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UNIVERSITY OF CALIFORNIA SAN DIEGO

A Primary Source of Information: How News, Parties, and Campaigns Shape Congressional
Primaries

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy

in

Political Science

by

Mackenzie Lockhart

Committee in charge:

        Professor Seth Hill, Chair
        Professor Pamela Ban
        Professor Daniel Butler
        Professor Julie Cullen
        Professor James Fowler

2023

The Dissertation of Mackenzie Lockhart is approved, and it is acceptable in quality and form for publication on microfilm and electronically.

University of California San Diego

2023

EPIGRAPH

All we have to decide is what to do with the time that is given us.

J.R.R. Tolkein
Lord of the Rings

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Biggers, Daniel R., Elizabeth Mitchell Elder, Seth J. Hill, Thad Kousser, Gabriel Lenz, and Mackenzie Lockhart. 2022. "Can Addressing Integrity Concerns about Mail Balloting Increase Turnout? Results from a Large-Scale Field Experiment in the 2020 Presidential Election." *Journal of Experimental Political Science.*

Rivard, Alex B. and Mackenzie Lockhart. 2022. "Government Preferences, Vote Choice, and Strategic Voting in Canada." *Canadian Journal of Political Science.*

Kousser, Thad, Seth J. Hill, Mackenzie Lockhart, Jennifer Merolla, and Mindy Romero. 2021. "How do Americans Want Elections to be Run During the COVID-19 Crisis?" *Research and Politics.*

Hill, Seth J., Thad Kousser, Gabriel Lenz, Mackenzie Lockhart, and Elizabeth Mitchell Elder. 2020. "How Can We Increase Turnout Among Low Propensity Voters?" *The California Journal of Policy and Politics.*

Lockhart, Mackenzie, Seth J. Hill, Jennifer Merolla, Mindy Romero, and Thad Kousser. 2020. "America's Electorate is Increasingly Polarized Along Partisan Lines About Voting by Mail During the COVID-19 Crisis." *Proceedings of the National Academy of Sciences.*

ABSTRACT OF THE DISSERTATION

A Primary Source of Information: How News, Parties, and Campaigns Shape Congressional
Primaries

by

Mackenzie Lockhart

Doctor of Philosophy in Political Science

University of California San Diego, 2023

Professor Seth Hill, Chair

How do voters navigate primary elections for the United States Congress, which by design demand voters to choose between candidates more similar than those in the general election? I look at three information sources voters might use: local newspapers, name recognition, and television advertisements. The decline of local newspaper coverage has contributed to more extreme nominees and a large incumbency advantage while name recognition can be influenced by political parties to exert control over primaries. Television advertisements potentially provide useful information directly to voters in the races where it maters most. In sum, voters struggle to access the information necessary to hold officials accountable in primary elections.

Introduction

In January of 2021, President Donald Trump faced the second impeachment hearing of his presidency (Levine and Gambino, 2021). Following his electoral loss in 2020 and the January 6th Capital riots, House Democrats sought to impeach Trump only weeks before he was set to leave office in response to charges he encouraged the riot to turn violent and attempted to disrupt the official counting of Electoral College votes. On January 13th, the formal vote to impeach Trump was passed in the House of Representatives, but unlike the previous impeachment Trump faced it did not pass solely along partisan lines. Ten Republican members of the House joined the Democratic caucus and voted in favour of impeachment (Cai et al., 2021).

Of the 10 Republicans who defected from their party and voted to impeach Trump, 4 retired, 4 lost their primary election, and only 2 were successfully re-elected in 2022 (David Valadao (CA-21) and Dan Newhouse (WA-4)) (Scott, 2022). Both of these candidates faced primary challenges from conservative Republicans endorsed by Trump that they narrowly avoided losing, winning by less than 5% of the vote to advance to the general election where they won re-election.

Among those who lost their primary was Liz Cheney (WY-AL), chair of the Republican House Conference. Cheney was well-resourced and high-profile in her re-election bid; she raised over $13 million, led the GOP conference, and was daughter of former Vice-President Dick Cheney (Martin, 2022). However, she faced a well-resourced challenger in the form of Harriet Hageman who received endorsements from national figures including Trump and raised over $5 million herself (Eavis, 2022). The primary received significant national media attention and local attention and ended with a decisive victory for Hageman who won by over 30 percentage

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points (Times, 2022). One question raised by the fallout from the 2021 impeachment vote for Republicans is why Cheney lost despite record setting fundraising while Newhouse and Valadao won? Put another way, how can we explain variation in primary election outcomes that help shape the national parties in Congress. This is one of the themes explored in this dissertation.

Interestingly, none of the 10 lost re-election at the general election stage. While all 10 Republican defectors face substantial criticism from important parts of their constituency, only two were eventually replaced by Democratic Members of Congress in 2022 - Peter Meijer (MI-3) and Jaime Herrera Beutler (WA-3). Both had already lost their primary election, however (and in fact, had they not lost their primaries to more conservative Republicans might have gone on to hold their districts).

This highlights a common result in political science: electoral accountability often relies on primary elections in the United States, not from general elections. General elections in the United States are increasing lopsided as voters sort both along ideological and geographic lines (Ansolabehere, Brady, and Fiorina, 1992), resulting in more ideologically homogenous districts and fewer marginal seats where incumbents face real electoral uncertainty. In the absence of these general election incentives, political scientists have increasingly studied primaries as a mechanism through which politicians are incentivized to faithfully represent their constituents (Ansolabehere et al., 2007a). While most Republicans might expect to win re-election at the general election, they still needed to be responsive to their primary electorate in order to avoid being primaried. When Republicans stepped out of line with the party, it was at the primary stage that they were punished, not the general election. This is another theme explored in this dissertation: how and when can primary elections serve as tools of accountability for Members of Congress?

Beyond their importance to the study of representation in America, primary elections are interesting set of elections to study in the comparative context as they differ substantially both from general elections in the United States but also from nomination contests in other countries. Primary elections differ from general elections in three important ways. First, primary elections

are often multi-candidate; there is no general pattern for primaries to converge on two candidate races. This means they offer a context where voters face more complicated choices than in normal first-past-the-post races in the US Second, because primaries are nomination contests, they are necessarily intra-party and so voters lack party labels. This creates an environment to examine how voters behave when they lack the most common heuristic used in elections - party labels (Kirkland and Coppock, 2018). Third, primaries provide an interesting case of a low salience race in the US. They receive less media coverage than general elections and candidates have less money to spend on campaigns (Hall and Lim, 2018). How voters and campaigns behave in this lower information environment remains under studied.

Primaries in the US are also a unique form of nomination contest; it is rare for legislative nomination contests to attract high levels turnout outside the US but Congressional primaries often see turnout over 25% (Mayer, 2001). At the same time, parties in the US have ceded control over their nominations to the government with primary elections being administered by state and local governments and open to any voter (with the strictest requirement being willing to publicly declare support for a party) (Ware, 2002). In other Western democracies, nomination contests tend to be small and tightly controlled by the party. Party members must pay to register with the party and nomination contests usually involve only a few hundred supporters. Additionally, party leaders and officials retain significant formal control over these procedures and in many cases retain the power to nominate candidates without the local party members' support (Koop and Bittner, 2011, for example).

The important and unique role of primary elections has begun to attract significant scholarly attention, shaping and improving what is known about how primaries work and impact American politics. In the last decade, scholarly understanding of primary elections has advanced dramatically as we learn more about primaries from why candidates choose to enter to the impact of primary campaigns on the general election. Thomsen (2014) shows the importance of looking at candidate emergence within primaries; she shows that one of the contributing factors to polarization is that moderates increasingly select out of primary elections because of a poor

ideological fit with the national party. Hall (2019) finds supporting evidence of this showing that moderates are more likely to select out of primaries when the incentives of holding office decline.

Hassell (2018) paints a rich picture of how parties act in primary elections. His research has helped show that parties, despite their lack of formal control over primary outcomes, are active at the primary level and provide critical support to candidates. He shows that party backed candidates perform significantly better than candidates who fail to receive that backing. Particularly, parties seem to support moderate candidates at the expense of the most extreme candidates providing a moderating effect on politics.

We also know more about how the general election and primary interplay. Lockhart and Hill (2023) show that actors in the primary are looking forward to the general election and, in some cases, responding to the opponent they expect to face. Conversely, Fouirnaies and Hall (2020) show that voters in the general election respond to behaviour in the primary; when a primary was more divisive, the eventually nominee performs worse in the general than if the primary had been less divisive.

Despite all these gains in our understanding of primary elections, we still know relatively little about the information environment in primaries and how it impacts representation. The low saliency of primaries, smaller turnouts, and difficult voting decisions suggest important differences between primaries and generals. What are voters learning about candidates, what information is available to them, and how does it impact who wins the primary? The existing scholarship provides only limited answers to these critical questions.

This dissertation includes three essays examining primary elections, information, and representation. In the first chapter, I argue that the information environment in primaries is important; while many voters lack information, the presence of local news coverage can inform voters and allow them to directly compare primary candidates. I combine data on newspaper circulation and newspaper employment to measure the volume of local news in Congressional districts over time to show that declining local news is associated with increased incumbency

advantages, more unpredictable open races, and more extreme candidates winning primaries. These findings illustrate one driving factor behind increasing polarization; in the primary where voters have strong incentives to use ideology to select their preferred candidates, the decline in local news makes it increasingly difficult for voters to learn about candidates' ideologies. This allows incumbents to avoid accountability and extreme candidates to win the nomination.

In the second chapter, I argue that in most cases, voters in primaries often know nothing about most or all of the candidates on the primary ballot. When voters know so little, they turn to the simplest possible heuristic – name recognition. I further argue local party elites, in order to influence the nomination process, provide candidates with resources necessary to build this name recognition. I use original measures of campaign finance, election returns, and Census data to show empirically that voters reward candidates with easy-to-remember names more than those with hard-to-remember names at the ballot box and that this effect is strongest for candidates who receive support from local party elites. This suggests that voters are relying on the heuristic of name recognition and local party elites are uniquely positioned to provide candidates the resources to take advantage of this heuristic.

In the final chapter, I take a more optimistic perspective and look at television advertising in primary elections. I argue that in the races that are most important (where the winner is llikely to be elected to Congress) television advertising is relatively frequent and focused on issues voters care about. Using data on advertising by campaigns from the Wesleyan Media Project, I show that campaigns use advertising strategically in primaries. They hold back their advertising budgets unless they face a challenge and focus their advertisements on themselves. Policy advertising dominates the airwaves while negative and attack ads are infrequent.

Combined, these three chapters paint a vivid picture of the information environment of primary elections. Voters increasingly lack external sources of information about candidates as the local news industry continues to dry up. Their ability to find objective information about representatives and challengers has declined, as has their ability to hold these representatives accountable for their behaviour in Congress. The nationalized media environment has benefited

incumbents and extreme candidates, despite a general preference for more moderate candidates in the electorate.

At the same time, campaigns are increasingly important in shaping primary election outcomes. A primary campaign might often be the only source of information about the candidates voters have access to. This gives a bigger role to parties, even though they lack formal control over the process. Because parties gatekeep access to important resources for campaign to use, their support in primaries carries more weight than just funneling some money to preferred candidates. The volunteers, expert staff members, and professionalized consultants that political parties control access to are critical for candidates hoping to win primary elections and allow parties more control over the nomination process. As a result, candidates who win primaries look more like the national party and less like the kind of candidates the local electorate prefers. Additionally, it helps further insulate incumbents from challenges by outsiders unless those outsiders have significant support from organized interest groups or organizations.

Chapter 1

Declining local news benefits incumbents and extremists in primary elections.

Primary elections serve as an important source of accountability in the United States (Turner, 1953; McDonald and Samples, 2007; Ansolabehere, Hirano, and Snyder, 2004). 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 1.1 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 and 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.
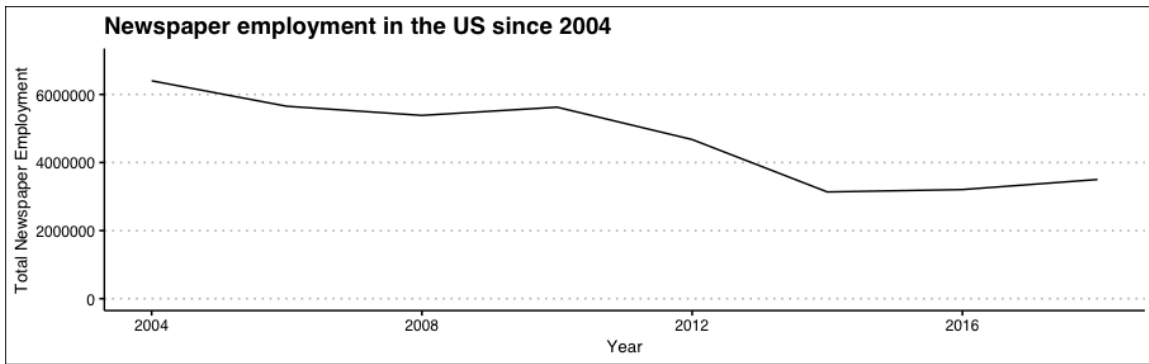
Figure 1.1. Newspaper employment in the US has declined sharply since the year 2000. Data is from the Census Bureau.

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 et al., 2016), and shifts in consumer behaviour removing traditional streams of revenue for newspapers (Djourelova, Durante, and 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, 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 (Dominguez, 2011; Boudreau, Elmendorf, and MacKenzie, 2019).

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 chapter, 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 chapter 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.

1.1 Existing Literature and Expectations

1.1.1 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 et al., 2007b); 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 Hall and Lim (2018) 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 and 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.

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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 (Hall and Lim, 2018). 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 (Hall and Lim, 2018), 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, and 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, Han, and Pope, 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).

1.1.2 Candidate Entry

Recent research has begun to explore more seriously the important role that candidate entry plays in shaping primary election outcomes. 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. Thomsen (2014) further shows career incentives shape candidate entry in primaries. 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).

1.2 Data and Methods

1.2.1 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, and 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 circulation[1].

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.

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

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.

1.2.2 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.

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

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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 1.2 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).

Measure Correlation.png
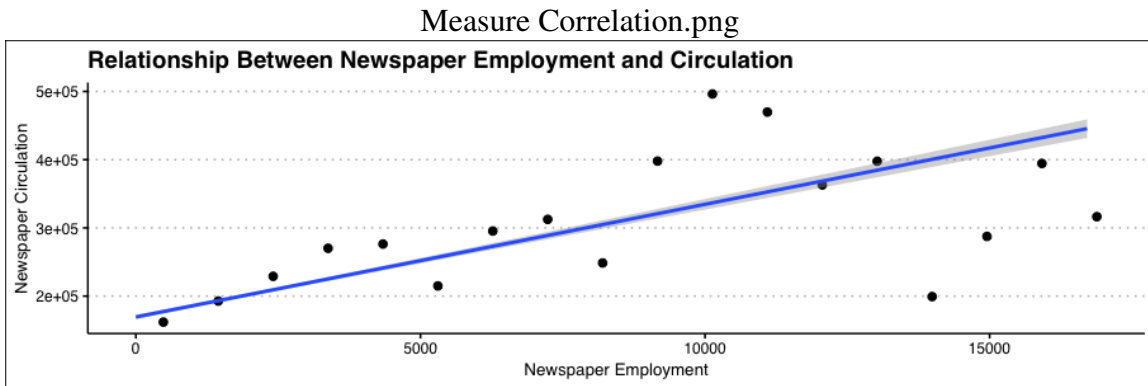
Figure 1.2. Correlation between Newspaper Employment and Circulation at the district level.

1.2.3 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 et al., 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.

1.2.4   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, Shapiro, and Sinkinson (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 and Jennings, 2020), newspapers (Grieco, 2019; Chyi and Tenenboim, 2019; Chyi and Ng, 2020), and social issues (Scott and 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.

1.2.5 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 and 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.

1.3   Results

1.3.1   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 1.3). 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.
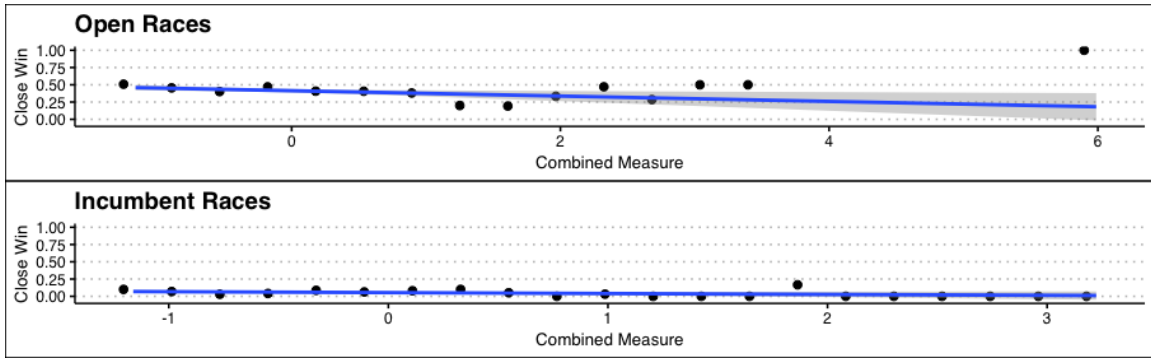
Figure 1.3. Correlation between combined local news measure and primary competitiveness across types of race. While the y-axis measures a binary outcome, points are scattered around their values for visualization purposes.

To analyze this relationship more closely, Table 1.1 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 1.3. 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.

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Table 1.1. Effect of local news coverage on primary competition. Data cover 2012-2018.

	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***	−0.29***	−0.28***
	(0.22)	(0.02)	(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. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

1.3.2 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 1.4 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 oh news coverage.
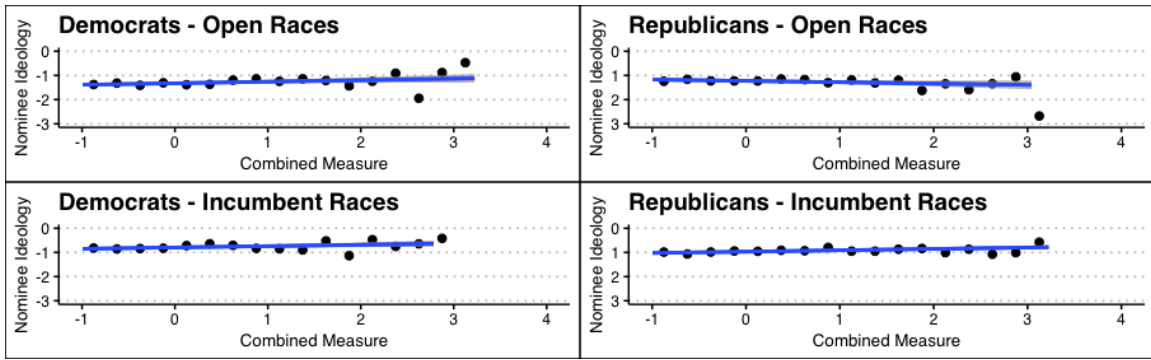
Figure 1.4. Correlation between combined local news measure and the ideology of the nominee across parties and types of race.

Table 1.2 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 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.

1.3.3 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 1.3 reports the results of regressions looking at how changes in district level news coverage impact turnout.

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

Table 1.2. Effect of local news on ideology of nominee. Data cover 2012-2018.

	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	0.14**
					(0.03)	(0.06)
Incumbent in race	−0.60*	−0.08	−0.01	−0.02	0.03	−0.05
	(0.31)	(0.24)	(0.08)	(0.07)	(0.04)	(0.07)
Log(Circulation) X Incumbency	0.05*	0.00				
	(0.03)	(0.02)				
Employment X Incumbency			0.00	−0.00		
			(0.00)	(0.00)		
Combined Measure X Incumbency					0.02	−0.04
					(0.02)	(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. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 1.3. Effect of local news coverage on primary turnout. Data cover 2012-2018.

	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	27151.46***	28000.63***
	(20654.93)	(1651.93)	(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. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

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.

1.3.4 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 incumbents more difficult and so might lead to a reduced number of candidates competing in races with an incumbent. Table 1.4 examines this possibility and shows the relationship between the number of candidates in a primary and the local news coverage.

Table 1.4. Effect of local news on number of candidates in a primary. Data cover 2012-2018.

	Republican	Democrat	Republican	Democrat	Republican	Democrat
Log(Circulation)	−0.35	0.06				
	(0.22)	(0.14)				
Employment			−0.00	−0.00		
			(0.00)	(0.00)		
Combined Measure					−0.42*	−0.08
					(0.19)	(0.17)
Incumbent in race	−5.71	−0.85	−2.20***	−1.01***	−1.71***	−0.84***
	(3.00)	(2.82)	(0.35)	(0.23)	(0.30)	(0.19)
Log(Circulation) X Incumbency	0.34	0.01				
	(0.24)	(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. $^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$.

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 1.5 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 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.

Table 1.5. Effect of local news on presence of an ideologically extreme candidate in a primary. Data cover 2012-2018.

	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**	0.01
					(0.03)	(0.03)
Incumbent in race	−0.23	−0.09	−0.08*	−0.06*	−0.05*	−0.07**
	(0.19)	(0.28)	(0.03)	(0.02)	(0.02)	(0.02)
Log(Incumbent) X Incumbency	0.02	0.00				
	(0.02)	(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. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

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1.4 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 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

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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 and 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.

Chapter 2

Do You Know My Name? How local elites influence primary election outcomes.

2.1 Introduction

Why do primary elections work? Primary elections systematically nominate candidates who are both ideologically extreme relative to the median voter and have more legislative experience than would be expected at random. This holds even in competetive, multi-candidate primaries. Past research has noted this selection effect of primaries, comparing it to the preferences of voters for experienced candidates and noting the divergence of the median primary voter from the median voter in the general electorate to suggest primary nominations reflect the preferences of the primary electorate.

However, primaries pose a problem for voters on two fronts. First, the institutional features of primaries make them particularly challenging. There are often many feasible candidates in the race instead of two, there are fewer heuristics available to voters because party is held constant, the media environment is usually lower in information, and the consequences of a vote are less clear given the result is a nominee and not a representative. A primary might, for example, require voters to choose between 5 candidates, multiple of whom have prior elected experience and all of whom agree on most salient issues. Within parties, the degree of similarity between candidates will generally dwarf the degree of difference between then. Further, from a behavioural perspective, primary elections generally require voters to choose between candidates

who are broadly similar on most dimensions which reduces the incentives for voters to actively search for information about the candidates and become involved. Research shows that voters are generally unable to distinguish between primary candidates on ideological dimensions, even when there might be a strategic incentive to do so (Ahler, Citrin, and Lenz, 2015; Ahler, Citrin, and Lenz, 2016; Hall and Lim, 2018). Voters lack the information necessary to make these subtle differentiations and likely further lack the motivation to do so. Even scholars of primary elections struggle to accurately measure intraparty differences in ideology (Bonica, 2018; Hirano et al., 2015). Yet despite these features, the outcomes of primaries follow clear patterns.

To explain this puzzle, I propose a model of campaigning where party backed candidates focus on connecting their name with their partisan label. In elections without many distinguishing features between candidates, strategic candidates will promote their own name instead of focusing on contrast with the competition. Voters, in turn, can rely on this cue either through the positive impression generated by exposure or by using name recognition as a proxy for candidate valence traits; a candidate who runs a prominent campaign could be expected to be more competent than one who runs a worse campaign. Additionally to explain this puzzle, while previous research has focused on voter preferences, I turn to a measure of the preferences of local party actors following Hassell (2016) and investigate local party preferences over candidates to see how they explain primary outcomes. Research has shown that local party actors often have divergent preferences and beliefs from voters (Broockman et al., 2021; Lockhart and Hill, 2023; Kujala, 2021).

Empirically, I show that local parties strongly prefer candidates who have prior legislative experience and who are close to the median of the party's Congressional delegation. I then show that these preferences are reflected in the outcome of primary elections. Local party support, beyond other candidate attributes, predicts outcomes in primary elections. Finally to show the role of name recognition, I leverage variation in how easy a name is to remember. I argue more common names are easier to recall and so more readily generate name recognition through campaigning. Candidates with easier to remember names recieve particularly large returns to

campaigning compared to candidates with names that are more difficult to remember.

My research contributes to three important areas of understanding in politics and specifically primary elections. First, it builds on prior work showing the importance of political parties. Previous research focusing on the invisible primary has largely assumed party actors either push candidates out of the primary or provide direct endorsements (e.g. Kousser et al., 2015; Hassell, 2018; Kujala, 2021). Relatively little is known about how party actors impact vote choice in elections with less salience; when leaders are not providing direct endorsements and signals, how do they effect control over the party? I argue they do so through scarce resources that candidates use to build effective campaigns.

Second, this research directly tests the role of name recognition in elections, an element that has long been suggested as important in low information environments but has rarely been directly tested using election data (Kam and Zechmeister, 2013; Jacobson and Carson, 2019). This contributes to our understanding of how voters might use heuristics to find suitable candidates, even in extremely low information environments such as open primary elections. Further, I provide a theory as to why this might be rational for voters to do.

Finally, it helps to explain why primary elections continue to produce polarizing results despite the general preference of voters for moderate candidates. One of the most important questions facing American politics is why polarization is occurring despite incentives to moderate (Hirano et al., 2010; Theriault, 2006; McCarty, 2019). By connecting voter behaviour to party involvement, I show that polarization can occur even when voters in primaries prefer moderates.

This chapter proceeds in four parts. First, I show that the existing literature lacks a convincing explanation for empirical patterns observed in primary elections. Second, I develop a theory of party control of primaries that uses differences in candidate name recognition as a path for parties to shape primary election outcomes. Third, I show that parties are committed to selecting an ideologically homogenous and experienced group of candidates to suppoty. Finally, I present empirical results showing that party power in primary elections in conditional on the ability of candidates to build name recognition. I conclude by discussing how these results help

build a deeper understanding of the role of parties and voter in primary elections.

2.2   Existing Literature

Existing research suggests that down-ballot primary elections are a hard case for voters in American elections. General elections provide both more distinct choices and more accessible heuristics for voters to make use of than their primary counterpart. Candidates in the two major parties differ in predictable ways across social, economic, and foreign policy issues (Moskowitz, 2021). A voter can reasonably differentiate the general election candidates based solely on their party affiliation and the candidates' likely issue positions to compare with their own positions.

Further, when voting across many different elections voters in general elections can make use of party labels as a heuristic to simplify the question of who to vote for (Downs, 1957; Schaffner and Streb, 2002). The same basic heuristic of party label can inform voters' decisions in national, state, and local elections and so serves to structure much of politics. This is evidenced by the fact that most voters in general elections do not split their ticket across levels of government or office, suggesting their votes are largely driven by differences between the parties rather than candidate specific features. General elections thus serve as an easy case for voters wishing to make policy driven choices.

In primaries, policy differences are muted and the partisan cue is absent. Voters face a much more difficult choice as a result. In one example, Hirano et al. (2015) tried to place candidates running for state legislative offices on an ideological spectrum relative to one another to identify more extreme or moderate candidates using statements and media coverage of the candidates. Despite their expertise, even they found it challenging in many cases to even produce an estimate of candidate ideologies. In practice, this seems to match with voters' own experiences. Ahler, Citrin, and Lenz (2016) investigate the impact of reforms to California's voting system designed to increase the incentive for candidates to moderate by moving to a top-two primary system as opposed to partisan primaries. The change was supposed to advantage candidates

who could appeal to moderate voters from each party, but Ahler and coauthors found no such moderating effect. They argue that this lack of centripetal force was because voters could not successfully identify the more moderate candidates to support. The information necessary to distinguish the ideology of candidates from the same party was too difficult to find and voters had to rely on other cues. In my own work speaking to voters, I have also found support for the limited role of ideology in the minds of voters. Conducting exit polls of Texas primary elections in 2020, I found that voters were rarely able to place even their preferred candidate on an ideological spectrum. In almost no cases did voters provide multiple ideological placements, suggestion they knew little about the ideological positions of candidates[1].

And yet primary elections seem to explain two important phenomena observed empirically in Congressional elections that would suggest voters are operating more systematically than the evidence suggests. First, research by Hirano and Snyder (2019) suggests that primaries act as an effective screening mechanism for parties by ensuring high quality candidates make it to the general election. They argue that, empirically, primaries serve surprisingly well at screening out potential candidates who lack experience and other non-policy characteristics that would hurt the party's chances in the general election. Looking at historical data, they find past elected experience has consistently conferred a substantial advantage to politicians seeking their party's nomination in a primary election.

Second, primary elections apparently reinforce ideological homogeneity within parties. Primaries consistently advantage more extreme candidates at the expense of moderate candidates. While early reformers thought primaries would produce results largely reflective of local characteristics, the introduction of primaries has largely reinforced party homogeneity. Members of Congress consistently demonstrate behaviour that suggests they are concerned about challenges in their primary if they do not act sufficiently in line with the party agenda while in Congress (Boatright, 2013). Further, despite the theoretical possibility of 'crossover voting" discussed

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[1]Because the results turned out to include so much missingness, I was not able to compile any meaningful analysis although additional quotes are presented later.

by some scholars (Cho and Kang, 2015), there exists no evidence for this kind of behaviour. Primaries consistently nominate candidates in line with the party's agenda.

In fact, the tendency for primaries to nominate non-centrist candidates has been exaggerated over time and likely contributes to polarization in Congress. Since the 1960s, primaries have nominated increasingly extreme candidates (Hill and Tausanovitch, 2018). While the exact cause of the shift in candidate nominations is contentious, it is clear that replacement through primary elections is the driving force in polarization, not changes in existing representative's behaviour (Theriault, 2006).

More unclear than the outcome of primaries or voter competence is what parties do in primary elections. There is limited evidence to suggest a role for parties in primaries, but the overall extent of this evidence is still small and only speaks to some facets of party involvement. Most notable is the research by Hans Hassel that shows party involvement in Senatorial primaries is an important source of primary success (Hassell, 2016). Hill (2020) also finds evidence that when institutional reforms aimed to limited the formal role of parties are introduced, campaign contributions also increase. He argues that this represents parties finding alternative pathways for influence over primary elections. It is this line of research that I build on below.

2.3   Name Recognition as Party Power

To reconcile the activity of parties in primaries and their predictable outcome, I turn to the role of name recognition in determining vote choice. Name recognition is often used loosely in the literature, but I use it to refer narrowly to the *familiarity of a candidate's name, regardless of any associated feelings*. Voters might know nothing about a candidate but recognize their name strongly in some cases while in others they might have strong positive or negative feelings associated with the candidate whose name they recognize.

The role of name recognition as a shortcut in elections has a long history. Jacobson (2015), for example, argues that name recognition is one of the important drivers of incumbent

success in Congressional politics. Burden (2002) looks at bad press coverage in primary elections and argues that it produced positive benefits for candidates by increasing their name recognition. Many more scholars argue that name recognition, on its own, contribute to the success of candidates

How does this mechanism work? Voters can use their recognition of a candidate's name, regardless of whether they have developed associated feelings, as a heuristic in extremely low information environments. Absent any additional information about candidates' experiences and platforms, a familiar name can be enough for a voter to select one candidate over another. Previous work by Kam and Zechmeister (2013) provides evidence for this; they show that exposure to candidate names, when presented without additional information, can be enough to win the support of voters in a lab setting. They argue that name recognition on its own is enough to generate positive impressions through the mere exposure effect (Bornstein and D'Agostino, 1992b). Stimuli that are more familiar are more easily processed, which in turn might suggest they are safer or benign choices.

This model is roughly consistent with an online processing model in which voters rely on impressions of candidates rather than specific facts about the candidates they can recall (Lodge, McGraw, and Stroh, 1989). This model does not require voters to make an explicit comparison between their options; instead they can focus on their general impression of candidates. Like with name recognitions, voters do not need to compare candidates on policy or personal dimensions to choose a candidate; they can select their preferred candidate without any knowledge of who they are.

Voters themselves support this idea when asked about their primary votes. When asked why they support a given candidate, most voters offer only general reasons such as the candidate's "value" or they "agreed on most stances", without naming specific issues or positions[2]. In my

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[2]These quotes are based on exit interviews I conducted with voters in competitive primary elections in Texas in 2020. Other voters specified name recognition, having heard of the candidate, or a general good feeling as the reason for their vote. Few voters named a specific policy position the candidate held and fewer still suggested they knew anything about candidates besides their preferred choice.

own exit interviews, no voter offered information comparing their preferred candidate to any other in the field; their focus was on the candidate they voted for. Voters do not know specific details or provide comparisons between candidates.

Name recognition offers an explanation for how voters might decide in primary elections given their lack of knowledge of the candidates. In fact, when asked many voters explicitly say that their choice was based on name recognition or having heard of the candidate[3]. As discussed above, voters in primaries generally struggle to differentiate the candidates they are presented with. In many important ways, the candidates are similar to one another and more subtle differences are hard to come across and remember. In this case, absent other information, Kam and Zechmeister (2013) show that voters tend to revert to this simplest of heuristic. While they might prefer to make their decision along more sophisticated dimensions, voters can fall back on candidate recognition to make a choice among candidates who they know little or nothing about.

Given the incentive to build name recognition in the electorate, successful primary campaigns should orient themselves around this goal. Increasing the profile or familiarity of a candidate in a low information race can increase their support, regardless of whether voters can recall anything about the candidate or even form an impression of the candidate. Candidates can engage in a wide array of activities to do this, from placing lawn signs in prominent locations, door knocking, attending or hosting local events, and of course through direct advertising campaigns. In fact, much of the activity campaigns engage in can be thought of as generating name recognition.

Crucially, name recognition can be built by any candidate. It does not depend on a candidate being ideologically close to the primary electorate, nor does it directly depend on the skills of the candidate or whether the candidate would be seen as qualified by the electorate. Any candidate who runs an active campaign has the ability to generate name recognition, particularly if they focus on building it. This provides a pathway for local parties to influence primaries directly.

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[3]In the same exit poll, as many voters mentioned ideology as did name recognition.

In essence, the low information environment in primary elections allows parties additional control as they can influence primaries through a channel that does not depend on an informed citizenry. While in higher information environments like presidential primaries, power might be exerted through endorsements or signals of ideology, in low information environments a much weaker signal is all that is necessary to build support. This gives parties more room to shape the outcome of elections as any desired candidate can benefit from the party support.

What should this look like? Based on existing research showing patterns in primary elections, we should expect parties to be targeting two types of candidates. First, while voters might prefer more moderate candidates (Hall and Lim, 2018), we should expect parties to nominate relatively more extreme candidates (Broockman et al., 2021). However, there is a limit to this extremity; local party actors will not support the most extreme candidates who are even more extreme than they are. Instead, their support will be narrowly focused on candidates that match the extremity of the party as it currently exists in Congress. On average, candidates closer to the median Member of Congress of the party should benefit from party support.

Second, we should expect parties to support more experienced candidates. This follows Hirano and Snyder (2019)'s findings that experienced candidates receive an electoral benefit in primary elections. I argue experienced candidates are more likely to be known to local party actors and therefor more likely to receive their support. Local party actors, in turn, would prefer experienced candidates as they already know the candidates disposition and ideology.

2.3.1 Voters and the invisible primary

Why would it be rational for voters to use name recognition as a shortcut for voting in primary elections? Another way to understand the impact of name recognition is from the perspective of the voter. Voters can use name recognition as a heuristic for valence characteristics and a proxy for ideology, especially when parties are homogenous.

Unlike in general elections, the primary election pits candidates with similar ideological positions against one another. Republican primary candidates tend to hold similar preferences for

reduced taxes and spending as well as for socially conservative policy while Democratic primary candidates hold the opposite positions in large. While high profile intraparty disagreements and factions do emerge, polarization has increased the homogeneity of the two political parties dramatically, increasing the amount of intraparty agreement (Dancey and Sheagley, 2018). Increasingly, both moderate and extreme members of Congress vote along party lines; since 1970 party line voting has gone from around 60% to around 90% in Congress.

As co-partisans become increasingly likely to vote with one another and hold similar policy positions, the benefit of primary elections as policy selection tools decreases. The expected gap in policy outcomes between electing a moderate and extreme representative of the same party has shrunk, reducing the potential utility voters derive from selecting a candidate marginally closer to their position. In a case such as that with reduced party heterogeneity, a rational voter might respond by relying on informational cues that are easier and less costly to locate while still providing some differentiating information.

These cues might include name recognition, candidate ethnicity and gender, or possibly candidate background if that is listed on the ballot.[4] Among these cues, name recognition has the largest potential to act as a reliable shortcut as it provides two potential pieces of information to voters. First, it provides valence information about candidates in the form of their fundraising and campaigning abilities as generating name recognition requires mounting a credible and reasonably competent campaign. In this way, name recognition is an example of a recognition heuristic where a positive trait (campaign skills) might correlate with recognition and become a useful shortcut.

This path operates through how candidates generate name recognition. For voters to develop a sense of who a candidate is, they must be exposed to the candidate during the election campaign. The more frequent the exposure (across advertising, campaigning, and word of mouth), the stronger the voter's recognition of a candidate will be. Even if the voter has not followed an election campaign, they can infer that candidates they recognize must have mounted

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[4]In California, for example, candidates may designate an occupation on the ballot.

some campaign and the candidate who seems the most familiar likely lead one of the most active campaigns. If voters are interested in candidates who will be generate positive campaign activity lead up to the general election, they can use name recognition to infer which candidate is likely to be best at campaigning.

Second, to the extent that parties are an important source of support for candidates and their support leads to higher name recognition, name recognition can be used as a cue by voters to infer that candidates hold positions broadly in line with the party. Put another way, name recognition can help voters screen out candidates who fall very far outside the mainstream of the party. This is because candidates who hold policy positions outside the norm for the party will struggle to find support in the local invisible primary. Without support, their campaigns will struggle to generate the activity necessary for building name recognition in the electorate. A candidate a voter recognizes in the primary election is likely to be a reasonable representation of the party they support, even if the voter does not know the candidate's policy positions specifically.

2.4 Data and Methods

2.4.1 Methods

My analysis proceeds in two parts. First, I use data on open-seat primaries to show that party support explains some of the relationship between ideology, experience, and election outcomes. Then I show that this relationship can be explained using the mechanism of name recognition. Below I outline these two analyses.

I begin with a measure of party support in local elections, following Hassell (2016). I do this by focusing on donors who contribute to the central parties. I classify party contributors as those who gave to one or more of the Democratic National Committee, Republican National Committee, or any of the four party campaign committees for the House and Senate in that cycle. These donors are those who are most likely to be involved with the political party at the local

level and likely to provide additional support in the form of volunteering or other resources Hassell (2016). Candidates who receive donations from these donors are likely those favored by the local party.

To measure the preferences of local party actors, I look at what factors predict support from party contributors. I look at two key factors that might influence the support from party actors. First, I look at the ideological distance between candidates and the median candidate for a party. I expect that, all else equal, parties are likely to support candidates who are neither too extreme nor too moderate; they're likely to back candidates who closely resemble the existing ideological landscape of the party. These candidates likely resemble the donors themselves as they fit closely to the national image of the party, as we might expect contributors to national campaigns to be. Following Jacobson (1989) and Hirano and Snyder (2019), I then look at the impact of experience on party support. I expect that candidates with prior experience in elected office will be significantly more likely to gain the support of party contributors.

To show the role of party support, I compare restricted to full models where I exclude and then include party support as an explanatory variable. If party support does explain the relationship between candidate traits and election outcomes, controlling for party support should attenuate this relationship and I should observe a weaker relationship in those models. This leads to my first hypothesis:

H1: When controlling for party support, the relationship between ideology, experience, and campaign outcomes will be reduced.

To test the role of name recognition in primaries, I take advantage of variation in how easy candidate names are to remember. Candidates with names that are easier to remember should generate more name recognition at a given level of campaigning; for each advertisement or campaign contact a voter encounters, a candidate with an easy-to-remember name will generate more name recognition than a candidate whose name is hard to remember. Candidates with very difficult-to-remember names will need significantly more advertising to generate name recognition in the electorate.

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What types of names are easier to remember? Literature from the fields of psychology, marketing and economics give some advice in this area. First, there is strong evidence to suggest that the most important precondition for memory is the processing of a stimuli. Research has consistently shown that people need to actively process a stimuli in order to recall it later (Bornstein and D'Agostino, 1992a); skimming an unfamiliar word, for example, is not enough to produce recognition. In the domain of names, this means that to learn and recall a name people must actively process that name.

Importantly, features of a name can make that processing more or less likely. Evidence from marketing studies suggests that brand names that are common words are easier for consumers to recall than novel words; when presented with brand names that are novel words, consumers insufficiently engage with them to recall them later (Lerman and Garbarino, 2002). Similarly, evidence from economics shows that names that are easier to pronounce and more familial are potentially easier to recall, leading to better job market outcomes (Ge and Wu, 2022). The mechanism is likely that people need to process a word to generate recall. Seeing a name without reading it will generate minimal recall, so names that are unfamiliar and hard to read will be readily skipped over and forgotten. Names that people find easy to read because they are short or used to will be read and will therefor generate recognition. This is a similar mechanism to the 'reception' mechanism outlined in Zaller (1992) in which exposure alone is not enough to generate recall; voters need to cognitively engage with something to remember it.

Based on this, I use the familiarity of candidate surnames as a measure of how easy these surnames are to remember. Because surnames are shared across individuals, some candidates will have more familiar surnames to voters; if a surname is widely shared, it will be very familiar to voters as they will be used to seeing it often. Candidates with surnames that are more common, then, should be more memorable to voters as a result as voters will be used to reading or hearing these names, making them easy to process. If voters find these names easier to process, then they will also find them more easily recall them, resulting in higher candidate name recognition for candidates with common names.

I then use this variation in surname commonality to see if name memorability mediates the relationship between party support and election outcomes. This builds on the work of Hassell (2016). I begin by replicating his finding that receiving support from local party actors is associated with success in primary elections. Crucially, though, I look at what happens when this measure is interacted with a measure of name commonality, using name commonality as a proxy for memorability. I expect that if party support is leading to candidates generating name recognition through their campaign activities, the independent effect of party support will depend on how easy a candidate's name is to remember. Candidates with more familiar names should find it easier to build name recognition and therefore support. Specifically, candidate with very hard to remember names will recieve very small returns to campaigning. Campaign activities that are meant to build name recognition will not help these candidates. Candidates with easy to remember names, however, will recieve electoral benefits only when they campaign to build name recognition; name commonality on its own should not have a direct effect on a candidate's electoral prospects. This gives me my second hypothesis:

H2: Candidates with more common surnames will experience larger returns to party support.

I also control for additional features to identify the impact of name recognition. First, I control for the ideology of the candidate. Past research has shown the important role of ideology in predicting primary outcomes (Boatright, 2013); if this is correlated with party support it might be that parties and voters both prefer the same type of candidate and so the relationship would be spurious. I also control for candidate experience. By controlling for ideology and experience, I limit the concern that voter preference and party support are being driven by the same valence characteristics; they would have to both be driven by additional features besides experience and ideology to explain the relationship.

I further control for district features that do not vary over time and shocks that impact specific years with district and year fixed effects. This controls for differences that might be attributed to either the district's location or composition or shocks such as wave elections that

impact all districts. Thus the results use within district variation in name recognition and party support to predict election outcomes, reducing the chance that the results could be driven by specific features of the district.

2.4.2 Data

To conduct this analysis, I bring together data on 5 different aspects of primary elections. My main outcome of interest is the electoral success of candidates. To measure this, I use election returns covering 21st century primary elections for the House of Representatives in every state. This data is collected from Hirano and Snyder (2019) and supplemented with additional electoral returns from the Federal Elections Commission. All candidates who appeared on the election ballot appear in this data set.

Next, I use campaign finance data from Bonica (2014) to measure two additional variables of interest: candidate ideology and party support. To measure the ideology of candidates in primary elections, many of whom never hold elected office, I use the CF Scores constructed by Bonica (2014). These scores assume that donors in elections donate to candidates with similar ideologies and policy positions to their own to recover systematic estimates of ideology for candidates who are never elected. Following Hassell (2018) and Lockhart and Hill (2023), I classify party contributors as those who gave to one or more of the Democratic National Committee, Republican National Committee, or any of the four party campaign committees for the House and Senate in a given cycle. Candidates who receive donations from party contributors should be those who are receiving support from local party actors who are involved in the primary; these donations should track other types of non-monetary support from these actors.

This operationalization of party support is a more broad one than that used by Hassell (2018) as it captures donations to any national political organization as opposed to just the national Senate campaigns. As a result, it captures a wider swatch of donors who might be involved in party politics at the local level. I then assign each candidate the proportion of the overall party support in their district they receive; if a candidate receives the entire support of

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their party, their score is a 1 and if they receive no support from party donors, it is a 0. Zero is the modal party support score as most candidates are not backed by party contributors. This measure captures a range of donors, some of whom may not be particularly involved in party politics; however, Hassell (2018) has shown that this measure does capture party behaviour at the local level. Put another way, despite noise induced by some donors being only minimally involved in the party itself, the measure has been shown to reliably capture local party support for a candidate.

I measure candidate experience using data collected by Porter and Treul (2019) on candidate experience. This data draws on candidate biographical information to measure whether a candidate is considered experienced. Following Hirano and Snyder (2019), I define any candidate with prior legislative experience in state or municipal governments as being experienced.

Finally, to measure the impact of name commonality on electoral success I use the US Census Bureau's decennial publication of surname frequency per 100,000 individuals. This list provides data on surname frequency in the United States for all names that occur more than 100 times in the given census. Names that occur less than 100 times are given a score of 0. Because this is a skewed distribution, I take the log of surname frequency (I add 1 to the name commonality before taking the log to account for candidates with a 0 commonality score). In the appendix, I show the 25 most common names; they represent a broad mix of apparent racial and ethnic backgrounds suggesting name frequency is relatively uninformative as a signal on its own.

2.5   Party Involvement

Figure 2.1 plots the distribution of candidate ideologies for both party supported and non-party supported candidates. The distribution shows that Democrats are significantly more likely to support candidates who are left of center and clustered around a score of -1. This represents a reasonably liberal but not extreme candidate within the party, similar to the median member of the Democratic Caucus in Congress. Neither extreme nor overly centrist candidates

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Overlapping Distributions of Ideology, Democrats
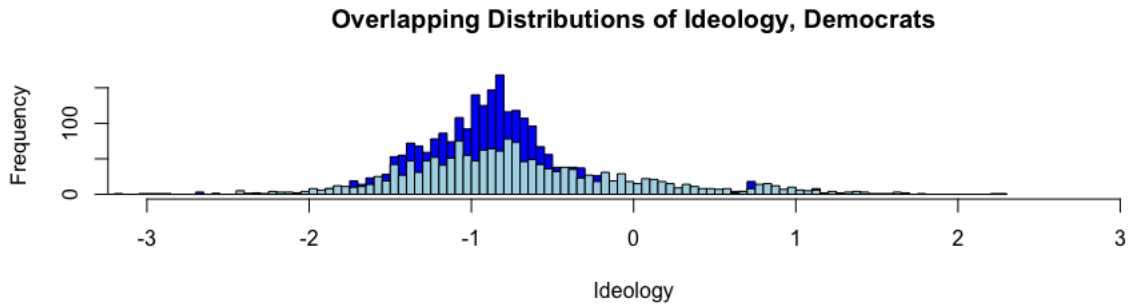
Figure 2.1. Distribution of primary candidate ideology by party support status among Democrats. Party supported candidates are dark blue, other candidates are light blue.

Overlapping Distributions of Ideology, Republicans
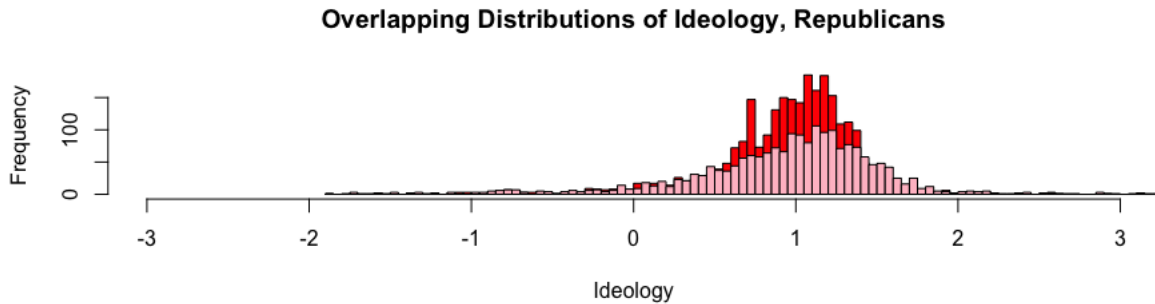
Figure 2.2. Distribution of primary candidate ideology by party support status among Republicans. Party supported candidates are dark red, other candidates are light red.

receive significant party support.

Republicans behave similarly, though following previous work there is some evidence they prefer slightly more extreme candidates than Democrats. Figure 2.2 plots the same distribution and shows that Republican party support clusters around candidates who have DIME scores narrowly above 1. Again the party appears to select candidates relatively close to their median to support in primaries. Moderate and extreme candidates receive significantly less support.

Following this, I formalize these predictions in a model predicting support from parties. I further include the role that experience plays in generating support from local parties. To do so, I model whether a candidate receives party support as a function of the candidates previous experience in elected office, DIME score, and incumbency status. For this, I use the full sample of

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Table 2.1. Impact of experience and distance from mean candidate ideology on support from party actors. Data covers 2002-2016.

	Democrats	Republicans
Experienced	-0.017	0.016*
	[-0.294, 0.260]	[0.003, 0.029]
Distance from Mean Ideoology	-0.194*	-0.043***
	[-0.352, -0.035]	[-0.063, -0.023]
Num.Obs.	2628	2937
R2	0.533	0.434
R2 Adj.	0.240	0.142

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

primary election candidates from 2012 to 2018, including candidates in open seats and challenger primaries. Table 2.1 shows that candidate experience is strongly predictive of support from both the Democrat and Republican parties. This suggests that parties are choosing to back candidates who have a high profile within the party; holding equal candidate ideology there is a preference for candidates who local actors will be more familiar with.

In this model, I code ideology as the absolute deviation from a party's average candidate in an election cycle. This captures that parties would rather support mainstream candidates who are neither moderate nor extreme. Parties should be likely to support candidates who are close to the mean of candidates running in a cycle. The results support this; party support declines significantly as candidates become either more moderate or more extreme. Democratic party donors in particular seem to respond to ideology of the candidates, focusing their donations on a narrow range of candidates.

Next, I look at Table 2.2 which examines the independent impact of party support on candidates' electoral fortunes. I now focus only on open seat primaries as the incumbency advantage is so large in primaries that it swamps the marginal effects of other variables. In this model, I control for both the ideology of the candidate and the experience of the candidate. It shows that while experience and ideology predict party support of primary candidates, party

support itself is independently associated with winning primary elections. This suggests that some voters might respond to the candidates directly, but the invisible primary has an independent effect on other voters.

Support from party donors is significantly associated with winning primary elections, holding candidate ideologies constant. For Democrats, there is a 28% bonus to electability from party support while for Republicans this is higher at 60%, though this is comparing a candidate with perfect party coalescence to one who receives no support at all. This evidence suggests that party support must be providing a useful benefit to candidates; party donors are providing something that candidates can use to win primaries that goes beyond their ideology and past experience. We do also see that some of the effect of party support in the relationship between experience, ideology, and outcomes: when party support is controlled for, the relationship between these variables and electoral success is attenuated, especially for ideology. In the next section, I investigate this relationship by examining the possibility that party support impacts primary elections by helping build name recognition for candidates.

2.6   Name Recognition

I begin by examining the relationship between surname commonality, party support, and election outcomes in the data. I compare candidates with the 25% most common and uncommon surnames and the relationship between party support and primary outcomes in these groups. Figure 2.3 shows that this relationship, even in the raw data, is stronger for candidates with more common surnames. Candidates with common surnames who receive substantial party support are significantly more likely to win the primary compared to candidates with uncommon surnames who have the same level of party support. The data suggests that surname commonality, and therefore name recognition, might be playing a role in determining primary election outcomes.

Table 2.3 replicates the results of prior research in the context of primaries for the House of Representatives from 2010 to 2018. Columns 1 and 3 both show that candidates who receive

Table 2.2. Determinants of electoral success based on experience, ideology, and support from local party actors. Data covers 2002-2016.

	Democrats	Democrats	Republicans	Republicans
Experienced	0.297***	0.255***	0.148**	0.137**
	[0.199, 0.395]	[0.159, 0.352]	[0.049, 0.248]	[0.041, 0.233]
Ideology	-0.132**	-0.096*	-0.089***	-0.069**
	[-0.214, -0.050]	[-0.176, -0.016]	[-0.141, -0.038]	[-0.115, -0.023]
Support from Party		0.286**		0.586***
		[0.090, 0.483]		[0.384, 0.788]
Num.Obs.	448	448	628	628
R2	0.612	0.637	0.351	0.406
R2 Adj.	0.278	0.320	-0.015	0.068

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001
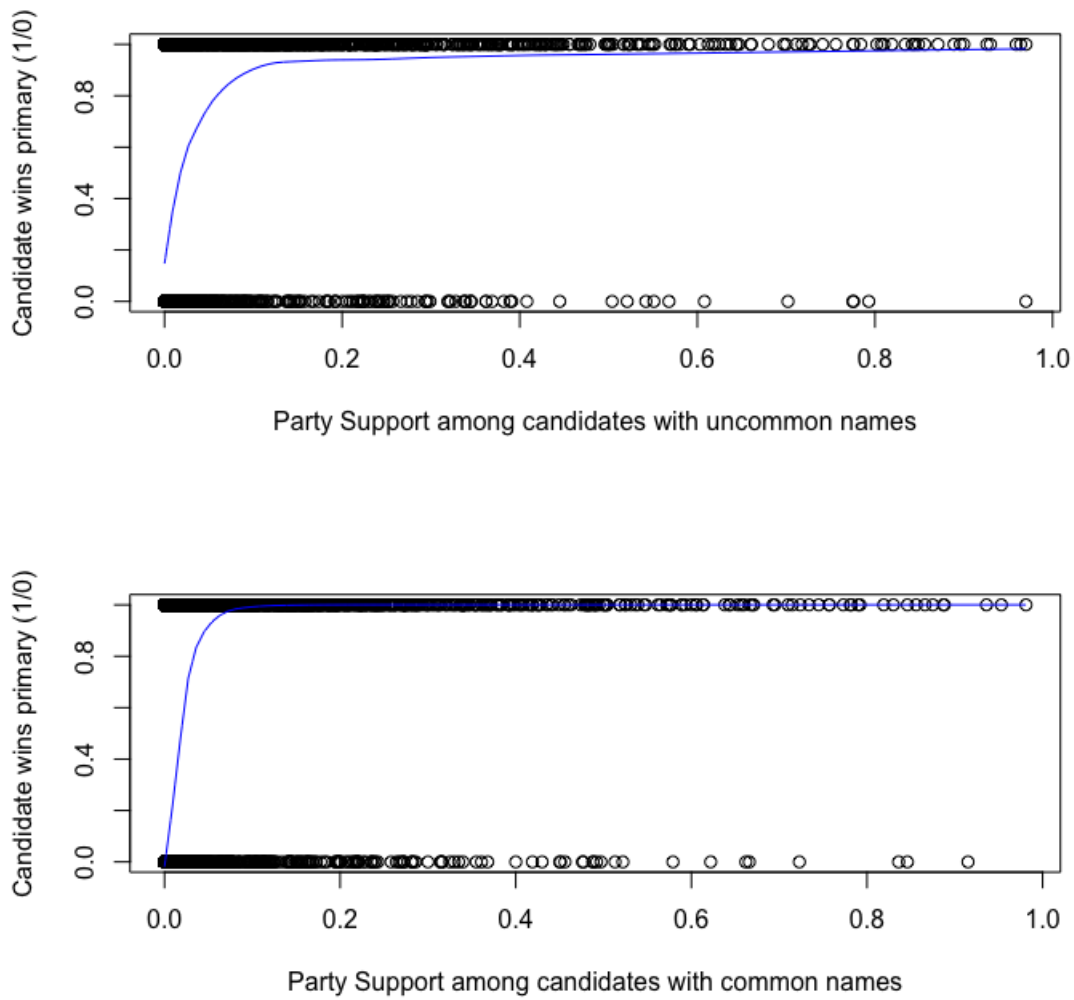
Figure 2.3. Relationship between party support and primary election outcomes among candidates with the top 25% most common and 25% least common surnames. Blue line represents Lowess fit showing strong relationship among candidates with common surnames.

donations from party contributors are significantly more likely to win primary elections, even when controlling for candidate ideology, district, and year. This replicates Hassell (2016)'s research on the Senate in the House. Additionally, surname frequency on its own has no impact on candidate success. Recall that the results include district and year fixed effects, as well as controls for candidate ideology, experience, and donations.

Columns 2 and 4 provide evidence that party support is acting through the generation of name recognition by increasing campaign activity. There are two important results here to note. First, when candidate names are added to the regression showing the advantage of party support, the apparent impact of party support dissipates. This is not surprising but clearly shows the important role of name recognition.

Secondly, candidates with more common names do receive substantial returns to party support, especially on the Republican side. A candidate with a more common surname can expect to benefit much more from party support than a candidate with a less common name. A 1% increase in the commonness of a surname leads to a 0.008 increase in the impact of party support on candidate success for Democrats and a 0.13 increase in the impact of party support for Republicans. This provides evidence that voters need to be able to remember the name of the candidate for parties to be able to provide support. Candidates with unfamiliar names struggle to generate name recognition as efficiently.

To understand these results better, I focus on three cases. First, when a candidate has no party support, the association between name frequency and electoral success is statistically indistinguishable from zero. Common names do not, on their own, bestow an advantage for candidates suggesting voters are not using information from the name itself on the ballot. In the appendix, I show that this is likely because common surnames to do convey information about other factors. First, I show that when imputed race based on surnames is included in these models, the effect remains. Second, I show that the most common surnames in the US include names that convey a wide range of races, ethnicity, and immigration status - the variables we might expect to be most readily inferred based on surnames.

Table 2.3. Determinants of electoral success based on name commonality. Data covers 2002-2016.

	Democrats	Democrats	Republicans	Republicans
Support from Party	0.018+	-0.005	0.604***	-0.017
	[-0.003, 0.039]	[-0.028, 0.017]	[0.397, 0.812]	[-0.479, 0.444]
Ideology	0.040	0.035	0.020	0.030*
	[-0.016, 0.097]	[-0.019, 0.090]		[0.003, 0.057]
Experience	0.293***	0.267***	0.153**	0.154**
	[0.192, 0.393]	[0.168, 0.366]	[0.058, 0.248]	[0.062, 0.246]
Log Name Frequency		-0.015		0.010
		[-0.038, 0.009]		[-0.007, 0.027]
Total Donations		0.000**		0.000***
		[0.000, 0.000]		[0.000, 0.000]
Name Frequency X Party Support		0.008*		0.130**
		[0.001, 0.014]		[0.033, 0.227]
Num.Obs.	480	480	628	628
R2	0.583	0.618	0.401	0.448
R2 Adj.	0.250	0.304	0.061	0.128

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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The second case worth considering is when a candidate has party support but an uncommon name. In this case too, the evidence suggests that there is no effect on election outcomes. Candidates with extremely uncommon surnames struggle to build name recognition through party support, likely because voters are not processing their names enough to remember them. That these candidates fail to see returns to campaigning is strong evidence that the candidate name itself is important for election outcomes; if party generated campaigning was providing policy information or some other information to voters, there should be a large direct effect of party support even for candidates with uncommon names.

It is only in the third case, when voters have both a name that is easy to remember and support from the party, that we see positive returns to party support. In this case, candidates are effectively generating electoral support in the election. In these cases, we see that voters learn candidate names and support them at the ballot box.

In the appendix, I report additional models showing broadly the same results. First, I use candidate surnames to infer the race of candidates to control for perceived candidate race; race is likely the most important candidate characteristic a voter could determine (or guess) based on a candidate's name. I use the same information available to the candidate to infer the candidate's race and control for it in Table A1; the findings are substantively and statistically the same. Additionally, because there are relatively few cases and the district fixed effects absorb a significant amount of the variation in the data, in Table A2I show that the results do not depend on the district fixed effects. Finally in Table A3, I use alternate measures of surname commonality looking at relative commonality within a district and again the results are largely the same (although not directly comparable).

2.7   Discussion and Conclusion

The role of parties in primary elections in the United States is increasingly being studied as an extension of party power. How and when parties involve themselves in primaries can

help explain patterns observed across the presidency, Senate, and House and help researchers understand who runs for office and who wins.

In primary elections for the US House of Representatives, parties exert influence at the ground level. While these primaries are often less salient than Presidential, Senate, and Gubernatorial primaries and so direct intervention might be less likely to succeed, local party actors can work around this by providing support to candidates they support that those candidates use to win primaries. Party actors tend to focus this support on candidates who have experience in elected office. I argued that this is because candidates with prior elected experience represent a visible pool of candidates with known ideological positions to choose from. Party actors were further seen to strongly prefer candidates close to the ideological center of the party; candidates who are neither too extreme nor too moderate. Once candidates receive party support, their chances of winning elections rise dramatically.

To explain this pattern, I looked closely at the differential impact of party support on electoral success. While in general party support does predict electoral success, I show that this is most true for candidates with highly common names. These names are more recognizable to voters and as a result should be easier for voters to remember once they are exposed to them. I show that candidates with the most common names experience the largest returns from party support while candidates with less common names do not receive this benefit.

The fact that parties appear to influence primary election outcomes through name recognition has an important implication for polarization. If voters rely on name recognition, they are not using actual candidate ideologies to make their decisions in primaries. This cedes control of shaping the ideological distribution of the party's elected members to the party who do not share the same preferences as voters. As noted earlier, party actors prefer non-centrist candidates to centrist ones, consistent with Broockman et al. (2021). Thus even though primary electorates may be less extreme than the party, primaries themselves continue to contribute to polarization as their outcomes reflect party goals instead of the goals of voters.

My findings suggests two important areas for future work to address. First, future work

needs to continue to explore how elites drive election outcomes. While my work focuses on the party's role in primaries, there are many other elite groups that are increasingly active in politics. Interest groups also have access to campaign expertise, committed volunteer bases, and staff that can provide intangible benefits to campaigns. Candidates looking to mount insurgent campaigns against incumbents, for instance, might use this type of outside support to build a campaign.

Organized social movements like Black Lives Matter or non-traditional party adjacent groups like the Democratic Socialists of America are increasingly providing candidates with support outside of the party system. This gives candidates who might not fit the ideological mold of a party the chance to win primary elections, potentially in safe districts where they can go on to be elected. Candidates like Alexandria Ocasio Cortez can win elections this way. If this trend continues, parties will likely lose some of their control over primary elections. Recent evidence suggests this is a growing trend. The preference for experienced candidates identified here is shrinking; thanks to early funding from outside of a district, inexperienced political outsiders are increasingly successful in primary elections (Porter and Treul, 2019). Non-party actors increasingly provide the resources parties used to control.

Second, these findings also speak to the need to better understand non-presidential primary campaigns themselves. The actual campaign activity and campaign style in Congressional primaries remains extremely poorly understood. Little is known about how, when, and why candidates choose to invest in different modes of advertising, door knocking, and campaigning activity. This is despite primary campaigns likely being a source of some of the most active persuasion in political communication as voters almost always enter the campaign without having made up their mind. This makes primaries a very useful place to study how and why different types of advertising and campaigning are effective.

Chapter 3

Primary Campaigns: Advertising strategies in nomination contests.

3.1 Introduction

In 2018, Alexandra Ocasio-Cortez ran an insurgent campaign against incumbent US House of Representatives member Joe Crowley in the Democratic primary election for New York's 14th Congressional District. Crowley was a prominent Democrat with a long history in Congress, including as Chair of the Democratic Caucus. Ocasio-Cortez, on the other hand, was a newcomer to national politics who relied on grassroots support. In the end, Ocasio-Cortex drew national media attention when she defeated Crowley and went on to win the general election.

As part of her campaign, Ocasio-Cortez produced an advertisement that her campaign called "The Courage to Change" which featured herself prominently, discussing her personal background and implying a comparison with the incumbent, Crowley. She emphasizes failings in the district and lists policies she would support if elected to Congress. This ad received significant media coverage, both during and after the campaign to explain why Ocasio-Cortez was successful at unseating a 20-year incumbent. The Washington Post highlighted the ad as an effective tool as part of her campaign and credited its content as particularly effective (Hornaday, 2018). Indeed, many seemed to think this type of advertising played an important role in Ocasio-Cortez's election, pointing to it after her victory as an important element of her campaign (Holmes, 2018).

However, as political scientists we know little about the advertising decisions that underpin campaigns like that of Ocasio-Cortez. Why did she decide not to name her opponent and only reference him generally? Why did she include policy messaging? Why did she decide to contrast herself against the incumbent instead of focusing only on herself? Why did she decide to advertise in the primary instead of saving her resources for the general election? The answers to these questions are unclear based on our current understanding of advertising strategies.

In the general election context, there are a few well understood motivations for campaigns to advertise - driving turnout higher among supporters and winning over swing voters. In primaries, the goal of advertising is less clear as the viewership of advertisements will largely be non-voters (primaries have very low turnouts) and the concept of swing voters is less well defined (swinging between who?). Additionally, primaries pit candidates with relatively similar policy positions against one another in races with relatively little news coverage (Hall and Lim, 2018) and candidates face a second election months later in the general. How much we should expect evidence from general elections to translate to primaries is thus unclear.

In this article, I lay out an argument for when and how primary election campaigns should advertise. I argue that in advance of more competitive general election race, primaries should be more policy focused and positive while in advance of safe-seat generals, races will focus more on personal features of candidates and feature more negative advertising. Additionally, I argue that incumbents will be less likely to go negative and more likely to focus on themselves to avoid giving undue attention to their opponents while challengers will seak to unseat incumbents by focusing on their negative features.

To test these theories, I then employ data on candidate advertising from the Wesleyan Media Project and data on candidates from the DIME dataset (Bonica, 2014; Fowler et al., 2019). I test the associations between institutional features and two sets of outcome variables: the quantity and the content of television advertisements in primary election. The results I present are primarily associations that fit the expected patterns of my theory, although they lack causal identification to know if they are effects of the institutional features.

The key findings are that in primary elections, advertising on TV is relatively uncommon - less than 15% of candidates advertise. However, it is more likely in races that are more competitive and where the winner is likely to win the general election which are the races where voters need information the most. Additionally, advertisements are more policy focused and less negative than in the general election and are even more likely to be policy focused when the candidate is likely to win the general election.

These results have important implications for how we understand primary elections. They provide positive evidence that in the primaries that are most important (where the eventual nominee is likely to take office), policy is an important factor in the race and voters might receive useful information about candidate policy positions. Additionally they highlight the important role that serious challengers play in holding incumbents accountable, even in safe seats, as challengers provide information about the incumbent to voters that they can use to hold their representative accountable in the primary. While information in primaries may be scarce, campaigns appear to act as a source of information in the races where it matters.

3.2   Theory

3.2.1   Advertising and Campaigns

Scholarship has looked at the effects of advertising in political campaigns extensively, showing an overall significant effect of advertising though with limited duration. Effects seem particularly prominent when either one campaign has a large relative advantage in advertising or for candidates who the electorate is less familiar with, though even then effects have limited durations.

Early research focused on the overall quantity of campaign activity, looking at campaign expenditure and its association with outcomes. Jacobson (1978) shows that candidates who spend more in campaigns are more likely to win elections. In later work, Jacobson (2006) shows more clearly that this effect is strongest for challengers; challengers need to introduce themselves

to the electorate and so rely more heavily on campaign activity to do so. Incumbents who are already known to the electorate receive smaller benefits as voters have pre-formed opinions about them and are less likely to be influenced by additional advertising or campaign activity.

More specifically, evidence suggests that television advertising directly has impacts on election outcomes. In one set of studies, scholars find that in areas where presidential campaigns spend more on TV advertising, they perform better. Johnston, Hagen, and Jamieson (2004) and Huber and Arceneaux, 2007 find that in the 2000 election, Bush outperformed Gore in areas where his campaign outspent Gore's. Huber and Arceneaux, 2007 show that being in a media market of a battleground state, even if a voter is not in the state itself and so isn't exposed to other aspects of the campaign, significantly impacted vote choice and increased support for Bush.

However, the effects of advertising have been shown to have limits. The general consensus among scholars looking at campaign effects is that they largely wear off within a week of being exposed to the campaign activity. Hill et al. (2013) model the effects of advertising in the 2000 presidential election and 2006 midterm election, finding that most effects appear to wear off quickly though some to persist for as long as 6 weeks. Sides and Vavreck (2014) show a significantly shorter duration for media effects. Relative spending advantages are associated with higher support in polls, but the advantage only persists for 1-2 days after the relative spending advantage subsides. The long-term effect of the net benefit does not appear different from zero.

These observational findings match results from experimental evidence. In Gerber et al. (2011), the authors work with a gubernatorial candidate in Texas to randomize the locations receiving advertisements during the primary campaign. They find that in locations receiving advertising, there is a benefit to the candidate but the benefit subsides after 1 week when advertising is equal across locations. Bartels (2014) shows that respondents randomly assigned to view an ad favoring Obama before the 2012 election were more likely to report intending to vote for Obama, but that this effect large dissipated by the post-election wave of the survey.

Advertising does seem to matter, but in a competitive advertising environment the advantage of advertising lasts only as long as a candidate continues to advertise more than their

opponents. If a candidate stops advertising or their opponent matches their advertising, the effects dissipate.

There has also been some research looking into the content of advertising on TV, especially focusing on negative or attack ads. Fowler and Ridout (2013) show that negative advertising has come to dominate election campaigns in the 21st century. A majority of advertising now is focused on the negative qualities (either personal or policy) of an opponent rather than on promoting the candidate who is paying for them. This type of advertising receives a lot of attention; it is often dramatic and prominent in the minds of voters. Ansolabehere et al. (1994) provide early evidence that the rise of negative advertising is associated with lower turnout in elections. Using a meta-analysis of studies, Lau, Sigelman, and Rovner (2007) find that negative ads are more memorable in general than positive advertising and seem to provide some useful information for voters in general elections. However, they reduce support for both the target of the advertisement and the candidate who runs the advertisement as voters dislike negative campaigning in general and so the effect on the final margin is negligible.

It is not clear how this should apply to primaries, however, as little research has examined how negative advertising operates in multiparty contexts. With more than two candidates, the demobilizing effect of a negative ad might instead translate to increased support for a third candidate. It could also be that with more candidates, each candidate has less incentive to use negative advertising than in a two-party situation. Overall, these findings beg the question of how advertising operates in the primary context.

3.2.2   TV Advertising in Primaries

This literature provides a basis to build our understanding of primary election advertising strategy, but there are a few key differences between primary elections and general elections that suggest candidates might behave differently in primaries. In a primary, advertising is potentially more important than in a general election. Because voters are asked to make intraparty decisions in primaries, they need more information to distinguish candidates. While a voter in the general

can reasonably infer the policy differences between candidates, in a primary the voter has no shortcut to make this inference. They must use information from the campaign to distinguish candidates from one another. Campaigns themselves and advertising in particular therefore have the potential to play an oversized role in primaries relative to general elections as candidates can potentially swing significantly more voters in these races. This fits with the finding that campaign spending is more predictive of less salient races (Sides, Vavreck, and Warshaw, 2022); where voters know less about candidates, campaigns can play a more decisive role.

However, despite the potential importance of primary campaigns, little is known about them. We do know that there are additional differences between these races and general election campaigns. The largest dilemma surrounding television advertising in a primary is the trade-off between the primary and general. Because primary elections are the first of a two round election system, strategic candidates should look forward to the general election as well as the primary election when considering how to advertise; a strategy that maximizes their chance of winning the primary might come at the expense of winning the general election (see Lockhart and Hill (2023) for a discussion of this problem more generally). A candidate who spends too much of their resources in the primary campaign won't be able to win the general election.

I organize my focus around two questions related to television advertising in primaries - when do candidates advertise and what do they feature in their advertisements. I focus on institution features that impact these choices, instead of focusing on candidate specific variables such as fundraising. As I show later, while fundraising is an important predictor of advertising, it is not the only feature of a campaign that predicts advertising levels. Institutional features such as the presence of an incumbent, the competitiveness of the district, and the district's partisan lean are important features that might motivate candidate behaviour and, as I show, are predictive of the advertising campaigns that candidates put forward.

Additionally, I generally assume that candidates are motivated by the general election. In this case, I mean that candidates both want to win the nomination and the general election and are strategic actors who anticipate the general election's electoral competition. If candidates

discount future payoffs too highly, they will not be motivated by general election incentives. For some candidates, this could be the case as they might not see the general election as winnable. However, I assume that in general most candidates have at least one eye on the general election.

Who should advertise?

Whether to advertise or not is an important decision for candidates in primary elections. With scarce resources and relatively narrow slice of the population who vote in primaries, candidates need to target their funds at the best ways to win support in the election. Airing TV advertisements is expensive and reaches a wide swath of voters, many of whom will not vote in their party primary. This leads to a number of factors that could influence a candidate's decision to advertise.

Unlike with general elections, I do not expect that the decision to advertise and quantity of advertising will be primarily driven by whether a candidate has money. Research has shown that the effects of advertising in elections are often short-lived. Since primary candidates can save money raised during the primary to spend in the lead up to the general, candidates who are confident in their position might forgo spending in the short term to spend more in the long term. Therefore, candidates who have a significant amount of money in their campaign account but do not face significant competition in the primary may choose to save their resources for the general election. On the other hand, competition in the primary should be important. Candidates in highly competitive primaries may choose to invest heavily in advertising to increase their name recognition and appeal to voters in order to overcome this first hurdle prior to turning their attention to the general election.

There are few features of a primary are likely to drive the level of expected competition in the race. Open seats and in-party favoured seats are more likely to attract multiple candidates and therefore be more competitive, making advertising potentially more desirable during the primary relative to the general. More competition makes it more challenging to win the primary which might encourage candidates to not hold back resources for the general election. Even

without multiple candidates declaring in a race, a candidate might anticipate the potential for competition and use more advertising in these races to ward off challenges.

In contrast, incumbents may choose to forego advertising altogether, as they are unlikely to face significant competition from other candidates. Especially in cases where these candidates face tough re-election prospects, an incumbent might choose to save their funding to spend on the general election as opposed to spending it in the primary. Because of the short lived effects of television advertising, the incumbent can focus their attention on advertising in the last few months of the campaign instead of in the primary which often occurs 4 or more months before the general.

What should they focus on?

Given the decision to advertise, candidates and campaigns face a strategic choice of what to feature in their advertisements. The question of how to introduce the candidate to the electorate, how to talk about opponents, and when to discuss policy all depend strongly on features of the campaign environment.

In a primary election, candidates need to distinguish themselves from their opponents more than in a general election. In a general election, a candidate might choose to focus on personal features to increase their appeal to swing voters who might dislike the more extreme policy positions of the candidates. Given that candidates within a party agree on a significant portion of issues and share many of those policy positions with the primary electorate, they have a higher need to focus on policy content of their platforms to distinguish themselves from their primary election opponents. Therefore we should expect to see a significant amount of policy focused advertising in primary elections.

Furthermore, when talking about opponents, candidates in primaries should be cautious about resorting to negative advertising. Negative ads can potentially backfire and harm both the candidate who initiates them, as well as their opponent as voters dislike negative advertising. Negative ads can often come across as divisive and turn off potential voters, leading them to

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view both the attacking candidate and their opponent in a negative light. It can also create an environment where additional challengers may benefit, as voters may become disenchanted with the negative tone of the campaign and look for alternative options. Research by Bernhardt and Ghosh (2020) suggests that positive advertising, such as focusing on personal or policy ads, is more effective for candidates who expect to win. Positive advertising can improve the electorate's view of the candidate going into the general election.

The type of advertising also depends on the competitiveness of the race and the nature of the seat. In competitive races and safe in-party seats, candidates should focus more on promoting their own candidacy and policy proposals. Competitive races often require candidates to differentiate themselves from their opponents, and focusing on their own policy agenda can help them establish themselves. Similarly, in safe in-party seats, where the candidate's victory is almost guaranteed, the focus should be on promoting the candidate's policies and qualifications.

Turning to the focus of the advertisements, incumbents should be mindful of how they talk about their opponents in their advertisements. Instead of giving their opponents free advertising by constantly attacking them, incumbents should focus more on showcasing their own accomplishments and policy positions. This approach also avoids elevating their opponents and making them seem more serious in the eyes of voters. Additionally, it prevents their opponent from generating additional name recognition in the electorate.

On the other hand, challengers often face the task of introducing themselves to the electorate and explaining why the incumbent should not be re-elected. Voters in primaries might default to the incumbent if they do not see a good reason to support the challenger. In this case, contrast ads that highlight the differences between the challenger and the incumbent can be effective. By pointing out the shortcomings or failures of the incumbent, challengers can make a case for why voters should consider them as a viable alternative. However, even in contrast ads, it is important for challengers to focus more on policy differences rather than resorting to purely negative attacks to avoid voters reacting negatively to the advertisement.

3.3   Methods

3.3.1   Data sources

The data on campaign advertising comes from the Wesleyan Media Project (WMP), a research project built by academics to better understand campaign dynamics. WMP uses commercial data from the Kantar Media/CMAG dataset that tracks in real time advertising for political and corporate clients. CMAG detects election advertising and collects information about it automatically, such as the time and date an advertisement aired as well as the channel and media market is what aired in. They also record the advertisement itself allowing researchers to directly examine the content of advertising.

WMP, in turn, supplement the automated detection and coding process of CMAG with content analysis of individual advertisements. Trained staff view the advertisement and code it for a number of features of the advertisement and meta-data related to where the advertisement aired and who sponsored it. Importantly, advertisements ran by political campaigns are listed as being sponsored by the candidate, allowing researchers to match campaign advertising content to the campaigns themselves. This data has been used by scholars in many contexts studying political advertising (Gollust et al., 2014; Franz et al., 2020; Fowler, Franz, and Ridout, 2020). Because this data includes the dates advertisements aired, I can focus only on advertisements aired before the primary elections in each state and cycle.

I collect nine variables from this data for my analysis focusing on three aspects of candidate advertising. First, I measure the quantity of advertising candidates engage in as both a binary measure indicating a candidate advertised at all as well as a continuous variable looking at the quantity of advertisements aired. The binary measure captures the initial decision to invest in TV advertising while the continuous measure allows for variance within those candidates who do choose to advertise. To capture the content of ads I measure the focus of each ad. I consider three variables that measure the content of the advertisement: whether it focuses on the candidates personal qualities, policy positions, or attacks an opponent. The third set of variables I collect

focus on which candidates are featured in the advertisement. For each ad, I measure whether the focus is the campaigns own candidate, an opponent, promotes the candidate, or contrasts them with an opponent.

In every case, I aggregate to the level of the candidate. For measures of quantity, this is obvious. For measures of content, this involves dropping candidates who do not advertise. I do this as instead of focusing on individual advertisements, I want focus on the share of a candidates overall advertisements that contain a given feature. I imagine campaigns have a fixed budget they can devote to advertising and must decide between different styles of advertising. For example, if a candidate airs more positive advertisements then this is at the expense of negative or contrast advertisements (as opposed to the decision to air more positive advertisements resulting in more advertisements overall).

This data covers elections from 2012 to 2018, including two presidential election cycles and two midterm election cycles. The limited scope of this data is due to the vast effort required to identify election advertising; elections ads are run across many media markets and television channels requiring a large scale effort to identify them consistently. Kantar Media/CMAG use an automated system to capture election advertising that would not have been practical using older technologies.

I combine data on the advertising styles of campaigns with election and candidate data drawn from the DIME dataset on elections and campaign finances (Bonica, 2014). This data allows me to measure two important features of the election environment - the districts presidential vote share and the type of race (incumbent or open seat). I use district presidential vote share as a measure of how competitive the general election in a district is; seats with Democratic presidential vote shares close to 50% should be more competitive - I code a district with Democratic presidential vote share between 40 and 60% as potentially competitive. I also use the DIME data to look at whether there is an incumbent in the in-party primary, out-party primary, or if the seat is open. This allows me to compare primaries with an incumbent sot primaries without an incumbent and seats with an incumbent to seats without an incumbent.

Both WMP and DIME data contain FEC identifiers for each candidate enabling this merge[1]. I use the universe of candidates from the DIME set to measure the total number of candidates who could potentially advertise; this set of candidates records the number who file with the FEC. In some cases, these candidates do not end up on the ballot but they might have run election advertising anyways. My sample of candidates is 8693 in total, of which 891 advertise in some way (9.8%). If we restrict the sample to more serious candidates (i.e. those who fundraise at all), this number rises to 11.1%.

In addition, I use campaign finance records from the DIME dataset to measure candidate pre-primary finances. I restrict this to fundraising before the primary. Unfortunately this data only exists until 2016, so I only have three election cycles worth of it. As a result, I include it only in the analyses focused on when candidates advertise and do not include it when considering the style of advertising[2]. I divide candidates into quartiles to model this relationship as pre-primary receipts are distributed very unevenly.

3.3.2 Note on identification

The results presented below are not causally identified. Indeed, there are likely many things that drive advertising styles that are exogenous to the conditions within a district and explain some of the patterns presented below. Candidate entry, for instance, is likely correlated both with the features of a district and advertising style. A more experienced candidate might wait for an open seat to appear before running for Congress and might choose to engage in more positive advertising; in this case the models presented below would show that an open seat predicts positive advertising styles, entirely unrelated to the strategic incentives discussed above.

This is a large problem in the study of campaign behaviour; strategic behaviour might either mask causal effects or induce correlations that are not causal. An incumbent might behave

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[1]The 2014 does not contain a consistent identifier and so I manually matched candidates based on their names. This match should be exact, though there are 3 cases where I was unable to identify a candidate in the DIME data that matched the candidate in the WMP data; this is because DIME and WMP use substantially different names in their data coding.

[2]When I do include it in the later analyses, the results do not change substantively.

differently because they are an incumbent, but it might also be that winning an election to become an incumbent produces a selection effect that looks like incumbent specific behaviour. These results should therefore be seen as a first cut at looking at advertising. My goal is only to show that features of the primary race are associated with different advertising styles in predictable and logical ways. While as researchers we would like to see exogenous variations in the institutional features that we can use to examine how similar candidates behave across races, we do not have access to this. Future work could surely build on these findings to examine which features produce causal variation in advertising styles.

3.4   Results

3.4.1   When Candidates Advertise
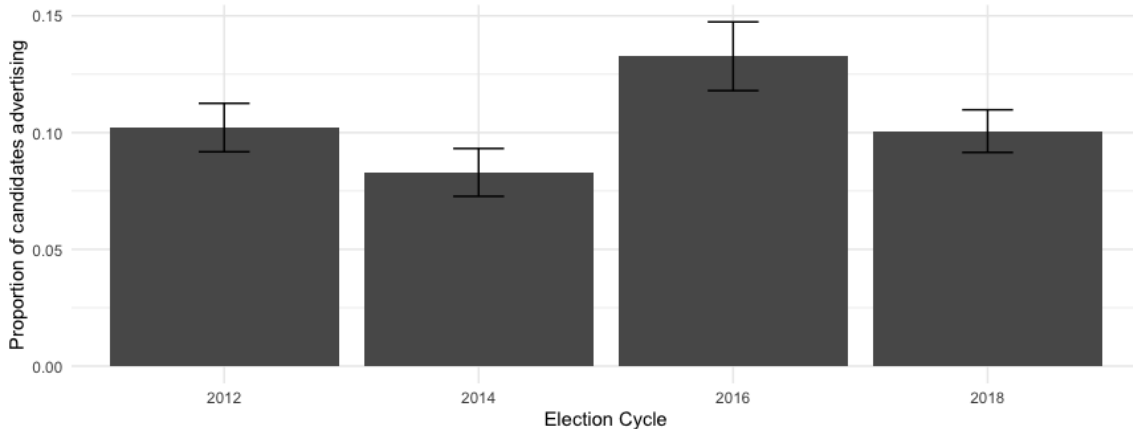
Figure 3.1. Proportion of candidates advertising in each election cycle.

As discussed above, only about 10% of primary election candidates advertise in primary elections (see Figure 3.1). The vast majority of candidates either cannot afford to advertise at this stage or choose to spend their scant resources elsewhere, either on other primary election related campaigning or saving it in anticipation of the general election. This is a marked contrast to general elections where candidate resources are much larger and so most candidates do advertise.

In Table 3.1, I analyze more closely the correlates of advertising. First, the type of district

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Table 3.1. District and candidate features that predict whether a candidate will advertise and how many advertisements they will air. Data cover 2012-2016,

	Advertising (binary)	Advertising (amount)
(Intercept)	−0.051**	−80.283***
	[−0.082, −0.020]	[−107.950, −52.617]
Out-Party Favored	−0.056***	−19.555+
	[−0.081, −0.032]	[−41.036, 1.926]
Competetive Seat	0.022*	16.458+
	[0.003, 0.042]	[−0.972, 33.888]
Incumbent in Primary	0.076***	47.595***
	[0.048, 0.105]	[22.439, 72.751]
Open Seat	−0.002	8.610
	[−0.027, 0.022]	[−13.377, 30.597]
Incumbent	−0.075***	−27.538*
	[−0.103, −0.046]	[−52.733, −2.343]
Pre-primary receipts (quartiles)	0.111***	79.559***
	[0.099, 0.122]	[69.343, 89.775]
Num.Obs.	4260	4260
R2	0.112	0.071
R2 Adj.	0.111	0.069

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

seems to play an important role in predicting advertising. Seats in which a party expects to lose receive significantly less advertising than districts where the in-party is favoured in the general; candidates are 5.6% less likely to advertise in seats in which the out-party is favoured and run on average 19 fewer advertisements.

Seats that are competitive at the general election are associated with higher advertising than seats where the in-party is expected to win. Compared to a candidate in a seat where the in-party is favoured, a candidate in a seat that is expected to be competitive is 2.2% more likely to advertise and airs an extra 16 ads, on average. This fits the strategic incentive of two round elections; television advertising in primaries is efficient for candidates who want to make use of it in the general election.

Interestingly, running in an open seat (with no general election incumbent) is not a strong

predictor of primary election advertising. Even though these seats might be expected to be more competitive in the general, there is no consistent relationship between the seat being open and the advertising decisions of candidates. One potential explanation for this finding is that the open-seat is attracting more candidates in general and so there are more low-resourced candidates that cancel out greater focuses on advertising from higher resource candidates.

Finally, the behaviour of in-party incumbents and their challengers is interesting. The presence of an incumbent in a primary increases the likelihood of advertising relative to an open primary, but this is only true for challengers. Incumbents themselves are no more likely to advertise than candidates running in open races. The increase for challengers is consistent with the logic that challengers need to provide voters with a reason to abandon the incumbent who might be their default choice; they need to introduce themselves and provide a clear alternative to the incumbent.

We do see an association between fundraising and advertising decisions as candidates in the top quartile are almost 35 percentage points more likely to advertise than candidates in the lowest quartile. Even though this does not completely explain candidate advertising behaviour, fundraising is clearly an important factor in predicting primary election behaviour.

3.4.2 What Candidates Feature in Advertisements

I next focus on the content of advertisements: when candidates advertise, what are they choosing to include in those advertisements? Here, I restrict my sample to the 891 candidates who advertised so that I can consider the share of a candidate's advertising that falls into each category. I do this based on the assumption that candidates first decide whether to advertise and then only after that decide what kinds of advertising to run. I focus on three types of advertisements candidates might make use of: personal ads focusing on their background and experience, policy ads focusing on their campaign promises, and attack ads criticizing an opponent.

Table 3.2 shows a few interesting patterns related to the content of advertising. The intercepts show that overall, policy advertising dominates primary election campaigns. Roughly

Table 3.2. Features of a district that predict the share of advertisements focusing on policy and personal aspects of the candidate as well as the share of attack ads a candidate airs. Data cover 2012-2018.

	Personal ads (share)	Policy ads (share)	Attack ads (share)
(Intercept)	0.177***	0.451***	0.007
	[0.129, 0.224]	[0.384, 0.517]	[−0.003, 0.017]
Out-Party Favored	0.014	−0.104**	0.004
	[−0.035, 0.063]	[−0.172, −0.036]	[−0.006, 0.014]
Competetive Seat	−0.034	0.088**	−0.007
	[−0.077, 0.010]	[0.028, 0.148]	[−0.016, 0.002]
Incumbent in Primary	0.015	−0.038	0.010*
	[−0.034, 0.063]	[−0.105, 0.028]	[0.000, 0.020]
Open Seat	−0.023	0.001	−0.002
	[−0.067, 0.020]	[−0.059, 0.061]	[−0.011, 0.007]
Incumbent	−0.046	0.147***	−0.011+
	[−0.105, 0.012]	[0.066, 0.228]	[−0.023, 0.001]
Num.Obs.	891	891	891
R2	0.006	0.032	0.009
R2 Adj.	0.000	0.027	0.003

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

half of all advertising in primaries is policy focused, though with considerable variation predicted by other factors. This confirms the idea that primaries, because they require discerning between candidates with similar ideologies, encourage candidates to focus on policy differences to differentiate themselves from their opponents. Personal advertisements do make up a considerable portion of advertising, in line with evidence that valence characteristics are important factors in primary elections (Hirano and Snyder, 2019). Additionally, negative advertising is extremely rare in primary elections. Only challengers in races with incumbent candidates use negative advertising with any regularity; all other candidates seem adverse to the potential risk of putting voters off with negativity. For challengers to incumbents, the rate is doubled from the baseline. This is a large departure from the trend in general elections where negative ads dominate the airwaves Fowler and Ridout (2013).

The largest associations are between the share of policy oriented ads and features of the race. The partisan lean of the district is strongly associated with the share of policy ads candidates run. Moving from an out-party favoured seat to an in-party favoured seat is associated with a 10 percentage point larger share of policy ads while moving to a competitive seat is further associated with 9 percentage points more policy ads. These races are important as they represent the races where the winner from the primary is likely to win the district in the general election; in these cases, voters seems to have access to the most policy information.

Additionally, being an incumbent seems to predict additional policy oriented ads. This makes sense as incumbents have significant past legislative work and so can use that to inform their advertising campaign. An incumbent can provide specific information about bill co-sponsorships, votes, and introductions that credibly signals to co-partisans their ideological commitments. For voters, this is potentially helpful as it makes it easier to hold incumbents accountable for their actions.

Next, I look at whether candidates are advertising to promote themselves or to hurt their opponents. Table 3.3 looks at four features of advertisements related to this question: the share that features the candidate, their opponent, that promote themselves, and that contrast the

candidates. Note the intercept suggests that candidates are primarily focused on self-promotion in primary elections. Unlike the findings of Fowler and Ridout (2013) that focused on the overall campaign, candidates in primaries are not as negative as candidates in general elections. They are primarily focused on introducing themselves to voters. This follows from candidate's incentive to maximize their own prospects in the general election; self-promotion advertising has the potential to increase a candidate's vote share across both the primary and the general while contrast ads only increase their share in the primary.

The dynamics of who candidates discuss in advertisements is strongly associated with whether a candidate is an incumbent, challenger, or running in an open seat. Candidates challenging an incumbent are much more likely than other candidates to contrast themselves with an opponent (presumably the incumbent) and more likely to mention the incumbent by name. Unlike in other types of races, challengers are not concerned about making their opponent look like a serious candidate as the incumbent will already have high levels of name recognition among the primary electorate. Incumbents and candidates in open seats, however, seam to shy away from directly mentioning their opponents. These candidates focus on self-promotion in their advertising more than incumbents do. Finally, seats that are likely to be competitive in the general election receive more contrast ads comparing candidates.

3.5 Conclusion

Primary elections differ qualitatively from general elections in many ways. Candidates compete within parties instead of between them, have another election to look toward to, and have limited resources. These differences provide clear reasons for primary election campaigns to look different than general election campaigns, but little past research has explored this question.

This chapter contributes two main findings to our understanding of campaigns for the US House of Representatives. First, it confirms that in primary elections, candidates have one eye towards the general election. Instead of spending money on advertising solely based on their

Table 3.3. Factors that predict which candidates are featured in advertisements, as a share of all advertisements. Data cover 2012-2018.

	Promote self (share)	Contrast (share)	Mention self (share)	Mention opponent (share)
(Intercept)	0.854***	0.131***	0.981***	0.122***
	[0.799, 0.910]	[0.081, 0.182]	[0.951, 1.010]	[0.070, 0.174]
Out-Party Favored	0.000	−0.021	−0.018	−0.004
	[−0.056, 0.056]	[−0.073, 0.030]	[−0.048, 0.012]	[−0.057, 0.050]
Competitive Seat	−0.081**	0.072**	−0.021	0.072**
	[−0.131, −0.031]	[0.027, 0.118]	[−0.048, 0.006]	[0.025, 0.120]
Incumbent in Primary	−0.148***	0.097***	−0.051***	0.117***
	[−0.204, −0.092]	[0.046, 0.148]	[−0.081, −0.022]	[0.064, 0.170]
Open Seat	0.082**	−0.061**	0.002	−0.067**
	[0.032, 0.132]	[−0.107, −0.016]	[−0.025, 0.029]	[−0.114, −0.020]
Incumbent	0.135***	−0.131***	0.014	−0.080*
	[0.068, 0.203]	[−0.192, −0.069]	[−0.022, 0.050]	[−0.143, −0.016]
Num.Obs.	891	891	891	891
R2	0.048	0.035	0.016	0.036
R2 Adj.	0.042	0.030	0.011	0.030

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

ability to pay for it, the results above show that candidates attend to features of the race when deciding whether to advertise. Controlling for candidate fundraising, features that contribute to advertising in primaries include whether a candidate is challenging an incumbent or aiming for an open seat, whether the seat will be competitive in the general, and the partisan lean of the district. Taken together, the evidence suggests candidates will save money for the general when they do not need to spend it in the general.

Looking at the content of candidates who advertise, there is clear evidence that primary advertising differs substantially from general election advertising in two ways. While negative advertising has come to dominate the airwaves in general elections, candidates in primary elections are significantly more likely to focus on their own policies and backgrounds. Only a small percentage of advertising takes the negative tone that makes up a majority of general election advertising. This is both consistent with a desire for self promotion and a desire to ensure voters who support an opponent are not put off by negative advertising targeting that candidate to the extent they avoid voting in the general election. Additionally, in races where the winner might reasonably expect to win the general election (such as races where the in-party is favoured in the districts partisan lean) campaigns are more likely to focus on policy in advertisements and slightly less likely to focus on their personal backgrounds.

This evidence presents an optimistic view of primary elections. While previous work is often pessimistic about the information voters have access to in primaries (Lockhart, 2021; Hall and Lim, 2018), this evidence suggests that in some cases the campaigns themselves might be providing useful information to hold candidates accountable. The quantity of advertising is highest in races that are likely to be competitive and with challengers looking to unseat incumbents, suggesting that in these crucial races voters are receiving more information. The information voters are getting from campaigns also seems to potentially be more useful than from general election advertising; it is more positive and policy centered than general election advertising.

Returning to the example of Ocasio-Cortez from above, this evidence helps us understand

why she chose to advertise and why her advertisement took the tone it did. Ocasio-Cortez wanted to unseat incumbent Joe Crowley in a heavily Democratic district, both factors that significantly increase the likelihood she would advertise and the quantity of advertisements she would air. Additionally, challenging an incumbent is significantly associated with advertisements contrasting candidates with their opponents. Finally, as the seat is heavily Democratic we should expect the advertisement to focus on policy. The evidence presented above helps make sense of Ocasio-Cortez's decisions that helped lead her to a successful primary challenge.

There are still many open questions considering advertising in primary elections. This research only begins to highlight the strategic considerations that might play into advertising decisions. Whether these decisions are effective at helping candidates win elections is still not clear, nor is how TV advertising plays into the larger structure of the campaign. Candidates might compliment TV advertising with other campaign styles or substitute for it entirely. Future work can continue to build on our understanding of primary election campaigns.

Conclusion

This dissertation has tackled three related questions looking at how campaigns, media, and voters interact with the information environment around primary elections. The view is generally pessimistic; primaries appear to offer less accountability than in the past with incumbency advantages increasing and information about local news declining. Even the bright spot that advertising is relatively more common where it would be more useful is limited by the overall lack of campaign activity in primary elections.

This research agenda pushes us to look more closely at what voters know when they go to the ballot box. The availability of information or lack thereof plays a crucial role in determining vote choice. As voters are better able to inform themselves, for instance when there is ample news coverage of an election, voters can learn directly about the candidates and use this information to hold them accountable for their actions and behaviour. Moderate electorates can select moderate candidates, voters can find candidates with experience they value, and challengers can make the case that incumbents should not be re-elected. When voters can't learn about the election or information is more difficult to find, these effects vanish. Incumbency advantages grow, voters become less able to select moderate candidates, and the value of experience declines.

At the most extreme ends, many communities end up as news deserts with no local coverage at all. Local governments and politics go completely unreported on when newsrooms shut down with a host of associated negative effects. For primary elections, this means voters have no independent source of information on candidate policies, backgrounds, and records they can use to distinguish them.

Instead, voters end up relying on less reliable informational shortcuts including the

simplest shortcut of them all - name recognition. For many voters, the simple feeling of familiarity is as much information as they have about any candidate and can be enough to induce them to vote for that candidate. Name recognition is then currency for candidates; it can help even candidates outside of the mainstream win the parties nomination. For many voters, information on a candidates record might dissuade them from voting for an overly extreme or moderate candidate, but that information can be hard to find and the more extreme or moderate candidate might be able to build name recognition despite their unpopular policy views.

The challenge of making information easy and accessible to voters is therefore core to protecting the mechanisms of accountability that underpin primaries. Solutions exist, but they require creativity and the willingness to think creatively. Ardia et al. (2020) propose a number of solutions to reinforce local news institutions, including direct support of newspapers and newsrooms to allow them to hire and retain experienced journalists as well as reducing the power and market share of large tech companies. Others suggest programs that work to strengthen to relationship between journalists and the communities they serve (Abernathy, 2022). In Canada, the government has already taken steps to help protect and preserve local journalism including direct funding for local journalism in communities that need it (Menzies, 2022).

There is pushback to these solutions too; many criticize the idea of government funding and support for news as creating a conflict of interest that will impact the ability of media organizations to hold the government to account (Menzies, 2022). Others note that the under-supply of local news is not caused by some external intervention but rather a decrease in the demand for local news. As demand decreases, even if local news were supplied through creative solutions, voters and the public might not engage with it. Political learning leans heavily on incidental news exposure in which voters who do not actively seek information are exposed to it anyways, maybe through catching the end of a local news report before a show begins or through posts on social media from friends (Ahmadi and Wohn, 2018). Solutions to the decline in local news need to take this into account; the news needs to make it in front of readers who might not be interested in reading it.

Relatedly, the question of how campaigns fill (or don't fill) this gap in information is increasingly prominent. While this dissertation shows campaigns offer at least some alternative to traditional media in informing voters, it also highlights that in most primaries candidates do not advertise and that campaigns significantly promote name recognition over policy knowledge. Campaigns do have the power to inform the electorate; political advertising can help (at least some) voters learn about candidates running for office (Stevens, 2005). The finding that advertising is more frequent and potentially more useful in competitive and important primaries bolsters this notion that campaigns can improve accountability.

However, recent elections have highlighted the pitfalls of expecting politicians to provide reliable information to their voters; 2022 saw hundreds of candidates who denied the election results of the 2020 presidential election publicly and as part of their campaigns. If voters relied on these candidates as information sources, they would be seriously mislead and unable to make informed decisions. Similarly, incumbent Republicans in 2022 took credit for infrastructure investments made through the Inflation Reduction Act even though they voted against it in Congress (Logan and Kaur, 2022). Unsurprisingly, candidates and campaigns incentives are not for an informed electorate but rather an electorate who views them positively. In some cases, the competitive information environment in campaigns makes this a valuable information source, but in primary elections where incumbents might have a large financial advantage the media and information environment is often not competitive.

Primary elections have the opportunity to provide real accountability to politicians in otherwise safe districts, but without looking closely at the information environment voters are faced with we might rush to the conclusion that primaries are currently operating effectively. Instead, scholars and policy makers alike should take seriously the need for reforms that empower voters to make sense of primaries and make informed decisions. In the absence of that, voters will need to rely on candidates, campaigns, and parties to make sense of the complicated choice.

Appendix Items for Chapter 2

Alternate model specifications

Models with imputed race

To control for the possibility that voters might be using candidate names to infer race and that is driving the results, I use the "Who are you?" package to infer candidate race based on their names. The package uses cencus name and race data to infer the probability a person with a given name is of a given race. Based on this, I take the race that is the most likely and assign it to the candidate; this mirrors how a voter might use race to infer the candidate's race. I include this as an additional control and find that it does not substantively impact the results.

Models without district fixed effects

Because there are relatively few open seat races in each election cycle, the district fixed effects absorb significant variation. To show that the results do not depend on this modelling choice, I run the same model without district effects; the results do not change.

Models with relative surname commonality

To account for the fact that if two candidates have similarly common names, the advantage might be smaller, I consider two alternate measures of commonality. First, I construct a measure of which candidate in a primary has the most common surname of all the candidates in the primary capturing which candidate has the absolute advantage. Second, I look at the relative surname advantage for candidates compared to the candidate with the most common surname in the district. These measures produce results that are in the same direction as the main results presented in the text of the paper. However, there is some noise in this measure and because the units are different to the ones used above, the results are not directly comparable to those presented in the main text.

25 most common surnames in the United States

The most common surnames in descending order based on US Cencus Bureau information. Common names appear to vary in apparent race, ethnicity, immigration status.

1. SMITH

2. JOHNSON

3. WILLIAMS

4. BROWN

5. JONES

6. MILLER

7. DAVIS

8. GARCIA

9. RODRIGUEZ

10. WILSON

11. MARTINEZ

12. ANDERSON

13. TAYLOR

14. THOMAS

15. HERNANDEZ

16. MOOR

17. MARTIN

18. JACKSON

19. THOMPSON

20. WHITE

21. LOPEZ

22. LEE

23. GONZALEZ

24. HARRIS

25. CLARK

Table A1. Determinants of electoral success, controlling for imputed race.

	Democrats	Republicans
Support from Party	−0.005	−0.052
	[−0.026, 0.016]	[−0.516, 0.411]
Log Name Frequency	−0.008	0.021*
	[−0.033, 0.017]	[0.002, 0.040]
Total Donations	0.000*	0.000***
	[0.000, 0.000]	[0.000, 0.000]
Ideology	0.035	0.035*
	[−0.019, 0.089]	[0.009, 0.061]
Experience	0.267***	0.152**
	[0.169, 0.364]	[0.062, 0.242]
Black	−0.131	0.010
	[−0.306, 0.045]	[−0.176, 0.195]
Hispanic	−0.030	−0.071
	[−0.223, 0.163]	[−0.262, 0.120]
Other	−0.122	0.060
	[−0.359, 0.115]	[−0.165, 0.285]
White	−0.040	0.092
	[−0.239, 0.158]	[−0.099, 0.284]
Name Frequency X Party Support	0.008*	0.141**
	[0.002, 0.013]	[0.041, 0.242]
Num.Obs.	480	628

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table A2. Determinants of electoral success ommitting district fixed effects.

	Democrats	Republicans
Support from Party	-0.008	-0.079
	$[-0.022, 0.006]$	$[-0.247, 0.088]$
Log Name Frequency	$-0.011+$	-0.001
	$[-0.019, -0.003]$	$[-0.016, 0.014]$
Total Donations	0.000	0.000
	$[0.000, 0.000]$	$[0.000, 0.000]$
Ideology	-0.020	-0.003
	$[-0.041, 0.002]$	$[-0.009, 0.003]$
Experience	$0.157+$	0.126
	$[0.044, 0.269]$	$[0.014, 0.237]$
Name Frequency X Party Support	$0.006***$	$0.124**$
	$[0.005, 0.006]$	$[0.094, 0.154]$
Num.Obs.	480	628

$+ p < 0.1,$ * $p < 0.05,$ ** $p < 0.01,$ *** $p < 0.001$

Table A3. Determinants of electoral success using alternate measures of surname commonality.

	Democrats	Democrats	Republicans	Republicans
Support from Party	0.003	0.005	0.353+	0.648**
	[−0.021, 0.027]	[−0.016, 0.027]	[0.119, 0.586]	[0.540, 0.755]
Most common name	−0.094		0.039	
	[−0.236, 0.048]		[−0.220, 0.298]	
Total Donations	0.000	0.000	0.000	0.000
	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]
Ideology	0.033	0.035	0.029	0.029
	[−0.012, 0.078]	[−0.020, 0.091]	[−0.008, 0.067]	[−0.006, 0.064]
Experience	0.254+	0.263	0.157	0.152
	[0.046, 0.461]	[0.041, 0.486]	[0.012, 0.301]	[0.018, 0.286]
Name Frequency X Party Support	0.051+	0.000	0.091	0.001**
	[0.010, 0.092]	[0.000, 0.000]	[−0.382, 0.565]	[0.001, 0.001]
Relative surname advantage		0.000+		0.000
		[−0.001, 0.000]		[0.000, 0.000]
Num.Obs.	480	480	628	628

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Bibliography

Abernathy, Anumita (2022). *The State of Local News: The 2022 Report*. Medill Local news Initiative.

Ahler, Douglas J., Jack Citrin, and Gabriel S. Lenz (2016). "Do Open Primaries Improve Representation? An Experimental Test of California's 2012 Top-Two Primary". *Legislative Studies Quarterly* 41.2, pp. 237–268.

Ahler, Douglas, Jack Citrin, and Gabriel S. Lenz (2015). "Why Voters May Have Failed to Reward Proximate Candidates in the 2012 Top Two Primary". *California Journal of Politics and Policy* 7.1.

Ahmadi, Mousa and Donghee Yvette Wohn (2018). "The Antecedents of Incidental News Exposure on Social Media". *Social Media + Society* 4.2, p. 2056305118772827.

Angrist, Joshua D. and Jörn-Steffen Pischke (2008). *Mostly Harmless Econometrics: An Empiricist's Companion*. Google-Books-ID: ztXL21Xd8v8C. Princeton University Press. 393 pp.

Ansolabehere, Stephen, David Brady, and Morris Fiorina (1992). "The Vanishing Marginals and Electoral Responsiveness". *British Journal of Political Science* 22.1, pp. 21–38.

Ansolabehere, Stephen, Shigeo Hirano, and James M Snyder (2004). *What did the direct primary do to party loyalty in Congress?* Working Paper.

Ansolabehere, Stephen, Shanto Iyengar, Adam Simon, and Nicholas Valentino (1994). "Does Attack Advertising Demobilize the Electorate?" *American Political Science Review* 88.4, pp. 829–838.

Ansolabehere, Stephen, John Mark Hansen, Shigeo Hirano, and James Snyder (2006). "The Decline of Competition in U.S. Primary Elections, 1908–2004". In: McDonald, Michael P. and John Samples. *The Marketplace of Democracy: Electoral Competition and American Politics*. Washington, DC: Brookings Institution Press, pp. 82–96.

Ansolabehere, Stephen, John Mark Hansen, Shigeo Hirano, and James M. Snyder (2007a). "The Incumbency Advantage in U.S. Primary Elections". *Electoral Studies* 26.3, pp. 660–668.

— (2007b). "The incumbency advantage in U.S. primary elections". *Electoral Studies* 26.3, pp. 660–668.

Ardia, David, Evan Ringel, Victoria Smith Ekstrand, and Ashley Fox (2020). *Addressing the Decline of Local News, Rise of Platforms, and Spread of Mis- and Disinformation Online* —. The Center for Information, Technology, and Public Life (CITAP).

Bartels, Larry M. (2014). "Remembering to Forget: A Note on the Duration of Campaign Advertising Effects". *Political Communication* 31.4, pp. 532–544.

Bernhardt, Dan and Meenakshi Ghosh (2020). "Positive and negative campaigning in primary and general elections". *Games and Economic Behavior* 119, pp. 98–104.

Boatright, Robert G. (2013). *Getting Primaried: The Changing Politics of Congressional Primary Challenges*. University of Michigan Press. 273 pp.

Bonica, Adam (2014). "Mapping the Ideological Marketplace". *American Journal of Political Science* 58.2. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/ajps.12062, pp. 367–386.

— (2018). "Inferring Roll-Call Scores from Campaign Contributions Using Supervised Machine Learning". *American Journal of Political Science* 62.4, pp. 830–848.

Bornstein, R. F. and P. R. D'Agostino (1992a). "Stimulus Recognition and the Mere Exposure Effect". *Journal of Personality and Social Psychology* 63.4, pp. 545–552.

Bornstein, R F and P R D'Agostino (1992b). "Stimulus recognition and the mere exposure effect". *Journal of personality and social psychology* 63.4, pp. 545–552.

Boudreau, Cheryl, Christopher S. Elmendorf, and Scott A. MacKenzie (2019). "Racial or Spatial Voting? The Effects of Candidate Ethnicity and Ethnic Group Endorsements in Local Elections". *American Journal of Political Science* 63.1, pp. 5–20.

Brady, David W., Hahrie Han, and Jeremy C. Pope (2007). "Primary Elections and Candidate Ideology: Out of Step with the Primary Electorate?" *Legislative Studies Quarterly* 32.1, pp. 79–105.

Broockman, David E., Nicholas Carnes, Melody Crowder-Meyer, and Christopher Skovron (2021). "Why Local Party Leaders Don't Support Nominating Centrists". *British Journal of Political Science* 51.2. Publisher: Cambridge University Press, pp. 724–749.

Burden, Barry C. (2002). "When Bad Press Is Good News: The Surprising Benefits of Negative Campaign Coverage". *Harvard International Journal of Press/Politics* 7.3. Publisher: SAGE Publications, pp. 76–89.

Cai, Weiyi, Annie Daniel, Lazaro Gamio, and Alicia Parlapiano (2021). "Impeachment Results: How Democrats and Republicans Voted". *The New York Times. U.S.*

Cho, Seok-ju and Insun Kang (2015). "Open primaries and crossover voting". *Journal of Theoretical Politics* 27.3. Publisher: SAGE Publications Ltd, pp. 351–379.

Chyi, Hsiang Iris and Yee Man Margaret Ng (2020). "Still Unwilling to Pay: An Empirical Analysis of 50 U.S. Newspapers' Digital Subscription Results". *Digital Journalism* 8.4, pp. 526–547.

Chyi, Hsiang Iris and Ori Tenenboim (2019). "Charging More and Wondering Why Readership Declined? A Longitudinal Study of U.S. Newspapers' Price Hikes, 2008–2016". *Journalism Studies* 20.14, pp. 2113–2129.

Dancey, Logan and Geoffrey Sheagley (2018). "Partisanship and Perceptions of Party-Line Voting in Congress". *Political Research Quarterly* 71.1. Publisher: SAGE Publications Inc, pp. 32–45.

Djourelova, Milena, Ruben Durante, and Gregory Martin (2021). *The Impact of Online Competition on Local Newspapers: Evidence from the Introduction of Craigslist*. SSRN Scholarly Paper ID 3846243. Rochester, NY: Social Science Research Network.

Dominguez, Casey B K (2011). "Does the Party Matter? Endorsements in Congressional Primaries". *Political Research Quarterly* 64.3, pp. 534–544.

Downs, Anthony (1957). *An economic theory of democracy*. New York: Harper. 310 pp.

Eavis, Victoria (2022). "Hageman Breaks Fundraising Record; Cheney Raises $2.9 Million". *Casper Star Tribune*.

Fiorina, Morris P. (1977). "The Case of the Vanishing Marginals: The Bureaucracy Did It". *The American Political Science Review* 71.1. Publisher: [American Political Science Association, Cambridge University Press], pp. 177–181.

Fouirnaies, Alexander and Andrew B. Hall (2020). "How Divisive Primaries Hurt Parties: Evidence from Near-Runoffs in US Legislatures". *The Journal of Politics* 82.1, pp. 43–56.

Fowler, Erika Franklin, Michael M. Franz, and Travis N. Ridout (2020). "The Blue Wave: Assessing Political Advertising Trends and Democratic Advantages in 2018". *PS: Political Science & Politics* 53.1. Publisher: Cambridge University Press, pp. 57–63.

Fowler, Erika Franklin and Travis N. Ridout (2013). "Negative, Angry, and Ubiquitous: Political Advertising in 2012". *The Forum* 10.4, pp. 51–61.

Fowler, Erika Franklin, Michael Franz, Travis Ridout, and Laura Baum (2019). *Political Advertising in 2012-2018*.

Franz, Michael M., Erika Franklin Fowler, Travis Ridout, and Meredith Yiran Wang (2020). "The Issue Focus of Online and Television Advertising in the 2016 Presidential Campaign". *American Politics Research* 48.1. Publisher: SAGE Publications Inc, pp. 175–196.

Ge, Qi and Stephen Wu (2022). "How Do You Say Your Name? Difficult-To-Pronounce Names and Labor Market Outcomes". *SSRN Electronic Journal*.

Gentzkow, Matthew, Jesse M. Shapiro, and Michael Sinkinson (2014). "Competition and Ideological Diversity: Historical Evidence from US Newspapers". *American Economic Review* 104.10, pp. 3073–3114.

Gerber, Alan S., James G. Gimpel, Donald P. Green, and Daron R. Shaw (2011). "How Large and Long-lasting Are the Persuasive Effects of Televised Campaign Ads? Results from a Randomized Field Experiment". *The American Political Science Review* 105.1, pp. 135–150.

Gollust, Sarah E., Colleen L. Barry, Jeff Niederdeppe, Laura Baum, and Erika Franklin Fowler (2014). "First Impressions: Geographic Variation in Media Messages During the First Phase of ACA Implementation". *Journal of Health Politics, Policy and Law* 39.6, pp. 1253–1262.

Grieco, Elizabeth (2019). "About a quarter of large U.S. newspapers laid off staff in 2018", p. 13.

Hall, Andrew B. (2019). *Who Wants to Run?: How the Devaluing of Political Office Drives Polarization*. Google-Books-ID: LEeHDwAAQBAJ. University of Chicago Press. 171 pp.

Hall, Andrew and Chloe Lim (2018). *Ideology and News Content in Contested U.S. House Primaries*. Working Paper.

Hassell, Hans J. G. (2016). "Party Control of Party Primaries: Party Influence in Nominations for the US Senate". *The Journal of Politics* 78.1, pp. 75–87.

— (2018). "Principled Moderation: Understanding Parties' Support of Moderate Candidates: Principled Moderation and Parties". *Legislative Studies Quarterly* 43.2, pp. 343–369.

Hendrickson, Clara (2019). *Local journalism in crisis: Why America must revive its local newsrooms*. Brookings. URL: https://www.brookings.edu/research/local-journalism-in-crisis-why-america-must-revive-its-local-newsrooms/ (visited on 06/17/2021).

Hill, Seth J. (2020). "Sidestepping primary reform: political action in response to institutional change". *Political Science Research and Methods*. Publisher: Cambridge University Press, pp. 1–17.

Hill, Seth J., James Lo, Lynn Vavreck, and John Zaller (2013). "How Quickly We Forget: The Duration of Persuasion Effects From Mass Communication". *Political Communication* 30.4, pp. 521–547.

Hill, Seth and Chris Tausanovitch (2018). "Southern realignment, party sorting, and the polarization of American primary electorates, 1958–2012". *Public Choice* 176.1, pp. 107–132.

Hirano, Shigeo and Jr Snyder (2019). *Primary Elections in the United States*. OCLC: 1117651809. Cambridge: Cambridge University Press. 358 pp.

Hirano, Shigeo, James M. Snyder Jr, Stephen Ansolabehere, and John Mark Hansen (2010). "Primary Elections and Partisan Polarization in the U.S. Congress". *Quarterly Journal of Political Science* 5.2. Publisher: Now Publishers, Inc., pp. 169–191.

Hirano, Shigeo, Gabriel S Lenz, Maksim Pinkovskiy, and James M Snyder (2015). "Voter Learning in State Primary Elections". *American Journal of Political Science* 59.1, pp. 91–108.

Hogan, Robert E. (2003). "Sources of Competition in State Legislative Primary Elections". *Legislative Studies Quarterly* 28.1, pp. 103–126.

Holmes, Jack (2018). *This Ad Shows What Alexandria Ocasio-Cortez's Victory Really Means*. Esquire. URL: https://www.esquire.com/news-politics/a21964797/alexandria-ocasio-cortez-defeats-joe-crowley/ (visited on 04/13/2023).

Hornaday, Ann (2018). "Perspective — Ocasio-Cortez, Hegar and the Art of Making Your Political Ad Feel like an Uplifting Movie". *Washington Post*.

Huber, Gregory A. and Kevin Arceneaux (2007). "Identifying the Persuasive Effects of Presidential Advertising". *American Journal of Political Science* 51.4, pp. 957–977.

Jacobson, Gary C. (1978). "The Effects of Campaign Spending in Congressional Elections*". *American Political Science Review* 72.2. Publisher: Cambridge University Press, pp. 469–491.

Jacobson, Gary C. (1989). "Strategic Politicians and the Dynamics of U.S. House Elections, 1946-86". *The American Political Science Review* 83.3, pp. 773–793.

— (2006). "Measuring Campaign Spending Effects in U.S. House Elections". In: *Measuring Campaign Spending Effects in U.S. House Elections*. Michigan: University of Michigan Press, pp. 199–210.

— (2015). "It's Nothing Personal: The Decline of the Incumbency Advantage in US House Elections". *The Journal of Politics* 77.3. Publisher: The University of Chicago Press, pp. 861–873.

Jacobson, Gary C. and Jamie Carson (2019). *The Politics of Congressional Elections, Tenth Edition*. 10th ed. Rowman & Littlefield Publishers. 376 pp.

Johnston, Richard, Michael G. Hagen, and Kathleen Hall Jamieson (2004). *The 2000 Presidential Election and the Foundations of Party Politics*. Cambridge: Cambridge University Press.

Kam, Cindy D. and Elizabeth J. Zechmeister (2013). "Name Recognition and Candidate Support". *American Journal of Political Science* 57.4, pp. 971–986.

Kirkland, Patricia A. and Alexander Coppock (2018). "Candidate Choice Without Party Labels:" *Political Behavior* 40.3, pp. 571–591.

Koop, Royce and Amanda Bittner (2011). "Parachuted into Parliament: Candidate Nomination, Appointed Candidates, and Legislative Roles in Canada". *Journal of Elections, Public Opinion and Parties* 21.4, pp. 431–452.

Kousser, Thad, Scott Lucas, Seth Masket, and Eric McGhee (2015). "Kingmakers or Cheerleaders? Party Power and the Causal Effects of Endorsements". *Political Research Quarterly* 68.3. Publisher: SAGE Publications Inc, pp. 443–456.

Kujala, Jordan (2020). "Donors, Primary Elections, and Polarization in the United States". *American Journal of Political Science* 64.3, pp. 587–602.

— (2021). *Unconventional Nominations: Party Conventions and Representation in the United States*. Working Paper.

Lau, Richard R., Lee Sigelman, and Ivy Brown Rovner (2007). "The Effects of Negative Political Campaigns: A Meta-Analytic Reassessment". *The Journal of Politics* 69.4, pp. 1176–1209.

Lerman, Dawn and Ellen Garbarino (2002). "Recall and Recognition of Brand Names: A Comparison of Word and Nonword Name Types". *Psychology & Marketing* 19.7-8, pp. 621–639.

Levine, Sam and Lauren Gambino (2021). "Donald Trump Acquitted in Second Impeachment Trial". *The Observer. US news*.

Lockhart, Mackenzie (2021). *Declining Local News Benefits Incumbents and Extremists in Primary Electionst.* Working paper presented at the 2021 meetings of the American Political Science Association.

Lockhart, Mackenzie and Seth J. Hill (2023). "How Do General Election Incentives Affect the Visible and Invisible Primary?" *Legislative Studies Quarterly*.

Lodge, Milton, Kathleen M. McGraw, and Patrick Stroh (1989). "An Impression-Driven Model of Candidate Evaluation". *American Political Science Review* 83.2. Publisher: Cambridge University Press, pp. 399–419.

Logan, Erin and Anumita Kaur (2022). "Republicans Who Voted against Biden's Infrastructure Bill Are Touting Its Projects Anyway". *Los Angeles Times. Politics*.

Martin, Gregory J. and Joshua McCrain (2019). "Local News and National Politics". *American Political Science Review* 113.2. Publisher: Cambridge University Press, pp. 372–384.

Martin, Jonathan (2022). "Liz Cheney Is Ready to Lose. But She's Not Ready to Quit." *The New York Times. U.S.*

Mayer, W. G. (2001). "Primary Elections". In: *International Encyclopedia of the Social & Behavioral Sciences*. Ed. by Neil J. Smelser and Paul B. Baltes. Oxford: Pergamon, pp. 12011–12014.

McCarty, Nolan (2019). *Polarization: What Everyone Needs to Know*. Publication Title: Polarization. Oxford University Press.

McDonald, Michael P. and John Samples (2007). *The Marketplace of Democracy: Electoral Competition and American Politics*. Google-Books-ID: csIpnWyG9hIC. Brookings Institution Press. 322 pp.

Menzies, Peter (2022). "Opinion: Canada's News Strategy Is a Mess". *The Globe and Mail*.

Mitchell, Amy, Jeffrey Gottfried, Michael Barthel, and Elisa Shearer (2016). *The Modern News Consumer*. Pew Research Center's Journalism Project. URL: https://www.journalism.org/2016/07/07/the-modern-news-consumer/ (visited on 06/17/2021).

Moskowitz, Daniel J. (2021). "Local News, Information, and the Nationalization of U.S. Elections". *American Political Science Review*. Publisher: Cambridge University Press, pp. 1–16.

Niven, David (2001). "The Limits of Mobilization: Turnout Evidence from State House Primaries". *Political Behavior* 23.4, pp. 335–350.

PEN America (2019). *Losing the News: The Decimation of Local Journalism and the Search for Solutions*. PEN America, p. 115.

Peterson, Erik (2021). "Paper Cuts: How Reporting Resources Affect Political News Coverage". *American Journal of Political Science* n/a (n/a).

Porter, Rachel and Sarah Treul (2019). *Inexperience and Success in Congressional Primaries*. Working Paper.

Rubado, Meghan E. and Jay T. Jennings (2020). "Political Consequences of the Endangered Local Watchdog: Newspaper Decline and Mayoral Elections in the United States". *Urban Affairs Review* 56.5. Publisher: SAGE Publications Inc, pp. 1327–1356.

Schaffner, Brian F. and Matthew J. Streb (2002). "The Partisan Heuristic in Low-Information Elections*". *Public Opinion Quarterly* 66.4, pp. 559–581.

Scott, Eugene (2022). "What Happened to the 10 Republicans Who Voted to Impeach Trump?" *Washington Post*.

Scott, Joseph E. and Loretta A. Schwalm (1988). "Rape rates and the circulation rates of adult magazines". *Journal of Sex Research* 24.1, pp. 241–250.

Sides, John and Lynn Vavreck (2014). *The Gamble*. Princeton, N.J: Princeton University Press.

Sides, John, Lynn Vavreck, and Christopher Warshaw (2022). "The Effect of Television Advertising in United States Elections". *American Political Science Review* 116.2, pp. 702–718.

Stevens, Daniel (2005). "Separate and Unequal Effects: Information, Political Sophistication and Negative Advertising in American Elections". *Political Research Quarterly* 58.3, pp. 413–425.

Theriault, Sean M. (2006). "Party Polarization in the US Congress: Member Replacement and Member Adaptation". *Party Politics* 12.4. Publisher: SAGE Publications Ltd, pp. 483–503.

Thomsen, Danielle M. (2014). "Ideological Moderates Won't Run: How Party Fit Matters for Partisan Polarization in Congress". *The Journal of Politics* 76.3, pp. 786–797.

Times, New York (2022). "Wyoming At-Large Congressional District Primary Election Results". *The New York Times. U.S.*

Trussler, Marc (2021). "Get Information or Get in Formation: The Effects of High-Information Environments on Legislative Elections". *British Journal of Political Science*. Publisher: Cambridge University Press, pp. 1–21.

Turner, Julius (1953). "Primary Elections as the Alternative to Party Competition in "Safe" Districts". *The Journal of Politics* 15.2, pp. 197–210.

Ware, Alan (2002). *The American Direct Primary: Party Institutionalization and Transformation in the North*. Google-Books-ID: hftm7pqI9a0C. Cambridge University Press. 290 pp.

Zaller, John (1992). *The Nature and Origins of Mass Opinion*. Cambridge [England] ; New York, NY, USA: Cambridge University Press. 367 pp.