

Declining Local News Benefits Incumbents and Extremists in Primary Elections*

Mackenzie Lockhart[†]

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Abstract

How does local news effect primary elections? In primaries, candidates share a party with voters, spend less on campaigning and generally receive local, rather than national, media attention. Thus the dramatic collapse of the local newspaper industry has likely impacted every aspect of House primary elections in the United States: the supply and extremity of candidates, the incumbency advantage, and the ideology of nominated candidates. Bringing two new measures of local news availability at the Congressional district level - newspaper circulation and newsroom employment - this paper shows that in districts that experience larger than average declines in local news coverage, open seat primaries become more competitive and produce more extreme nominees. In primaries with incumbents, larger declines in local news coverage are associated with larger incumbency advantages and more moderate nominees because incumbents who are generally more moderate face less competitive primary elections.

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[†]UC San Diego, mwlockha@ucsd.edu

Introduction

Primary elections serve as an important source of accountability in the United States (Ansolabehere, Hirano, & Snyder, n.d.; McDonald & Samples, 2007; Turner, 1953). As the number of marginal districts in Congress has declined (Fiorina, 1977), this role of primaries has become more pronounced. Even in the safest general election districts, Members of Congress might lose a primary election if they fail to respond to the needs of their constituents (Boatright, 2013).

At the same time as primaries have gained importance as a source of accountability, however, the decline of local news might have undermined the ability of voters to effectively use primaries for accountability. This decline has seen the amount of information voters have available to them about local candidates drop since the 1990s. Since 2004 more than 1,800 local newspapers have shut down operation in the United States leaving over 200 counties without a single local newspaper (PEN America, 2019).

The scope of the decline in local news is important to understand why this trend might be so concerning. Figure 1 shows that newspapers in the United States since the year 2000 have lost almost half their staff. The industry was hit especially hard in the wake of the 2008-09 recession and has failed to recover to employment levels even close to those seen before the recession. Even where newsrooms haven't closed, they have had to lay off a significant portion of their staff leaving fewer reporters covering local issues and politics. Across the United States, local print news has experienced a significant decline.

Americans' news diet has changed to include more national news; where local newspapers once made up a significant source of news for voters, cable television news and national online newspapers have become increasingly important in recent years (Martin & McCrain, 2019). American expenditures have remained relatively steady for cable news while declining for print news (PEN America, 2019). Instead of reading newspapers where they might learn about local issues and local political figures, Americans are tuning into broadcasts that cover national issues and national political figures.

Researchers have pointed to many different factors that have led to a decline in local news available such as the increasing availability of national news (Hendrickson, 2019), the shift to digital media (Mitchell, Gottfried, Barthel, & Shearer, 2016), and shifts in consumer behaviour removing traditional streams of revenue for newspapers (Djourelouva, Durante, & Martin, 2021).

This trend has been shown to have important effects on many different aspects of politics in past research. Importantly, it has contributed to the nationalization of politics in the United States as voters turn their attention away from local issues. Moskowitz (2021) shows that as local news sources have been substituted for,

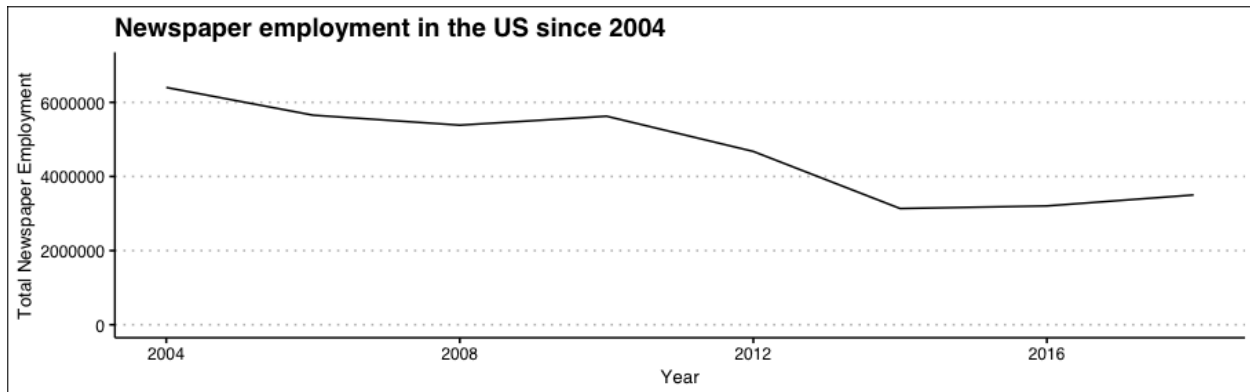


Figure 1: Newspaper employment in the US has declined sharply since the year 2000. Data is from the Census Bureau.

voters are increasingly concerned with national issues. This has resulted in less split ticket voting (Moskowitz, 2021), less knowledge of local politicians (Moskowitz, 2021), and a weaker incumbency advantage in general elections (Jacobson, 2015).

While past research has focused on the effects of local news on general election outcomes, it also has the potential to prominently effect Congressional primaries. This is because Congressional primaries offer a case where local news is likely to be particularly important. In these races, voters lack many of the usual sources of information we might expect them to use in voting decisions. Primaries are often open seat races, lack partisan cues, pit relatively ideologically similar candidates against one another, and generally lack the funding to run large scale advertising campaigns. In this kind of environment, other cues and sources of information end up playing an out sized role (Boudreau, Elmendorf, & MacKenzie, 2019; Dominguez, 2011).

In these instances, the effects of local news coverage are likely to be large. Even incidental exposure to news about primaries is likely to have an important effect on voters' decisions when they lack other applicable information. When this type of incidental news exposure was common, voters would have relative ease becoming informed about the race before going to vote. Reading local news that provides even minimal coverage of local politics, for example, could be enough for voters to form opinions about their local representatives and primary candidates to distinguish them from one another. As local news availability has declined, this has become harder for voters and their ability to make informed decisions has potentially declined.

In this paper, I test three main theories for how the decline in local news coverage impacts primary elections in the United States. Leveraging two new measures of local news coverage that allow me to isolate district specific coverage, I examine the impact of district specific changes in local news over time. My results show that news coverage has a significant effect on both the competitiveness of primaries and the results of primary

elections. In open races, the decline of news coverage has made races more competitive and nominees more extreme as voters are less able to coalesce on their preferred candidates. In races with incumbents, the decline of news coverage has contributed to benefits to the incumbent in the form of less competitive races.

Further, I examine how these effects provide incentives to potential candidates to either enter the race or not. I show that local news coverage impacts only Republican candidates and that the decline in local news coverage has led to an increase in both the number of Republicans who run as well as the likelihood that a more extreme candidate enters the primary.

These results have important implications for the ability of voters to use primaries to hold elected officials accountable. This paper shows that the decline of local news coverage in the United States has contributed significantly to less competitive primaries, has reduced the success of moderate candidates, and has contributed to more extreme candidates running for office and winning.

Existing Literature and Expectations

Primary Results Local news coverage is an important source of information for voters in primary elections. In this type of race, voters often lack common heuristics like partisan labels or incumbent performance, forcing them to rely on alternate information to identify their preferred candidate. I argue this has important implications for both primary competitiveness and for the type of candidate nominated.

Primary competitiveness refers to how competitive a political party's primary is. More competitive primaries usually feature more candidates who achieve some level of electoral success. Past research has focused on when incumbents face challenges (Boatright, 2013; Hogan, 2003), instead of when potential challengers might be particularly successful at defeating an incumbent. This difference is important as, while the quality of potential challenges is important, many factors besides challenger quality contribute to primary competitiveness. A non-high-quality challenger can win a primary or make it competitive while conversely a high-quality challenger might fail to mount a strong campaign leaving the race a runaway.

Local news coverage is likely to significantly contribute to how competitive a primary election is through two distinct mechanisms depending on the type of race (incumbent or open). In races with an incumbent, local news coverage should increase the competitiveness of primary elections as it offers a pathway for challengers to increase their name recognition and build a credible campaign. Incumbents in primary elections benefit from a substantial incumbency advantage (Ansolabehere, Hansen, Hirano, & Snyder, 2007); in order to mount a credible challenge to them a potential candidate needs to build a substantial amount of name recognition and positive impressions among voters.

When local news covers primary campaigns, it often mentions many of the challengers and provides some basic information on the challenger that the voter otherwise wouldn't learn. While not necessarily a rich source of information (see A. Hall & Lim (n.d.). for information on the content of primary election news coverage), this basic level of recognition could be enough to counteract some of the advantage the incumbent enjoys and so would result in a more competitive primary election. Thus my first hypothesis is that in races with incumbents, the decline in local news coverage has produced less competitive primaries(H1a).

In open races, however, the effect is likely to run in the opposite direction. This is because in the absence of a significant source of information about candidates, voters are likely to be unable to coalesce around a single candidate and so the race will be more competitive. Without a strong incumbency cue, voters require significantly more information about candidates to differentiate them in primary elections.

In a simplified form, we can consider an open race with substantial local news coverage to one with very little. In the race with substantial local news coverage, voters might learn about the candidates' experiences and traits and be able to decide on their preferred candidate more easily. They might coalesce around the more experienced candidate, for instance, as past research has shown a preference for experience in primary elections (Hirano & Snyder, 2019).

In the race with very little coverage, voters will struggle for even basic cues. Because primary campaigns tend to be less well-funded than general election campaigns, voters often know very little about any candidate and struggle to differentiate candidates along any dimension. In these cases, the behaviour of voters would be more random than when there was more information available as they lack a strong reason to vote one way or another. Without local news, strong candidates might have difficulty differentiating themselves from their opponents. Thus I hypothesize that the decrease in local news has resulted in more competitive open races (H1b).

Another possibility is that local news coverage impacts the type of candidate voters nominate in primary elections. While voters might have fixed preferences over the type of candidate they would prefer (at least within an election cycle), their ability to identify that preferred candidate depends on local news, among other things.

Local news plays a potentially important role for voters by identifying candidate policy positions and communicating them to voters. Print news often engages in a variety of activities that allow candidates to stake out diverging ideological positions. For example, it is not uncommon for newspapers to publish stories covering small or local campaign events where primary candidates express divergent views on policy issues (A. Hall & Lim, n.d.). They also tend to provide language that identifies which candidate is more extreme,

describing candidates in ideological terms such as “moderate”, “progressive”, or “conservative”.

Previous work has demonstrated that voters prefer more moderate candidates, when they can identify them (A. Hall & Lim, n.d.), as primary voters are often ideologically closer to moderate candidate than extreme candidates in primary elections. Despite primary electorates being more ideologically extreme than the overall electorate (Brady, Han, & Pope, 2007), they are still less extreme than the typical nominee who emerges from the primary (Kujala, 2020). Because of this, as the supply of local news has declined, voters are likely to be less able to determine which candidate is moderate leading to more extreme nominees, even without voters’ preferences changing. Based on this, I hypothesize that decreased local news coverage will result in more extreme nominees (H2a).

Further, incumbents are likely to play an important role in moderating this effect due to the large incumbency advantage discussed above and its interaction with the effects of candidate ideology on electoral success. If incumbent differ substantially from challengers on ideological lines, the mechanism discussed above that causes local news coverage to lead to more competitive incumbent races and less competitive open races should impact the relationship between news coverage and ideology. For this reason, I allow for the possibility that the effect of news coverage will vary by type of race (H2b).

I also test a potential alternate explanation for the effect of news coverage on primary election results. Until now, I have discussed the effect as an individual level effect that operates through a given set of voters deciding between a given set of candidates. An alternative is that the electorate itself is shaped by local news coverage and voter preferences between candidates are actually constant. Imagine a hypothetical marginal voter who is unsure whether to vote in a primary election. Additional local news coverage might cause that voter to turn out for several reasons. It could increase their awareness of the primary election itself, such as timing and how to register. It could also increase the voters’ interest in more local issues or alter their belief in the importance of voting in the election.

As primary electorates do not reflect the ideological composition of the general public (Brady et al., 2007), it is likely that the marginal voter might differ ideologically from the primary electorate. As a result, whatever the reason, if this marginal voter is persuaded to turn out by a higher amount of news coverage and they differ from the non-marginal voter in preferences, news coverage would appear to be related to preferences when it is actually primarily associated with turnout.

However, there is good reason to think this effect is unlikely to occur. Research has shown that district specific variation in competitiveness and candidate type offer only marginal sources of variation in turnout (Niven, 2001); the biggest driver of turnout tends to be competition at the presidential or statewide levels. In

presidential election years, the presidential race is the focus of most voters' attention and becomes the primary driver of turnout. In midterm elections or off cycle elections, statewide races like Senator and Governor generally drive turnout. Thus interest in local elections might not have an important effect on which voters show up at the polls (H3).

Candidate Entry Recent research has begun to explore more seriously the important role that candidate entry plays in shaping primary election outcomes. A. B. Hall (2019) provides significant evidence as to the effects that candidate entry can have on politics. The salary for Members of Congress, for example, influences who decides to run for Congress and in turn influences who is elected to the House and Senate. Without looking at candidate entry, it is difficult to accurately attribute changes in the type of candidates who are nominated to any one source; polarization could be because voters' preferences have changed, new candidates have emerged that are more extreme, or moderate candidates no longer decide to run.

There are good reasons to expect that local news coverage might impact what types of candidates decide to enter the primary arena. In seats that are incumbent held, challengers need to decide whether the challenge is worth it to them personally. While some candidates might experience some expressive benefits to running for Congress, many will weigh the probability that their challenge is successful against the personal and financial costs of running for Congress. When challenges are more likely to succeed, more candidates should put their names forward resulting in a larger field of candidates and more serious candidates.

Assuming that local news coverage does impact how voters behave in elections, it should also impact the assessments of potential candidates deciding to run. If the decline of local news has made primaries with incumbents less competitive, it should also be associated with a general decline in the number of candidates running for office (H4).

Similarly, ideologically extreme candidates should respond to the electoral incentives by entering primary elections with less local news coverage where they might expect to win more often. In those races, voters are less able to penalize them for being out of step with the primary electorate. As a result, if extreme candidates are more likely to win in races with less news coverage, they should also be more likely to enter primary elections when there is less local news coverage (H5).

Data and Methods

####Newspaper Circulation Data To measure newspaper circulation, I use data from the Alliance for Audited Media (AAM; formerly the Audit Bureau of Circulation). The AAM is a non-profit organization

that publishes annual reports on the reach of newspapers in the United States so that advertisers can make informed decisions when negotiating prices. Their data has been used in a handful previous analyses; most prominently Gentzkow, Shapiro, & Sinkinson (2014) look at a single year of data from 1924 to analyze newspaper competition.

The main obstacle that prevents broader use of the AAM data has been that it exists primarily in physical form and has not be accessible to researchers without incurring large costs. I make use of recent data, from 2012-2020, that already exists in a digital form. Starting in 2011, the AAM has kept digital records of over 1,200 different newspapers and their circulation by county, state, and ZIP code. I exclude newspapers that circulate in more than 15 distinct congressional districts as these represent national newspapers that are potentially non-local because of the size of their circulation¹.

This gives me a ZIP code level measure of newspaper circulation that I can link to Congressional districts. The total circulation of newspapers in a district is the total number of newspaper subscriptions reported by newspapers in a congressional district. As a result of each newspaper only reporting aggregate circulation data, I cannot distinguish between two houses in a ZIP Code subscribing to one of two newspapers and one household subscribing to two newspapers, but this issue should be minor as there is no reason to expect this to vary by district systematically.

In the results, I report effects in terms of the log number of subscribers in a district to allow for non-linear effects; at high levels of newspaper circulation, it is possible that the marginal impact of changes in circulation diminish while the effects at lower levels are potentially larger.

Using ZIP code information, I link these records to Congressional districts in 2012, 2014, 2016, and 2018 using ZIP Code and Congressional district relationship files provided by the US Census Bureau. These matches are not perfect as Congressional district boundaries do not follow ZIP Code boundaries and as a result ZIP Codes are not perfectly nested within Congressional districts. When a ZIP Code is included in two Congressional districts, it is treated as being a part of both districts.

Census Employment Data Because of the potential noise in the AAM data generated from needing to connect ZIP Code level data to Congressional districts, I also leverage annual county level employment data from the US Census Bureau. I collect data on the total number of employees employed by newspaper in each county for each year between 2000 and 2018. This data measured annually as only annual averages are released at a level to measure newspaper employment as opposed to broader publishing employment.

¹All the results are robust to including these papers as well

Employment data has seen little past use, likely because data measured at the county level requires imperfect bridges to connect it to election returns. Primary elections are district specific as the set of candidates cannot readily be compared across districts, and districts often overlap multiple counties while multiple districts are part of many counties or represent only a subset of a single county in the case of a large county.

As a result, using this type of data requires imperfectly bridging counties and districts. To do so, I assign each district a number of employees equal to the total number of newspaper employees in counties that overlap at all with the district. This results in employees from larger counties being counted two or more times in this analysis. This is imperfect, but it is reasonable to assume that, for most counties, newspaper reporters have a non-zero probability of reporting on any district that the county includes. Beyond this, this error should be consistent across districts over time and so can be controlled for through fixed effects.

Another potential issue with using census data is that it cannot distinguish between types of jobs within the newspaper industry; while employment has decreased in general there is no guarantee that political journalism has decreased. If this is the case, the relationship between newspaper employment and electoral outcomes would produce spurious results. Two factors assuage these fears. First, Figure 2 shows that this measure is highly correlated with the measure of overall newspaper circulation. This is suggestive of the fact that employment is likely an overall measure of the size of the local news industry. Second, past research suggests that when newsrooms make cuts to employment, they are generally spread out across journalism fields, meaning that a cut in overall employment results in a proportional cut to political journalism (Peterson, 2021).

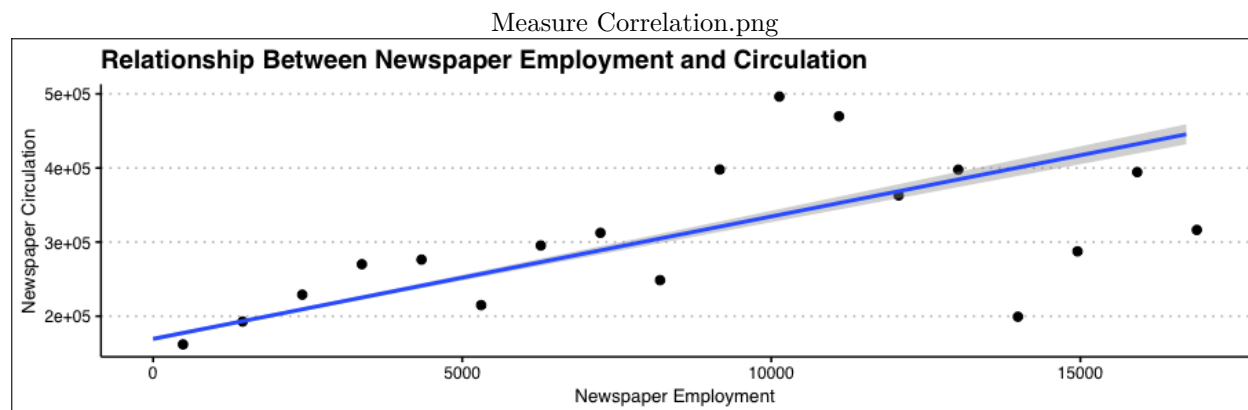


Figure 2: Correlation between Newspaper Employment and Circulation at the district level

Primary Election Data Primary election returns for the 2000-2018 election cycles were collected from the Federal Election Commission. This data includes the number of votes each candidate receives and their

party. In line with past research (Ansolabehere, Hansen, Hirano, & Snyder, 2006), I define a competitive primary as one in which the winning candidate's share of the vote is less than 60 percent of the total vote cast in that primary.

To measure the impact of local news coverage on the outcomes of primary elections I use Bonica (2018) DIME scores as a measure of ideological extremism for both challengers and incumbents. These scores are based on donation patterns observed in publicly released FEC reports. Donors are assumed to donate to ideologically similar candidates and so candidates who receive donations from the same or similar donors are classified as being ideologically similar. Past evidence suggests that for candidates who win, these scores predict their behaviour once in Congress. As a result, DIME scores offer a way to compare ideology for both candidates who win and those who lose.

Measurement Error A potential concern with the above data is measurement error, particularly within the measure of local newspaper availability. Coverage of data produced by the AAM is not perfect and smaller newspapers are often not included in their sample. While this is an issue, data from the AAM has been used in past research effectively. As noted above, Gentzkow et al. (2014) use historical data to study newspaper entry and exit. The data has also been used in a variety of context, including studying elections (Rubado & Jennings, 2020), newspapers Chyi & Ng (2020), and social issues (Scott & Schwalm, 1988).

If there is measurement error in the data, it would likely bias coefficients towards 0 rather than systematically away from 0. For measurement error to explain non-null results, it needs to be correlated with the dependent variable. In this case, election results would need to correlate with the measurement error in newspaper circulation to drive the results. When measurement error in the explanatory variable is uncorrelated with the outcome variable, it reduces the precision of the regression and biases estimates towards 0. With the above two measures, this is more likely the case than correlated measurement error.

To assuage some concern over measurement error, I report three sets of results, using both measures of local newspaper coverage discussed above (log circulation counts and newspaper employees) and a combined measure. The combined measure uses a principal component analysis to combine data from 2010-2018 on both newspaper circulation and employment. This measure captures the shared variances of the two data sources to limit the noise that enters the model. Results based on this measure are treated as the main results below because of this, although all three measures produce roughly similar patterns of results. However, I note the three sets of results are broadly consistent. This means that the measurement error in the AAM data would need to be correlated with measurement error in the employment data for these results to be explained by measurement error.

Identification Strategy

To identify the causal effect of the decline in local news coverage, I use a two-way fixed-effect approach to account for potential endogeneity (Angrist & Pischke, 2008). This way, I exploit variation in newspaper coverage within a district by using district fixed-effects, controlling for things that might affect coverage and results across districts such as demographic composition or their location, while also accounting for time-shocks (such as a general over time decline in newspaper coverage) using year fixed-effects.

This approach has two main advantages. First, many of the factors that drive newspaper coverage will vary by district systematically, such as whether a district is urban or its demographic composition. District fixed-effects control for these elements that are fixed within a district but vary between districts. Second, the year fixed-effects account for potential over time changes that are common across districts. In this case, it seems likely that newspaper subscriptions are decreasing across all districts over time. If an outcome variable is also changing over time in a consistent direction, the over-time correlation might be spurious.

By including both sets of fixed-effects, I am isolating the effects of district-specific changes in newspaper coverage on district-specific changes in the outcome variables. This approach is important because outside factors such as affective polarization in American politics co-vary strongly with the decline of local news coverage at the aggregate level, even if it is not caused by the decline in local news coverage. Indeed, anything that has consistently changed since the year 2000 will correlate strongly with the decline of local news regardless of whether there is a plausible causal connection between the two.

Further, consumption of local news is likely driven more by factors associated with inter-party competition than intraparty competition. It is unlikely that district specific factors impacting primary election outcomes are likely driving substantial changes in local news consumption when primaries are generally not given much attention by the modal voter. Instead, it is significantly more likely that changes in the news environment caused by external factors impact primary election results.

The major drawback of this approach is that the fixed-effects are absorbing a lot of variation in both the explanatory and outcome variables, so to detect an effect of newspaper coverage, I need to rely on there being enough district specific variation. This reduces my ability to measure aggregate effects that might come from the overall trend across the county but allows me to isolate the effects that are specifically due to the amount of local newspaper coverage. However, because of the large number of alternate explanations for changes in primary voting behaviour across time and over space, the trade off is worth it to identify the specific impact of local news on primary elections.

Results

Competition First, I plot the results in the aggregate comparing primary competitiveness with the combined measure of local news coverage by type of race (Figure 3). These figures show the effect of moving from the lowest values of local news coverage to the highest values of local news coverage on the probability that a candidate won their party’s nomination narrowly. I present both the raw data and regression results for all analyses.

In open races, the negative slope shows that more coverage is associated with a lower probability of a competitive race with very few competitive races at higher information levels. In races with incumbents, close wins are rare in general but appear to have no strong relationship with the amount of local news coverage. This suggests a relationship between local news coverage and primary competitiveness that is moderated by the type of race.

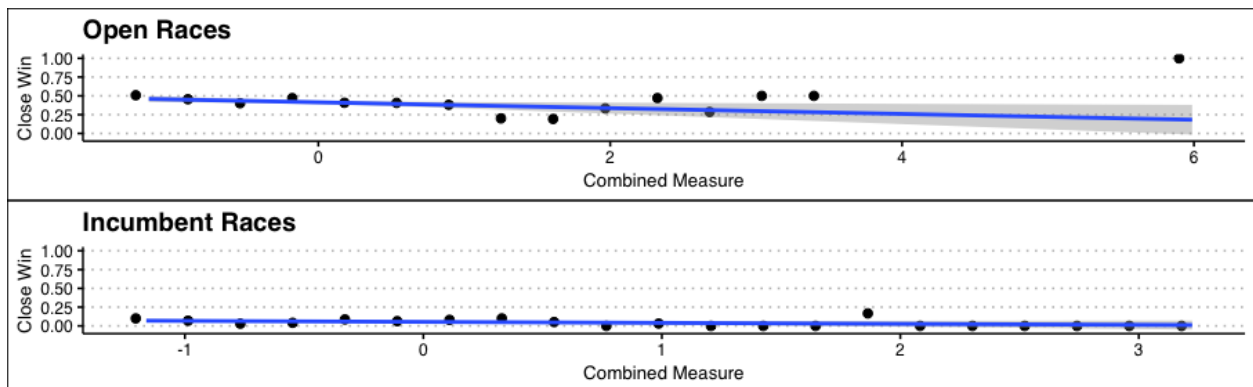


Figure 3: Correlation between combined local news measure and primary competitiveness across types of race. While the y-axis measures a binary outcome, points are scattered around their values for visualization purposes.

To analyze this relationship more closely, Table 1 shows the results of the fixed-effect analysis using both measures independently and the combined measure. Because these results account for both overtime variation and across district variation, the estimates can be described in causal terms unlike the associations shown in Figure 3. To account for correlation within a district across time because newspaper coverage is reported at the district level, standard errors are clustered at the district level.

The results are broadly consistent across measures. In races without an incumbent, there is a drop in competitiveness (measured by close wins) produced by increased local news coverage while in races with an incumbent there is no such drop. This provides support for the theory that in races without an incumbent, local news coverage is important to allow voters to coalesce around a preferred candidate. In races with an incumbent, the incumbency advantage eliminates this effect by providing an obvious candidate for voters to

coordinate on.

Table 1: Effect of local news coverage on primary competition.

	Circulation	Employment	Combined
Log(Circulation)	-0.04 (0.03)		
Employment		-0.00* (0.00)	
Combined Measure			-0.09** (0.03)
Incumbent in race	-0.87*** (0.22)	-0.29*** (0.02)	-0.28*** (0.02)
Log(Circulation) X Incumbency	0.05* (0.02)		
Employment X Incumbency		0.00 (0.00)	
Combined Measure X Incumbency			0.05* (0.02)
R ²	0.35	0.35	0.35
Num. obs.	2423	2465	2423
N Clusters	396	397	396

Cluster-robust standard errors reported in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Ideology I turn next to how changes in news coverage impact the ideology of the candidate nominated in the primary. For this analysis, results are displayed for both the Democratic and Republican party separately to allow for differences between partisans.

Figure 4 shows the aggregate results - it suggests a general difference between incumbent and open-seat races. In incumbent races, local news is associated with somewhat more moderate nominees (lower scores indicate more liberal nominees). Democrats particularly seem to nominate more moderate candidates in incumbent races with more news coverage.

This trend is eliminated or reversed in open seats; Democrats and Republicans tend to nominate more conservative candidates in primary races without an incumbent. However, a closer analysis suggests that this relationship might be partly driven by overall trends over time instead of a causal effect of news coverage.

Table 2 shows the results from regressions broken down by party and measure of news coverage. I include fixed-effects for both the district and the year and cluster the standard errors at the district level.

These results differ considerably from those shown in Figure 4 and should be broadly favored over the correlations plotted above. The results across the three measures of news coverage are broadly consistent with one another; in open races there is a moderating effect of news coverage on the ideology of the nominee. The moderating effect is particularly pronounced and robust within the Democratic party; the combined

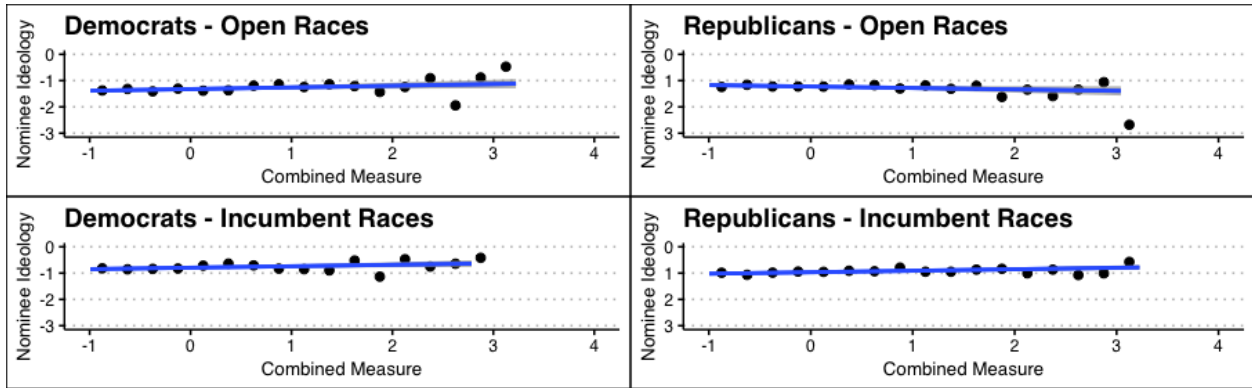


Figure 4: Correlation between combined local news measure and the ideology of the nominee across parties and types of race

measure suggests that a one unit increase in the combined measure leads to a 0.14 increase in DIME scores - roughly equivalent to half the gap between a more median candidate like Amy Klobuchar and a more liberal Democrat like Chuck Schumer.

This effect is attenuated towards 0 in incumbent races; across models there is a consistent interaction effect in the opposite direction of the main effect. This suggests that the incumbency advantage discussed above might interact with the effects of news coverage. The moderating effect of increased news coverage would be counterbalanced by the increased competition if incumbents tend to be more moderate than challengers; the increased news coverage might both benefit the moderate incumbent and benefit more extreme challengers hoping to mount credible campaigns.

The discrepancy between the plots and regression analysis should be attributed to overtime effects and differences between districts. The plot does not account for overall time trends that might confound the analysis. In this case, polarization and the decline of local news have co-occurred and without accounting for general time trends, the analysis is likely biased. Therefore the regression analysis should be preferred.

Turnout To explore the alternate possibility that news coverage impacts primary elections by changing the electorate instead of through informing the electorate, I also explore the possibility that news coverage impacts turnout. If the marginal voter is caused to turn out or stay home by changes in the local news environment, effects attributed to how news coverage shapes voter information might actually be caused by changes in the electorate. More news coverage might not help voters identify moderate candidates but rather cause more moderate voters to turn out in a primary instead.

To adjudicate this possibility, Table 3 reports the results of regressions looking at how changes in district level news coverage impact turnout.

Table 2: Effect of local news on ideology of nominee.

	Republican	Democrat	Republican	Democrat	Republican	Democrat
Log(Circulation)	-0.05 (0.03)	0.03 (0.02)				
Employment			-0.00** (0.00)	0.00* (0.00)		
Combined Measure					-0.04 (0.03)	0.14** (0.06)
Incumbent in race	-0.60* (0.31)	-0.08 (0.24)	-0.01 (0.08)	-0.02 (0.07)	0.03 (0.04)	-0.05 (0.07)
Log(Circulation) X Incumbency	0.05* (0.03)	0.00 (0.02)				
Employment X Incumbency			0.00 (0.00)	-0.00 (0.00)		
Combined Measure X Incumbency					0.02 (0.02)	-0.04 (0.05)
R ²	0.81	0.69	0.45	0.56	0.81	0.69
Num. obs.	1141	1257	2016	2231	1141	1257
N Clusters	400	413	440	433	400	413

Cluster-robust standard errors reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The results are at odds with the theory that increased news coverage increases turnout, at least in general, suggesting that moderate voters are not being turned out by additional news coverage. Instead, news coverage appears to be associated with decreased turnout in primary elections. This effect is somewhat difficult to explain and runs counter to my expectations.

One possibility is that voters tend to respond to national and statewide incentives to turn out in primaries. The saliency of presidential, senatorial, and gubernatorial races likely drives the bulk of changes in turnout and is unlikely to be related to the degree of local news coverage, especially for the time periods covered. News about these types of primaries is often carried by TV broadcasters and they often feature well-funded candidates who can afford to speak directly to voters.

Regardless, it seems unlikely that lower news coverage of primaries has a systematic effect that causes voters with more extreme preferences to stay home. Voters with more extreme preferences should be the most motivated to select an ideologically consistent candidate due to expressive benefits and likely the most motivated to vote in their party's primary. The negative effects of local news coverage on turnout likely cannot account for the changes in primary competition and ideology discussed above.

Candidate Entry Finally, I examine the effect of local newspaper coverage on candidate entry. As discussed, beyond impacting how voters see candidates, the decline of local news coverage might also impact which candidates choose to run. Decreased local news coverage has been shown above to make challenging

Table 3: Effect of local news coverage on primary turnout.

	Circulation	Employment	Combined
Log(Circulation)	154.77 (1449.53)		
Employment		-3.79*** (0.88)	
Combined Measure			-3021.82* (1447.93)
Incumbent in race	35259.09 (20654.93)	27151.46*** (1651.93)	28000.63*** (1311.12)
Log(Incumbent) X Incumbency	-605.62 (1675.09)		
Employment X Incumbency		0.31 (0.63)	
Combined Measure X Incumbency			275.67 (1625.44)
R ²	0.55	0.54	0.55
Num. obs.	2423	2465	2423
N Clusters	396	397	396

Cluster-robust standard errors reported in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

incumbents more difficult and so might lead to a reduced number of candidates competing in races with an incumbent. Table 4 examines this possibility and shows the relationship between the number of candidates in a primary and the local news coverage.

Focusing on the combined measure that offers more precision, the effects seem to vary by party. For Republicans the results align with expectations - local news coverage is negatively associated with the number of candidates running in open primaries, but this effect is not present in primaries with incumbents. This effect suggests that local news provides generally discourages candidates in open races, but in races with incumbents provides a potential opportunity that challengers can take advantage of.

Put in terms of the decline of local newspaper coverage, this effect means that incumbent Republicans have probably benefited from less challengers in primary elections. For Democrats, however, no such effect is observed. The decline of local newspaper coverage hasn't impacted Democrats' decision to run in primary elections.

Besides differences in the number of candidates running, local news coverage might impact the type of candidate who decides to run. Table 5 shows the impact of changes in local news coverage on the likelihood that an extreme candidate emerges in a primary election. Extreme candidates are defined in this case as any candidate who is one standard deviation or more extreme than the party median in a given cycle; roughly the 16% most extreme candidates in each cycle as measured by DIME scores.

Again, these results suggest that local news coverage has an impact on candidate entry for the Republican

Table 4: Effect of local news on number of candidates in a primary.

	Republican	Democrat	Republican	Democrat	Republican	Democrat
Log(Circulation)	-0.35 (0.22)	0.06 (0.14)				
Employment			-0.00 (0.00)	-0.00 (0.00)		
Combined Measure					-0.42* (0.19)	-0.08 (0.17)
Incumbent in race	-5.71 (3.00)	-0.85 (2.82)	-2.20*** (0.35)	-1.01*** (0.23)	-1.71*** (0.30)	-0.84*** (0.19)
Log(Circulation) X Incumbency	0.34 (0.24)	0.01 (0.23)				
Employment X Incumbency			0.00 (0.00)	0.00 (0.00)		
Combined Measure X Incumbency					0.46* (0.17)	0.17 (0.12)
R ²	0.51	0.47	0.52	0.46	0.52	0.47
Num. obs.	1525	1537	1554	1565	1525	1537
N Clusters	431	427	432	428	431	427

Cluster-robust standard errors reported in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

party. In line with expectations, increased local news coverage is associated with a lower probability that an extreme candidate enters the primary election, in open primaries and those with incumbents. In general, Republicans seem less likely to run when there is more local information. As a result, the decline on local news coverage has likely led to an increased number of extreme candidates running in Republican primary elections.

For Democrats, there is again no apparent effect. While Republicans appear to have been somewhat enticed into running for office as local newspaper coverage has declined, Democrats have continued running for Congress at steady rates.

Discussion and Conclusion

The local news industry has experienced a substantial decline over the past two decades. This decline is part of a broad shift away from a local, print model of news production and delivery towards a national, televised or digital model. This decline has been linked to several effects, including the nationalization of politics (Moskowitz, 2021), decline of the incumbency advantage (Jacobson, 2015), and change in legislative behaviour (Trussler, 2021), among other things. This study adds to this literature by showing how the decline has impacted primary elections for the House of Representatives in the United States.

Local news has three main effects on primary election outcomes. In open races, local news allows voters to

Table 5: Effect of local news on presence of an ideologically extreme candidate in a primary.

	Republican	Democrat	Republican	Democrat	Republican	Democrat
Log(Circulation)	-0.07 (0.04)	-0.04 (0.05)				
Employment			-0.00 (0.00)	0.00 (0.00)		
Combined Measure					-0.09** (0.03)	0.01 (0.03)
Incumbent in race	-0.23 (0.19)	-0.09 (0.28)	-0.08* (0.03)	-0.06* (0.02)	-0.05* (0.02)	-0.07** (0.02)
Log(Incumbent) X Incumbency	0.02 (0.02)	0.00 (0.02)				
Employment X Incumbency			0.00 (0.00)	-0.00 (0.00)		
Combined Measure X Incumbency					0.02 (0.01)	-0.01 (0.01)
R ²	0.52	0.48	0.51	0.48	0.52	0.48
Num. obs.	1011	1091	1027	1107	1011	1091
N Clusters	390	399	392	402	390	399

Cluster-robust standard errors reported in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

coalesce around a preferred candidate. In races with an incumbent, local news helps challengers overcome the incumbency advantage and produces more competitive races. At the same time, at least in the Democratic party local news leads to voters nominating a more moderate candidate. On the Republican side, the local news decreases the number of candidates running for office, including extreme candidates.

The decline in local news can thus be linked to a few broad shifts in American politics. First, the decline likely helped cement incumbent politicians in their seats and increase the cost of entry to potential challengers. By making it harder for incumbents to overcome incumbency, the decline in local news has probably made it harder for intra-party challenges despite the decrease in the incumbency advantage in general elections (Jacobson, 2015). Second, the decline in local news has likely decreased the value of experience in open seat races. With less local news, voters seem to behave less predictably or consistently and do not coalesce as consistently around a single candidate as much. This effect has likely hurt qualified candidates who have a more difficult time conveying their experience to voters.

Finally, and perhaps most importantly, the decline in local news can be linked to the increase in polarization, at least for the Democratic party. Voters, when given more information, appear to prefer more moderate candidates in elections. As that information has become less available over time, more extreme candidates have likely done better. This is important as primaries serve an important role in resolving intra-party conflict and so are important in determining the ideology of parties writ large (Hirano & Snyder, 2019).

The effects of local newspapers on candidate entry are more marginal. In the Republican party only, there is

evidence that the decline of local newspapers has contributed to slightly more candidates running, including more extreme candidates.

These results present a potential issue for those who argue that voters can, from a practical standpoint, use primaries to hold their members of Congress accountable in districts that are safe for one party or another (Turner, 1953). In these districts, the conventional wisdom argues that while representatives might not face significant competition in the general election, they must instead work to avoid challenges in the primary election. Because of this, the electoral incentives to provide good representation exist even for who represent the most Republican or Democratic districts.

If voters are unable to identify their preferred candidates in open seat races and increasingly default to incumbents in races with an incumbent, voters cannot be expected to hold elected officials accountable for their actions. Voters increasingly seem to struggle to differentiate candidates along any dimension except the recognition incumbents enjoy. As local news coverage has declined significantly, it appears that voters have lost their ability to use primary elections as an accountability mechanism.

Because primary elections and primary election campaigns have been studied little relative to general elections, this work suggests many future avenues for research. First, successful primary challenges are relatively rare events. While this evidence suggests local news likely contributes to the success of such campaigns, there are interesting avenues to explore comparing the relative contribution of campaigns, candidate qualities, and environmental attributes (like the local news environment) to the success of these campaigns.

Second, what voters actually learn from the news remains an open question. To the extent that moderates are favored in the Democratic party, this evidence cannot speak to why or what voters are actually learning about these candidates. It cannot, for example, rule out the possibility that moderate candidates in the party also share some other characteristic that voters value and are learning about.

Future work should ask how these incentives effect candidates themselves. Incumbents, for example, have the opportunity to react to changes in their local news environment and alter their behaviour to ward off potential primary challengers and potential challengers can look at the local news environment to decide if they should enter the race. Analyzing the effects of local news on candidate behaviour might help understand when and why primary challenges emerge.

This research also suggests the need to expand studies of other types of media to include primary elections. Changing television, social media, and broader internet usage patterns have likely had substantial influences of voter behaviour. The decline of local news is only one feature of the environment that has the potential to impact primary voters; future scholarship should aim to investigate these changes.

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