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The *Fox News* Factor: How the Spread of *Fox News* Affects Position Taking in Congress*

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Abstract

Scholars have argued that the media can affect voter opinions and turnout, but it is unclear whether elected officials might also be affected in policy consequential ways. We explore whether representatives to the US House take more conservative positions once Fox News begins broadcasting in their congressional district and whether more conservative representatives are more likely to be elected. We use the fact that the Fox News Channel was launched in October 1996 and it gradually spread across congressional districts in the United States in a manner that was unrelated to the ideology of the district and the incumbent representative to show that there is a modest effect on elected officials' positions. Comparing the change in behavior of representatives where Fox News does and does not emerge in otherwise similar districts reveals that members from districts where Fox News emerges become slightly more conservative and the effect is largest among Democrats. There is no evidence that Fox News affected which representatives were re-elected or replaced. As a result, the emergence of new media may have a slight effect on the prospects for policy change by affecting representatives' expectations and causing them to slightly adjust the positions that they take.

Does the broadcast media affect either the ideological positions that elected officials take or the likelihood that they are replaced? There is no doubt that the contemporary media environment is ideologically fragmented (e.g., Baum and Groeling 2008; Gentzkow and Shapiro 2011), and many have argued that messages and endorsements from the media affect mass attitudes (e.g., Kinder and Iyengar 1989; Druckman and Parkin 2005; DellaVigna and Kaplan 2007a; Groeling and Baum 2008; Gerber, Karlan and Bergan 2009; Ladd and Lenz 2009; Lenz 2009; Chiang and Knight 2011; Arceneaux, Johnson and Murphy 2012) and turnout (e.g., Gentzkow 2006), but it is less clear whether the media may also affect the incentives that elected officials have for taking particular ideological positions or the types of representatives that are elected.

Analyzing whether the media environment affects the actions of political elites is critically important and consequential because elected officials are the ones who create and amend the laws governing our society through their actions. An important reason why we presumably care about the media's effect on voters is because of how those changes may also affect the incentives of elected officials. Understanding how the media may affect the incentives of elected officials is important not only because what it reveals about the incentives that elected officials face when performing their jobs, but also because of what it may also suggest about the role and influence of the media itself.

Understanding how a changing media environment may affect the behavior of elected officials is critically important for understanding the possible policy consequences, but also notoriously difficult. Whereas experiments, "natural experiments," and surveys can be used to try to assess the media's effect of the mass public, we are obviously more limited in the methods we can use to study the media's effect on elected officials. As a consequence, despite the obvious importance of the question for better understanding both the news media and elected officials, we do not really know much about how the news media affects the actions of elected officials.

To examine the effect of the media on elite behavior, we take advantage of a unique

circumstance that allow us to evaluate how the plausibly exogenous spread of Fox News across congressional districts between 1996 and 2000 affected which representatives were elected to the US House and the positions that were taken by representatives that were reelected.[1] Prior scholars have used the entry and exit of media outlets to assess the media's effect on voters (e.g., Gentzkow 2006; DellaVigna and Kaplan 2007a; DellaVigna and Kaplan 2007b; Gentzkow, Shapiro and Sinkinson 2011; Hopkins and Ladd 2012), but we explore how the spread of Fox News across congressional districts affects the elected officials responsible for policymaking.

Policy change can occur either because representatives adopt new policy positions, or because incumbents are replaced by members with different policy preferences (Stimson, MacKuen and Erikson 1995). We therefore explore whether the emergence and spread of a new news organization with a relatively clear, and distinct ideological perspective – the Fox News Channel – affects either the positions taken by representatives serving in the US House, or which members are elected. Once the Fox News Channel begins broadcasting in a representative's district, does the representative change the positions they take on issues before the US House, and is it more likely that incumbents are replaced by more conservative members either through electoral defeats or voluntary retirements?

We show that representatives from districts where Fox News entered became slightly more conservative relative to their ideological position on issues before the US House in 1995-1996. We estimate this effect using a difference-in-differences identification strategy that compares the change we observe among such representatives to the change we observe among representatives with districts untouched by Fox News. Consistent with findings that

[1]We 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).

the effect of Fox News is concentrated largely among independents and Republicans (Hopkins and Ladd 2012), only Democrats appear to become more conservative in response. Moreover, the magnitude of the shift is related to the length of time that Fox News is broadcast in the district. However, there is no evidence that newly elected members from districts receiving Fox News were any more conservative than the newly elected members for those districts that did not.

We establish this finding in several steps. Section 1 provides reasons why the entry of Fox News may affect elected officials' behavior and justifies our focus on Fox News. Section 2 describes the data we use to measure the emergence and 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 the required assumptions. 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.

1 Hypothesizing the News Media's Effect on Representatives

A robust literature argues that mass media affects the behaviors and opinions of the mass public. In addition to exposing citizens to diverse perspectives (e.g., Mutz and Martin 2001), many scholars have argued that media coverage can affect citizens' opinions (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) and their likelihood of participating in the political process.[2]

Despite the plethora of studies focusing on how the media may affect voters, only a handful of studies explore how the media environment may also affect the political elites

[2]See Bartels 1993 on some of the difficulties of estimating media effects.

who are responsible for actual policy making. Bartels (1996), for example, looks at the whether the national policy agenda leads or follows press coverage and finds some of each. Arnold (2004) nicely explores the various ways that how local newspapers cover their local representatives, but he can only hint at what the possible effects of the various types of coverage might be on the elites. Prior (2007) argues that local media coverage may have increased the electoral safety of incumbents (but see Ansolabehere, Snowberg and Snyder 2004), 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 (2011) argues that the opinions of "coalition merchants" which are reported by news outlets and other publications 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.

For the media to change representatives' behavior, it must change the representatives' personal policy preferences or the incentives they have for taking particular policy positions. Because it seems unlikely that the personal preferences of elected representatives would change in response to a new media outlet, any effects are likely due to how the introduction of the new media changes the electoral environment.[3]

To the extent that legislators' electoral incentives are affected by a new national media outlet, it is presumably due to the effect that the outlet has on changing the opinions and behavior of likely voters in the district. Suggestive of this possibility, many studies demonstrate an apparent effect of media coverage on voter opinions using experiments (e.g., Kinder and Iyengar 1989; Druckman and Parkin 2005; Groeling and Baum 2008) and "natural" experiments (Gentzkow 2006; Barabas and Jerit 2009; Gerber, Karlan and Bergan 2009; Hainmueller and Kern 2009; Ladd and Lenz 2009; Lenz 2009) and surveys (e.g., Kull,

[3]It is exceptionally unlikely that an effect is due to individual coverage of the particular representatives. Although local newspapers may devote coverage to how representatives vote on particular bills and the actions that they take because the actions are of interest to the local readership (e.g., Arnold 2004), cable news programs seeking a national audience have no incentive to cover individual legislators unless they are a party leader, a sponsor of a prominent piece of legislation or involved in a scandal.

Ramsay and Lewis 2003).[4] If the framing of news and events can affect citizens' opinions as these studies suggest, it is possible that a media outlet with a particular and consistent perspective can change the electoral environment by changing voter opinions. Consistent with this possibility, and directly relevant to our study, DellaVigna and Kaplan (2007a) 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.

Given the low level of exposure and the relatively modest effects on voters, however, not everyone is convinced that media effects are likely to be consequential. For example, according to Nielsen Media Research, in 2010, 41.1 million viewers watched at at least 60 minutes of Fox News Channel programming in an average month. Given that there are an estimated 235.8 million individuals of voting age, this means that only about 17% of the voting age public chose to watch the Fox News Channel at least 60 minutes in the average month. For the period we examine – 1998 and 2000 – the fraction is considerably smaller. Moreover, those who do choose to consume the news media are likely to self-select (Prior 2007) and select sources that are similar to their existing views (Stroud 2008). Perhaps because of related reasons, research exploring the entry and exit of newspapers between 1869 and 2004 finds almost no evidence of an effect on voters' behavior (Gentzkow, Shapiro and Sinkinson 2011).

Even if exposure is low and scholars disagree about whether the media affects voters, there is still a reason to think that the emergence of a new media outlet may affect the behavior of re-election minded representatives. We typically think of re-election focused incumbents as "running scared" and actively anticipating and preempting possible electoral surprises through their actions (e.g., Jacobson 1987; Arnold 1990; Arnold 1993). Rather than waiting for evidence of an effect to materialize, legislators are often thought to anticipate the likely

[4]Inferences based on surveys are complicated by possible selective exposure. Stroud (2008), for example, shows that Fox News viewers are more likely to be conservative and Feldman et. a. (2012) show that Fox News viewers are less likely to accept the possibility of man-made global warning.

effects to minimize the potential electoral harms (see, for example, Stimson, Mackuen and Erikson 1995). 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). As a result, all that is required for a media outlet to affect representative position-taking is that the representative *believes* that the opinions and behaviors of their constituents may change in response to the new media outlet (perhaps because of the well-documented framing effects noted above) or that the challenger in the next election will be more likely to gain the support of swing voters in the district. If a representative fears that her constituency's opinion may change because of a change in the electoral environment – in our case the entry of a new television media outlet – she may adjust her policy positions to preempt the possible negative electoral consequences. Consistent with this possibility, Stratmann (2000), Kousser, Lewis and Masket (2007), and Bullock and Clinton (2011) all find evidence consistent with the claim that representatives adapt to changes in the electoral environment because of rational anticipation.

There is ample evidence that representatives recognized the importance of television and the information it conveyed to their constituents (see, for example, Sellers 2000). The Speaker of the House during timeframe we examine, Rep. Newt Gingrich certainly recognized the importance of television based on his early work 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." More specific to the possible impact and importance 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). To the extent that members recognized the potential power of television and worried about the potential impact it might have on the opinions of their constituents, it follows that they might adjust their behavior in response.

The hypothesis we explore is whether election motivated members change their behavior in response to the entry of a new media outlet in their district. The incentive to change may occur either because of direct cues that representatives receive from voters or because representatives act in anticipation of a possible effect. While we think the latter is more likely, we are agnostic about the exact mechanism, and we focus on estimating the net effect of the possible mechanisms on elected officials.[5] Expectations of a null effect are driven by skepticism over whether the low level of exposure to the new entrant in the media environment produces enough of an incentive for members to adjust their behavior.

Why Study Fox News?

We can further refine the hypothesized effect because of the distinctiveness of the media outlet that we study. There are two reasons for studying the emergence and spread of the Fox News Channel rather than an alternative media outlet like CNN or MSNBC.[6] First, because the programming on Fox News is ideologically distinct relative to the programming on other televised outlets it is easiest to form expectations about the likely effects of its

[5]Trying to disentangle the effects that may be due to direct cues versus elite anticipation seems exceptionally difficult, if not impossible. Moreover, it is of secondary importance to demonstrating the existence of an effect.

[6]CNN 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.

emergence. Second, because it spread to congressional districts across the United States in a manner that is unrelated to the ideology of the districts and representatives, we can treat the emergence of Fox News as exogenous to the constituency-representative relationship that we are interested in.

Studies of media effects reveal the largest effects when the frames being employed are distinctive and consistent. The largest effects on elite behavior will presumably result from outlets with programs that are ideologically distinct relative to existing outlets. From the perspective of assessing media effects, it is hardest to identify the effect of a new liberal media outlet if every other existing news outlet is liberal because there is nothing distinctive about the type of opinion change that we should expect because of the new outlet. In contrast, if the frames used by the new network are ideologically distinct, the expected direction of the effects are clearer and they are more likely to be self-evident.[7] This is true for both the analyst and the representative who is trying to anticipate the likely effects of the new media outlet on constituency opinion.

Scholars measure the ideological content of media coverage in many ways (e.g., Groseclose and Milyo 2005; Gentzkow and Shapiro 2006; Groeling 2008), but the measures generally agree that: 1) there are comparatively fewer television media outlets that are measured to be conservative than there are that are measured to be liberal, and 2) programs on the Fox News Channel are generally more conservative than the average broadcast news program. For example, the measure of Groseclose and Milyo (2005) attempts to locate the ideology of media outlets on the 0 to 100 scale used by the (liberal) interest group Americans for Democratic Action based on the ideology of the commentators used by the program. According to this measure, *Fox News' Special Report with Brit Hume* between June 1998 and July 2003 is estimated to have an average ADA score of 39.7. Only the *Washington Times* between

[7]For example, if all existing media outlets are "liberal," adding a new "conservative" outlet will presumably have the effect of either shifting opinions in a conservative direction or giving voice to a conservative perspective that may mobilize conservative voters. In contrast, it is unclear how the circumstances would change by adding another "liberal" outlet.

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. While it is possible that this score is distorted because of the possibility that Fox News started out more moderate and became conservative over time, Gasper (2011) shows that allowing Groseclose and Milyo's (2005) measure of media bias to change over time does not notably change these characterizations of the Fox News Channel; Fox News does becomes more conservative between 1996 and 2002, but *Fox's Special Report with Brit Hume* also starts out more conservative than any of the broadcast newscasts.

Because Fox News is uniquely situated among the other cable news channels in terms of adopting a conservative perspective, we get the cleanest hypothesized effect when investigated the effect of Fox News – the introduction of Fox News in congressional districts should cause members to adjust their positions in a more conservative direction. Moreover, it is likely the case that the effect is largest on representatives that are more liberal than Fox News – members who are conservative are presumably already taking positions that are consistent with the frames used by Fox News.[8] As a result, to the extent that Fox News has an effect on the positions that representatives take on issues in the US House, the effect may be larger among Democrats wary of the effect that Fox News has on independents and moderates who are susceptible to changing their opinions because of the newly available frames provided by Fox News.

A second reason for focusing on Fox News relates to the manner in which it gradually spread to congressional districts in the United States. When Fox News was launched in October of 1996, it was present in only 20% of U.S. towns.[9] In contrast, nearly everyone could receive the broadcast news at the time and only 4% of congressional districts lacked access to CNN as of 1998. We therefore have an instance where Fox News is present in

[8]Focusing on the emergence of MSNBC or CNN is more difficult because the programming being offered during the time period we examine is not ideological distinct from the other dominant media outlets according to the various measures and it is therefore unclear how members would change their behavior in response.

[9]While it is true that it was also carried on satellite television, we consider the implications of this below.

only some districts, and we can track the spread of Fox News across districts over time. Assuming some conditions are satisfied, we can therefore use the fact that Fox News was not immediately present in all congressional districts to see whether the emergence of Fox News in a district appears to cause the incumbent representative to become more conservative than representatives from similar districts that lack Fox News.

2 Measuring The Spread of Fox News

Fox News launched in October of 1996 so there is no exposure to Fox News prior to the 1996 election. To measure whether Fox News is being broadcast in a congressional district as of the 1998 and 2000 elections, we build upon the impressive data collected by DellaVigna and Kaplan (2007a). DellaVigna and Kaplan (2007a) explore whether the spread of Fox News to towns across the United States affects the extent to which the towns voted 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 per Town with access to Fox News and they analyze the electoral results of 9,256 towns in 28 states.

We extend the data of DellaVigna and Kaplan (2007a) in several ways. Because our unit of analysis is the behavior of Congressman j belonging to district i, we need to locate towns in congressional districts. DellaVigna and Kaplan (2007a) locate some towns within congressional districts, but there were 10,648 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 10,648 towns.[10] This not only increases the amount of district level information that we have for the states analyzed by DellaVigna and Kaplan (2007a), but it also allows us to extend the analysis to districts in Florida, Delaware, Indiana, Illinois, Oklahoma, Oregon, and Maryland. All told, we have data on whether Fox News is present in 19,904 towns in 35 states for the years 1998 and

[10]For towns that are located in multiple congressional districts, we assume that residents with Fox News access are uniformly distributed across districts.

2000.

We focus on these 35 states because these are the states that prior scholars have focused on when estimating an effect of Fox News on voters (DellaVigna and Kaplan 2007a).[11] Given evidence of a voter-level effects, if there is an effect of Fox News on elected officials we should therefore be most likely to find it in these states. Conducting a robustness checks reveals that the omitted states do not affect the results. In particular, the results in the Appendix show that if bound the possible effect by assuming that none of the 15 excluded states have Fox News – an extreme assumption that likely understates the true incidence of Fox News and therefore underestimates the difference between those that do and do not have Fox News – as well as assume that all of the 15 excluded states have Fox News, the estimated effects are qualitatively unchanged.

Because the data on whether a town's cable system carries Fox News is at the town level we aggregate the town-level data by congressional district. We measure Fox News exposure using an indicator variable for whether a cable system in the district broadcasts Fox News or not. This reflects the fact that while it is relatively easy for a representative to know whether Fox News has begun broadcasting in their district or not, more nuanced details such as the number of subscribers to each cable system in their district and the audience share of particular programs are harder to come by. As such, it is possible that representatives respond to whether or not Fox News is present in their district.[12]

Figure 1 indicates the congressional districts where Fox News existed in 1998 (dark blue) or not (light blue). The 15 states where we are missing information on cable systems are left

[11] As 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).

[12] Analysis in the Appendix reveals that using alternative measures of exposure yield substantively similar effects. For example, it may be that representatives are more closely attuned to the particulars of the cable television business in their district and that what matters for predicting the extent to which representatives change their behavior is not simply whether Fox News is present in the district, but also the number of cable subscribers in the district with access to Fox News. If so, it is possible that as the number of subscribers increases, so too does the extent to which representatives adjust their positions. Or, the impact many be a non-linear function of the number of subscribers – representatives may only adjust their positions if the number of subscribers is "sufficiently" high.

white.

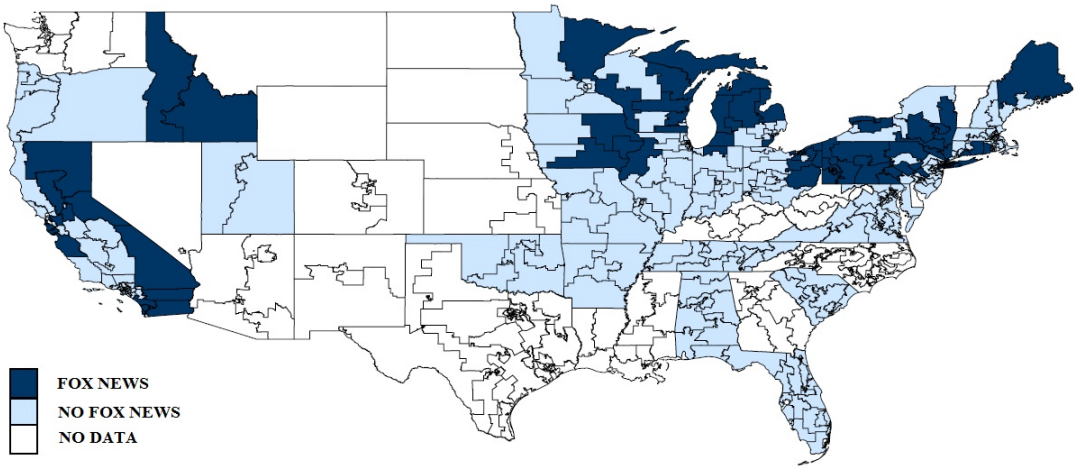

Figure 1: The *Fox News* "Treatment". 1998

Figure 1 reveals that Fox News was first launched in some of the the largest media markets, but not exclusively so (e.g., Idaho). Although it is had to infer much from Figure 1 about the characteristics of the districts where Fox News appears, in the section that follows we compare the characteristics of the districts and representatives that do and do not receive Fox News. As of the 1998 election, the spread of Fox News was relatively concentrated in a few states; Fox News was being broadcast in 15 of the 35 states for which we have data.

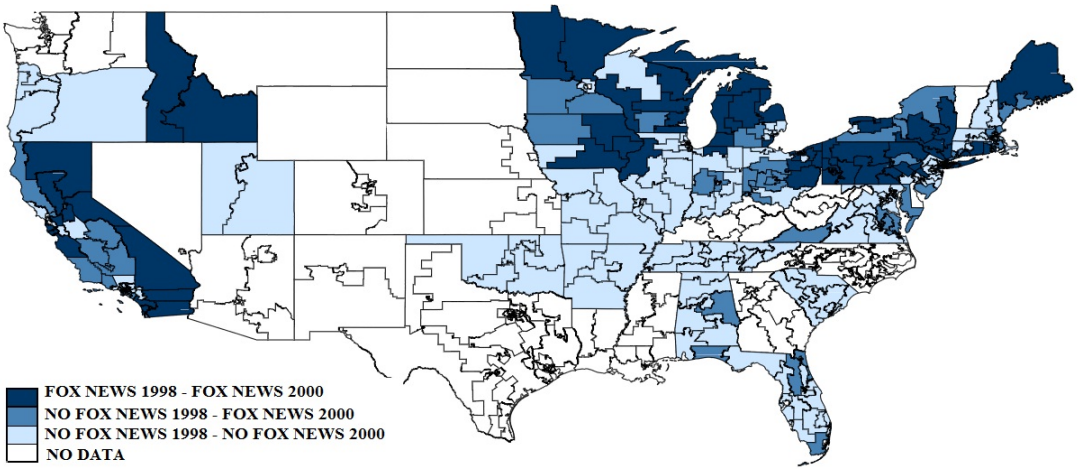

Figure 2: The *Fox News* "Treatment". 2000

As of the 2000 election, exposure to Fox News had spread, creating several different levels of exposure – those who lacked Fox News for the entire period (light blue), those who had Fox News since at least the 1998 election (dark blue), and those that lacked Fox News as of the 1998 election, but had it as of the 2000 election. Figure 2 indicates which districts belong to each possibility. Compared to the distribution of Fox News in 1998, coverage extended to congressional districts in 7 more states.

3 Identification Strategy

Our primary interest is whether the spread of Fox News Channel affects either the ideological positions taken by representatives or the set of representatives that are elected to the US House. To do so, we take advantage of the fact that the Fox News Channel spread gradually across congressional districts and the broadcast of Fox News in a congressional district is unrelated to the ideological characteristics of both the congressional district and the incumbent representative. These facts make the entry of Fox News a unique event that, if certain conditions are met, 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 existing differences are likely attributable to the entry of Fox News.

We estimate the effect of Fox News using a so-called "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 that is arguably attributable to Fox News we compare how the changes in ideological positions that are taken by House members in districts where Fox News has entered compares to the difference in ideological positions of House members from similar districts where Fox News did not enter. Others have used a similar strategy to explore the effect of the media on the mass public, but none have explored the effect on elected officials at the congressional district level. The most closely related work explores the effect of the entry of Fox News on voting behavior at the

town level (DellaVigna and Kaplan (2007a)), but Gentzkow (2006) measure 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.

To measure the positions taken by representatives in the US House, we use an ideal point estimated using all of the roll call votes that are taken. Characterizing representatives' ideological positions using an aggregate voting measure is common practice (e.g., McCarty, Poole and Rosenthal 2006), and it minimizes possible agenda effects by effectively averaging over the issues being voted on across the Congressional sessions. To measure representatives' ideological positions, we use the Bayesian quadratic model of Clinton, Jackman, and Rivers (2004) as implemented by Jackman (2011).

Measuring changes in ideological positions requires fixing the scale of the recovered space over time. To do so we fix the ideological positions of two members who are unlikely to experience an incentive to change their ideological positions between 1994 and 2000. In particular, we assume that the ideological distance between the positions that Rep. Maxine Waters (D, CA-35) and Rep. Curt Weldon (R, PA-7) take on roll call votes in Congress is unchanged between 1994 and 2000. Both Waters and Weldon are from districts where Fox News never entered during the years we examine, and their districts did not undergo any notable changes. Moreover, consistent with being electorally secure and not needing to adjust their positions, Waters and Weldon were both routinely re-elected by sizable and stable margins over the examined timespan. (Between 1994 and 2002, Waters received between 78% and 89% of the vote, and Weldon received between 65% and 72% of the vote.)[13]

[13]Deriving temporally comparable ideal points requires estimating ideal points for each Congress of interest – the 104th (1995-1996), the 105th (1997-1998), and the 106h (1999-2000) – assuming that only the ideal points of Weldon and Waters are fixed. To do so we analyze the roll calls from the 104th (1995-1996), the 105th (1997-1998), the 106th (1999-2000), and the 107th (2001-2002) Congresses separately using IDEAL 1.03 and the normalization assumption that the ideal points are distributed mean 0 with variance 1. We then rescale the ideal points of the 105th, 106th and 107th Congress such that the ideal point of Waters and Weldon are identical to their ideal points in the 104th Congress. (Alternatively, we could estimate the ideal points concurrently treating every legislator in each Congress as a "new" legislator but assigning a fixed ideal point across time to Weldon and Waters). (Although the estimates are measured with error, because

If t_1 denotes the Congress where Fox News exists and t_0 is a Congress from before 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 ideal points before and after the introduction of Fox News. When estimating possible anticipation effects, i refers to representatives who serve both before and after the introduction of Fox News. When estimating replacement effects, however, the unit of analysis is the congressional district and we compare the ideal point of the outgoing representative of district i to the ideal point of the newly elected member.

A potential limitation of our design is that we cannot estimate any systematic effects affecting all representatives. If, for example, Fox News affects the issues that are pursued on the political 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 (e.g., Tan and Weaver 2009). We can only estimate those effects of Fox News that affect only those representatives where Fox News is broadcast in their district. While the possible agenda-level and representative level effects may be related, we can only examine the effects of Fox News at the representative level.[14]

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

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

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

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

we are interesting in explaining the variation in the differences between ideal points and there is no reason to think that the (mean 0) errors are systematic and they are econometrically irrelevant.) Every representative besides Waters and Weldon are allowed to change the positions they take and we assume nothing about the nature of the possible change. Put differently, we estimate a separate ideal point for every representative in every House and we assume nothing about the relationship between these estimated ideal points.

[14]Identifying the agenda-level effect is obviously very difficult because there is no control group and estimating what the agenda would look like in the absence of the Fox News is a difficult counterfactual to evaluate.

This identification strategy arguably 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, time-invariant influences (e.g., the number of urban settings within a district) cannot cause a behavioral change because such influences are present both before and after the treatment. 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 as changing economic conditions or the political agenda changes before and after the treatment, the change presumably affects all representatives.[15] Because every representative is affected, the change in the positions of the control group provides a measure of the what the effect of the time-varying pressures might be. Comparing how the change observed in the treatment group compares to the amount of change attributed to time-varying aspects (as revealed in the change evident within the control group) reveals the effect that is attributable to the treatment.

One slight complication is the fact that Fox News was also available to satellite television subscribers. However, to the extent that residents in every district receive satellite television with access to Fox News, the effect of Fox News through satellite television affects the incentives for representatives that both do and do not have a cable system broadcasting Fox News in their district. Because both $x_{i,t_1}(T_i = 1)$ and $x_{i,t_1}(T_i = 0)$ are affected, the difference-in-differences estimate of Fox News (τ) recovers the effect of Fox News as delivered through cable television. (Moreover, the number of cable television subscribers dwarfs the number of satellite television subscribers.)

To identify the effect of the introduction of Fox News (τ) two conditions have to be met: 1) overlap in the distribution of the characteristics among treated and non-treated, and 2) ignorabilty (i.e., exogeneity) of the treatment.

The overlap assumption simply requires that the observations in the treatment and con-

[15] What is important is that the time-varying change does not exclusively affect only those who do or do not receive the treatment.

trol groups that are being compared are not so dissimilar so as to prevent a meaningful comparison. In other words, the districts in the treatment and control groups – i.e., the districts that do and do not receive Fox News – must be sufficiently similar so that the probability of being treated must be positive conditional on a set of characteristics.[16] We can explore the plausibility of this assumption by verifying that the districts being compared are sufficiently similar in terms of their average characteristics.

Table (1) describes the average district in the treatment and control group and tests for whether the differences are statistically distinguishable.[17]

[TABLE (1) ABOUT HERE]

Table 1 reveals that districts that get Fox News are no more likely to support Republican presidential candidates, or have a Republican representative, and there is no difference in the average ideology of the elected representative. The only real difference is that there are more blacks in districts that receive Fox News. Given that we would not expect the likelihood of taking conservative positions to increase as the number of black citizens in a district increases, this slight imbalance does not affect our ability to draw conclusions and we control for this characteristic in the analyses that follow.

The more difficult condition that is required to identify the effect of Fox News using a difference-in-differences design is the requirement that the treatment be exogenous conditional on included covariates. If so, the assignment of the treatment can be ignored and considered to be random. In our case, what this requires is that Fox News did not enter in districts where the representative was more likely to change their position in the absence of

[16] If the districts that do and do not receive Fox News are completely dissimilar, it is impossible to determine whether observable differences are attributable to Fox News or the other district differences.

[17] Although slightly harder to interpret, we use logged population counts and logged population instead of proportions to limit the influence of outliers. If we use percentages instead, we observe outliers in: % urban population, % aged 65+, % blacks, and % foreign born. Because using logs (and controlling for logged population of the district) is equivalent to controlling for percentages and it avoids the complications caused by outliers because of the log transformation, we use logged counts. This is also consistent with the specification that DellaVigna and Kaplan (2007a) use in their analysis of Fox News on voters.

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 there are several investigations we can conduct to reassure us that the entry of Fox News was likely unrelated to these possibilities.

First, 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 also again at time $t = 2000$) as a function of the ideology of the district and the representative to see if Fox News targeted specific districts because of: the number of conservatives in the districts or the ideological position of the district's representative. Note that because we are looking at the change in ideology, concerns about exogeneity arise if Fox News is more likely to enter in districts where representatives are more likely to change their positions and adopt more conservative positions even if Fox News did not enter. We therefore estimate:

$$E_{i,t}^{FOX} = \beta_0 + \beta_1 x_{i,t-1} + \beta_2 VOTE_{i,t_0} + \beta_3 REP_{i,t-1} + \Omega \boldsymbol{X}_{i,t_0} + e_i \tag{3}$$

Where:

- $x_{i,t-1}$ represents the ideological positions of a House member at district i the session before 1998 or 2000.
- $VOTE_{i,t_0}$ is the two-party presidential vote share for the Republicans at district i ($t_0 = 1996$).[18]
- $REP_{i,t-1}$ is equal to 1 if the party affiliation of the representative of district i (the session before 1998 or 2000) is Republican.
- $\boldsymbol{X}_{i,t_0}$ is a set of covariates at the district level in 1996 (e.g., % blacks, income, unemployment, etc.)

[18] We use vote share in 1996 rather than 1992 to avoid possible complications due to redistricting.

[TABLE (2) ABOUT HERE]

Table (2) reveals that the entry of Fox News was not driven by observable ideological factors in either 1998 or 2000. In none of the specifications is the entry of Fox News in the district statistically related to the ideological position of the current incumbent, the party of the incumbent, or the two-party presidential vote in the district for the Republican presidential candidate. The measures that are correlated with the entry of Fox News in Table 2 are the Number of Blacks and Total Population in a district (columns (1) and (3)). However, even these effects disappear when state level fixed effects are added. The fact that the spread of Fox News across congressional districts is uncorrelated with almost every district-level measure available means that in the analysis that follows we can treat the entry and spread of Fox News across congressional districts as exogenous when appropriate controls are used.

Despite the lack of statistical relationships in Table 2, it may still be the case that an omitted variable is 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 we predict whether changes in representatives behavior between 1995-1996 and 1997-1998 are predicted by the emergence of Fox News in the year 2000, and whether changes in representatives behavior between 1993-1994 and 1995-1996 are predicted by the emergence of Fox News in the year 1998. By definition, there can be no effect of Fox News in these comparisons because Fox News does not exist in either period. As a result, if we find an effect it suggests that there are unmeasured aspects that are related to both the emergence of Fox News and the proclivity of a representative to take more conservative positions. Finding an effect of Fox News in such a regression would therefore suggest that we cannot reliably estimate the effect of Fox News because of the presence of unmeasured factors.

[TABLE (3) ABOUT HERE]

Table 3 reveals that there is no evidence of omitted characteristics that are related to both the entry of Fox News and the proclivity of members to change their positions in the US House. The effect of *Fox News 1998* on the change in ideal points between 1993-1994 and 1995-1996 in the column labelled "103-104" is zero both substantively and statistically. Whether Fox News enters in 1998 is therefore unrelated to whether the representative is likely to change their behavior in earlier periods. The results reported in the column labelled "104-105" reveals that the emergence of Fox News in 2000 is similarly uncorrelated with changes in positions taken by representatives between 1995-1996 and 1997-1998.

Overall, Tables (1), (2) and (3) provide support for the two main conditions that are required to identify the effect of Fox News using a difference-in-differences design. We are therefore in good shape to examine the effect of Fox News on U.S. House members. We begin the analysis by considering possible anticipation effects before moving to consider the possibility that the emergence of Fox News affects which representatives are elected.

4 Results: An Anticipation Effect?

To begin, we consider whether the legislators who are elected both before and after the emergence of Fox News are more likely to take more conservative positions if Fox News begins broadcasting in their district. This involves estimating how positions representatives take in 1995-96 prior to the emergence of Fox News compares to the positions they take in 1997-98, and 1999-2000. Because members' positions may change for many reasons, we compare the average change for those that do and do not receive Fox News in their district. Whereas legislators who do not receive Fox News will be affected by systematic changes in the political and economic situations, those with Fox News will be affected by those

same pressures plus the additional effects that result from the introduction of Fox News.[19] Comparing the difference of this difference allows us to interpret the additional change we detect among those who receive Fox News relative to those who did not as the effect of Fox News in the district.

To illustrate the change of interest, Figure 3 plots the distribution of the ideal point changes between 1995-96 and 1997-99 (left) and between 1995-96 and 1999-2000 (right) by whether Fox News was being broadcast in the district as of the 1998 midterm election. The grey density is the density for districts with Fox News in the latter period (Fox News was not present in any districts in 1995-1996).[20]

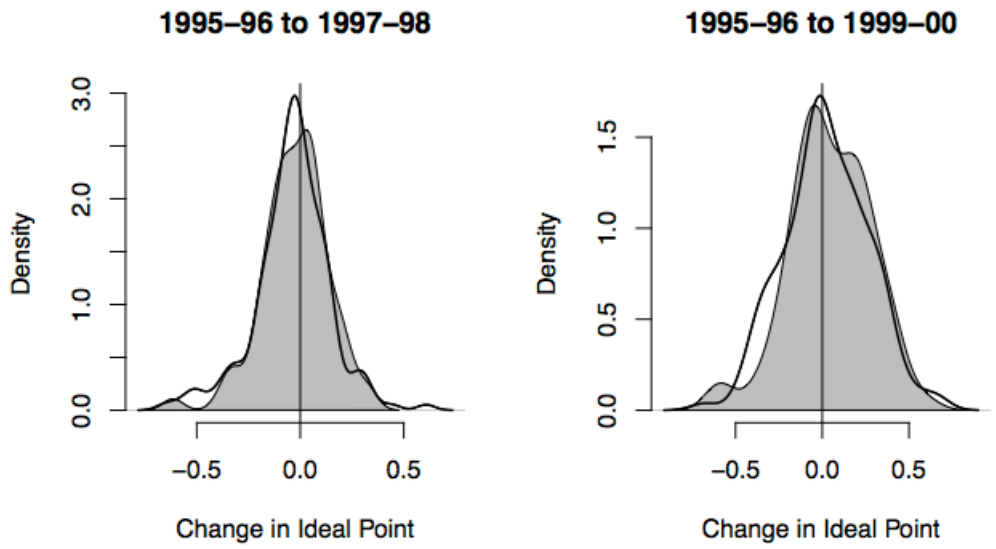

Figure 3: Change in Ideal Points by Fox News Presence: The figure plots the change in ideal points between 1995-96 and 1997-99 (left) and between 1995-96 and 1999-2000 (right) depending on whether Fox News was present in 1998 for the set of representatives who serve in both Houses.

Figure 3 reveals that if we examine the distribution of change for legislators from districts that are and are not exposed to Fox News, there is a slight conservative shift even without

[19]Note that systematic shocks that uniformly affect all members will be accounted for when the ideal points are normalized so as to maintain the distance between Waters and Weldon.

[20]By way of context, the average change in ideal points between the positions taken in 1995-1996 and those taken in 1997-1998 by representatives serving in both Congresses is -0.036 (with a standard deviation of .175); the average change between 1995-1996 and 1999-2000 is 0.032 (with a standard deviation of .237).

controlling for possible confounding influences.[21] To more precisely estimate the effect of the introduction Fox News in the district and to control for the slight differences between the districts that do and do not receive Fox News, we estimate the effect controlling for the characteristics of districts and representatives.

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. To determine whether members change the positions they took in response to the introduction of Fox News in their district, we compare how the ideal point based on votes cast in 1995-1996 (i.e., the 104th House) compares to the same representatives' voting behavior in 1997-1998 (105th House). To eliminate possible differences between the groups (although Table 1 reveals that there are very few such differences to begin with) and increase the precision of our estimate, 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 district demographic characteristics). To control for possible omitted characteristics that vary by state (e.g., political environment, structure of the media market, etc.) we also include state fixed effects when possible.[22]

Table 4 reveals that the emergence of Fox News in a district as of the 1998 midterm election may have caused members to become more conservative.

[TABLE (4) ABOUT HERE]

Estimating the effect of Fox News using using OLS controlling for possible confounding

[21]The average change is .01 (with a 95% confidence interval of (-.03,.05)) for those that do not receive Fox News compared to an average change of .08 (with a 96% confidence interval of (.03,.14)) for those that do.

[22]The Appendix reveals that using regional effects based on the Census definition does not change the substantive results; the results are reported in the Appendix.

effects (and state level fixed effects) with data from every representative who serves in the two Houses being compared reveals that those with Fox News in their district become 0.046 more conservative than those that do not. Estimating the effect using nearest neighbor matching (Abadie, Drukker, Herr and Imbens 2004) and the same covariates yields a substantive similar conservative shift of 0.040.

As section 1 explains, the effect of Fox News may depend on the ideology of the representative.[23] Because the programming on Fox News more closely reflects the perspectives of Republican representatives according to various measures (e.g., Groseclose and Milyo 1995), the positions of Republican representatives likely already reflect the perspective of Fox News. In contrast, the frames and perspective of Fox News likely differs more from the positions of Democrats in the US House. If members fear the potential influence of Fox News, because Fox News presumably shifts voters away from Democrats, we would expect larger anticipatory shifts by Democrats.[24]

Consistent with the possibility of differential effects, Table 4 reveals that the conservative shift measured when using members from both parties is largely attributable to Democrats becoming more conservative. Whereas Republicans are also estimated to become more conservative, the effect is not statistically distinguishable from 0 (Republicans become 0.025 more conservative with a standard error of 0.035). In contrast, Democrats exposed to Fox News become 0.067 more conservative relative to similar Democrats who are not.

To provide some context for interpreting this shift, the House median ideal point becomes 0.19 more liberal between 1995-1996 and 1997-1998 (the mean ideal point for the House in each of the the two periods changes by .127). Thus, at a time when the overall House is

[23]It is also possible that the effect might depend on the ideology of the district. Perhaps representatives from districts that are closely ideological divided are most attentive to the possible effects of Fox News because of the ideological split in the district. There is no evidence of this possibility. Models reported in the Appendix estimate the effect for representatives for districts that vary in the extent to which they vote for the presidential candidate from the opposing party and reveals no statistically distinguishable effects. Put differently, the differential effect is correlated with party, but not with how competitive the district is.

[24]Because Fox News may be more liberal than some representatives and more conservative than others, the effect depends on exactly where Fox News is located among the Republican representatives.

shifting away from the more conservative positions taken during the 104th House to more moderate (but yet still conservative) positions, the effect of Fox News is to move Democrats receiving Fox News in their district closer to the Republicans by approximately one-third of the movement seen in the House medians.

1997-1998 Compared to 1999-2000

Repeating the analysis for the set of representatives who serve both in 1997-1998 (105th House) and 1999-2000 (106th House) reveals substantively identical results. Because Fox News was being broadcast during the initial period, we are comparing 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.

[TABLE (5) ABOUT HERE]

Table 5 reveals that analyzing the effect for Democrats and Republicans together reveals a conservative shift for both levels of exposure using both linear regression and nearest neighbor matching. Being exposed to Fox News in 2000, but not 1998, is estimated shift representatives 0.053 more conservative (0.079 using nearest-neighbor matching) relative to similar representatives in the control group. Being exposed to Fox News for the entire period shifts members 0.044 more conservative (0.063 using nearest-neighbor matching). Taken together, not only does the introduction of Fox News appear to cause members to shift in a more conservative direction, but representatives from districts where Fox News is broadcast in their district for the entire period also continue to become more conservative.

As was the case for the comparisons of Table 4, although Republicans are estimated to move in a conservative direction, the effect is only statistically distinguishable for Democrats.

Democrats exposed to Fox News by the 2000 election (but not in the 1998 election) are 0.057 more conservative than the control group, and Democrats exposed to Fox News throughout the period become 0.069 more conservative.

1995-1996 Compared to 1999-2000

Finally, we compare how the positions taken on roll calls in 1995-1996 compare to those taken in 1999-2000 by representatives serving in both the 104th and 106th US House. As in the prior comparison, we are comparing the effects of three different levels of exposure: some representatives were never exposed to Fox News in their district, 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 midterm election.

Estimating the effect of Fox News for these different groups reveals effects that are substantively consistent with the effects documented above.

[TABLE (6) ABOUT HERE]

When assuming that Democrats and Republicans are equally affected by Fox News, there is evidence of a conservative shift for both those that have Fox News since the 1998 election (0.063), as well as those that only receive Fox News as of the 2000 election (0.023), but only the former can be distinguished from 0 using OLS. Nearest-neighbor matching reveals conservative shifts that are distinguishable from zero – especially among those from districts where Fox News was broadcasting the longest.

Looking at the possibility of differential effects reveals that although both Democrats and Republicans become more conservative once Fox News begins broadcasting in their district, the conservative shift among Republicans is too imprecisely estimated to be be distinguishable from zero.

Democrats with Fox News in both 1998 and 2000, however, become .067 more conservative relative to their Democratic colleagues who lack Fox News in both years. The effect among Democrats who lack Fox News in 1998 but receive it in 2000 cannot be distinguished from zero.

Based on these comparisons, it seems clear that representatives do appear to adjust their voting behavior once Fox News begins to broadcast in their district. Moreover, and as we might suspect given the ideological positions of each, the effect is largest among Democrats, and the conservative shift is larger the longer Fox News has been broadcasting. Changing their positions to adopt to a new electoral environment because of the entry of Fox News in the district is one way that an effect can result. We now consider whether Fox News may also affect who is elected to the US House.

5 Results: A Replacement Effect?

Having shown that the introduction of Fox News in their district appears to cause Democrats take slightly more conservative positions, we can also explore whether Fox News affects who is elected to the US House. More specifically, does the introduction of Fox News increase the probably of replacing the incumbent serving prior to the introduction of Fox News with a more conservative member?

Table 7 estimates the change in ideal points when comparing the ideal point of the retiring or defeated incumbent from the Congress prior to the introduction of Fox News to the ideal point of the newly elected representative who is elected following the introduction of Fox News for districts where Fox News is and is not broadcast.[25] The results reveal effects that are not statistically distinguishable from zero for either comparison.

[TABLE (7) ABOUT HERE]

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

Comparing the ideal points 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 51 instances where replacement occurs. There is also no clear effect when comparing the 33 changes between 1997-98 and 1999-00 using the emergence of Fox News in 2000 (controlling for whether Fox News existed in 1998). Although replacement representatives appear to be sightly less conservative if Fox News is broadcast in the district, the estimates are extremely imprecise.

Although purely speculative, it is possible that the lack of a clear replacement effect is attributable to the anticipation effect that is estimated in the prior section; perhaps more members were not defeated because they anticipated the effects and preempted the potential negative electoral consequences by shifting in a conservative direction. Alternatively, given the small effects of Fox News on voters that DellaVigna and Kaplan (2007a) estimate as well as the small conservative shifts we document, there may be limits to the effect that Fox News has on elected officials. The incentives for taking positions on issues before the US House may be slightly altered, but we cannot be sufficiently confident that the effects of Fox News are sufficient to also substantially affect incumbents' reelection probabilities. 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 media on 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.

How the news media matters for politics is an important debate, but it is a debate that has largely focused on the effects of the media on the mass public. However, we presumably care about the media's effect on the mass public because of the resulting consequences that the effects may 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.

Even if media effects on voters are small, what matters are the expected effects among elected officials. If elites believe that the emergence of the new media is consequential either because of changes that it may have on the voters in their district or the pool of 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). We obviously cannot know representatives' beliefs, but we use 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 the emergence of Fox New in their districts. Not only is the spread of Fox News across congressional districts in the United States unrelated to the district and incumbent ideology (and, therefore also the proclivity of members to change their positions), but Fox News also presented a distinct perspective relative to the existing television outlets. As a result, we use the emergence and spread of Fox News across to explore two pathways through which the emergence of Fox News may affect policy: by causing representatives to adapt and become more conservative because of the anticipated effects of Fox News in their district, and by replacing members with members who hold more conservative views.

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 more conservative once Fox News enters their district. Moreover, the effect is largest (and most precisely estimated) among Democrats located to the left of Fox News in the ideological spectrum.[26]

Of course, while the unique circumstances surrounding Fox News provide the cleanest opportunity to identify the effect of the media, 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 Republicans were in control of the US House it may be possible to conclude that the effects that we document represent a plausible upper-bound on the effects. For example, if the Fox News Channel was measured to be similar to existing outlets such as CNN and MSNBC (at the time), it is doubtful that there would be much of an effect because of the lack of a distinctive perspective that is likely to be perceived to affect voters in novel ways. As a result, although there is certainly an effect of the media on the positions taken by elected officials, the overall magnitude even in circumstances where we might expect the largest effects is relatively modest.

Overall, looking at the effect of the emergence and spread of Fox News suggests that the media may indeed have a slight effect on the prospects for policy change by affecting the

[26]If 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 minimal – only a small fraction of voters apparently changed their voting behavior (DellaVigna and Kaplan 2007) and there was no replacement effect – 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.

expectations of representatives and causing them to slightly adjust the positions that they take.

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Table 1: Evaluating the Overlap Assumption

	No Fox News	Fox News	DIFF.
Ideological Positions (104)	-0.034	-0.144	0.110
			(0.123)
Republican	0.530	0.517	0.013
			(0.063)
Two party 1996 GOP vote share	0.436	0.414	0.022
			(0.016)
Log(# of unemployed residents)	9.644	9.662	-0.018
			(0.039)
Large city in district	0.326	0.299	0.027
			(0.059)
Log(Median Income in district)	10.505	10.518	-0.013
			(0.030)
Log(# urban population)	12.652	12.583	0.069
			(0.111)
Coast	0.335	0.448	-0.113*
			(0.060)
Log(# Elementary and High School enrollments)	11.360	11.308	0.052*
			(0.029)
Log(Pop. per Sq. Mile)	6.128	6.202	-0.074
			(0.247)
Log(# population)	13.272	13.254	0.018*
			(0.010)
Log(# of people > 65 yrs)	11.175	11.227	-0.052
			(0.034)
Log(# of Blacks)	10.430	9.905	0.525***
			(0.162)
Log(# of foreign born residents)	10.149	10.310	-0.161
			(0.139)
No. of Obs.	231	88	319

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Std. Errors within parentheses

Table 2: Examining the "Random" Assignment of Fox News

	1998		2000	
	(1)	(2)	(3)	(4)
Two party 1996 GOP vote share	−0.397	−0.978	5.994	5.199
	(2.718)	(3.900)	(3.569)	(5.542)
Ideological Positions (104)	−0.551	−0.508		
	(0.524)	(0.653)		
Republican (104)	0.981	0.337		
	(0.804)	(1.043)		
Ideological Positions (105)			−0.909	−0.258
			(0.610)	(0.805)
Republican (105)			1.433	0.483
			(0.999)	(1.292)
Log(# of unemployed residents)	1.485*	−0.966	1.336	−3.683
	(0.720)	(1.612)	(0.878)	(2.044)
Large city in district	0.003	0.429	0.765	1.083*
	(0.347)	(0.501)	(0.416)	(0.552)
Log(Median Income in district)	1.095	−0.902	0.686	−5.384
	(1.096)	(2.059)	(1.276)	(2.811)
Log(# urban population)	−0.085	0.685	−0.301	−0.235
	(0.194)	(0.489)	(0.252)	(0.643)
Coast	0.161	0.496	0.624	0.729
	(0.314)	(0.468)	(0.364)	(0.568)
Log(# Elementary and High School enrollments)	0.877	0.655	2.231	2.575
	(1.283)	(1.535)	(1.451)	(2.683)
Log(Pop. per Sq. Mile)	−0.005	−0.524*	−0.081	−0.268
	(0.149)	(0.214)	(0.170)	(0.296)
Log(# population)	−10.425**	60.447*	−12.085**	5.511
	(3.299)	(30.199)	(3.951)	(79.708)
Log(# of people > 65 yrs)	1.835*	2.068	0.640	−0.206
	(0.835)	(1.444)	(0.925)	(1.422)
Log(# of Blacks)	−0.436***	−0.278	−0.110	0.161
	(0.124)	(0.321)	(0.172)	(0.368)
Log(# of foreign born residents)	0.217	0.106	0.460*	0.486
	(0.188)	(0.619)	(0.227)	(0.663)
Constant	83.779*	−814.795*	103.392**	−13.187
	(32.783)	(397.340)	(39.716)	(1042.110)
Adjusted R^2	0.288	0.299	0.123	0.259
Observations	317	196	230	159

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Standard errors reported within parentheses.
Specifications (2) and (4) include state-level fixed effects (not shown but available upon request)

Table 3: Does Fox News Exposure in 1998 and 2000 Predict Ideal Points Changes Between 1993-1994 vs. 1995-1996 and 1995-1996 vs. 1997-1998?

	103 - 104	104 - 105
Fox News 1998	0.012	
	(0.043)	
No Fox News 1998 - Fox News 2000		−0.013
		(0.035)
Republican	0.037	0.118***
	(0.041)	(0.043)
Two party 1996 GOP vote share	0.184	−0.284
	(0.251)	(0.286)
Log(# of unemployed residents)	−0.012	0.115
	(0.146)	(0.118)
Large city in district	−0.002	0.086**
	(0.055)	(0.042)
Log(Median Income in district)	−0.019	−0.043
	(0.189)	(0.145)
Log(# urban population)	−0.046	−0.012
	(0.036)	(0.021)
Coast	−0.026	−0.008
	(0.034)	(0.030)
Log(# Elementary and High School enrollments)	−0.087	−0.024
	(0.166)	(0.149)
Log(Pop. per Sq. Mile)	−0.054**	0.020
	(0.024)	(0.019)
Log(# population)	−0.463	−0.244
	(0.472)	(0.618)
Log(# of people > 65 yrs)	0.105	−0.014
	(0.124)	(0.112)
Log(# of Blacks)	0.034	−0.003
	(0.024)	(0.025)
Log(# of foreign born residents)	0.153***	−0.024
	(0.041)	(0.036)
Constant	5.305	3.497
	(4.952)	(7.356)
R^2	0.268	0.334
Observations	255	188

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust standard errors are reported within parentheses.
State-Fixed effects included but not reported.

Table 4: Representative's Change in Ideal Points: 1995-96 - 1997-98

	Regression	Regression By Party		Matching
	All	Dem.	Rep.	All
Fox News 1998	0.046**	0.067*	0.025	0.040*
	(0.026)	(0.048)	(0.035)	(0.028)
Republican	0.096***			
	(0.031)			
Two party 1996 GOP vote share	−0.217	−0.220	−0.193	
	(0.224)	(0.315)	(0.416)	
Log(# of unemployed residents)	0.126	0.112	−0.012	
	(0.092)	(0.129)	(0.151)	
Large city in district	0.070**	0.041	0.069	
	(0.033)	(0.053)	(0.046)	
Log(Median Income in district)	−0.045	−0.035	−0.240	
	(0.092)	(0.129)	(0.193)	
Log(# urban population)	−0.012	−0.030	0.005	
	(0.019)	(0.039)	(0.024)	
Coast	−0.010	−0.033	0.010	
	(0.024)	(0.041)	(0.031)	
Log(# Elementary and High School enrollments)	−0.007	−0.045	−0.083	
	(0.081)	(0.096)	(0.204)	
Log(Pop. per Sq. Mile)	0.013	0.018	−0.002	
	(0.015)	(0.026)	(0.025)	
Log(# population)	−0.317	−0.205	0.150	
	(0.553)	(0.643)	(0.838)	
Log(# of people > 65 yrs)	0.034	0.038	−0.120	
	(0.077)	(0.077)	(0.134)	
Log(# of Blacks)	−0.003	0.018	−0.041	
	(0.018)	(0.026)	(0.027)	
Log(# of foreign born residents)	−0.004	0.021	−0.025	
	(0.028)	(0.031)	(0.051)	
Constant	3.459	2.054	3.629	
	(6.951)	(7.826)	(10.772)	
R^2	0.319	0.510	0.309	
Observations	264	127	137	264

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

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

Table 5: Representative's Change in Ideal Points, 1997-1998 to 1999-2000

	Regression	Regressions by Party		Matching	
	All	Dems.	Reps.	All	All
No Fox News 1998 - Fox News 2000	0.053**	0.057*	0.029	0.079***	
	(0.028)	(0.039)	(0.041)	(0.029)	
Fox News 1998 - Fox News 2000	0.044*	0.069*	0.009		0.063***
	(0.028)	(0.049)	(0.038)		(0.032)
Republican	−0.093***				
	(0.020)				
Two party 1996 GOP vote share	−0.509***	−0.685***	−0.033		
	(0.172)	(0.208)	(0.324)		
Log(# of unemployed residents)	−0.227***	−0.177*	−0.157		
	(0.076)	(0.098)	(0.148)		
Large city in district	−0.026	−0.005	−0.026		
	(0.026)	(0.039)	(0.042)		
Log(Median Income in district)	−0.169*	−0.116	−0.297		
	(0.101)	(0.111)	(0.257)		
Log(# urban population)	0.014	0.014	0.008		
	(0.010)	(0.031)	(0.015)		
Coast	−0.007	−0.040	0.024		
	(0.021)	(0.027)	(0.035)		
Log(# Elementary and High School enrollments)	−0.177*	−0.257**	0.027		
	(0.101)	(0.120)	(0.199)		
Log(Pop. per Sq. Mile)	−0.017	−0.052***	0.027		
	(0.012)	(0.014)	(0.019)		
Log(# population)	1.066***	0.957***	0.736*		
	(0.225)	(0.303)	(0.393)		
Log(# of people > 65 yrs)	−0.145**	−0.196***	−0.020		
	(0.071)	(0.065)	(0.163)		
Log(# of Blacks)	−0.009	−0.008	−0.001		
	(0.012)	(0.021)	(0.023)		
Log(# of foreign born residents)	−0.023	−0.012	0.009		
	(0.025)	(0.025)	(0.052)		
Constant	−5.842***	−3.886	−5.166*		
	(1.893)	(2.591)	(2.694)		
R^2	0.360	0.367	0.399		
Observations	286	143	143	211	234

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

Regression specifications include state fixed effects (not shown but available upon request).

Table 6: Representative's Change in Ideal Points, 1995-1996 to 1999-2000

	Regression	Regressions By Party		Matching	
	Al)	Dems.	Reps.	All	All
No Fox News 1998 - Fox News 2000	0.023	−0.008	0.008	0.075**	
	(0.040)	(0.049)	(0.075)	(0.043)	
Fox News 1998 - Fox News 2000	0.063**	0.067*	0.069		0.122***
	(0.036)	(0.047)	(0.057)		(0.032)
Republican	−0.147***				
	(0.036)				
Two party 1996 GOP vote share	−0.759***	−1.041***	−0.025		
	(0.236)	(0.274)	(0.633)		
Log(# of unemployed residents)	−0.047	−0.059	−0.108		
	(0.109)	(0.124)	(0.218)		
Large city in district	0.052	0.039	0.047		
	(0.042)	(0.052)	(0.072)		
Log(Median Income in district)	−0.109	−0.024	−0.625**		
	(0.139)	(0.173)	(0.285)		
Log(# urban population)	−0.001	−0.003	−0.004		
	(0.022)	(0.043)	(0.031)		
Coast	0.004	−0.016	0.024		
	(0.030)	(0.042)	(0.049)		
Log(# Elementary and High School enrollments)	−0.072	−0.155	0.184		
	(0.127)	(0.144)	(0.258)		
Log(Pop. per Sq. Mile)	0.006	−0.027	0.059*		
	(0.020)	(0.025)	(0.033)		
Log(# population)	0.365	−0.061	0.452		
	(0.544)	(0.364)	(0.961)		
Log(# of people > 65 yrs)	−0.078	−0.150	−0.061		
	(0.089)	(0.102)	(0.157)		
Log(# of Blacks)	−0.022	−0.012	−0.026		
	(0.022)	(0.024)	(0.041)		
Log(# of foreign born residents)	−0.025	−0.007	0.062		
	(0.034)	(0.042)	(0.080)		
Constant	−0.580	5.724*	−0.779		
	(6.437)	(2.941)	(11.896)		
R^2	0.542	0.475	0.396		
Observations	237	112	125	172	194

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

Regression specifications include state fixed effects (not shown but available upon request).

Table 7: Replacement Effect of *Fox News*

	104 - 105	105 - 106
Fox News 1998	−0.073	
	(0.371)	
No Fox News 1998 - Fox News 2000		−0.116
		(0.494)
Fox News 1998 - Fox News 2000		−0.011
		(0.319)
Two party 1996 GOP vote share	1.479	4.973
	(1.655)	(3.282)
Log(# of unemployed residents)	0.461	0.458
	(0.718)	(1.419)
Large city in district	0.386	0.964**
	(0.503)	(0.455)
Log(Median Income in district)	−0.099	−1.476
	(1.094)	(1.723)
Log(# urban population)	0.346**	0.826
	(0.165)	(0.575)
Coast	−0.192	−0.088
	(0.323)	(0.413)
Log(# Elementary and High School enrollments)	0.442	0.660
	(0.869)	(1.298)
Log(Pop. per Sq. Mile)	−0.182	0.184
	(0.168)	(0.211)
Log(# of people > 65 yrs)	1.067	−0.316
	(0.647)	(0.822)
Log(# of Blacks)	0.252**	−0.229
	(0.096)	(0.218)
Log(# of foreign born residents)	−0.176	−0.316
	(0.260)	(0.301)
Constant	−25.447	−0.843
	(16.553)	(36.363)
R^2	0.363	0.500
Observations	51	33

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

Online Appendix For: The *Fox News* Factor: How the Spread of *Fox News* Affects Position Taking in Congress

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Abstract

This contains the supplementary results and the robustness checks for the paper "The *Fox News* Factor: How the Spread of *Fox News* Affects Position Taking in Congress." We show that the estimated effects in the paper are not dependent on the binary treatment or the sample of 35 states we analyze. We also show that the results are not sensitive to outliers or using alternative specifications based on regional fixed effects and that the lack of replacement effects does not depend on the party of the outgoing representative. Finally, we show that there is no support for the possibility that variation in the electoral competitiveness are more responsible for the results we document in the text than the partisanship of the representative.

0.1 A Non-Binary Treatment?

Table 1 replicates the results in Table 4 in the text, but instead of comparing Representatives from districts that were and were not exposed to Fox News as of the 1998 election, we classify access to Fox News into three groups: Low, High and None exposure. As footnote 12 in the text notes, it may be the case that the effect of Fox News is a non-linear function of the number of subscribers with access to Fox News within a district.

We therefore create two treatment groups depending on the number of subscribers with access to Fox News. If the number of subscribers with access to Fox News in a district is less than the the median number of subscribers, we code the district as being " Low Treatment." All districts more subscribers than the median are included in the "High Treatment."

As the results of Table 1 reveal, the results noted in the paper persist even despite the smaller sample sizes that are used to estimate the effects. The specification using all representatives shows that there is a conservative shift that occurs when Fox News enters before the 1998 election that is statistically distinguishable from zero for both treatment groups. Moreoever, the substantive effects of Fox News in the High and Low groups are substantively similar. This suggests that, consistent with the argument made in the paper, what appears to matter for the documented effect is whether or not Fox News begins broadcasting in the district rather than the number of constituents who have potential access to Fox News at the time.

The effects of the paper also persist if we separately estimate the effect of Fox News for Democrats and Republicans using the alternative treatment measure. As in Table 4 in the text, Table 1 shows that both Democrats and Republicans adopt more conservative positions regardless of whether Fox News exposure is High or Low, but the effect is only distinguishable from zero among Democrats. Although the substantive effect is largest for "High" treatment Democrats, we can only be confident that the effect is distinguishable from zero for "Low" treatment Democrats.

0.2 Extending the Sample?

Another possible concern is that we are only analyzing the behavior of representatives from 35 states. While this sample is appropriate for our research question given that we are interested in whether the individual level effects found by others investigating this sample (e.g., DellaVigna and Kaplan 2007; Hopkins and Ladd 2012) also affect the behavior of elected officials, some may be concerned with how generalizable the effects are because of the omission of 15 states.

To address this issue, we make two extreme assumptions about the missing data to generate an upper and lower bound of the effect of Fox News. We assume that none of the omitted states had any districts where Fox News was broadcast (i.e., all representatives from these states are included in the control group), and we assume that every district in the omitted states had Fox News being broadcast (i.e., all representatives from these states are included in the treatment group). Because reality lies between these two extremes, to the extent that we desire an estimate of the effect that extends beyond the sample, we can explore whether the results we document in the paper persist in the presence of such extreme assumptions.

Our results persist even in the presence of these extreme assumptions. Table (2) shows a conservative shift if representatives from omitted states are all included in the control (although the effects for the change between the 105th and 106th House are imprecisely

estimated and cannot be distinguished from zero). Table (3) shows that the conservative shift that is estimated to occur following the entry of Fox News persists when all of these representatives are included in the treatment group.

0.3 Robustness Results

We explore a series of other assumptions made in text to show that none are consequential. Table (5) examines whether the "Replacement" effect estimated in Table 7 of the text varies by party. Estimating the effect separately for Democrats and Republicans reveals no differential effects.

Table (4) presents the results of trimming out from the analysis Representatives with a high absolute change in ideological positions between Congress Comparisons. Each column replicates the results for the noted Congresses. 104-105 is the change between 1995-1996 and 1997-1998 (i.e., Table 4 in the text), 104-106 is the change between 1995-1996 and 1999-2000 (i.e., Table 5 in the text) and 105-106 is the change between 1997-1998 and 1999-2000 (i.e., Table 6 in the text). The results reveal that there is a consistent conservative shift in the positions that are taken by representatives.

As a final robustness check, we employ region fixed effects rather than state effects.[1] Tables (6) - (8) replicate the analysis of Tables (4) - (6) in the text and show that the results are generally consistent.

0.4 Alternative Explanation: District Competitiveness?

One possibility is that what really matters is the level of competitiveness of the district. That is, rather than all of the more liberal representatives reacting to the entry of Fox News, maybe representatives from more competitive districts are more likely to become more conservative. Meaningful conclusions from exploring the effects of the interaction of

[1] As mentioned in the text, Regions are defined according to the U.S. Census Bureau) definition.

party and competition are unfortunately impossible because of the scarcity of observations in the various comparisons. As a result, we explore whether representatives change their behavior in ways that are correlated with how split the district is along partisan or ideological lines. Put differently, does the composition of the electorate (rather than the partisanship of the representative) the primary determinant of whether representatives preemptively change positions in response to the entry of Fox News in the district?

To explore whether the district composition is driving the relationships we identify in the paper, we classify districts based on their voting behavior in the presidential election contest. For a Democrat (Republican) representative we use the two-party Presidential vote share in 1996 for the Republican (Democrat) party as a measure of the competitiveness of the electoral environment. High competitive districts are the ones where our measure of competitiveness is greater than 53%; Mid-competitive districts are the ones where our measure of competitiveness is between 47% and 53% and; Low-competitive districts are those where our measure of competitiveness is below 47%.

The results in Tables (9) - (11) reveal that there is no strong evidence that representatives' reactions to the entry of Fox News are driven primarily by the partisan/ideological composition of the district. While the effects are usually, but not always positive, the estimated effects are not distinguishable from zero and the substantive magnitude of the effects do not increase as districts become more ideologically competitive as we might suspect if the composition of the district were driving the results observed in the paper.

Table 1: Low and High Exposure Treatment: Representative's Change in Ideal Points: 1995-96 - 1997-98

	All	By Party	
		Dems.	Reps.
Low Treatment - Fox News 1998	0.046*	0.077**	0.014
	(0.034)	(0.054)	(0.052)
High Treatment - Fox News 1998	0.030**	0.099	0.025
	(0.037)	(0.065)	(0.051)
Republican	0.097***		
	(0.031)		
Two party 1996 GOP vote share	−0.221	−0.285	−0.195
	(0.197)	(0.301)	(0.358)
Log(# of unemployed residents)	0.124	0.100	−0.008
	(0.092)	(0.139)	(0.153)
Large city in district	0.070**	0.049	0.070
	(0.031)	(0.051)	(0.043)
Log(Median Income in district)	−0.045	−0.035	−0.240
	(0.114)	(0.162)	(0.226)
Log(# urban population)	−0.011	−0.031	0.006
	(0.020)	(0.046)	(0.024)
Coast	−0.009	−0.046	0.008
	(0.026)	(0.042)	(0.036)
Log(# Elementary and High School enrollments)	−0.004	−0.045	−0.084
	(0.103)	(0.135)	(0.206)
Log(Pop. per Sq. Mile)	0.013	0.018	−0.003
	(0.014)	(0.024)	(0.022)
Log(# population)	−0.322	−0.156	0.146
	(0.350)	(0.581)	(0.489)
Log(# of people > 65 yrs)	0.038	0.043	−0.117
	(0.079)	(0.110)	(0.126)
Log(# of Blacks)	−0.003	0.017	−0.042
	(0.017)	(0.024)	(0.028)
Log(# of foreign born residents)	−0.005	0.013	−0.025
	(0.029)	(0.040)	(0.058)
Constant	3.470	1.592	3.625
	(4.088)	(6.774)	(5.577)
R^2	0.318	0.519	0.308
Observations	264	127	137

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

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

Table 2: Alternative Assumptions About Missing Data: Fox News did not enter all the missing Districts

	104 - 105	104 - 106	105 - 106
Fox News 1998	0.042**		
	(0.026)		
No Fox News 1998 - Fox News 2000		0.002	0.034
		(0.040)	(0.030)
Fox News 1998 - Fox News 2000		0.048*	0.032
		(0.036)	(0.028)
Republican	0.038	−0.188***	−0.099***
	(0.030)	(0.034)	(0.022)
Two party 1996 GOP vote share	0.134	−0.419	−0.460***
	(0.193)	(0.260)	(0.149)
Log(# of unemployed residents)	0.111	−0.004	−0.227***
	(0.077)	(0.116)	(0.071)
Large city in district	0.043	0.030	0.009
	(0.028)	(0.038)	(0.027)
Log(Median Income in district)	−0.098	−0.244*	−0.219**
	(0.085)	(0.127)	(0.091)
Log(# urban population)	−0.021	0.004	0.002
	(0.020)	(0.020)	(0.015)
Coast	0.006	0.015	0.015
	(0.022)	(0.028)	(0.025)
Log(# Elementary and High School enrollments)	0.033	−0.054	−0.138
	(0.089)	(0.123)	(0.091)
Log(Pop. per Sq. Mile)	0.016	0.015	−0.012
	(0.012)	(0.016)	(0.010)
Log(# population)	−0.208	0.293	0.864***
	(0.383)	(0.391)	(0.226)
Log(# of people > 65 yrs)	0.022	−0.074	−0.117*
	(0.070)	(0.087)	(0.061)
Log(# of Blacks)	0.012	−0.015	−0.008
	(0.017)	(0.024)	(0.014)
Log(# of foreign born residents)	0.007	−0.013	−0.006
	(0.024)	(0.031)	(0.021)
Constant	1.733	0.642	−3.552*
	(4.658)	(4.384)	(2.040)
R^2	0.264	0.518	0.338
Observations	350	310	384

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

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

Table 3: Alternative Assumptions About Missing Data: Fox News was present in all the missing Districts

	104 - 105	104 - 106	105 - 106
Fox News 1998	0.023		
	(0.026)		
No Fox News 1998 - Fox News 2000		0.012	0.054**
		(0.040)	(0.029)
Fox News 1998 - Fox News 2000		0.065**	0.070***
		(0.035)	(0.027)
Republican	0.037	−0.189***	−0.097***
	(0.030)	(0.034)	(0.022)
Two party 1996 GOP vote share	0.129	−0.435*	−0.479***
	(0.193)	(0.260)	(0.145)
Log(# of unemployed residents)	0.111	−0.005	−0.227***
	(0.078)	(0.115)	(0.069)
Large city in district	0.043	0.028	0.007
	(0.028)	(0.038)	(0.026)
Log(Median Income in district)	−0.094	−0.227*	−0.203**
	(0.085)	(0.125)	(0.089)
Log(# urban population)	−0.019	0.004	0.003
	(0.020)	(0.020)	(0.015)
Coast	0.008	0.014	0.014
	(0.022)	(0.028)	(0.025)
Log(# Elementary and High School enrollments)	0.032	−0.052	−0.136
	(0.090)	(0.123)	(0.091)
Log(Pop. per Sq. Mile)	0.014	0.015	−0.012
	(0.012)	(0.016)	(0.010)
Log(# population)	−0.208	0.291	0.858***
	(0.384)	(0.391)	(0.225)
Log(# of people > 65 yrs)	0.024	−0.070	−0.113*
	(0.071)	(0.086)	(0.061)
Log(# of Blacks)	0.011	−0.013	−0.007
	(0.017)	(0.023)	(0.014)
Log(# of foreign born residents)	0.005	−0.016	−0.009
	(0.025)	(0.031)	(0.020)
Constant	1.704	0.402	−3.750*
	(4.665)	(4.375)	(2.041)
R^2	0.261	0.521	0.348
Observations	350	310	384

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses
Regression specifications also include state-level fixed effects (not shown but available upon request)

Table 4: Representative's Change in Ideal Points (Trimming Outliers)

	104-105	104-106	105-106
Fox News 1998	0.056**		
	(0.024)		
No Fox News 1998 - Fox News 2000		0.020	0.038*
		(0.038)	(0.025)
Fox News 1998 - Fox News 2000		0.067**	0.029
		(0.038)	(0.025)
Republican	0.080***	−0.158***	−0.099***
	(0.029)	(0.036)	(0.019)
Two party 1996 GOP vote share	−0.125	−0.703***	−0.408***
	(0.206)	(0.226)	(0.152)
Log(# of unemployed residents)	0.108	−0.014	−0.164**
	(0.087)	(0.102)	(0.068)
Large city in district	0.049	0.041	−0.010
	(0.031)	(0.035)	(0.023)
Log(Median Income in district)	−0.069	−0.024	−0.107
	(0.091)	(0.129)	(0.084)
Log(# urban population)	−0.009	−0.007	0.013
	(0.018)	(0.022)	(0.009)
Coast	−0.020	−0.011	−0.006
	(0.023)	(0.029)	(0.018)
Log(# Elementary and High School enrollments)	−0.018	−0.004	−0.112
	(0.079)	(0.118)	(0.092)
Log(Pop. per Sq. Mile)	0.017	0.013	−0.017
	(0.014)	(0.016)	(0.012)
Log(# population)	−0.275	0.202	0.896***
	(0.560)	(0.394)	(0.203)
Log(# of people > 65 yrs)	0.009	−0.019	−0.107*
	(0.072)	(0.090)	(0.064)
Log(# of Blacks)	−0.003	−0.022	−0.016
	(0.018)	(0.020)	(0.012)
Log(# of foreign born residents)	−0.010	−0.032	−0.022
	(0.027)	(0.033)	(0.022)
Constant	3.730	−1.418	−6.009***
	(7.045)	(4.516)	(1.961)
R^2	0.311	0.558	0.400
Observations	261	234	283

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

All regression specifications include State Fixed Effects (not shown but available upon request)

Table 5: Replacement Effect of *Fox News*: By Party

	104 - 105		105 - 106	
	Dems.	Reps.	Dems.	Reps.
Fox News 1998	−0.230	0.171		
	(0.675)	(0.338)		
No Fox News 1998 - Fox News 2000			0.368	−0.439
			(0.387)	(0.842)
Fox News 1998 - Fox News 2000			0.138	0.376
			(0.856)	(0.340)
Two party 1996 GOP vote share	1.893	13.177***	3.118	4.645
	(5.029)	(3.296)	(4.964)	(4.088)
Log(# of unemployed residents)	2.354	1.174	−1.202	2.347
	(1.663)	(0.828)	(1.397)	(1.220)
Large city in district	−0.089	−0.543	0.532	
	(0.808)	(0.699)	(0.408)	
Log(Median Income in district)	−0.664	2.406	−2.584	−0.620
	(1.531)	(1.613)	(1.702)	(1.563)
Log(# urban population)	−0.073	−0.211	1.527	0.830*
	(0.466)	(0.203)	(1.414)	(0.282)
Coast	−0.480	−0.498	−0.951*	0.015
	(0.465)	(0.414)	(0.413)	(0.169)
Log(# Elementary and High School enrollments)	−2.667	−1.004	−0.876	−1.278
	(2.601)	(1.060)	(1.505)	(1.403)
Log(Pop. per Sq. Mile)	−0.294	0.397*	−0.040	0.118
	(0.321)	(0.198)	(0.145)	(0.183)
Log(# of people > 65 yrs)	−0.683	2.493**	−0.774	−1.081
	(1.256)	(0.880)	(2.134)	(0.521)
Log(# of Blacks)	−0.174	−0.499*	−0.191	−0.226
	(0.188)	(0.236)	(0.153)	(0.123)
Log(# of foreign born residents)	0.188	−0.040	−0.343	−0.320
	(0.575)	(0.205)	(0.279)	(0.220)
Constant	24.494	−54.836*	43.415	2.709
	(40.646)	(26.893)	(53.499)	(23.809)
R^2	0.585	0.613	0.896	0.986
Observations	22	29	18	15

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

Table 6: Representative's Change in Ideal Points, 1995-1996 to 1997-1998 (Region Fixed Effects)

	All	By Party	
		(Dems.)	(Reps.)
Fox News 1998	0.037	0.083**	0.019
	(0.024)	(0.039)	(0.029)
Republican	0.058**		
	(0.027)		
Two party 1996 GOP vote share	−0.109	−0.399*	0.182
	(0.176)	(0.236)	(0.259)
Log(# of unemployed residents)	0.035	−0.050	0.050
	(0.070)	(0.111)	(0.084)
Large city in district	0.047*	0.028	0.051
	(0.028)	(0.038)	(0.039)
Log(Median Income in district)	−0.144*	−0.177*	−0.067
	(0.078)	(0.101)	(0.172)
Log(# urban population)	−0.011	−0.029	−0.012
	(0.016)	(0.032)	(0.021)
Coast	−0.002	−0.065*	0.038
	(0.023)	(0.039)	(0.026)
Log(# Elementary and High School enrollments)	−0.098	−0.151*	−0.179
	(0.077)	(0.087)	(0.141)
Log(Pop. per Sq. Mile)	0.012	0.022	−0.010
	(0.013)	(0.018)	(0.018)
Log(# population)	−0.021	0.271	0.064
	(0.315)	(0.314)	(0.450)
Log(# of people > 65 yrs)	−0.059	−0.083	−0.062
	(0.058)	(0.065)	(0.098)
Log(# of Blacks)	0.009	0.014	−0.007
	(0.012)	(0.016)	(0.019)
Log(# of foreign born residents)	−0.014	−0.029	−0.003
	(0.021)	(0.024)	(0.041)
North East	−0.044	−0.153***	0.032
	(0.032)	(0.048)	(0.039)
South	0.010	−0.115**	0.079
	(0.040)	(0.057)	(0.056)
West	−0.086*	−0.131**	−0.071
	(0.048)	(0.062)	(0.076)
Constant	3.323	1.943	2.255
	(3.831)	(3.712)	(5.282)
R^2	0.168	0.337	0.153
Observations	264	127	137

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

Table 7: Representative's Change in Ideal Points, 1997-1998 to 1999-2000 (Region Fixed Effects)

	All	By Party	
		(Dems.)	(Reps.)
No Fox News 1998 - Fox News 2000	0.048*	0.037	0.022
	(0.026)	(0.038)	(0.041)
Fox News 1998 - Fox News 2000	0.054**	0.053	0.039
	(0.023)	(0.036)	(0.027)
Republican	−0.099***		
	(0.018)		
Two party 1996 GOP vote share	−0.351**	−0.442**	−0.091
	(0.145)	(0.189)	(0.201)
Log(# of unemployed residents)	−0.085	−0.056	−0.039
	(0.055)	(0.070)	(0.096)
Large city in district	−0.023	−0.023	−0.014
	(0.024)	(0.029)	(0.040)
Log(Median Income in district)	−0.000	0.033	−0.164
	(0.085)	(0.095)	(0.228)
Log(# urban population)	0.003	0.016	0.005
	(0.009)	(0.018)	(0.011)
Coast	0.012	−0.012	0.053
	(0.023)	(0.025)	(0.043)
Log(# Elementary and High School enrollments)	−0.067	−0.142	0.048
	(0.084)	(0.100)	(0.116)
Log(Pop. per Sq. Mile)	−0.008	−0.038***	0.018
	(0.010)	(0.013)	(0.012)
Log(# population)	0.545***	0.409	0.435
	(0.192)	(0.252)	(0.297)
Log(# of people > 65 yrs)	−0.090	−0.093	−0.112
	(0.062)	(0.061)	(0.136)
Log(# of Blacks)	−0.015	−0.002	−0.032*
	(0.011)	(0.014)	(0.018)
Log(# of foreign born residents)	−0.020	0.001	−0.004
	(0.018)	(0.020)	(0.043)
North East	0.003	0.036	−0.027
	(0.024)	(0.034)	(0.034)
South	0.035	0.074	−0.035
	(0.029)	(0.048)	(0.042)
West	0.016	0.061	−0.097
	(0.043)	(0.054)	(0.081)
Constant	−3.844***	−2.096	−2.514
	(1.478)	(2.551)	(2.390)
R^2	0.185	0.195	0.142
Observations	286	143	143

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

Table 8: Representative's Change in Ideal Points, 1995-1996 to 1999-2000 (Region Fixed Effects)

	All	By Party	
		(Dems.)	(Reps.)
No Fox News 1998 - Fox News 2000	−0.003	−0.062	0.001
	(0.035)	(0.044)	(0.063)
Fox News 1998 - Fox News 2000	0.065**	0.068*	0.086**
	(0.028)	(0.040)	(0.039)
Republican	−0.195***		
	(0.031)		
Two party 1996 GOP vote share	−0.477**	−0.945***	0.139
	(0.195)	(0.196)	(0.331)
Log(# of unemployed residents)	−0.027	−0.092	0.052
	(0.084)	(0.102)	(0.136)
Large city in district	0.031	0.004	0.040
	(0.036)	(0.035)	(0.066)
Log(Median Income in district)	−0.100	−0.044	−0.340
	(0.113)	(0.119)	(0.263)
Log(# urban population)	−0.014	−0.008	−0.012
	(0.016)	(0.036)	(0.024)
Coast	0.037	−0.028	0.087*
	(0.030)	(0.032)	(0.051)
Log(# Elementary and High School enrollments)	−0.083	−0.126	0.008
	(0.105)	(0.121)	(0.185)
Log(Pop. per Sq. Mile)	0.009	−0.008	0.028
	(0.016)	(0.018)	(0.024)
Log(# population)	0.380	0.303	0.197
	(0.318)	(0.287)	(0.530)
Log(# of people > 65 yrs)	−0.129*	−0.094	−0.209
	(0.076)	(0.089)	(0.145)
Log(# of Blacks)	−0.011	−0.004	−0.037
	(0.015)	(0.015)	(0.028)
Log(# of foreign born residents)	−0.019	−0.022	0.033
	(0.025)	(0.024)	(0.055)
North East	−0.026	−0.075*	0.047
	(0.033)	(0.043)	(0.055)
South	0.038	−0.016	0.054
	(0.049)	(0.053)	(0.079)
West	−0.062	−0.006	−0.221**
	(0.056)	(0.057)	(0.096)
Constant	−0.600	0.773	2.556
	(3.585)	(3.416)	(6.174)
R^2	0.435	0.277	0.187
Observations	237	112	125

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

Table 9: Representative's Change in Ideal Points: 1995-96 - 1997-98

	By Electoral Competiveness		
	Low	Medium	High
Fox News 1998	0.078	0.007	0.038
	(0.061)	(0.080)	(0.047)
Republican	0.100*	0.091	0.101
	(0.057)	(0.074)	(0.136)
Log(# of unemployed residents)	0.193	0.145	−0.093
	(0.133)	(0.312)	(0.171)
Large city in district	0.104*	0.028	0.064
	(0.053)	(0.067)	(0.100)
Log(Median Income in district)	0.003	−0.061	−0.301
	(0.145)	(0.461)	(0.220)
Log(# urban population)	−0.089	0.086	0.005
	(0.079)	(0.066)	(0.022)
Coast	0.011	−0.053	−0.003
	(0.041)	(0.092)	(0.063)
Log(# Elementary and High School enrollments)	−0.043	0.132	−0.010
	(0.101)	(0.375)	(0.246)
Log(Pop. per Sq. Mile)	0.017	0.016	−0.015
	(0.028)	(0.066)	(0.035)
Log(# population)	−1.297***	−0.002	3.647
	(0.276)	(0.653)	(4.344)
Log(# of people > 65 yrs)	−0.006	0.149	−0.027
	(0.092)	(0.294)	(0.168)
Log(# of Blacks)	0.016	−0.067	0.011
	(0.024)	(0.076)	(0.032)
Log(# of foreign born residents)	0.023	−0.052	0.073
	(0.039)	(0.095)	(0.058)
Constant	16.394***	−4.126	−44.808
	(1.607)	(4.547)	(57.950)
R^2	0.498	0.508	0.519
Observations	131	63	70

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

All regression specifications include State Fixed Effects (not shown but available upon request)

Table 10: Representative's Change in Ideal Points, 1997-1998 to 1999-2000

	By Electoral Competiveness		
	Low	Medium	High
No Fox News 1998 - Fox News 2000	0.024	0.001	0.051
	(0.052)	(0.060)	(0.059)
Fox News 1998 - Fox News 2000	0.066	−0.081	0.045
	(0.056)	(0.066)	(0.069)
Republican	−0.174***	−0.060	−0.088*
	(0.054)	(0.042)	(0.046)
Log(# of unemployed residents)	−0.183	0.176	0.092
	(0.119)	(0.285)	(0.167)
Large city in district	−0.054	0.024	−0.024
	(0.047)	(0.046)	(0.120)
Log(Median Income in district)	−0.171	−0.181	0.093
	(0.156)	(0.360)	(0.260)
Log(# urban population)	0.019	0.011	−0.013
	(0.073)	(0.019)	(0.018)
Coast	−0.028	0.143**	−0.013
	(0.034)	(0.066)	(0.042)
Log(# Elementary and High School enrollments)	−0.168	−0.240	−0.269
	(0.139)	(0.257)	(0.360)
Log(Pop. per Sq. Mile)	−0.006	0.019	0.022
	(0.022)	(0.040)	(0.027)
Log(# population)	1.244***	0.428	−4.639
	(0.266)	(0.671)	(4.640)
Log(# of people > 65 yrs)	−0.156*	0.026	−0.270
	(0.092)	(0.174)	(0.171)
Log(# of Blacks)	0.010	−0.002	0.009
	(0.024)	(0.036)	(0.037)
Log(# of foreign born residents)	−0.016	0.008	−0.128**
	(0.036)	(0.064)	(0.061)
Constant	−9.159***	−3.196	67.004
	(1.626)	(8.023)	(60.172)
R^2	0.407	0.504	0.684
Observations	144	71	71

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

All regression specifications include State Fixed Effects (not shown but available upon request)

Table 11: Representative's Change in Ideal Points, 1995-1996 to 1999-2000

	By Electoral Competiveness		
	Low	Medium	High
No Fox News 1998 - Fox News 2000	−0.064	0.136	0.070
	(0.063)	(0.109)	(0.084)
Fox News 1998 - Fox News 2000	0.074	0.083	0.071
	(0.069)	(0.104)	(0.068)
Republican	−0.254***	−0.170	−0.004
	(0.073)	(0.107)	(0.166)
Log(# of unemployed residents)	−0.072	0.347	0.128
	(0.157)	(0.346)	(0.259)
Large city in district	0.133**	−0.056	0.111
	(0.057)	(0.092)	(0.158)
Log(Median Income in district)	−0.256	−0.019	−0.151
	(0.205)	(0.388)	(0.409)
Log(# urban population)	−0.034	0.064	0.009
	(0.087)	(0.089)	(0.024)
Coast	0.013	−0.001	−0.035
	(0.043)	(0.088)	(0.070)
Log(# Elementary and High School enrollments)	−0.274*	−0.017	0.083
	(0.156)	(0.409)	(0.453)
Log(Pop. per Sq. Mile)	−0.055	0.092**	0.059
	(0.034)	(0.040)	(0.044)
Log(# population)	0.187	1.796**	−3.817
	(0.341)	(0.740)	(4.248)
Log(# of people > 65 yrs)	−0.258**	0.322	−0.090
	(0.123)	(0.216)	(0.274)
Log(# of Blacks)	0.055*	−0.077	−0.043
	(0.033)	(0.077)	(0.049)
Log(# of foreign born residents)	0.085*	−0.167*	−0.030
	(0.048)	(0.094)	(0.151)
Constant	6.402***	−29.061***	51.221
	(1.805)	(5.670)	(55.979)
R^2	0.646	0.710	0.753
Observations	119	59	59

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$; Robust Std. Errors within parentheses

All regression specifications include State Fixed Effects (not shown but available upon request)