with negative attitudes toward the press will rely less on new information and more on partisan predispositions when forming their voting preferences. I test this prediction with recent cross-sectional and panel data from the ANES and over time pooled cross-sectional data from the GSS. Results are broadly supportive of expectations. Voters who dislike the news media are more influenced by their party identification and appear less influenced by recent economic conditions. Thus, the increasing negativity of public opinion toward the news media over the past 35 years has been a contributor to the potentially troubling recent increase in polarization in the American political system.

Table 1: Effect of Trust in the Media on Partisan Presidential Voting in the ANES

Probit Models Predicting Presidential Vote Choice		
Party Identification	4.49** (0.25)	4.69** (0.39)
Party Identification X Trust in the Media	-1.40** (0.46)	-1.14** (0.49)
Trust in the Media	0.07 (0.27)	-0.08 (0.28)
Party Identification X Political Knowledge		0.36 (0.36)
Political Knowledge		-0.18 (0.21)
Party Identification X Trust in Government		-1.34** (0.60)
Trust in Government		0.88** (0.34)
Party Identification X Trust in People		0.39* (0.22)
Trust in People		-0.29** (0.13)
Intercept	-2.22** (0.16)	-2.38** (0.23)
Pseudo R ²	0.55	0.55
Log- Likelihood	-922.9	-913.4
Number of Observations	2944	2923

This table shows the association between Party Identification and presidential Vote Choice is stronger among those who distrust the media. Entries are probit coefficients with standard errors in parenthesis. Models use pooled data from ANES time-series surveys from 1996, 2000, and 2004, and include year fixed effects whose coefficients are not reported. The same patterns appear when data from each of the three years are analyzed separately.

**p<.05, * p<.10 for two-tailed hypothesis tests.

Table 2: Effect of Trust in the Media on Partisan Congressional Voting in the ANES

Probit Models Predicting Congressional Vote Choice		
Party Identification	2.97** (0.17)	3.10** (0.28)
Party Identification X Trust in the Media	-0.90** (0.33)	-0.81** (0.35)
Trust in the Media	0.21 (0.19)	0.07 (0.20)
Party Identification X Political Knowledge		0.15 (0.26)
Political Knowledge		-0.08 (0.15)
Party Identification X Trust in Government		-0.59 (0.43)
Trust in Government		0.52** (0.24)
Party Identification X Trust in People		0.05 (0.16)
Trust in People		0.15* (0.09)
Intercept	-1.22** (0.11)	-1.43** (0.17)
Pseudo R ²	0.32	0.33
Log- Likelihood	-1499.4	-1482.3
Number of Observations	3192	3170

This table replicates the analysis in Table 1 for congressional Vote Choice. Entries are probit coefficients with standard errors in parenthesis. Models use pooled data from ANES time-series surveys from 1996, 1998, 2000, and 2004, and include year fixed effects whose coefficients are not reported. The same patterns appear when data from each of the four years are analyzed separately.

**p<.05, * p<.10 for two-tailed hypothesis tests.

Table 3: Trust in the Media and Partisan Voting in the 1994-1996 ANES Panel

Models Predicting 1996 Presidential Vote Choice	All Explanatory Variables Measured in 1994 except Trust in the Media Measured in 1996		All Explanatory Variables Measured in 1994 except Trust in the Media Measured in 1993		1996 Explanatory Variables Instrumented by Values in Earlier Panel Waves	
Party Identification	4.12** (0.63)	3.73** (0.90)	3.64** (0.37)	4.00** (1.33)	1.84** (0.52)	2.69 (1.96)
Party Identification X Trust in the Media	-1.51^a (1.03)	-1.04 (1.06)	-0.89 (0.98)	-0.66 (1.04)	-1.53^b (0.98)	-2.67 (3.83)
Trust in the Media	-0.57 (0.66)	-0.62 (0.66)	-0.09 (0.66)	-0.19 (0.70)	0.24 (0.54)	0.52 (1.38)
Party Identification X Political Knowledge		1.39** (0.69)		0.15 (1.39)		-1.25 (2.45)
Political Knowledge		-0.70* (0.41)		0.32 (0.89)		1.00 (1.64)
Party Identification X Trust in Government		-2.06* (1.08)		-1.41 (2.04)		1.78 (4.83)
Trust in Government		0.56 (0.69)		-0.57 (1.33)		-0.16 (0.67)
Intercept	-1.61** (0.41)	-1.34** (0.57)	-2.06** (0.26)	-2.08** (0.86)	-0.20 (0.33)	-1.10 (1.48)
Pseudo R ²	0.48	0.49	0.49	0.50		
Log- Likelihood	-295.3	-283.9	-122.7	-119.3		
R ²					0.60	0.38
Standard Error of Estimation					0.32	0.40
Number of Observations	827	806	349	346	348	335

This table shows that the patterns found in Tables 1 and 2 tend to persist when explanatory variables are measured several years prior to the election. All models use data from the 1992-1996 ANES Panel Study with 1996 presidential Vote Choice as the dependent variable. Columns 1 through 4 present probit coefficients with standard errors in parentheses. In the models in columns 1 and 2, all explanatory variables are measured in 1994 except Trust in the Media, which was not asked until 1996 and is measured in that year. Trust in People was also not asked prior to 1996. If Trust in People (measured in 1996) and its interaction with Party Identification are included in the models in columns 1 through 4, the results are substantively unchanged. In the models in columns 3 and 4, all explanatory variables are measured in 1994 except Trust in the Media, which is now measured with a question in the 1993 ANES pilot study asking respondents if media coverage reflects facts or bias (see the Appendix for variable information). Columns 5 and 6 present instrumental variables regression coefficients with Huber-White robust standard errors in parentheses. These should be interpreted as linear probability models (Aldrich and Nelson 1984). In these models, all explanatory variables are measured in 1996 but instrumented with their values in earlier panel surveys. Instruments for all explanatory variables except Trust in the Media are measured in 1994. Trust in the Media is instrumented with the aforementioned media question from the 1993 pilot study.

**p<.05, * p<.10, ^a p=.14, ^b p=.12 for two-tailed hypothesis tests.

Table 4: Trust in the Media and Partisan Voting in the 2000-2004 ANES Panel

Model Predicting 2004 Presidential Vote Choice	Probit Model with Explanatory Variables Measured in Prior Panel Waves		Instrumental Variables Model with Explanatory Variables Instrumented with their Values in Prior Panel Waves	
	Party Identification	5.69** (0.64)	5.95** (1.31)	1.45** (0.20)
Party Identification X Trust in the Media	-3.34** (1.03)	-3.68** (1.10)	-0.77** (0.39)	-0.77^c (0.53)
Trust in the Media	0.61 (0.54)	0.64 (0.57)	0.28 (0.32)	0.16 (0.42)
Party Identification X Political Knowledge		-1.02 (1.21)		0.03 (0.75)
Political Knowledge		0.08 (0.64)		0.01 (0.33)
Party Identification X Trust in Government		1.65 (1.34)		0.28 (0.49)
Trust in Government		-0.15 (0.72)		0.07 (0.36)
Party Identification X Trust in People		-0.28 (0.52)		-0.15 (0.17)
Trust in People		-0.03 (0.27)		0.04 (0.09)
Intercept	-2.14** (0.33)	-2.12** (0.62)	-0.15 (0.17)	-0.14 (0.33)
Pseudo R ²	0.56	0.56		
Log- Likelihood	-201.2	-186.7		
R ²			0.62	0.61
Standard Error or Estimation			0.31	0.31
Number of Observations	660	620	653	610

This table, similar to Table 3, shows that the patterns found in Table 1 and Table 2 using cross-sectional data persist when explanatory variables are measured several years prior to the election. All models use data from the 2000-2004 ANES Panel Study with 2004 presidential Vote Choice as the dependent variable. Columns 1 and 2 present probit coefficients with standard errors in parentheses. In these models, all explanatory variables are measured in 2002 except Trust in the Media, which was not asked in 2002 and is instead measured in 2000. Columns 3 and 4 present instrumental variables regression coefficients with Huber-White robust standard errors in parentheses, which, like the models in columns 5 and 6 of Table 3, should be interpreted as linear probability models (Aldrich and Nelson 1984). In these models, all explanatory variables are measured in 2004 but instrumented with their values in earlier panel waves. Instruments for all explanatory variables except Trust in the Media are measured in 2002. Trust in the Media was not asked in 2002 or 2004. But in 2004, respondents rated the media on a feeling thermometer. Thus, in the models in columns 3 and 4, media evaluations are measured with 2004 media thermometer ratings which are instrumented with 2000 Trust in the Media.

**p<.05, * p<.10, ^c p=.15 for two-tailed hypothesis tests.

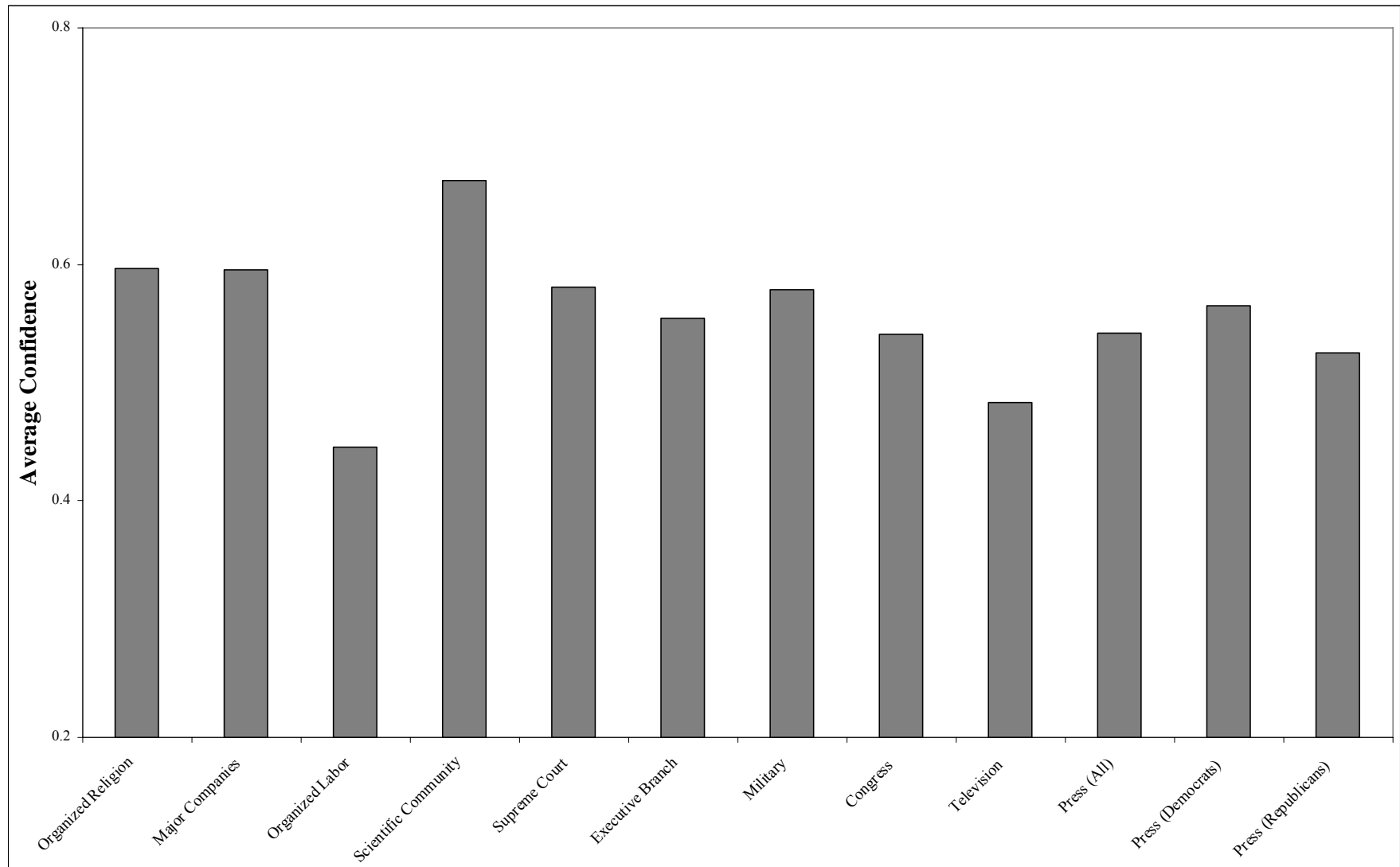
Table 5: Effect of Confidence in the Press on the Bases of Presidential Voting

Models Predicting Presidential Vote Choice						
Party Identification	3.55** (0.18)	2.88** (0.23)	3.18** (0.14)	3.18** (0.14)	3.19** (0.13)	3.19** (0.13)
Party Identification X Confidence in the Press	-0.65** (0.17)	-0.44** (0.16)				
Confidence in the Press	0.18** (0.08)	0.06 (0.10)	-0.03 (0.13)	-0.15 (0.23)	-0.11 (0.10)	-0.40** (0.20)
Party Identification X Education		1.57** (0.21)				
Education		-0.87** (0.24)				
Party Identification X Confidence in Executive Branch		-0.82** (0.28)				
Confidence in Executive Branch		0.62** (0.31)				
Economic Performance Q1–Q3			0.08* (0.04)	0.06 (0.07)		
Economic Performance Q1–Q3 X Confidence in the Press				0.05 (0.09)		
Economic Performance Q1–Q2					0.04 (0.03)	0.04 (0.05)
Economic Performance Q1–Q2 X Confidence in the Press						0.003 (0.05)
Economic Performance Q3					0.09** (0.03)	0.04 (0.05)
Economic Performance Q3 X Confidence in the Press						0.10* (0.06)
Intercept	-1.05** (0.06)	-0.78** (0.18)	-1.60** (0.07)	-1.55** (0.11)	-1.74** (0.07)	-1.60** (0.15)
Pseudo R ²	0.42	0.43	0.40	0.40	0.41	0.41
Log- Likelihood	-2765.6	-2684.3	-2835.5	-2834.6	-2811.1	-2805.8
Number of Observations	6874	6769	6874	6874	6874	6874

Source: Annualized rate of growth in Real Disposable Income (RDI) is calculated based on quarterly RDI data from the Bureau of Economic Analysis, United States Department of Commerce and available at <http://www.bea.gov>. All other variables are from the 1973, 1977, 1982, 1989, 1993, 1998, 2002 and 2006 GSS Surveys. See the Appendix for details. Entries are probit coefficients with standard errors in parentheses. The model in column 1 and 2 include year fixed effects. All models adjust standard errors to account for clustering of disturbances by year. The 1984 presidential election is not included in this analysis because the 1985 GSS survey, which asked respondents their 1984 presidential vote, did not also probe their Confidence in the Press.

**p<.05, *p<.10 for two-tailed hypothesis tests.

Figure 1: Confidence in American Institutions in 1973

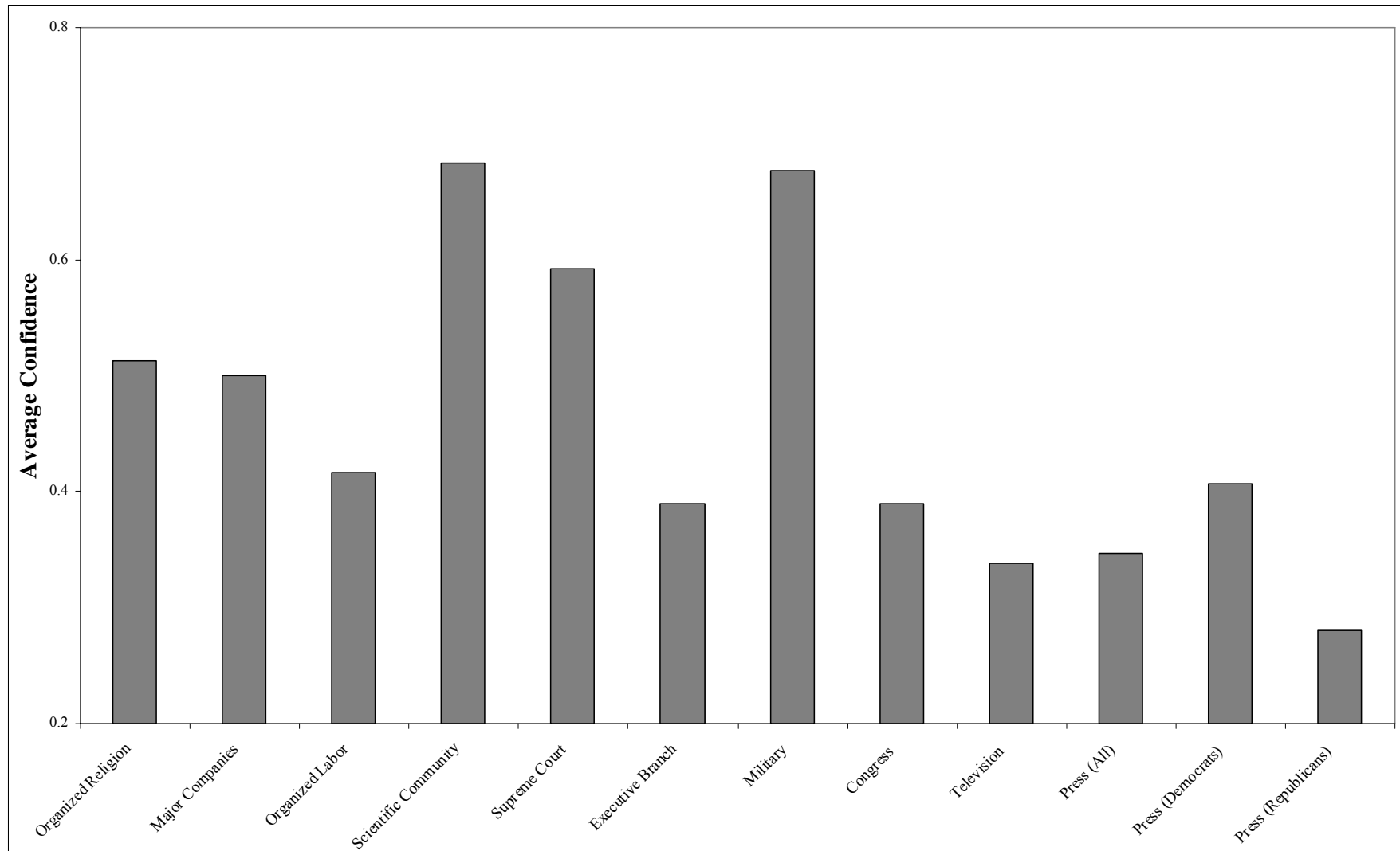


Confidence in Institutions Coding

A Great Deal	1
Only Some	0.5
Hardly Any	0

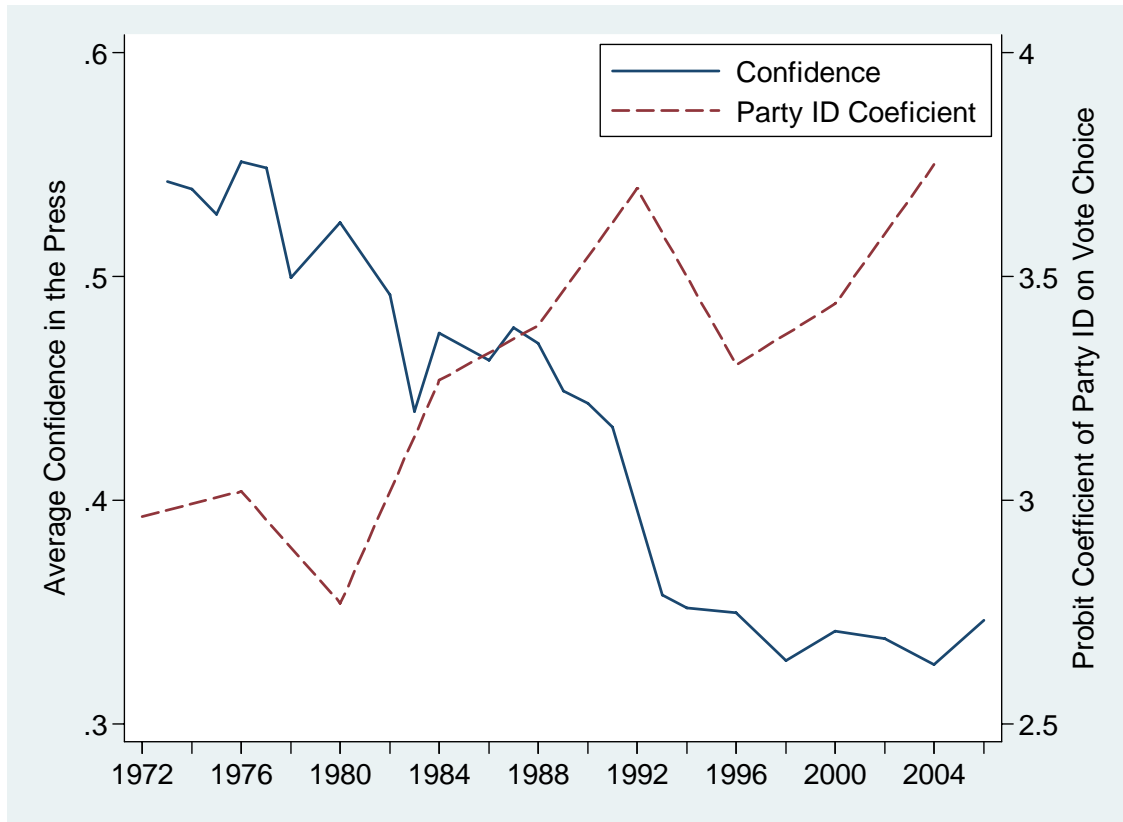
Source: 1973 General Social Survey (GSS). Observations are weighted to account for nonequal probability of selection into the sample.

Figure 2: Confidence in American Institutions in 2006



Source: 2006 GSS. Observations are weighted to account for nonequal probability of selection into the sample. For sake of comparison, Tables 1 and 2 only include institutions that were included in the confidence question battery in both 1973 and 2002.

Figure 3: Partisan Voting and Confidence in the Press over Time



Source: 1973, 1974, 1975, 1976, 1977, 1978, 1980, 1982, 1983, 1984, 1986, 1987, 1988, 1989, 1990, 1991, 1993, 1994, 1996, 1998, 2002 2004, and 2006 GSS Surveys

Appendix

Variables from ANES 1948-2004 Cumulative File: *Vote Choice* – VCF0704a; *Party Identification* – VCF0301; *Trust in the Media* – VCF0675; *Trust in Government* – VCF0604; *Trust in People* – VCF0619; *Political Knowledge* (Variables from time series survey datasets are merged into cumulative file) – V961189, V961190, V961191, V961192, V980475, V980476, V980477, V980478, V001447, V001450, V001453, V001456, V045162, V045163, V045164, V045165.

Variables from ANES 1992-1996 Panel Study File: *Vote Choice* – V961082; *Party Identification* – V940655, V960420; *Trust in the Media* – V937307, V961339; *Trust in Government* – V941033, V960566; *Political Knowledge* – V941006, V941007, V941008, V941009, V941010, V941011, V961189, V961190, V961191, V961191.

Variables from ANES 2000-2004 Panel Study File: *Vote Choice* – P045003a; *Party Identification* – P023038x, P045058x; *Trust in the Media* – P001429, P045041; *Political Knowledge* – P023155, P045202; *Trust in Government* – P025174, P045149; *Trust in People* – P025101, P045158.

Variables from GSS 1972-2004 Cumulative File: *Vote Choice* – PRES72, PRES76, PRES80, PRES88, PRES92, PRES96, PRES00, PRES04; *Party Identification* – PARTYID; *Confidence in the Press* – CONPRESS; *Education* – EDUC.

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