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### Impressum:

CESifo Working Papers ISSN 2364-1428 (electronic version) Publisher and distributor: Munich Society for the Promotion of Economic Research - CESifo GmbH The international platform of Ludwigs-Maximilians University's Center for Economic Studies and the ifo Institute Poschingerstr. 5, 81679 Munich, Germany Telephone +49 (0)89 2180-2740, Telefax +49 (0)89 2180-17845, email office@cesifo.de Editor: Clemens Fuest https://www.cesifo.org/en/wp An electronic version of the paper may be downloaded • from the SSRN website: www.SSRN.com

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# Do People Demand Fact-Checked News? Evidence from U.S. Democrats

## Abstract

In a large-scale online experiment with U.S. Democrats, we examine how the demand for a newsletter about an economic relief plan changes when the newsletter content is fact-checked. We first document an overall muted demand for fact-checking when the newsletter features stories from an ideologically aligned source, even though fact-checking increases the perceived accuracy of the newsletter. The average impact of fact-checking masks substantial heterogeneity by ideology: fact-checking reduces demand among Democrats with strong ideological views and increases demand among ideologically moderate Democrats. Furthermore, fact-checking increases from an ideologically non-aligned source.

JEL-Codes: D830, D910, L820.

Keywords: fact-checking, news demand, information, media bias, belief polarization.

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#### October 13, 2021

We would like to thank the editor (Ricardo Perez-Truglia) and three anonymous reviewers for excellent and highly constructive suggestions. We also thank Peter Andre, Joshua Dean, Armin Falk, Lukas Hensel, Yucheng Liang, Matt Lowe, Massimo Morelli, Salvatore Nunnari, Kirill Pogorelskiy, Andrea Prat, Carlo Schwarz, Daniel Sgroi, Andreas Stegmann, Joshua Tasoff, Marc Witte, Florian Zimmermann and seminar participants at the Belief-Based Utility Workshop 2021, Bonn, Warwick, Vienna, and the PERICLES Debate on Political Information at Bocconi for very helpful comments. Financial support from BA/Leverhulme Small Research Grants is gratefully acknowledged. Hrishikesh Iyengar, Apoorv Kanoongo, Melisa Kurtis and Kangli Wang provided excellent research assistance. IRB approval was obtained from the German Association for Experimental Economic Research (GfeW) and the University of Warwick HSSREC (86/20-21). The data collections were pre-registered in the AsPredicted registry. Roth: Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC 2126/1-390838866. The usual disclaimer applies.

## **1** Introduction

Misinformation on mass media is becoming increasingly prevalent (Lazer et al., 2018). Recent examples of misinformation on mass media include false claims about election fraud in the 2020 U.S. Presidential Election that were widely reported in several mainstream news outlets (Pennycook and Rand, 2021). The rise in misinformation coincides with distrust in the media reaching higher levels than ever, with 56% of Americans saying that the mainstream media is purposely trying to mislead the public with inaccurate reporting.<sup>1</sup> Academics and practitioners alike have suggested factchecking as one of the main tools to combat misinformation and restore trust in the news (Sell et al., 2021). The extent to which fact-checking can be an effective tool to combat misinformation and restore trust in the news crucially depends on the demand for fact-checking services. If consumers-as assumed in many models of media markets-primarily care about the accuracy of the news, news demand should increase when the news content is fact-checked. On the other hand, if consumers also have non-instrumental motives to read news, such as preferences for belief confirmation (Faia et al., 2021; Mullainathan and Shleifer, 2005; Di Tella et al., 2015; Young, 2016), it is theoretically ambiguous how fact-checking affects the demand for news.

In this paper, we provide evidence on how demand for a newsletter changes when its content is fact-checked. In a large-scale online experiment with more than 4,000 Americans who voted Democratic in the 2020 U.S. Presidential Election, respondents can sign up for a weekly politics newsletter featuring the three top stories about an economic relief plan (the *Biden Rescue Plan*). Whether our respondents sign up for the newsletter is our main outcome of interest. Our key treatment variation is whether respondents are told that all stories featured in the newsletter will be fact-checked. We further cross-randomize whether the newsletter features stories from an ideologically aligned source (*MSNBC*) or a non-aligned news source (*Fox News*). Although focusing exclusively on Democrats limits the generalizability of our results, we made this choice to make sure that the newsletter is equally ideologically aligned for all respondents.

Turning to results, we first establish that our sample of Democrats expects articles featured in the newsletter to contain factual errors and believes that fact-checking increases the accuracy of the newsletter. These results hold irrespective of whether the

<sup>&</sup>lt;sup>1</sup>https://www.axios.com/media-trust-crisis-2bf0ec1c-00c0-4901-9069-e26b21c283a9. html (accessed July 9, 2021)

newsletter features stories from an ideologically aligned or non-aligned source. Our first main result is that demand for a newsletter featuring stories from an ideologically aligned source is largely unaffected by the added fact-checking service: the fact-checking treatment increases newsletter demand by only 1.4 percentage points. The effect is not statistically significant (p = 0.382) and corresponds to a modest 2.7% change in demand compared to the control group mean of 49.7%. It is also relatively precisely estimated given our large sample of more than 4,100 respondents, which gives us an ex-post minimum detectable effect size of 4.4 percentage points (at 80% power). We thus have power to detect relatively modest effect sizes.

Our second main result is that the muted average treatment effect masks substantial heterogeneity by ideology: fact-checking decreases newsletter demand by 6.2 percentage points among Democrats with a strong ideology (p = 0.021) and increases demand among moderate Democrats by 4.5 percentage points (p = 0.018). These effect sizes correspond to a 10.4% reduction in demand among Democrats with a strong ideology and a 9.9% increase in demand among moderate Democrats (compared to control group means of 59.7% and 45%, respectively), underscoring the economic significance of the effects. Our third main result is that fact-checking increases demand among all Democrats when the newsletter features stories from an ideologically non-aligned source. The treatment increases demand by 10 percentage points on average (p = 0.016), which corresponds to a 29.1% increase in demand compared to the control group mean of 34.3%. This underscores the economic significance of the effects.

Our results provide a proof of concept that while fact-checking has the potential to increase the demand for news by increasing its perceived accuracy, it could also have the unintended side effect of reducing the demand for ideologically aligned news among consumers with extreme ideological views, who plausibly have a strong preference for belief confirmation. While these findings could potentially inform the optimal regulation of media markets, one should be careful when trying to generalize from a very specific setting with Democrats only. Our results could plausibly have looked differently if we had run the experiment on a different topic where accuracy concerns are likely to be more important, such as news about COVID-19 vaccine efficacy, or with a sample of Republicans. To draw credible and robust conclusions for policy, future research will need to test the robustness of our findings on the demand for fact-checking across many different settings and samples.

Our paper contributes to several strands of the literature. First, the paper relates to

the literature on fact-checking (Barrera et al., 2020), debiasing interventions (Alesina et al., 2018; Banerjee et al., 2018; Cruces et al., 2013; Galasso et al., 2021; Grigorieff et al., 2020; Pennycook et al., 2020; Pennycook and Rand, 2019), and misinformation on mass media (Bursztyn et al., 2021; Pennycook and Rand, 2021). Previous work in this literature has assessed how fact-checking or debiasing interventions affect beliefs and policy views (Barrera et al., 2020; Fehr et al., 2021; Haaland and Roth, 2021; Haaland et al., 2021; Nyhan and Reifler, 2010; Nyhan et al., 2019), trust in fact-checking services (Brandtzaeg and Følstad, 2017; Brandtzaeg et al., 2018), and willingness to share false news on social media (Henry et al., 2021).<sup>2</sup> While these studies have advanced our understanding of how fact-checking affects beliefs and policy views, it is important from a policy perspective to also understand how fact-checking affects people's news demand. We take the first step in this direction by providing evidence on how Democrats' demand for a politics newsletter changes when the newsletter content is fact-checked.

The paper also relates to the literature studying the demand for news (DellaVigna and Ferrara, 2015; Gentzkow and Shapiro, 2006; Gentzkow et al., 2018; Mullainathan and Shleifer, 2005; Prat and Strömberg, 2013; Qin et al., 2018). This literature has debated whether people tend to read ideologically aligned news because they have higher trust in ideologically aligned sources or because they want to confirm their existing beliefs (Druckman and McGrath, 2019; Gentzkow and Shapiro, 2006; Mullainathan and Shleifer, 2005). We contribute to this literature by providing a proof of concept that non-instrumental motives, such as preferences for belief confirmation, play a role in driving the demand for ideologically aligned news.

Finally, the paper also relates to the literature on information demand (Chopra et al., 2021; Faia et al., 2021; Falk and Zimmermann, 2017; Fuster et al., 2020; Ganguly and Tasoff, 2016; Golman et al., 2017; Nielsen, 2020; Tappin et al., 2020; Thaler, 2021; Zimmermann, 2015).<sup>3</sup> We contribute to this literature by providing evidence on whether Democrats have a preference for more accurate news. Compared to much of the previous literature, our design leverages a more natural outcome, namely people's decision to sign up for a real newsletter covering current political and economic news.

<sup>&</sup>lt;sup>2</sup>Work in psychology also studies interventions aiming to reduce the spread of misinformation. For example, attaching warnings to news stories disputed by third-party fact-checkers (Pennycook et al., 2020) or using crowdsourcing to generate trust ratings can help consumers identify inaccurate claims (Pennycook and Rand, 2019). While the outcomes considered by this research concern beliefs and trust in news, our focus is on the effects of fact-checking services on the demand for news.

<sup>&</sup>lt;sup>3</sup>See Capozza et al. (2021) for a review of the applied literature on information demand.

## 2 Sample and experimental design

#### 2.1 Sample

We collected the data for the experiment during January and February 2021 in collaboration with Lucid, a data provider commonly used in economic research (Bursztyn et al., 2020; Haaland et al., 2021). The data was collected in four waves, with about 2,000 respondents per wave and 8,399 respondents in total. Each wave was pre-specified in the AsPredicted registry (see Table B.1 for an overview and additional registry information).<sup>4</sup> To make sure that the newsletter was equally ideologically aligned for all respondents, we only recruited respondents who had voted for Joe Biden during the 2020 Presidential Election. Respondents who had voted for another candidate or had not voted at all were immediately screened out of the survey.

One recurring concern about online studies is potentially lower levels of attention among respondents compared to laboratory experiments, which may threaten the internal validity of the study. To address this concern, we included a simple pre-treatment attention check at the beginning of the study (see p. 43 of the Online Appendix for a screenshot). 56% of our respondents passed the attention check, which is very low compared to many other experiments (e.g., 96.4% in Bottan and Perez-Truglia 2020 and 99% in Nathan et al. 2020). As shown in Section C of the Online Appendix, we also observe much lower data quality among inattentive respondents. We, therefore, focus on attentive respondents in the main specifications, leaving us with a sample of 4,667 respondents.<sup>5,6</sup>

<sup>&</sup>lt;sup>4</sup>Each pre-registration was submitted to the AsPredicted registry a few hours before the launch of the respective data collection.

<sup>&</sup>lt;sup>5</sup>Many experimental studies conducted with similar online samples usually screen out inattentive respondents from the outset (e.g., Enke and Graeber, 2019; Haaland and Roth, 2020; Haaland et al., 2021).

<sup>&</sup>lt;sup>6</sup>We had some minor attrition of 1.1% between the main outcome and the subsequent post-treatment belief measures about newsletter characteristics.

#### 2.2 Experimental design

All four waves feature two base treatments that are constant across the waves. In the two base treatments, we vary whether we will fact-check a newsletter featuring the three top stories about the *Biden Rescue Plan* featured on *MSNBC*. On top of this, each wave includes a second set of cross-randomized conditions to assess the robustness of our findings to different variations in the newsletter content and to examine potential mechanisms. Specifically, we vary the framing of the plan (wave 1), the perceived instrumental benefits of the plan (wave 2), whether the newsletter features stories from *MSNBC* or *Fox News* (wave 3), and whether the newsletter features news or opinion pieces (wave 4). Each of the cross-randomized conditions includes a version with fact-checking and one without fact-checking, giving us ten treatments in total across the four waves (with 50% of the respondents being assigned to one of the two base treatments).<sup>7</sup> Section E of the Online Appendix provides screenshots of the full experiment, including all the cross-randomized conditions.

In the experiment, we first measure basic demographics as well as a range of other background characteristics and political views. In the base treatments, respondents are then informed that Congress is debating whether to pass the *Biden Rescue Plan* (the American Rescue Plan Act of 2021) and that the plan has received strong support from liberals but has been criticized by conservatives. We then ask whether they would like to sign up for our weekly newsletter that contains stories about the plan featured on *MSNBC* during the last week.<sup>8</sup> To fix beliefs about the stories featured in the newsletter, we made it clear to respondents that the newsletter would feature "the three top stories about the Biden Rescue Plan featured on MSNBC during the last week." By always focusing on the "three top stories" about the plan, our aim was to make sure that treated respondents did not get the impression that fact-checking affected the selection of articles into the newsletter.

We chose to focus on the *Biden Rescue Plan* because it was heavily featured in the news at the time of the experiment and we believed that demand for stories about the plan would be high. Furthermore, since the *Biden Rescue Plan* included a planned

<sup>&</sup>lt;sup>7</sup>Tables B.4–B.10 in the Online Appendix assess the integrity of randomization for our treatments.

<sup>&</sup>lt;sup>8</sup>If respondents indicated that they would like to receive our newsletter, we provided them with a link to a website at the end of the survey. The newsletter was published on this website. To accommodate different versions of the newsletter, we created individual websites for each treatment arm (see Figure D.1 for an example). This procedure allowed us to preserve the anonymity of our respondents by circumventing the need to collect email addresses.

\$1,400 stimulus check to all Americans, staying informed about the plan could be instrumentally valuable (e.g. to make optimal saving or investment decisions). We chose to focus on *MSNBC* because it is a well-known liberal outlet that broadly matches the ideological leanings of our respondents. Indeed, in a representative survey of Americans, over 90% who identify *MSNBC* as their primary source of political news are Democrats or lean towards the Democratic party, the highest fraction among any news outlet (Grieco, 2020).

Respondents are randomized into the fact-checking condition (treatment) or the non-fact-checking condition (control). Respondents in the fact-checking condition are informed that "we will fact-check all stories featured in the newsletter and flag those with inaccuracies." Respondents in the non-fact-checking condition are offered the same newsletter but without the fact-checking service.<sup>9</sup> For fact-checking to be valuable, respondents need to have at least some trust in our ability to fact-check the articles. We did not emphasize our affiliation on the decision screen, but the consent form included information about our academic affiliations as "researchers from the University of Bonn, Bergen University, and Warwick University."

Our main outcome of interest is whether people would like to receive our newsletter featuring the three top stories about the *Biden Rescue Plan*. We chose to focus on newsletter subscriptions because newsletters are a popular way of staying informed about politics, with 21% of Americans receiving news from a newsletter over the course of a week (Newman et al., 2020). Moreover, by including only the three top articles in our newsletter, we reduce the expected cost of our respondents to stay up to date about the debate of the *Biden Rescue Plan*—both in terms of time costs and search efforts. At the same time, administering the newsletter ourselves allows us to retain sufficient control to vary newsletter characteristics across treatment arms.

We also measure a battery of post-treatment beliefs to assess how fact-checking affected beliefs about different newsletter characteristics, including perceptions of the newsletter's accuracy, the perceived trustworthiness of the newsletter, as well the newsletter's entertainment value, political bias, quality, and complexity. We measure these beliefs using five-point Likert scales. Finally, we elicit beliefs about how many articles featured in the newsletter would contain any factual errors, how many articles they expect to be flagged for inaccuracies, and how much they trust our ability to fact-

<sup>&</sup>lt;sup>9</sup>Figure B.1 of the Online Appendix provides screenshots of the treatment and control condition. Section D provides further details about our fact-checking efforts.

check the news articles. These questions also allow us to check whether fact-checking affected beliefs about the distribution of articles included in the newsletter.

**Discussion of the design** Our base treatments exogenously vary the product characteristics of the newsletter similar to conjoint experiments by offering a fact-checking service to a random subset of respondents. This has a few desirable features. First, by providing additional information about the accuracy of the three top MSNBC articles on the Biden Rescue Plan, our treatment should not affect beliefs about which articles are featured in the newsletter. We are thus holding beliefs about media bias by omission, filtering, or distortion constant between the treatment group and the control group. Since our treatment should not affect the expected distribution of articles, our design shuts down mechanisms related to rational delegation of costly information acquisition (Chan and Suen, 2008; Suen, 2004). Second, rational agents without non-instrumental motives should prefer fact-checking because they can freely dispose of the additional information. This allows us to rule out prominent mechanisms based on Bayesian updating about the quality of a source that make it difficult to cleanly identify motives with observational data (Gentzkow and Shapiro, 2006). Third, we deliberately offered the fact-checking service ourselves. We truthfully tell our respondents in the treatment group that we will fact-check the newsletter. Our instructions make it clear that we are independent non-partisan researchers.

## **3** Results

#### **3.1** Fact-checking of politically aligned news

**Descriptives** 49.7% of control group respondents signed up for the newsletter featuring stories from *MSNBC*. The high baseline demand for the newsletter likely reflects that our respondents were interested in staying informed about the outcome of the *Biden Rescue Plan* and saw the newsletter as a convenient tool to receive the most important information. Newsletter demand correlates strongly with the perceived accuracy, entertainment value, quality, and trust in the newsletter (as shown in Figure B.9).

For fact-checking to be valuable in our setting, respondents have to expect at least some factual inaccuracies in the *MSNBC* stories included in the newsletter. Importantly,

it is people's subjective expectation of factual inaccuracies—and not the actual prevalence of factual inaccuracies—that determines whether fact-checking should increase the valuation of the newsletter. Figure 1 uses data from control group respondents to provide descriptive evidence on beliefs about factual inaccuracies in news articles included in the newsletter as well as trust in our ability to fact-check the articles. Figure 1a shows that 58.8% of the respondents expect at least one article featured in the newsletter with articles from *MSNBC* to contain a factual error. Furthermore, conditional on expecting at least one error, respondents expect 1.6 articles to contain factual errors on average, or slightly more than 50% of all articles.<sup>10</sup>

Another necessary condition for fact-checking to be valuable is that respondents trust our ability to identify potential errors in the articles. As shown in Figure 1b, we find high levels of trust in our fact-checking ability: 94.9% of the respondents report having at least some trust in our ability to fact-check articles from *MSNBC*, suggesting that our fact-checking treatment has scope to change the perceived accuracy of the newsletter.

**Empirical specification** In what follows, we assess how demand for the newsletter changes in response to fact-checking. For that purpose, we estimate the following regression specification using OLS:

$$y_i = \alpha_0 + \alpha_1 \operatorname{Treatment}_i + \alpha_2 \mathbf{x}_i + \varepsilon_i \tag{1}$$

where  $y_i$  is an indicator taking value one if respondent *i* signs up for the newsletter and value zero otherwise; Treatment<sub>i</sub> is an indicator for whether respondent *i* is in the fact-checking treatment;  $\mathbf{x}_i$  is a vector of control variables<sup>11</sup>; and  $\varepsilon_i$  is an individual-specific error term. We use robust error terms for inference.

<sup>&</sup>lt;sup>10</sup>We identified factual errors in the articles that were featured in our newsletter. In our main newsletter featuring articles from *MSNBC*, we identified factual errors in two out of 21 articles. The share of articles with an error was 9.5%, which is lower than people's estimate of 30.2%. In our newsletter with *Fox News* articles, 11% of featured articles included an error, which is far below people's expectation of 71.7%. In comparison, Maier (2005) finds an objective error rate of 48% among 4,800 news sources cited in 14 local newspapers.

<sup>&</sup>lt;sup>11</sup>We include the following control variables: gender, education, employment status, log income, Census region, and race and ethnicity. We include wave fixed effects when pooling observations across waves.

**Deviation from the pre-registration** In the main specification, we pool data from all four waves, including the cross-randomized conditions that varied the framing of the plan, the perceived instrumental motives, and whether the newsletter featured news or opinion pieces. These cross-randomized conditions did not differentially affect demand for the newsletter featuring stories from the ideologically aligned source compared to the base treatment (as shown in Table B.14). We deviate from the pre-registration by pooling all results across waves as this allows us to increase the statistical precision of our main estimates and simplify the exposition of our results. A second deviation from the pre-registration is that, motivated by our theoretical model presented in Section A of the Online Appendix, we examine heterogeneity based on the strength of people's ideology. A third deviation from the pre-registration is that, for reasons discussed in Section 2.1, we focus on attentive respondents in our main analysis. All pre-registered regressions are reported exactly as pre-specified in Table B.15.

Main effect Table 1 presents the main results on how fact-checking affects demand for the newsletter featuring stories from a politically aligned outlet, pooling observations from all waves. Column 1 of Panel A shows the main result of the paper: demand for the newsletter only increases by a non-significant 1.4 percentage points in response to the fact-checking treatment (p = 0.382). This effect corresponds to a modest 2.7% change in demand compared to the control group mean of 49.7%. The main effect is relatively precisely estimated given our large sample of more than 4,100 respondents, giving us an ex-post minimum detectable effect size at 80% power of 4.4 percentage points. We thus have power to detect relatively modest effect sizes, suggesting that the average effect of fact-checking on Democrats' demand for news is of relatively low economic importance. Furthermore, as shown in column 2, the muted impact occurs despite a large and statistically significant treatment effect on the perceived accuracy of the newsletter: respondents in the fact-checking condition think that the newsletter has 14.3% of a standard deviation higher accuracy (p < 0.001). That treated respondents expect our fact-checking service to increase the overall accuracy of the newsletter is consistent with their high trust in our ability to fact-check the articles (as shown in Figure 1b). Treated respondents also think that the newsletter has 8.7% of a standard deviation higher trustworthiness (p = 0.005). We also see some suggestive evidence that treated respondents associate the newsletter with 4.9% of a standard deviation higher quality (p = 0.115) and 5.1% percent of a standard deviation lower left-wing

bias (p = 0.099), but these effects—while going in the expected direction—are not very large compared to the effect on perceived accuracy. Finally, as shown in columns 6 and 7, it does not seem to be the case that fact-checking affects the perceived complexity (p = 0.259) or entertainment value (p = 0.439) of the newsletter. Our first main result can be summarized as follows:

**Result 1.** On average, people have a muted demand for fact-checking of news from politically aligned sources, despite a significant positive effect of fact-checking on the perceived accuracy of the newsletter.

**Robustness** We cross-randomized several treatments to assess the robustness of our findings to differences in the content of the newsletter and to examine potential mechanisms. As shown in Table B.14, we find that our main result of a muted demand for fact-checking of ideologically aligned news is robust to varying (i) the framing of the *Biden Rescue Plan* (column 1), (ii) the perceived salience of the financial implications of the plan (column 2), and (iii) the type of articles covered in the newsletter (column 3). Furthermore, as shown in Table B.11, we see very similar point estimates and no significant treatment differences between the base treatments and the pooled cross-randomized treatments. These results suggest that our main finding of an overall muted demand for fact-checking of ideologically aligned news is robust to small variations in the description of the newsletter content.

**Heterogeneity by ideology** As discussed in Section A of the Online Appendix, respondents with strong ideological views might assign a larger weight to non-instrumental motives—such as a preference for belief confirmation—than respondents with ideologically moderate views. In this case, we would expect the fact-checking treatment to have an opposite effect on newsletter demand for Democrats with strong and moderate ideological views. To categorize the strength of people's ideological views, we use a pre-treatment question where people report their ideology on a five-point Likert scale from "very liberal" to "very conservative." Throughout the paper, we refer to "very liberal" respondents as those with strong ideological views and to the remaining respondents as moderate respondents.<sup>12</sup> Respondents with strong ideological views

<sup>&</sup>lt;sup>12</sup>31.8% of our sample rated themselves as "very liberal." Furthermore, consistent with our restriction to focus on respondents who voted for Joe Biden in the 2020 Presidential Election, 93.7% of our respondents rated themselves as either "liberal" or "very liberal." 5.6% rated themselves as "neither

hold significantly more extreme policy attitudes than moderate respondents and are, for instance, 54% more likely to "strongly support" the *Biden Rescue Plan*.

Panels B and C of Table 1 show heterogeneity in treatment effects by ideological views (these effects are also displayed graphically in Panel A of Figure 2). Panel B of Table 1 shows treatment effects for respondents with strong ideological views. These respondents significantly reduce their demand for the newsletter by 6.2 percentage points in response to the fact-checking treatment (p = 0.021, column 1). This corresponds to a 10.4% decline in demand compared to the control group mean of 59.7%, underscoring the economic significance of the effect. The decline in demand occurs even though the respondents perceive the newsletter as 11.8% of a standard deviation more accurate (p = 0.028, column 2). These respondents also perceive the fact-checked newsletter as somewhat less left-wing biased (p = 0.079, column 5), providing suggestive evidence for a mechanism where respondents with strong ideological views trade off accuracy against non-instrumental utility. Panel C of Table 1 shows treatment effects for respondents with ideologically moderate views. These respondents significantly increase their demand for the newsletter by 4.5 percentage points in response to the fact-checking treatment (p = 0.018, column 1), corresponding to a 9.9% increase in demand compared to a control group mean of 45 percent. Ideologically moderate respondents also perceive the fact-checked newsletter as 14.6% of a standard deviation more accurate (p < 0.001, column 2).

Comparing treatment effects in Panel B and Panel C of Table 1 reveals that we can reject equality of treatment effects on newsletter demand between respondents with strong and moderate ideological views at any conventional level of statistical significance. By contrast, there are no statistically significant differences in treatment effects between the two groups on beliefs about newsletter characteristics, such as accuracy and trust (columns 2–7). Our second main result follows.

**Result 2.** Respondents with strong and moderate ideological views respond differently to fact-checking: Despite similar first stage effects on beliefs about newsletter characteristics, respondents with strong ideological views reduce their newsletter demand by 10.4% in response to the fact-checking treatment while ideologically moderate respondents increase their newsletter demand by 9.9%.

liberal nor conservative" and only 0.6% of respondents rated themselves as "conservative" or "very conservative."

#### [Insert Table 1 here]

#### **3.2** Fact-checking of politically non-aligned news

We next study how fact-checking affects demand for a newsletter featuring stories from a politically non-aligned outlet. According to our theoretical framework (Section A of the Online Appendix), fact-checking only creates a trade-off between accuracy and non-instrumental motives when the articles are selected from a politically aligned news outlet. We would therefore expect fact-checking to increase demand for a newsletter featuring stories from a politically non-aligned outlet (Prediction 2 of Section A). To test this prediction, in wave 3, we cross-randomized whether the newsletter featured news articles from *Fox News* instead of *MSNBC* while at the same time holding all other features of the design constant. We chose to focus on *Fox News* because it is a well-known outlet with a conservative leaning. Indeed, in a representative survey of Americans, over 90% who identify *Fox News* as their primary source of political news are Republicans or lean towards the Republican party, the highest fraction among any news outlet (Grieco, 2020).

**Descriptives** As expected, we observe a lower demand for news from *Fox News*: 34.3% of control group respondents sign up for the newsletter featuring stories from *Fox News*, compared to 49.7% for *MSNBC*. Given that Biden voters tend to prefer leftwing news, it is reassuring that baseline demand for news from *MSNBC* is 45% higher than for news from *Fox News*. Furthermore, newsletter demand correlates strongly with the perceived accuracy of *Fox News* (as shown in Figure B.10). We next use data from control group respondents to provide descriptive data on beliefs about factual inaccuracies in news articles from *Fox News*. 88.6% of control group respondents expect at least one article to contain factual errors and 53.8% expect every article to contain some errors (Figure 1c). Furthermore, 73% of the respondents express having at least some trust in our ability to fact-check articles from *Fox News* (Figure 1d). These descriptives demonstrate a large scope for fact-checking to improve the perceived accuracy of the newsletter.

**Main results** Panel A of Table 2 shows the treatment effects for the 558 respondents in the *Fox News* treatments. Column 1 shows that the fact-checking treatment increases

newsletter demand by 10 percentage points (p = 0.016). This corresponds to a 29.1% increase in demand relative to the control mean of 34.3%, underscoring the high economic significance of the effect. Respondents in the fact-checking condition also think that the newsletter has 23.1% of a standard deviation higher accuracy (p = 0.006, column 2), 15.2% of a standard deviation higher trustworthiness (p = 0.072, column 3), and 17.7% of a standard deviation higher quality (p = 0.038, column 4).

**Heterogeneity by ideology** Table 2 presents treatment effects for Democrats with strong ideology (Panel B) and Democrats with moderate ideology (Panel C). While focusing on these subsamples substantially reduces our power to detect statistically significant effects, especially for respondents with strong ideology, we find broadly similar patterns for both groups. As shown in column 1, treated respondents with strong and moderate ideology increase their demand for the newsletter by 6.4 percentage points (p = 0.42) and 9.5 percentage points (p = 0.056), respectively (these results are also shown graphically in Panel B of Figure 2). The increase in demand among both groups is consistent with the theory that the trade-off between instrumental and non-instrumental motives disappears when the newsletter features stories from a politically non-aligned source. Furthermore, as shown in columns 2–7, treatment effects on beliefs about newsletter characteristics, including perceived accuracy, are also similar in magnitude and with no significant differences between the two groups. This leads to our third main result:

**Result 3.** All respondents, irrespective of their ideological leanings, increase their demand for the newsletter from a politically non-aligned source in response to the fact-checking treatment.

[Insert Figure 1 here] [Insert Figure 2 here] [Insert Table 2 here]

#### **3.3** Alternative mechanisms

In this section, we discuss a series of mechanisms, which might be operating in this setting, but which are unlikely to explain the patterns in our data.

**Confidence and ideology** Empirically, we find that both respondents with moderate and strong ideology expect a more accurate newsletter if it is fact-checked (column 2 of Table 1). However, respondents with strong ideology, who hold strong prior beliefs about the world, might be very confident that they can detect any inaccuracies in reporting themselves. While overconfidence might decrease the perceived added-value of fact-checking services, it cannot strictly decrease the valuation of the newsletter. This would require an additional feature such as a large cost of processing information.

**Updating about source quality** People might update about the quality of the underlying source of the newsletter when they learn that the source is fact-checked. For instance, people could think that fact-checking implies that the underlying source is of low quality (hence the need for a fact-check). To address this potential concern, we elicited expected errors from the underlying source of the newsletter. If anything, we actually see that our respondents in the fact-check condition expect fewer errors from the underlying source (Table B.16).

**Cognitive constraints** Furthermore, since fact-checking in our context does not affect the selection of articles in the newsletter, we can—to the extent that fact-checking itself is not perceived as cognitively costly—change beliefs about accuracy while holding cognitive costs constant. Even if our respondents perceive fact-checking as cognitively costly (which we consider unlikely as column 6 of Table 1 shows that fact-checking does not affect the perceived complexity of the newsletter), the heterogeneity by the strength of people's ideological views as well as the heterogeneity by the ideological leanings of the outlet suggest that cognitive constraints are not driving the observed patterns in our data.

**Demand effects** While the high baseline demand for the newsletter featuring stories from *MSNBC* to some degree could reflect experimenter demand effects, this is not an issue for estimating treatment effects unless there is differential experimenter demand across treatment and control. While the between-design should not make it salient that we are interested in how fact-checking affects newsletter demand, we cannot rule out that some respondents nonetheless realized that we were studying fact-checking and adjusted their behavior accordingly. However, recent evidence suggests that demand effects are not a major concern in online experiments (de Quidt et al., 2018).

#### **3.4** Expert survey

Lastly, we wanted to examine how experts expect the demand for the newsletter to change in response to fact-checking of the newsletter content. The results from this study can potentially inform a policy maker's trade-off between following expert advice on fact-checking in a different setting and conducting new experiments (DellaVigna and Pope, 2018). For this purpose, we conducted a survey in March 2021 among leading academic researchers in the areas of media and behavioral economics. We compiled a list of 93 experts who attended major conferences in economics.<sup>13</sup> Our final sample consists of 65 experts, corresponding to a response rate of 70 percent.<sup>14</sup> After providing the expert participants with information about the sample, design, and experimental instructions (including screenshots of the key treatment screens), we elicit their predictions about the effect of fact-checking on the demand for news for *MSNBC* and *Fox News*. For both outlets, we inform experts about baseline demand for the newsletter among respondents in the control group and then elicit their beliefs about newsletter demand among respondents in the treatment group.

Figure B.11 of the Online Appendix shows the results from the expert survey. As shown in Figure B.11a, we observe a wide dispersion in expert beliefs about the impact of fact-checking on the demand for news with a mean absolute deviation of seven percentage points between expert opinions and actual treatment effects. The hetero-geneity in expert beliefs suggests that there is substantial expert disagreement about the relative importance of different motives to read the news, such as the importance of accuracy motives versus belief utility motives. As shown in Figure B.11b, expert beliefs on average closely resemble the actual treatment effects. As in DellaVigna and Pope (2018), our findings demonstrate a strong wisdom-of-crowds effect: while there is substantial disagreement within the expert sample, experts on average correctly predict the effects of fact-checking on newsletter demand.

<sup>&</sup>lt;sup>13</sup>These conferences include the briq Workshop on Beliefs, the NBER Summer Institute in Political Economy, and the Stanford Institute for Theoretical Economics (SITE) Summer Workshop (Experimental Economics and Psychology & Economics sessions).

<sup>&</sup>lt;sup>14</sup>25% of these experts are Full Professor, 15% are Associate Professor, and 34% are Assistant Professors, 14% are postdoctoral researchers, and only 12% of respondents in our sample are PhD students. Among non-respondents, 65.5% are Full Professors, 14% are Associate Professors, 18% are Assistant Professors, and 4% are PhD students. This suggests lower response rates among full professors compared to assistant professors, PhD students, and postdoctoral researchers.

## 4 Concluding remarks

This paper studies how fact-checking affects the demand for news. The main result of the paper is that Democrats have a muted demand for fact-checking of a newsletter featuring ideologically aligned news, even though fact-checking increases the perceived accuracy of the newsletter. This average effect masks substantial heterogeneity: Factchecking decreases demand for politically aligned news among Democrats with strong ideological views and increases demand among ideologically moderate Democrats. Furthermore, fact-checking increases the demand for a newsletter with politically non-aligned news for all Democrats irrespective of the strength of their ideological leanings.

Our findings provide a proof of concept that non-instrumental motives play a role in driving the demand for ideologically aligned news. These findings have relevance for theories of media markets. In particular, our findings are inconsistent with theories in which all consumers primarily care about the accuracy of the news and point to the relevance of theories incorporating non-instrumental motives, such as a preference for belief confirmation. Furthermore, while one should be careful not to overgeneralize from a very specific setting, our findings suggest that fact-checking services can have very heterogeneous effects on the demand for news. While our study provides the first step to understand how fact-checking affects the demand for news, our results could be specific to our chosen sample and setting. Future research should study how fact-checking affects the demand for news a range of different settings and samples to generate useful lessons for policy-makers.

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## **Main Figures and Tables**



Figure 1: Expected factual errors and trust in fact-checking

*Note:* This figure uses data from control group respondents who passed the attention check. Panel (a) shows the distribution of responses to the question "How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?" Panel (b) shows the distribution of responses to the question "How much do you trust our ability to fact check articles from MSNBC?" Panel (c) and Panel (d) show the corresponding figures for *Fox News*.

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Figure 2: Treatment effects on demand for the newsletter



*Note:* This figure shows newsletter demand (which is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No") for *MSNBC* (Panel A) and Fox News (Panel B) among attentive respondents. Newsletter demand is shown separately by treatment group for the full sample of Biden voters, respondents with a strong ideology (who identify as "very liberal"), and for respondents with a moderate ideology (who identify as not "very liberal"). 95% confidence intervals are indicated.

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	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
	110110 001110110	110001100	11460	Quinty	Lette wing ends	comprenity	
Panel A: Main effect							
Treatment	0.014	0.143***	0.087***	0.049	-0.051*	0.035	0.023
	(0.016)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.030)
N	4,109	4,069	4,069	4,069	4,069	4,069	4,069
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.497	0	0	0	0	0	0
Panel B: Strong ideology							
Treatment (a)	-0.062**	0.118**	0.043	0.016	-0.094*	0.027	0.023
	(0.027)	(0.054)	(0.053)	(0.052)	(0.054)	(0.055)	(0.052)
N	1,307	1,299	1,299	1,299	1,299	1,299	1,299
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.597	0	0	0	0	0	0
Panel C: Moderate ideology							
Treatment (b)	0.045**	0.146***	0.097**	0.051	-0.006	0.051	0.010
	(0.019)	(0.038)	(0.038)	(0.038)	(0.038)	(0.038)	(0.037)
N	2,802	2,770	2,770	2,770	2,770	2,770	2,770
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.450	0	0	0	0	0	0
p-value: $a = b$	0.001	0.806	0.495	0.638	0.141	0.779	0.808

Table 1: Main results: MSNBC

*Note:* This table shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use attentive respondents who were offered a newsletter featuring *MSNBC* articles. Panel A shows results for the full sample of Biden voters. Panel B shows results for respondents with strong ideology (who identify as "very liberal"). Panel C shows results for respondents with moderate ideology (who identify as not "very liberal"). "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. "News demand" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No." "Accuracy" of the newsletter is measured on a 5-point scale from "Very inaccurate" to "Very accurate." "Trust" is the trustworthiness of the newsletter and measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Very high quality." "Left-wing bias" is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Not trustworth on a 5-point scale from "Not entertaining at all" to "Very entertaining." The outcomes in columns 2–7 are z-scored using the control group mean and standard deviation.

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Robust standard errors in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	News demand	Accuracy	Trust	Quality	Left-wing bias	Complexity	Entertainment
Panel A: Main effect							
Treatment	0.100**	0.231***	0.152*	0.177**	-0.124	-0.076	0.107
	(0.041)	(0.084)	(0.084)	(0.085)	(0.081)	(0.086)	(0.087)
N	558	548	548	548	548	548	548
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.343	0	0	0	0	0	0
Panel B: Strong ideology							
Treatment (a)	0.064	0.195	0.117	0.227	-0.208	-0.035	0.265
	(0.079)	(0.158)	(0.163)	(0.172)	(0.151)	(0.159)	(0.176)
N	164	163	163	163	163	163	163
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.384	0	0	0	0	0	0
Panel C: Moderate ideology							
Treatment (b)	0.095*	0.224**	0.141	0.147	-0.062	-0.081	0.022
	(0.049)	(0.101)	(0.099)	(0.097)	(0.097)	(0.102)	(0.096)
N	394	385	385	385	385	385	385
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.329	0	0	0	0	0	0
p-value: $a = b$	0.732	0.953	0.973	0.637	0.381	0.826	0.202

Table 2: Main results: Fox News

*Note:* This table shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use attentive respondents who were offered a newsletter featuring *Fox News* articles. Panel A shows results for the full sample of Biden voters. Panel B shows results for respondents with strong ideology (who identify as "very liberal"). Panel C shows results for respondents with moderate ideology (who identify as not "very liberal"). "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. "News demand" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No." "Accuracy" of the newsletter is measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Complexity" of the newsletter articles is measured on a 5-point scale from "Very high quality." "Left-wing bias" is measured on a 5-point scale from "Very high quality." "Left-wing bias" is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Very entertaining." The outcomes in columns 2–7 are z-scored using the control group mean and standard deviation. "p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Robust standard errors in parentheses.

## For online publication only:

## Do People Demand Fact-Checked News? Evidence From U.S. Democrats

Felix Chopra, Ingar Haaland, and Christopher Roth

Section A presents our theoretical framework.

Section B contains additional tables and figures. Table B.1 provides an overview of the four experimental waves. Table B.2 provides summary statistics for demographic variables for the attentive sample and separately for each wave. Table B.3, Table B.4, Table B.5, Table B.6, Table B.7, Table B.8, Table B.9, and Table B.10 provide balance tests for our treatment manipulations based on observables. Table B.11 shows the main treatment effects on MSNBC newsletter demand for the full attentive sample as well as separately for respondents in the base treatments and in the extra treatments. Table B.12 shows the main treatment effects on MSNBC newsletter demand separately for respondents with strong ideology and moderate ideology using the full sample of respondents (including respondents who did not pass the attention check). Table B.13 shows the main treatment effects on Fox News newsletter demand separately for respondents with strong ideology and moderate ideology using the full sample of respondents (including inattentive respondents). Table B.14 shows interaction effects between our base treatment and our additional treatments separately for attentive respondents and inattentive respondents. Table B.15, which includes all our pre-registered regressions, shows interaction effects between our base treatment and our additional treatments by each wave using the full sample (including inattentive respondents). Table B.16 shows treatment effects on expected errors. Table B.17 shows differences in covariates between respondents who signed up for the newsletter and those who did not. Figure B.1 provides a screenshot of the key treatment screens. Figure B.2 shows the distribution of beliefs about factual errors and trust in our ability to fact-check the articles included in the newsletter for the full sample (including inattentive respondents). Figure B.3 shows treatment effects graphically using the full sample (including inattentive respondents). Figure B.4 shows the distribution of beliefs about factual errors and trust in our ability to fact-check news articles by respondent's ideology and the news outlet. Figure B.5 shows the distribution of beliefs about different newsletter characteristics by ideology and news outlet. Figure B.6 shows the evolution of demand for our newsletter over

time. Figure B.7 shows the results from simultaneously interacting our main treatment with respondent ideology and a vector of controls for the *MSNBC* newsletter. Figure B.8 shows the results from simultaneously interacting our main treatment with respondent ideology and a vector of controls for the *Fox News* newsletter. Figure B.9 and Figure B.10 show correlates of the demand for news from *MSNBC* and *Fox News*, respectively. Figure B.11 shows results from the expert survey.

Section C compares the sample of attentive and inattentive respondents. Table C.1 provides summary statistics separately for attentive and inattentive respondents. Table C.2 shows the main treatment effects on *MSNBC* newsletter demand for the full sample as well as separately for attentive and inattentive respondents. Table C.3 shows the main treatment effects on *Fox News* newsletter demand for the full sample as well as separately for attentive respondents. Figure C.1 shows correlations between newsletter demand and beliefs about newsletter characteristics separately for attentive respondents.

Section D provides further details about the newsletter and our fact-checking efforts, including an example of how our newsletter looked like.

Section E provides screenshots of the experimental instructions.

## **A** Theoretical framework

This section lays out a simple Bayesian model of news consumption where agents face a trade-off between instrumental and non-instrumental concerns. Based on this framework, we generate predictions for how fact-checking could affect the demand for news. There is an unobserved binary state  $\theta \in \{L, R\}$  that captures the desirability of a policy proposed by Democrats, which in our experiment is the *Biden Rescue Plan*. The agent, a Biden voter, has a prior belief  $q \ge 1/2$  that the plan will have positive overall consequences, i.e.,  $\theta = L$ .

**Politically aligned outlet** The agent can read a politically biased newsletter that contains a binary news article  $n \in \{L, R\}$ . We start with the case of a newsletter featuring articles from a politically aligned news outlet. The agent expects this outlet to always report *L* if indeed  $\theta = L$ . However, with probability *p*, the agent thinks the newsletter will report *L* even if  $\theta = R$ . Thus, *p* captures the perceived left-wing bias in reporting.<sup>1</sup>

The agent has to take a binary action  $a \in \{L, R\}$  with incentives to match the state. A relevant action could be how much to save, which depends on the expected stimulus check from the *Biden Rescue Plan*. Specifically, she receives utility  $\alpha$  if her action matches the state.<sup>2</sup> Without reading the newsletter, the agent will always choose *L* given her prior belief, which generates expected utility of  $\alpha q$ . Now, reading the newsletter increases the matching probability by (1-q)(1-p). The newsletter's instrumental value,  $u_I$ , is therefore

$$u_I = \alpha (1-q)(1-p).$$
 (2)

The agent may also receive non-instrumental utility from reading politically aligned news. For example, the agent might have a preference for news that confirms her prior beliefs about the world (Mullainathan and Shleifer, 2005), which might conflict with her preference for more accurate news. In our model, the agent receives utility  $\beta$  from

<sup>&</sup>lt;sup>1</sup>The agent's belief about biased reporting—not the actual probability of distortion—determines the anticipated utility consequences of reading the newsletter. This allows us to also capture cases where respondents have biased beliefs. Moreover, by continuity, our results also hold if  $P(n = L | \theta = L) = \tau$  for large  $\tau$ .

<sup>&</sup>lt;sup>2</sup>An alternative interpretation is that the agent intrinsically cares about learning the truth. Then  $\alpha$  captures the intrinsic value from holding accurate beliefs about the world.

reading news articles that confirm her prior belief that  $\theta = L$ . Given her beliefs, the expected non-instrumental utility is then

$$u_B = \beta \left( q + (1 - q)p \right). \tag{3}$$

Now suppose the newsletter is fact-checked by an external party. The fact-checker will flag all inaccurate articles, thereby identifying the share of articles p that is left-wing biased.<sup>3</sup> This has two opposing effects. On the one hand, the instrumental utility increases by  $\alpha(1-q)p$  because the newsletter now fully reveals the state. On the other hand, the non-instrumental utility from biased reporting decreases by  $\beta(1-q)p$ , implying a net change of the agent's valuation of the newsletter by

$$\Delta u_{\text{aligned}} = (\alpha - \beta)(1 - q)p. \tag{4}$$

This generates the following prediction:

**Prediction 1.** Fact-checking a newsletter featuring articles from a politically aligned news outlet will, (i), decrease the demand for news among respondents with stronger non-instrumental motives ( $\alpha < \beta$ ) and, (ii), increase the demand for news among respondents with stronger instrumental motives ( $\alpha > \beta$ ).

For example, people with strong ideological views might care more about the noninstrumental utility from belief confirmation than people with moderate views. In this case, we would expect fact-checking to have a polarizing effect on demand.

**Politically non-aligned outlet** We finally consider the case of a politically nonaligned news outlet. Here, the agent expects the news outlet to report *R* if  $\theta = R$ and to report *R* with probability p' if  $\theta = L$ . Thus, p' captures the perceived right-wing biased of the news outlet. First, suppose the agent decides to read the outlet's newsletter. In this case, we can derive her posterior belief  $\hat{q}(n)$  that  $\theta = L$  from Bayes' rule:

$$\hat{q}(n) = \begin{cases} 1 & \text{if } n = L \\ \frac{qp'}{1 - q + p'q} & \text{if } n = R \end{cases}$$

$$(5)$$

<sup>&</sup>lt;sup>3</sup>We obtain qualitatively similar results if fact-checking is only able to flag inaccuracies with probability  $\tau$ . Moreover, the results also hold if fact-checking only decreases the non-instrumental utility from inaccurate reports to  $\beta' < \beta$ .

The agent will find it optimal to choose a = R after reading n = R only if  $\hat{q}(R) \le \frac{1}{2}$ , which is the case if  $(1 + p')q \le 1$ . Thus, after reading the article *n*, it is optimal to choose a = n if  $(1 + p')q \le 1$ , and a = L otherwise.

Again, fact-checking will increase the instrumental value of the newsletter by identifying the share of articles p' that incorrectly reports about the state  $\theta$ . However, fact-checking now increases the non-instrumental utility as well because factual inaccuracies consist of reporting *R* although n = L would have been correct. In total, the agent's valuation of the newsletter changes by

$$\Delta u_{\text{opposed}} = (\alpha + \beta) q p' + \alpha \max\{0, 1 - (1 + p')q\}.$$
(6)

due to the fact-checking, which implies:

**Prediction 2.** Fact-checking a newsletter featuring articles from a politically nonaligned news outlet will increase the demand for news.

*Proof.* The proof is by case distinction. First, consider the case where  $(1 + p')q \le 1$ . In this case, the agent's action will match the state whenever  $n = \theta$ , which happens with probability 1 - q + q(1 - p'). Relative to always choosing a = L, the newsletter provides instrumental utility of  $u_I = \alpha(1 - q + q(1 - p'))$ , and non-instrumental utility of  $\beta q(1 - p')$ . Now, fact-checking will increase the instrumental value by  $\alpha qp'$  and the non-instrumental utility by  $\beta qp'$ . In total, the agent's valuation increases by  $\Delta u = (\alpha + \beta)qp'$ . Second, consider the case where (1 + p')q > 1. In this case, the agent will always choose *L*. Thus, the instrumental value of the newsletter is  $u_I = 0$ . Thus, while the effect of fact-checking on the non-instrumental utility is identical to the previous case, fact-checking will now increase the instrumental value by  $\alpha(1 - q)$  because it is now optimal to choose a = n. Thus, the total change in the agent's valuation is

$$\Delta u = \alpha(1-q) + \beta q p' = (\alpha + \beta) + \alpha(1 - (1+p')q).$$
<sup>(7)</sup>

Thus, we have shown that for politically non-aligned outlets, the effect of fact-checking on the agent's valuation of a newsletter is positive and given by

$$\Delta u_{\text{opposed}} = (\alpha + \beta) + \alpha \max\{0, 1 - (1 + p')q\},\tag{8}$$

which is strictly positive. This concludes the proof.

# **B** Additional Tables and Figures

Wave	Sample	Date	Extra treatments	Pre-analysis plan
Wave 1	n = 2,086	Jan 21–22	Non-polarized topic	aspredicted.org/blind.php?x=vk4ap3
Wave 2	n = 2,097	Jan 22–26	Instrumental value	aspredicted.org/blind.php?x=j22u5z
Wave 3	n = 2,054	Feb 15–16	Right-wing outlet	aspredicted.org/blind.php?x=qe6ad3
Wave 4	n = 2,162	Feb 16–18	Commentary	aspredicted.org/blind.php?x=zs5ht9

Table B.1: Overview of experimental waves

*Note:* This table provides an overview of the four experimental waves. All four waves feature the two base treatments (demand for *Biden Rescue Plan* with or without fact-check). In addition, each wave has an extra set of treatments.

	(1) Full sample	(2) Wave 1	(3) Wave 2	(4) Wave 3	(5) Wave 4
Male	0.400	0.380	0.442	0.426	0.349
Age	43.267	41.016	44.128	47.360	40.574
White	0.765	0.749	0.781	0.783	0.746
Log income	10.834	10.838	10.848	10.825	10.823
College education	0.864	0.860	0.867	0.879	0.850
Full-time employee	0.447	0.457	0.460	0.385	0.487
Northeast	0.229	0.234	0.205	0.239	0.239
Midwest	0.225	0.219	0.225	0.257	0.200
West	0.221	0.217	0.249	0.193	0.227
South	0.324	0.330	0.321	0.312	0.334
Hispanic	0.102	0.113	0.096	0.091	0.108
Observations	4,667	1,322	1,183	1,146	1,016

Table B.2: Summary statistics: Attentive respondents

Note: This table displays the mean value of basic covariates for the full attentive sample (column 1) and separately for each wave (columns 2–5). "Male" is a binary variable with value one for male respondents. "Age" is age of the respondent. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "Log income" is coded continuously as the log of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more).
"College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Northeast," "Midwest," "West" and "South" are binary variables with value one if the respondent lives in the respective region. "Hispanic" is a binary variable with value one if the respondent selected.

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.40	0.40	0.663	4667
Age	43.31	43.22	0.851	4667
Log of income	10.85	10.82	0.168	4667
South	0.32	0.33	0.227	4667
West	0.22	0.22	0.587	4667
Northeast	0.24	0.22	0.024	4667
White	0.76	0.77	0.392	4667
College	0.87	0.86	0.576	4667
Full-time employee	0.45	0.44	0.703	4667
Hispanic	0.10	0.11	0.383	4667

Table B.3: Test of balance for attentive respondents: Treatment vs. control

Note: This table provides a balance test for the fact-checking treatment using attentive respondents from all waves. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is a binary variable with value one if the respondent is a binary variable with value one if the respondent is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is Hispanic.
	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.44	0.44	0.639	8399
Age	40.08	39.98	0.790	8399
Log of income	10.75	10.76	0.858	8399
South	0.33	0.35	0.182	8399
West	0.20	0.20	0.857	8399
Northeast	0.24	0.23	0.065	8399
White	0.65	0.67	0.231	8399
College	0.81	0.81	0.946	8399
Full-time employee	0.48	0.48	0.973	8399
Hispanic	0.15	0.16	0.662	8399

Table B.4: Test of balance for full sample: Treatment vs. control

*Note:* This table provides a balance test for the fact-checking treatment using observations from all waves. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent selected with value one if the respondent is a binary variable with value one if the respondent is a binary variable with value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable taking value one if the respondent is a binary variable with value one if the respondent is Hispanic.

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.43	0.38	0.054	1471
Age	40.54	40.26	0.737	1471
Log of income	10.84	10.80	0.405	1471
South	0.34	0.31	0.152	1471
West	0.22	0.21	0.621	1471
Northeast	0.25	0.25	0.822	1471
White	0.76	0.78	0.438	1471
College	0.87	0.87	0.849	1471
Full-time employee	0.50	0.47	0.302	1471
Hispanic	0.12	0.11	0.528	1471

Table B.5: Test of balance for attentive respondents with a strong ideology: Treatment vs. control

*Note:* This table provides a balance test for the fact-checking treatment using attentive respondents with a strong ideology from all waves. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is Hispanic.

	Treatment (T)	Control (C)	P-value(T - C)	Observations
Male	0.39	0.40	0.428	3196
Age	44.63	44.54	0.894	3196
Log of income	10.86	10.83	0.265	3196
South	0.30	0.34	0.015	3196
West	0.22	0.22	0.744	3196
Northeast	0.24	0.20	0.004	3196
White	0.76	0.77	0.608	3196
College	0.87	0.86	0.428	3196
Full-time employee	0.43	0.43	0.764	3196
Hispanic	0.09	0.10	0.111	3196

Table B.6: Test of balance for attentive respondents with a moderate ideology: Treatment vs. control

*Note:* This table provides a balance test for the fact-checking treatment using attentive respondents with a moderate ideology from all waves. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is Hispanic.

	Neutral (a)	Polarized (b)	P-value(a - b)	Observations
Male	0.37	0.39	0.468	1322
Age	41.78	40.29	0.105	1322
Log of income	10.86	10.81	0.237	1322
South	0.32	0.34	0.432	1322
West	0.21	0.22	0.502	1322
Northeast	0.25	0.22	0.315	1322
White	0.75	0.75	0.897	1322
College	0.86	0.86	0.664	1322
Full-time employee	0.43	0.48	0.105	1322
Hispanic	0.10	0.12	0.321	1322

Table B.7: Test of balance: Neutral versus polarized framing

Note: This table provides a balance test for neutral and polarized framing of the policy proposal using attentive respondents from wave 1. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is Hispanic.

	Instrumental (a)	Neutral (b)	P-value(a - b)	Observations
Male	0.42	0.47	0.122	1183
Age	44.75	43.45	0.186	1183
Log of income	10.84	10.86	0.763	1183
South	0.32	0.32	0.851	1183
West	0.25	0.24	0.745	1183
Northeast	0.21	0.20	0.559	1183
White	0.80	0.76	0.148	1183
College	0.86	0.87	0.494	1183
Full-time employee	0.44	0.49	0.076	1183
Hispanic	0.10	0.09	0.629	1183

Table B.8: Test of balance: High instrumental value versus neutral framing

*Note:* This table provides a balance test for instrumental value treatment vs neutral (base) treatment using attentive respondents from wave 2. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is a binary variable taking value one if the respondent is a full-time employee.

	Fox News (a)	MSNBC (b)	P-value(a - b)	Observations
Male	0.45	0.40	0.139	1146
Age	47.12	47.59	0.657	1146
Log of income	10.83	10.82	0.893	1146
South	0.32	0.30	0.432	1146
West	0.19	0.20	0.696	1146
Northeast	0.24	0.24	0.935	1146
White	0.79	0.78	0.543	1146
College	0.88	0.88	0.812	1146
Full-time employee	0.40	0.37	0.261	1146
Hispanic	0.10	0.08	0.371	1146

Table B.9: Test of balance: Fox News versus MSNBC

*Note:* This table provides a balance test for the *Fox News* versus *MSNBC* treatment using attentive respondents from wave 3. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent selected with value one if the respondent is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is Hispanic.

	Opinion (a)	News (b)	P-value(a - b)	Observations
Male	0.35	0.35	0.802	1016
Age	40.27	40.86	0.557	1016
Log of income	10.80	10.84	0.397	1016
South	0.34	0.33	0.807	1016
West	0.23	0.23	0.984	1016
Northeast	0.23	0.25	0.404	1016
White	0.75	0.74	0.570	1016
College	0.84	0.86	0.344	1016
Full-time employee	0.47	0.51	0.223	1016
Hispanic	0.08	0.13	0.013	1016

Table B.10: Test of balance: Opinion versus news

*Note:* This table provides a balance test for the opinion versus news section variation using attentive respondents from wave 4. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is Hispanic.

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
Panel A: Main effect							
Treatment	0.014 (0.016)	0.143*** (0.031)	0.087*** (0.031)	0.049 (0.031)	-0.051* (0.031)	0.035 (0.031)	0.023 (0.030)
N	4,109	4,069	4,069	4,069	4,069	4,069	4,069
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.497	0	0	0	0	0	0
Panel B: Base treatments							
Treatment (a)	0.029	0.135***	0.084**	0.044	-0.102**	0.044	0.068*
	(0.021)	(0.041)	(0.040)	(0.041)	(0.040)	(0.041)	(0.040)
Ν	2,354	2,336	2,336	2,336	2,336	2,336	2,336
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.491	0	0	0	0	0	0
Panel C: Extra treatments							
Treatment (b)	-0.005	0.152***	0.090*	0.051	0.014	0.008	-0.033
	(0.024)	(0.048)	(0.048)	(0.048)	(0.049)	(0.049)	(0.046)
N	1,755	1,733	1,733	1,733	1,733	1,733	1,733
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.504	0	0	0	0	0	0
$p$ -value: $\mathbf{a} = \mathbf{b}$	0.291	0.769	0.953	0.911	0.062	0.562	0.099

Table B.11: Heterogeneity by base vs. extra treatments: MSNBC

*Note:* This table shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *MSNBC* articles. Panel A shows results for the full sample of Biden voters. Panel B shows results for respondents assigned to the base treatments. Panel C shows pooled from the cross-randomized conditions in wave 1 (different framing of the plan), wave 2 (higher perceived instrumental motives of the plan), and wave 4 (opinion stories about the plan). "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. "News demand" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No." "Accuracy" of the newsletter is measured on a 5-point scale from "Very inaccurate" to "Very accurate." "Trust" is the trustworthiness of the newsletter and measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Very left-wing biased.." "Complexity" of the newsletter articles is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Not entertaining at all" to "Very entertaining."

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
Panel A: Strong ideology		-					
Treatment (a)	-0.024 (0.018)	0.077** (0.038)	-0.012 (0.039)	-0.014 (0.038)	-0.041 (0.037)	-0.040 (0.038)	-0.008 (0.037)
N	2,592	2,571	2,571	2,571	2,571	2,571	2,571
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.657	0	0	0	0	0	0
Panel B: Moderate ideology							
Treatment (b)	0.019	0.068**	0.037	0.043	-0.010	0.044	0.008
	(0.014)	(0.030)	(0.030)	(0.029)	(0.029)	(0.029)	(0.028)
N	4,779	4,723	4,723	4,723	4,723	4,723	4,723
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.500	0	0	0	0	0	0
p-value: $a = b$	0.062	0.745	0.320	0.254	0.435	0.089	0.731

Table B.12: Heterogeneous treatment effects between respondents with strong and moderate views: MSNBC (full sample)

*Note:* This table uses data from all respondents (including inattentive ones) and shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *MSNBC* articles. Panel A shows results for respondents with strong ideology (who identify as "very liberal") and Panel B shows results for respondents with moderate ideology (who identify as not "very liberal"). "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. "News demand" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No." "Accuracy" of the newsletter is measured on a 5-point scale from "Very inaccurate" to "Very accurate." "Trust" is the trustworthiness of the newsletter and measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Very high quality." "Left-wing bias" is measured on a 5-point scale from "Very high quality." "Left-wing bias" is measured on a 5-point scale from "Very high quality." "Left-wing bias" is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Not trustworthy at a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Not entertaining at all" to "Very entertaining." \* p < 0.05, \*\*\* p < 0.01. Robust standard errors in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	News demand	Accuracy	Trust	Ouality	Left-wing bias	Complexity	Entertainment
		5		<u> </u>		1 2	
Panel A: Strong ideology							
Treatment (a)	0.099*	0.167	0.182*	0.241**	-0.144	-0.124	0.173*
	(0.052)	(0.104)	(0.103)	(0.107)	(0.104)	(0.104)	(0.104)
N	329	328	328	328	328	328	328
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.548	0	0	0	0	0	0
Panel B: Moderate ideology							
Treatment (b)	0.062*	0.157**	0.151**	0.146**	-0.127*	-0.089	0.120
	(0.037)	(0.074)	(0.074)	(0.074)	(0.073)	(0.078)	(0.074)
N	699	682	682	682	682	682	682
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.402	0	0	0	0	0	0

Table B.13: Heterogeneous treatment effects between respondents with strong and moderate views: Fox News (full sample)

*Note:* This table uses data from all respondents (including inattentive ones) and shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *Fox News* articles. All regressions use respondents that were offered a newsletter featuring *MSNBC* articles. Panel A shows results for respondents with strong ideology (who identify as "very liberal") and Panel B shows results for respondents with moderate ideology (who identify as not "very liberal"). "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. "News demand" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No." "Accuracy" of the newsletter is measured on a 5-point scale from "Very low quality" to "Very high quality." "Trust" is the trustworthiness of the newsletter and measured on a 5-point scale from "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Not rustworthy at all" to "Very trustworthy." "Complexity" of the newsletter articles is measured on a 5-point scale from "Very simple" to "Very complex."

	Interactant:					
	(1) Neutral frame	(2) Instrumental value frame	(3) Opinion piece	(4) Right-wing outlet		
Panel A: Attentive respondents						
Treatment	0.026	0.027*	0.029*	0.014		
	(0.016)	(0.016)	(0.015)	(0.016)		
Treatment $\times$ Interactant	-0.017	-0.028	-0.060	0.081*		
	(0.042)	(0.043)	(0.048)	(0.044)		
Interactant	0.020	-0.016	0.029	-0.145***		
	(0.035)	(0.036)	(0.038)	(0.035)		
N	4,667	4,667	4,667	4,667		
Controls	Yes	Yes	Yes	Yes		
Control group mean	0.491	0.491	0.491	0.491		
Panel B: Inattentive						
Treatment	-0.006	-0.003	0.001	-0.012		
	(0.016)	(0.016)	(0.017)	(0.017)		
Treatment $\times$ Interactant	0.009	-0.012	-0.039	0.057		
	(0.050)	(0.049)	(0.042)	(0.046)		
Interactant	-0.033	-0.003	0.081**	-0.083**		
	(0.042)	(0.039)	(0.036)	(0.039)		
N	3,732	3,732	3,732	3,732		
Controls	Yes	Yes	Yes	Yes		
Control group mean	0.625	0.625	0.625	0.625		

Table B.14: Inte	eraction analysis	: Base versus	extra treatments
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*Note:* This table shows OLS regression where the dependent variable is demand for the newsletter (taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No"). We pool respondents across waves. "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked (base treatment). In each column, we interact the base treatment with a different additional treatment. The interactants are binary variables taking value one if a respondent was assigned to the condition of the additional treatment that differed from the base experiment. In each column, we include indicator variables for the additional treatments that are not explored in the interaction analysis.

	Interactant:				
	(1)	(2)	(3)	(4)	
	Neutral frame	Instrumental value frame	Opinion piece	Right-wing outlet	
Treatment (a)	-0.024	0.011	0.019	0.032	
	(0.031)	(0.030)	(0.030)	(0.030)	
$Treatment \times Interactant (b)$	0.032	-0.023	-0.039	0.043	
	(0.043)	(0.043)	(0.042)	(0.043)	
Interactant	-0.016	-0.018	0.056*	-0.102***	
	(0.030)	(0.030)	(0.030)	(0.030)	
N	2,086	2,097	2,162	2,054	
Controls	Yes	Yes	Yes	Yes	
Control group mean	0.552	0.570	0.549	0.532	
P-value: $a + b = 0$	0.783	0.702	0.481	0.013	

Fable B.15: Interaction	of the base	treatment and	the additional	treatments
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*Note:* This table shows OLS regression where the dependent variable is demand for the newsletter (taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No"). Each column uses only observations from that particular wave, i.e, column k uses respondents from wave k. "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked (base treatment). In each column, we interact the base treatment with the additional treatment in that particular wave. The interactants are binary variables taking value one if a respondent was assigned to the condition of the additional treatment that differed from the base experiment.

	Attentive r	respondents	Full s	ample
	(1)	(2)	(3)	(4)
	MSNBC	Fox News	MSNBC	Fox News
Treatment	-0.120***	-0.264***	-0.066***	-0.127*
	(0.029)	(0.097)	(0.023)	(0.070)
N	4,039	539	7,236	996
Z scored	No	No	No	No
Control group mean	Yes	Yes	Yes	Yes
	0.906	2.152	1.072	1.900

Table B.16: Treatment effect on expected errors

*Note:* This table shows OLS regression where the dependent variable are the respondent's expectation about the number of articles that contain factual inaccuracies in reporting, which can range from 0 to 3. "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. Columns 1 and 2 show results for attentive respondents, while columns 3 and 4 show results for the full sample of Biden voters (including inattentive respondents). Columns 1 and 3 use respondents that were offered a newsletter featuring *MSNBC* articles, while columns 2 and 4 those that were offered a newsletter featuring *Fox News* articles.

	Newsletter demand	No newsletter demand	P-value	Observations
Male	0.42	0.36	0.003	2059
Age	43.68	41.63	0.006	2059
Log of income	10.84	10.81	0.469	2059
South	0.33	0.33	0.768	2059
West	0.22	0.23	0.594	2059
Northeast	0.24	0.19	0.014	2059
White	0.74	0.79	0.008	2059
College	0.87	0.86	0.556	2059
Full-time employee	0.47	0.43	0.070	2059
Hispanic	0.13	0.09	0.008	2059

Table B.17: Selection

Note: This table shows the characteristics of respondents who signed up for the newsletter ("Newsletter demand") and those who did not ("No newsletter demand") among attentive control group respondents who were offered the newsletter featuring articles from *MSNBC*. "Male" is a binary variable with value one for male respondents. "Age" is coded as the continuous midpoint of the age bracket (18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 or older). "Log of income" is coded continuously as the logarithm of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "South," "West," and "Northeast" are binary variables with value one if the respondent lives in the respective region. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable with value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is a full-time employee. "Hispanic" is a binary variable with value one if the respondent is Hispanic.

### Figure B.1: Experimental instructions: Newsletter about the Biden Rescue Plan

### (a) Newsletter: Control group

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

) Yes			

### (b) Newsletter: Treatment group

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those** with inaccuracies.

Would you like to receive our newsletter?

⊖ Yes

O No

*Note:* These figures provide the experimental instructions used to describe the politics newsletter to respondents in the control group (Panel A) and in the treatment group (Panel B) for the case of a politically aligned outlet. The original instructions did not include the red highlighting in Panel B. For the politically non-aligned outlet, we replaced MSNBC with Fox News.



Figure B.2: Expected factual errors and trust in fact-checking: Full sample

*Note:* This figure uses data from control group respondents (including those who did not pass the attention check). Panel B.2a shows the distribution of responses to the question "How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?" Panel B.2b shows the distribution of responses to the question "How much do you trust our ability to fact check articles from MSNBC?" Panel B.2c and Panel B.2d show the corresponding figures for *Fox News*.

Figure B.3: Treatment effects on demand for the newsletter: Full sample



*Note:* This figure shows newsletter demand for *MSNBC* (Panel A) and Fox News (Panel B) using all respondents (including inattentive respondents). Newsletter demand is shown separately by treatment group for the full sample of Biden voters, respondents with a strong ideology (who identify as "very liberal"), and for respondents with a moderate ideology (who identify as not "very liberal"). 95% confidence intervals are indicated.

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*Note:* This figure uses data from control group respondents who passed the attention check. Panel B.4a shows the distribution of responses to the question "How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?" Panel B.4b shows the distribution of responses to the question "How much do you trust our ability to fact check articles from MSNBC?" Panel B.4c and Panel B.4d show the corresponding figures for Fox News.



Figure B.5: Beliefs about newsletter characteristics

*Note:* This figure uses data from control group respondents who passed the attention check. Figure B.5a shows the distribution of responses to the question "How accurate do you expect the newsletter to be?." Figure B.5b shows the distribution of responses to the question "What quality would you expect the newsletter to have?." Figure B.5c shows the distribution of responses to the question "What kind of political bias do you expect the newsletter to have?." Figure B.5d shows the distribution of responses to the question "How entertaining do you expect the newsletter to be?." Each panel separately shows the distribution of responses for respondents with a strong ideology, moderate ideology and the full sample.



Figure B.6: Newsletter demand over time

*Note:* This figure uses data from control group respondents in the base treatment who passed the attention check. The vertical bars indicate the fraction of respondents who signed up for the newsletter. 95% confidence intervals are indicated. The date indicators are not jointly significantly different from zero in a regression with newsletter demand as the dependent variable (p = 0.191).



# Figure B.7: Heterogeneity in treatment effects on newsletter demand with MSNBC: Simultaneous interactions

Note: This figure plots interaction coefficients ( $\beta_2$ ) from a regression including our fact-check treatment, a vector of demographic controls and their interaction with the treatment indicator, i.e., a regression of the form  $y = \beta_0 + \beta_1 \text{Tr} + \beta_2 \text{Tr} \times \mathbf{X}_i + \beta_3 \mathbf{X}_i + \varepsilon_i$  where  $\mathbf{X}_i$  is a vector of demographic variables. 95% confidence intervals are indicated. The regression includes respondents who passed the attention check and were offered a newsletter featuring articles from *MSNBC*. "Strong ideology" is a binary variable taking value one for respondents who identify as "very liberal." "Income (above median)" is a binary variable taking value one if a respondent has above-median income. "Male" is a binary variable taking value one if a respondent is male. "Age (above median)" is a binary variable taking value one if a respondent has above-median age. "Employment" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "Non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "Non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience.



# Figure B.8: Heterogeneity in treatment effects on newsletter demand with Fox News: Simultaneous interactions

Note: This figure plots interaction coefficients ( $\beta_2$ ) from a regression including our fact-check treatment, a vector of demographic controls and their interaction with the treatment indicator, i.e., a regression of the form  $y = \beta_0 + \beta_1 \text{Tr} + \beta_2 \text{Tr} \times \mathbf{X}_i + \beta_3 \mathbf{X}_i + \varepsilon_i$  where  $\mathbf{X}_i$  is a vector of demographic variables. 95% confidence intervals are indicated. The regression includes respondents who passed the attention check and were offered a newsletter featuring articles from *Fox News*. "Strong ideology" is a binary variable taking value one for respondents who identify as "very liberal." "Income (above median)" is a binary variable taking value one if a respondent has above-median income. "Male" is a binary variable taking value one if a respondent is male. "Age (above median)" is a binary variable taking value one if a respondent has above-median age. "Employment" is a binary variable taking value one if a respondent has a full-time employee. "College" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience. "non-Hispanic White" is a binary variable taking value one if a respondent has at least some college experience.



Figure B.9: Correlates of demand: MSNBC

*Note:* This figure plots the correlations between newsletter demand and a battery of z-scored beliefs about the newsletter from a joint regression that also controls for demographic characteristics. We use control group respondents that were offered a newsletter featuring articles from *MSNBC*. 95% confidence intervals are indicated.



Figure B.10: Correlates of demand: Fox News

*Note:* This figure plots the correlations between newsletter demand and a battery of z-scored beliefs about the newsletter from a joint regression that also controls for demographic characteristics. We use control group respondents that were offered a newsletter featuring articles from *Fox News*. 95% confidence intervals are indicated.



(a) Distribution of expert forecasts





*Note:* This figure uses data from the expert survey. Panel B.11a shows the distribution of beliefs about treatment effects for *MSNBC* (left histogram) and *Fox News* (right histogram). Panel B.11b shows the mean expert forecast of the treatment effects for *MSNBC* and *Fox News* contrasted with the actual treatment effects from the base treatments pooled across waves (estimated without controls but with wave fixed effects). 95% confidence intervals are indicated.

# **C** Comparing attentive and inattentive respondents

In this section, we compare respondents who passed our simple pre-treatment attention check (attentive respondents) and those who did not pass the attention check (inattentive respondents).<sup>4</sup> As shown below, there are several pieces of evidence indicating lower data quality among inattentive respondents:

- Given our sample of Biden voters, we would expect baseline demand for the newsletter featuring stories from the left-oriented *MSNBC* to be much higher than for the newsletter featuring stories from *Fox News*, a right-wing outlet. Among attentive respondents, baseline demand for the newsletter featuring stories from *MSNBC* is indeed 45% higher than for the newsletter featuring stories from *Fox News*. Among inattentive respondents, however, the difference in baseline demand is only 10.8% higher for the newsletter featuring stories from *MSNBC*.
- The median response time is 49 seconds higher for attentive respondents than for inattentive respondents. This corresponds to a 21.7% difference compared to the median response time of 226 seconds among inattentive respondents.<sup>5</sup> The significantly lower time spent on the survey is consistent with inattentive respondents not paying careful attention to details of the instructions.
- In Table C.2, we display treatment effects of the fact-checking treatment on demand for the *MSNBC* newsletter and beliefs about newsletter characteristics separately for attentive and inattentive respondents. Panel B shows a large and significant first stage on beliefs about newsletter characteristics among attentive respondents. By contrast, Panel C shows that inattentive respondents do not adjust their beliefs about the characteristics of the newsletter.
- As shown in Figure C.1, the correlations between newsletter demand and beliefs about newsletter characteristics—such as accuracy, quality, and trust—are much more pronounced in the control group sample of attentive respondents compared to inattentive respondents.

<sup>&</sup>lt;sup>4</sup>See page 43 for a screenshot of the attention check.

<sup>&</sup>lt;sup>5</sup>Table C.1 shows similar patterns for average response time.

	(1) All respondents	(2) Attentive	(3) Inattentive
Male	0.440	0.400	0.488
Age	40.033	43.267	35.989
White	0.661	0.765	0.530
Log income	10.754	10.834	10.654
College education	0.810	0.864	0.742
Full-time employee	0.481	0.447	0.524
Northeast	0.235	0.229	0.242
Midwest	0.228	0.225	0.230
West	0.198	0.221	0.169
South	0.340	0.324	0.359
Hispanic	0.156	0.102	0.223
Time spent on survey	379.941	402.530	351.693
Demand: MSNBC	0.558	0.504	0.626
Demand: Fox News	0.481	0.389	0.589
Observations	8,399	4,667	3,732

Table C.1: Summary statistics: Full sample with attentive vs inattentive respondents

Note: This table displays the mean value of basic covariates for the full sample (column 1) and separately by whether respondents passed or did not pass a basic pre-treatment attention check (columns 2 and 3, respectively). "Male" is a binary variable with value one for male respondents. "Age" is age of the respondent. "White" is a binary variable with value one if the respondent selected "Caucasian/White." "Log income" is coded continuously as the log of the income bracket's midpoint (Less than \$15,000, \$15,000 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, \$75,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$200,000, \$200,000 or more). "College education" is a binary variable taking value one if the respondent selected "Some college, no degree," "Associates degree," "Bachelor's degree," or "Post-graduate degree." "Full-time employee" is a binary variable taking value one if the respondent is a full-time employee. "Northeast," "Midwest," "West" and "South" are binary variables with value one if the respondent lives in the respective region. "Hispanic" is a binary variable with value one if the respondent is Hispanic. "Time spent on survey" is the number of seconds the respondents spent on the survey. "Demand: MSNBC" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter featuring stories from MSNBC and zero for respondents who said "No." "Demand: Fox News" is similarly defined for respondents featured the newsletter featuring stories from Fox News.

	(1) News demand	(2) Accuracy	(3) Trust	(4) Quality	(5) Left-wing bias	(6) Complexity	(7) Entertainment
	110W3 demand	Treeditacy	IIust	Quanty	Left wing blus	complexity	Entertuinment
Panel A: Full sample							
Treatment	0.003	0.068***	0.018	0.021	-0.020	0.014	0.001
	(0.011)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.022)
Ν	7,371	7,294	7,294	7,294	7,294	7,294	7,294
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.556	0	0	0	0	0	0
Panel B: Attentive							
Treatment	0.014	0.143***	0.087***	0.049	-0.051*	0.035	0.023
	(0.016)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.030)
N	4,109	4,069	4,069	4,069	4,069	4,069	4,069
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.497	0	0	0	0	0	0
Panel C: Inattentive							
Treatment	-0.009	-0.002	-0.051	-0.000	0.007	-0.005	-0.023
	(0.016)	(0.035)	(0.036)	(0.034)	(0.034)	(0.035)	(0.034)
Ν	3,262	3,225	3,225	3,225	3,225	3,225	3,225
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.631	0	0	0	0	0	0

*Note:* This table shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *MSNBC* articles. Panel A shows results for the full sample of Biden voters. Panel B shows results for respondents who passed the attention check. Panel C shows results respondents who did not pass the attention check. "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. "News demand" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No." "Accuracy" of the newsletter and measured on a 5-point scale from "Very inaccurate" to "Very accurate." "Trust" is the trustworthiness of the newsletter and measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Very high quality." "Left-wing biase" is measured on a 5-point scale from "Very simple at all" to "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Not entertaining at all" to "Very entertaining."

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	News demand	Accuracy	Trust	Quality	Left-wing bias	Complexity	Entertainment
Panel A: Full sample							
Treatment	0.079***	0.163***	0.165***	0.177***	-0.140**	-0.113*	0.144**
	(0.030)	(0.060)	(0.060)	(0.061)	(0.060)	(0.062)	(0.061)
N	1,028	1,010	1,010	1,010	1,010	1,010	1,010
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.445	0	0	0	0	0	0
Panel B: Attentive							
Treatment	0.100**	0.231***	0.152*	0.177**	-0.124	-0.076	0.107
	(0.041)	(0.084)	(0.084)	(0.085)	(0.081)	(0.086)	(0.087)
Ν	558	548	548	548	548	548	548
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.343	0	0	0	0	0	0
Panel C: Inattentive							
Treatment	0.048	0.057	0.156*	0.151*	-0.170*	-0.146	0.168*
	(0.044)	(0.088)	(0.086)	(0.088)	(0.088)	(0.091)	(0.086)
Ν	470	462	462	462	462	462	462
Z-scored	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control group mean	0.569	0	0	0	0	0	0

Table C.3: Heterogeneity by attention: Fox News

*Note:* This table shows OLS regression estimates where the dependent variables are demand for the newsletter and different post-treatment beliefs about the newsletter. All regressions use respondents that were offered a newsletter featuring *Fox News* articles. Panel A shows results for the full sample of Biden voters. Panel B shows results for respondents who passed the attention check. Panel C shows results respondents who did not pass the attention check. "Treatment" is a binary variable taking value one if the articles in the newsletter are fact-checked. "News demand" is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No." "Accuracy" of the newsletter and measured on a 5-point scale from "Very inaccurate" to "Very accurate." "Trust" is the trustworthiness of the newsletter and measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Very high quality." "Left-wing bias" is measured on a 5-point scale from "Very simple" to "Very left-wing biased.." "Complexity" of the newsletter articles is measured on a 5-point scale from "Very high quality." of the newsletter articles is measured on a 5-point scale from "Very simple" to "Very simple" to "Very complex." "Entertainment" of the newsletter is measured on a 5-point scale from "Not entertaining at all" to "Very entertaining."



Figure C.1: Correlates of newsletter demand by attention

*Note:* This figure shows coefficient plots from bivariate OLS regressions where the dependent variable is newspaper demand (which is a binary variable taking the value one for respondents who said "Yes" to receive the newsletter and zero for those who said "No"). The independent variables are different beliefs about the newsletter characteristics (accuracy, trust, and quality). "Accuracy" of the newsletter is measured on a 5-point scale from "Very inaccurate" to "Very accurate." "Trust" is the trustworthiness of the newsletter and measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality" of the newsletter is measured on a 5-point scale from "Not trustworthy at all" to "Very trustworthy." "Quality." All regressions use control group respondents that were offered a newsletter featuring articles from *MSNBC*. We run the regressions separately for respondents who passed and did not pass the pre-treatment attention check. 95% confidence intervals are indicated.

## **D** Fact-checking

While we did not explicitly reveal to our respondents how we selected the three top stories, in practice we used Google News to identify the three top stories about the *Biden Rescue Plan* from *MSNBC* and *Fox News*. We then employed two complementary approaches to fact-check the veracity of the information contained in featured articles. First, we fact-checked the articles using the following steps:

- Identify whether a similar news article appeared in other high-quality outlets (e.g. Reuters). Then search for inconsistencies across these articles.
- Identify the primary source of statistical information, assess whether they are accurately represented, and compare the figures to estimates from other, high-quality sources (e.g. government reports, published studies).
- Identify the primary source of quotations and assess whether they are quoted out of context.

Second, we collected information on inaccurate claims from well-known fact-checking organizations to rule out that we missed already identified false claims. Below we provide two examples of false claims.

**MSNBC** On March 12, 2021, *MSNBC* published the article "Dems' COVID relief package already saving tens of thousands of jobs." In this article, the author claims that independent economic forecasts have "projected the law may create as many as 7 million jobs," citing a projection by Gregory Daco. This is misleading because the projection includes both the effect of the fiscal stimulus as well as improving economic conditions. This example illustrates how the ideologically aligned outlet biased their reports towards the beliefs of their readers by making exaggerated claims about the positive consequences of the stimulus plan.

**Fox News** On March 7, 2021, *Fox News* published the article "Sen. Blackburn on massive coronavirus package heading to House without GOP support." This article focuses on the critique of Senator Marsha Blackburn that "only nine percent" of the spending involved in the stimulus plan is related to fighting the coronavirus. While

spending on vaccines and other medical supplies accounts for about nine percent, the stimulus plan also includes financial relief for households affected by the pandemic.

Table D.1 below provides a screenshot of the website where we published our newsletter. The release schedule for our politics newsletters is shown in Table D.1. As the *Biden Rescue Plan* was signed into law on March 11, 2021, we ceased to publish weekly updated at this point.

Figure D.1: Newsletter about the Biden Rescue Plan

# **Newsletter** Biden Rescue Plan

Thank you very much for your interest in our weekly newsletter.

#### What is the newsletter about?

The newsletter will cover the **Biden Rescue Plan**, which is a plan to help America recover from the coronavirus crisis. The newsletter will contain three top stories about the plan featured on **MSNBC** during the last week.

#### How do I get the newsletter?

We will publish our weekly politics newsletter each Monday in January and Feburary 2021 on this website.

## Latest issues

Top articles from **January**:

- <u>What Biden's economic relief plan gets right</u>
- <u>Can Joe Biden's economic rescue plan get through Congress?</u>
- <u>Why Republicans are 'frustrated' and 'angry' as Dems eye COVID relief</u>

#### Top articles from **Feburary**

- <u>Republicans' Covid-19 stimulus compromise gives Biden little to work with</u>
- <u>GOP lawmakers push back against expanded unemployment assistance</u>
- <u>Slowly but surely, COVID relief bill inches forward, gains support</u>

Note: This is a screenshot of the website where we published our newsletter.

			Wave 1	Wave 2	Wave 3	Wave 4
Month	Day of month	Week number	Topic polarization	Instrumental motives	Fox News	Opinion
January	4	1				
	11	2				
	18	3				
	25	4	Х	Х		
February	1	5	Х	Х		
	8	6	Х	Х		
	15	7	Х	Х		
	22	8	Х	Х	Х	Х
March	1	9	Х	Х	Х	Х
	8	10	Х	Х	Х	Х
	15	11	Biden Re	scue Plan is signed	l into law at this	point

Table D.1: Release schedule of the politics newsletter

*Note:* This table shows the release schedule of our newsletter for each wave. Both wave 1 and wave 2 used the same set of articles. The Biden Rescue Plan was signed into law on March 11, 2021. On March 15, the newsletter informed recipients about this fact and announced that it would cease to publish weekly updates. At the end of March, we deactivated the newsletter websites.

# **E** Screenshots

## E.1 Full survey with base treatments (identical across all waves)

### E.1.1 Pre-treatment questions

This study is conducted by researchers from University of Bonn, University of Bergen, and Warwick University. You must be a US citizen of at least 18 years of age to participate in this study. If you do not fulfill these requirements, please do not continue any further.

You are not allowed to participate in this study more than once. If you experience a technical error or problem, do not try to restart or retake the study. Rather, send us an email with a description of your problem and we will get back to you. If you have any questions regarding this study, please email ingar.haaland@uib.no.

I have read and understood the above and want to participate in this study.

0	Yes		
$\cap$	No		

42

I'm not a rabat	2.
THI NOL A PODOL	
	reCAPTCHA
	Privacy - Terms

The next question is about the following problem. In questionnaires like ours, sometimes there are participants who do not carefully read the questions and just quickly click through the survey. This means that there are a lot of random answers which compromise the results of research studies. To show that you read our questions carefully, please choose both "Extremely interested" and "Not at all interested" as your answer in the next question. How interested are you in sports?

Extremely interested
Very interested
A little bit interested
Almost not interested
Not at all interested

43

Please indicate your gender.

O Male

O Female

What is your age?

Which category best describes your highest level of education?

O Eighth grade or less
O Some high school
O High school degree/GED
O Some college
O 2-year college degree
O 4-year college degree
O Master's degree
O Doctoral degree
O Professional degree (JD, MD, MBA)

-
Which of the following best describes your race or ethnicity?

- O African American/Black
- 🔿 Asian/Asian American
- Caucasian/White
- O Native American, Inuit or Aleut
- 🔘 Native Hawaiian/Pacific Islander
- () Other

Are you of Hispanic, Latino, or Spanish origin?

🔿 Yes

🔿 No

What was your family's gross household income in 2020 in US dollars?

- O Less than \$15,000
- () \$15,000 to \$24,999
- \$25,000 to \$49,999
- \$50,000 to \$74,999
- \$75,000 to \$99,999
- () \$100,000 to \$149,999
- \$150,000 to \$200,000
- O More than \$200,000

Who did you vote for in the 2020 presidential election?

O Donald Trump

🔿 Joe Biden

- O Other
- O Did not vote

In politics, as of today, do you consider yourself a Republican, a Democrat, or an Independent?

O Republican	
--------------	--

🔿 Democrat

O Independent

What is your region of residence?

O Northeast (CT, ME, MA, NH, RI, VT, NJ, NY, PA),

(IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)

O South (DE, DC, FL, GA,MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX)

**West** (AZ, CO, ID, NM, MT, UT,NV, WY, AK, CA, HI, OR, WA)

What is your current employment status?

$\bigcirc$	Full-	-time	empl	loyee
$\smile$			011101	

- O Part-time employee
- O Self-employed or small business owner
- O Unemployed and looking for work
- 🔘 Student
- O Not in labor force (for example: retired or full-time parent)

#### Are you liberal or conservative?

- 🔿 Very liberal
- 🔿 Liberal
- O Neither liberal nor conservative
- O Conservative
- O Very conservative

Which of the following newspapers are you most likely to read?

O Breitbart
O BuzzFeed News
O Chicago Sun-Times
O Daily Mail
O Drudge Report
O Los Angeles Times
() Newsmax
O New York Daily News
O New York Post
O Palmer Report
O The Denver Post
O The Huffington Post
O The Mercury News
O The New York Times
O The Wall Street Journal
O The Washington Post
O The Washington Times
🔿 USA Today
O I never read any of the newspapers above

### E.1.2 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

⊖ Yes

O No

### E.1.3 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those with inaccuracies.** 

Would you like to receive our newsletter?

O Yes

O No

## E.1.4 Post-treatment mechanism questions

How accurate do you expect the newsletter to be?

🔿 Very accurate

Accurate

🔘 Somewhat accurate

🔿 Inaccurate

🔿 Very inaccurate

How trustworthy do you expect the newsletter to be?

○ Very trustworthy

○ Trustworthy

🔿 Somewhat trustworthy

Not trustworthy

 $\bigcirc$  Not trustworthy at all

How entertaining do you expect the newsletter to be?

O Very entertaining

O Entertaining

🔘 Somewhat entertaining

O Not entertaining

O Not entertaining at all

What kind of political bias do you expect the newsletter to have?

○ Very right-wing biased

O Somewhat right-wing biased

🔿 Not biased

🔿 Somewhat left-wing biased

🔿 Very left-wing biased

What quality would you expect the newsletter to have?

O Very high quality

🔘 High quality

O Medium quality

- 🔘 Low quality
- $\bigcirc$  Very low quality

Do you expect the newsletter to have a simple or complex message?

$\cap$	1/		
$\bigcirc$	very	/ simp	sie

🔿 Simple

 $\bigcirc$  Neither simple nor complex

O Complex

○ Very complex

How much trust do you have in the news media?

$\bigcirc$	Very	high	trust	
$\sim$		0		

_						
$\sim$	Шi	0	h	tri	Lot	
					151	

○ Some trust

🔘 Low trust

○ Very low trust

Which of these platforms are you most likely to use as news sources?



## E.1.5 Beliefs about fact-checking: condition 1

Now imagine that we would fact check all stories and flag those with inaccuracies.

How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?

0 0		
01		
0 2		
○ 3		

How many of the top three articles from MSNBC selected for the newsletter do you expect to be flagged as inaccurate?

0 0			
01			
0 2			
О з			

How much do you trust our ability to fact check articles from MSNBC?

) Strongly trust
) Trust
) Somewhat trust
) Do not trust
) Do not trust at all

# E.1.6 Beliefs about fact-checking: condition 2

How many of the top three articles from MSNBC selected for the newsletter do you expect to contain factual errors?

0 ()		
01		
0 2		
<u> </u>		

How many of the top three articles from MSNBC selected for the newsletter do you expect to be flagged as inaccurate?

0 ()			
01			
2			
<u> </u>			

How much do you trust our ability to fact check articles from MSNBC?

○ Strongly trust	
⊖ Trust	
🔿 Somewhat trust	
🔿 Do not trust	
🔿 Do not trust at all	

# E.1.7 Demand for fact-checking information

MSNBC has been fact-checked several times by non-partisan fact checkers. Do you want to know how the accuracy of MSNBC has been rated?

O Yes			
O No			

# E.1.8 Questions about the Biden Rescue Plan

How strongly do you support the Biden Rescue Plan?

O Strongly support	
O Support	
O Neither support nor oppose	
O Oppose	
O Strongly oppose	

Do you think that the Biden Rescue Plan is bipartisan or only supported by one of the parties?

O Bipartisan

 $\bigcirc$  Only supported by one of the parties (Republicans)

Only supported by one of the parties (Democrats)

**→** 

# E.2 Wave 1: Topic polarization

### E.2.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **American Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from both conservative and liberal voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the American Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the American Rescue Plan.

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those with inaccuracies.** 

Would you like to receive our newsletter?

🔿 Yes

O No

### E.2.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **American Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from both conservative and liberal voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the American Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the American Rescue Plan.

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

⊖ Yes

O No

# **E.3** Wave 2: Instrumental motives

### E.3.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan**, which includes a **\$1400 stimulus check to most Americans**, to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan, including the **latest news about when you could you get your \$1,400 if the plan is approved.** 

The newsletter will be released each Monday in January and February 2021.

Would you like to receive our newsletter?

🔿 Yes

🔿 No

#### E.3.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan**, which includes a **\$1400 stimulus check to most Americans**, to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan, including the **latest news about when you could you get your \$1,400 if the plan is approved.** 

The newsletter will be released each Monday in January and February 2021. **We will fact check all stories and flag those with inaccuracies.** 

Would you like to receive our newsletter?

🔿 Yes

🔿 No

## E.3.3 Manipulation checks for instrumental motives

How relevant do you expect the newsletter to be for your personal finances?

🔿 Very relevant
() Relevant
🔿 Somewhat relevant
🔿 Not relevant
🔿 Not relevant at all

How do you expect the Biden Rescue Plan to affect your personal finances?

O Affect my personal finances very positively

O Affect my personal finances positively

O Does not affect my personal finances

O Affect my personal finances negatively

O Affect my personal finances very negatively

# E.4 Wave 3: Right-wing outlet

## E.4.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **Fox News** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021.

Would you like to receive our newsletter?

O Yes

O No

→

### E.4.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top stories about the Biden Rescue Plan** featured on **Fox News** during the last week.

By receiving our newsletter, you never risk losing out on the most important news about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021. **We will fact check all stories and flag those with inaccuracies.** 

Would you like to receive our newsletter?

O Yes

🔿 No

# E.5 Wave 4: Opinion piece

## E.5.1 Newsletter without fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top opinion pieces about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most newsworthy opinion pieces about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021.

Would you like to receive our newsletter?



🔿 No

### E.5.2 Newsletter with fact-checking

Congress is currently debating whether to pass the **Biden Rescue Plan** to help America recover from the coronavirus crisis. The proposal has received strong support from liberal voices, but has been criticized by conservative voices.

Our **Weekly Newsletter** is a weekly newsletter that will cover **the three top opinion pieces about the Biden Rescue Plan** featured on **MSNBC** during the last week.

By receiving our newsletter, you never risk losing out on the most newsworthy opinion pieces about the Biden Rescue Plan.

The newsletter will be released each Monday in February and March 2021. **We will fact check all stories and flag those with inaccuracies.** 

Would you like to receive our newsletter?

O Yes

🔿 No

**→**