The World Wide Web and the U.S. Political News Market

Norman H. Nie  Stanford University
Darwin W. Miller, III  RAND Corporation
Saar Golde  Stanford University
Daniel M. Butler  Yale University
Kenneth Winneg  University of Pennsylvania

We propose a framework for understanding how the Internet has affected the U.S. political news market. The framework is driven by the lower cost of production for online news and consumers’ tendency to seek out media that conform to their own beliefs. The framework predicts that consumers of Internet news sources should hold more extreme political views and be interested in more diverse political issues than those who solely consume mainstream television news. We test these predictions using two large datasets with questions about news exposure and political views. Generally speaking, we find that consumers of generally left-of-center (right-of-center) cable news sources who combine their cable news viewing with online sources are more liberal (conservative) than those who do not. We also find that those who use online news content are more likely than those who consume only television news content to be interested in niche political issues.

The past two decades have brought significant changes to the news media environment (Morris 2005). A steady decline in the audience for broadcast network news has been accompanied by a rise in cable news viewership, especially for the ideologically conservative FOX News Channel (Morris 2007; Pew 2008). This shift was concurrent with an unprecedented expansion in Internet access; it is increasingly common for consumers to use the Internet as a primary source of news and information (Bimber and Davis 2003; Davis and Owen 1998; Tewksbury 2006).

In this article, we combine insights from economic theories of differentiated products markets with theories of selective media exposure from social psychology and political communication to develop a theoretical framework for understanding how the Internet has affected the U.S. political news market. The driving force behind this framework is the dramatically lower cost of production for Internet news sources relative to traditional television news. Lower cost of production allows Internet news providers to profitably provide news content to consumers with more diverse and less centrist political views. Combining this insight with the concept of selective media exposure—the idea that consumers tend to seek out media that conform to their own political tastes—leads to the testable predictions that consumers of Internet news sources should, on average, hold political views that are further away from the center and be interested in more diverse political issues than those who solely consume mainstream television news.

We test this using two datasets with items about news exposure and political views. Generally speaking, we find that consumers of CNN, which is the most liberal cable news source in our dataset, who use Internet news sources are more liberal than those who do not. We also find that those who use online news content are more likely than those who consume only television news content to be interested in niche political issues.
are more liberal than CNN consumers who do not use Internet sources. Conversely, those who use the FOX News Channel, which is the most conservative cable news source in our dataset, in conjunction with Internet news content are more politically conservative than FOX consumers who do not use Internet news sources. We also find that those who use Internet news content are more likely than those who only consume television news content to be interested in niche political issues that are less likely to be covered on mainstream television. Taken together, these results, which hold up to a series of robustness checks, support our theoretical framework.

We believe that this study is important for several reasons. First, our framework generates new predictions about the relationship between individuals’ news viewer-ship and their political views. Because the Internet allows consumers to fit their news exposure to their own political preferences, these predictions tie our study to the large and emerging literature on political polarization. Second, since the predicted impact of the Internet on people’s political views depends on the other news sources that they consume, these predictions provide support for Bimber’s (2005) argument regarding the importance of interaction effects in empirical studies of the Internet. Third, and perhaps most important, our framework can give theoretical grounding for future work on the consequences of changes in the political news market.

The remainder of this article is developed as follows. The second section reviews the relevant existing empirical research, and the next section describes the theoretical framework we propose and the predictions based on that framework. The following section describes the data used in our empirical tests, and the fifth section presents the results of those tests. We conclude with a discussion of the implications of our findings for understanding the media market and conducting future research.

**Previous Empirical Research**

Much of the previous empirical work on the relationship between consumers’ political attitudes and views and their news source(s) comes out of the literature on the political fragmentation of news consumers. Davis and Owen (1998), for example, compare the attitudes of talk radio listeners, television news magazine viewers, and those who acquire news and political information on the Internet using data from the 1996 American National Election Study (ANES) and find significant differences between these groups. More recently, in a national survey of 1,506 adults, Mardenfeld et al. (2006) find that self-identified liberals and moderates are more likely to choose ABC, CBS, NBC, and CNN for their news rather than the FOX News Channel, while those who self-identify as conservatives are more likely to choose FOX News. Similarly, Morris (2007) finds, using surveys from Pew conducted in 2004 and 2005, that FOX News Channel viewers have distinct attitudes toward both President Bush and his opposition. Stroud (2008), using data from the 2004 National Annenberg Election Survey, shows that people’s political beliefs are related to their media exposure, a pattern that persists across media types (newspapers, political talk radio, cable news, and Internet).

While there is a literature on political fragmentation and the media news market, the majority of previous studies have focused on network, cable, and talk radio, not the Internet (see also, e.g., Dimmick, Chen, and Zhan 2004; Jones 2001; Mardenfeld et al. 2006; Morris 2005). While Davis and Owen (1998) did include the Internet in their study, their research used data collected well before the Internet explosion and the rise of cable news (especially FOX News), so it is unclear whether their results still describe the situation today. More generally, previous research has not studied the relationship between a consumer’s source of news and his or her political attitudes while looking simultaneously at network, cable, and Internet information sources. This article overcomes that deficiency in the literature by first developing a theoretical framework of the political news market and then testing predictions derived from that framework.

**Theoretical Model**

In this section, we propose a framework for understanding the recent changes to the political news market. We first discuss the two basic premises underlying our framework; we then use the framework to derive predictions about the relationship between the source of an individual’s news consumption and his or her political views and opinions.

**Premise I: The Demand Side—Selective Exposure**

The first premise underlying our model is that consumers tend to expose themselves to news content that covers issues they care about and is in line with their own political views. This premise is supported by a long line of literature from social psychology and public opinion and communications research. Leon Festinger (1957) provided the theoretical basis for the concept of selective exposure with his empirically based psychological theory of
cognitive dissonance, which posited that people tend to avoid information that conflicts with their own opinions in favor of self-reinforcing messages. Since then a number of studies have found strong empirical support for the concept of selective exposure (recent studies include Chaffee et al. 2001; D’Alessio and Allen 2002; Stroud 2007; Taber and Lodge 2006).

To be clear, we do not argue that selective exposure is all that drives media selection. There are other factors such as interest in news and current affairs that are also likely to affect the sources of news one seeks. Our claim is that, ceteris paribus, people will seek out news presented by sources with an ideological slant similar to their own (Iyengar 2007).

Premise II: The Supply Side—Internet News Saturates the Taste Space

The second premise underlying our framework is that the news content available on the Internet covers a wider range of political opinions and issues than that which is available from more traditional news sources. This assertion is theoretically grounded in the large difference in cost of production for Internet news sources relative to mainstream television news sources.

The importance of the changing costs of production has been noted by several authors studying the changing media (Baum 2003; Hamilton 2004; Prior 2007). As these authors point out, the effect of a drop in cost is an increase in the number of competitors providing news. The lower cost means that a news provider needs fewer audience members to be economically viable. Further, as Baum points out, the increasingly competitive news environment causes broadcasters to try to reach out to niche audiences, causing programming to grow more differentiated (2003, 35).

The models of differentiated products markets from the field of economics provide theoretical support for why lower costs increase competition and cause programming to become more diverse. Originally developed by Hotelling (1929), these models describe behavior in markets where consumers have tastes that are distributed according to some distribution function and prefer products close to their ideal point in the distribution; producers in these markets select product positions so as to maximize profits.3

One of the key results in the product differentiation literature is that when people consume the product nearest to their ideal point (i.e., when selective exposure occurs), lower production costs lead to saturation (see Eaton and Lipsey 1989 for a comprehensive, if somewhat outdated, survey of the literature). The reason for this is that producers need to recover their production costs; when production costs are high, a large number of consumers is needed before profits can be made. As costs decrease, fewer consumers are needed to recover the costs of production, so the market can support more producers. When only a few producers enter the market, they place themselves in a position where they are able to reach a lot of consumers, typically toward the center of the distribution. When costs are low, producers need fewer consumers to be viable, so more producers will enter the market and, between them, cover a greater range of locations in the market space. Thus, market segments that may be too small to be served when production costs are high may become viable as production costs decline.3

In the case of the U.S. political news market, the drop in production costs was particularly dramatic for the Internet. With this new medium, the cost of news production was low enough to allow for the proliferation of political blogs run by special interest groups and citizen journalists—many of which are aimed at tiny niche audiences.4 Catering to and connecting small, highly segmented markets have been a central feature of the Internet and the foundation of companies such as EBay and Google’s keyword-driven marketing model. Because of the very low cost of production and distribution of content, we argue that it is reasonable to view the Internet as a medium that effectively saturates the entire taste space for political news, allowing consumers to select whatever

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1Hamilton’s analysis, which is closest to ours, focuses on the effects of lowered costs on the provision of “soft” versus “hard” news (assuming that “hard” news has the positive externality related to encouraging voters to vote and assisting them in making more informed voting decisions). In contrast, we focus on differentiation along the dimension of political bias or slant, which has a more symmetric structure of both costs and preferences.

2The key distinction between our model and the existing literature on differentiated products markets is that most of the existing literature restricts attention to cases where consumers purchase at most one product, whereas individuals can and often do consume more than one news source.

3It is important to note that it is not necessarily the case that new producers provide this additional content. It is entirely possible that the same producers diversify and provide more content. Indeed, this appears to be occurring to some degree with the Internet. The New York Times, for example, provides more content online than what is available in the higher-cost print version of the paper, and many of the cable news networks provide Internet-only content.

4Reduced content production costs leading to an increase in the range of views provided by news outlets is not a unique feature of the Internet. See the fifth section for a brief review of the TV news industry moving through a similar process with the arrival of cable news networks.
FIGURE 1  Graphical Representation of the Model

Here, the distribution of political views within the population represents the local demand for political bias, and high-cost mainstream media locate at discrete points close to the center of this distribution. Due to the very low cost of production and distribution of Internet news, there are minimal barriers to entry that lead us to model the Internet as filling in the entire continuum and saturating the taste space for political bias. Thus, when viewing online content, consumers can choose news that fits their political opinion exactly.

news content they desire, no matter how far from the center of opinion it may be.

Figure 1 provides a graphical illustration of our argument. The mainstream television news sources are all located relatively close to the center, where they can still attract a large enough audience to cover their high production costs. The Internet, however, has saturated the taste space by providing news from all different ideological perspectives.

Some empirical support for the wide range of news content available online can be found in PEW (2008), where respondents report receiving political news not only from the websites of traditional news outlets such as NBC, CNN, FOX News, and the New York Times, but also from a plethora of solely Internet-based news sources (politically oriented or not) and social networking websites. However, unlike newspapers and TV news, whose political inclination has been mapped, the evidence is still thin with regard to the political inclination or slant of online news sources.

Putting the Pieces Together—Developing Hypotheses

Taken together, these two premises allow us to make a series of testable hypotheses regarding the political views of those who seek out news on the Internet versus their counterparts who do not, as well as differences between the two groups in the importance they attribute to certain issues.

Our first empirical hypotheses deal with the relationship between individuals’ ideological views and the source of the news they consume. The basic idea is that individuals whose ideological preferences are not completely served by mainstream television news sources (because their views are further from the center) will tend to search the Internet to get news that is more complementary to their views. We do not argue that everyone who uses Internet news is an ideological noncentrist, or even that a majority of Internet users are noncentrists. Rather, we argue that the share of noncentrists who search the Internet for news rather than get news only from mainstream television sources will be larger than the corresponding share of centrists. Thus, when you compare those who consume news on the Internet, a group that includes a larger share of noncentrists, to those who do not consume news on the Internet, the group who searches for news on the Internet will be further from the ideological center.

The predictions about viewers’ ideological positions that we will test here deal with those consumers who...
are getting news from the sources that appeal most to the viewers on the left and right, which in our dataset are, respectively, CNN and FOX News. Our own analysis, which is available in our online Appendix A, shows that CNN viewers are more liberal/Democratic than the viewers of any other TV station in our data, and FOX News viewers are more conservative/Republican than viewers of any other TV station. These results are consistent with the 2004 Pew study of Media Credibility, which shows that FOX and CNN are the two networks viewed most differently by Democrats and Republicans. FOX is the only network viewed as more believable by Republicans than by Democrats, and CNN has the widest gap in the other direction. Similarly, a survey of newspaper editors in 2003 by the Center for Survey Research and Analysis at the University of Connecticut shows that an equal percentage of respondents view CNN as liberal as view FOX as conservative: 18% in both cases (see Groseclose and Milyo 2005 for evidence of content bias and Posner 2005 and Stroud 2008 as examples that treat CNN as a liberal news source). In sum, Liberals/Democrats are more likely than Conservatives/Republicans to watch CNN and believe CNN, while the opposite is true for FOX News.

For the purposes of our model, it is useful to divide those who are using noncentrist cable television news sources into three groups. Let us use FOX News viewers as an example. There are viewers who are more conservative than FOX News, viewers who have roughly the same ideological position as FOX News, and viewers who are more liberal than FOX News. From our theoretical framework, we would expect the FOX viewers who hold roughly the same ideological position as FOX News itself to be satisfied with the coverage they get; thus, we do not expect these individuals to supplement with other sources.

We expect that those FOX News viewers who are more conservative than FOX News will supplement their news consumption by using an additional news source that is more conservative than FOX. Since these viewers will not find another television outlet more conservative than FOX, the most widely available option available to these consumers is the Internet. Thus, we should find that the most conservative FOX viewers supplement their FOX News viewership with Internet news content.

Our theoretical framework further suggests that those FOX viewers who are more liberal than FOX News will also seek to supplement their news consumption with a news source that is closer to their own ideological preference. While these individuals can use the Internet to supplement their news consumption, they also have the option of using other television broadcast news sources that are more liberal than FOX News. Since we are already conditioning on the fact that these individuals use television to get their news, the marginal effort needed for these individuals to get news from other television sources is lower than the marginal effort of seeking out news on the Internet. As a result, we expect these viewers, or at least a significant portion of them, to supplement their FOX News Channel consumption by simply changing the channel and watching more liberal news sources, such as national network broadcast news or CNN.

When we combine these insights, we get the following hypothesis:

H1: Of those who watch the FOX News Channel, individuals who also get news from the Internet will be more conservative than other FOX News Channel viewers.

We can follow the same type of logic to reach the following hypothesis about the most liberal television news source in our study, CNN:

H2: Of those who watch CNN news, individuals who also get news from the Internet will be more liberal than other CNN news viewers.

Our final empirical hypothesis deals with the relationship between individuals’ source of news and the issues they believe to be important. As H1 and H2 suggest, one motive for seeking Internet news can be a search for greater ideological purity in issue coverage. Interest in issues not covered by mainstream broadcast news may provide another motive. Mainstream broadcast news is time constrained and thus chooses to cover a subset of issues most viewers find important. In contrast, Internet news can focus on niche issues; some Internet news providers even dedicate themselves to such issues. Therefore, people who are interested in more diverse political issues are more likely to seek out news on the Internet. People interested in a broad range of political issues are more likely to identify a low-salience issue as the single most important current issue than people with a narrow range of political interest. Combining these two observations

8The model is easily extendable to include additional media sources, such as radio and print media. We concentrate on TV and Internet news mainly due to the fact that our data involve these types of media.

9For example, a very conservative (liberal) person who is particularly interested in the war on terror (the war in Iraq) may be unsatisfied with the coverage of the war they find on FOX (CNN) and hence seek out especially conservative (liberal) websites to supplement that coverage.
about people with a broad range of political interests yields our final hypothesis:¹⁰

H₃: Individuals who use the Internet for news should be more likely to identify low-salience political issues as important than those who rely solely upon mainstream television content.

One implication of our hypotheses is that those who use Internet news should be more politically polarized. It is important to note that this is not a causal statement; that is, we do not claim that the Internet has a polarizing effect on the electorate. Rather, we claim that those who are already polarized should be the most likely to use the Internet for news. In future research, we hope to address whether this mechanism has a causal effect¹¹ on the views of political noncentrists.

Data

The primary dataset we use to test Hypotheses 1–3 comes from a unique collection of public affairs surveys that thus far have not been used in academic research. The surveys were administered by Knowledge Networks, a survey research company, to its nationally representative online KnowledgePanelSM of U.S. residents as part of the company’s panel retention program. The surveys were conducted over a period of seven years (between April 2000 and June 2007) and given to 117,955 respondents during this time. Since only the most recent responses were kept for each individual, our dataset is essentially a large rolling cross-section. Additional details about panel composition, sampling scheme, respondent demographics, and calculation of response rates are provided in our online Appendix B.

One issue in using these data is that the sampling scheme used in administering surveys can potentially cause certain groups to be over- or underrepresented in the sample. We correct for this potential sample composition problem in our analyses by using rim weights to adjust our sample composition to match that of the national population. To verify that our correction did not drive the results, we also present in Appendix A the results of these analyses when using unweighted sample means and running OLS regressions with all available demographic variables as controls.

Additionally, whenever possible, we check the robustness of our findings by replicating the analysis using the biennial media consumption surveys done by the Pew Research Center. In particular, we were able to use the individuals from the 2002, 2004, and 2006 waves of Pew’s biennial media consumption survey ¹²,¹³ who were asked about their use of the cable channels FOX and CNN for news¹⁴ to test Hypotheses 1 and 2. We were not able to test Hypothesis 3 using the Pew data because respondents in the Pew dataset were not asked any questions about which issue they thought to be most important.

Analysis

Recall that our theoretical framework suggests that consumers whose ideological perspectives are not adequately covered by the mainstream media should be more likely to use the Internet for news. Using this insight, we formed hypotheses about the relationship between getting news from the Internet and the ideological positioning of those using the least ideologically centrist television news sources available (see H₁ and H₂).

The first of these predictions that we test, Hypothesis 1, states that among those who watch news from the rightmost television news source, the FOX News Channel, those who also get news from the Internet will be more conservative than FOX News viewers who do not cite the Internet as a news source. To test this hypothesis, we first limited the sample to those who responded that they watched a regularly scheduled FOX News program

¹⁰The logic behind Hypothesis 3 is one of consumer selection. There may be an alternative (supply side) explanation for a correlation between interest in low-salience issues and seeking out news online. The supply side argument would be that people who go online seeking news for reasons of ideological purity are exposed to a broader set of political issues and therefore are more likely to find one of the low-salience issues to be the most important. Both arguments yield the same observable correlation, and we take no stance as to which is stronger.

¹¹See more about this point in the sixth section.

¹²We did not use the 1998 and 2000 waves because, as is detailed in online Appendix A, during those waves CNN and FOX news consumers were not significantly more liberal and conservative, respectively, than their counterparts. Since Hypotheses 2 and 3 are about the behavior of those consumers who use the rightmost and leftmost television news sources, it would not be appropriate to include these years in that analysis.

¹³See online Appendix B for more details on sampling scheme, response rates, and weight calculation for the Pew surveys. Questionnaires and additional information are available at http://peoplepress.org/dataarchive/.

¹⁴In each of the three waves, the questions about the consumption of news from FOX and CNN were part of a split ballot and were only asked to a portion of the sample. In 2002 and 2004, the question was given to 50% of the sample; in 2006, the question was given to 25% of the sample.
frequently.15 Among these consumers, we identified Internet news consumers as those who responded that they searched the Internet for news16 at least three times a week. We then compared the ideological position of these consumers to FOX News viewers who searched the Internet for news less frequently.

We measured the ideological position of these groups of consumers in two different ways. First, we used their self-identified liberal-conservative position (with increasing values indicating increasing levels of conservatism). While respondents were asked about their liberal-conservative position in both the Knowledge Networks and Pew surveys, the available responses differed across the two surveys. In the Knowledge Networks data, respondents’ liberal-conservative positions were measured on a 7-point scale,17 while the Pew data used a 5-point scale.18 Second, for the Knowledge Networks data, we also used respondents’ self-identified 5-point party identification, where increasing values indicate increasing levels of attachment to the Republican party.19 Party identification was not used in analyzing the Pew data because respondents in the Pew surveys were not asked about the strength of their identification. For both of these measures, we calculated the difference between FOX viewers who consume Internet news and those who do not. The results are presented in Table 1.

15 See Appendix B for the questionnaire text and variable definitions.
16 Respondents were not asked what type of news they were seeking online, which websites they went to, or to what extent and in which direction were these online news sources biased, but PEW’s November 2004 Biennial Media Consumption survey (PEW 2004) suggests that the sources are diverse. The study found that 18% of online users reported getting “news or information about politics and upcoming campaigns” on the previous day. Even though many of the traditional mainstream media outlets have an online presence that accounts for most of news readership online, 29% of those who get their news online list smaller websites as a source for political news information; the vast majority of these are solely Internet-based news websites. Nine percent of online users reported reading political blogs frequently or sometimes.
17 The liberal-conservative scale in the Knowledge Networks data has the following values: 1 = Extremely liberal, 2 = Liberal, 3 = Slightly liberal, 4 = Moderate, middle of the road, 5 = Slightly conservative, 6 = Conservative, and 7 = Extremely conservative.
18 The liberal-conservative scale in the Pew data has the following values: 1 = Extremely liberal, 2 = Liberal, 3 = Moderate, 4 = Conservative, and 5 = Extremely conservative.
19 Respondents’ party ID was determined as part of a two-stage question—the first about which party they identify with, and the second question (asked only if the response to the first one was “Democrat” or “Republican”) about the strength of party association. The scale takes the following values: 1 = Strong Democrat, 2 = Weak Democrat, 3 = Independent, 4 = Weak Republican, 5 = Strong Republican.

### Table 1: The Ideological/Partisan Difference between Internet News Users and Non-Internet News Users among FOX News Viewers

<table>
<thead>
<tr>
<th>Party Identification (Knowledge Networks data)</th>
<th>Difference in Weighted Means</th>
<th>Std. Error</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.92**</td>
<td>0.04</td>
<td>17,503</td>
</tr>
<tr>
<td>Liberal-Conservative Position (Knowledge Networks data)</td>
<td>Difference in Weighted Means</td>
<td>0.92***</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td></td>
<td>17,178</td>
</tr>
<tr>
<td>Liberal-Conservative Position (Pew data)</td>
<td>Difference in Weighted Means</td>
<td>0.31**</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Std. Error</td>
<td></td>
<td>742</td>
</tr>
</tbody>
</table>

(*) significant at 10% level; (**) significant at 5% level; (***) significant at 1% level. The sample is limited to FOX News viewers; the point estimates indicate the difference between the weighted means of Internet and non-Internet news users in terms of their party identification and liberal-conservative position. See Appendix B for the exact definitions of each of the variables and their coding schemes.

The dependent variables used in Table 1 are measured so that increasing values indicate increasing levels of conservatism/attachment to the Republican party among respondents. Thus, the positive values in Table 1 show that FOX News viewers who also search for news online are more conservative and have a stronger attachment to the Republican party than FOX News viewers who do not use online news sources.20

In terms of magnitude, the estimated differences are substantively significant. For example, the estimates based on the Knowledge Networks data suggest that the difference in conservatism between FOX News viewers who search the Internet for news and those who do not is nearly a full point. Since the full range of the scale between those who are extremely liberal and those who are extremely conservative is only six points, a difference of one point is quite large. This difference is even more striking when considering the fact that the sample is limited to those who watch FOX News, who are already located right of center.

We found similar results when we tested our hypothesis that CNN viewers who also get news from the Internet are more liberal than CNN news viewers who do not. As with the analysis of FOX News viewers, we measured respondents’ positions by using both their self-identified

20 This result holds for the two other estimates as well (unweighted means and OLS regressions), as is shown in Appendix A.
liberal-conservative position and their party identification; the results are presented in Table 2.

Again, the dependent variables are measured so that increasing values indicate increasing levels of conservatism/attachment to the Republican party among respondents. Thus, the negative coefficients in Table 2 show that CNN viewers who also search for news online are more liberal and more attached to the Democratic party than their counterparts who do not. These results are both statistically and substantively significant.

Our final hypothesis, H3, is that those who use the Internet will be more likely to identify low-salience issues as being important than those who rely only on television news content. Our comparison in this case is between those who use the Internet for news, whether or not they also use television sources, and those who use only television sources and not the Internet. Respondents who do not report frequent use of either news source (29.0% of the sample) were excluded from the analysis.

We measured the dependent variable, whether the respondent identified a lower-salience issue as being the most important issue, by using respondents’ answers to the question “In your opinion, what is the most important issue facing the U.S. today?” which has been a part of Knowledge Networks’ public affairs questionnaire since 2005. Respondents could choose one of seven specified answers (Taxes, Education, War on terrorism, Situation in Iraq, Economy/Jobs, Moral issues, Healthcare) or choose “Other (please specify: ______).” We proxy for interest in less salient issues in two ways. First, we rank the categories in terms of their response rates and code respondents choosing one of the three least popular responses as being interested in less salient issues. Second, since the available answers to the question represent the issues that are dealt with most frequently in the mainstream media, the likelihood of choosing “Other” represents interest in a wider variety of issues than those available in mainstream media. Thus, as an alternative, we code those respondents reporting some other issue as the issue they care most about as being interested in less salient issues. We report results using both outcome measures, and they are qualitatively similar.

Table 3 reports the difference, in percentage points, of the weighted means between the two groups. The positive value indicates that Internet news consumers are 1.9 percentage points more likely than the non-Internet television news consumers to select the category “Other”
when identifying the most important issue and 2.9 percentage points more likely than non-Internet television news consumers to select a “less salient” issue as their most important. Both differences are statistically significant. Moreover, since roughly 6% of all respondents report “Other” as the most important issue, and 10% report one of the three least salient issues as the most important, both effects represent large percentage differences in interest in low-salience issues.

In addition to the results in Tables 1–3, we also estimated the results using unweighted sample means and running OLS regressions with all available demographic variables as controls; these results, presented in conjunction with the results for the weighted means in Appendix A, are supportive of the findings here.

It is also worth noting that all of the tests performed above compared those who use the Internet and a noncentrist cable television news source to all others who are using the same noncentrist television news source. In other words, our comparison group in the tests, the non-Internet news users, included those who are just using the noncentrist television news source, those who are using the noncentrist television news source and watching national network news broadcasts, and those who are using both noncentrist television news sources. A stronger version of these hypotheses is that the Internet news users should be further from the ideological center than each of these three groups separately. We performed tests for these stronger hypotheses and present the results in our online Appendix D; the results support the findings obtained here.

Finally, we checked to see whether the estimated effects varied by the level of the respondent’s political interest. Our expectation was that since the politically interested are more likely to be using the Internet to look at political content, the magnitude of the estimated effects should be larger among the more politically interested. For the estimation we reran the analyses separately for those with low and high levels of political interest. In all cases, the magnitude of the effect is larger among the respondents with high levels of political interest. For the less politically interested, the results are less strong than originally estimated and often insignificant, although always in the right direction. The full results are available in our online Appendix E.

**Conclusion**

Over the past few decades, the electronic news media environment has experienced significant change. From the 1960s through the early 1980s, it could be described as a homogenous system controlled by three major networks (ABC, NBC, and CBS), all of which were vying for the median viewer. In terms of news coverage, the messages were aimed to appeal to the most centrist opinion as the networks fought for market share. Since the 1980s, the number of news sources available to news consumers has expanded dramatically, first with the growth of cable networks and then with the expansion of the Internet. One of the key features of cable and especially Internet news is that, relative to network news, the costs of production for these outlets are much lower. Cheaper production costs make it feasible for these news sources to rely on smaller audiences that are positioned further from center or are more interested in niche political issues to recuperate their costs. Internet news providers, who face even lower costs than cable networks, essentially saturate the market for noncentrist political news.

In this article, we have outlined a theoretical framework for understanding how the reduced costs of producing and distributing news, combined with the consumers’ tendency to selectively expose themselves to media with which they agree, have changed the U.S. political news market by giving consumers more control over their information environment. We formulated and tested several predictions of this theoretical framework, and the results suggest that some people are using this extra control over their news environment to seek out news that appeals to them. We found that those who use the Internet to supplement their consumption of news from the most noncentrist television sources (CNN and FOX) are further from the ideological center than their counterparts who do not. Further, those who use the Internet for news are interested in a broader array of issues than those who do not.

The results of our study also have important implications for the growing literature on the polarization of the electorate. Sunstein (2001) has argued that the Internet will increase the polarization of the electorate by allowing consumers to place themselves into echo chambers; rather than operating in an open society of diverse ideas and discussion, people can limit their discussion and interaction to those whose opinions are similar to their own, leaving little opportunity for their ideas to be challenged. Our results suggest that the necessary conditions for the echo chamber effect are in place; people are using the Internet to expose themselves to opinions similar to their own.

Future research is needed to test whether there is in fact a causal relationship between Internet news readership and political polarization or whether the observed correlations are driven by self-selection. Even if most of the opinion fragmentation is found to be due to
self-selection, the increased information and/or propaganda buttressing initial reactions can help solidify more polarized positions. The results of future causal investigations will be an important contribution to the growing literature on the media’s causal effect on individuals’ political attitudes and behaviors (e.g., DellaVigna and Kaplan 2006; Stroud 2007).

Finally, our results show that the relationship between using the Internet for news and one’s political attitudes depends on what other sources, if any, the individual is using to find news. This provides evidence supportive of Bimber’s point that “the Internet does not represent a singular mode of communication, but a flexible and adaptable set of opportunities for communication that can be exploited by individuals and groups in many ways” (2005, 16). Researchers should bear this in mind when developing theory and testing predictions about the political causes and effects of Internet use.

Appendix A: Results from OLS and Weighted Means Analysis

### Table A1 The Ideological/Partisan Difference between Internet News Users and Non-Internet News Users among FOX News Viewers

<table>
<thead>
<tr>
<th>DV = Party Identification (Knowledge Networks data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>0.92***</td>
<td>0.88***</td>
<td>0.60***</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.04</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>N</td>
<td>17,503</td>
<td>17,503</td>
<td>17,503</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DV = Liberal-Conservative Position (Knowledge Networks data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>0.92***</td>
<td>0.94***</td>
<td>0.76***</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.05</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>N</td>
<td>17,178</td>
<td>17,178</td>
<td>17,178</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DV = Liberal-Conservative Position (Pew data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>0.31**</td>
<td>0.34***</td>
<td>0.14</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.12</td>
<td>0.11</td>
<td>0.12</td>
</tr>
<tr>
<td>N</td>
<td>742</td>
<td>742</td>
<td>628</td>
</tr>
</tbody>
</table>

(*) significant at 10% level; (**) significant at 5% level; (***), significant at 1% level. See Appendix B for the exact definitions of each of the variables and their coding schemes. Control variables included in the OLS regression include dummies for gender, age, marital status, race/ethnic groups, levels of education, levels of religious participation, income levels, and survey years. The full OLS regression results are presented in online Appendix C.

### Table A2 The Ideological/Partisan Difference between Internet News Users and Non-Internet News Users Among CNN News Viewers

<table>
<thead>
<tr>
<th>DV = Party Identification (Knowledge Networks data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>−0.24***</td>
<td>−0.32***</td>
<td>−0.42***</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.11</td>
<td>0.08</td>
<td>0.08</td>
</tr>
<tr>
<td>N</td>
<td>7,713</td>
<td>7,713</td>
<td>7,713</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DV = Liberal-Conservative Position (Knowledge Networks data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>−0.62***</td>
<td>−0.77***</td>
<td>−0.72***</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.14</td>
<td>0.10</td>
<td>0.09</td>
</tr>
<tr>
<td>N</td>
<td>7,214</td>
<td>7,214</td>
<td>7,214</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DV = Liberal-Conservative Position (Pew data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>−0.29**</td>
<td>−0.26**</td>
<td>−0.10</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.12</td>
<td>0.11</td>
<td>0.12</td>
</tr>
<tr>
<td>N</td>
<td>733</td>
<td>733</td>
<td>644</td>
</tr>
</tbody>
</table>

(*) significant at 10% level; (**) significant at 5% level; (***), significant at 1% level. See Appendix B for the exact definitions of each of the variables and their coding schemes. Control variables included in the OLS regression include dummies for gender, age, marital status, race/ethnic groups, levels of education, levels of religious participation, income levels, and survey years. The full OLS regression results are presented in online Appendix C.

### Table A3 The Difference between Internet News Users and Non-Internet News Users in Terms of the Diversity of Issues Considered Important

<table>
<thead>
<tr>
<th>Likelihood of Identifying “Other” as Most Important Issue (Knowledge Networks data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>1.9***</td>
<td>1.9***</td>
<td>1.4***</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>N</td>
<td>34,477</td>
<td>34,477</td>
<td>34,477</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Likelihood of Identifying Less Salient Issue as Most Important Issue (Knowledge Networks data)</th>
<th>Weighted Means</th>
<th>Unweighted Means</th>
<th>OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>2.9***</td>
<td>2.9***</td>
<td>1.5***</td>
</tr>
<tr>
<td>Std. Error</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>N</td>
<td>34,477</td>
<td>34,477</td>
<td>34,477</td>
</tr>
</tbody>
</table>

(*) significant at 10% level; (**) significant at 5% level; (***), significant at 1% level. See Appendix B for the exact definitions of each of the variables and their coding schemes. Control variables included in the OLS regression include dummies for gender, age, marital status, race/ethnic groups, levels of education, levels of religious participation, income levels, and survey years. The full OLS regression results are presented in online Appendix C.
Appendix B: Survey Questions and Response Coding

Q2. (multiple choice):
In your opinion, what is the most important issue facing the U.S. today?
Available answers:
   Taxes, Education, War on terrorism, Situation in Iraq, Economy/Jobs, Moral issues, Healthcare, Other (please specify: ____).

Q7. (multiple choice):
Generally speaking, do you think of yourself as a . . .
Available answers:
   Republican, Democrat, Independent, Another party (please specify: ____), No preference.

Q8. (multiple choice, asked if “Republican” was selected in Q7):
Would you call yourself a . . .
Available answers:
   Strong Republican, Not very strong Republican.

Q9. (multiple choice, asked if “Democrat” was selected in Q7):
Would you call yourself a . . .
Available answers:
   Strong Democrat, Not very strong Democrat.

Q10. (multiple choice, asked if “Independent,” “Another party,” or “No preference” was selected in Q7, or if respondent skipped Q7):
Do you think of yourself as closer to the . . .
Available answers:
   Republican Party, Democratic Party.

Q11. (multiple choice):
In general, do you think of yourself as . . .
Available answers:
   Extremely liberal (1), Liberal (2), Slightly liberal (3), Moderate, middle of the road (4), Slightly conservative (5), Conservative (6), Extremely conservative (7)

Q19. (multiple choice):
How often do you . . .
   - Watch national network news programs such as NBC Nightly News, ABC World News Tonight, or The CBS Evening News?
   - Watch local news programs on television?
   - Watch cable news networks such as CNN, MSNBC, or Fox News?
   - Search for news on the Internet?

Available answers for each news source:
   - Three times a week or more, Every week or almost every week, One to three times a month, Less than once a month, Never.

Q20. (multiple choice):
How often do you watch each of these nightly political programs?
   - Hardball with Chris Matthews on MSNBC or CNBC
   - Fox News’ The O’Reilly Factor
   - CNN’s Crossfire
   - PBS’ The News Hour with Jim Lehrer

Available answers for each news source:
   - Every night or almost every night, A few times a week, Occasionally, Never

Q21. (multiple choice):
How often do you watch each of these weekly political news programs?
   - NBC’s Meet the Press
   - CBS’ Face the Nation
   - CNN’s Late Edition with Wolf Blitzer
   - The McLaughlin Group
   - Special Report with Brit Hume
   - Fox News Sunday

Available answers for each news source:
   - Every week or almost every week, One to three times a month, Less than once a month, Never

Respondents were coded as national network news viewers if their response to Q19 indicated “watching national network news programs such as NBC Nightly News, ABC World News Tonight, or The CBS Evening News” “every week or almost every week” or more.

Respondents were coded as CNN viewers if their responses to Q20 and Q21 indicated watching the nightly political program “CNN’s Crossfire” “a few times per week or more” or watching the weekly political news program “CNN’s Late Edition with Wolf Blitzer” “one to three times a month” or more.

Respondents were coded as FOX News viewers if their responses to Q20 and Q21 indicated watching the nightly political program “Fox News’ The O’Reilly Factor” “a few times per week or more”, watching the weekly political news program “Special Report with Brit Hume” “one to three times a month or more,” or watching the weekly
political news program “Fox News Sunday” “one to three times a month or more.”

Respondents were coded as Internet news viewers if their response to Q19 indicated searching for news on the Internet “every week or almost every week” or more.

Respondents were coded as “liberal (conservative)” if their response to Q11 indicated that they considered themselves “liberal (conservative)” or “extremely liberal (conservative).”

Respondents were coded as “Democrat (Republican)” if their response to Q7 indicated that they considered themselves to be a “Democrat (Republican).”

Respondents were coded as “Interested in less-salient issues” if their response to Q2 indicated that the issue they cared most about was “Taxes,” “Education,” or “Other.”

Respondents were coded as “Interested in other issues” if their response to Q2 indicated that the issue they cared most about was “Other.”

References


