

Who's the Boss? Setting the Agenda in a Fragmented Media Environment

KATHLEEN SEARLES¹
Louisiana State University, USA

GLEN SMITH
University of North Georgia, USA

Recent work on media choice calls into question the continued influence of traditional news media on the public agenda. We asked whether agenda setting persists either in its traditional form or an alternative form. Coverage of the 2008 American economic collapse provides a unique case as it offers a rare moment of uniform media attention across outlets. We combined a content analysis of news coverage with survey data from the National Annenberg Election Study. Using multivariate time series analysis, we found that the news media respond to issue concerns of viewers and their effects vary by source.

Keywords: National Annenberg Election Survey, *agenda setting*, *economic collapse*, *time series*

The decline of the inadvertent audience changes the relationship between news media and the public. For this reason, Bennett and Iyengar (2008) have called for a new era of minimal effects in which political communications scholars retool theoretical frameworks to account for sociotechnological changes in our fragmented media environment. Commensurate with this call is the assertion that traditional news media have a diminished effect on public opinion (also see Chaffee & Metzger, 2001; Takeshita, 2005). Specifically, a focus on the ways in which choice conditions media exposure (Arceneaux & Johnson, 2013) suggests that a salient issue is less likely to be covered uniformly across outlets (Bennett & Iyengar, 2008; Stroud, 2011), a condition for agenda setting (Noelle-Neumann & Mathes, 1987). However, we can leverage the unique characteristics of the 2008 economic collapse, including uniform and obtrusive coverage, to uncover first-level agenda setting in a 21st-century media market (Walgrave & Van Aelst,

Kathleen Searles: ksearles@lsu.edu
Glen Smith: glen.smith@ung.edu
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2006). This is particularly important to examine for this case as national economic conditions are shared and, thus, have increased potential to influence the media agenda (Behr & Iyengar, 1985).

In addition, we build on other work that questions the demise of traditional agenda setting (Shehata & Strömbäck, 2013; Strömbäck & Kioussis, 2010) by examining outlet-specific partisan television news effects and audience influence. Although scholars have long talked about the public's ability to shape the media agenda and the democratic implications thereof (Cobb & Elder, 1971), scholarship on selective exposure has renewed interest in how individual interests may also influence niche news (Chaffee & Metzger, 2001) and vice versa (Muddiman, Stroud, & McCombs, 2014; Stroud, 2011). Broadly, such dynamics suggest that regardless of an increasingly stratified and fragmented news audience (or "stratamentation"; see Bennett & Iyengar, 2008), news consumers may still wield influence over the media's agenda.

In this research, we used economic coverage data from 2008 combined with survey data from the National Annenberg Election Study to test a traditional model of agenda setting against two alternatives: partisan news and public agenda setting. Using multivariate time series analysis, we found that, contrary to traditional agenda-setting models, the news media respond to the issue concerns of viewers and their effects vary by source.

Agenda Setting in a New Media Market

In the 1970s, media effects research shifted from a minimal effects model (Berelson, Lazarsfeld, & McPhee, 1954) to proclaim the return of powerful media (McCombs, 2004). Agenda setting, the idea that there is a relationship between the emphasis media place on issues—via placement or volume of coverage—and the public's subsequent assessment of the same issue's importance, aided in this shift by illustrating how the issues covered in the news media change the public's issue priorities (Cohen, 1963; Iyengar & Kinder, 1987; McCombs & Shaw, 1972). Meta-analyses lend further support to the robust relationship between the media's agenda and the public's issue interests (Dearing & Rogers, 1996; Wanta & Ghanem, 2000). This agenda interacts with the agendas of other political institutions, thus reinforcing a cycle of institutional attention, media coverage, and public attention, which eventually drives additional coverage (Edwards & Wood, 1999; Soroka, 2002). The effect of media attention on issues the public perceives as important is supported by both experimental and survey research (Iyengar & Kinder, 1987).

In this research, we draw on a market-based approach, which looks at how financial incentives influence news-generating processes, to generate our hypotheses. Undergirding this approach is the idea that for news outlets, information is a commodity, and thus financial success means supplying information commensurate with consumer demand. We use this market-based model to generate and test expectations along-side traditional theories of news. In this way, we can look at how incentives map out in a fragmented media environment to better understand when traditional agenda setting may persist, and when alternative models may be more applicable.

Persistence of Traditional Agenda Setting

Following the U.S. presidential election in 1968, McCombs and Shaw (1972)—in the classic study of agenda setting—described the interplay between the media agenda and public agenda in Chapel Hill, North Carolina. In their account, the media cover a few issues over a period of time with varying degrees of emphasis. This ebb and flow of coverage is reflected in the public agenda, which is often tapped by asking people what the most important issue facing the country is today. In that study, the rank order of issues covered in the media agenda was highly correlated with the rank order of issues perceived as important by the public. Since that seminal study, agenda-setting theory has extended to examine many issues, elections, countries, levels, and outcomes (McCombs, Shaw, & Weaver, 2014). However, the basic premise remains: The media are the source for the “pictures inside our heads” (Lippmann, 1922).

Such traditional models of agenda setting predict that media coverage influences the issues the public perceives to be most important. But in an environment characterized by choice (Prior, 2007), might we expect such powerful effects of media on the agenda to persist? Although the loss of the inadvertent audience makes it more difficult for the media to influence the agenda (Bennett & Iyengar, 2008), others argue that traditional media effects may still be at play (Holbert, Garrett, & Gleason, 2010; Strömbäck & Kioussis, 2010). Echoing this sentiment, recent work finds continued evidence of agenda setting (McCombs, Lance, Spiro, & Wanta, 2011; Muddiman et al., 2014; Walgrave & Aelst, 2006) despite an increased diversity of media messages (Stroud, 2011). In recent conceptualizations, the overall agenda remains powerful because of the importance of cumulative media choices (Jönsson & Strömbäck, 2007; Strömbäck & Kioussis, 2010).

Taken a step further, we can posit characteristics of coverage, motivated by financial incentives that create favorable conditions for traditional agenda setting. One such characteristic of coverage is uniformity, or consonance (Chaffee & Metzger, 2001; Noelle-Neumann & Mathes, 1987). In fact, regardless of media choice, journalists still gravitate to similar sets of stories characterized by values such as conflict (Gans, 1979; Van Dijk, 1988), and the financial incentives that encourage mimicry persist (Boczkowski, 2010; Boydston, 2013; Hoskins, McFayden, & Finn, 2004).

A second and related characteristic of coverage that supports a market-based news-generating process—and also creates conditions favorable to agenda setting—occurs when the media are focusing on the same issue, or what Eilders (1997) calls a focusing event. A focusing event affects a large number of people and hits close to home, resulting in consonant coverage as media outlets are motivated to follow the same story in similar ways (Boydston, 2013; Paletz, 1998). Each of these conditions characterized coverage of the 2008 economic collapse—obtrusive crisis coverage of a focusing event—making it an ideal case to test for the persistence of traditional agenda setting in an era of media choice. Consistent with previous theory, we set forth our first hypothesis:

H1: The television news media affect the public's agenda.

Consumer Agenda Setting

The journalistic and financial incentives that lead to consonant coverage dictate another similar outcome: Cover what sells or risk losing viewers (Hoskins et al., 2004). Indeed, as preferences increasingly drive media choice (Prior, 2007), one would expect news media efforts at viewer retention to include fitting news content to preferences. Work on market competition finds this to be true for issues for which there is agreement; for example, newspapers are more likely to slant toward their readers (Mullainathan & Shleifer, 2005). As competition drives a proliferation of niche news outlets, competition also requires all news outlets to take into account what their viewers want to hear (Boydston, 2013).

Chaffee and Metzger (2001) agree, suggesting that in the current media environment, it is not just the media telling the public what to think about, but also the public telling the media what they would like to think about. Thinking about the public's role in news generation is not entirely new as agenda-setting theory has long tried to understand the needs of individual viewers so as to better predict effects (Cobb & Elder, 1971). Indeed, Brosius and Kepplinger (1990) modeled the media agenda using a dynamic approach, which revealed that influence flows both from the media to the public, as is traditional, but also from the public to the media. Recently, a large-scale content analysis of issue coverage on nightly broadcast news shows suggested that consumer interest drives content, not vice versa (Uscinski, 2014). Such findings suggest that consumers of news have taken on a more active role in selecting news sources according to personal preferences and convenience, thus becoming "coproducers" in the mediated process (Bennett & Iyengar, 2008). In other words, consumers influence newsrooms by voting with their remote controls.

Simply, news sources identify issues that interest news consumers as part of their strategy to appeal to viewers (Hamilton, 2004). To further drill-down on the circumstances under which we may see the public wield influence on the agenda, we can consider the characteristics of coverage that suggest favorable conditions for a consumer-driven news-generating process. For example, one tradition in the literature focuses on the process of agenda building, or the ways in which real-world indicators map onto the media's agenda (Dearing & Rogers, 1996). The basic premise of such studies is that as conditions worsen, the public sends a signal that news media attention is needed (Sheafer & Weimann, 2005). Moreover, situations that affect a large segment of the population and hit close to home, such as national economic conditions, are more likely to facilitate a consumer-driven agenda influence (Behr & Iyengar, 1985). For economic coverage in particular, competition dictates that news outlets heed their consumers' preferences. As a result, we argue that viewer concern about the economy in 2008 was not simply a result of media attention as traditional agenda-setting models suggest, but also a driver of media attention. To test this argument, we set forth an alternative to traditional agenda setting: The overall media agenda is influenced by the consumer's agenda. Thus,

H2: The public's agenda affects television news media's agenda.

Partisan Agenda Setting

Still another alternative model posits a role for market competition on the supply side of news creation (Hamilton, 2004): News outlets are incentivized to differentiate their product (Uscinski, 2014). Under such circumstances, news outlets—particularly partisan networks—will focus on drawing a small, but loyal or passionate audience (DellaVigna & Kaplan, 2007; Mullainathan & Shleifer, 2005). For example, learning from the success of conservative talk radio, the Fox News Network became very successful by appealing to conservative viewers who were turned off by the supposed liberal bias of the mainstream media (Gentzkow & Shapiro, 2006; Morris, 2007).

Following these strategies, partisan news networks such as MSNBC and Fox News offer a distinct product and, thus, may be setting the agenda for their niche audience (Feldman, Maibach, Roser-Renouf, & Leiserowitz, 2011). Stroud (2011) found just that: Individual issue agendas reflect media diets and, specifically, Fox News viewers were more likely to cite terrorism as an important problem relative to the audiences of CNN and MSNBC. Moreover, partisan media might be better adept at setting the agenda of their viewing audience as viewers tend to trust ideologically consistent news sources more than opposing outlets, and are more likely to watch sources they trust (Tsfati & Cappella, 2003). Trust is an important factor when it comes to media effects; for example, Behr and Iyengar (1985) found that agenda setting was more likely when viewers trusted the news media (also see Miller & Krosnick, 2000), and this extends to trust in specific outlets (Tsfati, 2003).

Given that people pay more attention to—and are more trusting of—like-minded news outlets (Stroud, 2011; Turner, 2007), we set forth a second alternative model for the agenda: Viewers will follow the agenda of their preferred news outlets. This alternative model suggests that agenda-setting effects will be outlet-specific, such that audience issue priorities will change as a result of variations in issue coverage on their preferred news outlet. Fox News will set the agenda of its audience, and MSNBC will set the agenda of its audience. Thus,

H3: Television partisan news outlets (Fox News, MSNBC) affect their audience's agenda.

In other words, H2 and H3 posit alternative models of agenda setting in today's media environment, and H1 sets forth the traditional model.

The 2008 Economic Collapse: A Case Study

Testing for agenda-setting effects is not an easy task. With only small changes in individual issue priorities over time and much variation in coverage of political issues, it is nearly impossible to determine directionality. This is in part due to the organizational and marketplace incentives that promote path dependency and mimicking, all of which makes it even more difficult to detect outlet-specific effects on viewer attitudes and vice versa (Boydston, 2013). To overcome these methodological hurdles, what is needed is an issue that suddenly dominates media attention for a long period of time so that true differences in the amount of coverage by outlet—beyond coverage due to prior attention or mimicking, for example—could emerge. Such an event, in which all sources cover the same issue but to varying degrees,

both simulates an intervention and also allows for potential differences in the agenda-setting effects of partisan news to be distinguished. Given the proper methodological techniques, multivariate time series analysis, for example, these effects over time can be modeled with any reciprocal effects of the public on coverage.

Fortunately, for our purposes, just such an event occurred leading up to the 2008 presidential election. Throughout the year, signs of the impending economic collapse became evident, causing a bump in economic coverage by both mainstream and partisan news outlets. As we show, news sources devoted varying amounts of attention to the economy. Also, we show that most Americans came to believe that the economy was the most important issue facing the country. At first blush, the data suggest that traditional agenda setting may be alive and well. However, the unique opportunity afforded to us by this issue "intervention" (or collapse of the economy), allowed us to take advantage of before-after experimental logic and test alternative models of agenda setting. Although unable to capitalize on the benefit of randomization and limited by a unique case, we used coverage of the economy as a benchmark in our examination of variation in audience perceptions of the economy as the most important issue by news source.

Data and Method

The ideal approach to testing agenda-setting effects is to use variation in coverage to predict changes in the public issue agenda. To measure the public agenda, we matched content data from the News Coverage Index (NCI) gathered by the Project for Excellence in Journalism to attitudinal data from the 2008 National Annenberg Election Survey (NAES). This survey design is a common approach to longitudinal data, allowing us to capture dynamic changes in a population over time. The dependent variable of interest was perception of the economy as the most important issue facing the country; the independent variables included weekly coverage of the economy by source. We chose to limit our focus to the economy so as to take advantage of the unique, singular focus of coverage across outlets on the economic collapse.

Content Analysis

To measure media content, we drew on the NCI, gathered by the Project for Excellence in Journalism. The NCI examines coverage from 52 outlets in multiple modes including print sources and online, network, and cable television. Using a rotating schedule, we coded between 25 and 28 outlets for content per day. In 2008, the NCI coded a total of 69,943 segments. As our focus was on television news, we used data for all broadcast stations (ABC, CBS, NBC) and cable networks (CNN, Fox News, MSNBC) including morning, daytime, and nightly news coverage from January 1 to November 30, 2008, for a total of 45 weeks.² For primetime broadcast coverage (6–11 p.m.), 30-minute blocks were coded for two of three programs each day, with each program selected on a rotating basis daily. Thus, every program was coded two of every three days. For non-primetime broadcast coverage, 30-minute blocks were coded for

² The NCI chose the stations on the basis of the reach of their audience, which excludes other cable outlets such as CNBC and Headline News.

each program once every three days. For cable networks, daily analysis of primetime coverage consisted of 30-minute blocks from four primetime programs on CNN and Fox News and two on MSNBC, with each program selected on a rotating basis. Non-primetime cable network coverage included 30-minute blocks of programming on two of three networks each day so that on a given day there were 60 minutes of programming data from Fox News, CNN, and MSNBC.³

Within these 30-minute blocks, the NCI codes for all topics discussed and groups each into big story and substory categories. Big stories are considered major issues that are a frequent focus across media outlets during the time period studied, and substories are specific aspects of those stories. In other words, big stories are what make up the agenda. Tests of intercoder reliability showed 87% coder agreement for the big story and 80% agreement for the substory.⁴

To create our independent variables for H1 and H3 (and the dependent variable for H2), economic coverage overall and per source, we first examined the content of each story. A segment's content was determined to be within the scope of the project if it aired on one of the six sampled sources (ABC, CBS, NBC, CNN, MSNBC, Fox News) and either the big story or substory discussed one of the following economic topics: the stock market, gas prices, bailouts, job cuts, unemployment, the housing bubble, or Fannie Mae and Freddie Mac. Relevant segments included in this analysis totaled 3,807 stories, with 2,203 from broadcast networks and 1,604 from cable news networks, totaling 235,861 seconds and 204,469 seconds, respectively.

Second, we used time code data, which denote the story start and end time, to glean the number of seconds spent discussing the economy (either big story or substory) within each 30-minute coded block per source per day.⁵ We then summed the number of seconds of economic coverage per source for Fox News, CNN, MSNBC, and broadcast networks collapsed by week. As noncable networks had far less coverage overall, we combined ABC, CBS, and NBC into a single broadcast network measure so as to better compare variation in cable news versus traditional news coverage. We also created an overall economic coverage variable, which was a summed measure of all sources' coverage per week. This measure ranged from 1,111 to 50,406 seconds ($M = 12,608.07$ seconds) weekly for overall coverage, from 12 to 11,685 seconds ($M = 1,643.42$ seconds) weekly for Fox News, from 0 to 8,376 seconds ($M = 808.6$ seconds) weekly for MSNBC, from 111 to 10,309 seconds ($M = 2,091.73$ seconds) weekly for CNN, and from 470 to 14,813 seconds ($M = 5,241.4$ seconds) weekly for broadcast television. By using a duration measure for economic coverage rather than a count measure, we avoided treating a 30-minute economic story as equivalent to a one-minute economic story. In addition, this approach to measurement

³ Thus, the content data are more reflective of the primetime content than daytime coverage. This is an appropriate methodological tradeoff given that our focus was on the stories of the day and primetime coverage is more representative of such content (Boydston, 2013).

⁴ For more on the NCI intercoder reliability tests, see http://www.journalism.org/news_index_methodology/.

⁵ Additional information on the procedures involved in the content analysis can be found at http://www.journalism.org/about_news_index/methodology.

enabled us to leverage any variations in economic coverage between and within sources to test for agenda-setting effects by the public (H2) and by outlet (H3)

Time Series

Data measuring the public agenda came from the rolling cross-sectional component of the 2008 NAES. The NAES is designed as a repeated cross-section in which the interviews are spread out in a controlled way over time. We used surveys starting from January 2 until November 3, 2008, including 304 days or approximately 44 weeks and 55,936 adult respondents in the United States. There were 1,247 completed interviews per week, including an average of 200 interviews for Fox News viewers, 60 for MSNBC viewers, 259 for CNN viewers, and 252 for network television viewers.⁶ To assure random selection, respondents were contacted by telephone using random digit dialing technology. Interviews were conducted in English or Spanish depending on the respondent's preference. In accordance with the standards of the American Association for Public Opinion Research, Response Rate 1 was 18.98%.

In addition, the date on which a respondent was interviewed was a product of random selection, thus using temporal heterogeneity to the advantage of the researcher (Brandt & Williams, 2007). Because each cross-section was proximally distributed, the design provided a broader view of the period of interest (here, coverage of the economic collapse in 2008) and enabled stronger causal inference.

The dependent variables for H1 and H3 (and the independent variable for H2) were perceptions of the economy as the most important problem (EMIP). EMIP is a dichotomous measure that represents whether the respondent mentioned the economy as the most important issue (1) or another issue (0). To create this measure, we used the open-ended question, "In your opinion, what is the most important problem facing the country today?" Each respondent's answer was recorded verbatim and the Annenberg Public Policy Center-coded respondent answers into 1 of 35 categories. We used only responses captured by the economy category. Altogether, 42% of all respondents cited the economy as the most important problem, the most common response. Finally, because it is a newsroom norm across outlets to report the closing numbers of the stock market, to account for any variation in economic coverage because of changes in the stock market, we included the average Dow Jones closing numbers as a control. More details on variable coding can be found in Appendix A.

To build our data set, we merged the individual-level EMIP measures for viewers of that source with economic coverage measures from that source measured in seconds using weekly date of interview and date of airing. In other words, coverage of the economy on Fox News over time was matched with Fox viewers' perception that the economy was the most important issue over time; this was done for each of the outlets. To match viewers with their preferred source, we used the NAES question asking viewers to cite their primary source for news. Although a primary source measure was not ideal—because it estimated the effects of coverage on viewers who watched one day a week with viewers who watched

⁶ The total number of interviews per week was 1,247—the average interviews per week by source do not add up to this total because some weeks respondents did not watch that source, or did not watch television.

seven days a week—given the notoriously unreliable nature of self-reported exposure measures, it was a reasonable alternative (Prior, 2009). In addition, this measure of media exposure has been used in previous studies of partisan media effects on public opinion (Morris & Francia, 2009; Smith & Searles, 2014; Stroud, 2011). Also, given our focus on a single issue, if changes in coverage on a preferred source preceded changes in viewer attitudes, this provided for a suitably conservative test. Given our interest in whether the directionality of effects would hold true in today's current fragmented media environment, broadly, we believed this to be an appropriate approach. However, we hope that future work teases out the effects of amount of exposure and content of coverage per source.

Using measures of economic coverage by source matched with attitudes of viewers by source allowed us to parcel out source-specific agenda setting and test H3 (that partisan news outlets have distinct agenda-setting effects). To examine big picture agenda shifts, we also matched overall weekly economic coverage (summed measure in seconds of each sources' coverage combined) to aggregate perceptions of EMIP. This overall measure allowed us to test H1 and H2, or the traditional model of agenda setting and public agenda-setting alternative model, both of which examined the media agenda collectively. The data were collapsed by week. The week was both a methodologically appropriate choice as it gave us enough observations for time series analysis (Green, 2008), but also theoretically appropriate as it allowed us to capture shifts in issue attention at the agenda level without picking up noise from daily shifts due to mimicking, or outlets chasing other outlets (Boydston, 2013).

Relying on this combined content and individual-level data collapsed by week, we examined aggregate attitudes toward the economy and economic coverage by outlet and overall coverage over time. As we were interested in the potentially bidirectional effects of coverage and attitudes over time, we used multivariate time series analysis (VAR), which enabled us to model the dynamics between more than one time series while allowing for interdependence between the series. The VAR approach allowed us to evaluate the effects of these two sets of matched observations over time—attitudes toward the economy and economic coverage by source—without imposing directional restraints. This was an important element in our attempt to test our hypotheses as a VAR relaxed assumptions that would otherwise have restricted our ability to investigate causality. Rather than forcing the causal arrow and then modeling the data, we allowed the two series to be endogenously related (Brandt & Williams, 2007), enabling us to explain the amount of individual interest in the economy using previous values of economic coverage overall and by source, controlling for previous values of interest in the economy and vice versa. In other words, we investigated whether the average number of respondents who reported the EMIP affected (H2) or was affected by economic coverage in seconds overall (H1) or by source (H3).

Before estimating the models, we took several steps to prepare the time series data (Romer, Kenski, Winneg, Adasiewicz, & Jamieson, 2006). First, visual inspection of autocorrelation and partial correlation plots suggested nonstationary properties and the need for data to be transformed to first differences. To confirm, we additionally conducted augmented Dickey-Fuller, Kwiatkowski-Phillips-Schmidt-Shin, and Phillips-Perron tests to assess stationarity. With the exception of network television coverage by week and each of the source-specific audience attitude series, each series contained a unit root and was differenced. After whitening, the lag length for the VAR model was determined using model

selection criteria, specifically the Akaike information criterion and the Hannan and Quinn information criterion, which suggested that three weekly lags were appropriate for each of the models estimated.⁷

It was intuitive to expect at least one weekly lag when it came to the effect of economic coverage on individual attitudes toward the EMIP, given that coverage needs time to influence viewers' attitudes. However, we also had theoretical reasons to believe that when institutional incentives shift media attention to a big story, as the economy was in 2008, the agenda is best characterized by momentum, a process that may unfold over weeks and, thus, is not appropriately captured by one lag (Boydston, 2013). Other works on agenda setting use similar lag periods (Wanta & Ghanem, 2000; Wanta & Hu, 1993). Use of lags is an advantage of the VAR approach as it controls for history by including lagged values of the dependent variable regressed on itself and on lagged values of the other dependent variables in the system. As VAR models often suffer from high multicollinearity, making the coefficients difficult to interpret, we relied on postestimation Granger causality tests for each VAR model to make causal claims. Granger causality informed us whether the past values of one series helped predict another series (Freeman, 1983). Specifically, a series is said to Granger cause another series if it can be better predicted using past values of both series. Granger causality is especially well suited to VAR models because of its great flexibility.

Results

As a first cut at the data, we looked at whether the percentage of viewers by source varied in their naming of the EMIP, as we might expect if partisan media set the agenda (H3). If the agenda were set by news media in general (H1), then we would expect to see the percentage of viewers for each source that cites the EMIP to be similar. Figure 1 shows the percentage of the audience for each television news outlet—broadcast, CNN, Fox News, and MSNBC—that named the EMIP. The viewers of all sources became more likely to think the EMIP as time went on. Notably, the Fox News audience was the least likely to think the EMIP, relative to viewers of MSNBC, CNN, and broadcast networks, all of which were likely to cite the EMIP at similar rates. This initial examination suggests that it is not partisan news that has unique agenda-setting effects as predicted by H3, but Fox News that is unique.

⁷ These model selection criteria are commonly used in both economics and policy analysis, and, thus, we followed suit (Lutkepohl, 1993). We additionally conducted sensitivity analyses with models including lags up to 10 weeks; the relationships proved stable.

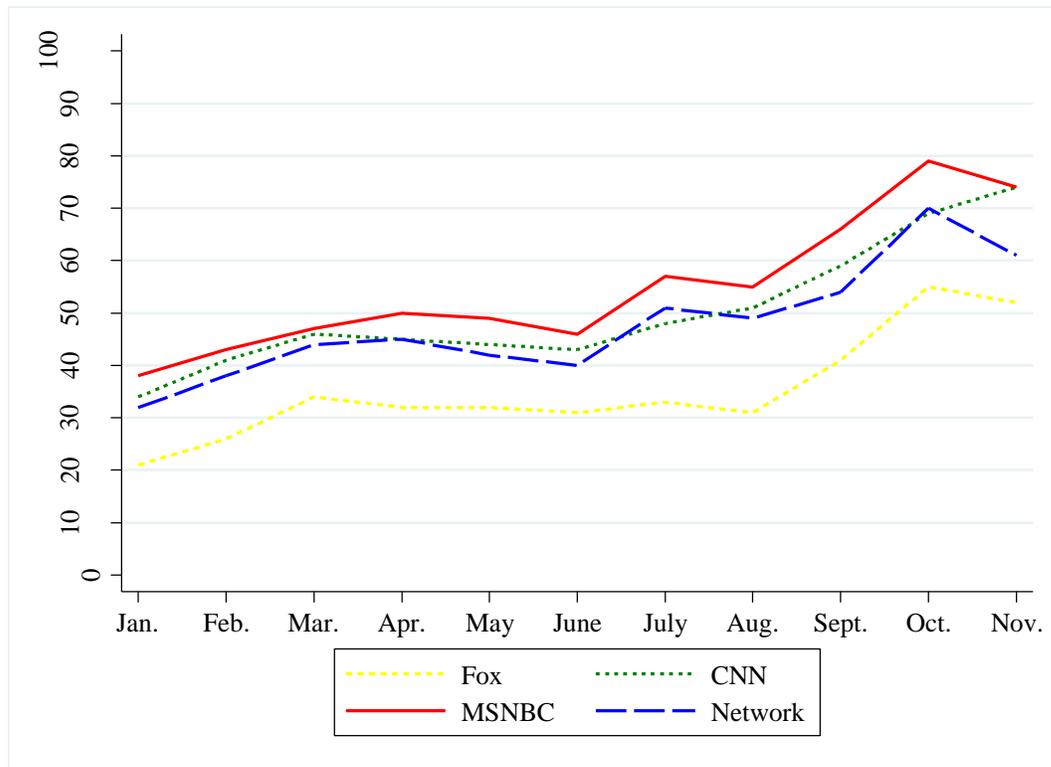


Figure 1. Percentage of viewers naming the economy as the most important issue over time.

Figure 2 depicts average weekly coverage of the economy in seconds by source over time. On visual inspection, it is obvious that with the exception of broadcast television, most sources' coverage of the economy varied little for the most part. A notable shift in coverage occurred in the 38th week, March 2008. This spike corresponds with the Bear Stearns buyout, decreasing housing prices, increasing gas and food prices, and subsequent increased coverage of all of these economic indicators by the news media. Noticeably, all three cable television networks were more similar in their level of economic coverage than not, whereas broadcast television covered the economy more often and more erratically.

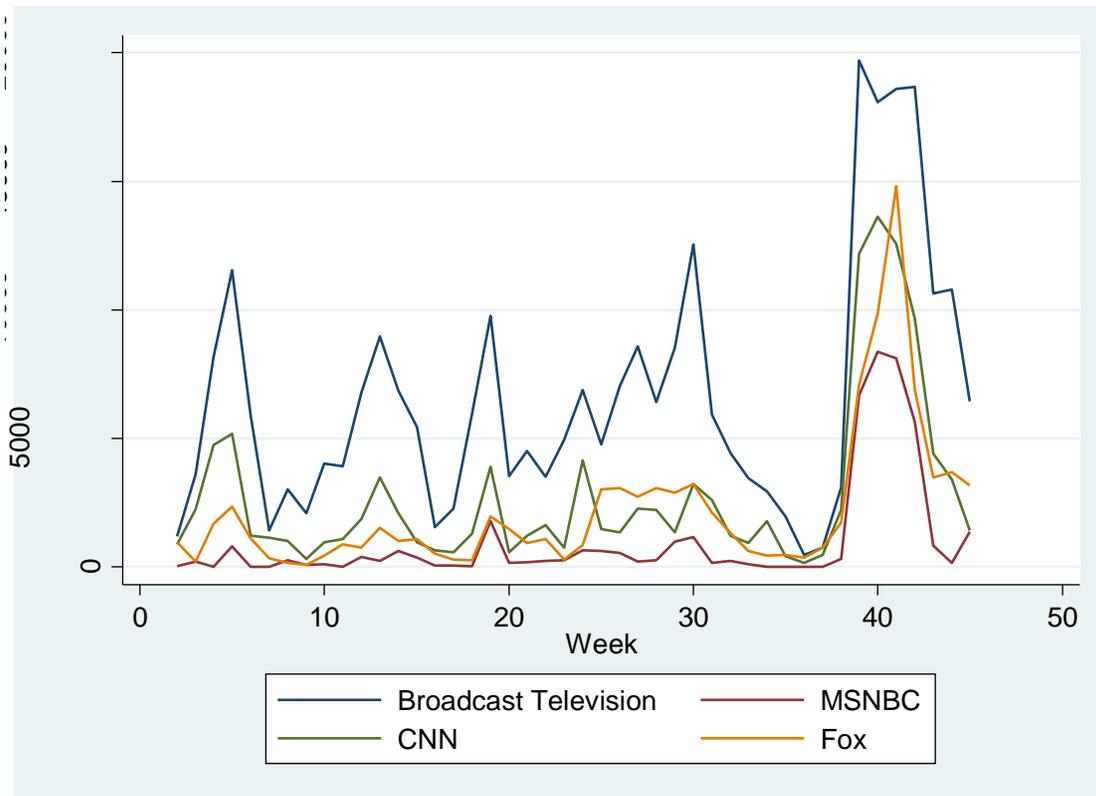


Figure 2. Weekly average economic coverage in seconds by source.

Overall, the patterns of coverage seem to reflect uniformity between sources, and audience perceptions of the EMIP also seem to reflect similarity, with the exception of Fox News. Although these results paint an interesting picture of the 2008 economic coverage, an important condition for agenda setting is establishing that coverage by the media precedes changes in viewer attitudes rather than the reverse. Thus, for a more robust test, we examined the directionality of effects. In other words, did change in coverage of the economy overall affect the EMIP (H1) or vice versa (H2)? Or were the agenda's effects distinct for partisan outlets (H3)? To test for these effects, we used VAR, which allowed us to examine variation in media coverage in tandem with variation in audience attitudes without imposing constraints on the directionality of these relationships.

To test H1 and H2, the first VAR model looked at variation in all viewers' perception of the EMIP and overall coverage of the economy in seconds, controlling for fluctuations in the economy as measured by average Dow Jones closing numbers. As our primary interest was in the Granger causality tests, we report these results in Table 1.⁸ H1 predicted a causal arrow from overall economic coverage to the EMIP,

⁸ Researchers typically discuss postestimation results, such as Granger tests, rather than multivariate time series analysis given that the latter is both prone to multicollinearity and difficult to interpret.

whereas H2 predicted the reverse. The results do not support traditional agenda setting (H1), but do suggest that the public sets the agenda (H2): changes in the public's perception that the EMIP Granger caused overall coverage of the economy. Recall that given the VAR model's strong control for history, a significant block of Granger coefficients on the dependent variable suggests that it was the inertia, or accumulative effects of the public's perception that the economy was the most important issue, that affected coverage. These results offer tentative evidence that television news outlets pay attention to viewer interests. This is perhaps not surprising given that early agenda-building work suggests that matters of the economy are particularly likely to make the media agenda follow public concern (Behr & Iyengar, 1985). Here, coverage of the economy and perceptions of the economy as important seem reciprocal.

Table 1. Granger Causality Tests for Overall Economic Coverage.

Coefficient block	χ^2	Dependent variable
Overall economic coverage	0.33 (.57)	EMIP
Dow	0.67 (.41)	
Overall economic coverage	24.92 (.00) →	Dow
EMIP	0.71 (.40)	
EMIP	4.93 (.03) →	Overall economic coverage
Dow	0.38 (.54)	

Note. EMIP = economy is the most important issue. The results presented here are Granger causality tests obtained postestimation of a multivariate time series analysis with three weekly lags in which joint hypothesis tests were conducted on blocks of lagged coefficients on each series; the arrow indicates Granger causality from the coefficient to the dependent variable. Numbers in parentheses are *p* values. There were 41 weekly observations in these series.

Next, we broke down outlet-specific coverage of the economy and viewers' belief in the EMIP by source to test H3. We estimated a VAR model for each source in which we simultaneously modeled coverage by source, overall coverage, and public attitudes of issue importance by source for broadcast television, CNN, MSNBC, and Fox News, controlling for fluctuations in the economy as measured by average Dow Jones closing numbers. Although H2 speaks only to the effects of partisan news outlets, MSNBC and Fox News, and their viewers, we estimated models for each specific source to give a complete picture.

Table 2. Granger Causality Tests for Economic Coverage by Source.

Coefficient block	Broadcast	CNN	MSNBC	Fox	Dependent variable
Overall economic coverage	1.74	0.01	2.82* →	7.79** →	
Economic coverage by source	0.38	0.05	0.92	7.57* →	EMIP for viewers
Dow	7.46* →	0.23	0.02	7.68* →	
Overall economic coverage	5.55	2.96* →	0.22	20.79*** →	
EMIP for viewers	7.93** →	0.0009	0.92 →	3.56	Economic coverage by source
Dow	2.32	2.56	0.41	4.98	
Economic coverage by source	2.51	0.49	0.50	2.49	
EMIP for viewers	5.22	0.43	0.54	4.60	Overall economic coverage
Dow	0.17	0.90	0.42	2.21	
Overall economic coverage	7.67* →	3.62* →	1.35	14.36** →	
Economic coverage by source	18.37*** →	0.22	1.32	14.51** →	Dow
EMIP for viewers	2.43	2.20	1.32	1.34	

Note. EMIP = economy is the most important issue. The results presented here are Granger causality tests obtained postestimation of a multivariate time series analysis with three weekly lags in which joint hypothesis tests were conducted on blocks of lagged coefficients on each series; the arrow indicates Granger causality from the coefficient to the dependent variable. Each of the middle four columns is an estimate derived for outlet-specific coverage and outlet-specific viewers. Coefficients are chi squares. There were 41 weekly observations in these series.

* $p < .1$. ** $p < .05$. *** $p < .001$.

Granger causality tests for each model by source are presented in Table 2. For H3 to be supported, we would expect there to be significant causal relations between Granger coefficients for Fox News and MSNBC's economic coverage on the EMIP for viewers of Fox News and MSNBC, respectively. However, the results suggest that this relationship was only supported for Fox News viewers and not MSNBC viewers. A significant block of Granger coefficients on the dependent variable suggests that it was Fox News' economic coverage that affected Fox viewers' perception about the EMIP. Taken alongside Figure 1, which suggests that Fox News viewers were less likely to think the EMIP when compared with MSNBC and CNN viewers despite similar levels of coverage (see Figure 2), the biggest takeaways seem not to be the effects of partisan outlets on the agenda of their viewers, but of the effects of Fox News specifically.

It is also noteworthy that whereas only Fox News set the agenda for its viewers, viewers of both Fox and MSNBC were affected by overall economic coverage, offering partial support for H1. When we examined the relationships presented by traditional models of agenda setting at the aggregate level, we found no evidence of influence. However, when we parceled out viewers by source, we did find a significant relationship between overall economic coverage and the EMIP for viewers of partisan media. At first blush, this is a surprising relationship given that we might expect partisan viewers to be trapped in their respective echo chambers. However, observational data find that partisan viewers consume a wide range of news media (Holbert et al., 2010; Holbert, Hmielowski, & Weeks, 2012). In addition, Garret (2009a, 2009b) found that in an online media environment, readers do not necessarily avoid or abandon counterattitudinal content. And whereas more recent work suggests that Republicans are more likely to avoid content that is primarily counterattitudinal, our results suggest that outside of the lab the influence of overall media may persist for partisan news viewers (H1). More work is needed to understand the contexts in which traditional agenda setting continues among audiences that selectively expose and avoid.

These results offer support for alternative models of agenda setting. When we examined economic coverage in the aggregate, we found no evidence of traditional agenda setting (H1), but we did find evidence that the public sets the agenda (H2).⁹ The only instance in which we found that overall media influenced viewer attitudes was audience-specific: MSNBC and Fox News viewers only. These results suggest that traditional agenda-setting effects persist, but only for those interested enough to watch news that matches their preferences.

Finally, we have partial support for H3, which posited that partisan media set the agenda for their viewers: Only Fox News wielded this agenda-setting power. When examined alongside the descriptive data, Fox News coverage seems to emerge as a unique case: Fox News viewers were the least likely to cite the EMIP and Fox News set the agenda for its viewers, while on the flip side, Fox News viewers were also influenced by the overall media agenda. Altogether, in the age of niche news, these results suggest that although we increasingly accept the premise of selective exposure, we should not necessarily downplay the continued role of the mainstream media agenda. Rather, we offer this update: Agendas may vary from outlet-to-outlet as viewers opt in to their preferred news source, but these viewers are still influenced by overall media coverage. In turn, collectively, viewers have an influence on overall media coverage.

⁹ Interestingly, although an average of Dow Jones closing numbers was included as a control and was not central to our analysis, in this model, its significance is suggestive. For both broadcast viewers and Fox viewers, average Dow Jones closing numbers Granger caused their perception that the economy was the most important issue, whereas for MSNBC viewers, it was overall coverage of the economy that Granger caused their perception of economic importance. Perhaps Fox and broadcast viewers are more responsive to exogenous measures of the economy than their peers who watch MSNBC. Another possible explanation is that both Fox News and broadcast viewers tend to be older, and this demographic is more tuned in to fluctuations in the stock market than their younger peers.

Discussion

The power of the news media to set the public agenda has been a cornerstone of media effects research for nearly half a century. However, agenda-setting theory has been called into question given sociotechnological changes in our media environment (Bennett & Iyengar, 2008). In line with calls to reexamine the media's agenda power, we have attempted to test traditional agenda-setting theory and two alternatives—consumer and partisan media driven agenda setting—which account for the fragmentation of the news media and the return of selective exposure (Stroud, 2008). We used a unique set of circumstances, namely coverage of the economic collapse in 2008, to isolate the effects of both overall and source-specific coverage on public attitudes. To that end, we posited three hypotheses to flesh out the ways in which agenda setting might manifest in the 21st-century media environment. We then tested these hypotheses using data from content analysis of television news programs and rolling cross-sectional over-time survey data.

We found little support for agenda setting as we know it, as only Fox News and MSNBC viewers were affected by overall economic coverage as a traditional agenda-setting model would predict. In an age of rapid-fire news, our data suggest that it is the viewers who opt in to partisan news streams who are most likely to be influenced by the overall agenda: It may be the case that these viewers are more likely to watch multiple outlets and therefore resemble viewers from the traditional model in their agenda. Indeed, observational data suggest that these viewers are nuanced in their consumption patterns (Holbert et al., 2012), and experimental data suggest that online media consumers are unlikely to avoid or abandon challenging information when given media choice (Garrett, 2009a, 2009b). Regardless, critics of the partisan echo chamber may take some comfort in our results that demonstrate that these viewers are still influenced by the overall media agenda.

When we look for outlet-specific agenda setting, again Fox News significantly affected its viewers. This casts additional support for studies that have found that Fox News' coverage of climate change or the Iraq War, for example, have a significant effect on viewers (Feldman et al., 2011; Stroud, 2011). This relationship was not replicated by viewers of CNN and MSNBC. Thus, our results show that Fox News viewers' are influenced by their outlet and the overall media agenda. This dual effect—outlet-specific and traditional agenda setting—may offer some balance to the one-sided coverage of Fox News. It also echoes work suggesting that viewers may prefer proattitudinal information, but not necessarily avoid opinion challenging information (Garrett, 2009a), although recent work suggests that this varies by partisanship (Garrett & Stroud, 2014). At least with Fox News, viewers may be influenced specifically by their preferred outlet's agenda, but they are not immune to influence from the media overall. In addition, these results build the case (Muddiman et al., 2014) that partisan news audiences may hold varying agendas.

We also found that consumers have an influence on the agenda, as predicted by H2. Traditional agenda-setting theories suggest a simple and direct relationship between the overall agenda and individual attitudes. Our results offer some support for a reciprocal influence between the public's agenda and the media, reminiscent of the early literature on agenda building. This result is somewhat intuitive given that changes in media technology have made it easier for consumers to convey their preferences

across industries, whether for a performer on *American Idol* or toothpaste. Why would news outlets be any less responsive to consumer demands?

Our methodological approach offers both benefits and limitations. In the classic typology set forth by McCombs and colleagues (2011), our study falls into the single-issue approach category (see, e.g., Winter & Eyal, 1981). We took advantage of a singular issue environment (the economy) to increase our explanatory power and used over-time VAR modeling to tease out the media's dynamic relationship with the public. However, the unique case that allowed us to test these relationships was just that: unique. Additional case studies are needed using other issues to better understand the generalizability of these results. Ultimately, numerous empirical approaches using many issue contexts will enable us to weave together an understanding of the complex media environment; we hope this study offers one piece of that puzzle.

Taken together, our results suggest that scholars need to revisit the role of viewers' perceptions of issue importance in building the media's agenda. Most important are the effects that Fox News has on its audience, an effect not replicated for MSNBC. As scholars continue to flesh out the effects of a partisan press in the age of cable television, our research demonstrates the importance of parceling out the effects of source-specific coverage on viewers.

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Appendix A

Codebook <i>Variables</i>	
EMIP	In your opinion, what is the most important problem facing the country today? Binary variable indicating that respondent said the economy was the most important problem facing the country. Response was open-ended in the RCS survey.
Time to Election	Months from beginning of survey, starting in December 2007, (1) through November 2008 (12).
Primary Television Source	In the past week, from what television program did you get most of your information about the 2008 presidential campaign? [Most respondents named a news source, but those mentioning programs were coded as the source.]
Fox News	Preference for Fox News; respondents coded 1 if they watched Fox News, 0 for all others.
CNN	Preference for CNN; respondents coded 1 if they watched CNN, 0 for all others.
Broadcast	Preference for Network Television; respondents coded 1 if they watched ABC, CBS or NBC, 0 for all others.
MSNBC	Preference for MSNBC; respondents coded 1 if they watched MSNBC, 0 for all others.