

The National News Media's Effect on Congress: How *Fox News* Affected Representatives in Congress*

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March 21, 2014

Abstract

Despite the prominence of the national news media, it is unclear whether elected officials are affected by the national news media in policy consequential ways because of the difficulty of disentangling the influence of the media on Congress from Congress's influence on the media. We use a unique opportunity to determine whether position taking behavior in Congress and the likelihood of re-election is affected by the national news media. Using the fact that the Fox News Channel spread gradually across the United States after being launched in October of 1996 in ways unrelated to the ideology of congressional districts and the incumbent representatives, we show that representatives become less supportive of President Clinton in districts where Fox News begins broadcasting than similar representatives in similar districts where Fox News was not broadcast. Moreover, the effects took a few years to be realized, and the entry of Fox News in a district did not appear to affect which representatives were re-elected. Consistent with theories emphasizing the anticipatory actions taken by elected officials to maximize their electoral security in the face of changing electoral conditions, our results suggest that the national media may slightly affect the prospects for policy change by altering representatives' expectations and the positions that they take.

Keywords: Media; US Congress

*The authors would like to thank Larry Bartels, John Geer, Stefano DellaVigna, David Strömberg, and participants at the American Politics Workshop at Yale University for helpful reactions on prior versions. An online appendix with supplementary material for this article is available at www.cambridge.org/cjo/whatever. Data and supporting materials necessary to reproduce the numerical results will be made available upon publication on the authors' webpages.

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Does the broadcast media affect either the ideological positions that elected officials take or the likelihood that they are replaced? To be sure, the contemporary media environment is ideologically fragmented (e.g., Baum and Groeling 2008; Gentzkow and Shapiro 2011) and many have argued that the media's messages and endorsements affect mass attitudes and voting behavior (e.g., Kinder and Iyengar 1989; Druckman and Parkin 2005; Gentzkow 2006; DellaVigna and Kaplan 2007; Groeling and Baum 2008; Gerber, Karlan and Bergan 2009; Ladd and Lenz 2009; Lenz 2009; Chiang and Knight 2011; Arceneaux, Johnson and Murphy 2012), but it is unclear whether the national news media also affects the positions taken by elected officials or the type of representatives that are elected (but see Snyder and Strömberg 2010; Campante and Hojman 2013).

Analyzing whether the national news media affects elected officials is important because it is the elected officials who are responsible for creating and amending the laws governing our society; an important reason why we care about the media's effect on voters is because of how those changes might affect elected officials' incentives. Examining the relationship between political elites and the news media is therefore important for better understanding not only how elected officials respond to potential changes in their district, but also because of what it implies about the media's influence on policy (Prat and Strömberg 2012).

Our interest lies in how the national news media affects the actions and incentives of political elites, but we focus on the Fox News Channel because it presents a unique opportunity to explore this relationship. Because Fox News was, at the time, the only ideological distinctive national television news channel and we can track its spread across cable systems in the United States over time, it presents a one-time opportunity to observe media influence in a context where it is possible to hypothesize about the predicted effects. Scholars have previously used the entry and exit of media outlets to assess the media's effect on *voters* (e.g., Gentzkow 2006; Gentzkow, Shapiro and Sinkinson 2011; Hopkins and Ladd 2013), but we extend DellaVigna and Kaplan (2007) to examine how the spread of Fox News across congressional districts affects the behavior of elected officials who are responsible for actual policymaking. Put differently, we ask: given the effects that have been found on voters, is there any evidence a similar impact on elected officials?

While many scholars argue that re-election minded representatives often “run scared” and attempt to anticipate and preempt possible electoral challenges (e.g., Jacobson 1987; Stimson, Mackuen and Erikson 1995), it is unclear whether a change in the broadcast media environment that, at the time, had unclear consequences on voters would cause representatives to change the positions they take on issues considered in Congress. Theoretically, we may suspect that re-election focused representatives anticipate and mitigate the electoral consequences produced by a new information source in their district, but empirically, the nature and extent of such a change is unclear.

We show that representatives change their public positions in Congress in ways that are consistent with the interpretation that they take actions to preempt possible conservative shifts in district opinion due to the introduction of Fox News. In particular, we show that representatives in districts where Fox News begins broadcasting become slightly more likely to oppose the positions of President Clinton than similar representatives from similar districts that lack Fox News. Moreover, the conservative shift does not happen immediately – the effect is only detectable two years after Fox News has been in existence – and the timing coincides with the Fox News induced conservative shift among voters others have documented (DellaVigna and Kaplan 2007; Hopkins and Ladd 2013). These results are consistent with prior claims regarding the proclivity of re-election minded representatives to anticipate and preempt electoral challenges (Stimson, Mackuen, and Erikson 1995), but we also document clear limits to the effect of the national media on individual members. For example, newly elected members from districts receiving Fox News are no more conservative than newly elected members from districts that did not.

We establish these results in several steps. Section 1 justifies our focus on Fox News and presents several hypotheses regarding how the spread of the national news media may affect representatives’ behavior. Section 2 describes the data we use to measure the spread of Fox News across congressional districts between 1996 and 2000.¹ Section 3 describes the difference-in-differences identification strategy we employ and it conducts several investigations to validate treating the spread of Fox News as being randomly assigned (condition on included covariates). Section 4 estimates the apparent anticipation effect of Fox News on

representatives who are successfully re-elected following the emergence of Fox News in their district, and Section 5 explores whether the emergence of Fox News affects who is elected from the district. Section 6 concludes by discussing the implications for understanding the relationship between the national news media and elected representatives.

1 Does the News Media's Affect on Representatives?

Many have argued that news media coverage affects the behaviors and opinions of the mass public. In addition to exposing citizens to diverse perspectives (e.g., Mutz and Martin 2001), scholars argue that media coverage can affect citizens' opinions and their likelihood of participating in the political process (e.g., Kinder and Iyengar 1989; Druckman and Parkin 2005; Groeling and Baum 2008; Gerber, Karlan and Bergan 2009; Ladd and Lenz 2009; Lenz 2009; Arceneaux, Johnson and Murphy 2012). We know less about whether the news media affects the political elites responsible for policy making.²

Our interest lies in exploring the effect of the national television news media on political elites, but we focus on the Fox News Channel because it presents a unique opportunity to identify media effects in the contemporaneous political system. First, because the programming on Fox News is ideologically distinctive, it is possible to form expectations about its effects – if there is an effect, the introduction of Fox News in congressional districts should cause members to adjust their positions in a more conservative direction.³ A second reason for focusing on Fox News relates to the manner by which it spread across the United States. Fox News was launched in October of 1996, and by the end of 2000, it was present in nearly 20% of towns in the United States. We can therefore identify the year in which Fox News begins broadcasting on a cable system in each congressional district, and we can determine which districts are receiving Fox News prior to each election. Because we can show that the outcome of negotiations that Fox News was having with the local cable stations in an attempt to be carried by the cable system were not obviously driven by a desire to target particular representatives in Congress, we can treat the emergence of Fox News as plausibly exogenous. Assuming certain assumptions are satisfied, we compare the changes in behavior

between similar representatives from similar districts whose districts are and are not exposed to Fox News to estimate the effect of Fox News on congressional behavior.⁴

Scholars often theorize about how elected officials take actions to maximize their electoral security (e.g., Stimson, Mackuen, and Erikson 1995), but it is unclear how a changing media environment affects the incentives individual members have for taking particular positions. *A priori*, several types of responses seem plausible.

One reasonable expectation is that the introduction of a national cable news channel in a congressional district has no effect on the representatives' behavior. Representatives may be unconcerned about a new entrant in an already crowded media environment that had yet to demonstrate an ability to attract a sizable audience - perhaps especially given that those who choose to consume news programs self-select (Prior 2007) and consume sources with views that are similar to their own (Stroud 2008). Incumbents may be reluctant to change from electorally successful positions of the past to react to the entry of a new media outlet with an unknown reach and influence - particularly when the national news is unlikely to cover the actions of individual legislators (barring exceptional circumstances) and focus on national rather than local issues.

Alternatively, re-election centered representatives may respond to changes in the media environment if they think their electoral environment is appreciably changed. Many argue that incumbents are best thought of as "running scared" because they actively anticipate and preempt possible electoral surprises (e.g., Jacobson 1987; Stimson, Mackuen and Erikson 1995).⁵ If so, representatives may react to changes in the media environment even if there is no evidence of an impact on voters - as Kingdon (1968) notes "By virtue of his electoral victory, an officeholder believes that the eyes of the public are on him, that voters cast their ballots according to his actions and characteristics, and that they are comparatively well informed about the issues of an election. If an incumbent thinks the electorate is watching him, whether they are or not in fact, he will attempt to anticipate their reactions to his decision" (p. 40). However, in the case of Fox News, scholars have argued that there was a detectable impact on voters - DellaVigna and Kaplan (2007) argue that the emergence of the Fox News Channel in 9,246 towns between 1996 and 2000 increased Republican vote

share in presidential elections between 0.4 and 0.7 percentage points, and Hopkins and Ladd (2013) argue that the effect occurs among independents and conservatives.

To be clear, the reason for such a shift could occur for several reasons: actual voter mobilization (i.e., Fox News mobilizes conservatives in the district and makes them more likely to participate), actual voter conversion (i.e., Fox News shifts the opinions of independents in a conservative direction), perceived voter mobilization (i.e., the representative believes that Fox News is mobilizing conservative voters), or perceived voter conversion (i.e., the representative believes that Fox News is changing the opinions of voters in her district). These mechanisms are clearly non-exclusive and it is impossible for us to disentangle the extent to which each may be responsible for inducing a shift in representative behavior. As a result, we focus on identifying the net effect of Fox News – do representatives become more conservative once Fox News enters the district regardless of whether actual or perceived changes in the electoral environment are responsible.⁶

Anecdotally, representatives appear to recognize the importance of nationally televised news (see, for example, Sellers 2000) and the Speaker of the House during time period we examine, Rep. Newt Gingrich, certainly tried to television to influence politics when working in the Conservative Organizational Society in the late 1970s and 1980s. As Zelizer (2004) reports, Gingrich believed that “television is the dominant medium of our society....the guys and gals in Congress who don’t master it get killed.” Regarding the impact of cable news in particular, Zelizer (2004) quotes a Press Director for a Republican member who noted that through a cable news channel such as CNN “you can get in to influence the news spin much more quickly. You can also get in to influence the way people are interpreting the events as they happen. By contrast, the networks are much later in the debate. They frame events, but they don’t influence the course of events” (p. 225). A recent survey of congressional staff members further confirms a pervasive belief in the importance of the news media. As summarized by the authors: “95% of congressional staff members believe that political bias in the media influences or shapes decision-making in Congress” (Rehr 2012).

2 Measuring The Spread of Fox News, 1996-2000

To determine whether Fox News is broadcast by a cable system in a congressional district as of the 1998 and 2000 elections we build upon the impressive data collected by DellaVigna and Kaplan (2007). DellaVigna and Kaplan explore whether the spread of Fox News to towns across the United States affects the towns' votes for Republican candidates in 1998 and 2000. To do so, they use the *Television & Cable Factbook* to collect the number of subscribers per cable company in each town with access to Fox News and they analyze the electoral results of 9,256 towns in 28 states.

DellaVigna and Kaplan locate most of the towns within congressional districts, but there were 5,462 towns for which the congressional district was unknown. We use the *Congressional District Atlas* for the 103rd Congress to identify the congressional district (or districts) containing each of these additional towns which extends the data to districts in Florida, Delaware, Indiana, Illinois, Oklahoma, Oregon, and Maryland.⁷ All told, we have data on whether Fox News is present in 14,748 towns in 35 states for the years 1998 and 2000.

We focus on these 35 states because these are the states that prior scholars have used when estimating the effect of Fox News on voters (DellaVigna and Kaplan 2007; Hopkins and Ladd 2013); if Fox News also affects elected officials we should find evidence of it in these states. The 15 omitted states are absent for reasons that are unrelated to either the spread of Fox News or the ideology of the representative and robustness checks in the appendix reveal that the inclusion of the omitted states do not affect the results.

Because the cable system data is organized by towns, we aggregate the town-level data by congressional districts. By way of description, Figure 1 indicates the congressional districts where Fox News existed in 1998 (dark) or not (light). The 15 states with missing information on cable systems are unshaded.

Figure 1 reveals that Fox News was first launched in some of the the largest media markets, but not exclusively so (e.g., Idaho). Fox News spread as local cable systems agreed to carry Fox News – an agreement that depended on negotiations between Fox News and the local cable systems. Although it is had to infer much about the districts where Fox News

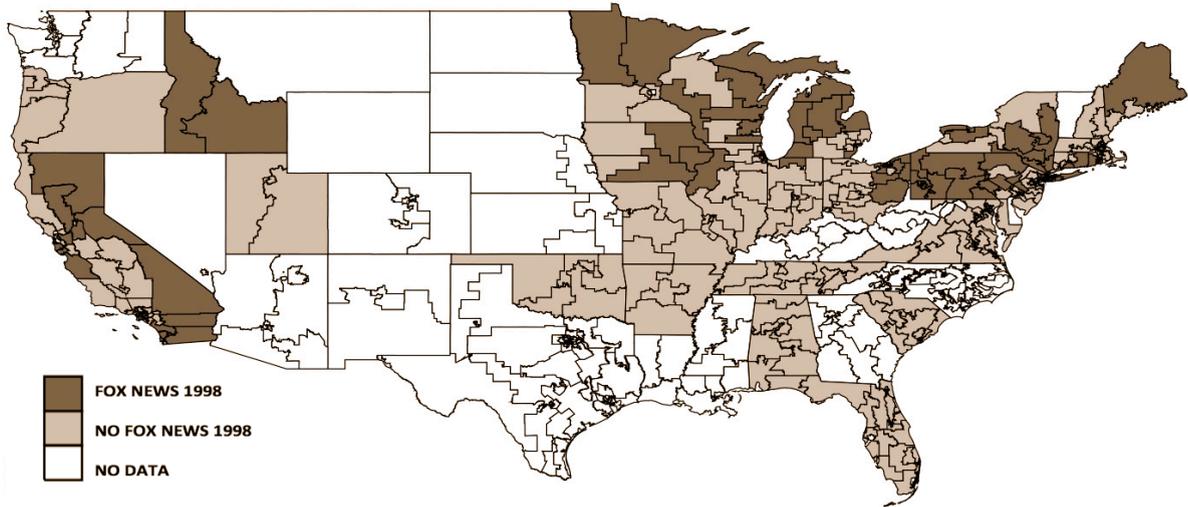


Figure 1: THE 1998 *Fox News* “TREATMENT”

appears from Figure 1, we conduct this comparison the next section. Overall, Fox News was broadcast in 15 of the 35 states as of 1998.

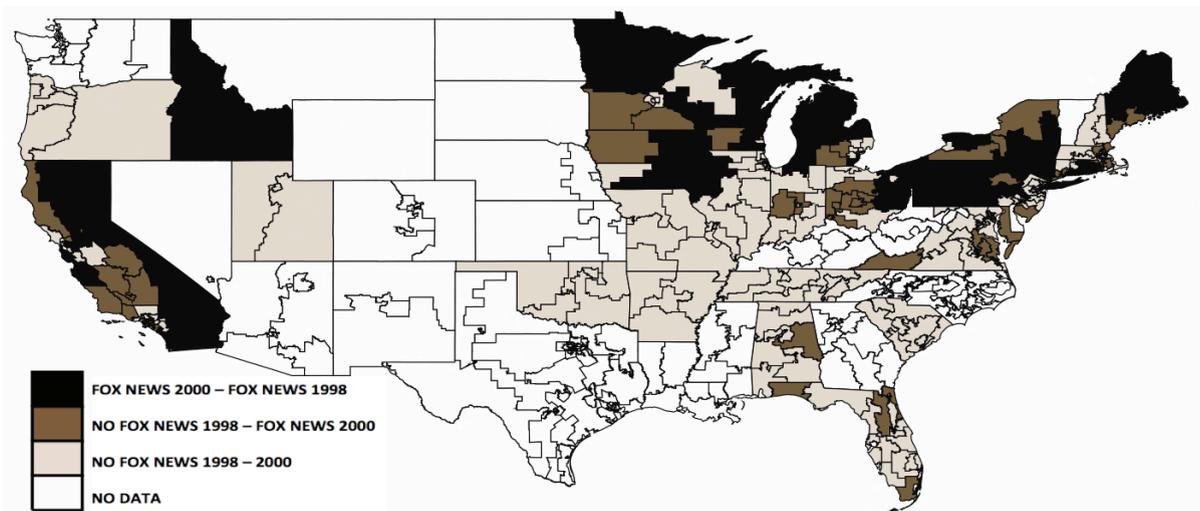


Figure 2: THE 2000 *Fox News* “TREATMENT”

As Figure 2 indicates, as of the 2000 election, exposure to Fox News spread to congressional districts in 7 additional states and created varying levels of exposure – some districts lacked Fox News for the entire period (light), some had Fox News since at least the 1998 election (dark), and some lacked Fox News in 1998, but had it as of the 2000 election (solid).

It is possible to measure the presence of Fox News in a district several ways and all yield similar substantive results. Regardless of whether we use a simple indicator for whether Fox

News is present on any cable system in the district, whether we use the logged number of cable subscribers with access to Fox News, or the fraction of towns in the district with access to Fox News similar results obtain.⁸

3 Identification Strategy

To determine whether the national news media affects either the positions taken by representatives in Congress or the set of representatives that are elected to the US House we take advantage of the fact that the Fox News Channel spread gradually across congressional districts in ways that appear to be unrelated to the likelihood that a representative would become more conservative in the absence of Fox News. These features make the entry of Fox News a unique event that, if certain assumptions are satisfied, allow us to compare changes in elite behavior across districts that differ only in their exposure to Fox News to characterize the impact of the entry of Fox News in the district on elite behavior.

We estimate the effect of Fox News using a difference in differences approach. Exposure to Fox News is the “treatment” (T_i) received by a House member from district i at a particular time. To estimate the effect of Fox News we examine how the changes in public positions taken by House members on votes in Congress who are from districts where Fox News enters compares to the difference in positions that are taken by similar representatives from similar districts where Fox News had not entered. Others use a similar strategy to explore the effect of the media on the mass public, policy and elite behavior, but none have explored the effect on elected officials; the closest related work explores the effect of the entry of Fox News on voting behavior at the town level (DellaVigna and Kaplan 2007), and the effect of the media penetration and coverage on policy responsiveness (Besley and Burgess, 2002; Strömberg, 2004; Einsensee and Strömberg, 2007; Snyder and Strömberg, 2010) or accountability and elite behavior (Snyder and Strömberg, 2010).

To measure the influence of Fox News using a metric that is easily interpretable and also likely corresponds to the content covered by Fox News, we use the change in a member’s “presidential support score” as calculated by Edwards (1989) based on the data collected

by *Congressional Quarterly*.⁹ Presidential support scores are based on the percentage of times that a member votes with the president on those issues on which the president takes a position. The scores are computed annually and we use the score for the election year given that representatives may be especially attentive during this period, but similar results obtain if we use the two-year average of the scores instead. We use presidential support scores for several reasons. First, given the content of Fox News and the largely critical coverage of President Clinton’s presidency, if there is an effect of Fox News, it should manifest itself in terms of how likely members are to support President Clinton once Fox News begins broadcasting in their district. Whereas we may not expect Fox News to affect the positions representatives take on many of the mundane issues that come to the House floor, if there is an effect of Fox News we would expect to find evidence of it on those issues where the president has decided to stake out a position. Second, whereas interpreting a change in ideal point space is difficult because the scale is only meaningful relative to the identification constraints that are imposed, a change in presidential support is simply the change in the percentage of times a member votes in accordance with the expressed position of President Clinton. Presidential support scores cannot normally be directly compared over time because of the changing agenda, but we are able to avoid this difficulty because we are interested in the *change* in presidential support scores during the presidency of Bill Clinton – even if support for Clinton decreases over time for all members (as it does on average), what matters is whether the support decreases at different rates for members depending on whether Fox News is being broadcast in their district.

If t_1 denotes the Congress where Fox News exists and t_0 is the Congress prior to the emergence of Fox News (e.g., the 104th Congress), let x_{i,t_0} and x_{i,t_1} denote the presidential support scores before and after the introduction of Fox News respectively. When estimating anticipation effects, i refers to representatives who serve both before and after the introduction of Fox News. When estimating replacement effects, the index i refers to districts because we compare the presidential support of the outgoing and incoming representative. Using the notation of Rosenbaum and Rubin (1983), we estimate the average difference in the public positions before and after the entry of Fox News using:

$$\Delta x_i(T_i = 1) = x_{i,t_1}(T_i = 1) - x_{i,t_0}(T_i = 1) \quad (1)$$

$$\Delta x_i(T_i = 0) = x_{i,t_1}(T_i = 0) - x_{i,t_0}(T_i = 0) \quad (2)$$

To obtain the average treatment effect, we subtract (1) from (2) to obtain $\tau = E[\Delta x_i(T_i = 1) - \Delta x_i(T_i = 0)]$.

Because we examine the differences in positions that a representative takes across time, aspects of the district or representative that are unchanged over time cannot be responsible for a change in behavior. Similarly, comparing the change in behavior between representatives that do and do not receive the treatment also controls for possible time-varying affects – even if President Clinton takes more conservative (or more liberal) positions over time this will not affect our estimation of τ because the choice of issues affects all representatives – every representative serving in this time period experiences the same change in presidential behavior so the change in the positions of the control group account for the impact of the changing issues. Comparing the change in the treatment group relative to the change in the control groups will therefore isolate the effect that is restricted to members of the treatment group (and presumably attributable to the treatment itself).¹⁰ To be clear, we are focused on the effect of Fox News on individual representatives; effects that affect everyone – if, for example, Fox News affects which issues are on the agenda and those agenda effects are felt equally among those with and without Fox News in their district – are not detectable using our identification strategy because of the lack of a control group.

To attribute the difference τ as the effect of Fox News on representatives' position-taking requires that several assumptions are satisfied (see, for example, Robinson et al 2009; Sekhon and Titiunik 2012; Keele and Minozzi 2013). One requirement is that the treatment must be plausibly exogenous – either unconditionally or conditionally based on included covariates. This requires that Fox News did not enter in districts where the representative was more likely to change their position even in the absence of Fox News. This assumption is not directly testable, but because representatives are unlikely to change their positions (Poole 2007) absent changes to the electoral environment, this assumption seems plausible.

Moreover, our empirical investigations reveal no evidence of Fox News entering districts with more malleable representatives.

First, the spread of Fox News is not obviously related to observable features such the number of conservatives in the districts or the ideological position of the district’s representative. To show this we estimate the probability that the district of representative i is exposed to Fox News ($E_{i,t}^{FOX}$) at time t of 1998 (and again at time $t = 2000$) to determine if Fox News begins broadcasting in those districts where representatives are more likely to change their positions to take more conservative positions in the absence of Fox News using the regression specification:

$$E_{i,t}^{FOX} = \beta_0 + \beta_1 x_{i,t_0} + \beta_2 VOTE_{i,t_0} + \beta_3 REP_{i,t_0} + \Omega \mathbf{X}_{i,t_0} + e_i \quad (3)$$

where: x_{i,t_0} represents the percentage of times a member from district i votes in support of the positions taken by President Clinton during 1996 prior to the creation of Fox News, $VOTE_{i,t_0}$ is the two-party presidential vote share for the Republicans at district i ($t_0 = 1996$), REP_{i,t_0} is equal to 1 if the party affiliation of the representative of district i during 1995-96 is Republican, and \mathbf{X}_{i,t_0} is a set of covariates at the district level in 1996.¹¹

Regardless of whether we include or exclude state-level fixed effects, Table 1 reveals that the presence of Fox News in a district as of 1998 or 2000 is unrelated to the current incumbent’s support for President Clinton, the party of the incumbent, or the two-party presidential vote in the district for the Republican presidential candidate.¹² The entry of Fox News into a media market in a congressional district is positively correlated with whether the incumbent is a Republican in all four specifications – perhaps reflecting the prior findings of DellaVigna and Kaplan (2007) – but the effect is indistinguishable from zero.

Even so, we may still worry that unobservable confounding variables may be determining both the entry decision of Fox News and the behavior of representatives. Additionally, perhaps the results in Table 1 are a consequence of offsetting differences “netting out.” To explore either possibility, we conduct a so-called placebo test and examine whether the emergence of Fox News in the year 2000 predicts changes in representatives’ behavior between

Table 1: EXAMINING THE “RANDOM” ASSIGNMENT OF FOX NEWS

| | 1998 | | 2000 | |
|-------------------------------|---|---|--|--|
| | (1) | (2) | (3) | (4) |
| Presidential Support (104th) | -2.5×10^{-4} (4.7×10^{-4}) | -2.4×10^{-5} (4.3×10^{-4}) | | |
| Presidential Support (105th) | | | 1.0×10^{-3} (6.8×10^{-4}) | 6.4×10^{-4} (6.7×10^{-4}) |
| Republican (104th) | 0.001 (0.023) | -0.024 (0.021) | | |
| Republican (105th) | | | 0.030 (0.036) | 0.018 (0.035) |
| Two party 1996 GOP vote share | -0.320 (0.945) | -0.064 (0.089) | 0.185 (0.124) | 0.264 (0.140) |
| Log(# of Blacks) | -0.015 (0.007) | -0.013 (0.007) | 0.007 (0.004) | 0.022 (0.018) |
| Constant | 0.374 (0.108) | 0.231 (0.113) | -0.164 (0.056) | -0.333* (0.187) |
| Adjusted R^2 | 0.021 | 0.308 | 0.019 | 0.217 |
| Observations | 318 | 318 | 231 | 231 |

Dependent Variable: Share of Towns that received for the first time the Fox News signal

Clustered Std. Errors at the State level (Wild Bootstrap, 1200 replications) within parentheses

Specifications (2) and (4) include state-level fixed effects (not shown but available upon request)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

1996 and 1998 and whether the emergence of Fox News in the year 1998 predicts changes in representatives behavior between 1994 and 1996.¹³ By definition, there cannot be an effect of Fox News in either case because Fox News does not exist in either period; if we find an effect this suggests that there are unobservable features that are related to both the emergence of Fox News and the proclivity of a representative to take more conservative positions.

Table 2 reveals no evidence that there are omitted characteristics related to both the entry of Fox News and the proclivity of members to change their positions. While there is a shift against President Clinton following the 1994 midterm elections, the effect of *Fox News 1998* on the change in presidential support between 1994 and 1996 in the column labelled “1994 vs. 1996” is statistically indistinguishable from zero and whether Fox News enters in 1998 is unrelated to whether the representative is likely to change their behavior in earlier periods. The results reported in the column labelled 2 reveals that the emergence of Fox News in 2000 is similarly uncorrelated with changes in representatives’ support for President Clinton between 1996 and 1998.

A second critical assumption for causal identification of τ is the assumption of “parallel

Table 2: DOES FOX NEWS EXPOSURE IN 1998 AND 2000 PREDICT PRESIDENTIAL SUPPORT CHANGES BETWEEN 1994 VS. 1996 AND 1996 VS. 1998?

| | 1994 vs. 1996 | 1996 vs. 1998 |
|----------------------------------|----------------------|-----------------------|
| | (1) | (2) |
| Fox News 1998 | 8.154 (10.426) | |
| No Fox News 1998 - Fox News 2000 | | 6.005 (8.513) |
| Republican | -7.903*** (2.489) | -14.841*** (4.733) |
| Two party 1996 GOP vote share | -21.561* (14.391) | -17.792*** (4.230) |
| Log(# of Blacks) | -0.313 (1.722) | -0.7534 (1.759) |
| Constant | 7.166 (6.924) | 22.872 (18.519) |
| R^2 | 0.254 | 0.69 |
| Observations | 254 | 191 |

Dependent Variable: Change in Nonunanimous Presidential Support

Clustered Std. Errors at the State level (Wild Bootstrap, 1200 replications) within parentheses

Regression specifications also include state-level fixed effects (not shown but available upon request)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

paths” (Keele and Minozzi 2013). This untestable assumption requires that in the absence of the entry of Fox News, the treated units would have the same over-time trend as the untreated unit. That is, there is not something about the districts that are treated that would have produced a similar effect as Fox News even if Fox News had not entered. It is difficult to conceive of how this assumption is likely to be violated in this instance as it would require something akin to local stations in the treatment group becoming more conservative in anticipation of the local population become more conservative in the absence of the Fox News. Not only is it unclear how partisan local news coverage is, but the fact that Table 2 reveals no evidence that exposure to Fox News is in anyway related to prior changes in member position-taking suggests that Fox News was not entering in districts where members were already shifting their positions because of other pressures. While it is impossible to test whether this lack of difference would persist had Fox News not entered as the parallel path assumption requires, the fact that there is no evidence of a shift in the past is reassuring.

Together, the null results of Tables 1 and 2 and prior findings regarding the determinants of member position-taking behavior suggests that the assumptions required to interpret τ as the impact of Fox News on member behavior are likely reasonable.

4 An Anticipation Effect?

We first consider whether the legislators serving both before and after the emergence of Fox News are more likely to take more conservative positions once Fox News begins broadcasting in their district. To do so we compare how positions taken prior to the emergence of Fox News in 1996 compares to positions taken in 1998 and 2000. Estimating the effect separately for the various time periods allows for time-varying effects within and across districts. This may occur if the audience for Fox News in a district grows or if there are changes in either the content of Fox News (Gasper 2011) or members' expectations about its' effect.

To measure the impact of Fox News on elected officials' behavior we examine the change in the percentage of times that a member votes with President Clinton using both unanimous and non-unanimous votes. The appendix goes to exhaustive lengths to also explore the effect using a measure of position-taking based on ideal point estimates and reveals qualitatively similar findings and it also shows that substantively similar results emerge from a large number of robustness checks (e.g., measuring exposure using an indicator for whether the number of such subscribers in the district is greater than or less than the median number of subscribers; estimating the effect of Fox News non-parametrically using nearest neighbor matching; omitting those representatives with the largest position changes; using regional fixed effects rather than state fixed effects, and omitting fixed effects entirely).

1996 Compared to 1998

We first compare the effect of Fox News using representatives who serve both immediately before and after the launch of Fox News in 1996. Because the stimuli to which the representative would respond to is theoretically ambiguous, we measure exposure to Fox News using: an indicator for whether Fox News is broadcast in the district, the logged number of cable

subscribers with access to Fox News, the percentage of towns in the district with Fox News, and an indicator for whether, condition on getting Fox News, the number of subscribers is greater than the median number for the reasons noted above.

To eliminate possible differences between the treatment and control groups and increase the precision of our estimates, we control for aspects of the districts that are plausibly related to the positions that legislators take (e.g., the party of the representative, the Republican two-party presidential vote in 1996, and a number of demographic characteristics). To control for possible omitted characteristics that vary by state (e.g., political environment, structure of the media market) we also include state fixed effects. Standard errors are clustered at the state level using the wild cluster bootstrap of Cameron, Gelbach, and Miller (2008).

Examining the influence of Fox News in the first Congress in which it is broadcasting is a strong test of media effects for several reasons. First, DellaVigna and Kaplan (2007) and Hopkins and Ladd (2013) document a Fox News effect on voters in the 2000 election, but it is unclear whether an effect also existed in 1998. Consequently, there is no evidence of any impact of Fox News on voters during this period. Second, for change to occur during this period, representatives must have immediately reacted to a change of unknown magnitude and significance in the electoral environment. It is unclear whether representatives would so hastily shift away from the positions taken in advance of their last successful election.

Table 3 compares the change in members' support for President Clinton between 1996 and 1998 using several measures of Fox News exposure and it reveals while that members from districts where Fox News had been broadcasting prior to the 1998 midterm election became slightly more opposed to President Clinton than similar representatives from similar districts where Fox News did not enter, the effect is indistinguishable from zero and the substantive effect sizes are small. Models 1 and 4 use an indicator variable to characterize whether Fox News is being broadcast on a cable system in the district and they reveal that the introduction of Fox News in a district is correlated with less than a 1% drop in the support for President Clinton using presidential support scores that exclude or include unanimous votes. Moreover, the null effect is estimated relatively precisely; the 95% confidence intervals suggest that, at most, the magnitude of the effect of Fox News ranges between decreasing presidential support

Table 3: REPRESENTATIVE'S CHANGE IN PRESIDENTIAL SUPPORT: 1996 - 1998

| | Nonunanimous | | | Overall | | |
|-------------------------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Indicator Treatment: Fox News 1998 | -0.400 (1.959) | | | -0.736 (2.076) | | |
| Continuous Treatment: Fox News 1998 | | -3.658 (11.628) | | | -5.365 (9.431) | |
| High Treatment: Fox News 1998 | | | -2.706 (4.069) | | | -2.785 (4.074) |
| Low Treatment: Fox News 1998 | | | 1.313 (1.774) | | | 1.168 (1.763) |
| Republican | -17.674*** (5.556) | -17.757*** (5.582) | -17.682*** (5.558) | -8.738*** (2.747) | -8.850*** (2.782) | -8.738*** (2.747) |
| Two party 1996 GOP vote share | 1.776 (14.864) | 1.655 (21.368) | 1.190 (17.771) | 0.834 (14.239) | 0.640 (16.112) | 0.242 (38.646) |
| Log(# of Blacks) | -1.606 (1.057) | -1.615* (0.949) | -1.560 (1.031) | -1.329* (0.722) | -1.335** (0.678) | -1.272* (0.678) |
| Constant | 21.993** (10.912) | 22.222** (10.479) | 21.776** (10.454) | 9.675* (5.653) | 9.915* (5.447) | 9.317* (5.614) |
| R^2 | 0.381 | 0.382 | 0.387 | 0.200 | 0.203 | 0.210 |
| Observations | 272 | 272 | 272 | 272 | 272 | 272 |

Dependent Variable: Change in Presidential Support

Clustered Std. Errors at the State level (Wild Bootstrap, 1200 replications) within parentheses

Regression specifications also include state-level fixed effects (not shown but available upon request)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

by 4.24% and increasing it 3.43% using non-unanimous votes. Measuring exposure using the logged number of subscribers with access to Fox News suggests a similarly-sized average effect – a 1% increase in the number of subscribers results in an estimated average decrease in presidential support of 3.66% (or 5.37%), but the effect is more imprecisely estimated. Finally, measuring exposure using an indicator for whether the number of subscribers is above or below the median number of subscribers in a district with Fox News (Models 3 and 6) reveals that the effect is concentrated among districts with more subscribers than the median number, but the effects are imprecisely estimated.¹⁴

1998 Compared to 2000

Perhaps a more compelling test of media influence occurs when Fox News enters in later Congresses after it has more of an opportunity to develop an audience and develop a reputation. Repeating the prior analyses for representatives serving in both 1998 (105th House) and 2000 (106th House) explores this possibility. This comparison also allows us to compare the actions of three groups of representatives: those whose districts lack Fox News, those whose districts do not have Fox News as of the 1998 election but which do have it as of

the 2000 election, and those from districts where Fox News had been broadcasting for the entire period. This allows us to determine whether the conservative shifts documented above persist and whether members from district in which Fox News enters only as of the 2000 election behave similarly to the representatives who first experienced Fox News in 1998.

Table 4: REPRESENTATIVE'S CHANGE IN PRESIDENTIAL SUPPORT: 1998 - 2000

| | Nonunanimous | | Overall | |
|--|-----------------------|-----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) |
| Indicator Treatment: No Fox News 1998 - Fox News 2000 | -4.090*** (1.287) | | -2.325*** (0.731) | |
| Indicator Treatment: Fox News 1998 - Fox News 2000 | -3.755** (1.645) | | -2.718** (1.597) | |
| Continuous Treatment: No Fox News 1998 - Fox News 2000 | | -11.480*** (3.612) | | -6.594*** (2.540) |
| Continuous Treatment: Fox News 1998 - Fox News 2000 | | -9.282** (4.678) | | -7.531*** (2.541) |
| Republican | 14.363 (14.202) | 14.335 (15.638) | 2.676* (1.556) | 2.659 (1.642) |
| Two party 1996 GOP vote share | 16.240* (8.871) | 16.185* (9.460) | 4.812 (8.107) | 4.764 (8.674) |
| Log(# of Blacks) | 1.945 (1.369) | 2.238* (1.280) | 1.652 (1.059) | 1.837* (1.016) |
| Constant | -40.173** (17.815) | -43.885** (17.272) | -26.762* (15.224) | -29.075* (15.184) |
| R^2 | 0.520 | 0.519 | 0.236 | 0.237 |
| Observations | 289 | 289 | 289 | 289 |

Dependent Variable: Change in Presidential Support

Clustered Std. Errors at the State level (Wild Bootstrap, 1200 replications) within parentheses

Regression specifications also include state-level fixed effects (not shown but available upon request)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Several conclusions emerge from Table 4. Comparing members' behavior in 1998 to 2000 reveals that Fox News being broadcast in a district is related to a decrease in support for President Clinton's positions regardless of whether we measure exposure to Fox News using an indicator (Models 1 and 3) or the logged number of subscribers (Models 2 and 4) and whether we exclude or include unanimous votes. In terms of the effect's magnitude, if we look at change in support for President Clinton on non-unanimous votes that occurs once Fox News begins broadcasting, the introduction of Fox News as of 1998 is related to an average decrease of 3.75% in the support of President Clinton's positions in the 1999-2000 Congress relative to similar members where Fox News does not enter. The introduction of Fox News in a district as of 2000 but after 1998 is correlated with an average decrease of similar magnitude (4.09%). Measuring Fox News penetration in a district using the log of

the number of subscribers with access to Fox News as the number of subscribers in a district with access to Fox News increases by 1% increase, the member is 10% likely to support the positions taken by President Clinton in 2000 (Model 2).¹⁵

The fact that the average shift away from President Clinton is similarly sized regardless of whether members are from districts that are newly exposed to Fox News as of the 2000 election (i.e., *No Fox News 1998 - Fox News 2000*) or whether their district has had Fox News since the 1998 elections (i.e., *Fox News 1998 - Fox News 2000*) suggests two possible interpretations: 1) the effect of Fox News is largely due to the effects occurring in 1999-2000 time period, or 2) members shift by about the same amount when Fox News initially enters their district and the shift persists (i.e., those that shift in 1998 remain so during 2000). Together, the results of Table 3 and 4 suggests that the former interpretation is more likely true. Because the members in the treatment group *Fox News 1998 - Fox News 2000* in Table 4 are also members of the treatment group *Fox News 1998* in Table 3, the difference in the two effects suggests that the shift in behavior occurred after the period examined in Table 3.¹⁶ There are many reasons why the effect may have taken time to emerge, and it is impossible for us to determine which possibility is most responsible, but our results suggest that the effect of Fox News on member behavior was not immediate.¹⁷

1996 Compared to 2000

Comparing how a member's support for President Clinton in 1996 compares to the member's support in 2000 among members serving in both the 104th and 106th US House estimates the net effect of Fox News over the entire time period. It also provides another opportunity to assess whether more exposure is related to a larger shift in behavior. As before, we examine three different levels of exposure to Fox News in the district: some districts were never exposed to Fox News during this period, some had Fox News broadcasting at least since the 1998 midterm elections, and districts had Fox News only as of the 2000 presidential election. Because representatives must take positions in both 1996 and in 2000 to be included in this analysis, the sample of representatives is slightly smaller (N=242) than earlier analyses.

Table 5 reveals that regardless of how we measure exposure to Fox News, and regardless

Table 5: REPRESENTATIVE'S CHANGE IN PRESIDENTIAL SUPPORT: 1996 - 2000

| | Nonunanimous | | Overall | |
|--|--------------|----------|-----------|----------|
| | (1) | (2) | (3) | (4) |
| Indicator Treatment: No Fox News 1998 - Fox News 2000 | -3.761* | | -2.412 | |
| | (2.409) | | (2.273) | |
| Indicator Treatment: Fox News 1998 - Fox News 2000 | -3.447* | | -3.339** | |
| | (2.066) | | (1.887) | |
| Continuous Treatment: No Fox News 1998 - Fox News 2000 | | -7.995* | | -3.826* |
| | | (4.227) | | (2.921) |
| Continuous Treatment: Fox News 1998 - Fox News 2000 | | -7.527* | | -8.100** |
| | | (5.595) | | (4.878) |
| Republican | -1.457 | -1.506 | -4.913*** | -4.926** |
| | (1.610) | (1.664) | (1.889) | (1.973) |
| Two party 1996 GOP vote share | 5.020 | 4.428 | -1.094 | -1.836 |
| | (6.962) | (7.039) | (18.029) | (13.062) |
| Log(# of Blacks) | 1.497 | 1.691 | 1.492 | 1.612 |
| | (1.367) | (1.330) | (1.275) | (1.254) |
| Constant | -27.841 | -29.786 | -29.268* | -30.279* |
| | (18.154) | (19.422) | (17.625) | (18.143) |
| R^2 | 0.272 | 0.265 | 0.382 | 0.379 |
| Observations | 242 | 242 | 242 | 242 |

Dependent Variable: Change in Presidential Support

Clustered Std. Errors at the State level (Wild Bootstrap, 1200 replications) within parentheses

Regression specifications also include state-level fixed effects (not shown but available upon request)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

of whether we measure support for President Clinton using unanimous votes or not, the effect of Fox News being broadcast in the district is similar. On average, members from districts where Fox News is present are 3% less likely to support the positions of President Clinton (Models 1 and 3). Using the log of the number of subscribers and allowing the effect to vary on the number of possibly affected voters reveals that a 1% increase in subscribers with access to Fox News is related to a roughly 7% decrease in average presidential support (Models 2 and 4). The similarity of the results of Tables 4 and 5 suggest that regardless of whether we take the initial position to be the support for President Clinton in 1996 (104th Congress) or 1998 (105th Congress), members are less likely to support President Clinton during the year 2000 (106th Congress) if the signal of Fox News is being broadcast in their district relative to similar members from districts where Fox News is not being broadcast. We also find that the magnitude of the effect is indistinguishable for the two treatment groups which again suggests that the effect of Fox News occurs only once it has been broadcasting for two years.

Overall, the results of Tables 3, 4, and 5 suggest that members do indeed take different

positions once Fox News begins broadcasting in their district – relative to the positions taken before the entry of Fox News in their district, after Fox News enters their district representatives are less likely to take positions that are in agreement with President Bill Clinton. Moreover, the effect is especially evident during 1999-2000. The effects we document among elected officials are reassuringly consistent with the results that others have obtained when looking at voters (DellaVigna and Kaplan (2007) and Hopkins and Ladd (2013)).

5 A Replacement Effect?

Having shown that the introduction of Fox News in their district appears to cause members to take positions that are slightly more opposed to those taken by President Clinton, we also explore whether Fox News being broadcast in a district also influences who the district elects to the US House. That is, does the introduction of Fox News in a district also increase the probability of replacing the incumbent with a more conservative member?

Table 6 estimates the change in presidential support for outgoing and incoming members in a district. To do so we compare the presidential support of a retiring or defeated incumbent who was elected prior to the introduction of Fox News to the presidential support of the representative elected following the national introduction of Fox News for districts with and without Fox News. Our sample is obviously limited due to the widespread ability of representatives to get re-elected – there are only 51 replacements in our sample of districts between 1995-1996 and 1997-1998 and only 28 replacements between 1997-1998 and 1999-2000 – but the effects are statistically indistinguishable from zero for both comparisons.

As Table 6 reveals, comparing the differences in the support for President Bill Clinton of incoming and outgoing representatives between 1996 and 1998 in model (1) reveals no statistically distinguishable effect of the emergence of Fox News in 1998 for the 50 instances where replacement occurs. There is also no clear effect when comparing the 28 changes between 1998 and 2000 using the emergence of Fox News in 2000 controlling for whether Fox News existed in 1998. The imprecision of the estimated effects mean that large positive and large negative effects cannot be ruled out – for example, the 95% confidence interval for the

Table 6: REPLACEMENT EFFECT OF FOX NEWS

| | 1996 to 1998 | 1998 to 2000 |
|----------------------------------|-----------------------|---------------------|
| | (1) | (2) |
| Fox News 1998 | 15.766 (11.974) | |
| No Fox News 1998 - Fox News 2000 | | 26.914 (26.010) |
| Fox News 1998 - Fox News 2000 | | -19.001 (12.405) |
| Two party 1996 GOP vote share | -90.751** (38.659) | -22.823 (25.667) |
| Constant | 43.678** (17.712) | 19.070 (13.070) |
| R^2 | 0.15 | 0.20 |
| Observations | 50 | 28 |

Dependent Variable: Change in Nonunanimous Presidential Support

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

shift between 1996 and 1998 in Model 1 ranges between -8.32% and 39.85% and the range is even larger for period estimated in Model 2.

Although speculative, the lack of a replacement effect in Table 6 may reflect the relatively modest effects that the national news media has on the electoral fortunes on individual members or it may be a consequence of the apparent anticipation effect we find in the prior section. If members correctly anticipated and preempted the potential electoral consequences of Fox News by becoming less supportive of President Clinton, perhaps that provided them with additional electoral security. While we cannot reach a firm conclusion on this, we can conclude that to the extent that Fox News affects the behavior of elected officials, it does not appear to be because of who is and is not elected to the US House.

6 Conclusion & Implications

Thomas Jefferson famously opined that “the basis of our governments being the opinion of the people, the very first object should be to keep that right; and were it left to me to decide whether we should have a government without newspapers or newspapers without a government, I should not hesitate a moment to prefer the latter.” While Jefferson was writing

in a very different time, understanding how the news media might affect the actions of elected officials is important for what it reveals about the possible influences on the behavior of re-election minded representatives and for what it suggests about the potential for the news media itself to shape the policy process.

Most studies of the news media in political science focus on the impact on the mass public. While important, we presumably care about the media's effect on the mass public because of how such changes affect public policy. We focus directly on the relationship between the media and elected officials to examine whether the national news media affects the behavior of elected officials in ways that are consistent with officials reacting to the possible media-induced changes in the electorate.

To determine the effect of the national news media on policy we examine whether which representatives are elected, and whether the positions taken by elected representatives while in office depends on the media environment in their district. We focus exclusively on elite behavior because it is possible for elites to respond to a change even before there is evidence of an effect among voters. As Erikson, Mackuen and Stimson (2002) suggest, "rather than simply pursue their ideological agendas and await passively for the electoral verdict, politicians can *anticipate* the electoral effects of public opinion and adjust their policymaking behavior in advance" (p.284). Although others have shown an effect on voters in the particular case we examine, it was unknown whether elites were similarly affected.

We use the unique circumstances surrounding the creation and spread of the Fox News Channel between 1996 and 2000 to examine whether members' actions are plausibly due to anticipatory preemption as a result of Fox News entering their districts. We find no evidence that Fox News increased the probability that an incumbent would be replaced by a more conservative representative, but we do find consistent evidence that elected officials become slightly less likely to publicly support President Clinton once Fox News enters their district. However, members do not shift their public support for President Clinton immediately; consistent with the timing of effects among voters, changes in members' support for President Clinton are most readily evident during 1999-2000.¹⁸

To be clear, the unique circumstances surrounding Fox News provide the cleanest op-

portunity to identify the effect of the national news media on congressional action, but the uniqueness of the situation also makes it difficult to generalize the effect. Nonetheless, given the fact that Fox News is measured by scholars to be ideologically distinctive, and perhaps also because it was launched during a political context in which the Democrats controlled the presidency, the Republicans were in control of the US House and the President was being tried for impeachment, it may be possible to interpret our effects as a plausible upper-bound on the effect that the media may have on elected officials. If Fox News Channel was ideological similar to existing television outlets such as CNN and MSNBC (at the time), for example, it is doubtful that there would be much of an effect because of the lack of a distinctive perspective. As a result, while our results suggest that there is almost certainly an effect of the media on the positions taken by elected officials, the overall magnitude of the effects are likely modest in general.

Understanding the role of the “fourth estate” is important, but it is also an exceptionally difficult role to disentangle. Following the lead of DellaVigna and Kaplan (2007), and using the emergence and spread of the national television news channel Fox News, we provide evidence that suggests that the national news media may indeed slightly affect the prospects for policy change – members appear to change their public position based on the media environment in their district, but the size of the effect is rather modest (roughly 3% less supportive of the president). The unique circumstances associated with the launch and spread of Fox News arguably allows us to identify the nature of media effects on elected officials, but an obvious downside is that it is unclear how generalizable our results are to other media outlets and other time periods. Even so, our findings suggest that if representatives are aware of a new media outlet in their district that is sufficiently ideologically distinctive, the new entrant may modestly impact the public positions taken by members even if it does not affect the composition of Congress. The national news media appears to be able to affect congressional behavior, but there appear to be important limits to the effects that are possible.

Notes

¹We examine the effect between 1996 and 2000 for several reasons. First, the political context is relative constant for this period. From 1994 until 2000, the United States experienced a period of divided government with the Republicans controlling the US House (and Senate), and with the Democrats controlling the presidency. The many changes instituted by the Republicans when they took control of the US House for the first time in 40 years in 1994 makes comparisons with earlier time periods more difficult. Following 2000, the political context also changed with the election of a Republican president. Second, insofar as concerns about redistricting may affect the behavior of elected officials (e.g., Strattmann 2000) prior to the midterm elections in 2002, for the period of 1996 until 2000 redistricting concerns are largely absent.

²Bartels (1996), for example, looks at the whether the national policy agenda leads or follows press coverage and finds some evidence of each. Arnold (2004) nicely explores the various ways that local newspapers cover their representatives, but he can only hint at the effects. Prior (2007) argues that local media coverage may have increased the electoral safety of incumbents, and Karpowitz (2009) uses evidence of President Nixon’s media consumption to show how media coverage may have affected his conduct in the White House. Noel (2012) argues that the opinions of “coalition merchants” reported by media outlets help define the ideological divisions between politicians, but it is unclear whether the effects are because of personal connections and interactions or the media’s publication of the opinions. More recently, Campante and Hojman (2013) argue that broadcast television decreased elite polarization by affecting the voters’ ideology and motivation.

³Scholars measure the ideological content of media coverage in many ways (e.g., Groseclose and Milyo 2005; Gentzkow and Shapiro 2006; Groeling 2008), but the various measures agree that: 1) there are comparatively fewer television media outlets that are conservative than liberal, and 2) programs on the Fox News Channel are more conservative than the average

broadcast news program. For example, Groseclose and Milyo (2005) attempt to locate the ideology of media outlets on the same 0 to 100 scale used by the (liberal) interest group Americans for Democratic Action based on the ideology of quoted commentators and they find that *Fox News' Special Report with Brit Hume* had an average ADA score of 39.7 between June 1998 and July 2003. Only the *Washington Times* between January and May 2002 is estimated to be more conservative, and no other media outlet they examine has an estimated ADA score of less than 55. Gasper (2011) shows that allowing Groseclose and Milyo's (2005) measure of media bias to change over time does not notably change this characterization; *Fox's Special Report with Brit Hume* does become more conservative between 1996 and 2002, but it also starts out more conservative than any of the other television newscasts.

⁴CNN launched much earlier than Fox News – June 1, 1980 — and it had the largest share of cable news viewers during this period, but by 1998 only 4% of the congressional districts failed to contain a cable company broadcasting CNN. Moreover, because programs on CNN are relatively non-ideological, and similar to programs on the broadcast networks it is unclear why there would be any incentive for elites to change their behavior. MSNBC was launched on July 15, 1996, and was also gradually extended across the country, but its viewership was dwarfed by CNN and Fox News until the network began to adopt programs that adopted a more liberal perspective (a move that began when Phil Griffin took over as President of the company in 2008).

⁵See also Stratmann (2000), Kousser, Lewis and Masket (2007), and Bullock and Clinton (2011) who find that representatives adapt to changes in the electoral environment.

⁶If representatives do adjust their behavior in response to Fox News being broadcast in their district, the adjustment may vary across both time and members. One possibility is that the effect may be larger in latter introductions – perhaps because it takes time for Fox News to develop a reputation and audience or because it takes time for Fox News to settle on more a consistent programming outlook. There may also be partisan differences – existing studies suggest that Fox News is more likely to affect independent and Republican voters

(Hopkins and Ladd 2013), and that “the impact of Fox News is (marginally significantly) larger in urban towns and lower in the Republican districts, significantly so with county fixed effects” (DellaVigna and Kaplan 2007, 1212) – or the effect may further vary depend on the competitiveness of the district. While it is possible to speculate about such differential effects, the appendix reveals that the data is unfortunately insufficient to the task of precisely estimating these effects due to limited samples.

⁷For towns in multiple districts we assume that Fox News access is uniformly distributed.

⁸To further explore non-linear exposure effects we also use whether the number of Fox News subscribers is greater than or less than the median number of subscribers in a district.

⁹Substantively similar results occur using ideal point estimates in the appendix.

¹⁰Fox News was also available to satellite television subscribers. However, the number of cable television subscribers dwarfs the number of satellite television subscribers and it is unclear whether representatives would be as attuned to the expansion of Fox News due to satellite television subscribers given the differences in market share. Whereas Fox News channel launched to 17 million cable subscribers in 1996, there were still only 2.3 million subscriptions to DirectTV – one of the two main satellite providers. At worse, the effect of satellite subscribers will mean that the treatment is measured with error which will attenuate the treatment effects we recover due to the measurement error attributable to the presence of satellite subscribers with access to Fox News.

¹¹We use vote share in 1996 rather than 1992 to avoid redistricting effects.

¹²The appendix replicates the result using ideal point measures instead of presidential support scores.

¹³Because presidential support scores are annual, we have also examined the effect using two year averages (e.g., 1993-1994,1995-1996,1997-1998) and other individual years. The results are unchanged.

¹⁴The appendix shows that conservative shifts are distinguishable from zero when ideal point estimates rather than presidential support scores are used to assess change, but the magnitude of the shift remains small. The fact that shift is detectable in ideal points but not in presidential support scores suggests that the effect of Fox News when it first launched was very modest and the relative coarseness of presidential support scores are unable to detect the subtle shifts.

¹⁵The difference in the magnitudes reflect the fact that Models 1 and 3 are averaging across districts of varying numbers of subscribers whereas Models 2 and 4 assume the effect is related to the size of the subscriber base.

¹⁶While the appendix reveals that more nuanced measures of position-taking behavior are able to detect a slight conservative shift between 1996 and 1998, evidence of a change in the likelihood of supporting the positions of President Bill Clinton is only readily evident during the 1999-2000 period. Put differently, the effects of Fox News on members' behavior in 1998 is much less than the effects of Fox News on members' behavior in 2000.

¹⁷For example, maybe it took time for members to appreciate the impact of the changing media environment on the voters' opinions? Perhaps the increased availability of the internet was partially responsible as exposure to Fox News drove viewers to online media outlets as well? Maybe it took time for Fox to establish its audience and perspective? Given the available data, it is impossible for us to determine the extent to which any of these was responsible for the delayed effect.

¹⁸If Fox News makes elected representatives slightly more conservative as our results consistently show, why do measures of political polarization show that the Democratic Party continue to move left once Fox News spread across the entire country? One possibility is that whereas elected officials initially slightly changed their positions in anticipation of a possible effect, over time they became less concerned about the possible effects once the novelty wore out. That is, perhaps they realized the electoral effects of Fox News were relatively minimal and that there was therefore no reason to react to change their positions in anticipation of a

possible effect of Fox News. Second, other media – e.g., blogs, internet – or other channels – e.g., MSNBC – may have emerged and provided a counterweight. If voters are being pushed in both directions by various media outlets, it is no longer clear how a member would react if they wanted to preempt a possible effect. Finally, there are obviously many factors that affect the positions taken by representatives. While we attempt to isolate the effect that is attributable to Fox News, the many other pressures that exist may push representatives in directions that make it difficult to assess what the net effect of the various influences on their voting behavior. Finally, because we are employing a difference-in-differences design our analysis largely focuses on the behavior of continuing members rather than the effects of replacement.

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