

# **Economic Perception and Cable News: Evidence from Panel Data, 2016–2020**

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*Honors Thesis submitted in partial fulfillment of the requirements for Graduation with Distinction in  
Economics in Trinity College of Duke University.*

Duke University  
Durham, North Carolina  
2025

## **Acknowledgments**

First and foremost, I want to thank my mother for her support and encouragement. Her sacrifices have carried me through these four years at Duke, and her strength has been a constant source of inspiration.

I am deeply appreciative of my thesis advisors, Professors Michelle Connolly and Bocar Ba, for their thoughtful guidance on this project and for mentoring me through this thesis. Professor Connolly was especially patient with my many questions and pushed me to think more deeply about the broader theoretical implications of my work. Professor Ba, alongside Professor Peter Arcidiacono, provided exceptional mentorship throughout my time in DEAL and played a pivotal role in shaping my academic path. They helped me discover my passion for economics and provided me with the tools and training that have been essential to my growth as a scholar.

I am also deeply thankful to Professor David Banks, who has mentored me throughout my four years at Duke and whose freshman-year class first sparked my interest in quantitative methods and set me on the path I follow today.

I would be remiss if I did not mention my thesis seminar peers, who have helped me grow intellectually through their insightful feedback. I am also thankful for the support of my friends — especially Michelle Schultze — who provided steady encouragement, patience and advice through the many challenges along the way.

## Abstract

This paper employs a panel approach to investigate the role of partisan cable news in shaping economic perceptions using the VOTER Survey dataset (2016–2020) and sentiment-scored transcripts from Fox News, CNN and MSNBC, examining how sentiment and coverage intensity interact with individuals’ viewership patterns to affect macroeconomic assessments. Findings suggest changes in exposure to cable news affects viewers’ economic perceptions, with effects varying by network, viewership patterns, time horizon and primetime exposure. Fox News exhibits particularly polarizing influence, with positive shifts in exposure improving economic outlooks among its viewers while worsening perceptions among non-viewers. Effects are moderated when individuals do not exclusively watch Fox News, suggesting a countervailing effect to watching multiple, ideologically diverse channels. Strikingly, non-primetime exposure to Fox’s coverage is more consistently associated with shifts in sentiment than primetime exposure, even among non-viewers — indicating that lower-profile programming may diffuse more broadly into the ambient media environment. In contrast, CNN’s economic coverage shows limited or short-lived influence, and MSNBC’s effects are more time-sensitive and contingent on viewership. These findings underscore the persistent influence of cable news in shaping public economic perceptions and suggest that media effects are not uniform across formats or audiences.

*JEL Classification: L8, L82*

Keywords: Cable news; Consumer sentiment; Sentiment analysis

## 1. Introduction

By most metrics, the U.S. economy has shown a robust recovery from the global disruption caused by the COVID-19 pandemic in 2020. Following an inflation spike in early 2022 that peaked at 9.1% in June, inflation steadily declined toward the Federal Reserve's 2% target through 2024, while the unemployment rate has remained consistently below 4.5% since November 2021 (U.S. Bureau of Labor Statistics, 2025; World Bank, 2025). The U.S. economy's recovery has also outpaced that of its G10 peers, with U.S. real gross capital formation growing 14% above pre-pandemic levels compared to a 7% decline in the measure across the eurozone during the same period (Brooks & Harris, 2024).

Still, Americans remained unexpectedly pessimistic about the state of the nation's macroeconomy. The University of Michigan's Consumer Sentiment Index has historically closely aligned with consumer spending and other widely recognized national economic indicators since it was first collected in the 1940's — but from 2022 to 2024, it fluctuated around or below the same levels observed during the Great Recession of 2009, when unemployment peaked at 10% (University of Michigan, 2025). Other polls conducted over a shorter collection period have shown similar results: In a May 2024 poll, the Pew Research Center reported that just 23% of U.S. respondents rated the country's economic conditions as “excellent” or “good” — a figure unchanged from April 2020, during the height of the COVID-19 pandemic (Pew Research Center, 2020, 2024a). In April 2020, 43% of Gallup respondents rated national economic conditions as “poor.” From March 2022 through January 2024, that share consistently ranged between 42% and 52%, indicating a sustained period of negative public sentiment even as the U.S. economy was recovering from the pandemic-induced crisis (Evans, 2025).<sup>1</sup>

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<sup>1</sup> This disconnect between negative consumer sentiment and traditional economic indicators has generated substantial public discourse, prompting economic commentator Kyla Scanlon to coin the term “vibecession” to describe the phenomenon (Scanlon, 2022).

The Brookings Institution highlights three leading theories in the academic literature for the post-pandemic disconnect between consumer sentiment and macroeconomic conditions: (1) dissatisfaction over the current state of the economy and future economic opportunities, (2) general dissatisfaction tied to non-economic concerns, and (3) the influence of negatively biased news sources (Harris & Sojourner, 2024). The hypothesis that negatively biased news coverage contributes to persistently low consumer sentiment is particularly compelling, especially considering the increasingly pessimistic tone of economic reporting over the past decade (van Binsbergen, Bryzgalova, Mukhopadhyay & Sharma, 2024). More pertinent to the present analysis, however, is the observation that mismatches between individuals' perceptions of the national economy and objective macroeconomic indicators long predate both the COVID-19 pandemic and the more recent "vibecession." For example, while consumer sentiment among political independents tends to track national trends relatively closely, partisan sentiment generally shifts in line with changes in presidential administration, suggesting a strong identity-based component to economic perceptions (Brady, Ferejohn, & Parker, 2022; Hsu, 2024). Additionally, survey data indicate that Americans are, on average, more optimistic about their personal financial situations than about the broader economy, indicating a perception gap between micro- and macro-level assessments (University of Michigan, 2025).

Using a panel approach, the present paper considers the impact of partisan media on public perception of the macroeconomy by investigating how cable news programs from the three major U.S. cable news networks — Fox News, CNN, and MSNBC — report on economic indicators and the relationship it has to consumer sentiment from 2016 to 2020.

Cable news is a particularly ripe area for research on media and economic perceptions for several reasons. Over the past decade, print newspaper circulation has declined sharply. Fewer than 5% of Americans now report a preference for print news, compared to 30–35% who cite television as their

preferred source. Even among digital newspaper readers, engagement has fallen: The average time spent per visit to newspaper websites declined from 2 minutes and 30 seconds in 2014 to just 1 minute and 30 seconds by 2022, suggesting increasingly fragmented and superficial consumption of written news. In contrast, cable news retains a more dedicated audience. Viewers spend an average of 25 minutes per day watching, with the most engaged segment averaging over an hour daily (Pew Research Center, 2023).

At the same time, the cable television market is undergoing a transformation. Roughly five million Americans cancel their cable subscriptions each year, prompting networks to launch streaming services to retain viewership (Mullin, 2023). These changes coincide with increasing polarization in cable news content and a relative lack of regulatory oversight. Unlike broadcast networks, cable news channels are not subject to the Federal Communications Commission's rules against news distortion. The Federal Communications Commission's longstanding regulation barring broadcasters from "news distortion"<sup>2</sup> only applies to "over-the-air broadcast (local TV and radio stations) news." Thus, "cable news networks ... or any other non-broadcast news platform are outside of the FCC's jurisdiction with respect to news distortion" (Federal Communications Commission, n.d.). This regulatory gap enables greater editorial freedom, which may contribute to the growing ideological divergence documented by Kim, Lelkes and McCrain (2022) across networks like Fox News, CNN and MSNBC. Finally, research on media bias and economic sentiment has focused on print journalism due to data limitations. However, advances in machine learning and sentiment analysis now allow for more systematic study of televised content, opening new avenues for analyzing how cable news shapes public perception in an increasingly polarized information environment.

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<sup>2</sup> Defined as a distortion in accuracy or bias that "must involve a significant event and not merely a minor or incidental aspect of the news report" (Federal Communications Commission, n.d.)

## 2. Literature Review

The present study contributes to three strands of the economic literature: the analysis of economic sentiment, the impact of partisan media on individual attitudes, and the role of media in shaping perceptions of macroeconomic conditions.

Recent advances in the study of media bias have been driven by improved access to rich textual data and computational tools for sentiment analysis. While much of the early literature focused on print media (e.g., Gentzkow & Shapiro, 2010), subsequent work has extended these methods to sources ranging from newly available cable news transcripts (Kim et al., 2022) to social media environments characterized by ideological segregation, also known as “echo chambers” (Gao, Liu, & Gao, 2023). Sentiment analysis, in particular, has evolved into a powerful method for quantifying the tone of media coverage across diverse platforms, especially as more recent work has emphasized the importance of domain-specific lexicons instead of general-purpose dictionaries. Particularly pertinent to the present study is the Loughran-McDonald (LM) sentiment lexicon, developed specifically for financial and economic texts after Loughran and McDonald (2011) demonstrated that the widely used Harvard Dictionary frequently misclassifies terminology in financial contexts. The LM lexicon has since been repeatedly updated and applied in a growing body of research, including studies of Brexit-related news coverage (Hassan, Hollander, Lent & Tahoun, 2024) and Federal Reserve press conferences (Gorodnichenko, Pham & Talavera, 2021). Expanding upon this foundation, Shapiro et al. (2022) develop sentiment-scoring models designed specifically for newspaper content, further advancing the measurement of economic sentiment in text.

A complementary strand of literature investigates the causal impact of partisan media on election outcomes, policy and individual political attitudes. Several studies have examined the so-called “Fox News effect” of the cable network on election outcomes, beginning with DellaVigna and Kaplan (2007),

who show that towns where Fox News became available on cable by the year 2000 experienced a significant increase in Republican vote share in the 2000 presidential election. Building on this work, Martin and Yurukoglu (2017) exploit quasi-random variation in the channel positioning of Fox News in cable lineups as an instrument for viewership, finding that increased exposure to the network shifted voting behavior in favor of Republican candidates across multiple election cycles. More recently, Ash et al. (2021) expand the analysis to include additional cable news networks and a broader set of elections. Ash and Galletta (2023), using the same dataset as Martin and Yurukoglu (2017), find via an instrument approach that exposure to Fox News reduces local governments' revenues and expenditures. Other studies have focused on cable news channels' effects on individuals. Schroeder and Stone (2015) find that individuals exposed to Fox News were more likely to possess knowledge about issues frequently covered by the network, particularly those aligned with Republican priorities. In a more recent field experiment, Broockman and Kalla (2023) offered regular Fox News viewers financial incentives to watch CNN for four weeks and observed measurable short-term shifts in policy attitudes and issue salience. However, these effects largely dissipated after the intervention ended, suggesting that while partisan media can influence beliefs, the persistence of such effects may be limited. Other empirical studies have shown that news and social media content can affect political views and even elections, including Barberá (2020) and Allcott and Gentzkow (2017).

More recently, a nascent literature has begun to examine the role of media in shaping perceptions of economic conditions. This literature focusing on economic news sentiment provides evidence that newspapers have been reporting more negatively on the economy in the past decade (van Binsbergen et al., 2024) and suggests that there exists some relationship between negative economic reporting and negative consumer sentiment. Macaulay and Song (2023) analyze Twitter and newspaper data to suggest that exposure to narratives forecasting an imminent recession leads to more pessimistic economic



expectations, with these effects spreading even to individuals who are only indirectly exposed to the content. Using their economic sentiment index to analyze economic and financial newspaper text, Shapiro et al. (2022) found that news sentiment is highly predictive of the University of Michigan Sentiment Index and that positive sentiment shocks increased consumption, output and interest rates and temporarily reduced inflation, consistent with the findings of Barsky and Sims (2012).

This paper offers a unique contribution to these strands of academic literature for three reasons. First, I broaden the scope of media effects research by offering new evidence on how ideological information environments may influence perceptions of macroeconomic conditions rather than political preferences alone. Second, the paper introduces a novel exposure metric that integrates both the tone and proportion of economic coverage, thus offering a more nuanced understanding of media influence. Finally, the paper analyzes the role of cable television news in shaping economic sentiment during a period of intensified media fragmentation and political polarization, specifically in the years following the 2016 U.S. presidential election.

The rest of the paper proceeds as follows. Section 3 introduces the theoretical framework, combining a market-level model of media bias with an individual-level model of media responsiveness to explain how partisan media environments shape economic sentiment. Section 4 describes the three datasets used in the analysis (the VOTER survey, the Internet Archive TV News Closed Caption Corpus, and the Federal Reserve Bank of Philadelphia's Real-Time Data Set) and outlines stylized facts (Section 4.4); Section 5 presents the empirical methodology. Section 6 reports the main results, beginning with baseline panel regressions (Section 6.1), then expanding to longer time horizons (Section 6.2) and primetime versus non-primetime coverage (Section 6.3). Section 6.4 discusses the study's limitations and directions for future research. The paper concludes with a summary of findings and their implications.

### 3. Theoretical Specification

To interpret these dynamics, I introduce two theoretical frameworks that jointly account for the behavior of media firms and the responsiveness of individuals to media content. The first, Gentzkow and Shapiro (2006)'s market-level model, formalizes how media bias can emerge in competitive environments where consumers hold divergent prior beliefs and firms compete for credibility. The second is an individual-level model that conceptualizes changes in economic sentiment as a function of both media exposure and lived economic experience. Together, these frameworks provide the conceptual foundation for understanding how partisan information environments may give rise to systematically divergent economic perceptions, and how individual heterogeneity may mediate these effects.

#### 3.1. *A market model of media bias*

Gentzkow and Shapiro (2006) develop a formal Bayesian model in which media bias arises as a rational strategy by profit-maximizing firms seeking to build a reputation for accuracy among consumers with heterogeneous priors. The model, elaborated on in Gentzkow et al. (2014), asserts that media firms slant their coverage toward their audience's preexisting beliefs to cultivate a reputation for quality because consumers who are uncertain about the credibility of the news source are more likely to perceive a source as higher quality if its reporting aligns with their own beliefs. Consequently, media firms adjust their content to match their customers' views to strengthen their reputation for accuracy.

In this model, there exists a true state of the world  $\theta \in \{L, R\}$ , and two equally large groups of consumers  $L$  and  $R$  with differing prior beliefs. Group  $L$  holds that the true state of the world is  $1 - \theta$ , while group  $R$  holds that the true state of the world is  $\theta$ , when  $\theta > \frac{1}{2}$ . A media firm observes a private signal  $s \in \{L, R\}$ , which is informative of  $\theta$ , and chooses a report  $r \in \{L, R\}$  to publish. Consumers cannot observe  $s$ , only  $r$ , and must infer both the firm's signal precision and its reporting strategy from  $r$

alone. The firm's payoff depends on the fraction of consumers who believe it is "high-quality" — that is, likely to report truthfully when it receives an accurate signal. Importantly, a consumer is more likely to judge a report as truthful if it aligns with their prior beliefs, introducing an incentive for the firm to slant its reporting toward the preferences of its audience. In equilibrium, the firm may distort its report (e.g., report  $r = R$  even if  $s = L$ ) if doing so increases the perceived likelihood of accuracy among consumers with strong priors, with the probability of some "garbling" of the signal  $l$  denoted as  $\sigma_l(\hat{r})$ . Consumers may update firms with feedback  $X \in \{L, R, 0\}$ , with  $\mu \in \{0, 1\}$  representing the probability of feedback.

The authors denote three types of equilibria in a game with heterogeneous priors and two firms. There can emerge an effective monopoly, in which one firm reports honestly, while the other firm slants its reports with positive probability. All consumers read only the honest firm, which dominates the market by earning a superior reputation for accuracy. Second, there can exist an honest equilibrium, in which both firms report honestly and consumers divide evenly among them. Finally, for any parameter values such that  $\sigma_l(\hat{r}) > 0$ , a segmented equilibrium may exist in which one firm is read only by consumers in group  $R$  and biases its reports toward the state  $\hat{r}$  that aligns with their beliefs, while the other is read only by group  $L$  consumers and slants toward  $\hat{l}$ . As beliefs ( $\theta$ ) become more extreme, the authors argue, firm reporting strategies diverge; as the probability and strength of feedback ( $\mu$ ) increases, firm reporting strategies tend towards honesty. For high enough  $\mu$ , there emerges an honest equilibrium because all monopoly strategies call for honesty.

Applying this model to the current cable news market, the segmented equilibrium maps well onto the existing media landscape. With the established increase in political polarization across the U.S. voter base and the popularity of partisan news, I assume that beliefs have become more extreme; that is,

$\theta$  has increased (Lelkes, 2016). At the same time, the relatively weak feedback mechanisms in cable news — where there exists a taste among viewers for like-minded news<sup>3</sup> (Martin and Yurukoglu, 2017) — imply that the feedback strength  $\mu$  remains low, limiting the reputational penalty for biased reporting. Consequently, the conditions for segmented equilibrium are sustained, and cable networks operate as ideological monopolists over their respective audiences.

### 3.2. *An individual model of media bias*

In this framework, changes in consumer sentiment are jointly determined by top-down information flows and bottom-up economic experiences. Formally, let:

- $\Delta S_i$  be the change in consumer sentiment for individual  $i$ ;
- $\Delta E_i$  be the change in exposure to economic sentiment in media content, which can be reflected through exposure to new media content or changes in the volume, proportion or framing of economic coverage on platforms to which the individual  $i$  is already exposed;
- $\Delta L_i$  be the change in locally observed economic conditions that individual  $i$  directly experiences or observes within their social or geographic proximity. This includes events such as personal job loss, conversations about financial stress with friends and family and changes in community-level prices or rents;

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<sup>3</sup> Furthermore, several studies find that viewers who consume Fox News and Fox affiliated channels are more likely to report misconceptions about the Iraq War compared to other cable and broadcast channels (Kull, Ramsay, & Lewis, 2003) and that ideological sources like Fox News and MSNBC decrease political knowledge below baseline levels (Fairleigh Dickinson University's PublicMind Poll, 2011). These findings further suggest that Fox News and MSNBC audiences exhibit lower feedback strength, as they appear less likely to cross-check information or update beliefs in response to contradictory evidence.

- $R_{exposure,i}$  be the individual  $i$ 's responsiveness to  $\Delta E_i$ , which governs the extent to which changes in  $\Delta E_i$  translate into changes in perceived economic conditions. This parameter may vary across individuals as a function of prior beliefs or trust in the media source. Let  $R_{exposure,i} \in [0, 1]$ ;
- $R_{local,i}$  be the individual  $i$ 's responsiveness to  $\Delta L_i$ . Let  $R_{local,i} \in [0, 1]$ ; and
- $\epsilon_i$  be an idiosyncratic error term.

A change in individual consumer  $i$ 's sentiment can be denoted as a function of these components:

$$\Delta S_i = f(\Delta E_i, \Delta L_i, R_{exposure,i}, R_{local,i}) + \epsilon_i \quad (1)$$

I describe two extreme cases: one in which  $R_{exposure,i} = 0$  (hereafter, known as media-inattentive consumption) and one in which  $R_{local,i} = 0$  (hereafter, known as experience-inattentive consumption). In the former case,  $\Delta S_i$  is entirely driven by individual  $i$ 's individual and local economic conditions; in the latter,  $\Delta S_i$  is entirely determined by exposure to media content. Most individuals fall between these two extremes, with  $0 < R_{exposure,i} < 1$  and  $0 < R_{local,i} < 1$ , but these extreme cases are relevant because they establish identification boundaries. By observing how  $\Delta S_i$  responds to changes in  $\Delta E_i$  and  $\Delta L_i$ , I can infer the relative magnitudes of  $R_{exposure,i}$  and  $R_{local,i}$ . In other words, if empirical data reveal that consumer sentiment reacts significantly to media sentiment even after controlling for local economic factors, then  $R_{exposure,i}$  must be non-zero. Conversely, if local economic shocks drive sentiment changes independently of media exposure, then  $R_{local,i}$  is non-zero.

Even if the market-level framework assumes relatively fixed consumer priors that shape firm strategy, evidence from Broockman and Kalla (2023) suggests that media exposure itself can temporarily shape or reinforce those priors, thereby altering  $R_{exposure, i}$ . First, it suggests that  $R_{exposure, i}$  is not entirely exogenous or fixed, but rather may be dynamic and responsive to past media exposure. This adjustment introduces a feedback loop: as media exposure  $\Delta E_i$  influences consumer sentiment  $\Delta S_i$ , it simultaneously modifies the degree to which future media content will affect sentiment by altering  $R_{exposure, i}$ . In turn, this can lead to time-varying effects where initial exposure may have a strong impact, which either amplifies or dampens the responsiveness over subsequent periods. Second, this potential endogeneity in  $R_{exposure, i}$  implies that empirical identification of the causal effect of media exposure on sentiment must account for the possibility that the weight placed on media signals evolves with the frequency or framing of news coverage. In my framework, I operationalize media exposure through  $\Delta E_i$  by measuring the percentage of “economic sentences” in news content. Finally, by allowing  $R_{exposure, i}$  to vary across individuals and over time, the model can capture heterogeneity in susceptibility to media effects — reflecting differences in prior beliefs or media trust — that may explain why certain segments of the population exhibit more volatile sentiment changes.

## 4. Data Review and Summary Statistics

### 4.1. Views of the Electorate Research (VOTER) survey.

This paper utilizes three data sources for its analysis, the first being the Views of the Electorate Research (VOTER) Survey, a longitudinal survey conducted by the University of California, Los Angeles Democracy Fund in collaboration with YouGov (2011, 2016–2020), which asked respondents

whether they watched specific programs on Fox News, MSNBC or CNN in 2011. The VOTER survey also asks respondents to rate their perceptions of the U.S. macroeconomy on a simple three-category scale ("getting better," "getting worse," and "no change").

To ensure consistency across survey waves, I select eight key demographic variables — gender, state, employment status, reported family income, political ideology, education and age at the time of the survey wave — along with the dates of the interviews recorded in the VOTER survey. I also incorporate respondents' perceptions of the national economy from all available survey years. To facilitate comparability, I standardize the VOTER variables to the most recent VOTER survey and drop the fewer than 1% of VOTER respondents whose values could not be standardized, largely due to skipped or unasked questions. Because the survey only captures media consumption at a single point in time, I assume stability in respondents' media preferences and extend those values across waves. This approach reflects prior findings that individuals tend to prefer ideologically aligned news sources (Martin and Yurukoglu, 2017), and that political ideologies are generally stable.

Summary statistics for the VOTER survey are presented in Tables B.1 through 2 in Appendix B. Table B.1 provides the total counts for the VOTER survey by the eight selected demographic variables. Table B.2 reports the mean values for respondents' perceptions of the national economy disaggregated by demographic information.

#### *4.2. Internet Archive TV News Archive Dataset.*

The paper's second source is a compilation of Closed Caption News Transcripts from the Internet Archive TV News Archive (2014–2023), curated by Gaurav Sood and Suriyan Laohaprapanon (Sood & Laohaprapanon, 2023). These transcripts are processed using the Stanford Cable News TV Analyzer, which removes commercials based on timestamps. Established in 2012, the Internet Archive's

Television News Archive preserves videos and closed caption transcripts of U.S. national television news, along with metadata on the contributing network, program name and airing time. Since Sood and Laohaprapanon’s dataset covers only 2012 to 2023, I extend the time frame by using their replication code to scrape additional transcripts from June 1, 2023 through December 31, 2024. To focus the analysis on cable news networks, I restrict the sample to programs contributed by Fox News, MSNBC or CNN, and exclude the fewer than 1% of programs without a corresponding transcript.

To analyze the economic content within cable news broadcasts, I extracted a subset of “economic sentences,” defined as sentences containing specific economic keywords along with the three subsequent sentences. The keywords were carefully selected to avoid overlap with non-economic contexts. For instance, terms like “interest” were excluded because they can appear in phrases unrelated to the state of the macroeconomy, such as “expressing interest” in a topic. Instead, I include terms like “NASDAQ,” which are reliably indicative of economic discourse. This approach minimizes noise and ensures that the extracted content is narrowly focused on economic topics. Overlapping sentences — that is, if the four sentences collected from the prior group of economic sentences overlap with another group of economic sentences — were grouped into a single, continuous segment to ensure completeness. An illustrative example of this process and the list of words used is provided in Appendix A.

Using the publicly available replication package from the San Francisco Federal Reserve, I replicate the ENSI score developed in Shapiro et al. (2022). This methodology, derived from the LM and Hu and Liu’s (2004) lexicon, generates sentiment scores for inputted text files, producing sentiment scores ranging from -1 (highly negative sentiment) to 1 (highly positive sentiment). The SSW approach is particularly suitable for the present analysis because alternative machine learning models typically require large training datasets, yet cable news transcripts have only been systematically archived over



the past decade. Furthermore, my analysis is limited to three contributing channels, which restricts the dataset's size and diversity and makes it insufficient for training robust machine learning models.

To construct a daily sentiment index for each program for economic sentiment, I first compute the geometrically decaying trailing weighted average of daily sentiment using Equation (2), by which weights decay geometrically over the 22 days elapsed since each article's publication, similar to the methodology used in Shapiro et al. (2022). Since sentiment is bounded by  $[-1,1]$ , I adjust for negative values by adding 1 during the calculation and subsequently subtracting it:

$$GM_t = \left( \prod_{i=t-21}^t (sentiment_i + 1) \right)^{\frac{1}{22}} - 1 \quad (2)$$

Since both the VOTER and CES surveys assess respondents' perceptions of the macroeconomy's direction of change (e.g., better or worse), whereas the daily sentiment index captures only a time-invariant measurement of sentiment (e.g., positive to negative), I compute the average daily sentiment change for the trailing weighted average of economic sentiment using Equation 3 (below). I calculate one-, three- and six-month differences by setting  $k$  equal to 30, 90 and 180 respectively.

$$SentimentChange_k = \frac{\overline{sentiment}_t - \overline{sentiment}_{t-k}}{|\overline{sentiment}_{t-k}|} \quad (3)$$

I calculate the proportion of words in "economic sentences" by dividing the sum of each day's total word count of economic sentences by the sum of each day's overall word count to account for transcripts of different lengths. Using Equation 2, I calculate the geometrically decaying average of the proportion of words in "economic sentences." Finally, I multiply  $SentimentChange_k$  by the

geometrically decaying average of the proportion of words in “economic sentences” to create a measure of change in content exposure over time.

Summary statistics for transcripts scraped from the Internet Archive are presented in Tables B.3 and B.4 in Appendix B. Table B.3 provides the total counts for several variables, including primetime status (broadcasts aired between 8 p.m. and 11 p.m. Mondays through Saturdays and from 7 p.m. to 11 p.m. on Sundays), contributor (the cable news network airing the broadcast), the year of the broadcast, the count of transcripts without economic keywords (as outlined in Appendix A), and 24-hour grouped starting times. Table B.4 reports the mean, median and standard deviation of sentiment scores, disaggregated into overall sentiment, sentiment for economic sentences (sentiment economic) and sentiment for non-economic sentences (sentiment non-economic). Table B.4, which includes the mean, median, and standard deviation for the percentage of words attributed to economic sentences, presents evidence that Fox News features a higher average proportion of words in “economic sentences” in comparison to other channels.

#### *4.3. Federal Reserve Bank of Philadelphia’s Real-Time Data Set for Macroeconomists.*

The third and final data source is the Federal Reserve Bank of Philadelphia’s Real-Time Data Set for Macroeconomists. Unlike finalized and revised datasets, which can introduce distortions when analyzing macroeconomic indicators in their historical context, the real-time dataset reflects the data as it appeared at the time of reporting and ensures a more accurate representation of the information available to the public and policymakers during the period under analysis. The dataset contains 23 variables; however, this study primarily utilizes quarterly reports of quarterly real GDP and monthly reports of the quarterly civilian unemployment rate and monthly consumer price index (CPI), as they are the main macroeconomic variables predicted in the Survey of Professional Forecasters, also conducted

by the Federal Reserve Bank of Philadelphia. Using real GDP data, I computed the GDP growth rate and incorporated the most recent quarterly GDP growth rate, alongside the latest available quarterly unemployment rate and monthly CPI releases.

#### 4.4. Stylized facts.

Before turning to the regression results, I summarize a set of stylized facts about the composition of each network’s audiences and media reporting over time. There are 2,794 unique individuals who watch none of the listed networks.

Table 1. Viewership Composition by Network and Cross-Viewership, 2016–2020

Network	Only [Network]	+ Fox	+ CNN	+ MSNBC	All Three
CNN	363 (22.49%)	274 (16.98%)	–	649 (40.21%)	328 (20.32%)
MSNBC	733 (37.47%)	246 (12.58%)	649 (33.18%)	–	328 (16.77%)
Fox	1,565 (64.86%)	–	274 (11.36%)	246 (10.19%)	328 (13.59%)

*Note:* A “+” sign is exclusive; for example, “CNN + Fox” indicates exposure to CNN and Fox, but not MSNBC. Source: VOTER Dataset (2016–2020).

Table 1 describes viewership composition of those who indicated they watched at least one of the networks. Only 22.49% of CNN viewers in the VOTER dataset watch CNN exclusively; specifically, 16.98% of the dataset’s CNN viewers also watch Fox News, and 40.21% also watch MSNBC. By contrast, Fox News viewers were far more likely to consume news from Fox alone, with just 35.14% respondents reporting that they viewed content from either CNN or MSNBC. MSNBC viewers fall between these extremes — 37.47% watch MSNBC exclusively, while 62.53% view at least one other network. Among MSNBC viewers, CNN is the most common secondary source: 49.90% of MSNBC also watch CNN.

Following the theoretical framework of Gentzkow and Shapiro (2006), I assume that media firms observe the same private signal  $s \in \{L, R\}$  informative of  $\theta$ , before choosing report  $r \in \{L, R\}$ . As a

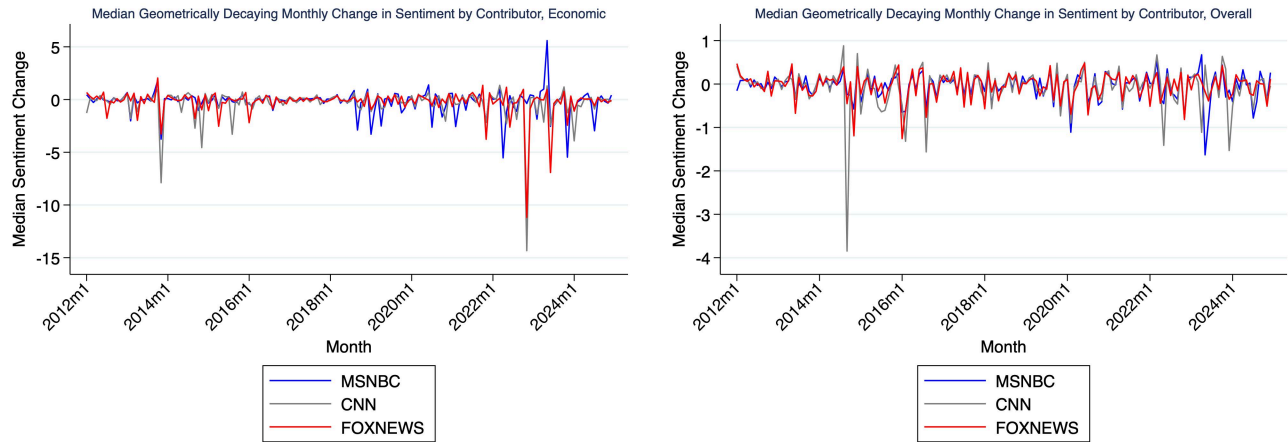
result, the larger the variance between networks' economic sentiment scores at the same time — a rough measurement of  $r$  for economic reporting — the larger the probability that firms “garble” their signals. To operationalize this idea, I compute the variance in economic sentiment scores and proportion of “economic sentences” between networks at each point in time. A higher variance in economic sentiment indicates greater disagreement in economic messaging across networks, while a higher variance in the proportion of “economic sentences” indicates spread in the emphasis on economic messaging.

Figure 2 compares the geometrically decaying average economic sentiment compared to that of overall sentiment. During the period of post-pandemic recovery, the cross-channel dispersion in economic sentiment increases relative to that of overall sentiment, suggesting that economic coverage became more polarized in that period. Similarly, Figure 3, which illustrates the variance of the averaged economic sentiment scores and averaged proportion of “economic sentences” between the three networks at each date, suggests a shift beginning around 2018, with more frequent and pronounced “spikes” in the between-network variance of economic sentiment, potentially reflecting heightened responsiveness to economic or political shocks.

Upon calculating the between-network variance displayed in Figure 3, I estimate simple ordinary least squares (OLS) regressions to assess how these variances evolve over time. Let  $variance_t$  be the variance between the average sentiment scores or proportions of “economic sentences” of the three networks at time  $t$ ,  $timetrend_t$  be a variable representing the month and year, and  $COVID_t$  be a dummy variable that equals 1 if the transcripts were recorded in or after February 2020:

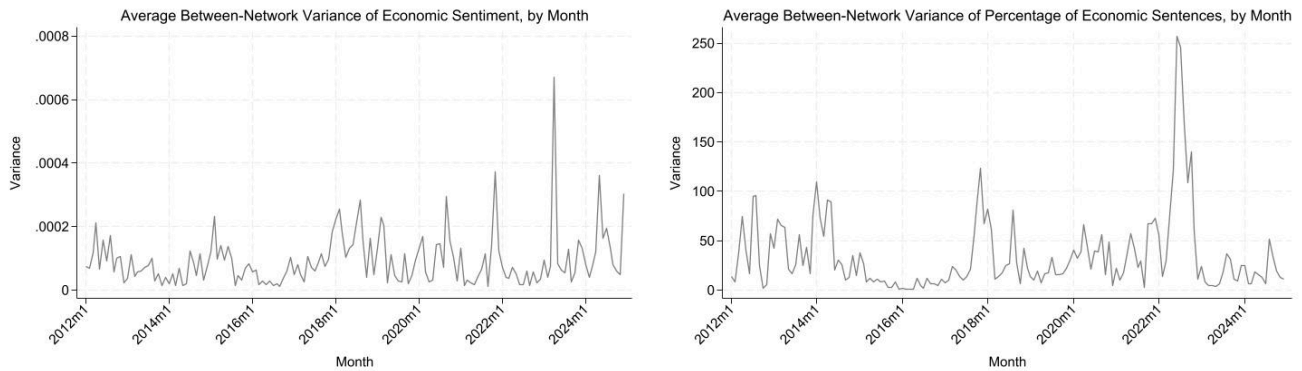
$$variance_t = \alpha + \beta_1 timetrend_t + \beta_2 COVID_t + \varepsilon_t \quad (4)$$

Figure 2. Average Sentiment Change By Month, Overall and Economic (2012–2024).



*Note: The monthly average is calculated by first calculating the geometrically decaying averages of the transcripts' sentiments by network using Equation (2), then computing the one-month difference between transcripts using Equation (3) and finally taking the median of these daily values within each month. Y-axes were adjusted for readability; note the larger y-axis range for the figure for economic sentiment (left) compared to that for overall sentiment (right). Source: Cable news transcripts scraped from the archive.org TV News Closed Caption Corpus from June 2023 to Dec. 2024; Sood and Laohaprapanon (2023).*

Figure 3. Between-Network Variance in Economic Reporting Measures, 2012–2024



*Note: The monthly average is calculated by first computing the daily between-network variance for each measure, then taking the median of these daily values within each month. Source: Cable news transcripts scraped from the archive.org TV News Closed Caption Corpus from June 2023 to Dec. 2024; Sood and Laohaprapanon (2023).*

I estimate two specifications for both the economic sentiment scores and the proportion of “economic sentences” based on Equation (4): the first includes only the linear  $timetrend_t$ , and the other adds the  $COVID_t$  dummy alongside  $timetrend_t$ .<sup>4</sup> Results are displayed in Table 2. The time trend

<sup>4</sup> To ensure the results are fully replicable, I fix the random seeds for all regressions reported from this point forward.

variables are positive and significant for both specifications of economic sentiment, suggesting divergence in economic sentiment across the three networks over time. In contrast, for the proportion of “economic sentences,” the time trend is positive in the model without the  $COVID_t$  dummy, but becomes negative when the  $COVID_t$  dummy is included. However, the  $COVID_t$  dummy’s coefficient is large and positive, suggesting that the structural break induced by the COVID-19 pandemic may have accounted for much of the divergence in the intensity of coverage suggested in the first specification.

Table 2. Between-Network Variance Trends Over Time, 2012–2024.

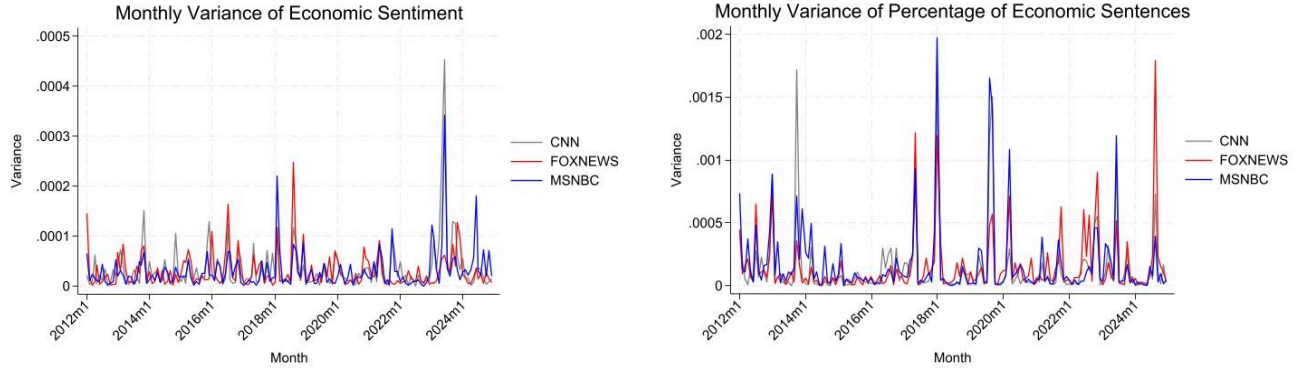
VARIABLES	Economic Sentiment		Proportion of Economic Coverage	
	(1)	(2)	(1)	(2)
Time Trend (Monthly)	0.031*** (0.0035)	0.052*** (0.0055)	0.045*** (0.0149)	-0.260*** (0.0182)
Post COVID-19 Pandemic		-2.405*** (0.5102)		33.808*** (1.9501)
Constant	-12.234*** (2.4182)	-26.552*** (3.7172)	3.333 (10.1914)	204.620*** (12.3722)
Observations	4,748	4,748	4,748	4,748
R-squared	0.019	0.023	0.002	0.044

Robust standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Note: Standard errors are reported in parentheses. Values have been scaled by a factor of 10,000 for clarity, as the original values were small and difficult to display at scale. Source: Cable news transcripts scraped from the archive.org TV News Closed Caption Corpus from June 2023 to Dec. 2024; Sood and Laohaprapanon (2023).*

I also examine the 22-day rolling variances of economic sentiment scores by network, displayed in Figure 4. I begin by performing variance ratio tests on geometrically decaying sentiment scores for each network. The results show no significant difference in variance between Fox News and CNN, but indicate that MSNBC's sentiment scores exhibit significantly lower variance than those of both Fox and CNN. When comparing the variance in the geometrically decaying share of "economic sentences" across networks, the ordering from least to greatest variance is: CNN, MSNBC and Fox News.

Figure 4. Within-Network Variances in Economic Reporting Measures, 2012 – 2024



*Note: The monthly average is calculated by first computing the 22-day rolling variance for each network and measure, then taking the median of these daily values within each month. Source: Cable news transcripts scraped from the archive.org TV News Closed Caption Corpus from June 2023 to Dec. 2024; Sood and Laohaprapanon (2023).*

Finally, I observe how within-network variances change over time by estimating the specification below for both the economic sentiment scores and the proportion of “economic sentences.”

$$variance_{it} = \alpha + \beta_1 network_i \times timetrend_t + \beta_2 network_i \times COVID_t + \varepsilon_t$$

(5)

Here,  $variance_{it}$  is the 22-day rolling variance for each network  $i$ ,  $network_i$  is a categorical variable indicating each of the three networks, and  $timetrend_t$  and  $COVID_t$  are defined as in Equation (4). Table 3 presents the marginal effects from Equation (5). Across all networks, the coefficients on the time trends are positive and statistically significant for the variance in economic sentiment, but negative for the variance in the share of sentences classified as economic.

Table 3. Marginal Effects of Within-Network Variances, 2012 – 2024.

VARIABLES	Economic Sentiment		Percent	
	Coefficient	Std. Error	Coefficient	Std. Error
<b>CNN</b>				
Time Trend (Monthly)	0.0058***	(0.0008)	-0.0325***	(0.0038)
Post-COVID Effect	0.8333***	(0.1492)	-0.3325	(0.7575)
<b>Fox News</b>				
Time Trend (Monthly)	0.0050***	(0.0007)	-0.0322***	(0.0041)
Post-COVID Effect	-0.7117***	(0.1021)	4.7257***	(0.7690)
<b>MSNBC</b>				
Time Trend (Monthly)	0.0052***	(0.0008)	-0.0308***	(0.0040)
Post-COVID Effect	0.5703***	(0.1176)	-0.2732	(0.8846)
Observations	14,241			
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

*Note: Standard errors are reported in parentheses. Values have been scaled by a factor of 10,000 for clarity, as the original values were small and difficult to display at scale. Source: Cable news transcripts scraped from the archive.org TV News Closed Caption Corpus from June 2023 to Dec. 2024; Sood and Laohaprapanon (2023).*

In sum, both between- and within-network variance increases over time, suggesting greater disagreement in economic messaging across networks and within network programs over time.

## 5. Methodology

The results of Section 4.4 suggest that cable networks produce distinct coverage of the same macroeconomic events, a phenomenon that has become more pronounced over time. Using a panel approach, I exploit variation in how different groups of viewers are exposed to differing framings of similar content — rather than variation in the underlying economic conditions themselves — to estimate the effect of exposure on sentiment.

I employ the assumption that coverage is plausibly exogenous to the timing of respondents' quasi-randomly assigned interviews. Furthermore, I assume that the overall variation in national reporting over time is not driven by individual-level factors that can also affect sentiment, as national cable news economic coverage decisions are made centrally by networks and respond to macro-level events. In other words, individual viewers do not influence what gets covered or when, especially when assuming low feedback strength  $\mu$  as in Section 3.1.



I begin with a baseline specification (Model 1), which is given by the following random effects model.<sup>5</sup> Let  $y_{ijt}$  be an ordinal variable with three strata  $\{-1, 0, 1\}$  indicating each individual respondent  $i$ 's economic perception of the U.S. macroeconomy at time  $t$ ;  $V_{FOX,i}$ ,  $V_{CNN,i}$  and  $V_{MSNBC,i}$  be dummy variables representing if the individual has ever been a viewer of Fox News, CNN or MSNBC respectively;  $Exp_{FOX,it}$ ,  $Exp_{CNN,it}$  and  $Exp_{MSNBC,it}$  be the 22-day geometrically decaying trailing weighted average of the one-month change in daily mean economic sentiment for each network multiplied by the geometrically decaying trailing weighted average of the proportion of “economic sentences”<sup>6</sup> at date  $t$  corresponding to the individual's survey collection date;  $monthyear_t$  be a variable representing the month and year  $t$  the survey was collected;  $age_{it}$  be the age of the respondent at the time they were surveyed;  $X_{ij}$  be a  $7 \times j$  vector of seven demographic variables stratified by category  $j$  (race, gender, state, employment status, reported family income, political ideology, education)<sup>7</sup>;  $Y_t$  be a  $3 \times 1$  vector of the three variables from the Federal Reserve Bank of Philadelphia's Real-Time Data Set (most recently announced quarterly GDP growth rate, quarterly unemployment rate and monthly CPI); and  $year_t$  be a  $4 \times 1$  vector of yearly fixed effects from 2017 to 2020:

$$y_{ijt} = \beta_0 + \beta_1 V_{FOX,i} + \beta_2 V_{CNN,i} + \beta_3 V_{MSNBC,i} + \beta_4 Exp_{FOX,it} + \beta_5 Exp_{CNN,it} + \beta_6 Exp_{MSNBC,it} \\ + \beta_7 monthyear_t + \beta_8 age_{it} + \sum_{k=7}^7 \sum_{j=1}^j \gamma_{k,j} X_{k,ij} + \sum_{k=1}^3 \gamma_k Y_{k,t} + year_t + \varepsilon_{ijt}$$

(6)

<sup>5</sup> I use the random effects specifications in this section to give a clearer picture of all the variables I'm including for my robustness checks, given that several variables are time-invariant and dropped in my fixed-effects specifications, but maintained in my correlated random effects models.

<sup>6</sup> Both calculated by Equation (2).

<sup>7</sup> Time-invariant variables — namely gender, race and the V-dummy variables — are dropped in the fixed effects specifications.

Model 2 introduces  $V \times Exp$  interaction terms between exposure and the dummy variable indicating viewership of a specific network to account for potential heterogeneity in how sentiment influences perceptions for viewers. Model 3 further refines the specification by adding an additional interaction term  $V \times V \times Exp$  to account for the number of viewers who watch multiple programs as shown in Table 1. This interaction expands each pair of networks into two terms. For example, for CNN and MSNBC, the model includes both  $V_{CNN,i} \times V_{MSNBC,i} \times Exp_{CNN,it}$  and  $V_{CNN,i} \times V_{MSNBC,i} \times Exp_{MSNBC,it}$  interaction terms, allowing for exposure effects to vary by which program's content is emphasized. Model 4 includes three additional interaction terms for the respondents who indicated that they watch all three networks.

To address individual heterogeneity and temporal dynamics, I estimate a series of three models using both fixed-effects and correlated-random effects specifications, seeing that Hausman tests across model specifications indicate that fixed-effects estimators yield more consistent estimates. Given the results of the Hausman tests and that the variable of interest is ordinal, the fixed-effects ordered logit model<sup>8</sup> is the most appropriate for my analysis, but I include linear fixed effects models in Appendix B as a robustness check. I also estimate a set of correlated random-effects models — which incorporate individual-level means of time-varying covariates to concerns about bias from unobserved heterogeneity while preserving variation in both within- and between-individual effects — to retain as much information as possible from the time-invariant cable news variables while accounting for unobserved

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<sup>8</sup> Ordered logit models assume a latent continuous variable underlying the observed ordinal outcomes and estimate threshold parameters to determine category boundaries and are especially appropriate for categorical dependent variables with a natural ordering. In short panels, nonlinear panel models with fixed effects can encounter the incidental parameters problem, a phenomenon in which a large number of individual-specific fixed effects lead to biased parameter estimates, especially when the time dimension is small. For the following estimates, I use the Stata package developed by Baetschmann et al. (2020), which avoids the incidental parameters problem by using a conditional maximum likelihood (CML) approach on a generated pseudo-dataset.

heterogeneity. Standard errors are clustered at the individual level to account for heteroskedasticity and within-individual serial correlation.

## **6. Results**

Part 6.1 covers my regression specified in the methodology section, assessing the short-term relationship between cable news exposure and respondents' economic sentiment. Part 6.2 expands the results of 6.1 to compare short-run and long-run effects of changes in cable news exposure with one-, three- and six-month changes, and part 6.3 further differentiates long-run effects by differentiating primetime and non-primetime broadcast sentiment.

Fox News stands out as a particularly powerful and polarizing driver of perception across specifications. While changes in exposure to MSNBC are associated with more optimistic sentiment among MSNBC viewers and non-viewers, its influence appears weaker and less consistent across time and primetime specifications; CNN shows limited and largely short-term effects, failing to maintain significance at longer horizons or in most subgroup analyses. Meanwhile, exposure to Fox's economic messaging is associated with significant changes in perceived national economic conditions — not only among Fox viewers, but also among non-viewers. These effects remain robust and statistically significant even over longer time horizons. For Fox viewers, higher exposure is generally linked to more optimistic economic sentiment. In contrast, the same increase in exposure is associated with more negative sentiment among non-viewers, particularly those who exclusively watch MSNBC. Furthermore, the magnitude of Fox's positive impact on its consumers is generally diminished if viewers do not exclusively consume the network. Taken together, findings suggest that Fox's messaging may diffuse beyond its direct audience through ambient media or interpersonal networks, and that exposure to ideologically diverse networks may have a moderately countervailing impact on economic sentiment.

### *6.1. Short-Term Cable News Consumption's Impacts on Respondents' Economic Sentiment.*

This section presents the results of the panel analysis assessing the relationship between cable news consumption and respondents' economic sentiment. Results comparing linear fixed-effects and ordered logit fixed-effects specifications and the results of the CRE specifications can be found in Appendix B.5 and B.6 respectively.

The marginal effects of the linear and ordered logit models with fixed effects are presented in Table 4 below.<sup>9</sup> Among respondents who report watching all three networks, only exposure to Fox has a statistically significant and negative effect. This result suggests that cross-cutting media exposure does not neutralize partisan signaling uniformly; rather, it may lead some viewers to actively discount or reject certain sources. In this case, exposure to economically optimistic reporting from Fox News may have a countervailing effect among individuals exposed simultaneously to multiple, ideologically diverse news outlets. Among non-viewers, exposure to Fox is associated with lower economic optimism, while exposure to MSNBC is positively associated with viewers' sentiment. This pattern is consistent with indirect exposure via social networks or ambient media environments.

Fox-only viewers exhibit a strong positive response to pro-Fox economic sentiment and respond negatively to MSNBC exposure, though to a lesser extent. Similarly, MSNBC-only viewers and those who watch both CNN and MSNBC respond negatively to Fox and positively to MSNBC, suggesting affective polarization in how economic messaging is received.

One potential explanation for the diverging sentiments across channels is selection bias. I assume that the fixed characteristics that make one watch a specific network are absorbed by fixed effects, but

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<sup>9</sup> Marginal effects for the ordered logit with fixed effects model developed in Baetschmann et al. (2020) are biased if thresholds are not constant. Because (1) the number of clones required to fully account for this assumption grows exponentially with the number of time periods, (2) the difficulty in determining the appropriate number of clones without considerable computing power, and (3) the reality that remaining postestimation commands cannot handle models with complex interaction terms, I compare my estimates of marginal effects from the ordered logit model to those from a linear fixed effects model and focus only on results that are consistent across both approaches.

time variant characteristics may remain. Specifically, as individuals grow older or become more politically conservative, they may be more inclined to watch Fox News and thereby reinforce their existing values, introducing bias into the models. Controlling for ideology and age, a strong and persistent association between Fox News viewership and more favorable economic perceptions nonetheless remains, suggesting that the relationship is not solely driven by ideological self-selection.

Table 4. Marginal Effects of Exposure Impacts on Consumer Sentiment by Viewer Group, 2016–2020.

Ordered Logit with Fixed Effects			
Viewer Group	Change in Fox Exposure	Change in MSNBC Exposure	Change in CNN Exposure
Non-Viewer	-7.496*** (0.8633)	0.723*** (0.1625)	0.815 (0.5018)
Fox Only	13.932*** (1.3256)	-2.243*** (0.2474)	7.785*** (1.0527)
MSNBC Only	-23.744*** (1.6505)	1.883*** (0.2876)	-5.013*** (0.9415)
CNN Only	-16.893*** (2.1513)	1.678*** (0.4142)	-2.389* (1.2791)
Fox + MSNBC	1.108 (2.3863)	-0.176 (0.5611)	1.957 (1.2767)
Fox + CNN	8.532*** (2.6894)	-1.118** (0.4348)	4.234*** (1.4450)
MSNBC + CNN	-19.775*** (1.4202)	2.122*** (0.2807)	-5.406*** (0.8651)
All Three	-4.481** (2.2192)	-0.041 (0.4090)	1.218 (1.4340)
Linear Model with Fixed Effects			
VARIABLES	Change in Fox Exposure	Change in MSNBC Exposure	Change in CNN Exposure
Non-Viewer	-2.025*** (0.2335)	0.200*** (0.0421)	0.123 (0.1223)
Fox Only	3.649*** (0.3334)	-0.472*** (0.0500)	2.083*** (0.2738)
MSNBC Only	-6.638*** (0.4275)	0.531*** (0.0740)	-1.279*** (0.2721)
CNN Only	-4.752*** (0.5774)	0.471*** (0.0999)	-0.976*** (0.3481)
Fox + MSNBC	0.446 (0.7132)	-0.019 (0.1307)	0.279 (0.5450)
Fox + CNN	2.299*** (0.6928)	-0.307*** (0.1117)	1.827*** (0.5485)
MSNBC + CNN	-5.728*** (0.4109)	0.603*** (0.0711)	-1.402*** (0.2634)
All Three	-1.180* (0.6275)	0.029 (0.1213)	-0.161 (0.5507)

Standard errors in parentheses  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

To account for a potential endogeneity issue, I exclude ideology and age from the model, but the results remain substantively unchanged. Furthermore, in the correlated random-effects (CRE) specifications, the individual-level mean covariates are either insignificant or less significant than their time-varying counterparts, most of which are significant at the 0.01 or 0.05 level. In other words, the results are less likely to be driven by selection into media consumption based on stable traits — such as long-standing political preferences or baseline economic optimism — and more likely to reflect changes in sentiment that occur as individuals are exposed to varying levels of media content. This suggests that the observed effects are primarily driven by within-individual variation over time, rather than long-term differences across individuals.

To assess whether multicollinearity between sentiment measures might bias the estimated effects, I examine pairwise correlations between each network's changes in exposure. CNN and MSNBC exposure scores are highly correlated, reflecting similar economic coverage. Given the strong correlation between CNN and MSNBC and the substantial overlap in their viewership, I re-estimate the model excluding one of the two networks and all variables that include each network as part of an interaction. Dropping either CNN or MSNBC exposure does not alter the substantive conclusions I draw from the regressions. In fact, dropping either network results in a more significant coefficient on Fox News exposure among respondents who watch all three networks, suggesting that similar signals from CNN and MSNBC may have previously dampened or masked the impact of Fox News messaging. Thus, the full-model estimate may in fact reflect *underestimate* Fox's potential polarizing influence in isolation on this viewership group. Results of Models 2 and 4 using an ordered logit model with fixed effects specification can be found in Appendix B.7.

## 6.2. *Salience of Cable News Exposure Over Time.*

The main specification captures only short-term changes in exposure, using a one-month window. As a result, some of the variation may reflect immediate or transient reactions, rather than more sustained effects. I reestimate the models in part 5.1 with additional 3- and 6-month changes. The marginal effects of the linear and ordered logit models with fixed effects are presented in Table 5 below.<sup>10</sup> Results comparing linear fixed-effects and ordered logit fixed-effects specifications and the results of the CRE specifications can be found in Appendix B.8 and B.9 respectively. Trends generally persist over time for those who watch all or none of the three networks and those who watch both MSNBC and CNN. Among those who watch only one channel, their consumer sentiment becomes more aligned with exposure to the channel that they watch; for those who only view CNN, the effect is small and insignificant.

Across all viewer groups, the resulting marginal effects of exposure to Fox News economic content are consistent and generally significant throughout each interval — that is, positive marginal effects remain positive or grow in magnitude between the one-month and three-month intervals, while marginal effects that were significant in the short-term generally retained significance in the long-term, even among groups that did not watch Fox News. Meanwhile, among individuals who exclusively watched CNN or watched CNN in combination with Fox News, the effects of CNN exposure failed to gain or maintain significance by the six month mark; the effects of CNN exposure remained insignificant throughout the three periods for those who watched all three channels. This pattern suggests that CNN’s economic messaging may exert short-term influence on consumer sentiment, but that its impact does not appear to persist over longer time horizons.

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<sup>10</sup> See footnote 9.

Table 5. Marginal Effects of Salience of Economic Exposure on Consumer Sentiment Over Time by Viewer Group, 2016–2020.

Ordered Logit with Fixed Effects									
Viewer Group	Fox Exposure			MSNBC Exposure			CNN Exposure		
	1 mo	3 mo	6 mo	1 mo	3 mo	6 mo	1 mo	3 mo	6 mo
Non-Viewer	-7.484*** (0.8667)	-4.498*** (1.0630)	-2.737** (1.2882)	0.710*** (0.1630)	1.070 (0.9216)	3.791** (1.5669)	0.778 (0.5018)	0.124 (0.6333)	0.348 (0.6972)
Fox Only	14.070*** (1.3352)	3.708*** (1.2664)	23.811*** (2.1689)	-2.255*** (0.2494)	-8.403*** (2.7148)	-5.579** (2.3397)	7.812*** (1.1709)	9.682*** (1.7279)	3.875*** (1.1404)
MSNBC Only	-23.525*** (1.6336)	-10.258*** (1.3138)	-19.878*** (2.5987)	1.873*** (0.2900)	12.234*** (3.1953)	14.280*** (2.6553)	-4.743*** (1.0045)	-8.759*** (1.7145)	-4.005*** (1.2530)
CNN Only	-16.798*** (2.1582)	-8.111*** (1.8018)	-13.840*** (3.0853)	1.772*** (0.4212)	7.660* (4.0408)	5.660 (3.5421)	-4.183*** (1.4084)	-5.087** (2.1936)	-0.299 (1.8281)
Fox + MSNBC	1.264 (2.3968)	-0.720 (2.1626)	7.523** (3.4035)	-0.080 (0.5767)	0.627 (1.4592)	1.019 (4.4934)	1.528 (1.9906)	1.572 (1.5076)	1.439 (1.9743)
Fox + CNN	8.744*** (2.7456)	3.720* (2.0812)	16.762*** (3.2910)	-1.219*** (0.4491)	-3.833*** (1.2487)	-6.101 (4.5589)	6.424*** (2.0569)	7.014*** (1.7079)	2.164 (2.2386)
MSNBC + CNN	-19.858*** (1.4275)	-7.814*** (1.3266)	-20.371*** (2.2405)	2.076*** (0.2782)	14.867*** (2.7242)	11.868*** (2.2906)	-4.877*** (0.8828)	-9.277*** (1.4569)	-3.182*** (1.1291)
All Three	-4.257* (2.2132)	-2.189 (1.8643)	2.313 (3.1224)	0.042 (0.4149)	-2.447 (3.9759)	3.417 (4.0276)	-0.398 (1.7363)	2.529 (2.5042)	0.243 (1.8554)
Linear Model with Fixed Effects									
Viewer Group	Fox Exposure			MSNBC Exposure			CNN Exposure		
	1 mo	3 mo	6 mo	1 mo	3 mo	6 mo	1 mo	3 mo	6 mo
Non-Viewer	-2.012*** (0.2339)	-1.359*** (0.2841)	-0.623* (0.3581)	0.196*** (0.0421)	0.256 (0.2441)	0.731* (0.4173)	0.119 (0.1213)	-0.054 (0.1639)	0.192 (0.1841)
Fox Only	3.677*** (0.3342)	0.787** (0.3355)	5.506*** (0.4095)	-0.471*** (0.0499)	-1.977*** (0.4853)	-1.735*** (0.5113)	2.060*** (0.2725)	2.509*** (0.3239)	1.356*** (0.2231)
MSNBC Only	-6.587*** (0.4294)	-3.019*** (0.3869)	-5.513*** (0.5411)	0.538*** (0.0743)	1.916*** (0.5110)	4.183*** (0.6977)	-1.250*** (0.2738)	-1.752*** (0.3250)	-1.094*** (0.2992)
CNN Only	-4.701*** (0.5786)	-2.264*** (0.4992)	-4.075*** (0.7828)	0.458*** (0.0984)	1.650** (0.6420)	1.551* (0.9299)	-1.036*** (0.3456)	-1.207*** (0.4289)	0.103 (0.4507)
Fox + MSNBC	0.499 (0.7146)	-0.154 (0.6269)	1.880* (1.0229)	0.001 (0.1269)	0.246 (0.3421)	-0.094 (1.2446)	0.321 (0.5454)	0.500 (0.4303)	0.830 (0.6168)
Fox + CNN	2.273*** (0.6886)	0.707 (0.5347)	4.412*** (0.8527)	-0.302*** (0.1118)	-1.118*** (0.3451)	-2.227** (1.0802)	1.777*** (0.5684)	1.881*** (0.4740)	0.876 (0.5491)
MSNBC + CNN	-5.771*** (0.4129)	-2.318*** (0.3881)	-5.549*** (0.5125)	0.603*** (0.0710)	2.704*** (0.6216)	3.580*** (0.6547)	-1.390*** (0.2686)	-2.039*** (0.3685)	-1.082*** (0.3073)
All Three	-1.113* (0.6266)	-0.621 (0.5126)	0.601 (0.9139)	0.023 (0.1211)	-0.702 (0.9419)	0.700 (1.1136)	-0.092 (0.5485)	0.730 (0.6468)	0.292 (0.5545)

Standard errors in parentheses  
\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions  $[-1, 0, 1]$  sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

### 6.3. Primetime versus Non-Primetime Coverage's Impacts on Consumer Sentiment.

While short-run specifications may capture reactions to breaking news cycles or short-term shocks, my primary interest lies in identifying sustained effects of cable news consumption, a pattern most clearly identified among primetime cable news viewers, whose consumption patterns are generally



regular and ideologically consistent. Accordingly, I focus my interpretation on the 6-month model from Table 5, which incidentally also provides the best model fit (Pseudo  $R^2 = 0.224$ ).<sup>11</sup>

To focus my analysis on primetime media exposure, I calculate the primetime and non-primetime measures of the six-month differences in economic sentiment using Equation 3 for primetime or non-primetime transcripts only. I calculate the proportion of words in "economic sentences" by dividing the sum of the total word count of economic sentences in primetime or non-primetime hours for that day by the sum of each day's overall word count during primetime or non-primetime hours, then applied Equation (2) to find the 22-day geometrically decaying average of this measure. I multiply these two values to create a measurement of economic exposure.

I identify two new models for this section: Model 5 builds on Model 4 by replacing each respective network's  $Exp$  variable with a corresponding  $Exp_{primetime}$  variable (hereafter abbreviated as  $Exp_p$ ). Model 6 adds  $Exp_{nonprimetime}$  variable (hereafter abbreviated as  $Exp_{np}$ ), representing the same measure as  $ES_p$  but for non-primetime transcripts, as well as the interaction terms corresponding to Models 4 and 5. Table 6 presents the marginal effects of the linear and ordered logit specifications with fixed effects for Model 5, while Table 7 does the same for Model 6.<sup>12</sup> Results comparing linear fixed-effects and ordered logit fixed-effects specifications and the results of the CRE specifications can be found in Appendix B.10 and B.11 respectively.

When isolating the effect of primetime coverage on viewers, a positive change in exposure to Fox News exhibits positive impacts among its own audience and negative impacts among those who watch one or both of the remaining networks, further reinforcing the finding that Fox's primetime economic messaging especially reinforces divergent perceptions across viewership groups.

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<sup>11</sup> Used for nominal and ordinal dependent variables instead of R-squared.

<sup>12</sup> See footnote 9.

Like in parts 5.1 and 5.2, exposure to Fox News coverage — particularly non-primetime coverage — retains significance for those who are not Fox viewers and tends to dominate consumer sentiment for those who view Fox and one of the two channels. In fact, Fox’s non-primetime exposure has stronger effects than primetime across nearly every viewer group. Meanwhile, CNN’s non-primetime exposure effects are largely statistically insignificant or inconclusive across viewer

Table 6. Marginal Effects of Primetime Exposure on Consumer Sentiment by Viewer Group, 2016–2020

Ordered Logit with Fixed Effects			
Viewer Group	Fox Exposure	MSNBC Exposure	CNN Exposure
Non-Viewer	-0.666 (0.8836)	2.056*** (0.7086)	-0.026 (0.0970)
Fox Only	16.827*** (1.2362)	4.700*** (1.1512)	1.485*** (0.1604)
MSNBC Only	-8.777*** (1.4937)	1.141 (1.4644)	-1.600*** (0.2457)
CNN Only	-6.553*** (1.9820)	-3.440* (1.9870)	-0.668*** (0.2398)
Fox + MSNBC	6.208** (2.7793)	2.137 (2.3267)	0.557* (0.3147)
Fox + CNN	10.729*** (2.6332)	-2.361 (2.4360)	0.830*** (0.2916)
MSNBC + CNN	-9.586*** (1.5243)	-2.179 (1.5291)	-1.486*** (0.2681)
All Three	4.502* (2.4529)	-2.255 (2.5608)	0.247 (0.2494)
Linear Model with Fixed Effects			
Viewer Group	Fox Exposure	MSNBC Exposure	CNN Exposure
Non-Viewer	-0.047 (0.2336)	0.459** (0.1813)	-0.013 (0.0259)
Fox Only	3.785*** (0.2804)	0.803*** (0.3065)	0.411*** (0.0310)
MSNBC Only	-2.295*** (0.3759)	0.240 (0.3184)	-0.428*** (0.0429)
CNN Only	-1.761*** (0.4973)	-0.721 (0.4913)	-0.189*** (0.0602)
Fox + MSNBC	1.866** (0.7814)	0.217 (0.6470)	0.166* (0.0933)
Fox + CNN	2.918*** (0.6344)	-0.586 (0.6272)	0.210*** (0.0669)
MSNBC + CNN	-2.778*** (0.3935)	-0.281 (0.3506)	-0.374*** (0.0479)
All Three	1.389* (0.7303)	-0.878 (0.6236)	0.069 (0.0741)

Standard errors in parentheses  
\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Notes: The dependent variable is an ordinal measure of respondents’ perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

Table 7. Marginal Effects of Primetime and Non-Primetime Exposure on Consumer Sentiment by Viewer Group, 2016–2020

Ordered Logit with Fixed Effects						
Viewer Group	Primetime Exposure			Non-Primetime Exposure		
	Fox Exposure	MSNBC Exposure	CNN Exposure	Fox Exposure	MSNBC Exposure	CNN Exposure
Non-Viewer	-1.818 (1.2140)	1.475 (0.8977)	-0.034 (0.1122)	-1.064 (1.4607)	1.656 (1.5442)	0.799 (0.5222)
Fox Only	6.378*** (1.7341)	-1.094 (1.3793)	0.713*** (0.1595)	15.215*** (2.5663)	-1.229 (2.2963)	1.046 (0.8177)
MSNBC Only	-1.715 (2.2303)	4.340*** (1.6154)	-0.864*** (0.2278)	-15.868*** (3.3824)	6.449** (2.7801)	-0.066 (0.9923)
CNN Only	-4.652 (2.8827)	-2.394 (2.4614)	-0.352 (0.2894)	-8.926** (3.8719)	4.821 (3.8265)	1.394 (1.3804)
Fox + MSNBC	-0.131 (4.6265)	-1.452 (3.0387)	0.068 (0.4265)	7.119 (5.5273)	4.597 (4.3496)	-0.214 (1.3280)
Fox + CNN	-4.258 (3.4701)	-12.340*** (3.1272)	-0.036 (0.3153)	19.949*** (4.5421)	4.328 (4.4953)	1.212 (1.5071)
MSNBC + CNN	-0.966 (2.0054)	1.423 (1.8242)	-0.619** (0.2664)	-19.621*** (3.2102)	8.236*** (2.5589)	0.021 (0.9638)
All Three	5.748* (3.2795)	-1.758 (2.6741)	0.367 (0.2894)	-4.890 (3.6696)	6.801 (4.5205)	-0.922 (1.3367)
Linear Model with Fixed Effects						
Viewer Group	Primetime Exposure			Non-Primetime Exposure		
	Fox Exposure	MSNBC Exposure	CNN Exposure	Fox Exposure	MSNBC Exposure	CNN Exposure
Non-Viewer	-0.363 (0.3227)	0.255 (0.2321)	-0.014 (0.0295)	-0.209 (0.3967)	0.175 (0.4022)	0.307** (0.1314)
Fox Only	1.137*** (0.4110)	-0.458 (0.3477)	0.244*** (0.0356)	3.474*** (0.4819)	-0.865* (0.5223)	0.619*** (0.1787)
MSNBC Only	-0.765 (0.5497)	0.831** (0.3880)	-0.280*** (0.0517)	-3.545*** (0.6529)	2.261*** (0.6889)	-0.204 (0.2065)
CNN Only	-1.247* (0.7287)	-0.407 (0.6207)	-0.090 (0.0728)	-2.542*** (0.9852)	1.013 (1.0286)	0.513 (0.3417)
Fox + MSNBC	-0.072 (1.2026)	-0.802 (0.8267)	0.055 (0.1244)	1.788 (1.4757)	0.924 (1.1878)	0.360 (0.3765)
Fox + CNN	-0.672 (0.9245)	-2.632*** (0.6916)	0.018 (0.0757)	4.794*** (1.0480)	-0.046 (1.0734)	0.497 (0.3821)
MSNBC + CNN	-0.978* (0.5540)	0.352 (0.4390)	-0.190*** (0.0585)	-4.186*** (0.6793)	2.257*** (0.6832)	-0.140 (0.2352)
All Three	1.413 (1.0067)	-0.928 (0.7117)	0.103 (0.0880)	-1.080 (1.0144)	1.463 (1.1784)	0.002 (0.3773)

Standard errors in parentheses  
 \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

groups and time slots. A change in positive exposure to MSNBC exhibits positive effects among its own audience, but does not significantly exert the same polarizing influence among new-viewers as exposure to Fox News does. Taken together, these patterns imply that Fox's economic coverage is not only more pervasive but also more effective at shaping economic sentiment even across viewer bases, potentially due to greater message consistency, audience alignment or broader diffusion into the media

environment. These findings are in line with academic literature outlining the “Fox effect” on political sentiment and electoral results (DellaVigna and Kaplan, 2007; Martin and Yurukoglu, 2017; Ash et al., 2021).

#### *6.4. Limitations*

A critical assumption of this study is that individuals who report watching a given network do so at comparable rates over time. In practice, I assume that exposure effects operate through average content consumed, and that all viewers within a group are equally likely to encounter the relevant coverage. This is a simplification, as prior research and descriptive evidence suggest that viewership intensity varies widely: while the average viewer may watch only 20 minutes of coverage, a more dedicated subset of cable news viewers consume an hour or more per day (Pew Research Center, 2023). To the extent that more intense viewers are more responsive to media content, this assumption may attenuate estimated effects.

The time frame covered in this analysis (2016–2020) is not long enough to reasonably estimate the impact of more recent economic phenomena, particularly the aforementioned post-pandemic period of economic discontent despite strong macroeconomic fundamentals. Moreover, the VOTER survey was conducted during a period of Republican executive leadership and shifting congressional control: Republicans held unified control of the federal government through 2018, lost the House in 2019, but retained the Senate and the presidency through the end of the period. This political context may shape how partisans interpreted economic conditions and mediated the influence of media content on economic perceptions. Given that consumer confidence may have evolved in response to the post-pandemic economic recovery and shifting political dynamics, expanding the dataset to include

2021 and beyond would provide a more comprehensive understanding of how economic sentiment is shaped in the current media environment.

Future studies may take a more explicitly political approach, examining whether references to political figures or partisan cues — such as mentions of Democratic or Republican politicians or backed policies — affect sentiment scores. This would allow for a more precise assessment of how media framing of economic conditions interacts with political identity and whether economic sentiment is systematically shaped by partisan rhetoric. Additionally, a key limitation of using reported bias measures is that they do not fully capture differences in topic selection and agenda-setting across networks. While sentiment scores provide insight into how economic conditions are framed, they do not measure which topics are emphasized more by one program relative to another. For example, one network may allocate more coverage to inflation and economic instability, while another may focus on job growth and wage increases, leading to differences in audience perceptions even if sentiment scores appear similar.

A more comprehensive approach would involve topic modeling or supervised machine learning techniques to systematically analyze the distribution of economic topics or political affiliation across networks. This would allow researchers to assess not just how economic conditions are framed, but which economic issues are prioritized or downplayed in different media and political environments. However, this analysis was not feasible in the present study due to methodological constraints. Identifying and quantifying the impact of political references on sentiment scores would require a more refined natural language processing model, such as a machine learning-based classifier capable of distinguishing between general economic coverage and politically framed economic narratives.

## 7. Conclusion

This paper investigates how cable news coverage influences economic sentiment in the United States, focusing on three major networks — Fox News, MSNBC, and CNN — over the period 2016 to 2020. Using sentiment-scored transcript data from the Internet Archive and panel responses from the VOTER survey, I estimate the association between shifts in economic media coverage and individual perceptions of national macroeconomic conditions. The results suggest that variation in the volume and tone of cable news economic coverage corresponds to meaningful differences in consumer sentiment, even after controlling for individual fixed characteristics and national economic fundamentals.

The effects vary across viewer groups and networks. Fox News exerts the most consistent and persistent influence, especially among viewers who exclusively consume Fox content or split viewership with another channel. MSNBC's effects are more sensitive to the timing and salience of economic coverage, while CNN's influence is weaker and appears to diminish over longer time horizons. Notably, even among viewers who consume content from multiple networks, the dominant influence of Fox News persists. A central takeaway is that partisan media does not operate in isolation. While it may shift attitudes among aligned viewers, it can also induce negative polarization among others. Thus, partisan content may polarize both through persuasion and through alienation from the promoted viewpoint.

Still, several limitations of the study remain. The analysis is confined to a relatively narrow political window and does not extend into the post-pandemic period, when the disconnect between objective macroeconomic performance and public sentiment has grown increasingly salient. In addition, while this study captures variation in sentiment and topic intensity, it does not assess differences in what economic issues are emphasized — a question that would benefit from topic modeling or more granular content analysis. Nor does it fully address the role of political rhetoric or partisan cues embedded within economic coverage, which may interact with viewer ideology in shaping sentiment. Future work should

extend this analysis to cover the post-2020 period, as well as explore whether similar patterns hold in digital and social media environments. Advances in machine learning could further refine measures of content framing, topic salience and ideological cues.

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## Appendix A

List of keywords: gdp, inflation, deflation, recession, economy, economic, unemployment, employment, stocks, dow, nasdaq, treasury, debt, tax, price, wage

and mount rainier closed again to the public while authorities investigate the death of a park ranger and mother of two margaret anderson and the man suspected of killing her. the alleged gunman, benjamin colton barnes, he was found dead in that car apparently from exposure. u.s. markets back open today after being closed yet for the new year's holiday. stock futures for the dow, **nasdaq** and s&p, all up sharply pointing to a higher open right now to start off the new year, and soledad, for the year last year, the s&p 500 basically flat. after all of those ups and downs, it ended right where it started, soledad. back to you. >> christine, thanks. appreciate it. coming up on "starting corner of the country including right here in des moines. protesters using the iowa caucuses try to focus attention ton their cause. they tried to disrupt the candidates' campaign events, like michele bachmann, with their mike check chance, and then dozens of protesters arrested for disrupting rallies and protesting outside of candidates' campaign centers.

### **Extracted Economic Text:**

stock futures for the dow, nasdaq and s&p, all up sharply pointing to a higher open right now to start off the new year, and soledad, for the year last year, the s&p 500 basically flat. after all of those ups and downs, it ended right where it started, soledad. back to you.

## Appendix B. Tables

Table B.1. Descriptive Statistics of VOTER Survey Respondents, 2016–2020.

Variable	Category	Frequency	Percent
Fox Viewer	Does Not Watch (0)	4,539	65.3%
	Watches (1)	2,413	34.7%
MSNBC Viewer	Does Not Watch (0)	4,996	71.9%
	Watches (1)	1,956	28.1%
CNN Viewer	Does Not Watch (0)	5,338	76.8%
	Watches (1)	1,614	23.2%
Gender	Male	3,459	49.8%
	Female	3,493	50.2%
Race	White	5,536	79.6%
	Black	588	8.5%
	Hispanic	381	5.5%
	Asian	106	1.5%
	Native American	64	0.9%
	Two or more races	151	2.2%
	Other	122	1.8%
	Middle Eastern	4	0.1%
Education	No HS	129	1.9%
	High school graduate	1,675	24.1%
	Some college	1,445	20.8%
	2-year	799	11.5%
	4-year	1,720	24.7%
Employment Status	Post-grad	1,184	17.0%
	Full-time	2,789	40.1%
	Part-time	595	8.6%
	Temporarily laid off	40	0.6%
	Unemployed	238	3.4%
	Retired	1,770	25.5%
	Permanently Disabled	703	10.1%
	Homemaker	644	9.3%
	Student	99	1.4%
	Other	74	1.1%
Family Income	Less than \$10,000	161	2.3%
	\$10,000 - \$19,999	402	5.8%
	\$20,000 - \$29,999	578	8.3%
	\$30,000 - \$39,999	647	9.3%
	\$40,000 - \$49,999	546	7.9%
	\$50,000 - \$59,999	571	8.2%
	\$60,000 - \$69,999	465	6.7%
	\$70,000 - \$79,999	497	7.1%
	\$80,000 - \$99,999	623	9.0%
	\$100,000 - \$119,999	470	6.8%
	\$120,000 - \$149,999	490	7.0%
	\$150,000 or more	587	8.4%
Ideology	Not sure/Skipped	915	13.2%
	Very liberal	556	8.0%
	Liberal	1,193	17.2%
	Moderate	2,423	34.9%
	Conservative	1,777	25.6%
	Very conservative	808	11.6%
Age at Time of First Survey	Not sure/Skipped	195	2.8%
	17-24	18	0.3%
	25-34	358	5.2%
	35-44	635	9.1%
	45-54	1,387	20.0%
	55-64	2,068	29.8%
	65+	2,475	35.7%
Region	Midwest	1,602	23.0%
	Northeast	1,258	18.1%
	South	2,432	35.0%
	West	1,660	23.9%
Total		6,952	100.0%

*Note: The table illustrates the reported demographic information of respondents at the time of their first survey wave. Demographic information was standardized to the most recent VOTER survey wave. Source: VOTER survey (2016–2020).*

Table B.2. Economic Perceptions by VOTER Survey Respondents' Demographics, 2016–2020.

Variable	Category	Mean	Standard Deviation
Fox Viewer	Does Not Watch (0)	-0.0765	0.5539
	Watches (1)	0.2838	0.5613
MSNBC Viewer	Does Not Watch (0)	0.0797	0.5836
	Watches (1)	-0.031	0.5714
CNN Viewer	Does Not Watch (0)	0.0627	0.5845
	Watches (1)	0.0019	0.5725
Gender	Male	0.1385	0.5858
	Female	-0.0404	0.5649
Race	White	0.0674	0.5816
	Black	-0.1121	0.5429
	Hispanic	0.0378	0.5817
	Asian	-0.0578	0.5834
	Native American	-0.046	0.5956
	Two or more races	0.0311	0.6049
	Other	0.1851	0.6207
	Middle Eastern	-0.4	0.8718
Education	No HS	0.0244	0.617
	High school graduate	0.0329	0.5773
	Some college	0.0564	0.6018
	2-year	0.0246	0.5859
	4-year	0.0566	0.5724
	Post-grad	0.0676	0.5728
Employment	Full-time	0.0756	0.5701
	Part-time	0.0246	0.5599
	Temporarily laid off	-0.069	0.5927
	Unemployed	-0.1446	0.6009
	Retired	0.0897	0.5926
	Permanently Disabled	-0.0303	0.6077
	Homemaker	0.0009	0.5636
	Student	-0.0349	0.5576
	Other	0.107	0.6142
	Skipped	-0.373	0.3121
Family Income	Less than \$10,000	-0.2064	0.6376
	\$10,000 - \$19,999	-0.1742	0.5961
	\$20,000 - \$29,999	-0.032	0.5953
	\$30,000 - \$39,999	-0.0009	0.5642
	\$40,000 - \$49,999	0.036	0.559
	\$50,000 - \$59,999	0.0434	0.5783
	\$60,000 - \$69,999	0.0451	0.5693
	\$70,000 - \$79,999	0.0735	0.5633
	\$80,000 - \$99,999	0.1487	0.5858
	\$100,000 - \$119,999	0.1027	0.5723
	\$120,000 - \$149,999	0.1483	0.571
	\$150,000 or more	0.1076	0.539
Ideology	Not sure/Skipped	0.0919	0.5935
	Very liberal	-0.2157	0.5537
	Liberal	-0.1389	0.5358
	Moderate	-0.0194	0.5514
	Conservative	0.2901	0.5533
	Very conservative	0.2545	0.5674
Region	Not sure/Skipped	-0.2491	0.5556
	Central	0.0452	0.5855
	West	0.0205	0.5856
	Northeast	0.079	0.5732
Age Group	South	0.0642	0.5921
	17–24	0.3591	0.5076
	25–34	0.0045	0.5722
	35–44	-0.0105	0.5658
	45–54	0.0451	0.5913
	55–64	0.0365	0.5864
	65+	0.0800	0.5782
Total		.04885	.5824

*Note: The table illustrates the reported demographic information of respondents at the time of their first survey wave. Demographic information was standardized to the most recent VOTER survey wave. The variable measuring economic trends is the mean of respondents' perceptions of national economic conditions [-1, 0, 1] across all surveyed years. Source: VOTER survey (2016–2020).*

Table B.3. Descriptive Statistics of Cable News Transcripts, 2012–2024.

Variable	Frequency	Percent (%)
<b>Total</b>	292,303	100.00
<b>Primetime</b>		
Not Primetime (0)	238,912	81.73
Primetime (1)	53,391	18.27
<b>Contributor</b>		
CNN	100,745	34.47
FOXNEWS	96,478	33.01
MSNBC	95,080	32.53
<b>Year Variable</b>		
2012	22,553	7.72
2013	22,912	7.84
2014	19,395	6.64
2015	17,442	5.97
2016	20,414	6.98
2017	23,522	8.05
2018	24,122	8.25
2019	23,429	8.02
2020	22,942	7.85
2021	23,422	8.01
2022	23,861	8.16
2023	24,763	8.47
2024	23,546	8.06
<b>Relevant Text</b>		
Missing Economic Text	50,682	17.34
<b>Start Hour Group (24 Hour Clock)</b>		
00-02	38,881	13.30
03-05	38,142	13.05
06-08	38,278	13.10
09-11	37,083	12.69
12-14	26,708	9.14
15-17	36,336	12.43
18-20	38,700	13.24
21-23	38,175	13.06

*Note: Primetime is defined as broadcasts aired between 8 p.m. and 11 p.m. Mondays through Saturdays and from 7 p.m. to 11 p.m. on Sundays. Source: Cable news transcripts scraped from the archive.org TV News Closed Caption Corpus from June 2023 to Dec. 2024; Sood and Laohaprapanon (2023).*

Table B.4. Cable News Transcripts' Sentiment Scores by Contributor, 2012–2024.

	CNN (1)	FOXNEWS (2)	MSNBC (3)	Total (4)
<b>Sentiment</b>				
Means	-0.0356	-0.0371	-0.0366	-0.0364
Medians	-0.0334	-0.0356	-0.0356	-0.0350
Standard Deviations	0.0339	0.0304	0.0304	0.0331
<b>Economic Sentiment</b>				
Means	-0.0309	-0.0298	-0.0294	-0.0300
Medians	-0.0326	-0.0301	-0.0313	-0.0312
Standard Deviations	0.0764	0.0792	0.0789	0.0801
<b>Non-Economic Sentiment</b>				
Means	-0.0363	-0.0381	-0.0375	-0.0373
Medians	-0.0343	-0.0367	-0.0366	-0.0358
Standard Deviations	0.0342	0.0339	0.0307	0.0334
<b>Proportion of Economic Sentences</b>				
Means	0.0584	0.0849	0.0685	0.0704
Medians	0.0287	0.0514	0.0354	0.0380
Standard Deviations	0.0848	0.1036	0.0929	0.0946

*Note: The table presents summary statistics for sentiment and relevance measures by contributor (columns 1–3) and for the total sample (column 4). Sentiment refers to the overall sentiment scores calculated by replicating the ENSI score developed by Shapiro et al. (2022) that range from -1 (very negative sentiment) to 1 (very positive sentiment); “Relevant” and “Non-Relevant” rows distinguish between economic and non-economic sentences, respectively; “Percentage of relevant sentences” captures the proportion of words in economic sentences. Proportions are represented in decimal form. For example, 0.0584 corresponds to 5.84%. Source: Cable news transcripts scraped from the archive.org TV News Closed Caption Corpus from June 2023 to Dec. 2024; Sood and Laohaprapanon (2023).*

Table B.5. Linear and Ordered Logit Fixed-effects Models Estimating Exposure Impacts on Consumer Sentiment, 2016–2020.

VARIABLES	(1) Model 1 (OLogit)	(2) Model 1 (Linear)	(3) Model 2 (OLogit)	(4) Model 2 (Linear)	(5) Model 3 (OLogit)	(6) Model 3 (Linear)	(7) Model 4 (OLogit)	(8) Model 4 (Linear)
Time Trend (Monthly)	0.009 (0.0133)	0.003 (0.0037)	0.013 (0.0139)	0.003 (0.0037)	0.012 (0.0140)	0.003 (0.0037)	0.012 (0.0140)	0.003 (0.0037)
Change in Fox Economic Exposure (1 mo)	-5.370*** (0.6331)	-1.539*** (0.1798)	-12.317*** (0.7653)	-3.426*** (0.2041)	-12.332*** (0.7667)	-3.449*** (0.2038)	-12.336*** (0.7672)	-3.448*** (0.2038)
Change in MSNBC Economic Exposure (1 mo)	0.347*** (0.1237)	0.110*** (0.0341)	0.031 (0.1555)	0.035 (0.0401)	0.015 (0.1605)	0.030 (0.0408)	0.016 (0.1605)	0.029 (0.0408)
Change in CNN Economic Exposure (1 mo)	1.001*** (0.3361)	0.198** (0.0881)	1.884*** (0.4161)	0.391*** (0.1006)	1.989*** (0.4280)	0.402*** (0.1016)	1.984*** (0.4276)	0.401*** (0.1016)
Fox Viewer x Change in Fox Economic Exposure			20.795*** (1.0539)	5.872*** (0.2898)	24.903*** (1.2752)	7.098*** (0.3423)	24.812*** (1.3128)	7.086*** (0.3518)
MSNBC Viewer x Change in MSNBC Economic Exposure			1.081*** (0.1915)	0.291*** (0.0498)	1.379*** (0.2515)	0.395*** (0.0664)	1.303*** (0.2611)	0.375*** (0.0702)
CNN Viewer x Change in CNN Economic Exposure			-4.078*** (0.6915)	-0.978*** (0.1897)	-3.225** (1.2654)	-0.823*** (0.3192)	-4.117*** (1.3901)	-1.034*** (0.3426)
Fox, CNN Viewer x Change in CNN Economic Exposure					5.476*** (1.4132)	1.590*** (0.4154)	7.627*** (2.2225)	2.122*** (0.5896)
Fox, CNN Viewer x Change in Fox Economic Exposure					-4.848** (2.0943)	-1.498** (0.5843)	-4.166 (2.8665)	-1.428* (0.7557)
CNN, MSNBC Viewer x Change in CNN Economic Exposure					-3.702*** (1.3494)	-0.987*** (0.3682)	-2.594 (1.5897)	-0.700* (0.4203)
CNN, MSNBC Viewer x Change in MSNBC Economic Exposure					0.548* (0.3055)	0.129 (0.0799)	0.697** (0.3426)	0.167* (0.0909)
Fox, MSNBC Viewer x Change in Fox Economic Exposure					-11.547*** (2.0524)	-3.233*** (0.5897)	-11.188*** (2.6206)	-3.188*** (0.7704)
Fox, MSNBC Viewer x Change in MSNBC Economic Exposure					-1.755*** (0.3563)	-0.479*** (0.0920)	-1.430** (0.5674)	-0.400*** (0.1317)
All Three Viewer x Change in Fox Economic Exposure							-1.278 (4.2810)	-0.151 (1.1999)
All Three Viewer x Change in MSNBC Economic Exposure							-0.517 (0.7333)	-0.129 (0.1868)
All Three Viewer x Change in CNN Economic Exposure							-3.286 (2.9356)	-0.890 (0.8438)
Constant		2.619** (1.0760)		2.417** (1.0627)		2.638** (1.0620)		2.619** (1.0618)
Observations	34,588	28,923	34,588	28,923	34,588	28,923	34,588	28,923
Number of Individuals		6,952		6,952		6,952		6,952
Pseudo R-squared	0.0936		0.122		0.128		0.128	
Within R-squared		0.0780		0.101		0.106		0.106

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.



Table B.6. Correlated Random Effects Models Estimating  
Exposure Impacts on Consumer Sentiment, 2016–2020.

VARIABLES	(1) Model 1	(2) Model 1 (Means)	(3) Model 2	(4) Model 2 (Means)	(5) Model 3	(6) Model 3 (Means)	(7) Model 4	(8) Model 4 (Means)
Fox Viewer	0.228*** (0.0150)		0.465*** (0.0299)		0.459*** (0.0303)		0.457*** (0.0303)	
MSNBC Viewer	-0.042*** (0.0147)		-0.005 (0.0190)		-0.016 (0.0223)		-0.017 (0.0227)	
CNN Viewer	-0.023 (0.0150)		-0.045** (0.0226)		-0.037 (0.0261)		-0.039 (0.0263)	
Time Trend (Monthly)	0.003 (0.0037)	-0.008 (0.0115)	0.003 (0.0037)	-0.009 (0.0114)	0.003 (0.0037)	-0.009 (0.0114)	0.003 (0.0037)	-0.009 (0.0114)
Change in Fox Economic Exposure (1 mo)	-1.539*** (0.1801)	1.182** (0.5622)	-3.426*** (0.2045)	0.304 (0.6422)	-3.449*** (0.2042)	0.301 (0.6423)	-3.448*** (0.2042)	0.291 (0.6425)
Change in MSNBC Economic Exposure (1 mo)	0.110*** (0.0342)	0.008 (0.1227)	0.035 (0.0402)	-0.100 (0.1380)	0.030 (0.0409)	-0.113 (0.1387)	0.029 (0.0409)	-0.109 (0.1389)
Change in CNN Economic Exposure (1 mo)	0.198** (0.0882)	-0.339 (0.3888)	0.391*** (0.1008)	-0.259 (0.4222)	0.402*** (0.1018)	-0.249 (0.4252)	0.401*** (0.1018)	-0.252 (0.4256)
Fox Viewer x Change in Fox Economic Exposure			5.872*** (0.2903)	2.075** (0.9013)	7.098*** (0.3430)	0.971 (0.9601)	7.086*** (0.3526)	0.984 (0.9674)
MSNBC Viewer x Change in MSNBC Economic Exposure			0.291*** (0.0499)	0.330 (0.2112)	0.395*** (0.0665)	0.291 (0.2818)	0.375*** (0.0704)	0.423 (0.2980)
CNN Viewer x Change in CNN Economic Exposure			-0.978*** (0.1901)	-0.072 (0.8132)	-0.823** (0.3198)	0.772 (1.2133)	-1.034*** (0.3433)	1.517 (1.3017)
Fox, CNN Viewer x Change in CNN Economic Exposure					1.590*** (0.4162)	-2.662 (1.6220)	2.122*** (0.5908)	-5.213** (2.1865)
Fox, CNN Viewer x Change in Fox Economic Exposure					-1.498** (0.5855)	2.084 (1.4332)	-1.428* (0.7572)	2.648 (1.7988)
CNN, MSNBC Viewer x Change in CNN Economic Exposure					-0.987*** (0.3689)	-0.134 (1.2606)	-0.700* (0.4212)	-1.017 (1.4537)
CNN, MSNBC Viewer x Change in MSNBC Economic Exposure					0.129 (0.0800)	-0.079 (0.3418)	0.167* (0.0911)	-0.340 (0.4082)
Fox, MSNBC Viewer x Change in Fox Economic Exposure					-3.233*** (0.5909)	2.605** (1.2494)	-3.188*** (0.7720)	3.028* (1.5887)
Fox, MSNBC Viewer x Change in MSNBC Economic Exposure					-0.479*** (0.0921)	0.319 (0.3674)	-0.400*** (0.1320)	-0.274 (0.5041)
All Three Viewer x Change in Fox Economic Exposure							-0.151 (1.2023)	-1.896 (2.8276)
All Three Viewer x Change in MSNBC Economic Exposure							-0.129 (0.1872)	1.033 (0.7518)
All Three Viewer x Change in CNN Economic Exposure							-0.890 (0.8455)	3.860 (3.1790)
Constant	-1.003 (2.5596)		-0.819 (2.5308)		-0.829 (2.5318)		-0.902 (2.5325)	
Observations	28,923	28,923	28,923	28,923	28,923	28,923	28,923	28,923
Number of Individuals	6,952	6,952	6,952	6,952	6,952	6,952	6,952	6,952
Overall R-squared	0.208	0.208	0.222	0.222	0.225	0.225	0.225	0.225

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

Table B.7. Ordered Logit Fixed-effects Estimates of Models Estimating Exposure Impacts on Consumer Sentiment, 2016–2020.

VARIABLES	(1) Model 2 - All Firms	(2) Model 2 - Fox/MSNBC	(3) Model 2 - CNN/Fox
Time Trend (Monthly)	0.015 (0.0140)	0.017 (0.0139)	0.024* (0.0137)
Change in Fox Economic Exposure (1 mo)	-12.223*** (0.7621)	-12.392*** (0.7580)	-11.517*** (0.7116)
Change in MSNBC Economic Exposure (1 mo)	0.034 (0.1557)	0.075 (0.1551)	
Change in CNN Economic Exposure (1 mo)	1.901*** (0.4154)		1.879*** (0.4107)
Fox Viewer x Change in Fox Economic Exposure	20.838*** (1.0596)	20.814*** (1.0642)	20.811*** (1.0546)
MSNBC Viewer x Change in MSNBC Economic Exposure	1.078*** (0.1923)	0.992*** (0.1902)	
CNN Viewer x Change in CNN Economic Exposure	-4.093*** (0.6919)		-3.732*** (0.6821)
Observations	34,634	34,634	34,634
Pseudo R-squared	0.123	0.121	0.121

VARIABLES	(1) Model 4 - All Firms	(2) Model 4 - Fox/MSNBC	(3) Model 4 - CNN/Fox
Time Trend (Monthly)	0.014 (0.0140)	0.018 (0.0140)	0.024* (0.0137)
Change in Fox Economic Exposure (1 mo)	-12.249*** (0.7640)	-12.360*** (0.7579)	-11.521*** (0.7144)
Change in MSNBC Economic Exposure (1 mo)	0.021 (0.1609)	0.065 (0.1610)	
Change in CNN Economic Exposure (1 mo)	2.004*** (0.4267)		1.893*** (0.4146)
Fox Viewer x Change in Fox Economic Exposure	24.891*** (1.3220)	24.231*** (1.2318)	23.013*** (1.2123)
MSNBC Viewer x Change in MSNBC Economic Exposure	1.282*** (0.2599)	1.429*** (0.1993)	
CNN Viewer x Change in CNN Economic Exposure	-4.007*** (1.4165)		-5.197*** (0.7476)
Fox, CNN Viewer x Change in CNN Economic Exposure	7.209*** (2.2192)		8.134*** (1.8330)
Fox, CNN Viewer x Change in Fox Economic Exposure	-4.213 (2.8889)		-2.473 (2.8446)
CNN, MSNBC Viewer x Change in CNN Economic Exposure	-2.716* (1.6125)		
CNN, MSNBC Viewer x Change in MSNBC Economic Exposure	0.732** (0.3450)		
Fox, MSNBC Viewer x Change in Fox Economic Exposure	-11.465*** (2.5932)	-10.807*** (2.5398)	
Fox, MSNBC Viewer x Change in MSNBC Economic Exposure	-1.398** (0.5734)	-1.502*** (0.5588)	
All Three Viewer x Change in Fox Economic Exposure	-1.025 (4.2885)	-5.193* (3.1527)	-12.400*** (3.3964)
All Three Viewer x Change in MSNBC Economic Exposure	-0.566 (0.7396)	0.007 (0.6497)	
All Three Viewer x Change in CNN Economic Exposure	-2.847 (2.9224)		-5.499** (2.3663)
Observations	34,634	34,634	34,634
Pseudo R-squared	0.128	0.125	0.124

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

Table B.8. Linear and Ordered Logit Fixed-effects Estimating Salience of Economic Exposure on Consumer Sentiment Over Time, 2016–2020.

VARIABLES	(1) 1 Month Change (OLogit)	(2) 1 Month Change (Linear)	(3) 3 Month Change (OLogit)	(4) 3 Month Change (Linear)	(5) 6 Month Change (OLogit)	(6) 6 Month Change (Linear)
Time Trend (Monthly)	0.016 (0.0141)	0.004 (0.0037)	0.017 (0.0133)	0.006 (0.0037)	0.036** (0.0140)	0.009** (0.0035)
Change in Fox Economic Exposure	-12.290*** (0.7678)	-3.429*** (0.2032)	-6.675*** (0.9559)	-1.899*** (0.2643)	-6.851*** (1.1315)	-2.180*** (0.2935)
Change in MSNBC Economic Exposure	0.003 (0.1605)	0.025 (0.0408)	-0.833 (0.5279)	-0.201 (0.1617)	6.061*** (1.3312)	1.373*** (0.3404)
Change in CNN Economic Exposure	1.946*** (0.4245)	0.394*** (0.1012)	1.857*** (0.4729)	0.415*** (0.1267)	1.233** (0.5483)	0.599*** (0.1414)
Fox Viewer x Change in Fox Economic Exposure	24.882*** (1.3162)	7.103*** (0.3527)	9.786*** (0.8926)	2.845*** (0.2610)	29.782*** (1.2197)	7.285*** (0.2264)
MSNBC Viewer x Change in MSNBC Economic Exposure	1.292*** (0.2594)	0.376*** (0.0702)	0.467 (0.9276)	0.111 (0.2471)	-21.265*** (1.9136)	-5.473*** (0.4447)
CNN Viewer x Change in CNN Economic Exposure	-4.209*** (1.4019)	-1.050*** (0.3414)	-2.728*** (0.9350)	-0.672*** (0.2484)	-5.120*** (0.9241)	-1.413*** (0.2379)
Fox, CNN Viewer x Change in CNN Economic Exposure	7.610*** (2.2385)	2.091*** (0.5971)	6.321*** (1.6451)	1.658*** (0.4558)	3.677* (2.1343)	1.070* (0.5611)
Fox, CNN Viewer x Change in Fox Economic Exposure	-4.308 (2.8717)	-1.502** (0.7537)	0.732 (2.0674)	-0.211 (0.5393)	-7.918** (3.3790)	-1.484* (0.7997)
CNN, MSNBC Viewer x Change in CNN Economic Exposure	-2.534 (1.6031)	-0.696* (0.4205)	-8.493*** (1.6640)	-1.819*** (0.4365)	-3.834*** (1.2204)	-1.436*** (0.3409)
CNN, MSNBC Viewer x Change in MSNBC Economic Exposure	0.713** (0.3423)	0.165* (0.0912)	15.285*** (2.7337)	2.860*** (0.6623)	21.026*** (2.7408)	5.981*** (0.7117)
Fox, MSNBC Viewer x Change in Fox Economic Exposure	-11.090*** (2.6037)	-3.179*** (0.7665)	-3.847* (2.1178)	-1.098* (0.6206)	-14.715*** (3.0791)	-3.033*** (0.8431)
Fox, MSNBC Viewer x Change in MSNBC Economic Exposure	-1.424** (0.5699)	-0.398*** (0.1319)	0.603 (1.4126)	0.394 (0.3907)	16.185*** (4.3149)	4.280*** (1.2223)
All Three Viewer x Change in Fox Economic Exposure	-1.209 (4.2811)	-0.111 (1.1991)	-2.248 (3.2978)	-0.268 (0.9137)	2.518 (5.3127)	0.027 (1.4387)
All Three Viewer x Change in MSNBC Economic Exposure	-0.554 (0.7376)	-0.137 (0.1878)	-18.275*** (4.7705)	-3.881*** (1.1806)	-19.195*** (6.1011)	-5.440*** (1.7244)
All Three Viewer x Change in CNN Economic Exposure	-3.187 (2.9518)	-0.836 (0.8499)	5.635* (3.2029)	1.140 (0.8579)	4.463 (2.9059)	1.472* (0.8189)
Constant		2.832*** (1.0637)		2.984*** (1.0937)		2.478** (1.0299)
Observations	34,625	28,924	34,625	28,924	34,625	28,924
Number of Individuals		6,952		6,952		6,952
Pseudo R-squared	0.128		0.105		0.223	
Within R-squared		0.106		0.0868		0.186

Robust standard errors in parentheses  
\*\*\* p<0.01. \*\* p<0.05. \* p<0.1

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

Table B.9. Correlated Random Effects Estimating Salience of Economic Exposure on Consumer Sentiment Over Time, 2016–2020.

VARIABLES	(1) 1 Month Change	(2) 1 Month Change (Means)	(3) 3 Month Change	(4) 3 Month Change (Means)	(5) 6 Month Change	(6) 6 Month Change (Means)
Fox Viewer	0.459*** (0.0303)		0.307*** (0.0198)		0.455*** (0.0219)	
MSNBC Viewer	-0.013 (0.0226)		-0.043** (0.0174)		-0.103*** (0.0186)	
CNN Viewer	-0.042 (0.0263)		-0.025 (0.0213)		-0.083*** (0.0231)	
Time Trend (Monthly)	0.004 (0.0038)	-0.011 (0.0115)	0.006 (0.0037)	-0.012 (0.0113)	0.009** (0.0035)	-0.016 (0.0122)
Change in Fox Economic Exposure	-3.429*** (0.2036)	0.221 (0.6437)	-1.899*** (0.2648)	-0.880 (0.8589)	-2.180*** (0.2941)	-0.112 (0.6204)
Change in MSNBC Economic Exposure	0.025 (0.0409)	-0.101 (0.1405)	-0.201 (0.1621)	-0.837 (0.5604)	1.373*** (0.3411)	-0.758 (1.0105)
Change in CNN Economic Exposure	0.394*** (0.1014)	-0.208 (0.4257)	0.415*** (0.1269)	-0.294 (0.5424)	0.599*** (0.1417)	-0.156 (0.3027)
Fox Viewer x Change in Fox Economic Exposure	7.103*** (0.3534)	0.990 (0.9665)	2.845*** (0.2615)	2.472** (0.9973)	7.285*** (0.2269)	-0.334 (0.5407)
MSNBC Viewer x Change in MSNBC Economic Exposure	0.376*** (0.0704)	0.436 (0.2977)	0.111 (0.2476)	3.267*** (1.1466)	-5.473*** (0.4457)	-2.007 (1.4978)
CNN Viewer x Change in CNN Economic Exposure	-1.050*** (0.3421)	1.576 (1.3043)	-0.672*** (0.2489)	1.681 (1.3001)	-1.413*** (0.2384)	0.422 (0.6152)
Fox, CNN Viewer x Change in CNN Economic Exposure	2.091*** (0.5983)	-5.351** (2.1894)	1.658*** (0.4568)	-4.417** (2.0049)	1.070* (0.5623)	-0.585 (1.3864)
Fox, CNN Viewer x Change in Fox Economic Exposure	-1.502** (0.7552)	2.743 (1.7980)	-0.211 (0.5404)	3.672* (1.9571)	-1.484* (0.8014)	0.718 (1.9060)
CNN, MSNBC Viewer x Change in CNN Economic Exposure	-0.696* (0.4214)	-1.086 (1.4606)	-1.819*** (0.4374)	-2.023 (1.5405)	-1.436*** (0.3416)	-0.613 (0.8094)
CNN, MSNBC Viewer x Change in MSNBC Economic Exposure	0.165* (0.0914)	-0.360 (0.4108)	2.860*** (0.6636)	-0.623 (1.9099)	5.981*** (0.7131)	2.839 (2.7625)
Fox, MSNBC Viewer x Change in Fox Economic Exposure	-3.179*** (0.7681)	3.107* (1.5870)	-1.098* (0.6218)	1.340 (1.8512)	-3.033*** (0.8448)	0.031 (1.5607)
Fox, MSNBC Viewer x Change in MSNBC Economic Exposure	-0.398*** (0.1322)	-0.299 (0.5030)	0.394 (0.3915)	-7.513*** (1.7815)	4.280*** (1.2248)	5.417 (4.4986)
All Three Viewer x Change in Fox Economic Exposure	-0.111 (1.2015)	-2.266 (2.8267)	-0.268 (0.9155)	-3.021 (3.3002)	0.027 (1.4416)	-0.218 (2.9132)
All Three Viewer x Change in MSNBC Economic Exposure	-0.137 (0.1882)	1.108 (0.7490)	-3.881*** (1.1830)	7.792* (4.2883)	-5.440*** (1.7279)	-12.702** (6.4077)
All Three Viewer x Change in CNN Economic Exposure	-0.836 (0.8516)	4.222 (3.2038)	1.140 (0.8596)	3.914 (3.3924)	1.472* (0.8205)	2.636 (1.8605)
Constant	-0.377 (2.5399)		-0.575 (2.5235)		-0.691 (2.7102)	
Observations	28,924	28,924	28,924	28,924	28,924	28,924
Number of Individuals	6,952	6,952	6,952	6,952	6,952	6,952
Overall R-squared	0.225	0.225	0.214	0.214	0.272	0.272

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.

Table B.10. Linear and Ordered Logit Fixed-effects Estimating Effects of Primetime and Non-Primetime Exposure on Consumer Sentiment, 2016–2020

VARIABLES	(1) Model 5 (OLogit)	(2) Model 5 (Linear)	(3) Model 6 (OLogit)	(4) Model 6 (Linear)
Time Trend (Monthly)	0.055*** (0.0136)	0.014*** (0.0034)	0.028** (0.0144)	0.007** (0.0036)
<i>Primetime Variables</i>				
Fox Change in Economic Exposure	-6.007*** (0.7220)	-1.723*** (0.1860)	-1.886** (0.9304)	-0.558** (0.2509)
MSNBC Change in Economic Exposure	2.976*** (0.6550)	0.655*** (0.1625)	-0.142 (0.7677)	-0.043 (0.1995)
CNN Change in Economic Exposure	0.183** (0.0746)	0.079*** (0.0211)	0.133 (0.0817)	0.060*** (0.0223)
Fox Viewer × Fox Economic Exposure	31.417*** (1.1377)	7.684*** (0.2305)	8.162*** (1.8687)	1.464*** (0.4352)
MSNBC Viewer × MSNBC Economic Exposure	-6.376*** (1.4246)	-1.697*** (0.3578)	3.562** (1.5887)	0.863** (0.3810)
CNN Viewer × CNN Economic Exposure	-0.950*** (0.2014)	-0.285*** (0.0503)	-0.856*** (0.2238)	-0.250*** (0.0541)
Fox, CNN Viewer × CNN Economic Exposure	1.619*** (0.3485)	0.426*** (0.0829)	0.968** (0.3837)	0.262*** (0.0930)
Fox, CNN Viewer × Fox Economic Exposure	-15.495*** (2.7608)	-3.236*** (0.6499)	-6.855* (3.7154)	-1.144 (0.9937)
CNN, MSNBC Viewer × CNN Economic Exposure	-1.010*** (0.2987)	-0.237*** (0.0606)	-0.811** (0.3259)	-0.192*** (0.0648)
CNN, MSNBC Viewer × MSNBC Economic Exposure	1.107 (1.9811)	0.734 (0.4696)	-4.996** (2.1796)	-0.820 (0.5154)
MSNBC Viewer × Fox Economic Exposure	-17.153*** (2.5578)	-3.597*** (0.6815)	-6.212 (4.8193)	-1.001 (1.2525)
Fox, MSNBC Viewer × MSNBC Economic Exposure	5.734** (2.7879)	1.314* (0.7368)	-4.687 (3.1355)	-1.552* (0.8155)
All Three × Fox Exposure	11.834*** (4.2960)	2.312** (1.1689)	12.472* (6.7014)	2.710 (1.8474)
All Three × MSNBC Exposure	-5.700 (4.0123)	-1.901* (1.0200)	3.984 (4.4094)	0.616 (1.1429)
All Three × CNN Exposure	0.391 (0.4785)	0.086 (0.1163)	0.924* (0.5340)	0.222* (0.1334)
<i>Non-Primetime Variables</i>				
Fox Change in Economic Exposure			-4.786*** (1.1754)	-1.624*** (0.3127)
MSNBC Change in Economic Exposure			5.028*** (1.2631)	0.961*** (0.3143)
CNN Change in Economic Exposure			0.715* (0.4292)	0.429*** (0.1078)
Fox Viewer × Fox Economic Exposure			22.134*** (1.9425)	5.770*** (0.4049)
MSNBC Viewer × MSNBC Economic Exposure			-19.179*** (1.7586)	-5.102*** (0.4543)
CNN Viewer × CNN Economic Exposure			-1.060 (0.8132)	-0.287 (0.2028)
Fox, CNN Viewer × CNN Economic Exposure			0.166 (1.3826)	0.042 (0.3797)
Fox, CNN Viewer × Fox Economic Exposure			-3.373 (4.3936)	-0.682 (1.0521)
CNN, MSNBC Viewer × CNN Economic Exposure			-1.469 (1.1277)	-0.574* (0.2987)
CNN, MSNBC Viewer × MSNBC Economic Exposure			18.693*** (2.9080)	5.168*** (0.7446)
Fox, MSNBC Viewer × Fox Economic Exposure			-10.101** (4.2140)	-2.400** (1.1106)
Fox, MSNBC Viewer × MSNBC Economic Exposure			16.477*** (3.6142)	4.932*** (1.0914)
All Three × Fox Exposure			-7.774 (6.7889)	-2.126 (1.7909)
All Three × MSNBC Exposure			-14.502** (6.1680)	-4.380** (1.7072)
All Three × CNN Exposure			0.777 (2.0555)	0.333 (0.5737)
Constant		0.572 (1.0160)		2.743** (1.0690)
Observations	34,593	28,910	34,593	28,910
Number of Individuals		6,946		6,946
Pseudo R-squared	0.200		0.222	
Within R-squared		0.164		0.185

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.



Table B.11. Correlated Random Effects Estimates of Macroeconomic Perceptions  
Estimating Effects of Primetime and Non-Primetime Exposure on Consumer Sentiment, 2016–2020

VARIABLES	(1) Model 5	(2) Model 5 (Means)	(3) Model 6	(4) Model 6 (Means)
Fox Viewer	0.411*** (0.0203)		0.455*** (0.0223)	
MSNBC Viewer	-0.047*** (0.0180)		-0.098*** (0.0220)	
CNN Viewer	-0.083*** (0.0207)		-0.086*** (0.0254)	
Time Trend (Monthly)	0.014*** (0.0034)	-0.021* (0.0115)	0.007*** (0.0036)	-0.014 (0.0123)
<i>Primetime Variables</i>				
Fox Change in Economic Exposure	-1.723*** (0.1864)	-1.219** (0.4859)	-0.558** (0.2515)	-1.279** (0.5986)
MSNBC Change in Economic Exposure	0.655*** (0.1629)	-0.473 (0.6373)	-0.043 (0.1999)	0.034 (0.6741)
CNN Change in Economic Exposure	0.079*** (0.0211)	-0.024 (0.0364)	0.060*** (0.0224)	-0.025 (0.0419)
Fox Viewer × Fox Economic Exposure	7.684*** (0.2310)	-0.181 (0.5835)	1.464*** (0.4362)	2.028** (0.9235)
MSNBC Viewer × MSNBC Economic Exposure	-1.697*** (0.3586)	-2.388 (1.5525)	0.863** (0.3819)	-3.533** (1.5192)
CNN Viewer × CNN Economic Exposure	-0.285*** (0.0504)	0.060 (0.1002)	-0.250*** (0.0543)	0.015 (0.1167)
Fox, CNN Viewer × CNN Economic Exposure	0.426*** (0.0831)	-0.382** (0.1840)	0.262*** (0.0932)	-0.204 (0.2211)
Fox, CNN Viewer × Fox Economic Exposure	-3.236*** (0.6512)	3.565** (1.4921)	-1.144 (0.9960)	4.620** (2.1946)
CNN, MSNBC Viewer × CNN Economic Exposure	-0.237*** (0.0607)	0.170 (0.1137)	-0.192*** (0.0650)	0.282** (0.1427)
CNN, MSNBC Viewer × MSNBC Economic Exposure	0.734 (0.4706)	4.140** (1.9191)	-0.820 (0.5165)	3.645* (1.9936)
Fox, MSNBC Viewer × Fox Economic Exposure	-3.597*** (0.6829)	2.309* (1.2488)	-1.001 (1.2554)	1.260 (2.5450)
Fox, MSNBC Viewer × MSNBC Economic Exposure	1.314* (0.7383)	6.321** (2.7721)	-1.552* (0.8173)	7.837*** (2.8570)
All Three × Fox Exposure	2.312** (1.1713)	-3.679 (2.3165)	2.710 (1.8516)	-8.226** (3.9704)
All Three × MSNBC Exposure	-1.901* (1.0221)	-9.477** (3.9528)	0.616 (1.1456)	-7.263* (4.3936)
All Three × CNN Exposure	0.086 (0.1165)	0.021 (0.2394)	0.222* (0.1337)	-0.307 (0.2949)
<i>Non-Primetime Variables</i>				
Fox Change in Economic Exposure			-1.624*** (0.3134)	0.529 (0.6153)
MSNBC Change in Economic Exposure			0.961*** (0.3150)	-0.212 (1.0341)
CNN Change in Economic Exposure			0.429*** (0.1080)	-0.175 (0.3171)
Fox Viewer × Fox Economic Exposure			5.770*** (0.4058)	-1.646** (0.8253)
MSNBC Viewer × MSNBC Economic Exposure			-5.102*** (0.4554)	-0.255 (1.4221)
CNN Viewer × CNN Economic Exposure			-0.287 (0.2033)	0.422 (0.7397)
Fox, CNN Viewer × CNN Economic Exposure			0.042 (0.3805)	-0.938 (1.2536)
Fox, CNN Viewer × Fox Economic Exposure			-0.682 (1.0546)	-1.293 (2.1368)
CNN, MSNBC Viewer × CNN Economic Exposure			-0.574* (0.2994)	-1.823* (1.0107)
CNN, MSNBC Viewer × MSNBC Economic Exposure			5.168*** (0.7463)	0.999 (3.0354)
Fox, MSNBC Viewer × Fox Economic Exposure			-2.400** (1.1132)	0.629 (1.9758)
Fox, MSNBC Viewer × MSNBC Economic Exposure			4.932*** (1.0939)	-1.166 (4.0945)
All Three × Fox Exposure			-2.126 (1.7950)	3.906 (3.4631)
All Three × MSNBC Exposure			-4.380** (1.7111)	-5.358 (6.9674)
All Three × CNN Exposure			0.333 (0.5750)	5.031*** (1.9514)
Constant	-0.767 (2.5876)		-0.805 (2.7963)	
Observations	28,910	28,910	28,910	28,910
Number of Individuals	6,946	6,946	6,946	6,946
Overall R-squared	0.259	0.259	0.272	0.272

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Notes: The dependent variable is an ordinal measure of respondents' perceptions of national economic conditions [-1, 0, 1] sourced from the VOTER survey (2016–2020). All models include individual fixed effects to control for time-invariant unobserved heterogeneity. Standard errors are clustered at the individual level and reported in parentheses.