

# Does Accountability Vary with Newspaper Coverage in State Legislatures?

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## Abstract

State legislatures are critical policymaking bodies, yet recent studies suggest that elections rarely hold state legislators accountable for their representation and voters generally know little about legislative politics. Would legislators behave differently if voters had access to more information about legislative politics? Leveraging the haphazard overlap of newspaper markets and legislative districts, I construct and validate a measure of legislative press coverage in all 99 state legislative chambers for the years 2000-2022 that is plausibly uncorrelated with other district-level variables. Pairing this measure with a regression discontinuity design and models of electoral selection, I estimate that the return to ideological moderation is 40% larger and the incumbency advantage is two times greater in districts with the strongest press coverage in comparison to those with the weakest coverage. Once in office, I find that legislators who receive stronger press coverage work more for their constituencies—missing fewer roll call votes, sponsoring more bills, and participating more on committees—and diverge less from their district’s median voter.

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# 1 Introduction

State legislatures are critical policymaking bodies, yet recent studies suggest that elections rarely hold state legislators accountable for their lawmaking (Birkhead, 2015; Hogan, 2008; Rogers, 2017), and voters know little about legislative politics (Rogers, 2023; Songer, 1984; Squire and Moncrief, 2019). Since the electoral connection between voters and legislators underpins canonical theories of legislative behavior (Fenno, 1978; Mayhew, 1974), its breakdown has important implications for legislative representation and elections. The absence of robust legislative accountability mechanisms is commonly attributed to the low-information news environment in which state legislatures operate (e.g., Carey et al., 2006). Without active political news coverage, incumbents may work less for their constituencies (Arnold, 2004; Snyder and Stromberg, 2010) and face limited threat of being thrown out of office for unresponsive policy making (Ferejohn, 1986). However, since legislative elections are generally low-salience events featuring limited competition and public attention, it is unclear whether the accountability-enhancing effects of the press identified in highly-salient congressional elections apply to down-ballot—yet increasingly consequential—legislative elections. For example, the marginal impact of press coverage may be higher in down-ballot elections, where baseline news penetration is low (Gentzkow, Shapiro, and Sinkinson, 2011; Schulhofer-Wohl and Garrido, 2013), or the fragmented and localized nature of legislative politics may limit the influence of news sources no matter their strength (Dunaway, 2008). Would legislators behave differently if voters had access to more information about local politics? Understanding how the media shapes down-ballot elections and legislator behavior is particularly important in light of the secular decline of local news sources (Hayes and Lawless, 2015, 2018; Martin and McCrain, 2019; Peterson, 2021*b*; Worden, Matsa, and Shearer, 2022) and the nationalization of American elections (Hopkins, 2018) and media (Martin and McCrain, 2019).

While observers have long worried about elections and accountability in low-information media environments, empirical evidence on the effect of news coverage on legislative races

is sparse because news coverage is endogenous to many political and economic outcomes. In this paper, I construct a measure of congruence between newspaper markets and state legislative districts that is plausibly uncorrelated with other political and economic variables (Peterson, 2021*a*; Snyder and Stromberg, 2010). To the extent that the selection on observables assumption from Snyder and Stromberg (2010) is satisfied, I am able to identify the causal effect of newspaper coverage on elections and representation. However, to guard against concerns about omitted variable bias, throughout the paper I show that my results are robust to the inclusion of a battery of legislative race, representative, and district controls.

I begin by testing whether my measure of press congruence predicts observed levels of legislative news coverage. To do so, I gather new data on press coverage of incumbent state legislators in 286 geographically-representative newspapers for the years 2000-2020 encompassing 58 million newspaper articles.<sup>1</sup> Analyzing this data, I find that the number of articles appearing in a given newspaper about the incumbent state legislator is strongly increasing in that newspaper’s share of readers residing in the associated legislative district. Because legislative news coverage is a function of readership share, my measure of congruence between newspaper markets and legislative districts strongly predicts overall legislative news coverage. Drawing on Cooperative Election Study survey data, I also find that increased legislative press coverage translates into greater average voter knowledge about legislative politics.

Having validated my measure of newspaper coverage, I investigate how electoral selection and the incumbency advantage in state legislative elections vary across levels of press coverage. First, I evaluate prominent claims that electoral returns to moderation are higher when races receive stronger news coverage (Canes-Wrone and Kistner, 2023; Hall, 2015; Rogers, 2017). Drawing on the midpoint design of Ansolabehere, Snyder, and Stewart (2001), I find that the electoral return to moderation in contested general elections is at least 40% larger

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<sup>1</sup>This news corpus encompasses 75% of all state legislative districts for the period of study.

in districts with the strongest newspaper coverage in comparison to those with the weakest coverage. Second, I test the prediction that the incumbency advantage is larger when media coverage of elections is stronger (Ansolabehere and Snyder, 2002; Ashworth and Bueno De Mesquita, 2008). Leveraging the regression discontinuity design of Lee (2008), I find that the combined personal and party incumbency advantage is at least two times as large in the most congruent legislative districts in comparison to the least congruent districts.

In the second half of the paper, I evaluate how news coverage shapes legislators' behavior in office. Analyzing extensive roll call, committee assignment, and bill sponsorship data, I find that legislators who receive more news coverage are more productive: they sponsor more bills, are absent from roll call votes less often, and are more likely to serve on important legislative committees. I also test whether the well-documented ideological divergence between Democratic and Republican representatives' roll call records is smaller in highly-congruent legislative districts (Ansolabehere, Snyder, and Stewart, 2001; Fowler and Hall, 2017, 2016; Lee, Moretti, and Butler, 2004). Leveraging a regression discontinuity design, I find that the gap in representation between Democratic and Republican state legislators is approximately 20% smaller in districts with the highest levels of newspaper coverage in comparison to those with the weakest.

This paper builds most directly on work by Snyder and Stromberg (2010) on media coverage and political accountability in Congress. Snyder and Stromberg find that members of Congress better represent their constituencies when news coverage is stronger. I evaluate whether these results extend to state legislatures. My analysis of state legislatures is important for at least two reasons. First, because identifying features of state legislatures are precisely their low levels of transparency (Broockman et al., 2012; Kirkland and Harden, 2018), limited public interest (Hopkins, 2018; Rogers, 2023), and curtailed statehouse reporting resources, it is not clear whether results about congressional media coverage apply to state legislatures. For example, the marginal impact of press coverage may be higher in down-ballot races, where baseline news penetration is low, (Gentzkow, Shapiro, and Sinkin-

son, 2011; Schulhofer-Wohl and Garrido, 2013), or the fragmented and localized nature of legislative politics may limit the influence of news sources no matter their strength (Dunaway, 2008). Second, replication of existing research—particularly in novel settings—is an essential part of scientific research. That I identify effects of active news coverage in state legislatures that are similar to those in Congress should bolster our confidence in this literature’s overall conclusions.

My analysis also complements yet improves upon Auslen’s (2023) work on issue representation in state legislatures. Auslen finds that legislators in more-congruent districts are more-likely to cast roll call votes that match their district’s preferences on abortion, same-sex marriage, gun control, medicaid expansion, and the minimum wage. While our congruence-based designs are similar, my paper incorporates a broader set of circulation data that is well-tuned for studying often highly-localized legislative elections.<sup>2</sup>

Further, my research contributes to a vibrant literature on ideological selection in American elections. Extensive work on Congress (Ansolabehere, Snyder, and Stewart, 2001; Canes-Wrone, Brady, and Cogan, 2002; Carson et al., 2010; Hall, 2015) and state legislatures (Handan-Nader, Myers, and Hall, 2024) finds that ideologically extreme candidates receive lower vote shares in general elections. A growing literature, however, suggests that the strength of this electoral selection mechanism is conditional on active media coverage. In congressional elections, the penalty to nominating an extremist primary candidate may be as much as three times larger when congruence is high (Hall, 2015), and news congruence strengthens the tie between candidates’ ideology and electoral outcomes (Canes-Wrone and Kistner, 2023). Systematic evidence on how news coverage shapes accountability in state legislatures, in contrast, is largely missing. One important exception is Rogers (2017, 2023), who finds that voters in states with more statehouse newspaper reporters are better able to hold their representatives accountable for their lawmaking. While foundational, these

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<sup>2</sup>Where Auslen (2023) focuses on newspapers included in the Alliance for Audited Media’s (AAM; formerly the Audit Bureau of Circulation) reports, my paper includes both AAM and non-AAM newspaper circulation data. Since non-AAM newspapers tend to be smaller (Snyder and Stromberg, 2010) and likely focus on local news, they are particularly important to include in an analysis of often highly-localized legislative elections.

results are based on a coarse, statewide measure of news coverage that is likely correlated with many other facets of legislative elections. Following Snyder and Stromberg (2010), my newspaper congruence design addresses these concerns while expanding the analysis across time and legislative chambers.

Finally, an important drawback of my analysis is that my data only cover the years 2000 to 2020. Over recent decades, increased choice in news options has shifted mass media consumption away from sources with traditionally high political coverage to outlets with more-limited political coverage that is often highly nationalized (Hindman, 2008; Hopkins, 2018; Prior, 2007; Stroud, 2011). Further, due to economic pressures, the overall quantity of local news has declined significantly (Hayes and Lawless, 2018, 2015; Martin and McCrain, 2019).<sup>3</sup> However, recent research suggests that newspapers remain an important driver of political knowledge, although these effects may be as much as one-half to one-third the size of previous eras (Peterson, 2021*a*). Importantly, these trends should bias my analysis against finding a significant relationship between newspaper coverage and legislative elections and representation.

Having motivated my study and focus on state legislatures, I now outline my empirical strategy and introduce newly collected data on legislative news coverage.

## 2 Empirical Strategy

### 2.1 Measuring Newspaper-District Congruence

Despite widespread interest, there is limited evidence on the impact of news coverage on local elections because the quantity and quality of news media are endogenously determined by political and economic variables. To overcome this challenge, I adapt the newspaper

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<sup>3</sup>In this paper, I focus on media effects revealed through newspapers. Existing research shows that local television allots less time to congressional (Hess, 1991; Vinson, 2003) and state legislative (Kaplan, Goldstein, and Hale, 2003) activity than newspapers. Future work should consider whether local television also augments accountability in state legislative elections.

congruence design of Snyder and Stromberg (2010) to state legislative elections. This design leverages the fact that a newspaper’s coverage of a legislator is partially a function of its share of readers residing in that legislator’s district (Hayes and Lawless, 2015; Snyder and Stromberg, 2010; Vinson, 2003). Intuitively, if the majority of a newspaper’s readers reside in a single district, the newspaper will cover that district’s legislator much more closely than legislators in other nearby areas. Conversely, a newspaper that straddles multiple districts will split its coverage of legislators accordingly, resulting in less-active political newspaper coverage. Identification in this design relies on the assumption that the economic factors that shape newspaper markets are often orthogonal to political boundaries.<sup>4</sup> The result is natural variation in newspaper coverage that is plausibly orthogonal to economic and political confounding variables.

Following previous work, I formalize this relationship by calculating the overlap (i.e., “congruence”) between newspaper markets and state legislative districts. Specifically, let  $x_{md}$  be the number of newspapers sold by newspaper  $m$  in district  $d$  in year  $t$ .<sup>5</sup> Then  $m$ ’s market share in  $d$  is given by

$$MarketShare_{md} = \frac{x_{md}}{\sum_{m'} x_{m'd}}, \quad (1)$$

and  $m$ ’s share of readers in district  $d$  is given by

$$ReaderShare_{md} = \frac{x_{md}}{\sum_{d'} x_{md'}}. \quad (2)$$

Intuitively, *MarketShare* represents each newspaper’s share of total sales in a given district, while *ReaderShare* captures the share of a newspaper’s readership that resides in the district.

To capture congruence, I weight *ReaderShare* by *MarketShare* to account for the probability

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<sup>4</sup>See Snyder and Stromberg (2010) for a full validation of this assumption.

<sup>5</sup>Here and henceforth the index  $t$  is implicit. I observe newspaper-county circulation data,  $x_{mc}$ . Following Snyder and Stromberg (2010), I assume that the number of copies of newspaper  $m$  sold in county  $c$  is proportionate across district  $d$ . Hence, I impute district-level circulation as  $x_{md} = \sum_c (\frac{n_{cd}}{\sum_{d'} n_{cd'}} x_{mc})$ , where  $n_{cd}$  is the population of the part of district  $d$  in county  $c$ .

that coverage reaches a given reader:

$$Congruence_d = \sum_{m=1}^M MarketShare_{md} ReaderShare_{md}. \quad (3)$$

In equation 3,  $Congruence_d$  ranges from zero to one. When congruence is equal to one, there is perfect overlap between newspaper markets and legislative districts, suggesting that the newspaper will concentrate its coverage on that district’s legislator. Congruence near zero indicates that voters will often be exposed to newspaper coverage about an incumbent that is not their legislator.

I calculate  $Congruence_d$  for every district in all 99 state legislative chambers for the years 2000-2020, accounting for both decennial and court-initiated redistricting. County level newspaper circulation data (i.e.,  $x_{mc}$ ) are from Peterson (2021a). This data was digitized from the 2008, 2014, and 2018 editions of the Standard Rate and Data Service *Circulation* handbook.<sup>6</sup> Population statistics (i.e.,  $n_{cd}$ ) were imputed from Census Bureau redistricting files at the block level.

## 2.2 Data on Legislative Performance and Representation

To implement my study, I build datasets on legislative performance and representation from a variety of sources. First, to measure legislator productivity, I assemble data on state legislative roll call voting and bill sponsorship from Fournaies and Hall (2022) and the online data vendor Legiscan.com. This data includes roll call votes and bill introductions for the near-universe of chamber-years for the years 2010-2022 and roughly half of chamber-years for the years 2000-2009. Approximately 20% of the data originate from Fournaies and Hall (2022) and the remaining 80% were collected by the author from Legiscan.com.<sup>7</sup> To this dataset I merge in data on state legislative committee assignments and chamber leadership

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<sup>6</sup>Following Peterson (2021a) and Snyder and Stromberg (2010), I interpolate circulation for missing years.

<sup>7</sup>While every effort was made to assemble a complete panel, data for a number of state-chambers was unavailable for early years of the analysis. Exact details on the sample are provided in Appendix Section A.1.1.



positions for the years 2000-2014 from Fournaies and Hall (2018) and Fournaies (2018).

Lastly, I build an extensive battery of legislative race, representative, and district controls at the state legislative-level following Snyder and Stromberg (2010). This data covers this paper’s full period of study and was collected from IPUMS and the Census Bureau.

All datasets were matched to a master dataset of state legislative election returns and candidate ideology scalings from Handan-Nader, Myers, and Hall (2024) and Myers (2023).

### 3 Congruence Predicts Legislative Newspaper Coverage and Voter Political Knowledge

The foundation of this paper is the assumption that the number of articles a newspaper publishes about a legislator is increasing in that newspaper’s share of readers who live in the related legislative district. This section introduces a novel legislative news coverage dataset and tests this assumption. After showing congruence predicts newspaper coverage, I evaluate whether this coverage boosts voters’ knowledge about state legislatures.

#### 3.1 Newspaper Coverage

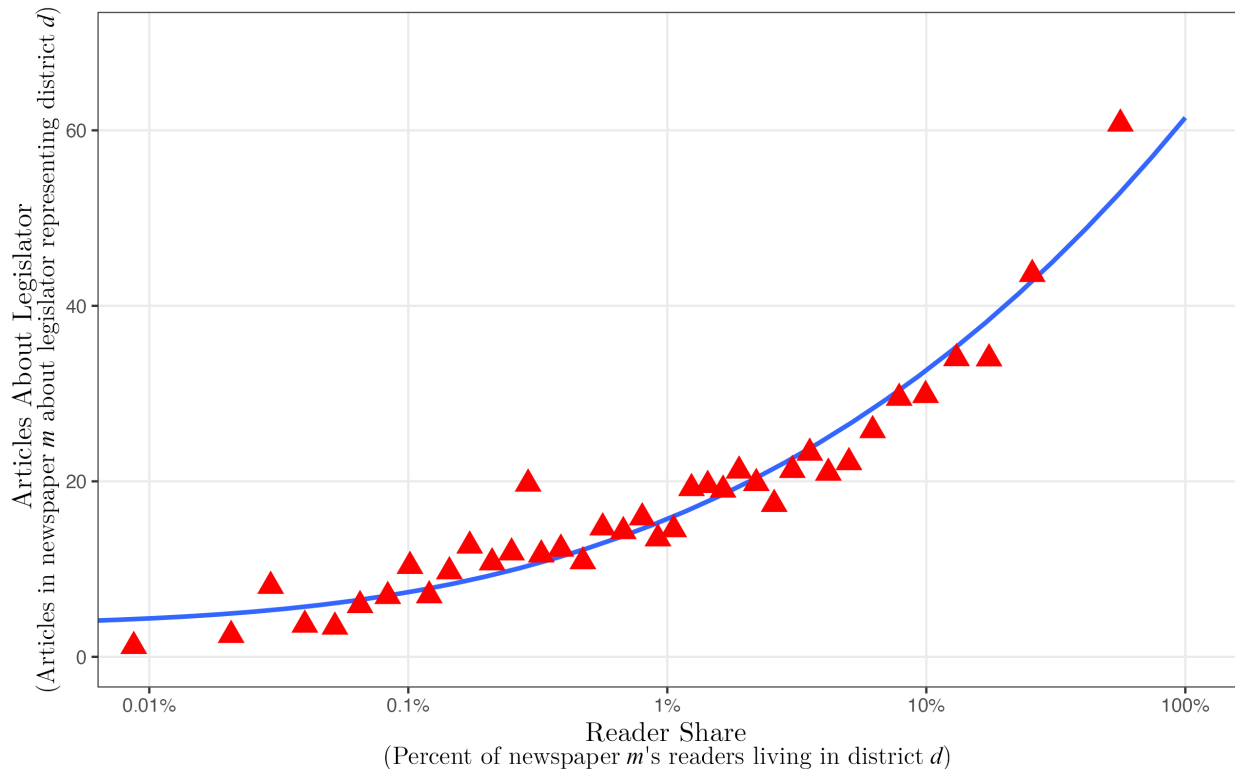
To measure legislator newspaper exposure, I use Newspapers.com to search 286 local and regional newspapers for articles about every incumbent state legislator in every election year between 2000 and 2020.<sup>8</sup> These 286 newspapers cover 75% of all state legislative districts and contain 1.3 million articles about state legislators. Using this data, I construct the variable  $q_{mdt}$  which records the number of newspaper articles written by newspaper  $m$  about the incumbent in district  $d$  in year  $t$ . See Appendix Section A.1.2 for a complete description of this novel dataset.

As an initial test, I plot the relationship between the number of articles in newspaper

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<sup>8</sup>Data from Newspapers.com have been used extensively in previous empirical research (Gentzkow, Glaeser, and Goldin, 2006; Ban et al., 2019; Schuster, 2023).

**Figure 1 – Newspaper Reader Share Shapes Legislator Press Coverages.** The number of articles written by newspaper  $m$  about the legislator representing district  $d$  (vertical axis) is strongly increasing in newspaper  $m$ 's reader share in district  $d$  (horizontal axis). Triangles are averages of equal-sample-sized bins of the horizontal axis. The horizontal axis is logged, representing constant proportional change in reader share, and the solid line plots a third-degree polynomial and is fit to the underlying data.



$m$  that are written about the legislator representing district  $d$  in election cycle  $t$  ( $q_{mdt}$ ) and  $m$ 's readership share in  $d$  and  $t$  ( $ReaderShare_{mdt}$ ). The results are shown in Figure 1 where  $ReaderShare_{mdt}$  is logged for ease of presentation and the red dots represent averages of equal-sample-sized bins. I find a strong positive relationship between  $ReaderShare_{mdt}$  and  $q_{mdt}$ . That is, the number of articles written about the incumbent state legislator increases strongly in newspaper reader share.

Now, I formally test this motivating assumption while controlling for a variety of variables that likely affect legislator news coverage. This battery of controls includes the controls employed in Snyder and Stromberg (2010), with the exception of an indicator for political

scandal.<sup>9</sup> These controls fall into three categories. First, I add legislator-specific controls, including indicators for whether the legislator is a freshman, a member of their chamber’s majority party, and a chair of a legislative committee. I also control for the legislator’s experience as measured by their tenure in the legislature. Second, I control for race characteristics, including whether the race was close (within 10%), was for an open seat, or was uncontested. Finally, I add district controls, including population density, median income, percent urban, percent retired, percent veterans, and percent foreign born. The summary statistics for these controls, along with their sources, are shown in Appendix Table A.1.3.

The results from this analysis are reported in Table 1. In columns one and two the unit of analysis is the district-newspaper-year and the outcome is  $q_{m dt}$ —the number of articles written by newspaper  $m$  about the legislator representing district  $d$  in year  $t$ . The key independent variable is *ReaderShare*. Following Snyder and Stromberg (2010), I include year fixed effects. Column one demonstrates that the relationship plotted in Figure 1 is highly statistically significant. In column two, the addition of legislator, race, and district controls does not meaningfully change these results.<sup>10</sup> I find that change in newspaper reader share from zero to one is associated with between 95 and 100 more articles written about the incumbent state legislator.

Overall, the strong relationship between newspaper *ReaderShare* and newspaper coverage underlies the results of remainder of this paper. This is because people residing in areas with a higher value for *Congruence* (i.e., *MarketShare* multiplied by *ReaderShare*) will be exposed to more articles about their state legislator. To emphasize this point, I calculate the sales-weighted number of articles written about the legislator representing district  $d$  in

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<sup>9</sup>I add additional district and race controls to the original Snyder and Stromberg (2010) specification in order to match the specifications employed in subsequent sections. In Appendix Table A.5, I replicate the Snyder and Stromberg (2010) specification (with the exception of the scandal indicator), the results of which are nearly identical to those presented in the main text.

<sup>10</sup>The results are also highly similar after controlling for the distance from the district’s centroid to the state capital.

**Table 1 – Newspaper Reader Share and Legislator Press Coverages.** After controlling for legislator, race, and district variables, newspaper *ReaderShare* strongly predicts observed press coverage. As a result, the *Congruence* between newspaper markets and districts is also highly predictive of legislative newspaper coverage.

		Count of Articles About Legislator ( $q_{mdt}$ )		Sales-Weighted Articles About Legislator ( $q_{dt}$ )	
		(1)	(2)	(3)	(4)
ReaderShare		94.69 (8.20)	99.79 (7.23)		
Congruence				93.53 (4.95)	95.55 (5.07)
Legislator Controls	Freshman		-2.18 (1.07)		-0.89 (0.22)
	Experience		0.38 (0.11)		0.10 (0.01)
	In Majority		0.11 (1.00)		-0.19 (0.19)
	Chair		5.61 (2.50)		1.15 (0.55)
Race Controls	Close Race		1.74 (1.06)		0.77 (0.20)
	Uncontested Race		-2.00 (0.75)		-0.44 (0.18)
	Open Seat		-0.78 (0.94)		-0.06 (0.22)
	Population Density		-0.39 (0.37)		-0.08 (0.09)
District Controls	Median Income		-0.00 (0.00)		-0.00 (0.00)
	% Urban		0.16 (0.05)		0.16 (0.05)
	% Retired		-0.23 (0.33)		-0.23 (0.33)
	% Veterans		0.01 (0.34)		0.01 (0.34)
	% Foreign Born		0.21 (0.19)		0.21 (0.19)
N		85,135	85,031	46,252	46,179
Unit of Observation		Dist.-Paper-Year	Dist.-Paper-Year	District-Year	District-Year
Fixed Effects		Year	Year	Year	Year
Standard Error Clusters		Newspaper	Newspaper	District	District

Note: The sales-weighted average number of articles about a legislator in district  $d$  in time  $t$  is  $q_{dt} = \sum_{m=1}^M \text{MarketShare}_{mdt} \cdot q_{mdt}$ . The definition of  $q_{cdt}$  is analogous. Results are substantively identical after logging *ReaderShare* and *Congruence*.

year  $t$  as

$$q_{dt} = \sum_{m=1}^M \text{MarketShare}_{m dt} \cdot q_{m dt}.$$

Columns three and four of Table 1 regress  $q_{dt}$  against district congruence,  $\text{Congruence}_d$ . I find a strong positive relationship between congruence and press coverage. An increase in congruence from zero to one is associated with an 94 or 96 article increase in newspaper coverage. These estimates are roughly half the size of previous estimates for Congress (Snyder and Stromberg, 2010).<sup>11</sup>

In sum, I find that newspaper *ReaderShare* is highly predictive of legislative news coverage. As a result, newspaper coverage of state legislators is stronger when *Congruence*—or the degree of overlap between newspaper markets and legislative districts—is higher.

### 3.2 Voter Political Knowledge

Having shown that *Congruence* predicts newspaper coverage of state legislators, I now investigate whether this coverage translates into increased voter knowledge about legislative politics. To do so, I use data from the 2018 Cooperative Election Study (CES) which asked respondents to name their lower chamber state representative. I then map each respondent to their lower chamber state legislative district, creating an indicator for whether they correctly identified the name of their state legislator.<sup>12</sup>

The results are reported in Table 2. Column one of Table 2 reports the baseline effect without controls, while column two adds controls for respondent characteristics. Controls include respondents’ level of education (6 categories), race (8 categories), party ID (8 categories), family income, interest in politics, age, and number of years the respondent has lived in their current city. I find that a shift from the lowest to highest newspaper congruence in my sample is predicted to increase respondents’ probability of correctly identifying their state

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<sup>11</sup>Note, however, that Snyder and Stromberg (2010) analyze newspaper references for the years 1991-2002, while I examine the period 2000-2020.

<sup>12</sup>The CES reports respondents’ locations at the ZIP code level, which often map to more than one state legislative district. Following Rogers (2023), I take a conservative approach and code a response as correct if the respondent identifies any of the lower-chamber state legislators representing their ZIP code area.

**Table 2 – Newspaper Congruence and Legislative Name Recognition.** *Congruence* strongly predicts voters’ probability of correctly identifying their lower chamber state legislator.

	State Legislator Name Recognition	
	(1)	(2)
Congruence	0.16 (0.07)	0.17 (0.08)
N	857	825
Respondent Controls	No	Yes
State FEs	Yes	Yes

Note: Standard errors are clustered by district in parentheses. Controls include respondent level of education (6 categories), race (8 categories), party ID (8 categories), family income, interest in politics, age, and number of years the respondent has lived in their current city. Full control results are reported in Appendix Table A.8.

legislator by 16 or 17 percentage points.<sup>13</sup> Considering that only 22% of respondents in my sample could identify their state legislator, the effect of newspaper congruence is substantial.

In this section, I have provided evidence that my measure of congruence between state legislative districts and newspaper markets strongly predicts actual newspaper coverage of legislative politics. Further, using CES data, I find that this increased newspaper coverage translates into stronger voter knowledge about legislative politics. Having validated the assumptions of this study, I now consider the whether *Congruence* varies with legislative elections and legislator behavior.

## 4 Press Coverage and Legislative Elections

In this section, I use my data on district *Congruence* to evaluate two prominent claims about how news coverage shapes elections. First, a key concern about the decay of local news media is that voters are less able to sanction candidates for ideological extremity. Previous work

<sup>13</sup>The CES data includes both voters and non-voters. My conclusions are unchanged after restricting the data to respondents who voted in the 2018 midterm elections.

on congressional elections suggests that the electoral penalty for ideological extremism is indeed higher when news coverage is stronger (Hall, 2015; Canes-Wrone and Kistner, 2023), but there is little evidence for state legislative elections. In the first subsection, I test whether the electoral returns to moderation in state legislatures are higher when elections receive more news coverage. In the second subsection, I evaluate the prediction that the incumbency advantage will be greater for more visible races (Ansolabehere and Snyder, 2002; Ashworth and Bueno De Mesquita, 2008).

## 4.1 Electoral Returns to Moderation

Downsian logic suggests that candidates will perform better the closer they locate to the median voter (Black, 1958; Downs, 1957; Hotelling, 1929). In line with this expectation, extensive work finds that voters prefer more-moderate candidates to more-extreme candidates (Ansolabehere, Snyder, and Stewart, 2001; Burden, 2004; Canes-Wrone, Brady, and Cogan, 2002; Erikson et al., 2000; Tomz and Van Houweling, 2008; Handan-Nader, Myers, and Hall, 2024). It is plausible, though, that voters will be less able to respond to candidates’ ideology when news coverage of legislative elections is low. In this subsection, I test whether the well-documented electoral returns to moderation in state legislative elections (Handan-Nader, Myers, and Hall, 2024) require active media coverage.

To assess how news coverage affects electoral returns to moderation, I compare the ideology of competing Democratic and Republican candidates and predict their electoral returns to changes in ideological platform. I rely on the estimated ideological positions of state legislative candidates from Handan-Nader, Myers, and Hall (2024) (henceforth “HMH Scores”) which leverage supervised machine learning to predict incumbents’ roll call ideology.<sup>14</sup> Following Ansolabehere, Snyder, and Stewart (2001), I estimate an equation of the form

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<sup>14</sup>I prefer HMH Scores because these scalings correlate highly within-party to NP-Scores ( $r = .78$  for Democrats and  $r = .73$  for Republicans) and are trained using contributions only from elections *before* a candidate first wins office. As Hall and Snyder (2015) note, restricting the scaling matrix to donations before a candidate takes office avoids potentially biasing the scalings if a subset of donors strategically contribute to candidates (e.g., access-seeking interest groups).

$$Y_{dct} = \beta_0 + \beta_1 \text{Midpoint}_{dct} + \beta_2 \text{Distance}_{dct} + \beta_3 \text{Congruence}_{dct} + \beta_4 \text{Midpoint}_{dct} \cdot \text{Congruence}_{dct} + \Omega X_{dct} + \alpha_c + \delta_t + \epsilon_{dct}, \quad (4)$$

where  $Y_{dct}$  is either the Democratic candidate's general election vote share or a victory indicator in district  $d$  in chamber  $c$  in year  $t$ .<sup>15</sup> *Midpoint* and *Distance* are the midpoint and distance between Democratic and Republican candidates, respectively, and *Congruence* is my measure of newspaper market-legislative district congruence. The term  $X_{dct}$  is an optional vector of controls,  $\alpha_c$  and  $\delta_t$  are state-by-chamber and year fixed effects, respectively, and the error term,  $\epsilon_{dct}$ , is clustered by district  $d$ . Finally, to hold the districts' median voter constant, I control for the Republican presidential candidate's vote share in the most recent presidential election.<sup>16</sup>

Previous research on state legislatures suggests that  $\beta_1$  is positive and between .12 and .3, indicating that candidates benefit from ideological moderation (Handan-Nader, Myers, and Hall, 2024).<sup>17</sup> The term  $\beta_4$  tests whether this advantage is stronger in districts with more-congruent newspaper coverage.

Table 3 reports my estimates of the midpoint model (i.e., Equation 4). Across all specifications, I find robust evidence that newspaper congruence strengthens the relationship between ideological moderation and electoral success. In column one, without any additional controls, I find that a shift from congruence of zero to one is associated with an increase in the expected electoral returns to moderation of 42% (.11/.26). After adding controls for candidate contributions (column 2) and district, race, and representative controls (column 3), I again find that stronger newspaper coverage is associated with enhanced electoral returns to moderation. Column two (three) suggests that a shift in congruence from

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<sup>15</sup>Since this design requires competition between one Democratic and one Republican candidate, I restrict my sample to elections in contested single-member districts when using the midpoint model.

<sup>16</sup>This decision matches Ansolabehere, Snyder, and Stewart (2001). Note that, since congruence is generally constant within district-regimes, I cannot employ district fixed effects to hold the median voter constant.

<sup>17</sup>Focusing on the lower bound of .12, this estimate suggests that one standard deviation increase in the midpoint would increase the Democratic vote share by 1.56 percentage points.



**Table 3 – News Congruence and the Advantage of Moderate Candidates in Contested General Elections.** Moderate candidates receive higher vote-share and win-probability returns in districts with more-congruent newspaper coverage.

	Dem Vote Share		
	(1)	(2)	(3)
Midpoint	0.26 (0.02)	0.19 (0.01)	0.17 (0.01)
Midpoint · Congruence	0.11 (0.05)	0.09 (0.04)	0.07 (0.04)
Congruence	-0.04 (0.03)	-0.04 (0.02)	-0.03 (0.02)
Distance	-0.02 (0.02)	-0.01 (0.01)	0.00 (0.01)
Rep. Pres. Vote Share	-0.74 (0.01)	-0.59 (0.01)	-0.55 (0.01)
Dem Contributions		0.02 (0.00)	0.02 (0.00)
Rep Contributions		-0.02 (0.00)	-0.02 (0.00)
N	7,335	6,864	6,864
District Controls	No	No	Yes
Race Controls	No	No	Yes
State-Chamber FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes

Note: The outcome is either Democratic vote share or a Democratic win indicator. Robust standard errors are clustered by district in parentheses. Midpoint and Distance variables are scaled to run from 0 to 1. The sample is limited to contested general elections in single member districts and, hence, *Race Controls* excludes the dummy for contested races. Full control results are reported in Appendix Table A.9.

zero to one would increase the midpoint coefficient by 47% (64%). In Appendix A.3, I show that similar results hold for the Democratic candidate’s win probability. In short, I find that press coverage appears to covary with the relationship between ideology and electoral outcomes.

## 4.2 The Incumbency Advantage

The incumbency advantage has received extensive scholarly attention in congressional and state legislative elections. In addition to highlighting the extraordinary advantage incumbents receive in their reelection bids, previous research suggests that the incumbency advantage is larger for higher-visibility offices and races.<sup>18</sup> I test this prediction, using my measure of *Congruence* as a proxy for race visibility.

To evaluate this prediction, I employ the regression discontinuity design (RDD) of Lee (2008).<sup>19</sup> This design compares party vote shares in time  $t + 1$  in districts where the margin of victory (and, hence, incumbency status) was very close in time  $t$ . Since vote share is continuous around  $50\% + 1$  but incumbency status changes discontinuously, this difference estimates the change in vote share that is attributable to incumbency. However, since I am interested in how *Congruence* shapes the incumbency advantage, I modify the original Lee (2008) design to allow for heterogeneity in the incumbency advantage. Specifically, for district  $d$  in election  $t$ , I estimate OLS regressions of the form

$$\begin{aligned}
 \text{Dem Vote Share}_{dt+1} = & \alpha_0 + \alpha_1 V_{dt} + \alpha_2 T_{dt} + \alpha_3 C_{dt} + \\
 & \beta_1 V_{dt} C_{dt} + \beta_2 V_{dt} T_{dt} + \beta_3 C_{dt} T_{dt} + \\
 & \gamma_1 V_{dt} C_{dt} T_{dt} + \\
 & [\alpha_4 \mathbf{W}_{dt} + \beta_4 V_{dt} \mathbf{W}_{dt} + \beta_5 T_{dt} \mathbf{W}_{dt} + \gamma_2 T_{dt} V_{dt} \mathbf{W}_{dt} +] \\
 & \delta_t + \varepsilon_{dt}.
 \end{aligned} \tag{5}$$

The term  $\text{Dem Vote Share}_{dt+1}$  is the Democrat's vote share in time  $t + 1$ ,  $T_{dt}$  is an indicator

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<sup>18</sup>Specifically, Ashworth and Bueno De Mesquita (2008) propose that, if news environments are equally informative across elections, the incumbency advantage is increasing in the informativeness of the news signals. This comparative static arises because, as voters receive better information, they become more confident about their selected candidate. Hence, future information is less likely to change their mind, helping the incumbent. Ansolabehere and Snyder (2002) find support for this hypothesis across different levels of government, but previous research has not examined this prediction across state legislative races.

<sup>19</sup>As Fowler and Hall (2014) note, this design captures the weighted average of the personal and party incumbency advantages. The RDD's assumptions have been shown to hold in the context of state legislative elections (Eggers et al., 2015).

**Table 4 – Regression Discontinuity Estimates of the Incumbency Advantage in High and Low-Congruence Districts.** The incumbency advantage is higher in more-congruent districts.

	Baseline			Interactive Model			Interactive Model With Controls		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dem Win · Congruence				0.05 (0.03)	0.06 (0.02)	0.05 (0.02)	0.05 (0.03)	0.08 (0.03)	0.06 (0.02)
Dem Win	0.05 (0.00)	0.05 (0.00)	0.05 (0.00)	0.05 (0.00)	0.04 (0.00)	0.05 (0.00)	-0.01 (0.03)	-0.01 (0.03)	-0.00 (0.03)
Congruence				-0.08 (0.02)	-0.09 (0.02)	-0.09 (0.02)	-0.04 (0.02)	-0.06 (0.02)	-0.05 (0.02)
N	6,325	8,391	10,379	5,973	7,918	9,816	4,954	6,539	8,134
Optimal Bandwidth	.067	.067	.067	.063	.063	.063	.066	.066	.066
Bandwidth Factor	.75	1	1.25	.75	1	1.25	.75	1	1.25
Estimate Bandwidth	.05	.067	.083	.047	.063	.079	.049	.066	.082
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	No	No	No	No	No	Yes	Yes	Yes

Note: In all columns the outcome is the Democrat’s vote share in time  $t + 1$ . Controls include race, representative, and district controls. Standard errors are clustered by district in parentheses. *Estimate Bandwidth* is the bandwidth used in each column and is the product of the *Optimal Bandwidth* and the *Bandwidth Factor*. Extended control results are reported in Appendix Table A.10.

for the Democrat’s victory in time  $t$ ,  $V_{dt}$  is the Democratic candidate’s general election win margin in time  $t$ ,  $C_{dt}$  is the district’s *Congruence*,  $\delta_t$  represents a year fixed effect, and  $\mathbf{W}_{dt}$  is an optional vector of control variables. This specification matches recent empirical and theoretical work on so-called “heterogeneity-in-discontinuities” designs (Bansak and Nowacki, 2022; Olson, 2020; Desai and Frey, 2023).

Table 4 reports the results from this exercise. Throughout Table 4, I combine a local linear estimator estimated separately on each side of the discontinuity with the optimal bandwidth from Calonico, Cattaneo, and Titiunik (2014) (e.g., Desai and Frey, 2023). For each specification, I report estimates at the optimal bandwidth and bandwidths that are 25% larger and smaller than the optimal bandwidth. Hence, the bandwidth used in each column (*Estimate Bandwidth*) is the product of the *Optimal Bandwidth* (from Calonico, Cattaneo, and Titiunik, 2014) and the *Bandwidth Factor*. First, as a baseline, columns one through three estimate the incumbency advantage in state legislative elections without reference to

*Congruence*. I find that incumbency in time  $t$  causes a 5 percentage point increase in party vote share in the subsequent election. This estimate is slightly smaller than Lee’s (2008) estimate of 7.7 percentage points in U.S. House elections.

Next, in columns four through six of Table 4, I allow the treatment effect to vary according to levels of *Congruence*. The coefficient on the interaction term indicates that incumbents running in districts with perfect congruence with newspaper markets receive a vote-share bonus that is typically double that of incumbents in theoretical districts with zero congruence. Finally, in columns seven through nine of Table 4 I introduce district, race, and representative controls and allow their relationship with vote share to vary across the discontinuity. This strategy provides more-compelling identification of the association between *Congruence* and vote share. After this inclusion, my results are similar and statistically significant, although the incumbency advantage when congruence is zero is attenuated.

Hence, Table 4 supports the theoretical predictions of Ashworth and Bueno De Mesquita (2008), indicating that where news coverage of state legislators is stronger, the incumbency advantage is significantly larger.

## 5 Legislative Behavior and Representation

The results from the previous section suggest that the presence of active newspaper coverage alters the functioning of legislative elections. When press coverage is strong, the electoral returns to moderation and incumbency advantage are higher. In this section, I explore how news coverage influences legislator behavior, including legislative productivity and representation.

### 5.1 Legislative Productivity

Robust media coverage of politics allows voters to monitor the behavior of their representatives (Arnold, 2004; Snyder and Stromberg, 2010). In the absence of robust media coverage,

however, legislators may have weak incentives to engage in costly forms of legislative productivity. This may happen, for example, if legislators serving low-information districts suspect that their shirking of legislative responsibilities will go unnoticed, or that their expenditure of effort will be overlooked by their electorate. While previous work suggests that the removal of electoral incentives leads to lower state legislative productivity (Fourinaies and Hall, 2022), there is no evidence on how press coverage affects state legislative productivity. In this section, I evaluate how legislative productivity varies with news coverage.

Voting, working on committees, and writing bills constitute many of the most important activities for legislators. By casting roll call votes, legislators engage in a highly-consequential form of position-taking (Mayhew, 1974), while missing a roll call vote may reflect non-ideological shirking (Bender and Lott, 1996).<sup>20</sup> Strategic committee membership and service allows legislators to prioritize and expedite the demands of their constituency (e.g., Shepsle, 1989, 1978; Gilligan and Krehbiel, 1987; Weingast and Marshall, 1988, although see also Berry and Fowler 2016). Finally, crafting and sponsoring legislation may aid legislators in building a personal legislative agenda (Schiller, 1995). Hence, following previous work on state legislative productivity, my analysis focuses on these three indicators of productivity.

I operationalize these forms of legislative productivity using the roll call, committee activity, and bill sponsorship data described in Section 2.2. First, to capture how often legislators participate in floor votes, I calculate the percent of all floor roll call votes in which a legislator cast a vote either in favor or against to the motion. Second, I measure committee service using the committee activity index created by Fourinaies and Hall (2022). This index measures a legislator’s aggregate committee responsibilities across all committee assignments. Third, to measure legislative bill-writing and sponsorship activity, I calculate the number of bills that each legislator sponsored in a given legislative session. Finally, following Fourinaies and Hall (2022) and Dal Bó and Rossi (2011), I create a summary measure of legislative productivity by extracting the underlying latent dimension of the

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<sup>20</sup>Further, roll call voting is one of the legislative activities that is most-commonly covered by newspapers (Arnold, 2004).

**Table 5 – Active Newspaper Coverage Increases Legislative Productivity.** Active newspaper coverage is associated with fewer missed roll call votes, more-active committee membership, and more bill sponsorships.

	Percent of Floor Votes		Committee Activity		Sponsored Bills		Aggregate Productivity Index	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Congruence	0.94 (0.41)	0.91 (0.42)	0.26 (0.12)	0.30 (0.12)	5.09 (2.96)	5.09 (2.96)	0.13 (0.05)	0.11 (0.05)
N	34,837	34,820	13,105	13,105	34,837	34,837	15,544	15,536
District Controls	Y	Y	Y	Y	Y	Y	Y	Y
Race Controls	Y	Y	Y	Y	Y	Y	Y	Y
Representative Controls	Y	Y	Y	Y	Y	Y	Y	Y
State x Chamber x Year FEs	Y	N	Y	N	Y	N	Y	N
State x Chamber x Year x Party FEs	N	Y	N	Y	N	Y	N	Y

Note: Outcomes are reported in column headers. Standard errors are clustered by state-chamber in parentheses. Full control results are reported in Appendix Table A.11.

three productivity measures using principle components analysis. Appendix Table A.1.3 reports the summary statistics for these measures.

Table 5 regresses the four measures of productivity on press congruence. Odd numbered columns include state-by-chamber-by-year fixed effects, so these columns leverage comparisons of productivity between legislators representing high and low congruence districts within the same legislative session. However, since the majority party may appear systematically more productive than the minority party (Bucchianeri, Volden, and Wiseman, 2024), even numbered columns include state-by-chamber-by-year-by-party fixed effects. In this second set of columns, I only leverage comparisons within the same legislative session and party.

The first two columns of Table 5 show the relationship between a shift in press congruence from zero to one and the percent of roll call votes a legislator casts. Legislators representing districts with the most robust newspaper coverage miss between .94 (column one) and .91 (column two) percentage points fewer roll call votes than legislators representing districts with the poorest press coverage.<sup>21</sup> Focusing on column one, since the average state legislator

<sup>21</sup>Since the missed vote rate may be correlated with travel time to the capital, in Appendix Table A.7 I add a control for the distance between each districts' centroid and the state capital. My results remain unchanged.

casts a vote in 94.9% of all roll calls, the effect of active press coverage represents an 18% increase in the missed-vote rate. This estimate is similar in absolute value to the effect of being a lame-luck term-limited legislator (Fouirnaies and Hall, 2022) or the extension of a legislator’s term length (Titunik, 2016).

Next I consider committee activity. Columns three and four of Table 5 show the relationship between press congruence and Fouirnaies and Hall’s (2022) measure of committee activity. I find that robust press coverage is, on average, associated with between a .26 and .30 increase in the committee index. These changes represent a 9% and 10% proportional increase in committee activity relative to the typical legislator. In columns five and six, I estimate how bill sponsorship varies with legislative press coverage. The coefficients are imprecisely estimated, but suggest that legislators who have the strongest press coverage sponsor 5.09 more bills than legislators with the weakest coverage. Finally, columns seven and eight aggregate my three measures of productivity into a single scale. The results mirror my findings for the individual components.

Collectively, the results in Table 5 suggest that press coverage plays an important role in driving legislator effort and productivity. Legislators that receive stronger news coverage are absent for fewer roll call votes, sponsor more legislation, and are more active on committees.

Having considered productivity, I now transition to studying legislative representation.

## 5.2 Representation Divergence

Political polarization has reached historic levels across American legislative landscapes, generating widespread concern about diminished legislative productivity, efficiency, and responsiveness (Mann and Ornstein, 2012; McCarty, Poole, and Rosenthal, 2006; Shor and McCarty, 2011; Krugman, 2004). A defining feature of this polarization is the divergence in representation between Democratic and Republican legislators. Despite Downs’ prominent prediction that candidates will converge to the median voter (Black, 1958; Downs, 1957; Hotelling, 1929), previous work documents systematic and persistent divergence in Ameri-

can legislatures (Fowler and Hall, 2016, 2017; Lee, Moretti, and Butler, 2004). Scholars have advanced numerous explanations for the failure of convergence, including voter preferences for non-ideological characteristics (Ashworth and Bueno de Mesquita, 2009; Bernhardt and Ingberman, 1985; Eyster and Kittsteiner, 2007; Groseclose, 2001), the threat of a third-party entrant (Palfrey, 1984), and uncertainty over electoral outcomes (Calvert, 1985; McCarty et al., 2019; Wittman, 1983).

Surprisingly, there is little evidence on how news coverage shapes divergence in legislative representation. One important exception is Snyder and Stromberg (2010) who show that congressional divergence is smaller in districts with stronger newspaper coverage. We might expect, for example, legislative media coverage to decrease representation divergence by prompting legislators to place more weight on their constituents' preferences. Alternatively, the legislative media environment may be too weak to meaningfully alter representatives' behavior. The following section addresses this question.

To assess the relationship between press coverage on divergence, I use a regression discontinuity design to compare representation in districts where the Democratic candidate barely won to districts where the Republican candidate barely lost (Fowler and Hall, 2016, 2017; Lee, Moretti, and Butler, 2004) across values of  $Congruence_d$ . In the neighborhood of the discontinuity, this design isolates the effect of an election result (Imbens and Lemieux, 2008).

As a fundamental element of representation, I use legislators' roll call votes to capture representation in state legislatures as measured by Shor and McCarty's (2011) NP-Scores. For this design, I focus on contested state legislative elections in single-member districts.



Specifically, for district  $d$  in election  $t$  I estimate OLS regressions of the form

$$\begin{aligned}
NPScore_{dt} = & \alpha_0 + \alpha_1 V_{dt} + \alpha_2 T_{dt} + \alpha_3 C_{dt} + \\
& \beta_1 V_{dt} C_{dt} + \beta_2 V_{dt} T_{dt} + \beta_3 C_{dt} T_{dt} + \\
& \gamma_1 V_{dt} C_{dt} T_{dt} + \\
& [\alpha_4 \mathbf{W}_{dt} + \beta_4 V_{dt} \mathbf{W}_{dt} + \beta_5 T_{dt} \mathbf{W}_{dt} + \gamma_2 T_{dt} V_{dt} \mathbf{W}_{dt} +] \\
& \delta_t + \varepsilon_{dt}.
\end{aligned} \tag{6}$$

In district  $d$  in election  $t$ ,  $NPScore_{dt}$  is the winning candidate’s NP-Score,  $T_{dt}$  is an indicator a Democratic candidate victory,  $V_{dt}$  is the Democratic candidate’s general election win margin,  $C_{dt}$  is the district’s *Congruence*,  $\delta_t$  represents a year fixed effect, and  $\mathbf{W}_{dt}$  is an optional vector of control variables. Note that this design mirrors the specification employed in Equation 5.

The coefficient  $\alpha_2$  is the effect of narrowly electing a Democratic legislator on the associated district’s roll call representation. Previous work uncovers significant divergence in close state legislative elections (Fowler and Hall, 2017, 2016), implying that  $\alpha_2$  is negative. For this study, I am interested in  $\beta_3$ , or the marginal effect of narrowly electing a Democrat on roll call representation when *Congruence<sub>d</sub>* shifts from zero to one. In other words,  $\beta_3$  estimates the difference in roll call divergence that is attributable to active newspaper coverage.

The results are reported in Table 6. As in Table 4 above, throughout Table 6 I estimate optimal bandwidths (*Optimal Bandwidth*) using the algorithm in Calonico, Cattaneo, and Titiunik (2014). To emphasize that my results are robust across bandwidths, I again report estimates at the optimal bandwidth and bandwidths that are 25% larger and smaller than the optimal bandwidth (the *Bandwidth Factor*). Columns one through three of Table 6 show the estimates from a reference RDD that replicates existing research—that is, it omits all terms containing *Congruence<sub>d</sub>*.<sup>22</sup> The negative coefficients on *Dem Win* in columns one

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<sup>22</sup>Specifically, I estimate equations of the form

$$NPScore_{dt} = \alpha_0 + \alpha_1 V_{dt} + \alpha_2 T_{dt} + \beta_2 V_{dt} T_{dt} + \delta_t + \varepsilon_{dt}. \tag{7}$$

**Table 6 – RD Estimates of Divergence in High and Low-Congruence Districts.** Districts with high newspaper congruence have less divergence in roll call representation between narrowly elected Democratic and Republican legislators.

	Baseline			Interactive Model			Interactive Model With Controls		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dem Win · Congruence				0.27 (0.12)	0.27 (0.10)	0.30 (0.10)	0.27 (0.12)	0.29 (0.11)	0.25 (.)
Dem Win	-1.39 (0.02)	-1.41 (0.02)	-1.41 (0.02)	-1.41 (0.03)	-1.42 (0.02)	-1.45 (0.02)	-1.46 (0.17)	-1.53 (0.14)	1.36 (.)
Congruence				0.36 (0.08)	0.32 (0.07)	0.31 (0.07)	0.03 (0.09)	0.03 (0.08)	0.08 (.)
N	7,935	10,629	13,329	7,567	10,154	12,700	8,364	11,234	14,114
Optimal Bandwidth	.065	.065	.065	.062	.062	.062	.081	.081	.081
Bandwidth Factor	.75	1	1.25	.75	1	1.25	.75	1	1.25
Estimate Bandwidth	.049	.065	.082	.047	.062	.078	.061	.081	.102
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	No	No	No	No	No	Yes	Yes	Yes

Note: In all columns the outcome is legislators’ NP-Score. Controls include race, representative, and district controls. Standard errors are clustered by district in parentheses. *Estimate Bandwidth* is the bandwidth used in each column and is the product of the *Optimal Bandwidth* and the *Bandwidth Factor*. Extended control results are reported in Appendix Table A.12.

through three indicate that the coin-flip election of a Democratic state legislator shifts the associated district’s roll call representation in the liberal direction.

The remainder of Table 6 shows estimates from Equation 6. In columns four through six I estimate a baseline interactive RDD. The positive coefficient on the interaction term *Dem Win · Congruence* indicates that divergence in representation is smaller in more-congruent legislative districts. Specifically, I find that a shift from negligible to perfect press congruence reduces divergence by roughly 20%.

The baseline RDD specification suggests that a meaningful difference in divergence exists across values of *Congruence*. In columns seven through nine, I add race, representative, and district controls to help rule out potential bias from factors associated with both congruence and roll call representation. The estimates from this exercise are highly similar in magnitude in the baseline specification and suggest that *Congruence* can reduce divergence. Finally, observe that the estimates reported in Table 6 are stable across different bandwidths and

control specifications.

In sum, I find strong evidence that robust press coverage reduces representation divergence in state legislative elections. The coin-flip election of a Democratic legislator is associated with an approximately 20% decrease in representation divergence in comparison to a counterfactual Republican legislator representing the same district.

## 6 Discussion

Robust political media coverage is widely regarded a key ingredient of democratic governance. Press coverage is often, however, uneven and lacking across political arenas. This concern is particularly acute in light of the secular decline of state legislative news coverage. By one count, the number of full-time newspaper reporters covering state legislatures has declined by 34% since 2014, further depleting an already low-information legislative news environment.<sup>23</sup> Does the general lack of down-ballot news coverage alter the functioning of local elections and politicians' behavior?

This is an important question, and future work should continue to investigate how accountability functions in low-information environments. Leveraging the haphazard overlap of newspaper markets and legislative districts, this paper provides the first systematic evidence on how local media shapes down-ballot elections and the behavior of state legislators. The results suggest that the fourth estate has an important monitoring influence in state legislatures. When press coverage of legislative elections is strongest, I find that the electoral return to ideological moderation is 40% larger and the incumbency advantage is two times greater in comparison to districts with the weakest coverage. Press coverage also shapes legislator behavior, with legislators who receive stronger newspaper coverage missing fewer roll call votes, sponsoring more bills, and participating more on legislative committees. Lastly, in addition to being more productive, my evidence suggests that robust press coverage is

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<sup>23</sup><https://www.pewresearch.org/short-reads/2022/04/05/the-number-of-full-time-statehouse-reporters-at-u-s-newspapers-has-declined-34-since-2014/>. See also Enda, Matsa, and Boyles (2014).

associated with less divergence between legislators' roll call representation and the median voter.

While this paper brings extensive new evidence to bear on the relationship between local press coverage and down-ballot elections, there are three important caveats to mention. First, due to data limitations, my analysis only covers the years 2000 to 2020. Over recent decades, the overall quantity of local news coverage has declined precipitously, with potentially serious implications for down-ballot accountability (Hayes and Lawless, 2018, 2015; Martin and McCrain, 2019). My analysis is unable to evaluate how the decline and nationalization of local media affects legislative accountability. However, it suggests that, despite these secular declines, local media still play an important role in down-ballot politics.

A second qualification is that my outcomes cannot be unambiguously interpreted as enhancing or curtailing voter welfare. For example, local news may enhance the quality of representation by reducing incentives for ideological extremism and the gridlock that often accompanies ideological polarization. Alternatively, the finding that local news coverage is associated with larger incumbency advantages might suggest that under-performing incumbents can leverage news coverage in ways that undermine legislative accountability. In short, the normative implications of these findings are not immediately measurable with my data. Future work should seek to evaluate the implications of these findings for voter welfare.

Finally, the mechanisms by which press coverage shapes accountability in state legislatures extends beyond the evidence marshaled in this paper. While my results suggest that robust legislative press coverage translates into better voter knowledge about legislative politics, why legislators respond to stronger press coverage remains unclear. It is possible that the press functions as a watchdog, preventing legislators from providing poor representation for fear of negative press coverage. Alternatively, knowing that statehouse reporters will cover their representation regardless of outcome, press coverage may generate incentives for legislators to exert costly effort on behalf of their electorate. Whatever the mechanism, my analysis underscores the importance of robust media coverage for legislative account-

ability and suggests that legislative elections and state legislators would be more moderate, representative, and productive were local press coverage strengthened.

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# Online Appendix:

## Does Accountability Vary with Newspaper Coverage in State Legislatures?

Intended for online publication only.

### Contents

A.1	Data Coverage and Descriptive Statistics . . . . .	2
A.1.1	Roll Call and Bill Sponsorship Data . . . . .	2
A.1.2	Incumbent Newspaper Coverage . . . . .	4
A.1.3	Descriptive Statistics . . . . .	5
A.2	Newspaper Market–Legislative District Congruence Robustness Checks . . . .	6
A.3	Electoral Selection Robustness Checks . . . . .	7
A.4	Productivity Robustness Checks . . . . .	8
A.5	Unabbreviated Model Results . . . . .	9

## A.1 Data Coverage and Descriptive Statistics

### A.1.1 Roll Call and Bill Sponsorship Data

State legislative roll call and bill sponsorship data were collected by the author from the online data vendor Legiscan.com and combined with similar data from Fourniaies and Hall (2022). This data include roll call votes and bill introductions for the near-universe of chamber-years for the years 2010-2022 and roughly half of chamber-years for the years 2000-2009. Approximately 20% of the data originate from Fourniaies and Hall (2022) and the remaining 80% were collected by the author from Legiscan.com. Table A.1 reports the full coverage of the roll call dataset.

**Table A.1 – Roll Call Data Coverage Matrix.** This table reports the coverage of my roll call dataset in terms of states and years. Cells contain the number of roll call votes observed in thousands.

State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
AK	.	.	.	.	.	.	.	.	.	.	.	.	.	13	18	13	15	21	22	11	7	17	25	163
AL	.	.	.	.	.	.	.	.	.	.	55	122	157	121	101	139	106	105	111	116	49	178	136	1495
AR	.	141	.	135	.	155	.	121	.	93	.	203	39	220	41	183	40	167	36	163	26	181	33	1979
AZ	76	67	57	46	55	59	70	51	55	36	51	68	74	60	64	67	76	65	67	61	49	91	79	1444
CA	147	137	141	128	132	115	119	118	130	213	187	262	265	254	284	279	296	295	323	321	123	259	315	4843
CO	.	.	.	.	17	6	29	31	28	31	37	46	52	58	49	45	105	87	119	125	90	134	120	1210
CT	.	.	.	.	.	.	.	.	.	.	12	67	52	82	61	70	89	118	98	120	18	117	91	995
DE	.	.	.	.	.	.	.	.	.	15	18	16	16	16	19	9	9	18	20	19	5	22	22	225
FL	.	.	.	92	110	95	90	84	82	76	109	112	112	96	87	87	81	69	57	53	53	118	119	1782
GA	.	.	.	.	.	.	.	.	.	171	42	113	168	127	123	126	127	116	123	120	107	126	191	1779
HI	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	26	26	53	42	148
IA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	37	32	110	.	60	28	73	54	393
ID	.	.	.	.	.	.	.	.	.	.	.	42	43	44	43	43	46	43	44	41	44	48	43	524
IL	.	.	.	.	.	.	.	.	.	232	165	191	134	175	149	161	123	162	158	164	10	203	117	2143
IN	.	.	.	.	.	.	.	.	.	.	0	89	53	92	83	91	68	83	66	98	60	77	67	926
KS	.	.	.	.	.	.	.	.	.	.	.	94	62	53	46	43	44	44	45	31	18	53	38	572
KY	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	56	49	42	60	66	273
LA	55	222	90	208	171	107	163	96	172	112	428	220	364	212	381	246	200	130	203	135	150	153	212	4429
MA	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	58	45	24	30	19	19	195
MD	.	.	.	.	.	.	.	.	.	.	64	202	286	154	215	183	230	254	250	236	200	241	245	2761
ME	.	.	.	43	43	59	38	34	42	43	21	41	25	85	61	88	39	83	46	60	6	78	32	965
MI	.	61	89	61	83	67	100	55	100	61	48	101	147	100	149	84	125	84	167	63	100	94	66	2003
MN	.	.	.	.	.	.	.	.	.	.	.	51	59	74	60	45	43	49	39	67	32	54	33	606
MO	119	118	122	129	105	104	97	102	107	124	94	105	117	150	122	122	145	104	127	109	56	100	84	2562
MS	.	.	.	.	.	.	.	.	.	.	202	186	185	182	173	168	178	155	148	140	158	134	182	2192
MT	.	459	.	453	.	471	.	423	.	169	.	307	.	276	.	289	.	272	.	298	.	324	.	3740
NC	.	.	.	.	.	.	.	.	.	2	12	203	65	207	77	170	62	141	65	142	32	96	27	1303
ND	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	146	.	128	.	149	.	141	.	564
NE	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	13	11	17	8	46	30	40	31	196
NH	.	.	.	.	.	.	.	.	.	.	.	91	104	68	102	69	99	62	101	106	77	92	99	1069
NJ	.	.	.	.	.	.	.	.	.	.	47	49	46	58	133	116	89	84	100	95	95	104	75	1089
NM	.	.	.	.	.	.	.	.	.	.	.	.	.	62	28	51	29	57	29	55	19	30	13	373
NV	.	.	.	.	.	.	.	.	.	.	.	39	.	43	0	44	0	49	.	43	1	38	.	257
NY	.	.	.	.	.	.	.	.	.	30	122	368	82	367	37	241	14	411	342	456	223	373	393	3461
OH	.	.	.	.	.	.	.	13	21	20	18	39	39	33	43	21	26	20	27	18	22	26	20	405
OK	128	130	149	145	159	159	158	140	141	163	169	308	142	300	134	248	121	272	105	289	101	340	157	4158
OR	.	.	.	.	.	.	.	.	.	.	.	.	.	1	18	119	18	104	18	98	12	91	17	497
PA	.	.	.	.	.	.	.	.	.	166	152	266	247	264	7	324	257	307	260	308	216	186	171	3133
RI	.	.	.	.	.	.	.	.	.	.	.	.	.	2	95	63	91	82	67	62	24	78	75	637
SC	.	.	.	.	.	.	.	.	.	.	.	90	58	98	111	100	97	81	95	97	54	90	118	1089
SD	.	.	.	29	30	28	29	29	29	29	50	42	47	48	48	47	43	41	70	44	48	48	55	836
TN	.	.	.	.	.	.	.	.	.	80	73	229	254	213	239	199	243	229	265	284	254	303	333	3196
TX	.	.	.	.	.	.	.	.	.	.	.	.	.	304	.	367	.	486	.	444	.	450	.	2052
UT	.	.	.	.	.	.	.	.	.	.	22	58	58	95	93	93	90	101	103	105	105	96	98	1115
VA	.	.	.	.	.	.	.	.	.	.	333	326	335	284	301	306	307	319	353	346	556	329	389	4483
VT	.	.	.	.	.	.	.	.	.	.	.	.	.	29	14	13	14	13	17	11	9	8	9	137
WA	.	.	.	.	.	.	.	.	.	6	2	105	68	98	70	99	73	101	78	106	89	91	86	1071
WI	.	.	.	.	.	.	.	.	.	.	.	70	25	31	23	26	28	24	20	9	12	21	17	306
WV	.	.	.	.	.	.	.	.	.	1	8	58	67	69	73	87	99	95	83	121	104	111	104	1079
WY	.	.	.	.	.	.	.	.	.	.	10	29	37	45	46	71	55	80	48	46	52	37	34	590
Total	525	1336	647	1469	903	1423	894	1296	909	1872	2551	5008	4084	5361	4019	5651	4086	5996	4623	6189	3619	6227	4751	73442

### A.1.2 Incumbent Newspaper Coverage

To build a comprehensive dataset of observed legislative news coverage, I identify 286 local and regional newspapers on Newspapers.com. Taken together, these newspapers cover legislative politics in 75% of all state legislative districts, including every state except Alaska. For every newspaper I search for references to state legislators representing districts within that newspaper’s circulation area. Due to the extensive nature of this data collection task, I restrict this search to each districts’ legislative election year. These results are then aggregated at the newspaper-district-year level to create  $q_{mdt}$ . Table A.2 shows the coverage of this dataset by year.

**Table A.2 – Number of Newspapers and Articles in Sample.** This table reports the number of newspapers and total newspaper articles included in my sample (i.e., articles that mention state legislators). Coverage is sparse in odd years because only five states have off-cycle state legislative elections.

Year	N. Articles	N. Newspapers	Year	N. Articles	N. Newspapers
1998	118953	151	2010	106060	193
1999	21259	18	2011	9068	19
2000	132314	147	2012	80004	190
2001	1923	3	2013	2607	8
2002	143681	168	2014	87133	186
2003	15796	19	2015	7097	17
2004	167209	205	2016	70663	183
2005	928	3	2017	2339	7
2006	157903	207	2018	53078	187
2007	13576	19	2019	3548	16
2008	139479	208	2020	40231	183
2009	1450	6	-	-	-

### A.1.3 Descriptive Statistics

**Table A.3 – Summary Statistics for Key Variables**

Variable	Mean	Median	Min	Max	Std. Dev.	Source
Close Race	0.3	0	0	1	0.46	SLERs
Uncontested Race	0.38	0	0	1	0.48	SLERs
Open Seat	0.18	0	0	1	0.39	SLERs
Freshman	0.22	0	0	1	0.41	SLERs
Experience	6.9	4	0	60	7.5	SLERs
In Majority	0.63	1	0	1	0.48	Author
Chair	0.38	0	0	1	0.49	Fourinaies (2018)
Population Density	6.4	6.4	-0.12	12	2	IPUMS
Median Income	56212	53855	22020	130890	14046	IPUMS
% Urban	74	81	0	100	24	IPUMS
% Retired	15	15	4.9	46	3.4	IPUMS
% Veterans	4.5	3.4	0.2	26	2.6	IPUMS
% Foreign Born	9.2	6.7	0.18	53	8.3	Census Bureau

**Table A.4 – Summary Statistics for Key Variables**

Variable	Mean	Median	Min	Max	Std. Dev.
Percent of Floor Votes	0.95	0.98	0	1	0.089
Sponsored Bills	8.8	2	0	614	20
Committee Activity	3.5	3	0	11	1.9
Aggregate Productivity Index	0.13	-0.44	-1.3	29	1.2



## A.2 Newspaper Market–Legislative District Congruence

### Robustness Checks

**Table A.5 – Newspaper Reader Share and Legislator Press Coverages.** This table replicates the specification in Table 2 of Snyder and Stromberg (2010) (with the exception of the Scandal variable). The results are substantively identical to those reported in Table 1 in the body of this paper.

	Count of Articles About Legislator ( $q_{mdt}$ )		Sales-Weighted Articles About Legislator ( $q_{dt}$ )	
	(1)	(2)	(3)	(4)
ReaderShare	94.69 (8.20)	93.97 (8.30)		
Congruence			93.53 (4.95)	102.62 (7.52)
Leader		12.33 (2.46)		2.07 (0.43)
Sought Higher Office		4.38 (1.58)		0.85 (0.39)
Out of State		-26.31 (2.68)		-4.14 (0.19)
Close Race		3.32 (0.85)		1.08 (0.25)
Freshman		-6.39 (1.29)		-1.76 (0.17)
% Retired		-0.05 (0.38)		-0.42 (0.05)
% Urban		0.27 (0.05)		0.08 (0.01)
Median Income		-0.00 (0.00)		-0.00 (0.00)
N	85,135	54,951	46,252	29,650
Unit of Observation	Dist.-Paper-Year	Dist.-Paper-Year	District-Year	District-Year
Fixed Effects				
Standard Error Clusters	Year	Year	Year	Year
SE	Newspaper	Newspaper	District	District

Note: Results are substantively identical after logging *ReaderShare* and *Congruence*.

### A.3 Electoral Selection Robustness Checks

**Table A.6 – News Congruence and the Advantage of Moderate Candidates in Contested General Elections.** Moderate candidates receive higher win-probability in districts with more-congruent newspaper coverage.

	Dem Win		
	(1)	(2)	(3)
Midpoint	1.28 (0.10)	0.93 (0.10)	0.95 (0.10)
Midpoint · Congruence	0.63 (0.26)	0.53 (0.23)	0.44 (0.24)
Congruence	-0.27 (0.15)	-0.28 (0.13)	-0.23 (0.14)
Distance	0.10 (0.09)	0.11 (0.09)	0.07 (0.09)
Rep. Pres. Vote Share	-2.78 (0.06)	-2.10 (0.06)	-2.05 (0.07)
Dem Contributions		0.09 (0.00)	0.09 (0.00)
Rep Contributions		-0.08 (0.00)	-0.08 (0.00)
N	7,335	6,864	6,864
District Controls	No	No	Yes
Race Controls	No	No	Yes
State-Chamber FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes

Note: The outcome is either Democratic vote share or a Democratic win indicator. Robust standard errors are clustered by district in parentheses. Midpoint and Distance variables are scaled to run from 0 to 1. The sample is limited to contested general elections in single member districts.

## A.4 Productivity Robustness Checks

Since the missed vote and sponsorship rate may be correlated with travel time to the capital, in Table A.7 I add a control for the distance between each district's centroid and the state capital. My results are unchanged.

**Table A.7 – Active Newspaper Coverage Increases Legislative Productivity.** Active newspaper coverage is associated with fewer missed roll call votes, more bill sponsorships, and more-active committee membership.

	Percent of Floor Votes		Committee Activity		Sponsored Bills		Aggregate Productivity Index	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Congruence	0.94 (0.41)	0.91 (0.42)	0.27 (0.12)	0.30 (0.12)	5.15 (2.96)	1.79 (2.77)	0.13 (0.05)	0.11 (0.05)
N	34,837	34,820	13,105	13,105	34,837	34,820	15,544	15,536
District Controls	Y	Y	Y	Y	Y	Y	Y	Y
Race Controls	Y	Y	Y	Y	Y	Y	Y	Y
Representative Controls	Y	Y	Y	Y	Y	Y	Y	Y
Distance to Capital Control	Y	Y	Y	Y	Y	Y	Y	Y
State x Chamber x Year FEs	Y	N	Y	N	Y	N	Y	N
State x Chamber x Year x Party FEs	N	Y	N	Y	N	Y	N	Y

Note: Outcomes are reported in column headers. Standard errors are clustered by state-chamber in parentheses.

## A.5 Unabbreviated Model Results

**Table A.8 – Newspaper Congruence and Legislative Name Recognition.** *Congruence* strongly predicts voters’ probability of correctly identifying their lower chamber state legislator.

	State Legislator Name Recognition	
	(1)	(2)
Congruence	0.16 (0.07)	0.17 (0.08)
Education - High School		0.04 (0.02)
Education - Some college		0.06 (0.03)
Education - 2-year college		0.01 (0.04)
Education - 4-year college		0.10 (0.03)
Education - Post-grad		0.11 (0.04)
Race - Black		-0.02 (0.03)
Race - Hispanic		0.00 (0.03)
Race - Asian		-0.06 (0.03)
Race - Native American		-0.08 (0.04)
Race - Mixed		-0.04 (0.05)
Race - Other		0.22 (0.19)
Race - Middle Eastern		0.32 (0.29)
Age		-0.00 (0.00)
Party ID - Lean Democrat		-0.02 (0.03)
Party ID - Weak Democrat		-0.04 (0.04)
Party ID - Independent		0.00 (0.04)
Party ID - Weak Republican		-0.04 (0.03)
Party ID - Lean Republican		-0.09 (0.03)
Party ID - Strong Republican		-0.02 (0.04)
Party ID - Not Sure		-0.06 (0.04)
Interest in Politics		-0.02 (0.01)
Family Income		0.00 (0.00)
Residence Tenure		0.00 (0.00)
N	857	825
Respondent Controls	No	Yes
State FEs	Yes	Yes

Note: Standard errors are clustered by district in parentheses. Controls include respondent level of education (6 categories), race (8 categories), party ID (8 categories), family income, interest in politics, age, and number of years the respondent has lived in their current city. Omitted categories are No High School, White, and Strong Democrat.

**Table A.9 – News Congruence and the Advantage of Moderate Candidates in Contested General Elections.** Moderate candidates receive higher vote-share and win-probability returns in districts with more-congruent newspaper coverage.

	Dem Vote Share		
	(1)	(2)	(3)
Midpoint	0.26 (0.02)	0.19 (0.01)	0.17 (0.01)
Midpoint · Congruence	0.11 (0.05)	0.09 (0.04)	0.07 (0.04)
Congruence	-0.04 (0.03)	-0.04 (0.02)	-0.03 (0.02)
Distance	-0.02 (0.02)	-0.01 (0.01)	0.00 (0.01)
Rep. Pres. Vote Share	-0.74 (0.01)	-0.59 (0.01)	-0.55 (0.01)
Dem Contributions		0.02 (0.00)	0.02 (0.00)
Rep Contributions		-0.02 (0.00)	-0.02 (0.00)
Population Density			0.00 (0.00)
Median Income			-0.00 (0.00)
Percent Urban			-0.00 (0.00)
Percent Retired			0.00 (0.00)
Percent Veterans			0.00 (0.00)
Percent Foreign Born			0.00 (0.00)
Competitive Race			0.02 (0.00)
Open Seat			-0.00 (0.00)
N	7,335	6,864	6,864
District Controls	No	No	Yes
Race Controls	No	No	Yes
State-Chamber FEs	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes

Note: The outcome is either Democratic vote share or a Democratic win indicator. Robust standard errors are clustered by district in parentheses. Midpoint and Distance variables are scaled to run from 0 to 1. The sample is limited to contested general elections in single member districts and, hence, *Race Controls* excludes the dummy for contested races.

**Table A.10 – Regression Discontinuity Estimates of the Incumbency Advantage in High and Low-Congruence Districts.** The incumbency advantage is higher in more-congruent districts.

	Baseline			Interactive Model			Interactive Model With Controls		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dem Win · Congruence				0.05 (0.03)	0.06 (0.02)	0.05 (0.02)	0.05 (0.03)	0.08 (0.03)	0.06 (0.02)
Dem Win	0.05 (0.00)	0.05 (0.00)	0.05 (0.00)	0.05 (0.00)	0.04 (0.00)	0.05 (0.00)	-0.01 (0.03)	-0.01 (0.03)	-0.00 (0.03)
Congruence				-0.08 (0.02)	-0.09 (0.02)	-0.09 (0.02)	-0.04 (0.02)	-0.06 (0.02)	-0.05 (0.02)
Dem Win Margin	0.72 (0.06)	0.74 (0.04)	0.73 (0.03)	0.74 (0.11)	0.84 (0.07)	0.77 (0.05)			
Dem Win Margin · Congruence				0.24 (0.64)	-0.36 (0.45)	-0.19 (0.30)			
Dem Win Margin · Dem Win				0.01 (0.15)	-0.08 (0.10)	-0.06 (0.07)			
Dem Win Margin · Dem Win · Congruence				-0.52 (0.97)	-0.36 (0.67)	-0.19 (0.44)			
N	6,325	8,391	10,379	5,973	7,918	9,816	4,954	6,539	8,134
Optimal Bandwidth	.067	.067	.067	.063	.063	.063	.066	.066	.066
Bandwidth Factor	.75	1	1.25	.75	1	1.25	.75	1	1.25
Estimate Bandwidth	.05	.067	.083	.047	.063	.079	.049	.066	.082
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	No	No	No	No	No	Yes	Yes	Yes

Note: In all columns the outcome is the Democrat's vote share in time  $t + 1$ . Controls include race, representative, and district controls. Standard errors are clustered by district in parentheses. *Estimate Bandwidth* is the bandwidth used in each column and is the product of the *Optimal Bandwidth* and the *Bandwidth Factor*. Full results for control interactions in columns 7-9 are not reported due to the large number of coefficients.

**Table A.11 – Active Newspaper Coverage Increases Legislative Productivity.** Active newspaper coverage is associated with fewer missed roll call votes, more-active committee membership, and more bill sponsorships.

	Percent of Floor Votes		Committee Activity		Sponsored Bills		Aggregate Productivity Index	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Congruence	0.94 (0.41)	0.91 (0.42)	0.26 (0.12)	0.30 (0.12)	5.09 (2.96)	5.09 (2.96)	0.13 (0.05)	0.11 (0.05)
Population Density	-0.07 (0.05)	-0.14 (0.05)	-0.00 (0.02)	-0.00 (0.02)	0.87 (0.43)	0.87 (0.43)	0.00 (0.01)	-0.00 (0.01)
Median Income	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Percent Urban	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.07 (0.04)	-0.07 (0.04)	0.00 (0.00)	0.00 (0.00)
Percent Retired	-0.00 (0.03)	0.01 (0.03)	0.01 (0.01)	0.01 (0.01)	0.19 (0.16)	0.19 (0.16)	0.00 (0.00)	0.00 (0.00)
Percent Veterans	-0.04 (0.03)	-0.03 (0.03)	0.01 (0.02)	0.01 (0.02)	-1.41 (0.34)	-1.41 (0.34)	0.00 (0.01)	0.01 (0.01)
Percent Foreign Born	-0.02 (0.01)	-0.03 (0.01)	0.00 (0.00)	-0.01 (0.00)	0.19 (0.08)	0.19 (0.08)	-0.00 (0.00)	-0.00 (0.00)
Freshman	0.73 (0.15)	0.77 (0.15)	-0.65 (0.05)	-0.65 (0.05)	-4.49 (1.27)	-4.49 (1.27)	-0.26 (0.02)	-0.28 (0.02)
Experience	-0.09 (0.01)	-0.08 (0.01)	-0.02 (0.01)	-0.02 (0.01)	-0.03 (0.13)	-0.03 (0.13)	0.02 (0.00)	0.02 (0.00)
In Majority	1.00 (0.11)	0.00 (.)	1.06 (0.03)	0.00 (.)	26.67 (0.94)	26.67 (0.94)	0.59 (0.01)	0.00 (.)
Committee Chair	-0.30 (0.31)	-0.25 (0.31)	0.97 (0.12)	0.84 (0.12)	-2.90 (2.23)	-2.90 (2.23)	1.00 (0.06)	0.92 (0.06)
Competitive Race	0.14 (0.11)	0.12 (0.12)	0.04 (0.04)	0.00 (0.04)	-1.01 (1.01)	-1.01 (1.01)	0.00 (0.02)	-0.00 (0.02)
Uncontested Race	-0.25 (0.11)	-0.26 (0.11)	0.08 (0.04)	0.08 (0.04)	2.59 (1.13)	2.59 (1.13)	0.03 (0.02)	0.03 (0.02)
Open Seat	0.28 (0.13)	0.26 (0.13)	-0.02 (0.05)	0.00 (0.04)	0.12 (1.11)	0.12 (1.11)	-0.05 (0.02)	-0.03 (0.02)
N	34,837	34,820	13,105	13,105	34,837	34,837	15,544	15,536
District Controls	Y	Y	Y	Y	Y	Y	Y	Y
Race Controls	Y	Y	Y	Y	Y	Y	Y	Y
Representative Controls	Y	Y	Y	Y	Y	Y	Y	Y
State x Chamber x Year FEs	Y	N	Y	N	Y	N	Y	N
State x Chamber x Year x Party FEs	N	Y	N	Y	N	Y	N	Y

Note: Outcomes are reported in column headers. Standard errors are clustered by state-chamber in parentheses.

**Table A.12 – RD Estimates of Divergence in High and Low-Congruence Districts.** Districts with high newspaper congruence have less divergence in roll call representation between narrowly elected Democratic and Republican legislators.

	Baseline			Interactive Model			Interactive Model With Controls		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dem Win · Congruence				0.27 (0.12)	0.27 (0.10)	0.30 (0.10)	0.27 (0.12)	0.29 (0.11)	0.25 (.)
Dem Win	-1.39 (0.02)	-1.41 (0.02)	-1.41 (0.02)	-1.41 (0.03)	-1.42 (0.02)	-1.45 (0.02)	-1.46 (0.17)	-1.53 (0.14)	1.36 (.)
Congruence				0.36 (0.08)	0.32 (0.07)	0.31 (0.07)	0.03 (0.09)	0.03 (0.08)	0.08 (.)
Dem Win Margin	-1.56 (0.34)	-1.07 (0.22)	-0.95 (0.16)	-2.04 (0.68)	-1.33 (0.42)	-0.95 (0.31)			
Dem Win Margin · Congruence				2.80 (3.11)	0.48 (1.92)	-0.11 (1.36)			
Dem Win Margin · Dem Win				1.03 (0.89)	0.12 (0.57)	0.35 (0.42)			
Dem Win Margin · Dem Win · Congruence				-4.65 (4.19)	0.19 (2.89)	0.43 (2.02)			
N	7,935	10,629	13,329	7,567	10,154	12,700	8,364	11,234	14,114
Optimal Bandwidth	.065	.065	.065	.062	.062	.062	.081	.081	.081
Bandwidth Factor	.75	1	1.25	.75	1	1.25	.75	1	1.25
Estimate Bandwidth	.049	.065	.082	.047	.062	.078	.061	.081	.102
Year FEs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	No	No	No	No	No	Yes	Yes	Yes

Note: In all columns the outcome is legislators' NP-Score. Controls include race, representative, and district controls. Standard errors are clustered by district in parentheses. *Estimate Bandwidth* is the bandwidth used in each column and is the product of the *Optimal Bandwidth* and the *Bandwidth Factor*. Full results for control interactions in columns 7-9 are not reported due to the large number of coefficients.