Off-Cycle and Out of Office: Election Timing and the Incumbency Advantage

Justin de Benedictis-Kessner, Boston Area Research Initiative

Democratic accountability relies on the ability of citizens to reward and punish politicians in elections. Electoral institutions, such as the timing of elections, may play a powerful role in this process. In this article, I assess how on-cycle (concurrent) and off-cycle elections affect one facet of accountability—the incumbency advantage—using data on nearly 10,000 mayoral elections in cities over the past 60 years. Using a regression discontinuity design, I find that incumbency carries a substantial advantage for individual candidates. Moreover, I find that on-cycle elections provide incumbents with a far larger advantage than off-cycle elections do. These results show that election timing has important implications for electoral politics and demonstrate one possible mechanism for the prevalence of the incumbency advantage.

Political scientists have long observed high rates of incumbent reelection across many levels of government in the United States in what has been called the "incumbency advantage." This pattern may exist because voters reward officials for a job well done. Alternatively, this could be because they benefit from advantages to being in office already that a challenger does not have. If the latter is true, then the incumbency advantage may be indicative of problems with the process of accountability. Regardless of the cause of this advantage, if these incumbent politicians know that they have very little chance of losing the next election, they have little incentive to respond to the preferences of their constituents.

The incumbency advantage alone is a widespread descriptive pattern in politics in the United States and elsewhere. Understanding why this advantage exists—how incumbents stay in office and why voters reelect them—is important for understanding the electoral process and accountability more broadly. Moreover, political scientists do not have a clear answer for why this advantage persists and how electoral institutions might affect it.

Institutions that control the format and timing of elections may play a role in this process. The Progressive-era reforms, and in particular the shift of elections in the United States to a time that is not November of even-numbered years, have been excoriated for their effects on representation: mainly that they suppress turnout and can lead to interest group capture of elections. These institutions might similarly weaken the potential for electoral accountability, despite their well-intentioned goals. If common institutional variation in the timing of elections corresponds with the size of the incumbency advantage, this suggests that these institutions play a role in democratic accountability by affecting the decisions of either candidates or voters—or both—in elections.

I use data collected on municipal elections to investigate the effect of election timing on the incumbency advantage—one part of the larger process of accountability. Using a regression discontinuity design, I find that, overall, mayoral candidates benefit from a substantial incumbency advantage at the candidate level, demonstrated by both an increase in their probability of rerunning and an increase in their probability of rerunning and winning their next election. Moreover, this advantage is larger in elections that are concurrent with national elections compared to elections that are off-cycle. I supplement these descriptive findings by combining the regression discontinuity design with an over-time comparison that leverages the breadth of my elections data and demonstrates the causal impact of a city changing its election timing.

This article proceeds as follows. First, I discuss the previous literature on election timing and the incumbency advantage, as well as the impact that institutions of government may have on accountability. Next, I introduce my data and research design. I present my findings showing the advantage that incumbents receive from being in office overall and discuss the differences in this advantage between on- and off-cycle elections. I then show how, when cities switch their election timing, the incumbency advantage changes accordingly. Finally, I conclude and briefly discuss the implications for accountability, electoral institutions, and local politics.

BACKGROUND

Though the lion's share of publicity is directed toward the first Tuesday in November when most national elections are held, the majority of elections in the United States do not happen on that day. Municipal, special district, and some state elections occur at a number of other times. There is substantial variation in election timing across the United States, in part because of the lack of uniform regulations across states and cities. This patchwork election calendar emerged over a century ago. Reform groups in the late 1800s and early 1900s, such as the National Municipal League, encouraged cities to hold off-cycle elections at a time other than when national elections were held (National Municipal League 1916; Trounstine 2010). The intent of this reform, at least in principle, was to insulate municipal politics from the mires of national politics and the machine capture of local elected offices (Trounstine 2008). Policy makers hoped that democracy might be strengthened by these reforms. The result was that many cities switched the timing of their elections from on- to off-cycle, and sometimes back again, often because of the influence of different organized interest groups and political parties (Anzia 2012b). More recently many cities have shifted their elections to be concurrent with other elections to save money on election administration, to increase voter turnout, or to reduce the time commitment required by municipal employees (Jomsky, Mullins, and Pope 2015). In other cases, however, cities have opposed these shifts and instead advocated to maintain off-cycle elections in order to allow for voters to focus on local issues (Koss 2015). This variation in the timing of municipal elections may have had its intended effects on representation and accountability—but the holistic effects of election timing on these qualities of democracy are unclear.

Assessing the quality of representation under on- and off-cycle elections has been the subject of much research. It is well established that off-cycle elections are associated with lower voter turnout (e.g., Anzia 2014; Caren 2007; Hajnal and Lewis 2003; Hess 2002; Wood 2002). We know that lower turnout in national elections can distort representation via the elec-

torate's racial demographics, income levels, and educational attainment relative to the general population (Rosenstone and Hansen 1993; Schattschneider 1970; Verba, Schlozman, and Brady 1995; Wattenberg 2002). There is evidence that local low turnout elections, such as those held off-cycle, can similarly lead to downstream inequities in representation (Hajnal and Lewis 2003; Hajnal and Trounstine 2005). Policies enacted by government could represent this biased version of the citizenry rather than the interests of the population as a whole. For instance, off-cycle elections may lead to policy that favors organized interest groups (Anzia 2011, 2012a, 2014). This line of research indicates that off-cycle elections have the potential to hurt the quality of representation.

Election timing may play a role in accountability entirely separate from its effects on representation. Indeed, off-cycle elections were designed to increase the influence of informed voters in local elections and therefore aid in accountability. Measuring accountability, however, remains a question with many answers. A broad literature has identified potential problems in the process of accountability at all levels of government, such as informational deficits that can lead voters to make suboptimal choices (e.g., Healy and Lenz 2014; Huber, Hill, and Lenz 2012). Among many others, one of the symptoms of a lack of accountability most scrutinized by political scientists is the overwhelming tendency of incumbent politicians to seek and win reelection. This incumbency advantage is well documented in national elections (Ansolabehere and Snyder Jr. 2002; Butler and Butler 2006; Gelman and King 1990; Lee 2008). Past research has also demonstrated that it varies at different levels of government in the United States, from Congress to states to the local level (Ansolabehere and Snyder Jr. 2002; Cox and Katz 1996; Ferreira and Gyourko 2009), and even outside the United States (e.g., Klašnja and Titiunik 2017). Moreover, the incumbency advantage has increased from the first half of the twentieth century to the present (Ansolabehere and Snyder Jr. 2002; Cox and Katz 1996; Gelman and Huang 2008; Jacobson 1990). This pattern has been taken as evidence that citizens' voting may not reflect a simple process of rationally voting the "good" politicians into office and the "bad" ones out (Achen and Bartels 2016). On the one hand, this could be indicative of voters failing to accurately judge incumbent performance, but on the other hand it could also be a result of an election field devoid of quality challengers. Despite the long-standing attention to the incumbency advantage, we lack a concrete story for what causes it and why it may vary (Hall and Snyder 2015).

Three primary theoretical explanations for the incumbency advantage have been advanced, which focus on (1) the greater experience of incumbents, (2) their greater share of resources, and (3) the greater availability of information about

incumbents. The first of these suggests that challenger quality is lower in elections in which an incumbent reruns for office because of a "scare-off" effect, whereby the most savvy challengers avoid elections with incumbents and instead run in open seat races (Cox and Katz 1996; Levitt and Wolfram 1997). By this explanation, incumbents win subsequent elections because they do not face the best quality challengers.[1] The second of these explanations argues that incumbents benefit from an electoral advantage because of their ability to conduct casework for constituents or use the power of their office to reach voters (Cain, Ferejohn, and Fiorina 1984; Fiorina 1977).[2] A third explanation argues that voters have more information about incumbents relative to challengers and rely on incumbency as a heuristic for the better candidate (Snyder and Strömberg 2010). Incumbents may self-promote in their own district to raise voters' awareness of them (Alford and Lee 1968; Mayhew 1974). At an even simpler level, voters are more likely to recognize incumbent candidates' names and, as a result, are more likely to support them over (unknown) challengers (Kam and Zechmeister 2013).

It is this third mechanism—the informational advantage of incumbents—that is most likely to be influenced by the timing of elections. We know that the composition of the electorate changes in off-cycle elections due to their lower turnout (Anzia 2011; Hajnal and Lewis 2003; Hajnal, Lewis, and Louch 2002; Hess 2002). When fewer people turn out in this form of "selective participation," each voter might be more knowledgeable (Berry and Gersen 2011; Oliver and Ha 2007; Oliver, Ha, and Callen 2012). These voters might be less likely to blindly support an incumbent candidate. Off-cycle elections may therefore decrease the incumbency advantage.

Alternately, this effect could work in the opposite direction. Well-organized core supporters of interest groups and incumbent governments tend to dominate off-cycle elections (Anzia 2011; Moe 2006). For instance, Anzia (2014) shows that municipal employees may have outsize influence in off-cycle elections because of their greater motivation to turn out. Given that employees of the incumbent government have a stake in maintaining their jobs, they might be more likely to support incumbents. The incumbency advantage in off-cycle elections would then be higher than in on-cycle elections.[3]

These theoretical reasons that election timing may affect the incumbency advantage are uniquely testable at the local level. Local elections are an excellent place to study representation and accountability because of the institutional variation present in cities, special districts, and other local-level governments (Marschall, Shah, and Ruhil 2011). And while the incumbency advantage in Congressional elections is well documented, this effect has not been as thoroughly examined at subnational levels of government. Existing scholarship does not take full advantage of these opportunities to study accountability (Trounstine 2010). Municipal government involves the vast majority of elections and politicians in the United States. Furthermore, over a trillion dollars of government spending each year is done by municipal governments (US Census Bureau 2007). Municipal politicians, much as those at the state and national level, respond to the opinion and partisanship of constituents by changing policies (de Benedictis-Kessner and Warshaw 2016; Einstein and Kogan 2015; Palus 2010; Tausanovitch and Warshaw 2014). Problems with accountability at the local level may suggest that similar mechanisms operate at other levels of government as well. Furthermore, the variation in institutions present among cities provides ample opportunity to test the effects of institutional reforms that are relevant for understanding how policy affects democracy.

The existing data and research on accountability in cities leaves some important questions open. For one, past research on local elections suggests that incumbency may operate to the advantage of mayors and city councilors when they run for office again (Krebs 1998; Lieske 1989; Merritt 1977; Oliver et al. 2012; Trounstine 2012). Yet these studies often document only descriptive differences between local candidates and lack a causal research design to illuminate whether incumbency may cause an electoral advantage.

Other, more causally identified research on the incumbency advantage in cities has also been limited in important respects. Ferreira and Gyourko (2009) collect an impressive amount of data on mayoral elections in a broad array of cities

---

1. However, see Hall and Snyder (2015) for an argument that this only explains a small portion of the total incumbency advantage.

2. Ansolabehere and Snyder Jr. (2002) examine offices that do not do casework, such as attorneys general, and show that they still exhibit a substantial incumbency advantage, indicating that this mechanism cannot fully explain the advantage.

3. There is also reason to think that election timing may also affect voters on an individual psychological level. Holding local elections on the

---

same cycle as major national and state elections might overwhelm voters with choices. In contrast, off-cycle elections require voters to gather less information because of the fewer number of choices. The increase in the number of decisions that voters must make in on-cycle elections establishes a high cost to making informed choices, thereby increasing the overall cognitive load on voters. Fewer choices might instead decrease the cognitive load, which can lead to more rational choices (Augenblick and Nicholson 2016; Baumeister et al. 1998; Danziger, Levav, and Avnaim-Pesso 2011; Iyengar and Lepper 2000; Levav et al. 2010; Selb 2008). Off-cycle elections would then lead to a decrease in the incumbency advantage because voters might be less likely to rely on incumbency cues. I explore the mechanisms behind the incumbency advantage more in app. G.

across the United States but only calculate a partisan incumbency advantage. This quantity is far less applicable to a large portion of local elections that are nonpartisan or dominated by one party. Cities also present an econometric problem due to the low proportion of elections with parties running in repeated elections (De Magalhaes 2015). This fact requires an individual-level design instead, and calculation of a personal-level incumbency advantage. Trounstine (2011) employs this more apt individual-level research design using data on city council elections. This research represents an important step forward in the study of local elections, but relies on data from only four cities. Unfortunately, this limits its ability to assess the effects of institutional context.

DATA

To answer these questions of accountability and the influence of election timing, I use data on elections and institutions in cities in the United States. I use a design-based inference strategy to assess the causal impact of incumbency on electoral success.

I use data on 9,131 mayoral elections, in which just under ten thousand unique candidates ran across six decades in 1,016 cities. These are a combination of data from several different sources and includes elections between 1950 and 2014 in cities of all sizes.[4] This includes cities such as Andover, Minnesota, at the smaller end of the spectrum, and New York City, at the larger end. Together, the merged data set is the largest database of mayoral elections in cities in the United States (de Benedictis-Kessner and Warshaw 2016). The geographical scope of these data are shown in the map in figure 1.

These elections data also contain the month and year of the election, allowing me to construct a measure of whether a given election is on-cycle (concurrent with national and state elections, in November of an even year) or off-cycle (in a different month or year from national and state elections).[5] As

shown in figure 2, these data are primarily in off-cycle (odd) years but encompass a long period of time.

RESEARCH DESIGN

Scholars who study the incumbency advantage in national and state elections have employed many different methods to quantify the benefit provided by serving in office (Ansolabehere et al. 2007; Carson, Engstrom, and Roberts 2007; Cox and Katz 1996). However, a number of these are difficult to apply to the local electoral context because of the lack of partisan labels in so many elections or do not account for selection effects.

More recently, others have used a strong causal research design called a regression discontinuity design (RDD) to identify the effect of incumbency status on electoral success in the next election. This design exploits the fact that, as long as some amount of the vote is unpredictable in very close elections, the winner of an election is determined in as-if random fashion. More formally, this takes advantage of the fact that the probability of a candidate winning her first election changes discontinuously at 50% of the top-two-candidate vote share (Lee 2008). Around this discontinuity, winning can be considered a near-random "treatment" of incumbency status for a future election.

In essence, by comparing those candidates who barely won an election and those who barely lost an election, this design can identify the effect of incumbency and assume that these barely winning and barely losing candidates are otherwise nearly identical. This mimics the design of a random experiment whereby one candidate might be assigned to have incumbent status and one candidate assigned to nonincumbent status. This design enables me to causally identify the local average treatment effect of incumbency status on my dependent variable, which is the candidate's success in the next election.[6]

Testing for an incumbency advantage at the local level brings with it certain mechanical hurdles. For instance, in the study with the broadest set of local elections data, Ferreira and

---

4. These consist of those collected by de Benedictis-Kessner and Warshaw (2016) for 3,059 elections in 307 cities over 75,000 in population, which includes elections between 1950 and 2005 from Ferreira and Gyourko (2009), data between 1989 and 2010 from Gerber and Hopkins (2011), and data between 1950 and 2014 scraped together from the website http://www.Our Campaigns.com. I supplement these election data with additional election records from cities between 25,000 and 75,000, in population from Ferreira and Gyourko (2009) and scraped together from OurCampaigns.com, and verify all of these with additional records from city, county, and state websites and archives in cities where there were gaps in elections data. The last of these sources, OurCampaigns.com, is a crowd-sourced political information website that records information about elections and candidates in many cities, as well as at other levels of government, and has been used by other researchers such as Miller (2013) and Vogl (2014), as well as the incorporation with other sources in de Benedictis-Kessner and Warshaw (2016).

5. Because of the different timing of state and national elections but the consistency with which they generally happen in November of even years, I

do not differentiate by concurrency with presidential elections or midterm elections. I also integrate these elections data with records of local government institutions that might affect accountability—indicators for whether elections are partisan or nonpartisan, whether the municipal government is run by an appointed chief official (often called "council-manager" form of government) or an elected mayor (a "strong mayor" form of government), whether mayors are term-limited, and whether citizens are able to use referendums or ballot initiatives to influence local policy. These data and their results are described in app. D.

6. The regression discontinuity design has been applied recently by others to research in local politics, including de Benedictis-Kessner and Warshaw (2016), Ferreira and Gyourko (2009, 2014), Gerber and Hopkins (2011), Hopkins and McCabe (2012), and Trounstine (2011).
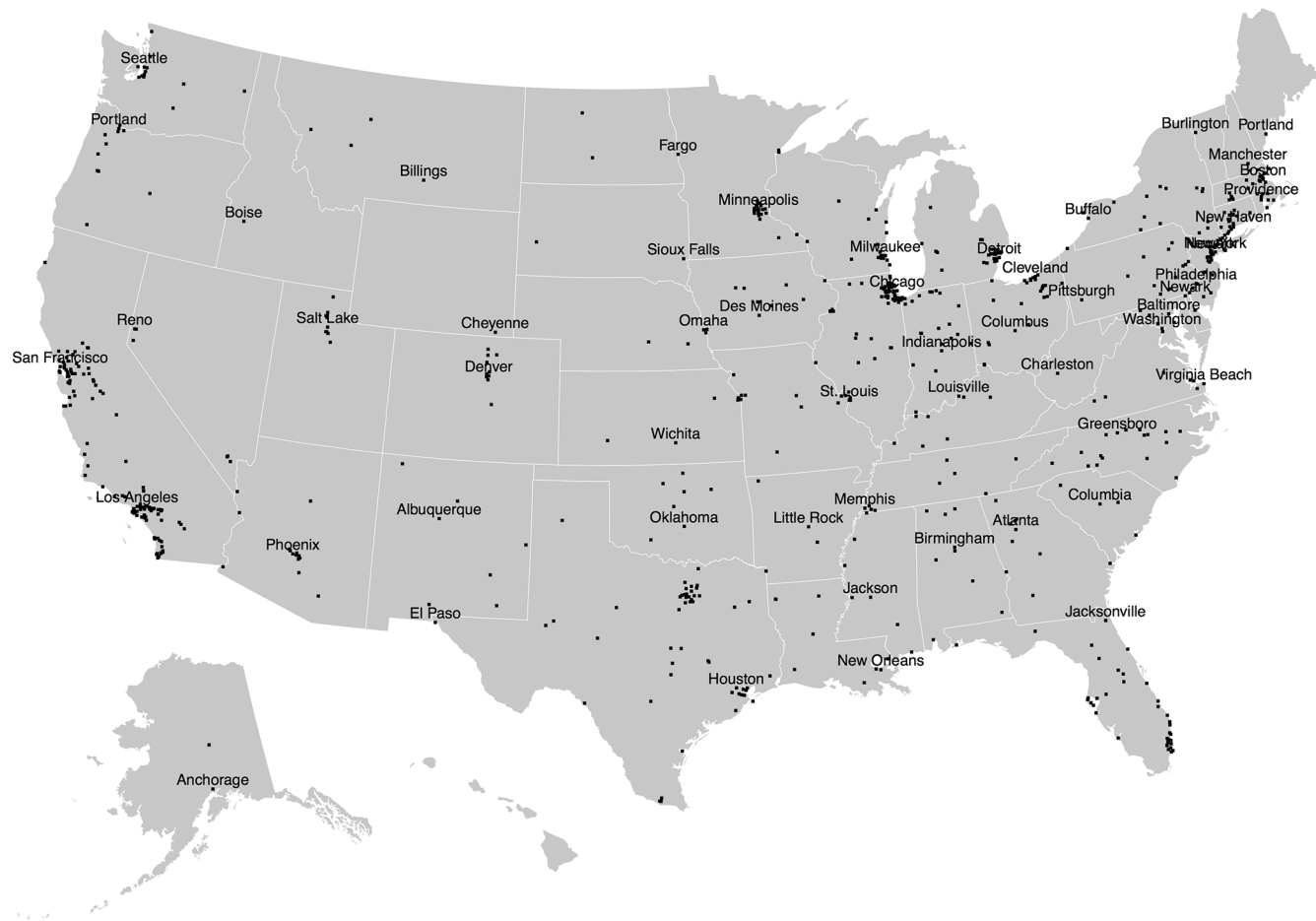
Figure 1. Cities in elections data set

Gyourko (2009) investigate the incumbency advantage. However, they test this by calculating the advantage for the incumbent party rather than candidate, a comparison that relies on partisan coalitions and voting in local elections. Because of the lack of partisan labels on many city ballots, an incumbency advantage calculated at the party level would only describe the subset of elections in which party labels are present—a small minority of elections.[7] Additionally, because many cities have elections that are dominated by candidates from one political party rather than both major parties, the advantage to the incumbent party is less meaningful. A personal incumbency advantage is much more suited to the local context, where an individual's status as incumbent is much more salient than an incumbent party.[8]

Reflecting this, Trounstine (2011) calculates a more appropriate individual-level incumbency advantage, which represents the benefit that individual incumbent candidates have in future elections.[9] This allows for application to local contests without bias that might be caused by strategic dropout of parties or candidates. Using this strategy, I broaden the analysis from four cities to thousands of cities and measure the advantage to individual incumbent candidates rather an advantage to the incumbent party. This also provides an arguably better match with how the literature discusses the incumbency advantage—as a benefit of office holding rather than a concept that relies on voters' ability to connect the incumbent politician with another candidate of the same party.

---

7. It is also econometrically problematic even if parties are present in some elections. De Magalhaes (2015) shows that estimating the partisan incumbency advantage in an environment where parties do not always rerun in subsequent elections may result in drastically biased estimates due to selection.

8. Additionally, Fowler and Hall (2014) show that much of the incumbency advantage at other levels of government is actually a personal incum-

---

bency advantage, and not an advantage to the incumbent party, when the two are disentangled.

9. Others have employed this individual-level design to estimate a personal-level advantage, including Ariga (2015) in Japanese parliamentary elections, De Magalhaes (2015) in Brazilian mayoral elections, Uppal (2009) in Indian state legislative elections, and Hyytinen et al. (2015) in Finnish municipal elections.
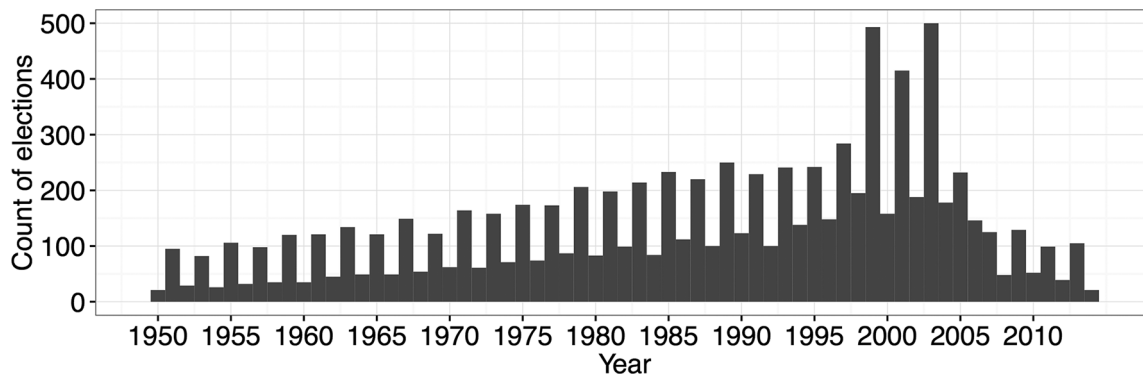
Figure 2. Distribution of elections data over time

Mechanically, the calculation of the candidate-level incumbency advantage uses an individual candidate's current voteshare to predict their success in the next election. Estimation of the incumbency advantage would ordinarily proceed by calculating the impact of incumbent status after the election at time t on voteshare in the election at time $t + 1$ (Lee 2008). However, unlike in the estimation of a partisan incumbency advantage, this estimation presents a problem because an individual candidate sometimes does not run in the next election (Erikson and Titiunik 2015). Because I estimate a candidate-level effect of incumbency rather than party-level effect, this identical calculation would not be a causal estimate of incumbency (Trounstine 2011). Rather, the dependent variable of "voteshare" would encompass both future voteshare and the decision of candidates to run in the next election. Computing an effect of incumbency on candidates' future vote share conditional onthe decision to run would not be a valid estimate either, given that candidates' decisions to run in the next election are unlikely to be random (Cox and Katz 1996; De Magalhaes 2015).[10]

Instead, I calculate the effect of incumbency on, first, the probability that a candidate will run in the next election, and second, her probability of running in and winning that election. Without a way of disentangling the decision to run from electoral success, these quantities are the best demonstration of how an incumbent candidate benefits from her status in the next election (De Magalhaes 2015). Following the best practices described in Calonico, Cattaneo, and Titiunik (2014b),

I model the relationship between the assignment and outcome variables with local linear regression and use a bandwidth that minimizes mean square error (MSE) and adjust the confidence intervals to account for remaining bias.[11]

The assumption underlying this design is that the distribution of candidates' potential outcomes is continuous at the treatment threshold. This means that across the 50% threshold, candidates should be relatively randomly distributed across a range of observable and unobservable characteristics. A standard way to check this assumption is to examine the density of observations across the threshold, which should be continuous if the assumptions of the design hold.[12] A more formal way to check for continuity of potential outcomes across the threshold is with the McCrary (2008) test. The null results from this diagnostic test, showing an insignificant effect of incumbency on the density of observations, suggests that this assumption is not violated.[13]

Another standard check for whether or not there might be sorting across the treatment threshold is to check whether incumbents are able to manipulate their vote share. If this is true, then incumbency status would not be "as-if random" across the threshold of 50% voteshare. I check for this by regressing past electoral success on current voteshare. If incumbency causes candidates to be able to strategically shift their voteshare, then the close winners of elections at time t should also be able to shift their voteshare in the positive di-

---

10. The decision to run again is likely related to the outcome we wish to measure, which in this case is the future vote share of a candidate. For example, challengers could strategically choose not to run in a future election because they think they are likely to lose these future elections. An estimate of the incumbency advantage on all candidates' voteshares in the next election would therefore produce an estimate that is biased upward. On the other hand, this estimate could also be biased downward if the candidates who choose not to run are instead the ones who are more likely to be successful in the future election, but instead decide to pursue higher elected office.

---

11. I implement these procedures using the rdrobust package in R (Calonico, Cattaneo, and Titiunik 2014a).

12. This assumption could also be violated if, as Caughey and Sekhon (2011) show, some candidates are better able to win narrow victories because of more campaign experience or more money. In the case of mayoral elections, this appears not to be true (Eggers et al. 2015). This assumption is not verifiable using my data, as the outcome variables needed to check it, such as candidates' funding or objective information about the candidates' "quality," are not commonly available for local elections in the way that they are for federal or state candidates.

13. The full results from this test and a plot of the kernel-density of observations is shown in app. A.

Table 1. Placebo Tests: RDD Effect of Incumbency on Previous Electoral Success

Dependent Variable	Coeff. (CI)	p-Value	Obs.	BW
Vote share, $t - 1$	.00 (−.03, .03)	.93	4,520	6.18
Probability run and win, $t - 1$	−.01 (−.07, .04)	.59	12,499	6.87
Probability run, $t - 1$	−.03 (−.09, .03)	.29	12,789	7.77

Note. Estimated using the default local-linear regression bandwidth (BW) and robust confidence intervals calculated by rdrobust (Calonico et al. 2014a). RDD = Regression discontinuity design.

rection in the election at time $t - 1$. The null result from this placebo test is shown in the first line of table 1. In addition, I check whether these near winners are able to positively affect their previous electoral victory (the probability that they ran in and won their previous election) in the second line of table 1. Again, barely winning candidates are no different from barely losing candidates. For complete symmetry with the analyses in my main results, I also check whether those elected at time t are more likely to run in the previous election. Not only is this effect not positive and significant, but the point estimate is in the negative direction and approaches statistical significance. Together, these tests demonstrate that the assumptions of this design are appropriate and valid for examining the incumbency advantage.

RESULTS

In this section, I present the descriptive differences across incumbent and nonincumbent mayoral candidates, as well as my main results from the regression discontinuity design and the effect of election timing. First, I analyze the degree of success that incumbent candidates have in local elections when compared to nonincumbent candidates. On the whole, incumbent candidates receive an average of 65% of the vote, while nonincumbent candidates receive an average of 44%. This difference is shown in figure 3, with incumbent candidates plotted on the right with open circles and nonincumbent candidates plotted on the left with filled triangles. The descriptive difference between incumbents' electoral success and challengers' success is evident from the higher distribution of incumbents' voteshares relative to that of nonincumbents. Incumbent candidates have an average probability of running and winning again of 50%, while nonincumbent can-

didates have an average probability of only 3%. Among those candidates who rerun in the next election, 81% of incumbents win the election, while only 22% of challengers who rerun end up winning. However, these differences do not necessarily identify a causal impact of holding office on a candidate's electoral success.

Regression discontinuity estimates

Next, I turn to the causal effect of incumbency on future electoral success. While the difference in success between incumbent and nonincumbent candidates, shown above, is illustrative of the broader trend that incumbents do better in elections, it does not isolate an effect of incumbency. The incumbent candidates in figure 3 could simply be of higher quality than nonincumbent candidates. This selection effect is eliminated with the regression discontinuity design. By comparing the differences in future electoral success at time $t + 1$ between close winners and close losers of elections at t, I can identify the "treatment effect" of incumbency status. I utilize this treatment to first assess the impact of incumbency on the decision of candidates to run again and then the impact of incumbency on the probability of a candidate both running in and winning the next election.

Table 2 shows the point estimates from the regression discontinuity models of incumbency status on mayoral candidates' presence in the next election and on their probability of rerunning and winning, along with robust confidence intervals, p-values, the number of candidate-level observations, and the bandwidth used to compute the models around
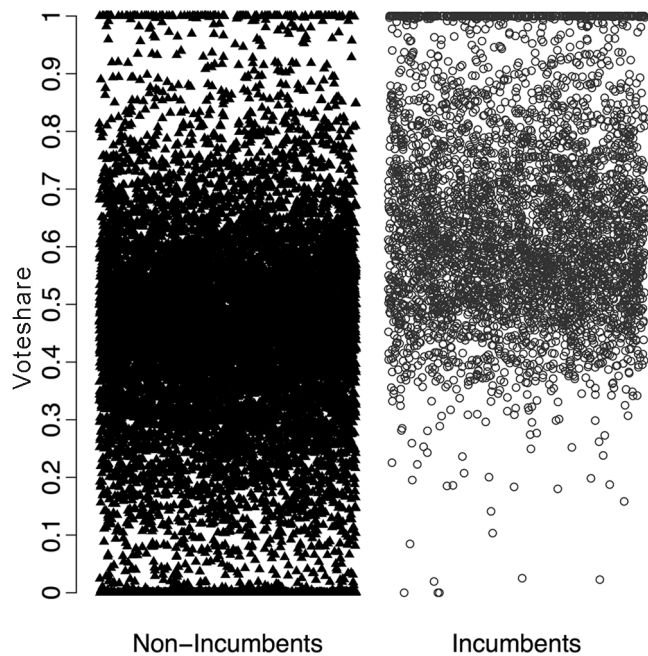

Figure 3. Mayoral candidate success by incumbency status

Table 2. RDD Estimates, All Elections

Dependent Variable	Incumbency Advantage (CI)	*p*-Value	Obs.	BW
Pr. running	.46 (.41, .51)	.00	12,587	7.81
Pr. running + winning	.37 (.32, .41)	.00	12,207	9.73

Note. Estimated using the default local-linear regression bandwidth (BW) and robust confidence intervals calculated by rdrobust (Calonico et al. 2014a). RDD = Regression discontinuity design.

the discontinuity.[14] As shown in the first row, incumbency strongly affects the decision of candidates to run in the next election: specifically, it increases the probability that a candidate will run in the next election by approximately 42 percentage points. This causal effect, by eliminating selection bias, demonstrates a large deterrence effect of a close loss in an election on candidates' willingness to attempt a subsequent run at office. This may be evidence in favor of a scare-off effect, which contributes to the overall advantage of incumbency in local elections. However, it could also be evidence that losers of elections simply decide not to run again because they find more desirable private-sector employment in the intervening years. In either case, incumbents are more likely to stay in office by virtue of their greater persistence in subsequent elections.

As shown in the second row of table 2, I also find that incumbent mayoral candidates benefit from an approximately 37 percentage-point increase in the probability that they will run and win their next election relative to nonincumbent candidates.[15] Barely winning an election causes the incumbent candidate to benefit from both a deterrence effect on those candidates who barely lost and an additional advantage to having served in office expressed in their greater probability of winning the next election.[16]

---

14. Bandwidths are selected to optimize MSE and standard errors are adjusted for bias following Calonico et al. (2014b), but these results are robust to the use of other bandwidths. Table B1 and fig. B2 in app. B show that this estimated incumbency advantage is strong when using any potential bandwidth for the RDD.

15. To examine the robustness of these results, and to show that the results do not rely on any particular subset of the data, I ran the same analysis on different time periods of the data and separately by cities' size. Across all subsets of the data, this substantial incumbency advantage still exists. These results are shown in tables B2 and B3 in app. B.

16. To check that these results are not only due to the strategy of estimating a candidate-level advantage, I also calculate a more traditional party-level incumbency advantage. These results are shown in table C5 in app. C.

Figure 4 shows these results graphically, with the mean probability of running (fig. 4*A*) and running and winning (fig. 4*B*) in the next election shown on the *y*-axis, and the voteshare in the current election on the *x*-axis. Candidates on the left side of the plots are those that lost their election at time *t*, while those on the right side are those that won at time *t*, who then become the incumbents at *t* + 1. Binned mean probabilities are represented by open circles, with the individual data points (binary indicators of running/not running or winning/not winning the next election) plotted along the top and bottom of the graphs. The solid lines and shaded confidence intervals represent the linear regressions (within the window of close elections) of the probability of running, or running and winning, in *t* + 1 on voteshare at time *t*. The large vertical jump between the lines on the left to the lines on the right at 0.5 in each graph indicates the
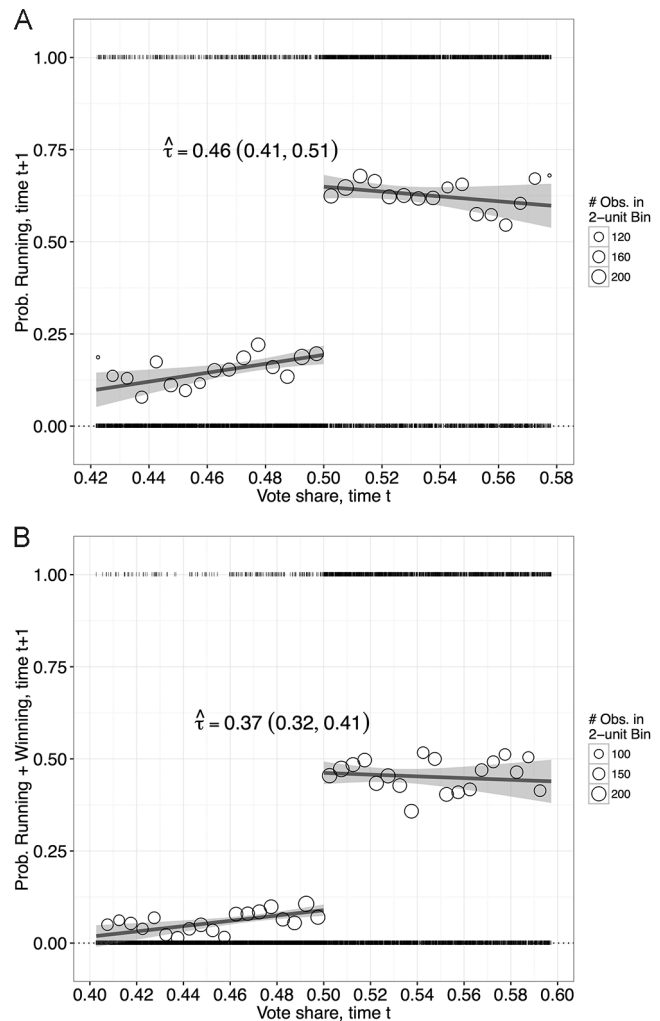

Figure 4. Mayoral incumbency advantage, all elections

Table 3. RDD Estimates by Election Timing

Election Timing	Dependent Variable	Incumbency Advantage (CI)	*p*-Value	Obs.	BW
On-cycle	Pr. running	.59 (.45, .86)	.00	979	5.68
Off-cycle	Pr. running	.44 (.38, .49)	.00	10,769	9.83
On-cycle	Pr. running + winning	.62 (.45, .85)	.00	968	5.64
Off-cycle	Pr. running + winning	.35 (.30, .39)	.00	10,460	10.53

Note. Estimated using the default local-linear regression bandwidth (BW) and robust confidence intervals calculated by rdrobust (Calonico et al. 2014a). RDD = Regression discontinuity design.

electoral advantage of being an incumbent in these close elections.

The impact of election timing

The timing of elections has a large impact on the character and consequences of these elections. In line with past research, I find that mayoral elections that are held on-cycle with national elections have substantially higher voter turnout than off-cycle elections. On average, the number of votes cast for the candidates in these data is 28% of the city's population in on-cycle elections, while it is only 18% of the population in off-cycle elections. While this may indicate a greater potential for highly motivated voters or groups to influence the outcome of off-cycle elections, it does not alone indicate problems in accountability.

I next move to comparing the incumbency advantage in on-cycle (concurrent) elections to that in off-cycle elections. Table 3 shows the treatment effect of incumbency on the probability of running and on the probability of running and winning for both of these subsets of elections—those held on-cycle and those held off-cycle. As the first two rows show, incumbents that barely win their election are much more likely to run in the subsequent election than candidates who barely lost their election, and this effect differs by the timing of a city's elections. When a city has on-cycle elections, there is a larger increase in the probability that incumbents will rerun relative to nonincumbents. This demonstrates that incumbency may advantage candidates even at the stage of deciding to run for office again, and more so in cities with on-cycle elections. Practically speaking, this means that incumbents are less likely to face a challenger whom they barely beat in the previous election when elections are held on-cycle.

Building on these differential rates of scare-off in on- and off-cycle elections, the third and fourth rows of table 3 show the effect of incumbency on the probability of a candidate rerunning and winning. This demonstrates the combined impact of incumbency on both a candidate's selection into the next election and her electoral success. In places with on-cycle elections, this is an increase of 62 percentage points relative to nonincumbents. In places with off-cycle elections, however, this advantage is far lower: incumbents only have a 35 percentage-point increase in their probability of running and winning the next election. This demonstrates another way that the incumbency advantage differs between cities according to the timing of their mayoral elections.[17] Figure 5 shows these results graphically. I plot the mean probability of running and winning in the next election on the *y*-axis, and the voteshare in the current election on the *x*-axis. Binned mean probabilities are represented by open circles, with the individual data points plotted along the top and bottom of the graphs. The open circles and dashed lines and accompanying shaded confidence intervals represent the binned means and linear regressions of voteshare in $t + 1$ on voteshare at time t within the bandwidth for on-cycle elections, while the filled

---

17. It is also statistically significant: a *z*-test for the difference in coefficients between on- and off-cycle elections (Paternoster et al. 1998) indicates that the probability that this observed difference is due to chance is 0.01, and so we can reject the null hypothesis that the difference between on-cycle and off-cycle elections is zero. This is also corroborated using a fully interacted regression model that interacts election timing with all other variables, in which the interaction between the forcing variable (incumbency) and on-cycle elections is statistically significant. Furthermore, the same comparison using the party-level incumbency advantage also demonstrates a marked increase in the incumbency advantage in on-cycle elections, as shown in table C6 in app. C.
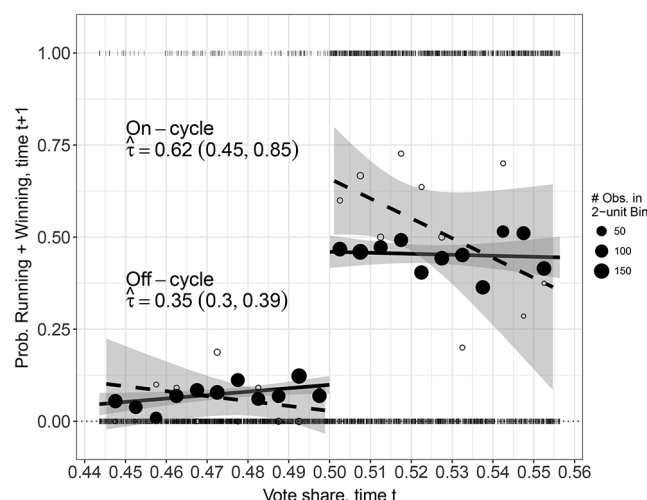
Figure 5. Incumbency advantage by election timing

circles and solid lines represent the binned means and regressions for off-cycle elections. The causal advantage of being an incumbent is shown by the large vertical jump in probability at 0.5 on the *x*-axis, with the larger advantage in on-cycle elections evident from the larger jump between the two dashed lines than between the two solid lines.[18] This variation in incumbents' electoral advantage is striking, and is not evident when comparing variation in other municipal institutions, such as partisan ballots, the form of government, direct democracy, or the media environment.[19]

However, these results are only a descriptive difference between those elections that are on-cycle and those that are off-cycle, and subject to some degree of selection bias. For instance, cities that have on-cycle elections might also just elect worse-quality incumbents than cities with off-cycle elections. These incumbents might then perform worse in their subsequent elections.[20] Additionally, cities that have on-cycle elections might have different features than those cities with off-cycle elections. Some cities even determine their own elec-

tion timing, and the factors influencing this decision might be the cause of these differences in the incumbency advantage.[21] Identifying the true effect of election timing on the incumbency advantage requires circumventing this selection problem. Fortunately, the broad temporal scope of these data provide some ability to do so.

Rather than focusing on the overall cross-sectional difference in the incumbency advantage between on- and off-cycle elections, I next look at the subsample of cities that switch their election timing. This allows me to discount the possibility that cities that have on-cycle elections and off-cycle elections are simply different in other ways, and these other factors confound the relationship between election timing and the incumbency advantage. By way of example, in the late 1980s the city of Oceanside, California, switched from holding its elections in the spring of even years to holding them in November. I can examine cities like Oceanside that switch their timing at some point, which limits my analysis to a small subset of 1,092 elections in 76 cities but which eliminates one possible source of confounding. By looking only at how the incumbency advantage differs between on-cycle elections and off-cycle elections among cities that switch their election timing, I must make a smaller assumption that there are no time-varying confounders affecting only these switching cities at certain times. While those cities that switch their timing may be inherently different than those cities that maintain constant election timing, this strategy allows me to get a better causal estimate of the effect of timing alone. By calculating the incumbency advantage in the subset of cities that switch, and comparing this quantity from when they are on-cycle to when they are off-cycle, I can isolate the impact of changes to election timing.[22]

Table 4 shows incumbents' advantage on the probability of running in and winning their next election in the cities that switch timing and those that do not switch their election timing during the six decades for which I have elections data, in on-cycle elections and in off-cycle elections. The difference

18. This difference is also robust to the specification of the bandwidth. Results are shown here with bandwidths chosen to optimize MSE and adjusted for the bias following Calonico et al. (2014b), but the results with other bandwidths are similarly different between on- and off-cycle elections and are shown in fig. B3 in app. B. When separating the small number of on-cycle elections even further into those occurring in presidential election years and those occurring in nonpresidential (midterm) years, a difference in the incumbency advantage is also evident, though only statistically significant when comparing midterm years with off-cycle elections, as shown in table B4 in app. B.

19. These results are shown in apps. D and E, and are in line with the null institutional findings of de Benedictis-Kessner and Warshaw (2016) and Tausanovitch and Warshaw (2014).

20. This could be plausible if on-cycle elections encourage better quality candidates to run for higher office, leaving only lower quality candidates to run in local elections.

21. For instance, Hartney and Nickerson (2011) show that school districts' propensity to hold elections off-cycle may be related to their sympathy with teachers' unions, which may affect their underlying policy preferences.

22. This strategy is similar to the difference-in-differences strategy that would compare over-time variation between cities that maintain the same timing and the same over-time variation in cities that switch their timing. This "difference in discontinuities" estimate of the effect of changing election timing using a combined difference-in-differences and regression discontinuity design, is described more formally by Grembi, Nannicini, and Troiano (2016). I calculate a difference-in-discontinuities estimate as well as the subset analyses presented here. The results from this design are substantively similar and also indicate an impact of changes in election timing on the incumbency advantage. Table F16 and fig. F8 in app. F show the results from these analyses.

Table 4. Changes in Election Timing

Subset	On-Cycle Incumbency Advantage (CI)	Off-Cycle Incumbency Advantage (CI)	Difference	p-Value of Difference
Nonswitchers	.81 (.66, 1.06) $n = 296$	.35 (.30, .39) $n = 9,547$	.46	.00
Switchers	.52 (.33, .76) $n = 672$	.25 (.08, .40) $n = 913$	.27	.05

Note. Estimated using the default local-linear regression bandwidth (BW) and robust confidence intervals calculated by rdrobust (Calonico et al. 2014a). Statistical tests of differences are calculated using a two-tailed Z-test (Paternoster et al. 1998).

between the incumbency advantage in on-cycle elections and off-cycle elections in cities that do not switch timing, in the first row, again identifies the cross-sectional difference of election timing. The same difference in cities that do switch their election timing, in the second row, represents an even better-identified estimate of the impact of election timing on the incumbency advantage.

In both cases, incumbents in on-cycle elections have a far larger advantage than in off-cycle elections. Among the cities that switch election timing, on-cycle elections give incumbents an advantage of approximately 52 percentage points, while off-cycle elections have a significantly lower advantage of only 25 percentage points. This 27 percentage-point difference represents a substantively large and statistically significant impact of switches in election timing, shown graphically in figure 6.

The open circle and corresponding 95% confidence interval (on the left) represents the incumbency advantage in elections in the subset of cities that remain on-cycle, while the filled circle and confidence interval (on the right) represents this advantage in the subset of cities that remain off cycle. The triangles and confidence intervals plot the same advantage for the subset of cities that switch election timing, both when they have on-cycle elections (on the left, with an open triangle) and when they have off-cycle elections (on the right, filled triangle). Within cities that switch their election timing, the incumbency advantage differs according to the timing of the elections, with off-cycle elections causing a far lower benefit to incumbents. This verifies that the impact of election timing on the incumbency advantage is not due to preexisting differences between those cities that have on-cycle elections and those with off-cycle elections. Instead, the timing of elections has a substantial causal effect on the incumbency advantage.

This empirical result still leaves open the question of why election timing creates a difference in the incumbency ad-

vantage. Particularly puzzling is the advantage that incumbent candidates have in their probability of rerunning in their next election. One possibility is that winning candidates in off-cycle elections are less likely to rerun in the next election but to instead seek (and gain) higher office. This could be true, for instance, because they do not need to sacrifice their ability to run in a (concurrent) higher-level election when the mayoral election happens off-cycle. However, the urban politics literature suggests that mayors generally are unlikely to pursue higher office (Banfield and Wilson 1963; Einstein et al. 2016; Gittell 1963; Murphy 1980). The rarity of this event suggests that differential ambition between on- and off-cycle elections would be unlikely, though still possible.

Another potential explanation for this is that candidates who barely lose elections in on-cycle elections realize that their chance to make up the vote margin in the next election is low, and so they decide not to rerun, while candidates who barely lose in off-cycle elections notice that the margin they must make up is far smaller. To test this explanation, I divide the vote margin in each election by the city's population as a
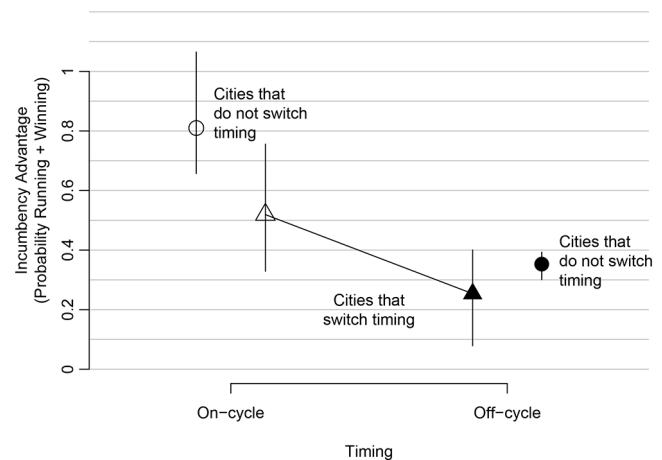

Figure 6. Switches in election timing

metric of how difficult it would be to make up the margin in the next election. In on-cycle elections, the margin of victory is approximately 9.1% of the city's population on average, while in off-cycle cities the margin of victory is approximately 4.7% of the city's population. This provides some tentative indication that losers in off-cycle elections might notice that it could be relatively easy to make up this margin in the next election (compared to losers in on-cycle elections). This could lead to the higher advantage of incumbents on the probability of rerunning in their next election in on-cycle elections. This advantage in the probability of rerunning in the next election could, in turn, affect the probability of a given candidate rerunning in and winning the next election. Consequently, this higher incumbency advantage at the candidate entry stage could be a cause for the downstream higher advantage in the probability of running and winning in on-cycle elections.

I also take up this exploration of voter-level mechanisms in appendix G (apps. A–G available online). One of the simplest differences between on-cycle and off-cycle elections is that when voters cast their ballots they utilize fundamentally different ballots. As noted by advocates of off-cycle elections, on-cycle election ballots are longer, which might prevent voters from giving their full attention to the local races that appear later on the ballot (Jomsky 2016). I verify this by taking a sample of ballots in both on- and off-cycle elections from my data. On average, local races in on-cycle elections appear on the later pages on the ballot, while in off-cycle elections the local races appear early on a shorter ballot. Because these differences may create differential levels of choice fatigue or roll off, they may also affect the incumbency advantage. I verify this using a survey experiment that replicates these two different choice scenarios, randomly providing either a simulated ballot that gives respondents local choices on a short ballot ("off-cycle" treatment condition) or late on a longer ballot ("on-cycle" treatment condition).[23] I compare the average preferences of respondents for local incumbents in these two conditions to assess the effect of ballot design on voters' preference for the incumbent. The results indicate that respondents' incumbent preference is lower in local races when these contests appear earlier on the ballot: in the on-cycle treatment condition, respondents preferred the incumbents in an average of 1.66 of the four local races, while when the local races appeared earlier on the ballot in the off-cycle treatment condition, respondents preferred the incumbent in only 1.38 of the four races on average. Put another way, in the on-cycle ballot condition, respondents were more likely to choose an incumbent in at least one of the local races by 5 percent-

age points. These results cautiously point to individual-level choice fatigue as one mechanism behind the differential incumbency advantage in on- and off-cycle elections.

CONCLUSION

In this article, I examine the mayoral incumbency advantage using a research design that allows me to isolate the causal effect of a candidate's incumbency on their future success. The scope of this research is far broader than previous findings on the local incumbency advantage. I show that incumbents in local elections have a substantial advantage over nonincumbents as identified using an individual-level regression-discontinuity design.

Some research has also shown that electoral institutions may affect the quality of local representation and accountability. The impact of institutional design deserves attention if we wish to understand the implications of government policy making. I investigate one important institution, election timing, and find that it has a substantial effect on an important facet of municipal accountability, the incumbency advantage. I demonstrate that this advantage in cities with on-cycle elections is nearly double that in cities with off-cycle elections. Going even further, I use a strong causal research design to show that when cities switch the timing of their elections they drastically change the size of the incumbency advantage in mayoral elections. Concurrent elections, while they may mobilize a greater portion of the population, may also increase the reelection of incumbent candidates both by decreasing the number of challengers that rerun and increasing the probability that incumbents will rerun and win subsequent elections.

These results extend theories of the incumbency advantage in the United States more generally, showing that not only does personal incumbency carry a large advantage, but it is not reliant on a partisan label. Further, these results test the effects of one important electoral institution. By moving local elections to months or years when national and state elections are not concurrently held, municipalities may have helped to decrease the tendency of incumbent mayors to stay in office. My results uncover a partial answer to the question of why the incumbency advantage persists.

Future research should examine how candidate decisions to rerun may be swayed by electoral institutions. Moreover, it remains to be seen how institutions of government may interact with voter behavior on a psychological level. Additional research is needed on how these institutions affect the processes of accountability and responsiveness. Without such evidence, democratic accountability may be unknowingly obstructed by electoral institutions.

---

23. Full details of the experimental procedure are described in app. G.

ACKNOWLEDGMENTS

REFERENCES

Achen, Christopher H., and Larry M. Bartels. 2016. *Democracy for Realists: Why Elections Do Not Produce Responsive Government.* Princeton, NJ: Princeton University Press.

Alford, Robert R., and Eugene C. Lee. 1968. "Voting Turnout in American Cities." *American Political Science Review* 62 (3): 796–813.

Ansolabehere, Stephen, John Mark Hansen, Shigeo Hirano, and James M. Snyder Jr. 2007. "The Incumbency Advantage in U.S. Primary Elections." *Electoral Studies* 26 (3): 660–68.

Ansolabehere, Stephen, and James M. Snyder Jr. 2002. "The Incumbency Advantage in US Elections: An Analysis of State and Federal Offices, 1942–2000." *Election Law Journal* 1 (3): 315–38.

Anzia, Sarah F. 2011. "Election Timing and the Electoral Influence of Interest Groups." *Journal of Politics* 73 (2): 412–27.

Anzia, Sarah F. 2012a. "The Election Timing Effect: Evidence from a Policy Intervention in Texas." *Quarterly Journal of Political Science* 7 (3): 209–48.

Anzia, Sarah F. 2012b. "Partisan Power Play: The Origins of Local Election Timing as an American Political Institution." *Studies in American Political Development* 26 (1): 24–49.

Anzia, Sarah F. 2014. *Timing and Turnout: How Off-Cycle Elections Favor Organized Groups.* Chicago: University of Chicago Press.

Ariga, Kenichi. 2015. "Incumbency Disadvantage under Electoral Rules with Intraparty Competition: Evidence from Japan." *Journal of Politics* 77 (3): 874–87.

Augenblick, Ned, and Scott Nicholson. 2016. "Ballot Position, Choice Fatigue, and Voter Behavior." *Review of Economic Studies* 83 (2): 460–80.

Banfield, Edward C., and James Q. Wilson. 1963. *City Politics.* Cambridge, MA: Harvard University Press.

Baumeister, Roy E., Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice. 1998. "Ego Depletion: Is the Active Self a Limited Resource?" *Journal of Personality and Social Psychology* 74 (5): 1252–65.

Berry, Christopher R., and Jacob E. Gersen. 2011. "Election Timing and Public Policy." *Quarterly Journal of Political Science* 6:103–35.

Butler, Daniel M., and Matthew J. Butler. 2006. "Splitting the Difference? Causal Inference and Theories of Split-Party Delegations." *Political Analysis* 14 (4): 439–55.

Cain, Bruce E., John A. Ferejohn, and Morris P. Fiorina. 1984. "The Constituency Service Basis of the Personal Vote for U.S. Representatives and British Members of Parliament." *American Political Science Review* 78 (1): 110–25.

Calonico, Sebastian, Matias D. Cattaneo, and Rocío Titiunik. 2014a. "rdrobust: Robust Data-Driven Statistical Inference in Regression-Discontinuity Designs." *Strata Journal* 20 (2): 1–36.

Calonico, Sebastian, Matias D. Cattaneo, and Rocío Titiunik. 2014b. "Robust Nonparametric Confidence Intervals for Regression-Discontinuity Designs." *Econometrica* 82 (6): 2295–326.

Caren, Neal. 2007. "Big City, Big Turnout? Electoral Participation in American Cities." *Journal of Urban Affairs* 29 (1): 31–46.

Carson, Jamie L., Erik J. Engstrom, and Jason M. Roberts. 2007. "Candidate Quality, the Personal Vote, and the Incumbency Advantage in Congress." *American Political Science Review* 101 (2): 289–301.

Caughey, Devin, and Jasjeet S. Sekhon. 2011. "Elections and the Regression Discontinuity 29 Design: Lessons from Close U.S. House Races, 1942–2008." *Political Analysis* 19 (4): 385–408.

Cox, Gary W., and Jonathan N. Katz. 1996. "Why Did the Incumbency Advantage in US House Elections Grow?" *American Journal of Political Science* 40 (2): 478–97.

Danziger, Shai, Jonathan Levav, and Liora Avnaim-Pesso. 2011. "Extraneous Factors in Judicial Decisions." *Proceedings of the National Academy of Sciences of the USA* 108 (17): 6889–92.

de Benedictis-Kessner, Justin, and Christopher Warshaw. 2016. "Mayoral Partisanship and Municipal Fiscal Policy." *Journal of Politics* 78 (4): 1124–38.

De Magalhaes, Leandro. 2015. "Incumbency Effects in a Comparative Perspective: Evidence from Brazilian Mayoral Elections." *Political Analysis* 23 (1): 113–26.

Eggers, Andrew C., Anthony Fowler, Jens Hainmueller, Andrew B. Hall, and James M. Snyder Jr. 2015. "On the Validity of the Regression Discontinuity Design for Estimating Electoral Effects: New Evidence from over 40,000 Close Races." *American Journal of Political Science* 59 (1): 259–74.

Einstein, Katherine Levine, David M. Glick, Palmer Maxwell, and Robert Pressel. 2016. "Mayoral Ambition." Presented at the Annual Meeting of the American Political Science Association, Philadelphia. http://ssrn.com/abstract=2739221.

Einstein, Katherine Levine, and Vladimir Kogan. 2015. "Pushing the City Limits: Policy Responsiveness in Municipal Government." *Urban Affairs Review* 52 (1): 3–32.

Erikson, Robert S., and Rocío Titiunik. 2015. "Using Regression Discontinuity to Uncover the Personal Incumbency Advantage." *Quarterly Journal of Political Science* 10:101–19.

Ferreira, Fernando, and Joseph Gyourko. 2009. "Do Political Parties Matter? Evidence from US Cities." *Quarterly Journal of Economics* 124 (1): 399–422.

Ferreira, Fernando, and Joseph Gyourko. 2014. "Does Gender Matter for Political Leadership? The Case of US Mayors." *Journal of Public Economics* 112:24–39.

Fiorina, Morris P. 1977. "The Case of the Vanishing Marginals: The Bureaucracy Did It." *American Political Science Review* 71 (1): 177–81.

Fowler, Anthony, and Andrew B. Hall. 2014. "Disentangling the Personal and Partisan Incumbency Advantages: Evidence from Close Elections and Term Limits." *Quarterly Journal of Political Science* 9 (4): 501–31.

Gelman, Andrew, and Zaiying Huang. 2008. "Estimating Incumbency Advantage and Its Variation, as an Example of a Before-After Study." *Journal of the American Statistical Association* 103 (482): 437–46.

Gelman, Andrew, and Gary King. 1990. "Estimating Incumbency Advantage without Bias." *American Journal of Political Science* 34 (4): 1142–64.

Gerber, Elisabeth R., and Daniel J. Hopkins. 2011. "When Mayors Matter: Estimating the Impact of Mayoral Partisanship on City Policy." *American Journal of Political Science* 55 (2): 326–39.

Gittell, Marilyn. 1963. "Metropolitan Mayor: Dead End." *Public Administration Review* 23 (1): 20–24.

Grembi, Veronica, Tommaso Nannicini, and Ugo Troiano. 2016. "Do Fiscal Rules Matter?" *American Economic Journal: Applied Economics* 8 (3): 1–30.

Hajnal, Zoltan L., and Paul G. Lewis. 2003. "Municipal Institutions and Voter Turnout in Local Elections." *Urban Affairs Review* 38 (5): 645–68.

Hajnal, Zoltan L., Paul G. Lewis, and Hugh Louch. 2002. *Municipal Elections in California: Turnout, Timing, and Competition.* San Francisco: Public Policy Institute of California.

Hajnal, Zoltan L., and Jessica Trounstine. 2005. "Where Turnout Matters: The Consequences of Uneven Turnout in City Politics." *Journal of Politics* 67 (2): 515–35.

Hall, Andrew B., and James M. Snyder Jr. 2015. "How Much of the Incumbency Advantage Is Due to Scare-Off?" *Political Science Research and Methods* 3 (3): 493–514.

Hartney, Michael, and David W. Nickerson. 2011. "Elect Your Own Employer! Endogenous Election Timing and Interest Group Advantage in Michigan." Working paper, University of Notre Dame.

Healy, Andrew, and Gabriel S. Lenz. 2014. "Substituting the End for the Whole: Why Voters Respond Primarily to the Election-Year Economy." *American Journal of Political Science* 58 (1): 31–47.

Hess, Frederick M. 2002. *School Boards at the Dawn of the 21st Century: Conditions and Challenges of District Governance.* Alexandria, VA: National School Boards Association.

Hopkins, Daniel J., and Katherine T. McCabe. 2012. "After It's Too Late: Estimating the Policy Impacts of Black Mayoralties in US Cities." *American Politics Research* 40 (4): 665–700.

Huber, Gregory A., Seth J. Hill, and Gabriel S. Lenz. 2012. "Sources of Bias in Retrospective Decision Making: Experimental Evidence on Voters' Limitations in Controlling Incumbents." *American Political Science Review* 106 (4): 720–41.

Hyytinen, Ari, Jaakko Meriläinen, Tuukka Saarimaa, Otto Toivanen, and Janne Tukiainen. 2015. "Does Regression Discontinuity Design Work? Evidence from Random Election Outcomes." Working paper no. 59, Government Institute for Economic Research Finland (VATT).

Iyengar, Sheena S., and Mark R. Lepper. 2000. "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of Personality and Social Psychology* 79 (6): 995–1006.

Jacobson, Gary C. 1990. *The Electoral Origins of Divided Government: Competition in US House Elections, 1946–1988.* Boulder, CO: Westview.

Jomsky, Mark. 2016. "Request for Direction Regarding the Formation of a Charter Study Task Force." City of Pasadena, CA.

Jomsky, Mark, Zizette Mullins, and Lisa Pope. 2015. "Elections—There's More than One Way." Presented at the City Clerks New Law and Elections Seminar, League of California Cities.

Kam, Cindy D., and Elizabeth J. Zechmeister. 2013. "Name Recognition and Candidate Support." *American Journal of Political Science* 57 (4): 971–86.

Klašnja, Marko, and Rocío Titiunik. 2017. "The Incumbency Curse: Weak Parties, Term Limits, and Unfulfilled Accountability." *American Political Science Review* 111 (1): 129–48.

Koss, Michael. 2015. "Opposition Testimony—Sub SB 171 and Proposal for Even-Year City Elections." Presented to the League of Kansas Municipalities.

Krebs, Timothy B. 1998. "The Determinants of Candidates' Vote Share and the Advantages of Incumbency in City Council Elections." *American Journal of Political Science* 42 (3): 921–35.

Lee, David S. 2008. "Randomized Experiments from Non-random Selection in US House Elections." *Journal of Econometrics* 142 (2): 675–97.

Levav, Jonathan, Mark Heitmann, Andreas Herrmann, and Sheena S. Iyengar. 2010. "Order in Product Customization Decisions: Evidence from Field Experiments." *Journal of Political Economy* 118 (2): 274–99.

Levitt, Steven D., and Catherine D. Wolfram. 1997. "Decomposing the Sources of Incumbency Advantage in the US House." *Legislative Studies Quarterly* 22 (1): 45–60.

Lieske, Joel. 1989. "The Political Dynamics of Urban Voting Behavior." *American Journal of Political Science* 33 (1): 150–74.

Marschall, Melissa, Paru Shah, and Anirudh Ruhil. 2011. "The Study of Local Elections." *PS: Political Science and Politics* 44 (1): 97–100.

Mayhew, David R. 1974. *Congress: The Electoral Connection.* New Haven, CT: Yale University Press.

McCrary, Justin. 2008. "Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test." *Journal of Econometrics* 142 (2): 698–714.

Merritt, Sharyne. 1977. "Winners and Losers: Sex Differences in Municipal Elections." *American Journal of Political Science* 21 (November): 731–43.

Miller, Michael K. 2013. "For the Win! The Effect of Professional Sports Records on Mayoral Elections." *Social Science Quarterly* 94 (1): 59–78.

Moe, Terry M. 2006. "Political Control and the Power of the Agent." *Journal of Law, Economics, and Organization* 22 (1): 1–29.

Murphy, Russell D. 1980. "Whither the Mayors? A Note on Mayoral Careers." *Journal of Politics* 42 (1): 277–90.

National Municipal League. 1916. A Model City Charter and Municipal Home Rule. National Municipal League, Committee on Revision of the Model City Charter.

Oliver, J. Eric, and Shang E. Ha. 2007. "Vote Choice in Suburban Elections." *American Political Science Review* 101 (3): 393–408.

Oliver, J. Eric, Shang E. Ha, and Zachary Callen. 2012. *Local Elections and the Politics of Small-Scale Democracy.* Princeton, NJ: Princeton University Press.

Palus, Christine Kelleher. 2010. "Responsiveness in American Local Governments." *State and Local Government Review* 42 (2): 133–50.

Paternoster, Raymond, Robert Brame, Paul Mazerolle, and Alex Piquero. 1998. "Using the Correct Statistical Test for the Equality of Regression Coefficients." *Criminology* 36 (4): 859–66.

Rosenstone, Steven, and John Mark Hansen. 1993. *Mobilization, Participation and Democracy in America.* New York: Macmillan.

Schattschneider, Elmer E. 1970. *The Semisovereign People: A Realist's View of Democracy in America.* New York: Harcourt Brace.

Selb, Peter. 2008. "Supersized Votes: Ballot Length, Uncertainty, and Choice in Direct Legislation Elections." *Public Choice* 135 (3-4): 319–36.

Snyder, Jr., James M., and David Strömberg. 2010. "Press Coverage and Political Accountability." *Journal of Political Economy* 118 (2): 355–408.

Tausanovitch, Chris, and Christopher Warshaw. 2014. "Representation in Municipal Government." *American Political Science Review* 108 (3): 605–41.

Trounstine, Jessica. 2008. *Political Monopolies in American Cities.* Chicago: University of Chicago Press.

Trounstine, Jessica. 2010. "Representation and Accountability in Cities." *Annual Review of Political Science* 13:407–23.

Trounstine, Jessica. 2011. "Evidence of a Local Incumbency Advantage." *Legislative Studies Quarterly* 36 (2): 255–80.

Trounstine, Jessica. 2012. "Turnout and Incumbency in Local Elections." *Urban Affairs Review* 49 (2): 167–89.

Uppal, Yogesh. 2009. "The Disadvantaged Incumbents: Estimating Incumbency Effects in Indian State Legislatures." *Public Choice* 138 (1): 9–27.

US Census Bureau. 2007. *Census of Governments.* Suitland, MD: US Census Bureau.

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics.* Cambridge, MA: Harvard University Press.

Vogl, Tom S. 2014. "Race and the Politics of Close Elections." *Journal of Public Economics* 109:101–13.

Wattenberg, Martin P. 2002. *Where Have All the Voters Gone?* Cambridge, MA: Harvard University Press.

Wood, Curtis. 2002. "Voter Turnout in City Elections." *Urban Affairs Review* 38 (2): 209–31.