

Media Slant and Public Policy Views

Milena Djourelova* Ruben Durante† Elliot Motte‡

Eleonora Patacchini§

January 2024

In the United States, views on many public policy issues, spanning from climate change to immigration and gun control, have diverged along partisan lines over the last two decades (Gallup 2023). Drawing on a literature on the influence of partisan cable news on electoral outcomes (DellaVigna and Kaplan 2007; Martin and Yurukoglu 2017), this paper examines the potential contribution of cable news to the increasing polarization on these issues.

First, we document the slant of Fox News and MSNBC coverage with respect to four policy issues – climate change, immigration, gun control, and abortion – utilizing GPT’s large language model to annotate cable news transcripts. Second, we link views on these issues expressed in a large electoral survey – the Cooperative Election Study (CES) – to local viewership of the two channels. To establish causality, we build on an approach proposed by Martin and Yurukoglu (2017), exploiting channel positions in local cable systems as a source of exogenous variation in their viewership. In both OLS and instrumental variable specifications, we document that the effects of viewership on views on specific public policies tend to follow the direction of slant in the coverage of these issues. Furthermore, we show that these effects remain significant after including controls for individual ideology and party affiliation.

This work contributes to a literature on the political effects of mass media (Strömberg 2004;

*Cornell University and CESifo. Email: mnd43@cornell.edu

†National University of Singapore, BSE, CESifo, IZA, and CEPR. Email: rubendurante@gmail.com.

‡Universitat Pompeu Fabra. Email: elliot.motte@upf.edu.

§Cornell University, CEPR, EIEF and IZA. Email: ep454@cornell.edu.

Snyder and Strömberg 2010; Enikolopov et al. 2011) and of cable news in particular. Prior literature has linked cable news exposure to outcomes ranging from the electoral success of Republican versus Democratic candidates (DellaVigna and Kaplan 2007; Martin and Yurukoglu 2017; Ash et al. 2022)¹ to judicial decisions (Ash and Poyker 2023) and local fiscal policy (Ash and Galletta 2024). On the issue of climate change beliefs, our results relate to recent work by Djourelouva et al. (2023) and Ash et al. (2023). Using a unified framework, this paper shows that similar effects are found for individual views on a spectrum of specific, policy-relevant questions. Additionally, these effects seem to operate even conditional on individual ideology and party affiliation.

Data. Our analysis combines three sources of data: (1) Cable news coverage of public policy issues from the GDELT Television API; (2) Survey data on policy views from the Cooperative Election Study (CES); (3) Cable news ratings and channel positions from Nielsen.

We collect the text of TV segments related to the four policy topics of interest and aired on Fox News or MSNBC between 2010 and 2022.² We use the GDELT 2.0 Television API to find all snippets containing a keyword relevant to one of the four topics. The keywords are “climate change/ global warming”, “immigrants/ immigration”, “gun rights / gun regulation / gun laws / gun control”, “abortion / reproductive rights”. Because GDELT snippets are very short (38.4 words on average), we look up the 500 characters before and 500 characters ahead of the keyword of interest. This procedure yields 57,914 unique segments that are 180.4 words long on average. Appendix Table A1 presents breakdowns of the counts of segments by channel and by topic.

Data on policy views on the four topics are from the Cooperative Election Study (CES). The CES is a nationally representative repeated cross-section conducted around congressional elections with sample size of up to 60,000 respondents per year and smaller waves in non-election years. We use the harmonized policy preferences file compiled by Dagonel (2021),

¹Broockman and Kalla (2023) provide detailed descriptive evidence on cable news consumption that supports the premise of this literature: cable news audiences are large (about 14% of Americans consume over 8 hours of partisan TV per month), persuadable, and largely isolated from cross-cutting content.

²We focus on segments broadcasted during local primetime hours (7 pm-11 pm).

which pools all survey waves from 2006 up to 2021. We focus on the 2 policy questions asked most often for each of the four issues, and recode outcomes such that higher values always denote a more left-leaning position. The eight questions are:

- *Some people think it is important to protect the environment even if it costs some jobs or otherwise reduces our standard of living. Other people think that protecting the environment is not as important as maintaining jobs and our standard of living. Which is closer to the way you feel?* [5-point scale from 1= Jobs much more important, to 5= Environment much more important]
- *From what you know about global climate change or global warming, which one of the following statements comes closest to your opinion?* [5 point scale from 1= Climate change is not occurring, to 5=Immediate action is necessary]

Do you support or oppose the following proposals:

- *Increase the number of border patrols on the U.S. Mexican border.* [=1 if support]
- *Grant legal status to all illegal immigrants who have held jobs and paid taxes for at least 3 years, and not been convicted of any felony crimes.* [=1 if support]
- *Ban assault rifles.* [=1 if support]
- *Make it easier for people to obtain concealed-carry permit.* [=1 if oppose]
- *Ban abortions after the 20th week of pregnancy.* [=1 if oppose]
- *Always allow a woman to obtain an abortion as a matter of choice.* [=1 if support]

Finally, we obtain data on the line-ups of local cable systems and channel ratings from the audience-measurement company Nielsen. Specifically, we use Nielsen's 2012 Focus Report, which provides information on the channel lineups of local cable companies, as well as their geographic scope, i.e. the set of zipcodes in which each company is active. We take the average ordinal positions of Fox News and MSNBC across companies active in each zip-code, and aggregate this data up to the county level weighted by zip-code population. We combine this dataset with Fox News and MSNBC total-audience ratings for the year 2012, reported by Nielsen at the county level, and merge this data to the CES using information on respondents' county of residence.

Measuring Media Slant Using GPT. To measure cable news slant on the four policy issues of interest, we apply GPT4 in a two-step annotation procedure. First, we filter out segments in the keyword-based corpus that are not related to the topic of interest. We do so using the question “*Is the segment about [climate change or global warming/ immigration /gun control/ abortion]*”. This step filters out between 11% and 57% of segments depending on the topic.

Second, we determine each segment’s policy stance with the question “*Broadly speaking, is the segment for or against stronger [climate change policy/ immigration restrictions/ gun control/ abortion rights]*”, with answer choices “*For*”, “*Against*” and “*Not sure/Not clear*”. We consider the share of segments that take a left-leaning policy stance – *for* stronger climate change policy, gun control and abortion rights, and *against* stronger immigration restrictions.³

Figure 1 presents the share of segments on Fox News and MSNBC that hold a left-leaning stance on each topic. We find large and significant differences between the two channels, with consistently higher shares of left-leaning segments on MSNBC than on Fox News across all four policy topics. The magnitude of the difference between the two channels ranges from 37 to 54 percentage points depending on the topic.

Cable TV Viewership and Policy Views: OLS Estimates. To understand the impact of exposure to slanted cable news coverage on policy views, we start by estimating respondent-level regressions of the CES survey measures described above on channel ratings in the respondent’s county. We control for respondents’ age, gender, income and education, a set of indicators for respondents’ self-reported ideology and party affiliation, and state \times year fixed effects. Standard errors are clustered at the county level.

Table 1 presents the results. For all four policy issues and the majority of specific questions within each category, we find a negative correlation between left-leaning policy positions and viewership of Fox News, coupled with a positive correlation with MSNBC viewership.

³The residual share of segments encompasses those that are against stronger climate change policy, gun control and abortion rights, and for stronger immigration restrictions as well as segments that are categorized as “Not sure/ Not clear”.

For example, one standard deviation higher Fox News viewership is associated with 0.6 percentage points lower likelihood of supporting amnesty for undocumented immigrants, conditional on respondent ideology and party affiliation. Conversely, one standard deviation higher MSNBC viewership is associated with a 0.4 percentage points higher likelihood of supporting immigration amnesty.⁴

Cable TV Viewership and Policy Views: IV Estimates. The challenge in interpreting the above results lies in the tendency of media consumers to select information sources that confirm their pre-existing views (Gentzkow and Shapiro 2010). In other words, even conditional on ideology and party affiliation, the correlation between viewership and public opinion may be biased due to reverse causality. To overcome this challenge, we apply a strategy proposed by Martin and Yurukoglu (2017) – using the channel positions of Fox News and MSNBC as a source of exogenous variation in their viewership. The two channels entered cable markets in the late 1990s and their positions in local lineups were determined largely by capacity constraints at the time. Indeed, in Appendix Table A2 we confirm that channel positions are uncorrelated with local political predispositions before the channel’s entry, proxied by the Republican vote share in the 1996 presidential election.

Channel positions do however have a significant first stage effect on viewership. Because viewers tend to start their search of channels from the top of the lineup (where most popular non-news channels are located), a lower ordinal position (and a higher ordinal position of competing channels) induces some marginal viewers to encounter and watch the channel more often. Appendix Table A3 presents this first-stage relationship. We estimate that a Fox News position lower by one standard deviation is linked to approximately 0.08 standard deviations higher Fox News viewership. Similarly, a MSNBC position lower by one standard deviation is associated with 0.06 to 0.08 standard deviations higher MSNBC viewership.

The upper panel of Table 2 presents the reduced form effect of the positions of Fox News and MSNBC in a respondent’s county on their views on the four policy issues, controlling

⁴The magnitudes of these correlations are substantially larger – -1.8 percentage points for Fox News and +1.5 percentage points for MSNBC – if the controls for individual ideology and party affiliation are omitted.

for individual socio-economic characteristics, ideology and party affiliation, and conditional on state \times year fixed effects. For seven out of the eight policy issues (with the exception of views on border security), we find a significant positive relationship between the channel position of Fox News and the likelihood of holding left-leaning policy views. For example, a Fox News position lower by one standard deviation is associated with 0.65 percentage point lower likelihood of supporting immigration amnesty. We find an inverse relationship, though less robust (statistically significant for three out of the eight policy issues) for MSNBC.

In the lower panel of Table 2, we scale these magnitudes in terms of viewership employing a 2SLS specification. We use the position of Fox News as an instrument for its local rating, controlling for MSNBC’s position.⁵ This analysis confirms that for almost all policy questions, Fox News viewership has a negative effect on the likelihood of holding left-leaning policy views. For example, the 2SLS coefficient implies that one standard deviation higher Fox News viewership leads to 2.8 percentage points lower support for immigration amnesty. The magnitudes are larger than those implied by the OLS estimates, consistent with the fact that the 2SLS strategy identifies a local average treatment effect for consumers whose choice among partisan channels is significantly affected by channel positioning. Such marginal consumers are likely to have weaker political priors and be subject to larger persuasion effects than the average consumer.

Conclusions. Focusing on the US cable TV market, we study how ideologically opposing news channels cover policy-relevant issues, and how they influence viewers’ policy stances. We document large qualitative differences in the way Fox News and MSNBC report on climate change, immigration, abortion, and gun rights. We also find that exposure to these channels can have significant effects on policy views, even when we control for political ideology and party affiliation. This evidence suggests that the increased popularity of partisan news sources - such as Fox News and MSNBC - may have contributed to the rise of polarization on these issues over the past two decades (Gallup 2023).

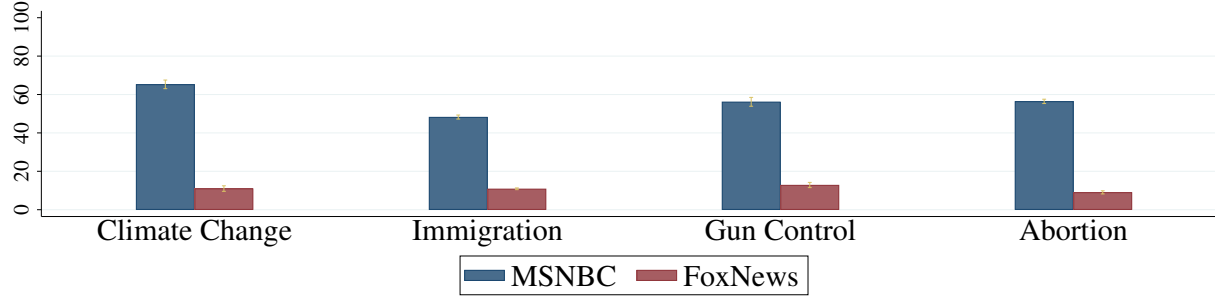
⁵We focus on the 2SLS estimates for Fox News and not for MSNBC because MSNBC’s position has much lower power in the respondent-level first stage. In other words, the results are less conclusive about the causal effect of MSNBC viewership.

Due to the cross-sectional nature of our analysis, our findings reflect the effect of exposure to different coverage of policy issues over a prolonged period of time. Yet, partisan media are also likely to shape the way individuals interpret new information that becomes available around prominent events. This is the case, for example, for the conflicting narratives about climate change that emerge in the aftermath of natural disasters (Djourelouva et al. 2023). Understanding whether similar processes apply to other issues and under what circumstances is a promising avenue for future research.

References

- ASH, E., A. BOLTACHKA, AND M. PINNA (2023): “Media Bias and Climate Change Skepticism,” *SSRN Working Paper*.
- ASH, E. AND S. GALLETTA (2024): “How Cable News Reshaped Local Government,” *American Economic Journal: Applied Economics*, (forthcoming).
- ASH, E., S. GALLETTA, M. PINNA, AND C. WARSHAW (2022): “The Effect of Fox News Channel on U.S. Elections: 2000-2020,” *Working Paper*.
- ASH, E. AND M. POYKER (2023): “Conservative News Media and Criminal Justice: Evidence from Exposure to Fox News Channel,” *Economic Journal*, (forthcoming).
- BROOCKMAN, D. AND J. KALLA (2023): “Selective Exposure and Partisan Echo Chambers in Television News Consumption: Evidence from Linked Viewership, Administrative, and Survey Data,” *Working Paper*.
- DAGONEL, A. (2021): “Cumulative CCES Policy Preferences,” *Harvard Dataverse*.
- DELLAVIGNA, S. AND E. KAPLAN (2007): “The Fox News Effect: Media Bias and Voting,” *Quarterly Journal of Economics*, 112(3), 1187–1234.
- DJURELOVA, M., R. DURANTE, E. MOTTE, AND E. PATACCHINI (2023): “Experience, Narratives and Climate Change Beliefs,” .
- ENIKOLOPOV, R., M. PETROVA, AND E. ZHURAVSKAYA (2011): “Media and Political Persuasion: Evidence from Russia,” *American Economic Review*, 101, 3253–3285.
- GALLUP (2023): “Partisan Gaps Expand Most on Government Power, Climate,” <https://news.gallup.com/poll/509129/update-partisan-gaps-expand-government-power-climate.aspx>.
- GENTZKOW, M. AND J. M. SHAPIRO (2010): “What Drives Media Slant? Evidence from U.S. Daily Newspapers,” *Econometrica*, 78(1), 35–71.
- MARTIN, G. J. AND A. YURUKOGLU (2017): “Bias in Cable News: Persuasion and Polarization,” *American Economic Review*, 107(9), 2565–2599.
- SNYDER, J. AND D. STRÖMBERG (2010): “Press Coverage and Political Accountability,” *Journal of Political Economy*, 118(2), 355–408.
- STRÖMBERG, D. (2004): “Radio’s Impact on Public Spending,” *Quarterly Journal of Economics*, 119(1), 189–221.

Figure 1: Fox News and MSNBC TV segments stance on policy issues



Notes: Bars represent the share of segments for a given channel and a given topic that are for stronger abortion rights, for stronger climate change policy, for stronger gun control and against stronger immigration restrictions.

Table 1: Effect of cable news exposure on policy views: OLS estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Environment vs jobs	Climate change concerns	Increase border security ($\times -1$)	Legalize immigrants	Ban assault weapons	Ease concealed-carry permits	Ban abortions after 20th week ($\times -1$)	Always allow abortions
Fox News rating (std)	-0.0026 (0.004)	-0.0129*** (0.004)	-0.0036*** (0.001)	-0.0056*** (0.002)	-0.0097*** (0.001)	-0.0065*** (0.001)	-0.0030** (0.001)	-0.0043*** (0.002)
MSNBC rating (std)	0.0005 (0.003)	0.0034 (0.004)	0.0027** (0.001)	0.0041*** (0.001)	0.0085*** (0.002)	0.0069*** (0.002)	0.0051*** (0.002)	0.0090*** (0.002)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State \times Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	153,461	124,599	289,794	289,810	228,591	228,745	216,741	216,889
Number of counties	2,880	2,808	2,924	2,924	2,874	2,874	2,867	2,866
R ²	0.27	0.44	0.19	0.22	0.25	0.19	0.17	0.28
Mean dep. var.	3.03	3.59	0.44	0.54	0.67	0.64	0.38	0.61

Notes: OLS regressions of individual policy views on cable news ratings in the respondent's county. Respondent controls include age, gender, education, income, ideology and party affiliation. Standard errors clustered by county. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 2: Effects of cable news exposure on policy views: IV estimates

Panel (a): Reduced form								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Environment vs jobs	Climate change concerns	Increase border security ($\times -1$)	Legalize immigrants	Ban assault weapons	Ease concealed-carry permits	Ban abortions after 20th week ($\times -1$)	Always allow abortions
Fox News position (std)	0.0265*** (0.009)	0.0341*** (0.007)	0.0026 (0.002)	0.0065** (0.003)	0.0146*** (0.003)	0.0101*** (0.003)	0.0081*** (0.003)	0.0158*** (0.003)
MSNBC position (std)	-0.0159* (0.009)	-0.0262*** (0.007)	0.0001 (0.002)	-0.0042* (0.002)	-0.0052 (0.003)	-0.0043 (0.003)	-0.0039 (0.003)	-0.0046 (0.003)
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State \times Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	158,426	128,782	299,999	300,019	236,742	236,900	224,488	224,638
Number of counties	2,885	2,819	2,926	2,926	2,879	2,879	2,874	2,873
R ²	0.26	0.44	0.19	0.22	0.25	0.19	0.17	0.28
Mean dep. var.	3.03	3.59	0.44	0.54	0.67	0.64	0.38	0.61
Panel (b): 2SLS								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Environment vs jobs	Climate change concerns	Increase border security ($\times -1$)	Legalize immigrants	Ban assault weapons	Ease concealed-carry permits	Ban abortions after 20th week ($\times -1$)	Always allow abortions
Fox News rating (std)	-0.1334** (0.059)	-0.1717*** (0.054)	-0.0132 (0.011)	-0.0284** (0.012)	-0.0668*** (0.019)	-0.0489*** (0.017)	-0.0400*** (0.015)	-0.0724*** (0.021)
MSNBC position	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Respondent controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State \times Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
First stage F-stat	13.39	12.15	14.77	14.79	16.42	16.40	16.20	16.24
Observations	153,177	124,400	289,375	289,391	228,284	228,438	216,454	216,601
Number of counties	2,817	2,750	2,856	2,856	2,812	2,812	2,807	2,806
R ²	0.23	0.41	0.18	0.18	0.22	0.18	0.15	0.24
Mean dep. var.	3.03	3.59	0.44	0.54	0.67	0.64	0.38	0.61

Notes: Panel (a): Reduced-form regressions of individual policy views on the positions of Fox News and MSNBC in cable lineups in the respondent's county. Panel (b): 2SLS regressions of individual policy views on Fox News ratings in the respondent's county, instrumented by the channel's position in cable lineups. Respondent controls include age, gender, education, income, ideology and party affiliation. Standard errors clustered by county. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

1 Appendix

Table A1: Number of TV segments collected by station and policy issue

	Climate change	Immigration	Guns	Abortion	Total
Fox News	4480	19265	2986	6609	33340
MSNBC	3698	10070	2177	8629	24574
Total	8178	29335	5163	15238	57914

Notes: The table displays counts of unique TV segments broken down by cable TV station and policy issue.

Table A2: Placebo: Channel positions and political predispositions prior to channel's entry

	(1)	(2)
	1996 Republican vote share	
Fox News position (std)	-0.0038 (0.003)	0.0012 (0.003)
MSNBC position (std)	0.0010 (0.003)	0.0006 (0.003)
State FEs	No	Yes
Observations	3,045	3,044
R ²	0.00	0.37
Mean dep. var.	0.44	0.44

Notes: County-level regressions of the Republican vote share in the 1996 presidential election on local Fox News and MSNBC channel positions. Standard errors clustered by county. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A3: First stage: Channel positions and ratings in the 2012 county-level cross section

	(1)	(2)	(3)	(4)
	Fox News rating (std)		MSNBC rating (std)	
Fox News position (std)	-0.0765** (0.037)	-0.0800* (0.041)	0.0763*** (0.022)	0.0663*** (0.024)
MSNBC position (std)	0.0988*** (0.033)	0.0668* (0.035)	-0.0795*** (0.026)	-0.0641** (0.026)
State FEs	No	Yes	No	Yes
Observations	2,964	2,963	2,964	2,963
R ²	0.00	0.05	0.00	0.04

Notes: County-level regressions of Fox News and MSNBC ratings on channel positions in cable lineups. Standard errors clustered by county. Significance levels: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.