American Economic Journal: Applied Economics 2023, 15(4): 292–320
https://doi.org/10.1257/app.20210501

How Cable News Reshaped Local Government†

By Elliott Ash and Sergio Galletta*

This paper shows that partisan cable news broadcasts have a causal effect on the size and composition of budgets in US localities. Using exogenous channel positioning as an instrument for viewership, we show that exposure to the conservative Fox News channel reduces revenues and expenditures. Multiple mechanisms drive these results: Fox News improves election chances for local Republicans, alters politician campaign agendas, and shifts voter policy preferences on fiscal issues. Consistent with the priorities of small-government conservatism, we find evidence that private provision compensates for the reduced public services. The "Fox News effect" extends beyond vote shares to rightward policy shifts. (*JEL* D72, H71, H72, H75, I20, L82)

The "Fox News effect" is by now well documented: Exposure to partisan cable news, such as Fox News Channel (FNC), influences voting in US elections (DellaVigna and Kaplan 2007; Martin and Yurukoglu 2017a; Ash et al. 2021). An extensive empirical literature has teased out corollary effects on individual attitudes (Schroeder and Stone 2015; Broockman and Kalla 2022) and roll call votes in Congress (Clinton and Enamorado 2014; Arceneaux et al. 2016). Yet an important open question remains on the policy consequences of these shifts. As Strömberg (2015) observes: "There is no direct empirical evidence of the effect of media bias on policy" (188).

This paper provides the first such evidence. Our empirical setting is local US government, for which we have detailed data on fiscal policy outcomes. Since FNC is a national news channel that does not report on local politics, the null hypothesis would be that they have no effect on local policies. However, if conservative media bias leads to more Republicans taking local office or to more

*Ash: ETH Zurich (email: ashe@ethz.ch); Galletta: ETH Zurich (email: sergio.galletta@gess.ethz.ch). Ilyana Kuziemko was coeditor for this article. We are grateful to Stefano DellaVigna, Mirko Draca, Ruben Durante, Tore Ellingsen, Benny Geys, Massimo Morelli, Suresh Naidu, Giovanni Pica, Carlo Schwarz, Alex Stremitzer, David Strömberg, Alois Stutzer, and Ali Yurukoglu for helpful suggestions. We have also benefited from comments by participants at the Causes and Consequences of Populism workshop in Bocconi (Milan), Workshop on Political Economy at the IEB (Barcelona), Swiss Workshop on Local Public Finance (Lugano), Petralia workshop, EEA-ESEM conference (Manchester), PE Workshop on Elections, Democracy, and Populism (Bologna), and seminars at the University of Lugano, ETH Zürich, and IAE-CSIC (Barcelona). We are grateful to Christian Dippel for sharing his data on city elections and to Greg Martin for sharing his data and assistance in processing the Nielsen data. David Cai, Romina Jafarian, Selina Lorusso, and Matteo Pinna provided excellent research assistance.

†Go to https://doi.org/10.1257/app.20210501 to visit the article page for additional materials and author disclosure statement(s) or to comment in the online discussion forum.

right-wing policy preferences among voters, then the Fox News effect may extend to local fiscal policies, as well.

In an empirical analysis of these issues, using an OLS model where fiscal outcomes are regressed on news channel viewership would produce biased estimates. There would be endogeneity due to both omitted variable bias and reverse causation—namely, in localities that are historically more conservative, fiscal policies will already be more conservative and Fox News will tend to be more popular. To confront this problem, we follow Martin and Yurukoglu (2017a) and exploit the quasirandom variation in channel positioning across counties. Due to historical channel placement, there are wide differences in channel ordering across media markets—Fox News is sometimes located in the low 20s and sometimes closer to 100. Because channel surfers generally start at channel 1 and click upward until they find something they like, the position of a news channel can have a big influence on whether people watch it. We confirm this argument in the data by showing a strong first-stage relationship between a news channel's lineup position and its viewership across counties. In terms of instrument exogeneity, we can show that channel position is unrelated to pre-existing markers for conservative politics, such as past fiscal policies (in trends or levels) or historical Republican vote shares. Further, the instrument is uncorrelated with pre-existing demographic characteristics that are predictive of FNC viewership or fiscal policy.

Using channel position as an instrument for viewership, we run two-stage least squares regressions to estimate local average treatment effects (LATEs) of FNC viewership on local government finances. We find that an exogenous increase in Fox News exposure is associated with more conservative fiscal policies—specifically, a decrease in both revenues and expenditures per capita. The effect is economically significant. A hypothetical 0.1-standard-deviation decrease in FNC's channel position, inducing about 45 minutes of additional FNC watching per household per month, would decrease local revenues by 3.4 percent and local expenditures by 3.8 percent. In a back-of-the-envelope calculation, this would imply a $150 per capita decrease in local revenues and spending per year.

These main results are robust to a variety of empirical checks—for example, in additional adjustments for demographics, for other aspects of fiscal policy, and for the positioning and ratings of the other cable news networks (CNN, MSNBC). Results are robust to perturbing the sample—for example, by dropping each state from the regressions one by one. We find qualitatively similar results using a different identification strategy—a differences-in-difference specification based on DellaVigna and Kaplan (2007) that compares changes in fiscal policy to changes in the population share that has access to FNC. On the other side of the partisan divide, we find evidence that higher exposure to the left-leaning MSNBC network tends to expand local budgets, although that effect is less robust than the one for FNC. Meanwhile, there are no observed effects on fiscal policy for the more centrist network CNN.

Closer examination of the specific budget factors provides additional insight into how FNC is changing local fiscal policy. On the expenditures side, we see decreases in public services (education, health, welfare) but not in protective services (police, corrections). On the revenues side, we see the largest decreases in

charges (fees for government services), which may reflect lower service provision or privatization. Consistent with privatization, we find that FNC increases the number of local private-sector firms providing education services and security services. Using schooling data, we show that the share of students enrolled in private schools increases in response to higher FNC exposure. Overall, these results highlight how right-wing news media have shifted local policies in line with the policy priorities of small-government conservatives.

The next question is what mechanisms can explain these effects. A first possibility is that biased news might change vote shares in local partisan elections and select for more Republican officials. That, in turn, would lead to changes in local policies. Using data on a sample of mayoral elections, we show evidence consistent with this mechanism: FNC reduces the probability of Democrats running for local office and increases the probability of Republicans winning office.

A second possible mechanism is that news media exposure influences local politicians' policy agendas. To evaluate this channel, we use data on the content of political advertising across US localities. We find that, indeed, higher exposure to FNC causes Democrats to talk more about fiscal issues and less about public welfare issues.

A third relevant mechanism is that partisan cable news may shift the policy preferences of local voters. To get at this channel, we collect data on ballot referenda in Texas related to tax collections. We show that higher Fox News exposure increases the shares of votes in favor of fiscally conservative positions. Hence, biased media can influence policy positions, not just support for a particular political party.

Taken together, we find evidence for the relevance of all three political mechanisms in how cable news can influence local fiscal policy.[1] These results are consistent with a story where voters change their preferences after exposure to partisan news, which influences the selection of local politicians and how politicians shape their campaign platforms. Once in office, the presence of fiscally conservative voters motivates incumbents to enact small-budget policies regardless of the party in power.

To summarize: we can establish that political ideology in media is an important causal factor in driving choices on local redistributive policies. This is some of the best evidence, relative to existing literature, for a causal effect of partisan media on policy outputs. While the previous literature has shown effects on voters (DellaVigna and Kaplan 2007; Martin and Yurukoglu 2017a) and on legislators (Clinton and Enamorado 2014; Arceneaux et al. 2016), there isn't any evidence on the resulting policies (Strömberg 2015). This paper fills that gap.

It should be emphasized that this last gap—going from boosting Republican vote share to rightward movements in policy—is not obvious. The FNC effect on votes documented in DellaVigna and Kaplan (2007) and Martin and Yurukoglu (2017a) did not necessarily entail effects on policy outcomes; it may have helped only moderate Republicans win close elections, for example, with little or no policy change.

[1] Meanwhile, we are able to rule out that the effect is driven by changes in the local housing market or by intergovernment transfers.

Our evidence shows instead that Fox viewership leads to a number of important policy impacts.

What potentially makes these results more surprising is that the national news channels are focusing on national politics, rather than local politics. The viewers in these localities are learning about (and hearing opinions about) the actions of the federal government, yet that information and these opinions are applied to local policies and causally shift them in the intended ideological direction. Therefore, we have better evidence of a durable change in political attitudes compared to the previous papers showing changes along the margins explicitly recommended by media messaging. In particular, the results on the ballot referenda suggest a change in policy preferences, rather than partisan loyalty. These media outlets have a more deep-seated impact than what the previous literature had suggested.

More generally, this paper builds a bridge between the literatures on media politics and public finance. To begin, a number of studies have looked at political impacts of the quantity of newspaper coverage. Studying US newspapers, Gentzkow, Shapiro, and Sinkinson (2011) show that higher media coverage due to random variation in overlap between newspaper markets and congressional districts positively influences voters' turnout in presidential and congressional elections. Snyder Jr. and Strömberg (2010) show that this variation affects the behavior of congressmen while in office. At the local level, Gao, Lee, and Murphy (2020) show in the cross-section that municipal borrowing costs are higher in areas where local newspapers have closed down. In the case of India, Besley and Burgess (2002) show that local governments are more responsive to disaster relief in areas with higher newspaper circulation. Drago, Nannicini, and Sobbrio (2014) provide evidence from Italy suggesting that the entry of newspapers positively affects turnout in municipal elections and the efficiency of the municipal government.

Another strand of papers has analyzed the history of radio, television, and the internet. Strömberg (2004) finds that New Deal programs were substantially larger in US counties with a higher share of population with access to radio. Gentzkow (2006) shows a decrease in voter turnout after the introduction of television in the 1950s, while Campante and Hojman (2013) find an associated reduction in the partisanship of congressional roll call votes. Durante, Pinotti, and Tesei (2019) suggest that differential exposure to entertainment programs in Italy made some people more amenable to the political messaging of populist parties. Moving to cable television, Ellingsen and Hernæs (2018) show that higher cable penetration in Norway significantly reduced turnout in municipal elections and also reduced public spending (while increasing the share spent on education). Most recently, Gavazza, Nardotto, and Valletti (2018) suggest that local government expenditures (and taxes) are lower in areas with greater internet penetration.[2]

A closer set of papers have established effects of partisan media on voters' behavior, with a focus on Fox News Channel in the United States.[3] Using a

[2] An emerging literature has begun to analyze how social media contributes to political polarization (Boxell, Gentzkow, and Shapiro 2017; Allcott and Gentzkow 2017).

[3] Related work outside of the US context includes Barone, D'Acunto, and Narciso (2015) on elections in Italy and Enikolopov, Petrova, and Zhuravskaya (2011) on elections in Russia.

difference-in-difference strategy, DellaVigna and Kaplan (2007) show that the introduction of Fox News in the US cable market had a positive effect on both turnout and vote share for Republicans in the 2000 presidential election.[4] This result has been replicated in an instrumental variable framework and extended to later elections by Martin and Yurukoglu (2017a) and Ash et al. (2021). Schroeder and Stone (2015) show that exposure to Fox News is associated with greater knowledge about political issues that tend to favor Republicans.[5]

Hence, while we know that Fox News increases Republican vote shares, whether these shifts are large enough to flip elections or move policy is a separate question. At the national level, two papers have compared changes in Fox News availability across congressional districts and changes in congressmen's positions as expressed in roll call votes. Using data from 35 states, Clinton and Enamorado (2014) show that congressmen from districts that adopted Fox News early tended to vote against the position favored by President Clinton in the 1999–2000 session (but not the 1997–1998 session). Arceneaux et al. (2016) re-analyze this dataset and find that Fox's difference-in-difference effect occurs only for congressmen whose districts have substantial pre-FNC Republican vote share and only for roll calls in close proximity to an election. The research design in these papers does not permit confident conclusions about whether these shifts were pivotal for policy in the sense of whether Fox caused some bills to be enacted or not. At the local level, meanwhile, there is no previous work on how much FNC might bias local elections or how much it influences local policy.

Beyond the literature on media, our paper contributes to the work on the determinants of local fiscal policies. Pettersson-Lidbom (2008) shows that mayors' partisanship influences local expenditures and revenues in the Swedish context, while Ferreira and Gyourko (2009) find no effect for US localities (see also Dippel 2022a). Looking to institutional factors, Coate and Knight (2011) find that spending is lower when mayor and city council are both elected by voters, compared to when an elected city council selects a manager. Hinnerich and Pettersson-Lidbom (2014) provide further evidence on how institutions shape fiscal polices, as they find that Swedish municipalities with town meetings spend 40–60 percent less on public welfare than municipalities with city councils (see also Galletta 2021).

The stage has now been set for the following sections. Section I provides background information and describes the data. Section II presents the empirical strategy, while Section III reports the main results. Section IV explores the relevant mechanisms, while Section V reports some supporting results. Section VI concludes.

[4] Hopkins and Ladd (2014) obtain similar findings in surveys asking about vote intentions.

[5] Several papers find that FNC influenced responses to the COVID-19 pandemic (Ash et al. 2020; Pinna, Picard, and Goessmann 2022). Looking at local news, Mastrorocco and Ornaghi (2021) show that when local news stations are taken over by a national company, local news coverage of crimes goes down and crime rates go up.

I. Background and Data

A. *Cable News in the United States*

There are three main competitors in the US cable news market: CNN, introduced in 1980; Fox News Channel (FNC); and MSNBC. (FNC and MSNBC were both introduced in 1996). Each channel provides program schedules and content that are the same nationwide, but their availability has varied across localities. This is due to the geographically fragmented market of cable providers.[6] Most of the time, national media producers have to reach separate agreements with local cable companies in order to make their channel available to the final users. As these procedures might start and also end at different times depending on the area of interest, channel accessibility has varied significantly by locality and time (DellaVigna and Kaplan 2007).[7]

Similarly, the lineup positions assigned to channels crucially depends on when they joined the system, as new channels are positioned sequentially most of the time. Old channels could be dropped, in which case new channels could sometimes take the lower, vacated position. It is also common for local cable providers to put channels with a similar genre into adjacent or close positions. While this process is not random, it is arbitrary and depends on many random factors. Moreover, channel positions are generally stable over time, with the rationale that changes might confuse customers. Martin and Yurukoglu (2017a) provide detailed evidence on the process by which channel positions are assigned.

The conventional wisdom that FNC is a politically conservative force has been borne out by empirical research in economics. DellaVigna and Kaplan (2007) show that in towns where FNC was introduced in the late 1990s, Republicans received more votes in the 2000 presidential election compared to towns where FNC had not been introduced. Martin and Yurukoglu (2017a) replicated and extended this finding to later years, showing that higher FNC viewership increased the presidential vote share for Republicans in 2004 and 2008. The authors also provide some limited evidence on a negative effect of MSNBC viewership on Republican votes.

Previous research on the content of Fox News has established that the political viewpoint is not just in favor of Republicans but in favor of particular conservative policies. This research includes Cassino (2016), a book-length treatment that analyzes how FNC stories frame a number of categories, including budget and taxes. Peck (2019, chapter 4) provides a detailed qualitative analysis of how FNC frames

[6] In the United States, both cable and local broadcast stations are privately owned, and in general there may be just one publicly owned channel in a market.

[7] For instance, FNC had its first big agreement with TCI (nytimes.com/1996/06/25/business/the-media-business-tci-reaches-deal-with-fox-to-carry-all-news-channel.html). Differently, MSNBC started by replacing a former NBC channel, America's Talking (nytimes.com/1996/06/03/business/bitterness-and-posturing-as-rivalries-resurface-in-fight-for-cablenews.html).

fiscal policy issues. Some relevant themes include how progressive taxes reduce entrepreneurship and economic growth[8] as well as the unfairness of redistribution.[9]

To add to this qualitative evidence, we quantitatively analyzed the messaging around fiscal policy using the prime-time transcripts from FNC and MSNBC for the years 2005 through 2007, obtained from LexisNexis.[10] We applied a natural language processing (NLP) tool called Word2Vec,[11] which identifies associations between words in a corpus based on how often they show up in the same sentence. For FNC and MSNBC, we scored each word by its association with "tax" relative to the other network and to CNN. Word clouds illustrating these associations are reported in online Appendix Figure A.1, panels A and B. We can see that on MSNBC (panel A) there are issues related to progressive taxation: "progressivity," "wealthy," and "high income." There are complaints about "giveaways" (presumably to rent-seeking corporations) and "budget-busting" austerity policies. On the other hand, Fox speakers complained about the redistributive earned income tax credit (EITC)[12] and about tax rights.

In addition, online Appendix Figure A.1, panel C displays how frequently the phrase "public service" is mentioned compared to "tax" in the two networks from 1999 through 2007. Overall, it seems that MSNBC is generally more likely to talk about public services than FNC, and interestingly, this dynamic has strengthened over time.

There is already some cross-sectional evidence that this messaging might have an impact on the fiscal policy views of Fox News viewers. An October 2018 survey, in particular, compared Fox-viewing Republicans to non-Fox-viewing Republicans on a range of attitudes.[13] They found that the policy where Fox-viewing Republicans diverged the most was in their strong opposition to a wealth tax on assets greater than $100 million. Similarly, DiMaggio (2019) finds that domestic policy views (including taxes and spending) are more predictive of FNC viewership than political affiliation, attitudes toward leaders, or foreign policy. These statistics speak to conservative (antiredistribution) views among this group (although they are at least partly driven by selection).

To measure FNC channel position and viewership (ratings), we use the same data as Martin and Yurukoglu (2017a). Information about the channel positions are based on the Nielsen FOCUS database, which provides the channel lineup

[8] Peck (2019) quotes a representative commentary from the Glenn Beck show: "Redistribution of wealth: No, I work for it. I work for my money. It's mine. I've always worked for people with more money than I have, because they gave me a job. That's the only redistribution of wealth I support. I never got a job from a poor person. And let me ask you another question, why do you want me to hate my employers? What do you have against shareholders making a profit, and charitable contributions?" (166).

[9] Another quote from *O'Reilly Factor*: "Income redistribution is something else other than taxes […] it's basically above and beyond your fair share, which I'm willing to pay, all right, and I'd say 40 percent to 50 percent of my paycheck is fair […] Above and beyond that, Barack Obama and you and others say no, you have more of an obligation to then social engineer people who hadn't gotten educated, who don't work hard, who maybe were addicted for 30 years of their life, maybe they're clean now. Okay?" (173).

[10] See https://www.lexisnexis.com/ap/academic/form_news_tv.asp.

[11] We used the implementation in the Python package gensim, with 300 dimensions and window size 5.

[12] For example, "IRS Paid More than $110 Billion in Improper Tax Credits" (foxnews.com, May 24, 2016). We note that our use of the language "tax" in this setting rather than something broader, like "revenue," is based on the colloquial use of taxes to refer to all revenue categories.

[13] See John Ray, "The Fox News Bubble," available at www.dataforprogress.org/blog/2019/3/23/the-fox-news-bubble.

for all the US broadcast systems and the served locations at the zip code level. Our measure of television viewership (ratings) is also provided by Nielsen and includes the share of individuals tuned in to each channel by zip code for the years 2005 through 2007. Because fiscal data are not zip code–specific, we aggregate ratings and channel position values at the county level. Specifically, we create county average channel positions weighting the observations by the number of TV-watching households in the zip code as estimated by Nielsen for the period 2005–2007. Similarly, we create county-specific ratings by weighting ratings by the number of survey individuals in the zip code according to Nielsen.[14] Note that our sample consists of 2,521 counties from 206 designated market areas (DMAs) and 49 states in which FNC is accessible in at least one zip code in at least one of the years between 2005 and 2007.[15]

Online Appendix Table A.1 reports the summary statistics of the cable news media variables. The average FNC rating is 0.542, which corresponds to around 55 minutes per week per household.[16] The average channel position is 42, with a standard deviation of 12. We have the same information for CNN and MSNBC. On average, CNN has a rating of 0.279 and channel position 29, while MSNBC has an average rating of 0.088 and channel position 44. These ratings comparisons confirm the top standing of FNC in the cable news market. Note that CNN has, on average, the lowest channel position, consistent with being the first market entrant.

B. *Local Fiscal Policy*

In the United States, levels of revenues and expenditures vary across local governments (see online Appendix Figure A.2). Each locality has its own mix of sources of revenue and categories of spending, which depend on the specific structure of fiscal programs. These localities generate revenue mainly through taxes on property and fiscal transfers from upper levels of government, while expenditures are for the main part devoted to education and health as well as transportation and public safety (i.e., police and correctional facilities).

We use information that comes from the local government finance census. This is a survey of all local governments administered every five years, beginning in 1972. In all, local governments account for 30 percent of total government spending and 10.5 percent of GDP. Online Appendix Table A.2 provides insights on the composition of both the revenue and spending sides of the local budgets. These measures represent the sum of the amounts reported in the annual budget by each local government located in a given county. In principle, we could have matched zip codes to more localized governments than counties (e.g., townships and municipalities), but we found that matching those boundaries was more error prone.[17] In addition, using

[14] When a zip code covers multiple counties, it is assigned to a single county—the one with the largest fraction of the zip code's population.

[15] DMAs are areas of the United States that define television and radio markets.

[16] We apply the same conversion metric proposed by Martin and Yurukoglu (2017a), where one rating point is about 100.8 minutes (1.68×60) spent watching television per week.

[17] We provide some evidence on this level of government in Section IV when addressing the effect of FNC on local elections.

county-level data abstracts from two sources of heterogeneity (and potentially measurement error). First, there is heterogeneity in the assignment of public tasks: It could be that in certain areas specific public services are provided by the county governments, while in others the same public services are assigned to township governments. Second, in each local government the structure of decision-making processes can be different: For instance, there are cities where the mayor is elected directly by voters, while in others there is a city council that selects a professional administrator.

Given that the information on cable news viewership is available for the period 2005–2007, our outcomes come from the budget components for the year 2007. We include the 1997 and earlier values as controls.

C. *Additional Data Sources*

To supplement data on media exposure and fiscal policy, we collected demographic characteristics from the 2000 US decennial census. They include the general demographic and economic composition of each county, such as race, gender, age, income, income inequality, education, urban or rural, and sector of occupation. (Summary statistics are in online Appendix Table A.1.) Median house value is from the 2010 census. Public employment and wages are from the Annual Survey of Public Employment and Payroll. Total wages are from the Bureau of Labor Statistics. Moreover, we collect data of Republican presidential share of the county in 1996 as well as for statewide ballot measures in Texas from the Secretary of State website.[18] Data on the number of firms by county are from the County Business Patterns (CBP) dataset. Data on mayoral elections come from Dippel (2022b). (Summary statistics are in online Appendix Table A.3.) Data on political advertising come from the Wesleyan Media Project (WMP).[19] Schooling information comes from Common Core of Data (CCD).[20]

II. Estimation Strategy

This section describes our empirical strategy. We are interested in the relationship between FNC viewership and local budgets. Given the data at our disposal, we conduct a cross-sectional analysis that focuses on the 2007 local budget and the average FNC ratings for the period 2005–2007.

The standard approach to our research question would be to estimate the following linear regression for county i in designated market area (DMA) d and state s:

$$Y_{ids} = \alpha + \gamma_s + \rho V_i + \beta \mathbf{X}_i + \epsilon_{ids}, \tag{1}$$

where Y_{ids} is a 2007 local fiscal policy variable—for example, log revenue collections per capita or log expenditures per capita. V_i is the main regressor, which

[18] See Texas Secretary of State (2008). "Election History" https://elections.sos.state.tx.us/index.htm.
[19] See https://mediaproject.wesleyan.edu/dataaccess (formerly known as the Wisconsin Advertising Project).
[20] See National Center for Education Statistics (NCES) (2008a) https://nces.ed.gov/ccd/pubschuniv.asp.

is operationalized as the average FNC viewership (ratings) for the the period 2005–2007. $\mathbf{X}_i$ includes covariates—namely, cable controls (i.e., share of county population living in zip codes with access to FNC, MSNBC, and CNN; plus the channel positions of MSNBC and CNN), demographic controls (i.e., race, gender, age, income, income inequality, education, urban or rural, and sector of occupation), pretreatment fiscal policy choices (i.e., Y_{ids} values from 1997 and decennial changes from 1977 to 1987 and from 1987 to 1997), and pretreatment political preferences, while γ_s are state fixed effects. The error term ϵ_{ids} includes unobservable factors and randomness, while ρ gives the effect of interest. The same equation can be applied to all components of the budget.

Inferring causality from OLS estimates requires strong assumptions about the absence of omitted confounders. In particular, historically more conservative (liberal) areas might have more conservative (liberal) policies as well as higher (lower) popularity of Fox News. Thus, to provide causal estimates, we follow Martin and Yurukoglu (2017a) and instrument the endogenous regressor using channels' positions in the system lineup.

We define the first-stage equation as

$$V_{ids} = \alpha + \gamma_s + \gamma \mathbf{Z}_i + \beta \mathbf{X}_i + \eta_{ids}, \tag{2}$$

where in addition to the previously defined elements we now also have Z_i, which is the FNC channel position in the system lineup in county i averaged over the period 2005–2007. Finally, the second-stage equation is

$$Y_{ids} = \alpha + \gamma_s + \delta \hat{V}_i + \beta \mathbf{X}_i + \eta_{ids}, \tag{3}$$

where $\hat{V}_i$ are the fitted values from equation (2).

The key identifying assumption of our strategy is that FNC channel position is exogenous with respect to counties' preferences for fiscal policies, conditional on controls. Martin and Yurukoglu (2017a) provide a lengthy discussion and set of checks along these lines. As discussed above, channel positions have a pivotal arbitrary, historical component, with significant inertia and path dependence. This implies that television companies have limited scope in affecting the channel position and adapting it to local conditions.

In Section IIIB we provide a number of checks to test the identification assumption. We show that in our data the instrument is not related to pretreatment (before 1996) local fiscal policies nor to demographic characteristics predicting fiscal policies and news channel viewership. In addition, the instrument is not correlated with past Republican vote shares.

We provide initial evidence of instrumental relevance in Figure 1, panel A, which plots the first-stage relationship. There is a clear downward trend, with higher ratings for FNC when FNC is in a lower position. Adding controls does not change the relationship (panel B). The regression Table 1 in Section III gives the Kleinbergen-Paap F-statistics of the excluded instruments for each regression; the relationship is strong and stable with and without the inclusion of controls.

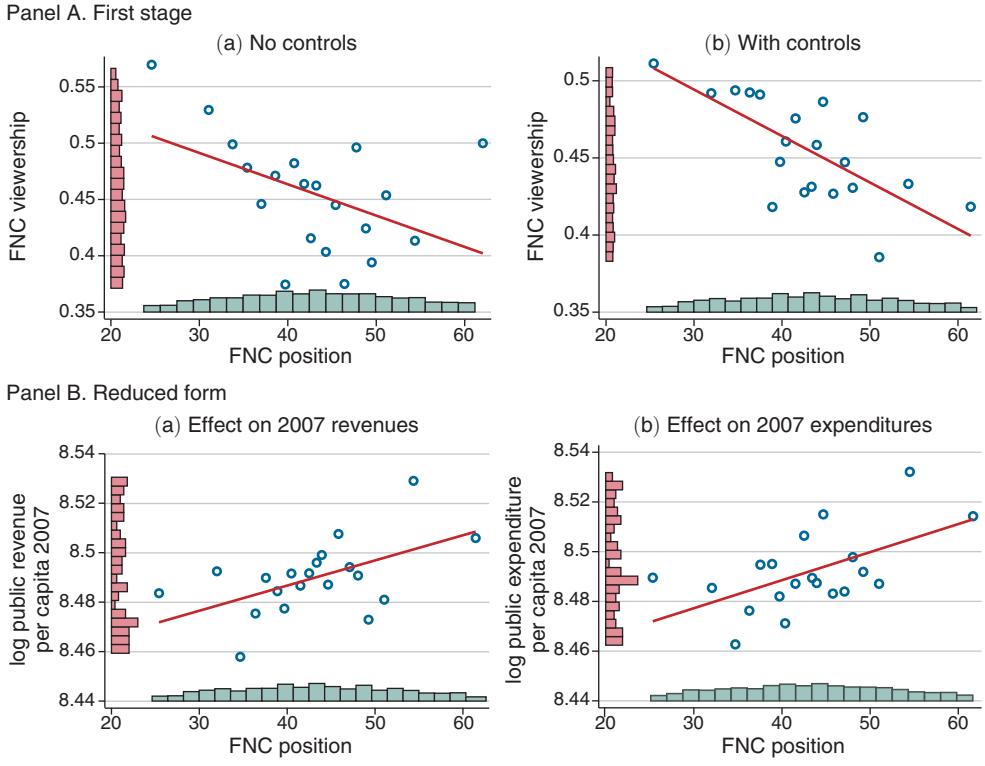

FIGURE 1. FIRST STAGE AND REDUCED FORM

Notes: The figure presents binscatter diagrams for the first-stage and the reduced-form effect. Panel A displays the first stage without controls (a) and with controls (b). Panel B displays the reduced-form effect, with the full set of controls, of FNC channel position on (a) 2007 log revenues per capita and (b) 2007 log expenditures per capita. Graphs were created using *binscatterhist* in Stata (Pinna 2022).

Under exogeneity, two-stage least squares procures consistent estimates for ρ if the instrument satisfies an exclusion restriction and monotonicity. That is, the channel position affects budget decisions only through its effect on cable news viewership, and the channel never has a reverse effect. We feel these assumptions are reasonable in this context.

Standard errors are adjusted for clustering at the DMA level to account for correlation in the error terms of counties belonging to the same DMA.[21] Regression estimates are weighted by county population in light of large heterogeneity in populations. This weighting could improve efficiency because in smaller counties Nielsen ratings are based on fewer sampled households, potentially producing measurement error.[22] To facilitate the interpretation of the coefficients, we standardize the instrumental variable by dividing the original values by the respective standard deviations.

[21] Significance results are stable with clustering by state or not clustering and using robust standard errors. See online Appendix Table A.4.

[22] Municipal population size is highly correlated with the actual number of surveyed individuals for each county by Nielsen. In online Appendix Table A.4, we report the results when performing our main regressions weighting for Nielsen respondents in the county and find similar results to those reported in the main text.

TABLE 1—FNC EFFECTS ON LOCAL FISCAL POLICY

	OLS		First stage		Reduced form	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Impact on revenues						
Ratings FNC	−0.011	−0.009				
	(0.009)	(0.009)				
FNC position			−0.032	−0.037	0.013	0.012
			(0.009)	(0.008)	(0.004)	(0.004)
F-stat			12.040	23.974		
Observations	2,521	2,521	2,521	2,521	2,521	2,521
Panel B. Impact on expenditures						
Ratings FNC	−0.005	−0.004				
	(0.012)	(0.010)				
FNC position			−0.033	−0.037	0.015	0.014
			(0.009)	(0.007)	(0.004)	(0.004)
F-stat			12.314	23.930		
Observations	2,521	2,521	2,521	2,521	2,521	2,521
State fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Cable system controls	Yes	Yes	Yes	Yes	Yes	Yes
Dep. variable in 1997	Yes	Yes	Yes	Yes	Yes	Yes
Additional controls	No	Yes	No	Yes	No	Yes

Notes: The dependent variable is the log(*Total revenue per capita*) in 2007 in columns 1–2 and 5–6 of panel A and the log(*Total expenditure per capita*) in 2007 in columns 1–2 and 5–6 of panel B. In columns 3–4, the dependent variable is *Ratings FNC* (average 2005–2007) in both panels. All estimates include MSNBC position, CNN position, proportion of people with access to CNN, proportion of people with access to FNC, proportion of people with access to MSNBC, and share of population covered as cable system controls. Additional controls include race, gender, age, income, education, occupation, urban or rural composition of the county, the share of the vote for the Republican candidate in the 1996 presidential election, and decennial variation in the dependent variables from 1977 to 1997. The observations are weighted by county population. Standard errors clustered at the DMA level are in parentheses.

For completeness, we also estimated a pre- and postmodel based on DellaVigna and Kaplan (2007). Details on the specification and associated results are reported in Section VB. The model compares changes in county fiscal policy to changes in the population share exposed to partisan news through channel availability. The identification assumption for these regressions is the absence of time-varying confounders (parallel trends). This analysis produces similar results to the instrumental variable analysis.

III. Main Results

In this section, we begin our presentation of the results by reporting evidence about the effect of partisan news on local public revenues and expenditures. Next, we provide identification checks.

A. *Results on Revenues and Expenditures*

Our regression estimates for the effect of FNC on local government budgets are reported in Table 1 and Table 2. First, Table 1, panel A reports the OLS, first-stage, and reduced-form results with log revenues per capita as outcome. There is zero effect of cable news on local fiscal policies in OLS (columns 1–2). The first stage

Table 2—FNC Effects on Local Fiscal Policy (2SLS)

	Total Revenues			Total Expenditures		
	(1)	(2)	(3)	(4)	(5)	(6)
Ratings FNC	−0.395	−0.311	−0.339	−0.442	−0.356	−0.378
	(0.171)	(0.122)	(0.126)	(0.197)	(0.138)	(0.140)
F-stat	12.040	24.333	23.974	12.314	24.214	23.930
Observations	2,521	2,521	2,521	2,521	2,521	2,521
State fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Cable system controls	Yes	Yes	Yes	Yes	Yes	Yes
Dep. variable in 1997	Yes	Yes	Yes	Yes	Yes	Yes
Demographic controls	No	Yes	Yes	No	Yes	Yes
Dep. variable pre-trends	No	No	Yes	No	No	Yes

Notes: The dependent variable is the log(*Total revenue per capita*) in 2007 in columns 1–3 and the log(*Total expenditure per capita*) in 2007 in columns 4–6. All estimates include MSNBC position, CNN position, proportion of people with access to CNN, proportion of people with access to FNC, proportion of people with access to MSNBC, and share of population covered as cable system controls. Demographic controls include race, gender, age, income, education, occupation, urban or rural composition of the county, and the share of the vote for the Republican candidate in the 1996 presidential election. Dependent variable pre-trends account for decennial variation in the dependent variables from 1977 to 1997. The observations are weighted by county population. Standard errors clustered at the DMA level are in parentheses.

(columns 3–4) confirms that the instrument is sufficiently strong, with higher channel position significantly reducing viewership. The coefficient with controls (−0.037) suggests that a one-standard-deviation increase in FNC channel position (corresponding to 12 numerical positions) would decrease FNC viewership by 0.037 ratings points, about four fewer minutes of viewership per week per household. Next, columns 5 and 6 show that there is a positive and significant reduced-form effect of channel position on revenues, meaning that a relatively lower channel position for FNC (increasing viewership) decreases revenues. The size of the coefficients (0.013 without controls and 0.012 with controls) suggests that a one-standard-deviation decrease in FNC channel position would induce a decrease in public revenues of around 1.2 percent. Turning to expenditures, the results in Table 1, panel B echo the revenue results for OLS, first stage, and reduced form. Notably, the reduced-form coefficient for expenditures is almost identical to that for revenues, and it suggests that a one-standard-deviation decrease in FNC channel position would decrease public expenditures by 1.4 percent.[23]

Figure 1, panel B provides a visualization of the reduced form, plotting the outcome variables (a) revenues and (b) expenditures against the channel position. There is a clear upward trend, reflecting that with a higher channel number, fewer people watch FNC, and there is less government downsizing. There is no indication that the estimates are driven by outliers.

Table 2 reports the 2SLS estimates for the effect of FNC viewership on local budgets. We find a negative and significant effect on both revenues (columns 1–3)

[23] In unreported analysis, we estimate the reduced-form coefficients for each of the 50 top-rated channels in the data separately. Fox News had the second-largest negative effect on revenues and expenditures among all channels after A&E and followed by USA Network and the History Channel. Moreover, our main results hold when including five principal components from the matrix of county-level channel positions for all other cable networks.

and expenditures (columns 4–6) for a variety of specifications. The baseline specification is used in columns 1 and 4. Columns 2 and 5 add demographic controls, while columns 3 and 6 additionally include pre-trends in the dependent variable. The coefficients are relatively stable, ranging from −0.395 to −0.311 for revenues and from −0.442 to −0.356 for expenditures. In the preferred specification (columns 3 and 6), we find that an increase of FNC sviewership of 0.1 rating points would cause a reduction in revenues of 3.4 percent and expenditures of 3.8 percent. This may seem like a large effect, but such a large swing in ratings is unlikely to be induced by a change in the channel position. In particular, we know from the first stage that a one-standard-deviation increase in the instrument would increase viewership by about 0.037 ratings points. Therefore, one can look at the reduced-form effect as a more reasonable indication of the relevant magnitudes. Another way of interpreting these magnitudes is to say that if a county's residents would all watch ten minutes more of FNC per week, that would decrease local revenues by 3.4 percent and expenditures by 3.8 percent. A back-of-the-envelope calculation implies a decrease around $150 per capita in annual revenues and spending.

It is worth reemphasizing that we estimate a local average treatment effect that is identified most by counties where ratings are particularly influenced by the channel position (i.e., compliers). These counties are likely composed of viewers with relatively weak predetermined political preferences who are thus more easily influenced by cable news than the average American. These points could partly explain the difference between the 2SLS results and the OLS estimate of zero reported in Table 1, as OLS weights observations equally. There could be other selection factors that bias OLS toward zero—for example, the local income distribution. In our data, counties with low incomes tend to have smaller tax bases and budgets, and they also have lower FNC ratings, presumably because lower-income residents cannot afford cable television.

Finally, we assessed the robustness of the results to specification choices. In online Appendix Table A.4, we vary two features of our main specification: the level of clustering and the weighting variables. Clustering by state gives almost identical standard errors to clustering by DMA (columns 6 and 7). We also show that weighting by number of Nielsen households rather than population produces similar results (columns 8 and 9). To check robustness to the included sample, online Appendix Figure A.3 plots the coefficient from the main regression 50 times while leaving out each US state individually. The results are robust to sampling.

B. *Identification Checks*

Now, we provide a set of tests to support the validity of our estimation approach. Specifically, we want to rule out the possibility that cable channel positions are determined by contemporaneous or past local conditions that could be related to local fiscal policies. We report these checks in Table 3.

First, we assess whether the channel position is selected to demographics in a way that would predict changes in ratings or outcomes. We apply linear regression to form-predicted values for ratings, expenditures, and revenues, with demographic characteristics and state fixed effects as right-hand-side predictors. We then take

Table 3—Identification Checks

	Reduced form					
	FNC View. Pred. (1)	Tot. Rev. Pred. (2)	Tot. Exp. Pred. (3)	Share Rep. 1996 (4)	Tot. Rev. 1992 (5)	Tot. Exp. 1992 (6)
Panel A. Level						
FNC position	−0.004	0.003	0.001	−0.001	−0.003	−0.008
	(0.008)	(0.005)	(0.004)	(0.004)	(0.008)	(0.008)
Observations	2,521	2,521	2,521	2,521	2,521	2,521

	Reduced form					
	Total revenues			Total expenditures		
	Δ 87–77 (1)	Δ 97–87 (2)	Δ 07–97 (3)	Δ 87–77 (4)	Δ 97–87 (5)	Δ 07–97 (6)
Panel B. Trends						
FNC position	−0.006	0.008	0.011	0.000	0.003	0.013
	(0.005)	(0.005)	(0.004)	(0.006)	(0.006)	(0.004)
Observations	2,521	2,521	2,521	2,521	2,521	2,521
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Cable system controls	Yes	Yes	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: In panel A, the dependent variable is the predicted FNC rating in column 1, the predicted level of revenues in 2007 in column 2, and the predicted level of expenditures in 2007 in column 3, the share of vote for the Republican candidate in the 1996 presidential election in column 4, log (*Total revenue per capita*) in 1992 in column 5, and log (*Total expenditure per capita*) in column 6. The predictions used in colmuns 1 to 3 are derived from regressions that include the full set of demographic controls.

these predicted values and regress each separately on the FNC channel position. A nonzero estimate would imply that the channel position is endogenous, in the sense that ratings-relevant or outcome-relevant factors are determining the channel position. Reassuringly, columns 1 through 3 of Table 3, panel A show that there is zero statistical relation. Thus, we can exclude that FNC channel position is systematically related to relevant demographic characteristics, providing evidence for the exogeneity of the instrument. Further, column 4 confirms that the instrument is not correlated with previous political preferences as measured by Republican vote shares in the 1996 presidential election.

Similarly, we check whether FNC channel position is correlated with pre-existing local fiscal conditions before the arrival of Fox News. Table 3, panel A, columns 5 and 6 show that the channel position is unrelated to expenditures and revenues in 1992, the survey year prior to the introduction of Fox News in 1996. Figure 2 visualizes more comprehensively the pre-existing trends and levels in local fiscal conditions before the arrival of Fox News, showing the relation between the instrument and the level of revenues and expenditures for 1977–2007 (with outcomes measured every five years). We confirm that the relation is not statistically significant, with a negative coefficient, for all years prior to 1997. After the introduction of FNC in 1996, the sign turns to be positive, and the growing coefficient size, statistically significant in 2007, is in line with the main results.

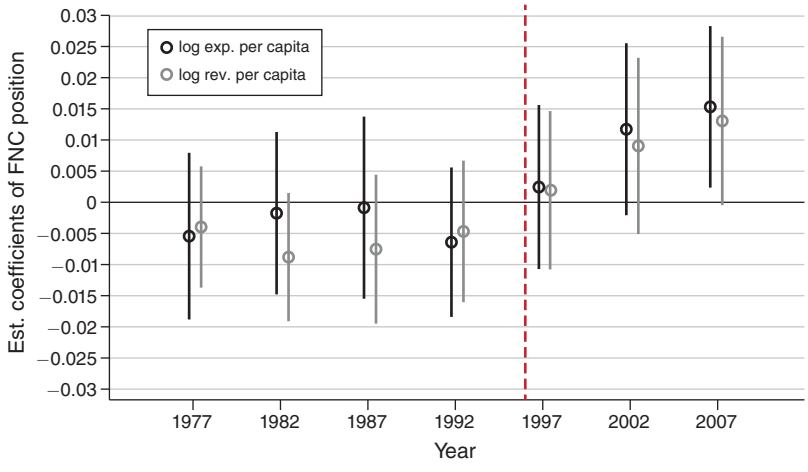

FIGURE 2. IDENTIFICATION CHECK FOR CONFOUNDING TRENDS IN EFFECT OF CHANNEL POSITION

Notes: The plot shows the coefficient estimates of different reduced-form regressions where the explanatory variable is the channel position instrument and the outcome variable is the log per capita revenues (gray) or log per capita expenditures (black) from the corresponding year specified in the horizontal axis. The specification is similar to the one used for estimates reported in Table 3 but adding to the controls the dependent variable level from 1972. The dashed red line indicates the year in which FNC was launched (1996). For each coefficient, 95 percent confidence intervals (delimited by horizontal bars) are included.

In addition to checking the pre-FNC levels, we systematically check whether FNC channel position is confounded with pre-existing trends in the local fiscal policy outcomes. We run the reduced-form regressions using ten-year changes in the budget as the outcome for each ten-year interval from 1977 to 2007. The results—reported in Table 3, panel B—are reassuring in showing that the instrument is uncorrelated with trends in local fiscal policies before the entry of FNC in 1996. In columns 3 and 6, meanwhile, we can confirm our main results using an alternative specification of the dependent variable—i.e., using the 1997-to-2007 difference as outcome rather than the 2007 level as outcome with the 1997 level as a control.[24] Overall, this supporting evidence provides reassurance that channel positioning is exogenous; thus, our estimates have a causal interpretation.

IV. Mechanisms for Main Results

This section explores the mechanisms by which cable news could influence local budgets. Taking a political economy perspective, we focus on three channels through which media exposure can affect fiscal policy. First, cable news might affect partisan control of local offices and thereby affect policy. Second, cable news could

[24] We note that we cannot reject the null that the effect on the 1997-to-2007 difference is the same as the 1987-to-1997 difference. However, it is reassuring to see that the coefficients in the main analysis do not vary much when including the decennial variation as controls. In unreported estimates, we find that the effect is for the most part driven by the difference between 1997 and 1992 rather than the difference between 1992 and 1987, hinting at a potential partial treatment in 1996 and 1997. Meanwhile, we find no correlation between the instrument and population changes either before or after 1996.

directly influence local officials by altering their policy agendas or campaign platforms. Third, cable news could shift the fiscal policy preferences of constituents, which would then influence policies. These mechanisms are not mutually exclusive and could reinforce each other.

A. *Partisan Control of Local Governments*

First, we test if cable news influences the partisan control of local governments. Given that DellaVigna and Kaplan (2007) and Martin and Yurukoglu (2017a) find that FNC shifts voting in presidential elections, it could be that FNC also shifts voting in local elections. Then, Republicans would be more likely to be elected to the mayoralty and other local offices.[25] If mayor party affiliation influences policy priorities, the change in partisan power would then affect local policies. This last point is not obvious, however, as previous evidence on partisan control and local policy is mixed. For example, Ferreira and Gyourko (2009) use a regression discontinuity in US cities and find no impact of mayoral party on the size or composition of local spending. On the other hand, de Benedictis-Kessner and Warshaw (2016) find some evidence that mayors influence spending patterns in a different sample of mayoral races. Dippel (2022a) finds that Democratic mayors favor larger pension benefits for public employees.

To investigate this channel, we merge the data from Ferreira and Gyourko (2009) and Dippel (2022b) with our data on cable news and local finance at the city level. We end up with a sample of 839 city elections during the years 2005–2008.[26] For this sample we have the candidates' parties, and for a subset we also have the partisan vote share. We use this information to construct four outcomes: a dummy variable indicating whether there is at least one Republican candidate, a dummy variable indicating whether there is at least one Democratic candidate, a dummy variable indicating whether a Republican candidate wins the election, and Republican vote share.

To match the outcomes, we aggregate the channel positions and ratings to the city level. Beyond our baseline set of controls, we include state $\times$ year fixed effects because elections take place in different years and we can apply a more demanding specification. Table 4, columns 1 and 4 report the first stage coefficients, where column 1 includes all mayoral races while column 4 includes the smaller sample of cities for which we have vote share data. We see that the instrument's effect on ratings has the expected negative sign. For the larger set of municipalities (column 1), the coefficient of -0.024 is not too distant from the estimate of the county-level first stage (-0.037), but an F-statistic of 4.3 indicates a weak instrument. For the smaller set of municipalities (column 4), we have a noisily estimated coefficient of -0.029, which is not significant, with an F-statistic of 0.5. Given the weak first stage, we

[25] More recently, Ash et al. (2021) show evidence on how FNC influenced other elections, including gubernatorial races.

[26] Some cities had elections more than once in the period of analysis. The total number of cities considered is 630.

Table 4—FNC Effects on Mayoral Elections

	First stage	Reduced form		First stage	Reduced form	
	FNC View. (1)	Rep. Cand. (2)	Dem. Cand. (3)	FNC View. (4)	Rep. Win (5)	Rep. Share (6)
FNC position	−0.024	−0.025	0.071	−0.029	−0.152	−0.016
	(0.011)	(0.032)	(0.033)	(0.039)	(0.046)	(0.024)
F-stat	4.584			0.544		
Observations	839	839	839	322	322	322
State FE × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Cable system controls	Yes	Yes	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable is FNC viewership in columns 1 and 4, a dummy identifying whether a Republican candidate is running for office in column 2, a dummy identifying whether a Democratic candidate is running for office in column 3, a dummy identifying whether a Republican candidate won the election in column 5, and the Republican candidate's vote share in column 6. All estimates include MSNBC position, CNN position, proportion of people with access to CNN, proportion of people with access to FNC, proportion of people with access to MSNBC, and share of population covered as cable system controls. Additional controls include race, gender, age, income, education, occupation, and urban or rural composition of the city. The observations are weighted by city population. Standard errors clustered at the DMA level are in parentheses.

do not report 2SLS estimates but rely on the reduced form. Still, the reduced-form effects we are about to discuss need to be interpreted with caution.[27]

We produce reduced-form estimates by regressing each of the four outcomes on the channel position instrument, measured at the city level. In Table 4, columns 2 and 3, we find that lower exposure to FNC (i.e., higher channel position) increases the probability of having a Democratic candidate, while there is no effect for the presence of a Republican candidate. The estimated coefficient suggests that a hypothetical one-standard-deviation increase in channel position would increase by 7 percent the chance of having a Democratic candidate in the race. Next, according to column 5, FNC exposure significantly increases the probability of a Republican candidate wining mayoral elections (coeff. $=$ 0.152 and SE $=$ 0.046). Column 6 shows that FNC does not affect directly the vote share, suggesting that the Republican victory effect is mostly driven by Democrats dropping out of the race.[28]

On the whole, these estimates suggest that partisan government control could be a relevant mechanism for the effect of cable news on fiscal policy.

B. *Changes in Politician Agendas and Priorities*

The second mechanism analysis considers changes in politicians' policy agendas. To get at this channel, we analyze the content of politicians' messaging, as recorded in their campaign advertising. Note that shifts in messaging could be due to either

[27] To check that this sample is not too divergent in terms of our main analysis, we run two reduced-form regressions where we use total revenues and total expenditures, alternatively, as dependent variables for the sample of municipalities with data on local elections. We find, coherently with the main results, positive and statistically significant coefficients. For revenues, coeff. $=$ 0.039 and SE $=$ 0.013; for expenditures, coeff. $=$ 0.060 and SE $=$ 0.0139.

[28] If we include state and year fixed effects separately, the sign of the coefficients does not change, while their size and the standard errors do change a bit. Using this specification, the effect of having a Democratic candidate is not quite statistically significant.

a direct effect of cable news or as a reaction to changes in citizens' attitudes (more below).

We collected data from the Wesleyan Media Project (WMP) containing information on the content of political advertising across US counties for the 2006 and 2008 elections. For each party, we construct two variables based on the relative importance of different topics in the political campaign. On the one hand, we compute the share of ads directly mentioning fiscal policy, such as taxes or public deficits. On the other hand, we compute the share on topics that have a more direct social dimension—ads that mention healthcare, social security, poverty, public aid, housing, or unemployment.

Our expectation is that in the aggregate, Republican candidates would talk more about taxes and deficits while Democratic candidates would instead talk more about social issues. From a look at the summary statistics (online Appendix Table A.3), this expectation is confirmed. On average, 40 percent of Republican ads mention fiscal issues, and 28 percent mention social issues. For Democrats, 29 percent of ads mention fiscal issues and 49 percent mention social issues.

The estimation strategy is the same as before. We estimate the first stage for the sample of counties with advertising data, and then we report reduced-form estimates by regressing the party-specific ad topic shares on the FNC channel position. State fixed effects and baseline controls are included.

Table 5 reports the results. The first stage is strong and significant, with a magnitude similar to the one from the main results (column 1). The reduced-form effect for Democratic campaigning (columns 2 and 3) suggests that Democrats tend to talk more about fiscal issues and less about social issues in areas with higher FNC exposure.[29] In contrast, Republican politicians (columns 4 and 5) do not change their advertising in response to FNC.

Overall, these results are consistent with an increasingly conservative platform and policy agenda being induced by FNC.

C. *Changes in Local Citizen Policy Preferences*

A third mechanism is that cable news exposure could directly influence citizens' preferences for fiscal policies. These preferences would then affect local budgets regardless of which political party holds office. To analyze this channel we look at a clean, credible signal of voter preferences: voting on ballot referenda about fiscal policy. A similar approach to gauge citizen preferences for fiscal policies has been used in the Swiss context. For example, Eugster et al. (2011) study the effect of culture on preferences for social policies, while Galletta (2021) studies the effect of direct-democratic institutions on fiscal preferences.

For this analysis, we collect county-level results on statewide ballots for the state of Texas. Texas has the largest number of counties of any US state, and it is the second-largest state by population and land area. To construct fiscal voting

[29] Specifically, a one-standard-deviation decrease in FNC channel position, inducing an increase in viewership, would increase the relative mention of fiscal policies by 0.6 percentage points (2 percent of the mean) while decreasing the relative coverage of social issues by 0.9 percentage points (1.8 percent of the mean).

Table 5—FNC Effects on Political Campaign Advertising

	First stage	Reduced form			
		Democrats		Republicans	
	FNC View. (1)	Tax and Deficit (2)	Social Issues (3)	Tax and Deficit (4)	Social Issues (5)
FNC position	−0.037	−0.006	0.009	0.001	0.003
	(0.008)	(0.003)	(0.003)	(0.004)	(0.004)
F-test	23.714				
Observations	2,461	2,461	2,461	2,465	2,465
State fixed effects	Yes	Yes	Yes	Yes	Yes
Cable system controls	Yes	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable is the share of advertising from the Democratic party mentioning tax or deficit in column 1; the share of advertising from the Democratic party mentioning issues related to healthcare, social security, poverty, public aid, housing, or unemployment in column 2; the share of advertising from the Republican party mentioning taxs or deficits in column 3; and the share of advertising from the Republican party mentioning issues related to healthcare, social security, poverty, public aid, housing, or unemployment in column 4. All estimates include MSNBC position, CNN position, proportion of people with access to CNN, proportion of people with access to FNC, proportion of people with access to MSNBC, and share of the population covered as cable system controls. Demographic controls include race, gender, age, income, education, occupation, urban or rural composition of the county, and the share of the vote for the Republican candidate in the 1996 presidential election. The observations are weighted by county population. Standard errors clustered at the DMA level are in parentheses.

outcomes, we selected three ballot referenda from the year 2007 (Propositions 3, 5, and 6), all of which had direct consequences for revenues.[30] For a pre-FNC placebo test, we construct additional voting outcomes from three tax-related referenda in 1997 (Propositions 2, 3, and 9).[31] We use as outcome the vote share for the fiscally conservative position (that is, reducing revenues) on each of these ballots.[32]

As in the previous tests, we estimate the first-stage and reduced-form effects in the Texas counties including our standard set of controls. Given that the sample is composed of counties belonging to the same state and the limited number of DMAs, we cluster standard errors by county. After restricting the sample due to missing data (e.g., counties that did not have access to FNC and therefore do not have a channel position), the regressions are run on a sample of 169 counties.

Table 6 provides these results. Column 1 reports the estimate of the first stage, while the other columns report reduced-form estimates for the indicated ballot vote outcomes. We find a strong first stage, where the size of the coefficient is actually larger than the one in the main analysis. For the 2007 ballot propositions (panel A,

[30] These ballot propositions are Proposition 3 (Appraisal Values for Taxes), Proposition 5 (Limitations on Municipal Taxes), and Proposition 6 (Tax Exemptions for Motor Vehicles). We do not include bond issues as revenue related. Note that in our results on the budget composition, the single main revenue component that changes in response to FNC is technically charges rather than taxes. We did not observe any ballot referenda on charges, so we could not make a similar comparison for voter preference changes on the sources of revenue. Our intuition is that voters do not perceive an important difference between tax revenues and fee or charge revenues.

[31] These ballots are Proposition 2 (Tax Valuations of Residence Homesteads), Proposition 3 (Tax Exemptions for Water Conservation), and Proposition 9 (Property Tax for Fire Prevention).

[32] This is the "yes" position on all ballots except Proposition 9 from 1997.

Table 6—FNC Effects on Voters' Preferences—Ballot Results (Texas)

		Reduced form			
	First stage	2007			
	FNC View. (1)	Prop. 3 (2)	Prop. 5 (3)	Prop. 6 (4)	Prop. 3/5/6 (5)
Panel A. 2007					
FNC position	−0.074	−0.007	−0.016	−0.008	−0.010
	(0.018)	(0.005)	(0.005)	(0.004)	(0.004)
F-stat	17.142				
Observations	169	169	169	169	507
		Reduced form			
	First stage	1997			
	FNC View. (1)	Prop. 2 (2)	Prop. 3 (3)	Prop. 9 (4)	Prop. 2/3/9 (5)
Panel B. 1997					
FNC position	−0.074	0.002	0.004	0.010	0.005
	(0.018)	(0.005)	(0.009)	(0.008)	(0.002)
F-stat	17.142				
Observations	169	169	169	169	507
Cable system controls	Yes	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable is the share of the conservative position in the proposition defined in each column heading. All estimates include MSNBC position, CNN position, proportion of people with access to CNN, proportion of people with access to FNC, proportion of people with access to MSNBC, and share of the population covered as cable system controls. Demographic controls include race, gender, age, income, education, occupation, urban or rural composition of the county, and the share of the vote for the Republican candidate in the 1996 presidential election. The observations are weighted by county population. Standard errors clustered at the county level are in parentheses.

columns 2 through 4), higher FNC viewership due to channel positioning is associated with a higher vote share for the conservative option. The results are statistically significant for Propositions 5 and 6, but not for Proposition 3. When we consider the ballots jointly (panel A, column 5), the effect is statistically significant. The latter estimate implies that a one-standard-deviation decrease in the channel position would increase the share of voters in favor of a reduction in revenue collection by 8 percentage points.

Next, we consider the placebo ballot referenda from 1997, before FNC was able to shift preferences. When looking at the 1997 ballots separately, the coefficients are not significant (panel B, columns 2–4), and in the joint regression (panel B, column 5), the effect actually is significant in the opposite direction. This placebo test provides additional evidence for the exogeneity of the instrument—cable news is having a prospective causal effect on fiscal policy referendum votes, rather than channel numbers being selected into areas with different pre-existing political views on fiscal policy.

In sum, this evidence supports the idea that cable news affects fiscal policy by influencing voter preferences.

D. *Additional Mechanisms and Discussion*

To round out this discussion, we consider three alternative mechanisms for the results. First, it could be that news media are not influencing fiscal policy directly but are having an indirect effect through the tax base. In particular, given the primary role of property taxes in local revenues, it could be that FNC influences budgets through the housing market. In online Appendix Table A.4, column 1, we show that there is no reduced-form effect of FNC channel position on housing values. Thus, we can rule out that FNC affects budgets through the housing tax base. Second, we test whether FNC might affect local economic activity in a way that would indirectly alter the local budget. In online Appendix Table A.4, column 2, we proxy county-level GDP with total wages paid by local establishments and find no reduced-form effect. Third, we consider whether FNC is inducing budgetary changes by reducing intergovernment transfers from state and federal sources. As shown in online Appendix Table A.5, column 5, there is no effect of FNC channel position on such transfers, meaning that our results are not driven by partisan disagreements between local and state or federal government.

Overall, our analysis points to ideological persuasion as the driving force in how cable news media influence local fiscal policy outcomes. FNC reshapes local government by persuading voters to be more conservative about fiscal policy. Democratic politicians respond, first, by dropping out of elections. The Democrats who stay on the ballot become more fiscally conservative in their policy agendas. These mechanisms combine to put more Republicans in local office and, presumably, to put more fiscally conservative Democrats in local office. Once in office, the incumbents have additional incentives to produce conservative fiscal policy given reelection pressures imposed by fiscally conservative voters.

V. Additional Results

This section provides three sets of additional results to support the main analysis from Section III. First, we dig into some of the more granular effects on local governance with some evidence on privatization and education outcomes. Second, we provide a complementary analysis of public budgets using a differences-in-difference strategy rather than instrumental variables. Third, we provide results for the other cable news networks, MSNBC and CNN.

A. *Changes in Composition and Evidence of Privatization*

In the analysis so far, we have looked at the total budget size in terms of revenues and expenditures per capita. Now, we use the more granular information on local government finances to assess how the budget reductions induced by FNC are allocated. In terms of revenues, we look at property taxes, sales taxes, license fees, and charges (public service fees). In terms of expenditures, we look at the major "public

services" categories—education, healthcare, hospitals, and welfare—and the major "protective services" categories—police and corrections.[33]

The reduced-form estimates for these specific outcomes are reported in online Appendix Table A.5. In terms of expenditures, we generally see positive reduced-form coefficients, indicating that expenditure categories tend to fall, but they are noisy and not significant on their own. When we aggregate the public services items (education, healthcare, hospitals, and welfare; column 13), higher FNC viewership has a statistically significant negative effect with an identical coefficient to the total budget effect (coeff. $= 0.014$). Meanwhile, there is no effect for the protective services components of the budget (policing and corrections; column 14). In general, this shift in the composition of the budget away from public services is consistent with conservative fiscal priorities.

In terms of revenues, the coefficients, again, are mostly positive across categories but noisy and not significant. This noisy picture when looking across revenue categories is perhaps not that surprising, since the preferred margin for reducing collections will vary across localities. The only revenue category that is statistically significant by itself is charges (online Appendix Table A.5, column 4; also shown in Table 6, column 2), which includes fees for government services. A decrease in public service provision could mean that services are no longer provided at all, or it could mean that services are privatized. Either way, a decrease in service provision is consistent with a key policy interest for small-government conservatives.[34]

If these reductions in public services are due to privatization, we would expect them to be compensated by an increase in private-sector provision. We can check for this using data on local firms from the County Business Patterns (CBP) dataset. CBP contains information on the number of establishments by county and year separately by NAICS industry code. We select sectors identifying educational services (NAICS 61), healthcare and social assistance (NAICS 62), and security guards and patrol services (NAICS 561612). For educational outcomes, in addition, we use Common Core of Data (CCD) information on attendance shares in private versus public schools.[35]

For this analysis, we use the 2007 values of these variables as outcomes. When analyzing sectoral activity, we take the log of the number of establishments by sector as our outcome. This implies that we only include counties that have at least one firm in a sector—that is, we look at intensive-margin effects. When studying the effect on schooling, the dependent variable is the share of students enrolled in private schools out of the total number of students. We continue with our previous estimation strategy, including the 1998 value of the dependent variable as control.[36]

[33] To allow for zeros when looking at specific categories of expenditures and revenues, our outcomes are transformed as $Y = \log(1 + F/P)$, where F is the nominal dollar value (revenues or expenditures) and P is population. Results were not sensitive to alternative transformations.

[34] Online Appendix Table A.4 collects a number of results for other public-sector outcomes. We estimate the reduced-form FNC effect on number of public employees (column 3), total salaries for public employees (column 4), and local public debt per capita (column 5). There is no effect of FNC on any of these variables.

[35] In the CBP dataset, NAICS 62 sometimes includes public hospitals. In CCD, we also have county information on the number of schools, teachers, and students by type.

[36] 1998 is the earliest year of CBP data with NAICS (rather than SIC) codes. This specification approximates a difference-in-difference. Records on specific privatization events would be a preferred data source, but these are not presently available. In the schooling analysis, we also control for the relative supply of private schools and teachers.

Table 7—FNC Effects on Private-Sector Firms and Schools

	Reduced form					
		log(*number of Firms*)				Share of pupils in private schools
	Revenue charges	Education	Health	Security	Others	
	(1)	(2)	(3)	(4)	(5)	(6)
FNC position	0.037	−0.017	−0.001	−0.041	−0.003	−0.001
	(0.015)	(0.008)	(0.004)	(0.023)	(0.003)	(0.000)
Observations	2,521	2,047	2,513	807	2,520	2,521
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Cable system controls	Yes	Yes	Yes	Yes	Yes	Yes
Dep. variable in 1998	Yes	Yes	Yes	Yes	Yes	Yes
Demographic controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The dependent variable is revenue from charges in column 1, log(*num. of firms in NAICS 61*) in 2007 in column 2, log(*num. of firms in NAICS 62*) in column 3, log(*num. of firms in NAICS 561612*) in column 4, log(*total num. of firms*) from the remaining sectors in column 5, and the share of students enrolled in private schools in 2007 in column 6. All estimates include MSNBC position, CNN position, proportion of people with access to CNN, proportion of people with access to FNC, proportion of people with access to MSNBC, share of the population covered, race, gender, age, income, education, occupation, urban or rural composition of the county, and the share of the vote for the Republican candidate in the 1996 presidential election as additional controls. In addition, in column 6 we also include share of private schools in 1998 and 2008 and share of teachers in private schools in 1998 and 2008. Standard errors clustered at the DMA level are in parentheses.

Table 7 reports the reduced-form results on privatization (see online Appendix Table A.6 for the associated first-stage estimates).[37] In education services (column 2), the number of private-sector establishments increases with a lower FNC channel position, consistent with a move toward private schools from public schools; however, healthcare establishments do not increase significantly in number (column 3).[38] In column 4, we see an increase in the number of private security establishments, consistent with privatization of public policing. Finally, we can rule out that these changes are due to broader economic changes, as column 5 shows that the number of firms in other sectors is not affected. Taken together, these estimates suggest that the reduced provision of public goods could potentially be compensated by the private sector through the opening of new establishments.

Table 7 column 6 shows the reduced-form effect of FNC channel position on the share of students in private schools. Consistent with the increase in private education services in response to FNC, there is also an increase in private-school student share. In line with small-government conservatism, the media effect favors moving public goods like schooling into private-sector provision.

B. *Estimation à la DellaVigna and Kaplan (2007)*

This section provides a complementary analysis of how FNC has influenced public budgets, using a difference-in-difference design rather than instrumental variables. The

[37] The instrument performs similarly to what is shown in the main analysis in terms of the coefficient and statistical significance.

[38] Unfortunately, in the CBP data, NAICS 62 sometimes includes public hospitals, so a null result could also indicate a one-for-one substitution of public for private hospitals.

Table 8—Estimation à la DellaVigna and Kaplan (2007)

	Total revenues				Total expenditures			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Share pop. exposed to FNC	−0.028	−0.034	−0.025	−0.032	−0.014	−0.026	−0.025	−0.031
	(0.011)	(0.011)	(0.010)	(0.010)	(0.013)	(0.013)	(0.013)	(0.013)
Observations	2,964	2,964	2,964	2,964	2,964	2,964	2,964	2,964
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cable system controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Demographic controls	No	No	Yes	Yes	No	No	Yes	Yes
Pre-trend dep. variable	No	No	No	Yes	No	No	No	Yes

Notes: The dependent variable is (*Total revenue per capita 2002 – Total revenue per capita 1997*)/*Total revenue per capita 1997* in columns 1–4 and (*Total expenditure per capita 2002 – Total expenditure per capita 1997*)/*Total expenditure per capita 1997* in columns 5–8. *Share pop. exposed to FNC* is standardized, dividing the original value by the standard deviation (SD = 0.29). Cable system controls include the share of the population exposed to MSNBC and CNN and the five principal components from the matrix of channel availability for the fifty top-rated cable channels. Demographic controls include race, gender, age, income, education, occupation, urban or rural composition of the county, and the share of the vote for the Republican candidate in the 1996 presidential election. The pre-trend of the dependent variable includes variation from 1987 to 1992 and 1992 to 1997. Observations are weighted by county population. Standard errors clustered at the DMA level are in parentheses.

method follows more closely the intuition and empirical strategy from DellaVigna and Kaplan (2007). We focus on the early period, 1997–2002, when Fox was just being introduced. Using within-county variation over time, we compare how local policies evolved in areas more or less exposed to FNC in terms of channel availability.

For this analysis, the main outcomes are budget features (log revenues and expenditures per capita) from the local government finance census, reported for the years 1997 and 2002. Let $\Delta\%Y_{2002-1997,is}$ denote the within-county log change in the budget between 1997 and 2002 for county i from state s. Next, the explanatory variable $FNCExposure_i$ is the availability of FNC in a county during this early period, measured as the share of the county population living in zip codes where at least one cable provider offers access to FNC.[39]

Formally, we estimate

$$\Delta\%Y_{2002-1997,is} = \gamma_s + \rho FNCExposure_i + \beta \mathbf{X}_i + \epsilon_{is}, \tag{4}$$

where $\Delta\%Y_{2002-1997,is}$ and $FNCExposure_i$ are the outcome and treatment, as just discussed; γ_s includes state fixed effects; $\mathbf{X}_i$ includes controls for demographics, for cable system features, and pre-trend variation in the dependent variable before 1997; and ϵ_{is} is the error term. Standard errors are clustered by DMA, regression estimates are weighted by county population, and the treatment regressor is standardized.

The estimates for equation (4) are reported in Table 8. Columns 1 through 4 report results for revenues, while columns 5 through 8 report results for expenditures. Across all columns we see a negative coefficient, which is statistically significant

[39] The 1997 budget values from the census were chosen in 1996, so they can be seen as a pre-FNC baseline level—when the treatment variable was zero. The FNC availability data starts in 1998, so exposure is measured as the average availability over the years 1998 through 2002; thus, the treatment variable summarizes how many people were exposed to Fox News and for how many years.

in seven out of eight specifications. In the early period of the FNC rollout, counties with a higher exposure to Fox News as dosed by channel availability had a larger decrease in local revenues and expenditures per capita. A one-standard-deviation increase in availability (equal to 0.3) corresponds to approximately 2 to 3 percent decreases in both outcomes.

Thus, this panel analysis provides complementary evidence that FNC shifts fiscal policies. In line with the evidence of our main instrumental-variables strategy, places with greater early adoption of Fox News implemented more conservative fiscal policies by 2002. The consistent results with a different empirical strategy lend confidence to our main findings.

C. *Effects of MSNBC and CNN*

So far, the analysis has focused on just the conservative Fox News Channel. We performed analogous regression analyses using CNN channel position to instrument for CNN ratings and using MSNBC channel position to instrument for MSNBC ratings. The results of these regressions are reported in online Appendix Table A.7. For CNN, we see no relationship with the budget, consistent with CNN being a relatively nonpartisan network that does not forward a slanted message on fiscal policy.

For MSNBC, however, we do see a fiscal policy impact. The regression estimate is statistically significant in the reduced form, suggesting that higher MSNBC viewership due to channel position tends to expand local budgets. We see that effect with both revenues and expenditures. This evidence is consistent with MSNBC having a relatively progressive stance on fiscal policy, which persuades voters and policy makers in the opposite direction from Fox News.

The results for MSNBC should be interpreted with some caution, however. While identification checks suggest that MSNBC channel position is exogenous, the first stage is somewhat weak, with F-stat $\approx$ 7 without controls and F-stat $\approx$ 12 with controls. In the supporting analyses on mechanisms and additional outcomes, the MSNBC results typically have a very weak first stage and noisy, nonsignificant reduced-form estimates. Finally, when we run the panel analysis on increasing availability of MSNBC in the period 1997–2002 (online Appendix Table A.8), we find no effect.

VI. Conclusion

Right-wing media has reshaped US local governments. The evidence is consistent with a causal effect of exposure to Fox News Channel in shifting local fiscal policies in a conservative direction. This shift has resulted in substantial reductions in revenues and expenditures in these localities. Further, we show that there is a substitution effect in service provision between the public and the private sector, particularly in education. The left-leaning MSNBC has a smaller but opposite effect on budgets, while the more centrist CNN has no effect. Overall, this is some of the first robust evidence for a media bias influence on enacted policies (Strömberg 2015).

Our analysis also sheds light on the mechanisms through which partisan media can influence policy. We find that FNC could work by boosting chances for Republicans

to take local office, by changing the political priorities and agendas of Democrats, and by directly shifting voter preferences in a more fiscally conservative direction. Our evidence for a fiscal policy preference shift, beyond a change in partisan loyalties, is particularly noteworthy. These mechanisms likely work in tandem and reinforce each other, eventually leading to observed differences in enacted policies. Further, the cumulation of mechanisms helps explain why our results on FNC are different from previous work showing that partisan control of local government, by itself, has little effect on revenues and spending (Ferreira and Gyourko 2009).

We cannot make strong claims about the welfare impacts of how media affects policy. While we find that revenues and expenditures on public goods decrease in response to conservative news, they might have been inefficiently high in the first place. More work could be done to understand the incidence of these effects across the income and wealth distributions. It could also be useful to analyze whether these television effects are mitigated or amplified by internet access or by local print media (Widmer, Galletta, and Ash 2020).

In sum, this paper adds to the political economy literature by providing some of the best evidence so far on whether slanted media affect enacted policies. The previous work has shown effects on voters and some less robust effects on the actions of legislators. But this is the first paper to show that partisan media have substantial causal effects on local policy outputs. We now have evidence for a concrete link between political media and political action. This evidence could be useful for future research and policy making in this area.

REFERENCES

Allcott, Hunt, and Matthew Gentzkow. 2017. "Social Media and Fake News in the 2016 Election." *Journal of Economic Perspectives* 31 (2): 211–36.

Arceneaux, Kevin, Martin Johnson, René Lindstädt, and Ryan J. Vander Wielen. 2016. "The Influence of News Media on Political Elites: Investigating Strategic Responsiveness in Congress." *American Journal of Political Science* 60 (1): 5–29.

Ash, Ellitt, and Sergio Galletta. 2023. "Replication Data for: How Cable News Reshaped Local Government." American Economic Association [publisher], Inter-university Consortium for Political and Social Research [distributor]. https://doi.org/10.3886/E168941V1.

Ash, Elliott, Sergio Galletta, Matteo Pinna, and Christopher Warshaw. 2021. "The Effect of Fox News Channel on US Elections: 2000–2020." Center for Law and Economics Working Paper Series 2021(07).

Ash, Elliott, Sergio Galletta, Dominik Hangartner, Yotam Margalit, and Matteo Pinna. 2020. "The Effect of Fox News on Health Behavior during COVID-19." Unpublished.

Barone, Guglielmo, Francesco D'Acunto, and Gaia Narciso. 2015. "Telecracy: Testing for Channels of Persuasion." *American Economic Journal: Economic Policy* 7 (2): 30–60.

Besley, Timothy, and Robin Burgess. 2002. "The Political Economy of Government Responsiveness: Theory and Evidence from India." *Quarterly Journal of Economics* 117 (4): 1415–51.

Boxell, Levi, Matthew Gentzkow, and Jesse M. Shapiro. 2017. "Greater Internet Use Is Not Associated with Faster Growth in Political Polarization among US Demographic Groups." *PNAS* 114 (4): 10612–17.

Broockman, David E., and Joshua L. Kalla. 2022. "The Manifold Effects of Partisan Media on Viewers' Beliefs and Attitudes: A Field Experiment with Fox News Viewers." Unpublished.

Bureau of Labor Statistics (BLS). 2008. "Quarterly Census of Employment and Wages." United States Department of Labor. https://www.bls.gov/cew.

Campante, Filipe R., and Daniel A. Hojman. 2013. "Media and Polarization: Evidence from the Introduction of Broadcast TV in the United States." *Journal of Public Economics* 100: 79–92.

Cassino, Dan. 2016. *Fox News and American Politics: How One Channel Shapes American Politics and Society*. New York: Routledge.

Clinton, Joshua D., and Ted Enamorado. 2014. "The National News Media's Effect on Congress: How Fox News Affected Elites in Congress." *Journal of Politics* 76 (4): 928–43.

Coate, Stephen, and Brian Knight. 2011. "Government Form and Public Spending: Theory and Evidence from US Municipalities." *American Economic Journal: Economic Policy* 3 (3): 82–112.

de Benedictis-Kessner, Justin, and Christopher Warshaw. 2016. "Mayoral Partisanship and Municipal Fiscal Policy." *Journal of Politics* 78 (4): 1124–38.

DellaVigna, Stefano, and Ethan Kaplan. 2007. "The Fox News Effect: Media Bias and Voting." *Quarterly Journal of Economics* 122 (3): 1187–1234.

DiMaggio, Anthony. 2019. "Slanting the News: Media Bias and Its Effects." In *News on the Right: Studying Conservative News Cultures*, edited by Anthony Nadler and A.J. Bauer, 190–212. Oxford: Oxford University Press.

Dippel, Christian. 2022a. "Political Parties Do Matter in US Cities... for Their Unfunded Pensions." *American Economic Journal: Economic Policy* 14 (3): 33–54.

Dippel, Christian. 2022b. "Political Parties Do Matter in US Cities... for Their Unfunded Pensions: Dataset." *American Economic Journal: Economic Policy.* https://doi.org/10.3886/E127661V1.

Drago, Francesco, Tommaso Nannicini, and Francesco Sobbrio. 2014. "Meet the Press: How Voters and Politicians Respond to Newspaper Entry and Exit." *American Economic Journal: Applied Economics* 6 (3): 159–88.

Durante, Ruben, Paolo Pinotti, and Andrea Tesei. 2019. "The Political Legacy of Entertainment TV." *American Economic Review* 109 (7): 2497–530.

Ellingsen, Sebastian, and Øystein Hernæs. 2018. "The Impact of Commercial Television on Turnout and Public Policy: Evidence from Norwegian Local Politics." *Journal of Public Economics* 159: 1–15.

Enikolopov, Ruben, Maria Petrova, and Ekaterina Zhuravskaya. 2011. "Media and Political Persuasion: Evidence from Russia." *American Economic Review* 101 (7): 3253–85.

Eugster, Beatrix, Rafael Lalive, Andreas Steinhauer, and Josef Zweimüller. 2011. "The Demand for Social Insurance: Does Culture Matter?" *Economic Journal* 121 (556): F413–F448.

Ferreira, Fernando, and Joseph Gyourko. 2009. "Do Political Parties Matter? Evidence from US Cities." *Quarterly Journal of Economics* 124 (1): 399–422.

Galletta, Sergio. 2021. "Form of Government and Voters' Preferences for Public Spending." *Journal of Economic Behavior and Organization* 186: 548–61.

Gao, Pengjie, Chang Lee, and Dermot Murphy. 2020. "Financing Dies in Darkness? The Impact of Newspaper Closures on Public Finance." *Journal of Financial Economics* 135 (2): 445–67.

Gavazza, Alessandro, Mattia Nardotto, and Tommaso Valletti. 2018. "Internet and Politics: Evidence from UK Local Elections and Local Government Policies." *Review of Economic Studies* 86 (5): 2092–2135.

Gentzkow, Matthew. 2006. "Television and Voter Turnout." *Quarterly Journal of Economics* 121 (3): 931–72.

Gentzkow, Matthew, Jesse M. Shapiro, and Michael Sinkinson. 2011. "The Effect of Newspaper Entry and Exit on Electoral Politics." *American Economic Review* 101 (7): 2980–3018.

Hinnerich, Björn Tyrefors, and Per Pettersson-Lidbom. 2014. "Democracy, Redistribution, and Political Participation: Evidence from Sweden 1919–1938." *Econometrica* 82 (3): 961–93.

Hopkins, Daniel J., and Jonathan M. Ladd. 2014. "The Consequences of Broader Media Choice: Evidence from the Expansion of Fox News." *Quarterly Journal of Political Science* 9 (1): 115–35.

Leip, Dave. 2016. "Dave Leip US Presidential General County Election Results." https://doi.org/10.7910/DVN/SUCQ52.

LexisNexis. 2008. "TV and Radio News Transcript." https://www.lexisnexis.com/ap/academic/form_news_tv.asp.

Martin, Gregory J., and Ali Yurukoglu. 2017a. "Bias in Cable News: Persuasion and Polarization." *American Economic Review* 107 (9): 2565–99.

Martin, Gregory J., and Ali Yurukoglu. 2017b. "Bias in Cable News: Persuasion and Polarization: Dataset." *American Economic Review.* https://doi.org/10.3886/E113143V1.

Mastrorocco, Nicola, and Arianna Ornaghi. 2021. "Who Watches the Watchmen? Local News and Police Behavior in the United States." Unpublished.

National Center for Education Statistics (NCES). 2008a. "Common Core of Data Public Elementary/Secondary School Universe Survey Data." https://nces.ed.gov/ccd/pubschuniv.asp.

National Center for Education Statistics (NCES). 2008b. Private School Survey. https://nces.ed.gov/surveys/pss/tableswhi.asp.
Nielsen Media. 2008. Nielsen Local TV View Ratings (accessed July 2018).
Nielsen Media. 2016. Nielsen Focus Cable Channel Lineups.
Peck, Reece. 2019. *Fox Populism: Branding Conservatism as Working Class*. Cambridge: Cambridge University Press.
Pettersson-Lidbom, Per. 2008. "Do Parties Matter for Economic Outcomes? A Regression-Discontinuity Approach." *Journal of the European Economic Association* 6 (5): 1037–56.
Pierson, Kawika, Michael L. Hand, and Fred Thompson. 2016. "The Government Finance Database." https://doi.org/10.7910/DVN/LMS8NT.
Pinna, Matteo. 2022. "Binned Scatterplots with Marginal Histograms: Binscatterhist." *Stata Journal* 22 (2): 430–45.
Pinna, Matteo, Léo Picard, and Christoph Goessmann. 2022. "Cable News and COVID-19 Vaccine Compliance." *Scientific Reports* 12: 16804.
Schroeder, Elizabeth, and Daniel F. Stone. 2015. "Fox News and Political Knowledge." *Journal of Public Economics* 126: 52–63.
Snyder Jr., James M., and David Strömberg. 2010. "Press Coverage and Political Accountability." *Journal of Political Economy* 118 (2): 355–408.
Strömberg, David. 2004. "Radio's Impact on Public Spending." *Quarterly Journal of Economics* 119 (1): 189–221.
Strömberg, David. 2015. "Media and Politics." *Annual Review of Economics* 7: 173–205.
Texas Secretary of State. 2008. "Election History." https://elections.sos.state.tx.us/index.htm.
US Census Bureau. 2000. "Cartographic Boundary Shapefiles." https://www.census.gov/geographies/mapping-files/2000/geo/carto-boundary-file.html.
US Census Bureau. 2007. "County Business Patterns." https://www.census.gov/programs-surveys/cbp/data/datasets.html.
US Census Bureau. 2008. "Annual Survey of Public Employment and Payroll United States Department of Labor." https://www.census.gov/programs-surveys/apes.html.
Wesleyan University. 2008. "Wesleyan Media Project." https://mediaproject.wesleyan.edu/.
Widmer, Philine, Sergio Galletta, and Elliott Ash. 2020. "Media Slant Is Contagious." Center for Law and Economics Working Paper Series 14/2020.