Primary Campaigns Advertising strategies in nomination contests.*

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Working Paper - Do Not Cite

This draft: April 19, 2023 First draft: April 13, 2023

Abstract: When do primary election campaigns decide to run TV advertisements and what types of advertisements do they run? This paper explores these decisions based on institution features of primary elections, focusing on the type of primary (open-seat/incumbent/challenger) and the type of district (competitive/safe-in-party/safe-out-party) to explain variation in the number and type of advertisements. I draw on data from the Wesleyan Median Project and look at all advertisements run by candidates prior to House and Senate primary elections from 2012-2018. The results show that the best predictor of advertising in primary elections is fundraising and the presence of an incumbent, while the tone and substance of advertising are best predicted by the presence of an incumbent and district competitiveness. Optimistically, competitiveness increases the share of policy ads and quantity of advertising, suggesting voters might be exposed to information they need in races where that is most important.

Keywords: Primary elections; political campaigns; political advertising; strategy; campaign finance.

^{*}I thank Seth Hill for feedback.

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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 (*This Ad Shows What Alexandria Ocasio-Cortez's Victory Really Means*).

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 (swing-

ing 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.

2 Theory

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 be-

ing 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.

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.

2.2.1 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 hurtle 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.

2.2.2 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 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 Methods

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 merge¹. 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 preprimary 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 advertising². I divide candidates into quartiles to model this relationship as pre-primary receipts are distributed very unevenly.

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 fea-

¹The 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.

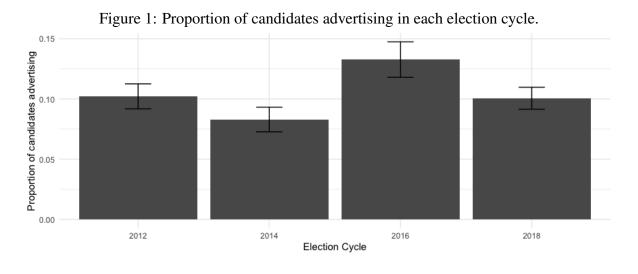
²When I do include it in the later analyses, the results do not change substantively.

tures 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 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.

4 Results

4.1 When Candidates Advertise



As discussed above, only about 10% of primary election candidates advertise in primary elec-

Table 1: District and candidate features that predict whether a candidate will advertise and how many advertisements they will air.

	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

tions (see Figure 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 1, I analyze more closely the correlates of advertising. First, the type of district 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.

Interestingly, 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.

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 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.

	Personal ads (share)	Policy ads (share)	Attack ads (share)			
	1 Cisoliai aus (silaic)	1 oney aus (share)	Attack aus (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			
0 1 * 0 05 ** 0 01 *** 0 001						

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

Table 2 shows a few interesting patterns related to the content of advertising. The intercepts show that overall, policy advertising dominates primary election campaigns. Roughly 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 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.

Table 3: Factors that predict which candidates are featured in advertisements, as a share of all advertisements.

	Promote Self ads (share)	Contrast Candidate ads (share)	Mention Self ads (share)	Mention Opponent ads (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

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.

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 paper 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 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 in two ways.

tising 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.

References

- 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.
- 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.
- 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.
- 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.
- 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.
- Hall, Andrew and Chloe Lim (2018). *Ideology and News Content in Contested U.S. House Primaries*. Working Paper.
- 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.
- Hirano, Shigeo and Jr Snyder (2019). *Primary Elections in the United States*. OCLC: 1117651809. Cambridge: Cambridge University Press. 358 pp.
- Holmes, Jack. 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. (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.
- Johnston, Richard, Michael G. Hagen, and Kathleen Hall Jamieson (2004). *The 2000 Presidential Election and the Foundations of Party Politics*. Cambridge: Cambridge University Press.
- 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.
- 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*.
- 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.