

Legislative Responsiveness and Local Media Declines

Bradley Madsen*

Johanna Dunaway†

October 2023

Abstract

Concerns about the decline of local news coverage relate to its implications for theories of democratic accountability; when citizens are not watching, legislators are free to deviate from constituent preferences. However, most studies have stopped short of directly linking declines in local news to failures of representative responsiveness. This study offers two significant contributions. First, it synthesizes and extends previous arguments to offer a comprehensive theory of news coverage and legislator accountability. Second, it empirically tests this theory through analyzing declining local coverage via a relatively unexplored phenomenon: the acquisition of television stations by large media conglomerates. Using data from the FCC, the 2022 CCES, and the roll-call votes of the 117th U.S. Congress, we find mixed evidence that the degree of broadcast station consolidation within a congressional district is significantly associated with the degree of incongruence between a representative's roll-call vote and her constituents' preferences. This sheds further light on previously stated concerns of declining democratic accountability with the decrease in local news coverage.

*Department of Political Science, Texas A&M University, College Station, TX 77843, USA, e-mail: bh-madsen@tamu.edu.

†Institute for Democracy, Journalism, and Citizenship, Syracuse University, Washington, DC 20001, USA, e-mail: jldunawa@syr.edu.

Recent literature in political communication has expressed concerns of the ramifications of the declining prominence of local news in the United States. Changing consumer demand in the contemporary information marketplace has resulted in declining revenues for both newspapers (Pew Research Center, 2021b) and local television news stations (Pew Research Center, 2021a), forcing many outlets to lay off newsroom employees (Peterson, 2021b), consolidate under corporate owners to streamline the costs of production (Adgate, 2021; Dunaway, 2008; McManus, 1994), or outright file for bankruptcy (Kamarck and Gabriele, 2015). These and other changes have resulted in a sharp decline in the quantity of stories covering local political events, including reports of the actions of locally-elected members of Congress (Hayes and Lawless, 2015). This decline in coverage has been shown to decrease both knowledge of and participation in state and local political affairs (Hayes and Lawless, 2015, 2018; Hopkins, 2018; Peterson, 2021a; Schulhofer-Wohl and Garrido, 2013), potentially attenuating the extent to which legislators are incentivized to comply with the policy preferences of their constituents (Arnold, 2004; Snyder Jr and Strömberg, 2010; Trussler, 2022). In this way, the decline of local news coverage in the United States possibly threatens the fundamental mechanism of democratic accountability.

Although the extant literature has identified a few modes by which local news coverage affects legislator behavior, it insufficiently addresses if and how the true scope of local news decline engenders a loss of democratic accountability. While some studies have demonstrated that low-information congressional districts are associated with its corresponding representatives voting along party lines or in congruence with special interest groups (Snyder Jr and Strömberg, 2010; Trussler, 2022), these studies fail to consider if this shift in legislator behavior is in explicit deviation from constituents' expressed policy preferences. Furthermore, while these studies have explored local news decline via newspaper closures (Snyder Jr and Strömberg, 2010) and broadband internet rollout (Trussler, 2022), the most prominent contemporary mode of local news exposure has been largely neglected: local television news. Much like the newspaper, local television broadcast stations have been increasingly acquired

by large media conglomerates - such as the Nexstar Media Group, the Sinclair Broadcast Group, and Gray Television, inc. - to centralize and thus reduce the costs of the production of program content. The increasing acquisition of once independently-owned and -operated broadcast stations by powerful conglomerates has yielded what I will henceforth refer to as “broadcast station consolidation” throughout the United States. Regarding Sinclair in specific, Martin and McCrain (2019) found that this consolidation has resulted in acquired stations reporting a significantly larger proportion of national news content at the expense of local politics than those stations which remain independently owned and operated. Given that the Sinclair Broadcasting Group - the second largest television station conglomerate in the U.S. - alone reaches roughly 40% of households (Levendusky, 2022), and that consumption of news on television vastly eclipses that of newspapers (Forman-Katz and Matsa, 2022), the democratic effects of the decline of local news coverage on television is likely much more severe.

Synthesizing arguments made in both empirical works (Arnold, 2004; Dunaway, 2008; Hayes and Lawless, 2015; Snyder Jr and Strömberg, 2010; Trussler, 2022) and in formal models of democratic accountability (Barro, 1973; Fenno, 1977; Ferejohn, 1986; Mayhew, 2004), I propose that broadcast station consolidation and the resulting nationalization of local news reduces the electoral constraint placed upon representatives, resulting in greater degrees of representative-constituent policy incongruence. Without sufficient available knowledge of their representatives’ behavior, those living in consolidated regions are less likely to utilize their representatives’ roll-call vote record to inform their electoral decisions. Because there likely exist motives for legislators to vote on considerations other than constituent preferences - such as voting on the preferences of the party and/or on those of interest groups (Snyder Jr and Strömberg, 2010; Trussler, 2022)- the reduction in this electoral constraint will result in representatives deviating further from constituent preferences. Thus, I predict that representatives from districts of high consolidation will engage in greater deviation than representatives from areas with more independent station ownership.

To test this hypothesis, I utilize data from the Federal Communications Commission's (FCC) TV Query, the 2022 Cooperative Congressional Elections Study (CCES) common content, and the roll-call votes of members of the 117th United States House of Representatives. With this data, I created variables for broadcast station consolidation and policy incongruence, with which I use two general nesting spatial models to estimate model coefficients. The results provide mixed evidence to support my hypothesis that district-level broadcast station consolidation is significantly, positively associated with representative-constituency policy incongruence.

This study offers three primary contributions to the extant literature. First, this study directly assesses whether the decline in local news coverage results in greater degrees of representative-constituency policy incongruence, whereas previous studies have analyzed the decline of democratic accountability through proxy via the consideration of other constituent services (Snyder Jr and Strömberg, 2010) and if representatives are more likely to vote along party and lobbying interests (Snyder Jr and Strömberg, 2010; Trussler, 2022). Second, this study considers degrading accountability via the decline of the medium by which most U.S. citizens today receive local news: local broadcast television (Forman-Katz and Matsa, 2022). Lastly, this presents a unique (yet preliminary) comprehensive measure of broadcast station consolidation. Whereas previous studies have fixated upon just one media conglomerate - the Sinclair Broadcasting Group (e.g., Levendusky, 2022; Martin and McCrain, 2019) - I offer a measure which incorporates the current operating licenses of the three largest media conglomerates in the U.S.: Nexstar Media Group, Sinclair Broadcasting Group, and Gray Television, inc. I measure broadcast station consolidation as the proportion of full-power broadcast stations within a DMA that are licensed to one of these three groups. Measuring the consolidation of DMAs, rather than simply identifying those owned by a single conglomerate, has not yet been utilized in the extant research.

1 Context: The Decline of Local News Coverage

In many aspects, local news coverage has declined in prominence throughout the United States. Much of this is attributed to a downward shift in consumer demand. In the last two decades alone, average U.S. daily newspaper circulation decreased by roughly 56.3% (Pew Research Center, 2021b). Today, only about 8% of American citizens report often seeking out news from print publications (Forman-Katz and Matsa, 2022), down from the sizable 36% of citizens in 1986 (Bogart, 1989). The dramatic downward shift in demand, partially the outcome of the proliferation of online news outlets, has resulted in significant losses in newspapers' revenues. From 2006 to 2022, total newspaper advertising revenue - the primary revenue stream of most newspapers - has decreased by a staggering 81.5% (Pew Research Center, 2021b). More astonishing, between 2019 and 2020 alone advertising revenue decreased by 25%. Market forces and projected trends demonstrate that the print newspaper, once the steadfast, staple source of news information, is approaching near-extinction. These forces have resulted in many newspapers significantly slashing the number of newsroom personnel (Peterson, 2021b), small, struggling newspapers being acquired by large, corporate owners (Dunaway, 2008), and, simply, for many newspapers to file for bankruptcy and dissolve entirely (Kamarck and Gabriele, 2015). In whichever of these cases newspapers attempt to cope with changing consumer demands (and possibly fail to do so), unforgiving market forces have resulted in the decline of local news coverage, yielding a host of negative consequences for democratic practice.

Clearly, the dissolution of local, regional newspapers has resulted in declining coverage of local politics. As local newspapers are distributed to small geographical regions, reporting on local events is relevant to a greater share of that paper's audience than other larger, nationalized news mediums. Thus as local mediums disappear and nationalized mediums remain, the amount of relative coverage of local politics decreases substantially (Hayes and Lawless, 2018). However, total dissolution is not a necessary condition for the quantity of reported local events to decrease. Those newspapers that remain today have also substantially

decreased local coverage. This has occurred for two primary reasons. First, in response to decreasing revenues newspapers in aggregate have significantly reduced the number of employed newsroom personnel. From 2006 to 2020, the total number of newsroom employees in the U.S. newspaper sector has decreased from 74,410 employees to 30,820: a decrease of roughly 58.6% (Pew Research Center, 2021b). Many of these cuts were of journalists and local correspondents, who are largely responsible for the production of local news content. As a result, Peterson (2021b) found that newspaper staff cuts were significantly, negatively associated with the quantity of political coverage that newspaper provides.

Second, many surviving newspapers have persisted because they were acquired by corporations. Today, the ten largest newspaper owners control half of the daily papers in the United States, and most of the recent acquisitions have been primarily family-run or small private regional publishers (Adgate, 2021). These chain-owners, many of which are publicly-traded corporations, strictly seek to maximize profits to appease shareholders (Bagdikian, 2004; Dunaway, 2008, 2013; Hamilton, 2004). As newspaper revenues are sharply declining with time, this profit maximization often occurs through the reduction of production costs by economies of scale (Hamilton, 2004). This could take the form of newsroom layoffs, as mentioned prior, and the concentration of content production. When a media conglomerate owns and operates multiple subsidiaries, much news content is often produced/purchased by the conglomerate, which is then distributed to local editors (McManus, 1994). Thus, newspapers owned by corporations, and specifically those of publicly-traded corporations, report less substantive local news than their privately-owned counterparts (Dunaway, 2008; Hamilton, 2004; Schaffner and Sellers, 2003).

Thus far, I have discussed the decline of local news coverage solely through the lens of the decay of the American newspaper. Although extant literature has primarily focused on local newspapers, a growing group of scholars (e.g., Dunaway, 2008; Levendusky, 2022; Martin and McCrain, 2019) have investigated the effects of similar transitions that have recently occurred throughout another influential news medium: local television. Much like the newspaper, local

television has experienced a notable, albeit less dramatic decreasing trend in viewership. This trend is visible across all three primary TV time slots - from 2016 to 2019, local affiliates of ABC, CBS, Fox, and NBC experienced a 12.6% decrease in average morning news viewership, a 13.1% decrease in evening news viewership, and a 15.4% decrease in late night news viewership (Pew Research Center, 2021a).¹ Moreover, total local advertising revenues (including both digital and over-the-air) have decreased from \$22.4 billion USD in 2004 to \$19.8 billion USD in 2020: an 11.7% decrease (Pew Research Center, 2021a). Although these trends are noticeably less severe than that of the newspaper, they are non-negligible and arguably predict a similar decay. Therefore, like the newspaper, proprietors of local television news are experiencing the effects of substantial economic competition in the age of information.

As a result an increasing number of television broadcast stations have also been acquired by large media conglomerates. The underlying explanatory mechanism remains the same: the supplementation of a sizable portion of news content by the conglomerate decreases the production costs of each individual subsidiary. Thus, economies of scale increases profit margins in the face of declining revenues. Consistent with results substantiated by studies on newspaper consolidation, and in support of this explanatory mechanism, Martin and McCrain (2019) found that stations that were acquired by the Sinclair Broadcasting Group - the second largest broadcast station conglomerate in the U.S. - covered a significantly larger proportion national news at the expense of local political coverage upon the change in ownership. Given that the vast majority of today's broadcast stations are owned and/or operated by comparable holding groups, the decline in local news on television is likely to be quite severe. Though the Federal Communications Commission (FCC) restricts each conglomerate from acquisitions which would exceed coverage of 40% of American households (Federal Communication Commission, 2022), local marketing agreements largely circumvent

¹From 2019 to 2020, average viewership for both evening and late night news increased: by 4.3% for evening and by 3.9% for late night. However, this is potentially the result of the Coronavirus pandemic: an event which both attracted significant news viewership and also encouraged individuals to stay home, potentially increasing viewership

this by allowing conglomerates to operate television stations owned by another party (Stelter, 2012). Thus, in effect the three largest broadcast station conglomerates alone - the Nexstar Media Group, the Sinclair Broadcasting Group, and Gray Television, Inc. - owns and/or operates 197, 193, and 180 television stations respectively. This results in total effective coverages of 68%, 43%, and 38% of American households, respectively (Miller and Jessell, 2021). Given these large coverages and that many Americans still tune into local TV news, the various implications of the decline of local news coverage on television may be more severe than those resulting from the decline of the local newspaper.

These implications will be discussed in depth in the following section. However, there is one more consideration worth identifying. Although these changes in television station ownership have been somewhat explored by recent scholars, this literature today remains sparse. Moreover, of the limited literature which considers this topic, only the acquisitions of one of the major broadcast conglomerates has been considered: those of the Sinclair Broadcasting Group. Sinclair is a particularly attractive conglomerate to analyze for two primary reasons. First, in recent years Sinclair has acquired smaller television stations at a faster rate than its competitors, including an unsuccessful attempt at a merger with media titan Tribune which would have increased its total coverage to roughly 70% (Tryon, 2020). Thus, models which capture the effects of this quick and large transition are less prone to spurious findings. Secondly, a key component of the content Sinclair provide to its subsidiaries are "must-run" segments. Not only do these segments undermine the editorial autonomy of these stations, but this literature has found that they exude a considerable conservative slant (Martin and McCrain, 2019). Thus, the emergence of Sinclair in these markets has been attributed to outcomes such as pro-Republican shifts in viewers' attitudes (Levendusky, 2022).

The rationale for utilizing the acquisitions by the Sinclair Broadcasting Group alone is sufficient in contexts which consider polarization and ideological attitude change. However, if one wishes to consider the effects of the decline of local news coverage on television more

generally, then the sole use of Sinclair acquisitions likely yields conservative estimated effects. Thus, I consider the ownership of the three largest broadcast station conglomerates - Nexstar, Sinclair, and Gray Television - to better capture the overall decline of televised local news coverage. Moreover, by connecting the literatures on political communication and on economic theories of democracy, I test a frequently argued, yet empirically sparse theory on the democratic implications of decreased local news coverage: increased policy incongruence between locally-elected legislators and their constituents.

2 With Local News Goes Legislator Accountability

One of the primary functions of the free press in a democratic society is to be a watchdog of government behavior. As citizens do not directly observe the majority of daily governmental affairs, the press possesses both the prerogative and imperative to make public the affairs that would otherwise be absent from citizens' knowledge. At the extreme, this could include notifying the public of various government scandals, corruption, misinformation, and criminality (Besley and Prat, 2006; Cammaerts and Carpentier, 2006; Puglisi and Snyder Jr, 2011; Schultz, 1998). More regularly, the news informs citizens on the various policies implemented, from which they can determine their favorability toward the current Congress and presidential administration (Iyengar and Kinder, 1987). In both cases, the free press can alert the public of potential malfeasance (Bovens et al., 2014; Hamilton, 2016). Because democratically-elected officials depend on the support of their constituents for the sustenance of their political career, that the public can observe and form opinions on the basis of an official's record discourages the official to engage in behavior which substantially deviates from her constituents' preferences (Ansolabehere et al., 2001; Barro, 1973; Carson et al., 2010; Fenno, 1977; Ferejohn, 1986; Griffin et al., 2019; Mayhew, 2004). This is the process by which elected officials are held accountable to public opinion.

As the quantity of local political news coverage decreases, by the accounts identified

in the previous section, it is likely that the degree of this electoral constraint decreases substantially, resulting in legislators deviating further from their constituents' policy preferences. This is a pervasive argument in the standing literature (Arnold, 2004; Dunaway, 2008; Hayes and Lawless, 2015, 2018; Snyder Jr and Strömberg, 2010; Trussler, 2022), and forms the basis upon which this study's sole hypothesis is drawn. The mechanisms by which this effect occurs are two-fold: a) the decline of local news results in voters less frequently utilizing incumbents' performance to determine their vote choice; and b) the reduction of this electoral constraint fundamentally changes the incentive structure for the incumbent, resulting in behavior which deviates further from constituent preferences. These mechanisms, and their corresponding empirical support, are discussed in the following sections.

2.1 Local News Decline and Voter Behavior

The loss of substantive information on the affairs of locally-elected officials, such as representatives, has been shown to profoundly affect the attitudes and the behaviors of voters. At the individual level, consumption of political information via the news has been associated with increases in citizens' knowledge of public affairs (Carpini and Keeter, 1996; De Vreese and Boomgaarden, 2006; Eveland Jr and Scheufele, 2000; Kaid et al., 2007), beliefs that the government is responsive to the demands of the citizenry and thus that citizens hold considerable political power (Gil de Zúñiga et al., 2017), and, as a result, increases in various forms of political participation (De Vreese and Boomgaarden, 2006; Gil de Zúñiga et al., 2017). Conversely, as the quantity of this local information decreases, as occurs via the declining prominence of local newspapers (Dunaway, 2008; Peterson, 2021a) and the consolidation of local television stations (Martin and McCrain, 2019), the ability of the voter to evaluate her incumbent representative's legislative performance significantly diminishes (Hayes and Lawless, 2015). As a result, the decline of local news has been associated with decreased knowledge regarding one's U.S. representative and depressed political participation in U.S. congressional elections (Hayes and Lawless, 2015, 2018).

Moreover, those who continue to participate in said elections are significantly less likely to utilize the legislative behavior of the incumbent to inform their vote choice, instead relying on simple cognitive heuristics such as the personalistic characteristics of candidates such as personality traits, age, race, and gender (Bernhard and Freeder, 2020), cues from political parties (Boudreau and MacKenzie, 2014), and the name recognition of incumbent candidates (Mann and Wolfinger, 1980). The logic explaining these findings is aptly captured by the famous economic theory of democracy presented by Downs (1957). In short, Downs (1957) argues that voters engage in iterative Bayesian updating leading up to an election, whereby exposure to sequential units of substantive information changes the likelihood that they will vote to re-elect the incumbent. In his model, this information primarily takes the form of a legislator's policy decisions. In the absence of such information, however, and under the hypothetical condition that voters are unable to abstain, voters will be forced to use simple cognitive heuristics - such as the party affiliation of the incumbent - to approximate the extent to which the incumbent is behaving according their preferences. Whilst this does perform as a mechanism by which the voter evaluates incumbent performance, as an approximation of incumbent behavior it necessarily induces some error. As explained in the following section, this shift in voter behavior following the loss of local news information substantially alters the incentives of the incumbent in making policy decisions.

2.2 Incumbent Incentives and Roll-Call Vote Choice

That the free press serves as an essential watchdog of government behavior relies on the ability of the public to effectively constrain the behavior of government officials. In democratic societies, this constraint occurs via free and fair elections. If we assume that elected officials place some (if not all) weight on not just the ability to dictate policy, but to retain political power (Downs, 1957), it follows that said officials will not deviate from constituent preferences so far that they are likely to lose the subsequent election (Barro, 1973; Ferejohn, 1986). This is the mechanism of democratic accountability via electoral constraint (Barro,

1973; Fenno, 1977; Ferejohn, 1986; Mayhew, 2004), which has been empirically demonstrated in a number of studies (e.g., Ansolabehere et al., 2001; Carson et al., 2010; Griffin et al., 2019).

What occurs when information on the policy actions of incumbents are lost? Fundamentally, this results in a loss of the free press serving as an effective watchdog of government behavior. Because, as previously explained, citizens in low-information environments are less likely to utilize the legislative behavior of an incumbent representative to determine their vote choice, this mitigates the incentives of the incumbent to act upon her constituents' preferences. If we assume that incumbents consider constituent preferences strictly as a means to secure future electoral victory - which, granted, is not always the case - that voters may not use policy actions as a means to determine vote choice reduces the extent to which congruence with one's constituency increases the odds of re-election. Rather, the incumbent may instead legislate in accordance with party leadership (Carson et al., 2010) or powerful special interest groups (Barber, 2016): both of whom make substantial campaign contributions which significantly better an incumbent's electoral odds (Jacobson, 1990). Moreover, because the heuristics used by voters in a low-information environment are approximations with a degree of uncertainty, voters may be unable to assess the extent to which the incumbent has deviated from their preferences. In these ways, the richness of the information environment determines the extent to which incumbents are constrained by and are incentivized to appease constituent preferences.

Two notable studies empirically examine this theory. The first study, that of Snyder Jr and Strömberg (2010), considers how local newspaper coverage of U.S. House representatives impacts both constituents' knowledge of a given representative and the degree of self-serving behavior the representative engages in. Consistent with the theory offered, and with the works mentioned prior, the authors found that areas in which press coverage of representatives is exogenously lower, constituents are less likely to be able to recall their representative's name and are less likely to describe or rate them. More directly pertaining to incumbent

incentives, however, they also found that representatives from regions of low local press coverage work less for their constituents, in that they are less likely to stand before congressional hearings, to serve on constituency-oriented committees, and to vote against the party leadership. In this way, the loss of local information results in the legislators' incentives shifting away from appeasing constituents and toward appeasing their party. More recently, and in a similar fashion, Trussler (2022) considered how the rollout of broadband internet and the resulting decline of local news media resources influenced the roll-call vote behavior of U.S. representatives. Like Snyder Jr and Strömberg (2010), he found that legislators in regions of high broadband internet penetration voted more in line with their parties, the president, and aligned interest groups.

While these studies are crucial in connecting local media robustness to theories of democratic accountability, much is still left to be explored. For one, while these studies demonstrate the theorized shift in incentive structure away from constituents and toward parties and interest groups, they do not specifically assess policy incongruence: the extent to which representatives' legislative behaviors deviate from the expressed preferences of their constituents. Given that the classic formal models of democratic accountability rely on this single spatial dimension to measure electoral constraint (Barro, 1973; Ferejohn, 1986), this omission results in inference by proxy. Secondly, while Snyder Jr and Strömberg (2010) considers the newspaper and Trussler (2022) considers broadband internet rollout, to my knowledge there is no study which explicitly tests the theory of declining democratic accountability for what is today the most popular mode of local news consumption: local broadcast television Forman-Katz and Matsa (2022). Though the studies presented by Snyder Jr and Strömberg (2010) and Trussler (2022) are quite compelling, the consideration of this essential context would provide a means of significant corroboration of these findings.

Thus, in this study, I seek to provide a new angle by which to corroborate the theory of declining electoral accountability. First, I consider the consolidation of local television broadcast stations as the mechanism by which local political news coverage has declined.

Unlike previous studies, however, I expand this consideration beyond the analysis of a single broadcast conglomerate to more accurately capture the variation in the degree of consolidation across the United States. Second, I employ a direct conceptualization of self-serving representative behavior: policy incongruence - the extent to which a representative's roll-call vote record deviates from the expressed policy preferences of her constituents. This provides a more direct application for the theory offered. In accordance with my theory, I expect that in regions of higher broadcast station consolidation, representatives from that region will engage in a higher degree of policy incongruence than in regions of low consolidation, yielding this study's sole hypothesis:

Hypothesis 1 *The broadcast station consolidation of a congressional district is positively associated with the degree of representative-constituency policy incongruence of that district.*

The following section discusses the data I used to create the variables needed to test this theory.

3 Methods

To test the single core hypothesis offered by this study, I estimated several spatial models using data from the FCC, the 2022 Cooperative Election Study (CES) survey, and the DW-NOMINATE scores of the representatives in the 117th United States House of Representatives. The explanatory variable of interest is district-level broadcast station consolidation: the proportion of television stations that citizens within each district have access to which are licensed to the Nexstar Media Group, the Sinclair Broadcasting Group, and Gray Television, Inc. The outcome of interest is the degree of representative-constituency policy incongruence: the magnitude of the difference between a representative's average roll-call vote choice - as measured by DW-NOMINATE scores - and her constituents' average policy preferences - as derived from the 2022 CES. In this section, I describe both the construction and the

justification for the inclusion of these variables, as well as the spatial-econometric approach to model selection.

3.1 Representative-Constituent Policy Incongruence

The outcome of interest in this paper, representative-constituent policy incongruence, was measured by combining the DW-NOMINATE scores of the members of the 117th U.S. House of Representatives with data from the common content of the 2022 CES survey. DW-NOMINATE scores are measures of legislators' ideological extremity which are derived from their voting record. Thus it serves as a sufficient, single measure of a representative's expressed policy preferences. To compute the aggregate policy preferences of each congressional district, the responses of 60,000 individuals from the 2022 CES were utilized. The first component which was retained was the ideological self-identification of each respondent - the routine 5-point Likert-scale item ranging from "Very Liberal" to "Very Conservative" - as this likely corresponds to a constituent's ideal preferences for her representative's roll-call vote behavior. The second component retained consisted of the items directly pertaining to respondents' support or opposition of a variety of policy propositions. In total, 40 dichotomous policy measures over eight separate policy domains were utilized by this study. Because policy incongruence was calculated via comparison to representative's DW-NOMINATE scores, which measures ideological extremity, all policy measures included were of non-valence, partisan issues. In specific, I assessed individuals' reported support for two separate health care proposals, five proposals on firearm regulation, four proposals on immigration, five proposals on abortion, five proposals on the environment, and eight proposals on policing. Moreover, I included five items which indicated respondents' support for recent policies passed by Congress and five additional items on miscellaneous policy decisions.² Be-

²The miscellaneous policy decisions from the 2022 CES included in my measure were the following: support for "The United States re-joins the Paris Climate Agreement"; "The United States re-joins the World Health Organization"; "Order all federal agencies to buy clean energy, purchase electric vehicles, and make federal buildings energy efficient"; "Increase the minimum wage paid to federal contractors to \$15 per an hour"; "Require that all employees at large companies be vaccinated".

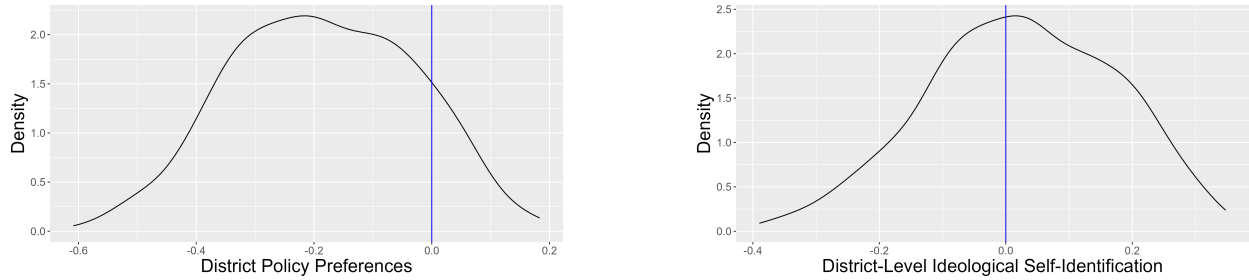


Figure 1: Distribution of Congressional District’s Aggregated Policy Preferences and Ideological Identity

cause the questions were structured as dichotomous support or opposition of these measures, I recoded these responses such that when the support/opposition of a measure was consistent with liberal/Democratic preferences, that response was assigned a -1 and when the support/opposition of a measure was consistent with conservative/Republican preferences that response was assigned a +1. An individual’s responses were then averaged to yield a single value of average ideological policy preference.

Using the survey weights provided in the 2022 CCES common content data set, I aggregated both the ideological self-identification item and these individual-level average policy preferences to the congressional district level. Figure 1 shows the distribution of districts’ aggregated policy preferences and self-identification. As can be seen, while self-identification is relatively normally-distributed about zero, indicating that there exist an even distribution of more-liberal and more-conservative districts, the mean of the distribution of aggregated policy preferences is noticeably to the left of zero. This suggests that districts on average display more solidly liberal policy preferences than conservative ideals. This is consistent with the findings of Ellis and Stimson (2009), which suggest that American citizens generally hold liberal *operational* preferences - those regarding tangible policies - whilst possessing an array of *symbolic* preferences - regarding ideological identity.

To account for these stark differences in the ideological policy preferences of the American public, two separate measures of representative-district policy incongruence were computed. The first variable - which I call *absolute incongruence* - strictly considers the extent

to which a representative's roll-call vote behavior deviates strictly from the explicit policy preferences expressed by her constituents. This first measure is in the spirit of the classic formal theories of democratic accountability (Barro, 1973; Ferejohn, 1986) upon which this study is largely based, which consider the ideal preferences of the legislator and of the constituent along a single dimension. As in other empirical works which have considered policy incongruence (e.g., Arceneaux and Vander Wielen, 2017), I computed absolute incongruence as the absolute value of the difference between district-level constituent preferences and the DW-NOMINATE score of the representative from that district, thus yielding the magnitude of deviation:

$$AbsoluteIncongruence_i = |DWNOMINATE_i - PolicyPreferences_i|$$

The second dependent variable, on the other hand, sought to incorporate both operational policy preferences and symbolic ideological identification into the calculation of representative-district incongruence. While a district may hold operationally-liberal preferences, it may be the case that it also holds more conservative symbolic preferences. It is also possible that when there exists such a discrepancy that the constituency places greater weight on either their symbolic or their operational preferences in considering the performance of their incumbent representative (Ellis and Stimson, 2009). In response, a legislator's DW-NOMINATE score may be more representative of a district's symbolic preferences, operational preferences, or equally weighted between the two. To account for this possibility, the second measure of incongruence - what I call *relative incongruence* - is the magnitude of the variance in a legislator's DW-NOMINATE score that is not explained by symbolic nor operational policy preferences. Specifically, to compute relative incongruence I regressed the DW-NOMINATE scores of each representative on both the aggregate policy preferences and ideological self-identification of each district, as well as a multiplicative interaction between the two types of preferences. The residuals from this regression were retained, the absolute values of which then constituted the final measure of relative incongruence:

$$RelativeIncongruence_i = |\epsilon_i| = |DWNOMINATE_i - \beta_0 - PolicyPreferences_i \times \beta_1 - Ideology_i \times \beta_2 - (PolicyPreferences_i \times Ideology_i) \times \beta_3|$$

3.2 District-Level Broadcast Station Consolidation

To estimate the degree of broadcast station consolidation within each U.S. congressional district, I use publicly-available data from the FCC’s TV Query³ and from the official websites of the Nexstar Media Group, the Sinclair Broadcast Group, and Gray Television, Inc. The FCC TV Query contains information such as the location, call sign, current licensing/permitting agreements, and the names of the current licensee/permittee of each of the 10,667 television broadcast stations currently in operation under FCC regulations in the United States. For the purpose of this analysis, however, I need only to consider full-power television stations, as these are the stations which produce regulated local news content. This excludes the assessment of public access television or amateurs with the personal equipment to broadcast unregulated content. To subset this data to full-power television stations, I utilize the established process for call sign assignment. The call sign is a station’s unique identifier, and there exist both long-standing norms and federal regulations which determine the unique identifier assigned to a new station. For example, stations are often assigned call sign which ends in the suffixes -LD, -CA, or -CD to designate that these stations are classified as low-power digital, class-A analog, and class-A digital stations respectively.

By utilizing such call sign patterns, I subsetting this data to only include the 1,578 full-power television stations in the contiguous United States. The reason I exclude Alaska and Hawaii from my analyses are theoretical. Because there exists significant geographical distance between these two states and the mainland U.S., the demand for local television

³This data can be found at <https://www.fcc.gov/media/television/tv-query>

Table 1: Number of TV Stations Owned and/or Operated to Three Largest Conglomerates

Conglomerate	Licensed Stations	LMA Stations	Total
Nexstar Media Group	128	63	191
Sinclair Broadcasting Group	18	135	153
Gray Television, Inc.	143	11	154
Total	289	209	498

news content may be significantly higher in these two states than in otherwise politically-comparable states. Because of this, Alaska and Hawaii are likely outliers in the trends I wish to parsimoniously explore.

Table 1 displays the number of full-power television stations in the contiguous U.S. that are directly licensed to Nexstar, Sinclair, and Gray Television as reported in the TV Query. However, licenses alone are an insufficient measure of the stations controlled by these three conglomerates, as they do not capture those stations operated by these companies through local marketing agreements (LMAs). These LMAs allow large holding companies to exert *de facto* control over local stations, while the operating license is technically held by a third-party “shell” company (Stelter, 2012). This allows conglomerates to exceed the 40% coverage limit imposed by the FCC, and thus is frequently used. To account for these stations which are *de facto* controlled by these three conglomerates, the call-signs of television stations were matched with those from lists of controlled stations provided on these companies’ websites. Table 1 includes the number of stations controlled by these companies through LMAs, and thus provides the total number of stations owned and/or operated by these three conglomerates.

Using the latitude and the longitude of these stations provided by the TV Query and by the websites of the three conglomerates, I identified the proportion of television stations owned by one of these three conglomerates in a given region, yielding the value of broadcast station consolidation. However, it would be inappropriate to apply this information directly to the congressional district level, as citizens across congressional districts often have access to

the same local news programming. Therefore, I first apply this data to the Designated Market Area (DMA) level. Nielsen (2022) - one of the country’s foremost media data analytics firms - defines a DMA as “a group of counties and zip codes that form an exclusive geographic area in which the home market television stations hold a dominance of total hours viewed”. In the era of broadcast television, these regions largely reflected the geographic coverage of all broadcast stations located within that region. Today, although television has been digitized, these DMAs still dictate which stations the public has access to (Moskowitz, 2021). Thus, the degree of broadcast station consolidation was first calculated at the DMA level. Figure 1 displays the estimated degree of broadcast station consolidation in each of the 206 DMAs in the in the contiguous United States.

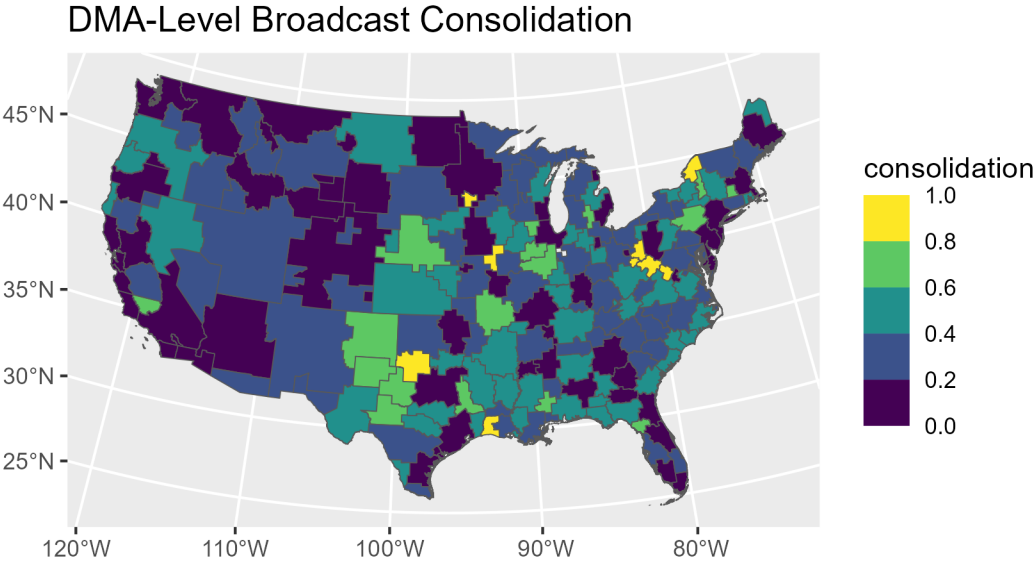


Figure 2: Broadcast Station Consolidation in Contiguous U.S. Designated Market Areas

I can then apply this information to the district-level. Because the borders of the U.S. congressional districts are incongruent with those of the DMAs, I use areal weighted averages to produce district-level consolidation values. To illustrate, consider a hypothetical congressional district A, 40% of which is within the borders of DMA 1, 45% in DMA 2, and 15% in DMA 3. If DMA 1 has a consolidation value of 0.65, 2 of 0.2, and 3 of 0.45, the estimated consolidation value of the congressional district would be

$$\text{consolidation}_A = (0.40)(0.65) + (0.45)(0.2) + (0.15)(0.45) = 0.4175$$

Using the `r` package `areal`, I use the DMA consolidation values along with the shapefiles of both the DMAs and the U.S. congressional districts to generate district-level consolidations. Specifically, I intensively interpolate the consolidation values from the DMAs to the congressional district shapefile. This interpolation has the advantage of also appropriately addressing cases in which the area of the congressional district is larger than that of its overlapping DMAs, as is the case with North and South Dakota, for example. Figure 2 displays the resulting values of broadcast station consolidation at the congressional-district level, thus concluding the production of the independent variable.

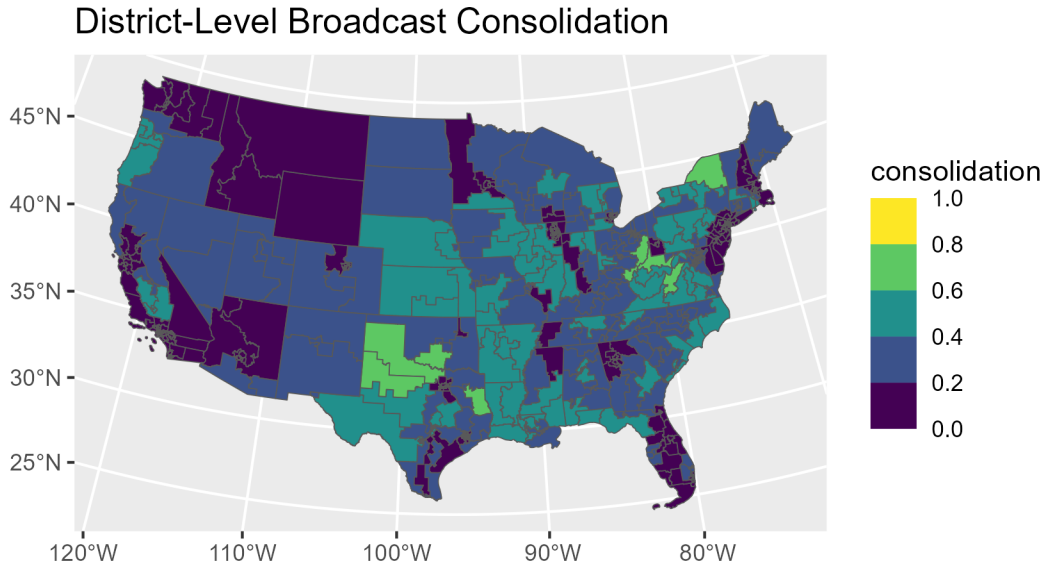


Figure 3: Broadcast Station Consolidation in Contiguous U.S. Congressional Districts

3.3 Spatial Model Selection

Because this study compares the effects of broadcast station consolidation on representative-constituent policy incongruence across U.S. congressional districts, a spatial modeling approach was utilized for the core analyses. This included the specification of a spatial weights

matrix, as well as numerous tests to determine the most appropriate spatial lag structure in the final models.

For the spatial weights, a row-standardized distance-nearest-neighbors matrix was created, whereby congressional districts were deemed to be neighbors if they exist within 200 kilometers of one another. This distance was chosen for two reasons: a) because broadcast consolidation was initially calculated at the DMA-level, and this is an approximate radius of the median DMA in the United States, and b) because congressional districts greatly vary in size, and therefore those districts most tightly clustered may be considered to all be neighbors of one-another as opposed to the few at-large districts in large states (e.g., North Dakota, South Dakota, Montana, and Wyoming) in which spillovers of events are unlikely to occur. For that same reason, this spatial weights matrix was row-standardized, reducing the influence any one specific congressional district has on another in these tightly-clustered regions.

With this spatial weights matrix in hand, Moran's I and Lagrange Multiplier tests were then conducted to assess the degree of significant spatial autocorrelation / dependence for the three substantive variables of interest (broadcast consolidation, absolute incongruence, and relative incongruence). This served to determine if the specification of a spatial model - as opposed to a simple OLS model - would be necessary in the core analyses. Indeed, regarding autocorrelation the results of the Moran's I tests suggest that broadcast station consolidation ($I = 0.48, p < 0.01$), absolute incongruence ($I = 0.24, p < 0.01$) and relative incongruence ($I = 0.06, p < 0.01$) are all significantly spatially autocorrelated. For spatial dependence, a series of Lagrange Multiplier and Robust Lagrange Multiplier tests were conducted on the simple OLS versions of the two models to be produced: the two forms of incongruence separately regressed on consolidation. The results of the tests suggest significant spatial dependence for both lags of the included variables and for lags of the error in both models. Thus, general nested spatial models were estimated for both the absolute and the relative incongruence models.

Specifically, the final model specified for the effect of broadcast consolidation on both forms of incongruence is as follows:

$$Incongruence = \rho W(Incongruence) + Consolidation \times \beta + W(Consolidation) \times \theta + u,$$

$$\text{where } u = \lambda W u + \epsilon$$

4 Results

The results of the two general nesting spatial models specified to determine the effect of broadcast station consolidation on representative-constituent policy incongruence as displayed in Table 2. Results from the first model, which considers absolute incongruence - the absolute difference in a district's policy preferences and its representative's DW-NOMINATE score, suggest that broadcast station consolidation is significantly, positively associated with representative-constituent policy incongruence. At its face, this provides some potential support for the single hypothesis offered by this study. However, upon further inspection of this model, the extent to which this first set of results supports the hypothesis is highly questionable. For one, the weak model diagnostics - the log-likelihood and the Akaike Information Criterion (AIC) - suggest that this model performs poorly in explaining the variation of the outcome. Moreover, the estimated effects of the spatial lags of both the dependent variable and the error term suggest that this model may be prone to erroneous inferences. For one, that the effect size of the lagged error exceeds that of the explanatory variable of interest could suggest that potential confounding factors are omitted from this model. Thus, that consolidation is significantly and positively associated with absolute incongruence may be a result of omitted variable bias, yielding an erroneous inference. Furthermore, the significant, negative coefficient of the lagged dependent variable suggests that an increase in the representative-constituent incongruence of one district is significantly associated with a

marked decrease in the incongruence of its neighbors. This is not only the opposite of the relationship captured by the Moran's I statistic of spatial autocorrelation of absolute incongruence ($I = 0.24, p < 0.01$), but it makes little normative sense. Thus, though the results of the first model are consistent with this study's sole hypothesis, this is likely an erroneous inference derived from poor model specification.

Table 2: Effects of Broadcast Station Consolidation on Representative-Constituent Policy Incongruence

	<i>Dependent variable:</i>	
	Absolute Incongruence (1)	Relative Incongruence (2)
Broadcast Station Consolidation	0.359*** (0.082)	-0.044 (0.069)
Lag of Consolidation	0.570*** (0.180)	0.050 (0.099)
Spatial Lag of Y (ρ)	-0.569** (0.120)	0.212 (0.212)
Spatial Lag of ϵ (λ)	0.697*** (0.061)	-0.013 (0.254)
Constant	0.318** (0.048)	0.196*** (0.051)
Observations	445	445
Log-Likelihood	14.168	133.227
AIC	-16.335	-254.45

Note:

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

The second column of Table 2 presents the results of the general nesting spatial model of broadcast consolidation and relative incongruence - the portion of a representative's DW-NOMINATE score not explained by constituent policy preferences nor district ideological identification. The results of this second model suggest that broadcast station consolidation is not significantly associated with relative incongruence, thereby lacking support for the one offered hypothesis. Taken in conjunction with the potentially erroneous nature of the findings of the first model, these analyses provide incredibly weak - if any - support for the hypothesis.

5 Discussion

This paper sought to investigate the potential effects broadcast station consolidation - the proportion of television stations in a given region owned and operated by large media conglomerates - have on the behaviors of locally-elected political officials. In specific, by elaborating upon and extending the classic theories of electoral accountability presented in the literatures on political communication and economic theories of democracy, I argue that the decline in the public's knowledge of their local representative - which follows from local news station acquisition - reduces the electoral constraint placed upon that representative, incentivizing her to engage in more frequent deviations in her from her constituents' preferences in her roll-call votes. By using data from the FCC, the 2022 CCES, and the DW-NOMINATE scores of the members of the 117th U.S. House of Representatives, I find weak support for this theory. Whilst consolidation was significantly, positively associated with absolute incongruence, which is consistent with the offered hypothesis, model diagnostics and the estimated effect sizes of other parameters suggest that this may be a spurious finding resulting from omitted variable bias. Moreover, the results of the analyses suggest that there is no significant association between consolidation and relative incongruence, further undermining the results produced by the first model. Due to the inconsistent and possibly erroneous nature of this study's findings, future research should attempt to refine the offered analyses to provide a better direct test of the theory proposed by this paper.

To begin, much error was likely induced in the explanatory variable through the interpolation of consolidation from the DMA-level to the district-level. Consolidation was originally computed at the DMA-level to reflect the fact that all individuals within a single DMA have access to the same broadcast television stations. Because these two units of analysis do not nest - due to the extreme incongruence of the boundaries of these regions, a multi-level model was not able to be fitted. To compensate for the error induced by the transformation employed, a spatial model was fit. However, while modeling the spatial spillovers which likely occurred via the interpolation from one unit of analysis to another may have captured

some of this induced error, this approach was still likely insufficient.

Second, as explained previously the measures of constituent preferences, which were used to calculate the extent of representatives' policy deviations, are prone to error as well. For one, the dichotomous "support/oppose" responses available to participants of the CCES on measures of policy preferences removes much of the nuance necessary to determine the strength of respondents' support or opposition. Had these measures been formatted as a five-point Likert-scale, for example, or if participants had weighted the importance of specific policy arenas, the calculated district-level policy preferences would have been more accurate. Because these values were used in comparison with a representative's DW-NOMINATE scores, the dependent variables in these analyses were particularly prone to bias.

Because there exists significant measurement error in both the dependent variable and in the explanatory variable of interest, these analyses were particularly susceptible to the production of spurious findings. This is what I perceived to have happened regarding the variation in the estimated effects across the two models.

Although these preliminary analyses resulted in arguably spurious findings, this is not to say that this paper lacks in its potential contributions to extant literature. In fact, I would argue that this work should be seen as a crucial launching point, compelling future research. Outside of studies which investigate the attitude shifts that results from television station acquisition (Levendusky, 2022; Martin and McCrain, 2019), research on the numerous varied effects of these acquisitions remains quite sparse. Second, those which have considered these acquisitions have primarily considered just one of the several media conglomerates engaging in a fierce competition for coverage: the Sinclair Broadcast Group. Although crude in its approach, my study is the first to expand the scope of these acquisitions to other equally influential holding groups, better capturing the effects of station acquisition as a whole. Third, this study joins the ranks of Snyder Jr and Strömberg (2010) in being among the few studies which directly tests the effects of declining local news coverage on the behaviors of locally-elected representatives. Although it has been long argued that the decline of local

news has undermined liberal democratic mechanisms of electoral accountability, curiously very few studies have actually sought to empirically test these arguments. Although my results are largely inconclusive, they provide a primary basis for exploring these mechanisms, particularly during a period in history which is experiencing rapid shifts in the information environment.

In conclusion, this study explored new waters by attempting to apply the implications of the acquisition of television broadcast stations by large media conglomerates to classic theories of democratic accountability. Along these theories, I tested whether representatives in areas of higher broadcast consolidation engaged in more frequent deviations from the preferences of their constituents in their roll-call vote choice. Although my results are largely inconclusive, this study should be considered a preliminary analysis by which to inspire future works which aim to better understand how shifts in the information environment affect democratic practice.

References

- Adgate, B. (2021). Newspapers have been struggling and then came the pandemic. *Forbes*. <https://www.forbes.com/sites/bradadgate/2021/08/20/newspapers-have-been-struggling-and-then-came-the-pandemic/?sh=3385558c12e6>.
- Ansolabehere, S., Snyder Jr, J. M., and Stewart III, C. (2001). Candidate positioning in us house elections. *American Journal of Political Science*, pages 136–159.
- Arceneaux, K. and Vander Wielen, R. J. (2017). *Taming intuition: How reflection minimizes partisan reasoning and promotes democratic accountability*. Cambridge University Press.
- Arnold, R. D. (2004). *Congress, the press, and political accountability*. Princeton University Press.
- Bagdikian, B. H. (2004). *The new media monopoly: A completely revised and updated edition with seven new chapters*. Beacon Press.
- Barber, M. (2016). Donation motivations: Testing theories of access and ideology. *Political Research Quarterly*, 69(1):148–159.
- Barro, R. J. (1973). The control of politicians: an economic model. *Public choice*, pages 19–42.
- Bernhard, R. and Freeder, S. (2020). The more you know: Voter heuristics and the information search. *Political Behavior*, 42(2):603–623.
- Besley, T. and Prat, A. (2006). Handcuffs for the grabbing hand? media capture and government accountability. *American economic review*, 96(3):720–736.
- Bogart, L. (1989). *Press and public: Who reads what, when, where, and why in American newspapers*. Erlbaum Associates, Hillsdale, NJ.

- Boudreau, C. and MacKenzie, S. A. (2014). Informing the electorate? how party cues and policy information affect public opinion about initiatives. *American Journal of Political Science*, 58(1):48–62.
- Bovens, M., Goodin, R. E., and Schillemans, T. (2014). *The Oxford handbook public accountability*. Oxford University Press.
- Cammaerts, B. and Carpentier, N. (2006). *Reclaiming the media: Communication rights and democratic media roles*. Intellect Books.
- Carpini, M. X. D. and Keeter, S. (1996). *What Americans know about politics and why it matters*. Yale University Press.
- Carson, J. L., Koger, G., Lebo, M. J., and Young, E. (2010). The electoral costs of party loyalty in congress. *American Journal of Political Science*, 54(3):598–616.
- De Vreese, C. H. and Boomgaarden, H. (2006). News, political knowledge and participation: The differential effects of news media exposure on political knowledge and participation. *Acta Politica*, 41(4):317–341.
- Downs, A. (1957). *An economic theory of democracy*. Harper & Row, New York.
- Dunaway, J. (2008). Markets, ownership, and the quality of campaign news coverage. *The Journal of Politics*, 70(4):1193–1202.
- Dunaway, J. (2013). Media ownership and story tone in campaign news. *American Politics Research*, 41(1):24–53.
- Ellis, C. and Stimson, J. A. (2009). Symbolic ideology in the american electorate. *Electoral Studies*, 28(3):388–402.
- Eveland Jr, W. P. and Scheufele, D. A. (2000). Connecting news media use with gaps in knowledge and participation. *Political communication*, 17(3):215–237.

- Federal Communication Commission (2022). Fcc broadcast ownership rules. <https://www.fcc.gov/consumers/guides/fccs-review-broadcast-ownership-rules>: :text=National%20Television%20Ownership,of%20all%20U.S.%20TV%20households. Online; accessed on November 7, 2022.
- Fenno, R. F. (1977). Us house members in their constituencies: An exploration. *American Political Science Review*, 71(3):883–917.
- Ferejohn, J. (1986). Incumbent performance and electoral control. *Public choice*, pages 5–25.
- Forman-Katz, N. and Matsa, K. E. (2022). News platform fact sheet. Technical report, Pew Research Center, Washington, D.C.
- Gil de Zúñiga, H., Diehl, T., and Ardévol-Abreu, A. (2017). Internal, external, and government political efficacy: Effects on news use, discussion, and political participation. *Journal of Broadcasting & Electronic Media*, 61(3):574–596.
- Griffin, J. D., Newman, B., and Nickerson, D. W. (2019). A god of vengeance and of reward? voters and accountability. *Legislative Studies Quarterly*, 44(1):133–162.
- Hamilton, J. (2004). *All the news that’s fit to sell: How the market transforms information into news*. Princeton University Press: Princeton, NJ.
- Hamilton, J. T. (2016). *Democracy’s detectives: The economics of investigative journalism*. Harvard University Press.
- Hayes, D. and Lawless, J. L. (2015). As local news goes, so goes citizen engagement: Media, knowledge, and participation in us house elections. *The Journal of Politics*, 77(2):447–462.
- Hayes, D. and Lawless, J. L. (2018). The decline of local news and its effects: New evidence from longitudinal data. *The Journal of Politics*, 80(1):332–336.
- Hopkins, D. J. (2018). *The increasingly United States: How and why American political behavior nationalized*. University of Chicago Press.

- Iyengar, S. and Kinder, D. R. (1987). *News that matters: Television and American opinion*. University of Chicago Press.
- Jacobson, G. C. (1990). The effects of campaign spending in house elections: New evidence for old arguments. *American Journal of Political Science*, pages 334–362.
- Kaid, L. L., McKinney, M. S., and Tedesco, J. C. (2007). Political information efficacy and young voters-introduction. *American Behavioral Scientist*, 50(9):1093–1111.
- Kamarck, E. C. and Gabriele, A. (2015). The news today: 7 trends in old and new media. *Brookings Center for Effective Public Management*.
- Levendusky, M. S. (2022). How does local tv news change viewers’ attitudes? the case of sinclair broadcasting. *Political Communication*, 39(1):23–38.
- Mann, T. E. and Wolfinger, R. E. (1980). Candidates and parties in congressional elections. *American Political Science Review*, 74(3):617–632.
- Martin, G. J. and McCrain, J. (2019). Local news and national politics. *American Political Science Review*, 113(2):372–384.
- Mayhew, D. R. (2004). *Congress: The electoral connection*. Yale university press.
- McManus, J. H. (1994). *Market-driven journalism: Let the citizen beware?* Sage Publications.
- Miller, M. K. and Jessell, H. A. (2021). Top 30 station groups: Nexstar still no. 1; gray, scripps, allen busy buyers. *TVNewsCheck*. <https://tvnewscheck.com/business/article/nexstar-still-no-1-gray-scripps-allen-busy-buyers/>.
- Moskowitz, D. J. (2021). Local news, information, and the nationalization of us elections. *American Political Science Review*, 115(1):114–129.

- Nielsen (2022). Dma regions. <https://markets.nielsen.com/us/en/contact-us/intl-campaigns/dma-maps/>. Online; accessed on November 12, 2022.
- Peterson, E. (2021a). Not dead yet: political learning from newspapers in a changing media landscape. *Political Behavior*, 43(1):339–361.
- Peterson, E. (2021b). Paper cuts: How reporting resources affect political news coverage. *American Journal of Political Science*, 65(2):443–459.
- Pew Research Center (2021a). Local tv news fact sheet. <https://www.pewresearch.org/journalism/fact-sheet/local-tv-news/>. Online; accessed on November 2, 2022.
- Pew Research Center (2021b). Newspaper fact sheet. <https://www.pewresearch.org/journalism/fact-sheet/newspapers/>. Online; accessed on October 2, 2022.
- Puglisi, R. and Snyder Jr, J. M. (2011). Newspaper coverage of political scandals. *The journal of politics*, 73(3):931–950.
- Schaffner, B. F. and Sellers, P. J. (2003). The structural determinants of local congressional news coverage. *Political Communication*, 20(1):41–57.
- Schulhofer-Wohl, S. and Garrido, M. (2013). Do newspapers matter? short-run and long-run evidence from the closure of the cincinnati post. *Journal of media economics*, 26(2):60–81.
- Schultz, J. (1998). *Reviving the fourth estate: Democracy, accountability and the media*. Cambridge University Press.
- Snyder Jr, J. M. and Strömberg, D. (2010). Press coverage and political accountability. *Journal of political Economy*, 118(2):355–408.

Stelter, B. (2012). You can change the channel, but local news is the same. *The New York Times*. <https://www.nytimes.com/2012/05/29/business/media/local-tv-stations-cut-costs-by-sharing-news-operations.html>.

Trussler, M. (2022). The effects of high-information environments on legislative behavior in the us house of representatives. *Legislative Studies Quarterly*, 47(1):95–126.

Tryon, C. (2020). Sinclair broadcasting as mini-media empire: media regulation, disinfomercials, and the rise of trumpism. *Media, Culture & Society*, 42(7-8):1377–1391.