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

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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 across congressional districts in the United States after being launched in October of 1996 in ways unrelated to the ideology of the district and the incumbent representative, we show that representatives become less supportive of President Clinton in districts where Fox News begins broadcasting than similar representatives in otherwise similar districts where Fox News is not being broadcast. Moreover, the effects took a few years to be realized, the effects are slightly larger among Democrats, and there is no evidence that the entry of Fox News in a district affected which representatives were re-elected. Consistent with theories that emphasize the 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 indeed slightly affect the prospects for policy change by altering representatives' expectations and causing them to adjust the positions that they take.

Keywords: Media; US Congress

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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). It is less clear whether the 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 elected officials 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 how the national news media affects elected officials is important not only for what it reveals about the incentives that elected officials face when performing their jobs, but also because of what it suggests about the influence of the media in our political system (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 the relationship between the two. The fact that Fox News was the only ideological distinctive national television news outlet with a substantial audience (at the time) and its spread across the country via cable systems can be tracked presents a one-time opportunity to observe media influence in a context where it is possible to derive predictions about which representatives should be affected and how. 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 the elected officials responsible for actual policymaking. Given the effects that have been found on voters, is there any evidence of an impact on elected officials?

Many argue that re-election minded representatives "run scared" by anticipating and preempting electoral challenges (e.g., Jacobson 1987; Stimson, Mackuen and Erikson 1995), but 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 the issues that they confront in the legislature. Theoretically, while we may suspect that re-election focused representations may attempt to anticipate and preempt the possible electoral consequences of a newly available information source on their electorate, the hypothesized nature and extent of change is unclear.

We show that representatives changed the positions they took in Congress in ways that suggest that they sought to preempt possible shifts in district opinion due to the introduction of Fox News. Using a difference-in-differences identification strategy that compares the average change we observe in representatives where Fox News begins broadcasting to the average change we observe among similar representatives from districts without Fox News reveals that the introduction of Fox News appears to cause representatives to vote in a slightly more conservative manner. While the effect takes some time to emerge – the effect only manifests itself after Fox News has been in existence for two years – we find that members become more conservative at exactly the same time that others have found evidence of voters becoming more conservative because of Fox News (DellaVigna and Kaplan 2007; Hopkins and Ladd 2013). Moreover, the conservative shift we document appears sightly larger among Democrats and it is consistent with prior findings that Fox News most affected independent and Republican constituents and shifted voters away from Democrats and towards Republicans.

More broadly, our results support prior claims regarding the proclivity of re-election minded representatives to anticipate and preempt electoral challenges (Stimson, Mackuen, and Erikson 1995). That said, while we uncover evidence that elected officials take positions

that appear to anticipate the effect of Fox News being broadcast in their district, we show that there are clear limits to the effect of this national media on individual members. We find no evidence that newly elected members from districts receiving Fox News were more conservative than newly elected members from districts that did not.

We establish these claims 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. 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 the replacement effect to determine whether the emergence of Fox News affects who is elected from the district. Section 6 concludes by discussing the implications of our findings for understanding the relationship between the national news media and elected representatives.

1 Hypothesizing the News Media's Effect 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

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 that were 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 (with the exception of a few court-ordered redistrictings due to the Voting Rights Act).

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 actual 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 identify exactly when Fox News began broadcasting on a cable system in each congressional district, and we can therefore determine which districts are receiving Fox News prior to each election.⁴ Because we can show that the entry

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 what the possible effects might be on the elites. 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 the introduction of broadcast television decreased the polarization of representatives by affecting the ideology and motivation of voters.

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 becomes more conservative between 1996 and 2002, but it also starts out more conservative than any of the other television newscasts.

⁴Fox News was also carried on satellite television, and we consider the implications of this below.

decision of Fox News was not driven by a desire to target particular representatives, we can treat the emergence of Fox News as exogenous and 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.⁵

In terms of the expected effect, 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 and several alternatives are possible depending on how the introduction of Fox News in a district affects the opinions and actions of voters or, perhaps more crucially, what the elected officials expect the effect to be on the voters of relevance to their re-election.

One reasonable expectation is that the introduction of a national cable news channel in a congressional district has no effect on 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.

⁵CNN 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. While exploring the effect of CNN during the 1980s is plausible, it is also unclear how CNN would affect the incentives elites face given the nature of CNN's coverage. 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). Because it had the smallest reach of the three major cable news channels and its programming was also relatively balanced we would also have little expectation of an effect.

H₀ NULL EFFECT: Representatives' position-taking behavior in Congress is unaffected by the entry of Fox News in their districts.

Alternatively, re-election centered representatives may respond to changes in the media environment if the changes are thought to appreciably affect their electoral environment. Many argue that incumbents are best thought of as "running scared" and actively anticipating and preempting possible electoral surprises (e.g., Jacobson 1987; Stimson, Mackuen and Erikson 1995).⁶ If so, representatives may react to changes even in the absence of any proven impact on the electoral environment – 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 we'll 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). In the case of Fox News, however, scholars have shown that it appears to affect voter behavior – Della Vigna and Kaplan (2007) argue that the emergence of the Fox News Channel in 9,246 towns across the United States 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 is concentrated among independents and conservatives. If representatives seek to preempt possible shifts in district opinion we would predict that:

H₁: Representatives take more conservative positions in Congress when Fox News begins broadcasting in their district.

To be clear, this effect could occur because of 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

⁶See also Stratmann (2000), Kousser, Lewis and Masket (2007), and Bullock and Clinton (2011) who find evidence consistent representatives adapting to potential changes in the electoral environment.

conservative voters), or perceived voter conversion (i.e., the representative believes that Fox News is changing the opinions of voters in her district). Given the difficulty in disentangling the various (non-exclusive) mechanisms of influence we focus on identifying the net effect of Fox News and whether representatives change the positions they take in Congress once Fox News enters the district regardless of whether it is because of actual or perceived changes in the electoral environment.

Anecdotally, representatives appear to recognize the importance of nationally televised news (see, for example, Sellers 2000) and the Speaker of the House during time we examine, Rep. Newt Gingrich, notably sought to use the power of television when working as part of 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, 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 confirms a pervasive belief that the news media matters. As summarized by the authors: "95% of congressional staff members believe that political bias in the media influences or shapes decision-making in Congress. 75% of Republican Hill staff believes there is 'a lot' of bias compared to 53% of Democratic staff. 41% of Democratic staff says there is 'some' bias compared with 24% of Republicans" (Rehr 2012).

If representatives adjust their behavior in response to Fox News being broadcast in their district, it is unclear whether different representatives react differently. Existing studies suggest that the effect of Fox News is largest among independents and Republicans (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). These effects suggest two possible competing reactions by elected officials.

One possibility is that the effect of Fox News is largest among Democrats. If conservative representatives already take positions consistent with the views espoused by Fox News, and if representatives think independents can be swayed by exposure to Fox News as Hopkins and Ladd (2013) document, Democrats fearful of voters shifting away from their position because of Fox News may be the most likely to take more conservative positions in response.

H₂ LARGER DEMOCRATIC EFFECT: Democrats take more conservative positions in Congress once Fox News begins broadcasting in their district.

Alternatively, the mobilization of conservative voters and the additional public arguments for conservative positions provided by Fox News may cause Republican representatives to adopt more conservative positions because of the impact that Fox News has among Republican voters. Combined with the possibility that the core constituents of Democratic incumbents may be unresponsive to the appeals of Fox News, it is plausible that the largest effects of Fox News are found among Republican representatives.

H₃ LARGER REPUBLICAN EFFECT: Republicans take more conservative positions in Congress once Fox News begins broadcasting in their district.

The effect may also depend on the competitiveness of the district – members who think themselves electorally secure may be less concerned with a change in the electoral environment and be less likely to change their behavior than representatives who survived a close re-election – but data is unfortunately not very informative on this possibility given the number of available observations.

2 Measuring The Spread of Fox News, 1996-2000

To measure 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.⁸

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 blue) or not (light blue). The 15 states with missing information on cable systems are left white.

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 – Fox News coverage depended on negotiations between Fox News and

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

⁸As DellaVigna and Kaplan explain in their 2006 working paper "The remaining states either do not have electronic voting information available at levels of aggregation below the county level, or have numeric precincts with no precinct-to-town conversion available from the state" (p. 12).

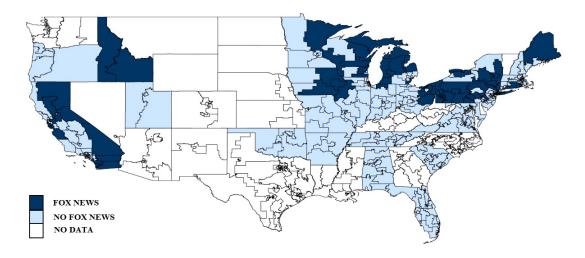


Figure 1: The 1998 Fox News "Treatment"

the local cable systems and whether the cable systems would be willing to include Fox News in their cable package. Although it is had to infer much from Figure 1 about the districts where Fox News appears, we conduct this comparison the next section. Overall, Fox News was broadcast in 15 of the 35 states as of 1998.

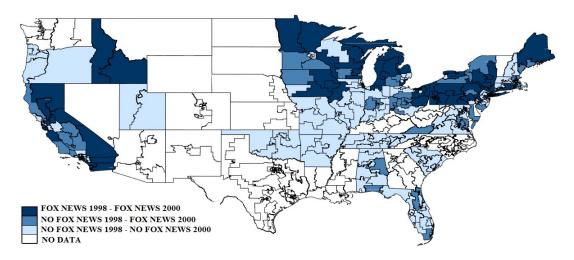


Figure 2: The 2000 Fox News "Treatment"

As 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 blue), some had Fox News since at least the 1998 election (dark

blue), and some lacked Fox News in 1998, but had it as of the 2000 election (darkest blue). Figure 2 indicates the districts in each grouping.

There are several ways of measuring exposure to Fox News and all yield similar conclusions. The coarsest measure is an indicator for whether Fox News is present on any cable system in the district. This is a quantity that is easily known by the representative (unlike more nuanced details such as the number of subscribers to each cable system with access to Fox News in their district) and this measure is defensible if the introduction of Fox News is thought by the representative to reflect a qualitative change in their electoral environment. A more nuanced measure that reflects the extent to which the effect of Fox News depends on the number of voters possibly exposed to Fox News is provided by the logged number of cable subscribers with access to Fox News.⁹ By measuring the "treatment" using the number of potential viewers rather than the simple presence or absence of Fox News, this measure explores whether representatives shift more in districts where Fox News is more widely broadcast. A third measure which accounts for varying levels of penetration within a district but does not require subscriber-level information is the fraction of towns (larger than 10,000 people) with a cable system that broadcasts Fox News.

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

⁹In fact, we can also use this measure in two ways and get similar answers. First, if we just control for the log of the number of subscribers this is effectively calculating the effect relative to the district population as a whole so long as districts are similarly sized. The fact that districts within a state are mandated to have equal-populations and the fact that we include state-level fixed effects which would capture the effect of different state sizes make this interpretation reasonable. Alternatively, we can also measure the fraction of subscribers with access to Fox News relative to the number of individuals who live in the towns identified in the DellaVigna and Kaplan (2007) dataset. This excludes citizens living in small towns from the denominator. Yet another measure of exposure can be constructed by seeing if the number of subscribers is "larger" than usual to allow for non-linear effects – e.g., using indicators for whether the number of Fox News subscribers is greater than or less than the median number of subscribers.

districts in ways that can be shown 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 true, allow us to compare changes in elite behavior across districts that differ only in their exposure to Fox News and to plausibly claim that any differences are attributable to the entry of Fox News in the district.

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 ideological positions taken by House members in districts where Fox News enters compares to the difference in House members' ideological positions from similar districts where Fox News did not enter. 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), 10 and the effect of the media penetration and coverage on policy responsiveness (Besley and Burgress, 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 Congressional Quarterly. These scores are based on the percentage of times that a member votes with the president on issues on which the president takes a position. Substantively similar results are obtained used ideal point estimates and these results are reported in the appendix, but we focus on examining the change in presidential support in the text 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

¹⁰In related work, Gentzkow (2006) measures the effect of the media on voter behavior using the introduction of television in the 1950s, and Gentzkow, Shapiro and Sinkinson (2011) explore the effect of the entry and exit of newspapers between 1869 and 2004.

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.

We explore the effect on presidential support scores that both include and exclude unanimous votes. The average level of presidential support when unanimous votes are included is obviously higher given that these are issues upon which everyone agrees. To facilitate the ease of interpretation, we focus on the effect of Fox News holding fixed the identity of the president – exploring the effect of Fox News during Democrat Bill Clinton's president provides the cleanest test given the ideological opposition of Fox News to his presidency.

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 of 1994 to 1995), 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 unit of analysis is the congressional district because we compare the ideal point of the outgoing representative of district i to the ideal point of the newly elected member. Using the notation of Rosenbaum

¹¹In fact, the relative magnitude of the change we uncover in presidential support scores and ideal point estimates provides suggestive evidence of this – while the changes are hard to compare, the results in the appendix suggest that the effect on presidential support scores appears larger than the effect on ideal points.

and Rubin (1983), we estimate the average difference in the house member's ideological positions before and after the entry of Fox News using:

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

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

To obtain the average treatment effect, we subtract (1) from (2) to obtain $\tau = E[\Delta x_i(T_i = 1) - \Delta x_i(T_i = 0)]^{12}$

If the treatment can be considered to be randomly assigned, this identification strategy isolates the effect of the entry of Fox News on representative position taking from other confounding effects. 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, because we compare the change in behavior between representatives that do and do not receive the treatment, we also control for possible time-varying affects – insofar economic conditions or the type of issues taken by President Clinton changes over time, such effects will not affect our estimation of τ so long as the change presumably affects all representatives. If, for example, the issues included in the presidential support score change over time, because every representative who serves over the same time period experiences the same change, the change in the positions of the control group will reflect the effect of the changing issues and comparing the relative changes of the treatment and control groups will therefore isolate the effect that is attributable to the treatment.¹³

¹²Bertrand, Duflo, and Mullainathan (2004) show that difference-in-difference estimators can be problematic in the presence of autocorrelated errors if there are multiple periods both before and after the treatment, but our single period pre-post treatment design evades this possible complication.

¹³One slight complication is that Fox 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

To be clear, the effect of Fox News we are able to identify is the effect on individual representatives. It is impossible to determine the effect on aspects that may affect everyone – if, for example, Fox News affects which issues are on the agenda and the effects are equally felt among those with and without Fox News in their district, a difference in differences design cannot estimate the effect because of the lack of a control group (e.g., Tan and Weaver 2009).¹⁴

To identify the effect of the introduction of Fox News (τ) on the behavior of representatives, the treatment must be plausibly exogenous – either unconditionally or conditionally based on the included covariates. This means 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. Because representatives are unlikely to change their positions (Poole 2007) absent changes to the electoral environment, this assumption seems plausible. This assumption is not directly testable (Wooldridge and Imbens 2007), but Fox News did not appear to enter media markets to target malleable representatives.

First, the spread of Fox News was not based on political geography and it is unrelated 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:

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

where: x_{i,t_0} represents the percentage of times a member from district i votes in support presence of satellite subscribers with access to Fox News.

¹⁴Identifying the agenda-level effect is difficult because it is unclear what the agenda would look like in the absence of the Fox News.

of the positions taken by President Clinton during 1995-96 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. 15

Table 1: Examining the "Random" Assignment of Fox News

	1998		2000	
_	(1)	(2)	(3)	(4)
Presidential Support (104th)	-3.9×10^{-5} (3.1×10^{-4})	-5.3×10^{-5} (3.0×10^{-4})		
Presidential Support (105th)	,	,	$4.0 \times 10^{-5} $ (3.6×10^{-4})	$1.8 \times 10^{-5} $ (3.7×10^{-4})
Republican (104th)	0.007 (0.014)	-0.020 (0.014)		
Republican (105th)	,	, ,	0.009 (0.017)	0.002 (0.012)
Two party 1996 GOP vote share	-0.056 (0.184)	0.120 (0.109)	0.077 (0.059)	0.111 (0.140)
Log(# of Blacks)	0.003 (0.004)	0.012 (0.007)	0.006 (0.004)	0.013 (0.008)
Constant	0.026 (0.127)	-0.107 (0.106)	(0.056)	-0.167 (0.117)
Adjusted R^2	0.021	0.308	0.019	0.217
Observations	318	318	230	230

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

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

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

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. 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 not distinguishable from zero. The specific states of the prior findings of DellaVigna and Kaplan (2007) – but the effect is not distinguishable from zero.

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

 $^{^{15}\}mathrm{We}$ use vote share in 1996 rather than 1992 to avoid possible complications due to redistricting.

 $^{^{16}}$ The appendix replicates the result using ideal point measures instead of presidential support scores.

¹⁷In evaluating the entry-decision of Fox News at the town level, DellaVigna and Kaplan (2007) find that Fox News is more likely to emerge in Republican towns, but that correlation disappears once they control

Despite the fact that the entry of Fox News is unrelated to these characteristics, we may still worry that omitted variables are driving both the entry decision of Fox News and the behavior of representatives. To explore this 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 1995-1996 and 1997-1998 and whether the emergence of Fox News in the year 1998 predicts changes in representatives behavior between 1993-1994 and 1995-1996. By definition, there cannot be an effect of Fox News in either case because Fox News does not exist in either period. As a result, if we find an effect this would suggest 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: Does Fox News Exposure in 1998 and 2000 Predict Ideal Points Changes Between 1993-1994 vs. 1995-1996 and 1995-1996 vs. 1997-1998?

	1993-94 vs. 1995-96	1995-96 vs. 1997-98
	(1)	(2)
Fox News 1998	-1.974	
	(30.426)	
No Fox News 1998 - Fox News 2000		11.033
		(15.513)
Republican	-11.106***	-15.222***
	(3.489)	(4.733)
Two party 1996 GOP vote share	3.925	-14.800
	(17.391)	(11.230)
Log(# of Blacks)	-0.355	-1.949
	(1.722)	(1.759)
Constant	0.116	37.484***
	(6.924)	(12.519)
R^2	0.254	0.504
Observations	259	151

Dependent Variable: Change in Nonunanimous Presidential Support

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

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

for features of the cable system and the county and district. They also find no relationship between the demographic characteristics of the towns that do and do not receive Fox News. Even so, it is difficult to compare the results given that we are interested in congressional districts and they were interested in towns.

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

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 1993-1994 and 1995-1996 in the column labelled "1993-94 vs. 1995-96" is both substantively and 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 1995-1996 and 1997-1998.

Given the null results in Tables 1, and 2, we can treat the entry of Fox News as exogenous conditional on included covariates and use a difference-in-differences design to examine the effect of Fox News on U.S. House members.

4 Results: 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 1995-96 compares to positions taken in 1997-98 and also 1999-2000. 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 over time or if there are changes in either the content of Fox News (Gasper 2011) or members' expectations about the possible effect of Fox News. So doing also explores whether members adopt a "wait-and-see" response and fail to react immediately.

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 (Abadie, Drukker, Herr and Imbens 2004); omitting those representatives with the largest position changes; using regional fixed effects rather than state fixed effects, and omitting fixed effects entirely).

1995-1996 Compared to 1997-1998

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 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 exists as of 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 reacted immediately to a change in the electoral environment of unknown magnitude and significance. It is unclear whether representatives would so hastily adjust the positions that were successful in the last election.

Table 3: Representative's Change in Presidential Support: 1995-96 - 1997-98

	Nonunanimous			Overall		
	(1)	(2)	(3)	(4)	(5)	(6)
Indicator Treatment: Fox News 1998	-0.400			-0.736		
	(1.959)			(2.076)		
Continuous Treatment: Fox News 1998	, ,	-3.658			-5.365	
		(11.628)			(9.431)	
High Treatment: Fox News 1998			-2.706			-2.785
			(4.069)			(4.074)
Low Treatment: Fox News 1998			1.313			1.168
			(1.774)			(1.763)
Republican	-17.674***	-17.757***	-17.682***	-8.738***	-8.850***	-8.738***
	(5.556)	(5.582)	(5.558)	(2.747)	(2.782)	(2.747)
Two party 1996 GOP vote share	1.776	1.655	1.190	0.834	0.640	0.242
	(14.864)	(21.368)	(17.771)	(14.239)	(16.112)	(38.646)
Log(# of Blacks)	-1.606	-1.615^{*}	-1.560	-1.329^*	-1.335**	-1.272^*
	(1.057)	(0.949)	(1.031)	(0.722)	(0.678)	(0.678)
Constant	21.993**	22.222**	21.776**	9.675^{*}	9.915^{*}	9.317^{*}
	(10.912)	(10.479)	(10.454)	(5.653)	(5.447)	(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 Boostrap, 1200 replications) within parentheses

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

Table 3 reveals that members from districts where Fox News begins 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, but the effects are of modest substantive significance regardless of how exposure to Fox News and the effect of Fox News is measured. Models 1 and 4 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 precisely; the 95% confidence intervals suggest that, at most, the magnitude of the effect of Fox News ranges between decreasing presidential support by 4.24% and increasing it 3.43%

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

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 range is more imprecisely estimated. Measuring exposure using an indicator for whether the number of subscribers is above or below the median number in 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 given that fewer cases are used to estimate each effect.

The 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. While the direction of the estimated effect is as would be anticipated and the magnitude of the estimated effect appears plausibly sized, the size of the standard errors suggests that we cannot be certain as the exact nature of the shift.

1997-1998 Compared to 1999-2000

The true test of media influence occurs in later Congresses once Fox News is more established - particularly given the effects that others have documented on voters in the 2000 election. Repeating the above analysis for those representatives who serve in both 1997-1998 (105th House) and 1999-2000 (106th House) explores what happens once Fox News becomes more established. To do so, we compare the actions of three groups of representatives: those without Fox News for both periods, those who lack Fox News as of the 1998 election but have it as of the 2000 election, and those that have Fox News 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: 1997-98 - 1999-2000

	Nonunanimous		Overall	
	(1)	(2)	(3)	(4)
Indicator Treatment: No Fox News 1998 - Fox News 2000	-4.090***		-2.325***	
	(1.287)		(0.731)	
Indicator Treatment: Fox News 1998 - Fox News 2000	-3.755**		-2.718**	
	(1.645)		(1.597)	
Continuous Treatment: No Fox News 1998 - Fox News 2000		-11.480***		-6.594***
		(3.612)		(2.540)
Continuous Treatment: Fox News 1998 - Fox News 2000		-9.282**		-7.531****
		(4.678)		(2.541)
Republican	14.363	14.335	2.676*	2.659
	(14.202)	(15.638)	(1.556)	(1.642)
Two party 1996 GOP vote share	16.240*	16.185*	4.812	4.764
	(8.871)	(9.460)	(8.107)	(8.674)
Log(# of Blacks)	1.945	2.238*	1.652	1.837^*
	(1.369)	(1.280)	(1.059)	(1.016)
Constant	-40.173**	-43.885**	-26.762^*	-29.075^*
	(17.815)	(17.272)	(15.224)	(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 Boostrap, 1200 replications) within parentheses

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

Several conclusions emerge from Table 4. Comparing members' behavior in 1997-1998 to 1999-2000 reveals that Fox News being broadcast in a district is related to a members' decreasing support for President Clinton 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 magnitude of the effect, if we look at change in support for President Clinton on non-unanimous votes that occurs once Fox News begins broadcasting in the district we find that the introduction of Fox News as of 1998 results in the support for President Clinton decreasing by 3.75% in the 1999-2000 Congress relative to similar members where Fox News does not enter, and the introduction of Fox News after 1998 but as of 2000 decreases the support by 4.09%. Using the log of the number of subscribers with exposure to Fox News suggests that a 1% increase in the number of subscribers results in a roughly 10% decrease in the support for President

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

Clinton (Model 2).¹⁸

The shift away from President Clinton that is evident among those that are newly exposed to Fox News as of the 2000 election (i.e., No Fox News 1998 - Fox News 2000) is indistinguishable from the shift occurring among those representatives with Fox News prior to both elections (i.e., Fox News 1998 - Fox News 2000). This suggests two possible interpretations: either 1) the effect of Fox News is largely due to the effect that occurs in 1999-2000 time period, or 2) members shift by about the same amount when Fox News enters their district and the shift persists (i.e., those that shift in 1997-1998 remain so during 1999-2000).

Considering the results of Table 3 together with 4 suggests that the former interpretation is more likely true. While the appendix reveals that more nuanced measures of position-taking behavior are able to detect a slight conservative shift between 1994-1995 and 1995-1996, 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 1997-1998 is much less than the effects of Fox News on members' behavior in 1999-2000. While 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, the results we report suggest that the effect of Fox News on member behavior was not immediate.

1995-1996 Compared to 1999-2000

Comparing how the support for President Clinton in 1995-1996 compares to the support in 1999-2000 among representatives serving in both the 104th and 106th US House estimates the net effect of Fox News over the entire time period. Because representatives must take positions in both 1995-1996 and in 1999-2000 to be included in this analysis, the sample of

¹⁸The different magnitude estimates reflects the fact that the indicator variable (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 and districts with more subscribers result in a larger impact on member behavior.

representatives is smaller (N=242) than earlier analyses. As in the prior comparisons, we compare the effects of three different levels of exposure to Fox News: some representatives were never exposed to Fox News in their district during this period, some had Fox News broadcasting at least since the 1998 midterm elections, and some representatives had Fox News in their district only as of the 2000 presidential election. Estimating the effect of Fox News for these three different groups using the various measures of Fox News exposure reveals effects that are substantively similar to the effects documented above for the separate time periods.

Table 5: Representative's Change in Presidential Support: 1995-96 - 1999-2000

	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 Boostrap, 1200 replications) within parentheses

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

We again find that regardless of how we measure exposure to Fox News or whether we measure support for President Clinton using unanimous votes or not, the effect of Fox News being broadcast in the district is to decrease a members' support for President Clinton by around 3% on average (Models 1 and 3 in Table 5). Using the log of the number of subscribers to allow for 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

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

in average presidential support (Models 2 and 4). These results suggest that regardless of whether we take the initial position to be the support for President Clinton in 1995-1996 (104th Congress) or 1995-1996 (105th Congress), members are more likely to shift away from supporting President Clinton during the 1999-2000 Congress is Fox News is being broadcast in their district than 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.

Table 6: Representative's Change in Presidential Support: 1995-96 - 1999-2000

	Nonunanimous		Overall		
	(Dems) (1)	(Reps) (2)	(Dems) (3)	(Reps) (4)	
No Fox News 1998 - Fox News 2000	-6.229*	-2.100*	-4.744	-1.540	
	(6.035)	(1.821)	(4.961)	(1.746)	
Fox News 1998 - Fox News 2000	-4.573	-1.967	-4.413	-2.127	
	(4.385)	(2.974)	(3.558)	(3.070)	
Two party 1996 GOP vote share	-0.468	10.174	-10.402	15.548	
	(20.284)	(12.932)	(15.415)	(14.361)	
Two party 1996 GOP vote share	-0.487	10.547	-10.406	14.886	
	(29.035)	(12.793)	(15.362)	(14.139)	
Log(# of Blacks)	1.259	0.824	1.050	1.142	
	(2.348)	(1.291)	(2.353)	(1.174)	
Constant	-24.559	-23.815	-21.173	-39.550*	
	(31.083)	(19.083)	(33.441)	(22.853)	
R^2	0.292	0.300	0.304	0.318	
Observations	114	128	114	128	

Dependent Variable: Change in Presidential Support

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

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

If we explore whether Republicans or Democrats are most affected, Table 6 provides some suggestive evidence that while both Democrats and Republicans are more likely to oppose President Clinton once Fox News begins to be broadcast in their district, the effects are slightly larger among Democrats. While the number of cases is limited, the effect of Fox News on the support for President Clinton is approximately 3-4% greater among Democrats. (The results of the appendix reveals qualitatively similar results using other measures of position taking (i.e., changes in ideal points) and other measures of exposure.)

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

Taken together, the results reported in Tables 3, 4, 5, and 6 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, and there is some suggestive evidence that Democrats are more affected than Republicans.

Besides being reasonably sized effects, the timing, magnitude, and nature of 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) find that towns exposed to Fox News were more likely to vote for Republicans in the 2000 election, and Hopkins and Ladd (2013) argue that the effect of Fox News occurs largely among independent and marginal Republican voters. Thus, the effect we find occurs at the same time that others have found an effect on voters, and the fact that Democrats are slightly more affected than Republicans suggests that they were likely concerned about the conservative shift that Fox News might have on independent voters.¹⁹

5 A Replacement Effect?

Having shown that the introduction of Fox News in their district appears to cause members to take slightly more conservative positions, we also explore whether the broadcast of Fox News in a district also influences who the district elects to the US House. That is, in addition to causing representatives to change the positions they take, does the introduction of Fox News also increase the probability of replacing the incumbent serving prior to the introduction of Fox News with a more conservative member?

Table 7 estimates the change in presidential support when comparing the support of the

¹⁹While the effect may also depend on the electoral security of the incumbent our ability to examine this possibility is limited due to the size of the available sample. Section 5 of the appendix reports the results of specifications that allow the effect to vary by the competitiveness of the district and while these effects are often in the expected direction, they are not statistically distinguishable from zero.

retiring or defeated incumbent from the Congress prior to the introduction of Fox News to the support of the newly elected representative who is elected following the introduction of Fox News for districts where Fox News is and is not broadcast.²⁰ While 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 33 replacements between 1997-1998 and 1999-2000 – the results reveal effects that are not statistically distinguishable from zero for either comparison.

Table 7: Replacement Effect of Fox News				
	1995-96 to 1997-98	1997-98 to 1999-2000		
	(1)	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$		
Fox News 1998	3.733			
	(6.553)			
No Fox News 1998 - Fox News 2000		5.630		
		(13.887)		
Fox News 1998 - Fox News 2000		-9.896		
		(11.997)		
Two party 1996 GOP vote share	-99.672	31.152		
	(72.653)	(25.667)		
Log(# of Blacks)	-3.140	5.238		
	(6.625)	(3.539)		
Constant	41.615	-59.651		
	(106.037)	(40.130)		
R^2	0.644	0.071		
Observations	50	33		

Dependent Variable: Change in Nonunanimous Presidential Support

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

The estimates are extremely imprecise given the small number of replacements that occur, but comparing the differences in the support for President Bill Clinton of incoming and outgoing representatives between 1995-96 and 1997-98 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 33 changes between

^{*} p < 0.1, ** p < 0.05, *** p < 0.01

²⁰There are no fixed effects in either specification given the number of replacements that occur.

1997-98 and 1999-00 using the emergence of Fox News in 2000 controlling for whether Fox News existed in 1998. The estimates suggest that the new representative actually more supportive of President that the outgoing representative, but the precision of the estimates means that both large positive and large negative effects cannot be ruled out – the 95% confidence interval for the shift between 1995-96 and 1997-98 ranges between -9.11% and 16.58% and the range is even larger for period estimated in Model 2.

Although speculative, the lack of a replacement effect may be attributable to both the relatively modest effects that a national news media may have on the electoral fortunes on an individual member, and perhaps also evidence for the effectiveness of the apparent anticipation effect we find in the prior section. Perhaps more members were not defeated because they correctly anticipated the effects and preempted the potential negative electoral consequences by shifting in a conservative direction. As a result, to the extent that Fox News affects the behavior of elected officials, it does not appear to be because of the effect that Fox News has on 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 the impact of the news media on the actions of elected officials is important for what it reveals about the possible influences on the behavior of reelection minded representatives and for what it suggests about the potential for the news media itself to shape the policy process.

How the news media matters for politics is an important debate, but it is a debate that has largely focused media's effects on the mass public. However, we presumably care about the media's effect on the mass public precisely because of the consequences that such effects have for the policy process. Rather than leave this linkage unexamined, we focus directly on the relationship between the media and elected officials and we explore whether the media's influence over the opinions and participation decisions of voters affects the behavior of elected officials as is implicitly assumed.

To determine the effect of the national news media on policy outcomes requires determining which representatives are elected and how the elected representatives behave once in office. If elites believe that the emergence of a new media outlet is consequential because of changes that it may have on the voters in their district or the pool of possible challengers, they may adjust their behavior to preempt a possible effect without waiting to see if the feared effects ever materialize. 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). It is unclear, however, whether changes in the media environment are sufficient to cause such a reaction and if some representatives are more affected than others.

We use the unique circumstances surrounding the emergence of the Fox News Channel in congressional districts between 1996 and 2000 to investigate 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 that elected officials become slightly less likely to take positions that are in agreement with President Clinton once Fox News enters their district. Moreover, the effect appears to take some time to emerge – consistent with prior research focusing on voters, shifts in members' support for President Clinton are most readily evident in 1999-2000, which is a few years after the launch of Fox News. The effect is also slightly larger among Democrats located to the left of Fox News in

the ideological spectrum.²¹

The unique circumstances surrounding Fox News provide the cleanest opportunity 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 and the Republicans were in control of the US House, it may be possible to interpret the effects we document 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, although there is certainly an effect of the media on the positions taken by elected officials, the overall magnitude of the effects we detect are relatively modest given that we are examining those circumstances where we might expect the largest effects.

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 uncover evidence that suggests that the national news media may indeed slightly affect the prospects for policy change by affecting the expectations of representatives and causing them to slightly

²¹If 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, perhaps other media – e.g., blogs, internet – or other channels – e.g., MSNBC – provided a counterweight. If voters are being push 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.

adjust the positions they take. The unique circumstances associated with the launch and spread of Fox News allow us to identify and document the existence and nature of media effects on elected officials relatively cleanly, but an obvious downside is that it is unclear how generalizable our results are to other media outlets and other time periods – perhaps especially given the constant evolution of the news media and the fact that the internet has dramatically increased the number of available outlets and the ability of voters to self-select into particular media outlets on-demand. Even so, our findings suggest that if representatives are aware of a new media outlet with the potential to reach a considerable portion of their audience, and if the new media is sufficiently distinctive in the media marketplace then it may have modest effects on the positions they take even if it does not affect the composition of members in Congress. The national news media can affect congressional behavior in modest ways, but that there are also likely important limits to the effects that are possible.

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