

Partisanship, Personalisation of Politics, and Incumbency in Australia

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What are the electoral advantages of current officeholders in a highly partisan environment?

To answer this question, I evaluate overall incumbency effects and personal incumbency effects in Australian elections and find that incumbent parties receive a small boost in vote shares on average, but that this effect is asymmetric between parties in federal elections. By contrast, incumbent legislators who barely win an election tend to receive the same or even fewer votes than non-incumbents in the next election. I also find no evidence that incumbency advantages have increased over time in the face of eroding partisanship in Australia. These results suggest that party ties in Australia remain a salient feature of its political landscape despite the personalisation of politics.

1 Introduction

What are the electoral advantages, if any, for current officeholders? This question has motivated a great deal of scholarship on incumbency. In this paper, I explore the incumbency advantage phenomenon in the Australian political landscape in greater depth than any existing literature. The distinctiveness of Australia's electoral system can elucidate the influence of institutional factors on democratic accountability in a unique setting. At the same time, political institutions in Australia share many features with its democratic counterparts and can enrich our understanding of how voters respond to differences between candidates and parties. In particular, I reveal a tension between partisanship and individual candidate assessments as well as the impact of this tension on incumbency effects.

I assess both overall incumbency effects and personal incumbency effects in Australian federal and state elections. The findings suggest that incumbent parties indeed receive a boost in vote shares on average, and that effect is asymmetric between parties in federal elections. The Coalition reaps more electoral gains than the Australian Labor Party in the 64-year (1955–2019) period studied. In state elections, I find no such effect. Contrary to expectation, incumbent legislators who barely win an election tend to receive the same or even less votes than non-incumbents in the next election. State election results echo those of federal elections. I interpret this as an indication of the strength of party identification in Australia.

The paper proceeds as follows. I begin by summarizing theories of incumbency effects from past work. Before adapting arguments for incumbency advantage to the Australian case, I give a brief overview of Australia's electoral system. I then advance key hypotheses. Sections 3 and 4 elaborate on the empirical strategy of Regression Discontinuity Designs and the data used in the analyses. The results are presented in Section 5, and the validity of the causal identification strategy is scrutinized in the ensuing section. I conclude with a discussion on the implications of my findings.

Existing Literature on Incumbency Effects

Even after having amassed an impressive literature over the past few decades, the study of incumbency advantage — the electoral fortunes that a candidate or party gains by virtue of winning the previous election — continues to hold the attention of political scientists. In the United States, efforts to estimate the probability of winning as a function of incumbent status have consistently found positive findings. Studies of other mature democracies such as Canada (Kendall and Rekkas [2012](#)), the United Kingdom (Eggers and Spirling [2017](#)), Germany (Ade, Freier, and Odendahl [2014](#), Freier [2015](#), Hainmueller and Kern [2008](#)), and Ireland (Redmond and Regan [2015](#)) also detect an incumbency advantage. Although the study of incumbency in the United States continues to monopolize this literature, there has also been a dramatic growth in recent years of studies that investigate the phenomenon in political contexts like Brazil (De Magalhaes [2015](#)), India (Uppal [2009](#)), Chile (Salas [2016](#)), and Zambia (Macdonald [2013](#)). Interestingly, with the exception of Chile, these studies appear to have detected an incumbency disadvantage.

Scholars of incumbency have identified a myriad of mechanisms that explain both positive and negative effects of incumbency on electoral prospects. There are compelling arguments that support the existence of an average advantage to the incumbent. Firstly, some theories point to office-holders' access to greater financial resources. Hall and Fourinaies ([2014](#)) investigate the causal impact of party incumbency on the amount of campaign contributions received and find a 20 to 25 percentage point increase in donation flows to the incumbent's party in the United States. They observed that financial benefits stemming from access-oriented interest groups explain a large portion of the incumbency advantage in U.S. legislatures. Second, social connections built from being in office and gains from name exposure and recognition can also be advantageous (Box-Steffensmeier et al. [2003](#)). Next, at least in the United States, gerrymandering is a prominent explanation for the incumbent's large electoral advantage. Cox and Katz ([2002](#)) argue that the ability to redistrict has provoked an increase in incumbency advantages after the 1960s because boundaries could be redrawn to limit

competition. Finally, there are quality-based theories centred around intrinsic differences between the incumbent and their challengers. It could be that incumbents tend to face lower quality challengers as strong competitors are deterred or “scared off” (G. W. Cox and J. N. Katz 1996) by, for example, the incumbent’s ability to raise money (Goodliffe 2007, Levitt and Wolfram 1997).¹

In some instances, being in the incumbent position will be disadvantageous. The incumbent could be punished if an incumbent performs poorly during her time in office and voters engage in retrospective voting. For instance, there exists a wealth of literature on economic voting. Its broad implication for incumbency effects is that the electoral gain or loss for incumbents is predicated on conditions of the economy during their tenure. An asymmetry exists because voters do not (or cannot) hold the challenging candidate to the same standard. More generally, incumbent status can be unfavourable when voters desire change.

The analysis conducted in this paper does not allow me to shed light on the various mechanisms of incumbency advantage. For the remainder of the paper, I focus primarily on the function of partisanship as a determinant of the magnitude of incumbency effects in Australia.

2 The Australian Electoral Setting

Australia is a parliamentary democracy where lower and upper house Commonwealth (federal) elections are typically held once every three years. The election of single-member constituents to the Australian House of Representatives is conducted through a full-preferential voting system whereby voters cast a ballot of their ranked candidate preferences. If in the primary count — known as *first preferences* — no candidate receives more than 50% of the total votes, the candidate with the fewest votes is eliminated and their share is redistributed among the remaining candidates. The process continues until two candidates remain — called *two-candidate preferences* — and the

¹However, Hall and Snyder (2015), who account for candidate officeholder experience, find a minimal scare-off effect across U.S. House, Senate and State races.

one with the larger share of votes is elected. State Legislative Assemblies (lower house of state parliaments) also use this voting system.²

The Australian political system is also peculiar for its adoption of compulsory voting, which is applicable in all Commonwealth and state elections, and in some local government elections. Taken together, Australia's full-preferential ballot and compulsory voting system present an interesting case study for learning how the rules of the game interact to benefit or hinder current officeholders.

Incumbency Effects in Australia

Given the foregoing explanations for incumbency effects and their interaction with the ranked ballot and compulsory vote, what advantages ought we anticipate for Australian incumbent parties and candidates? In this section, I lay out my theoretical expectations. First, drawing on both comparative literature and few existing work on incumbent re-election in Australia, I claim that there is a net positive incumbency advantage. Then, I consider how incumbency advantages are watered-down by strong party identification, which is in turn, bolstered by compulsory voting. A corollary of this claim is that the dynamics of incumbency advantages correlate with trends in partisanship over time. Next, I examine the balance between votes for parties versus votes for individuals in Australia. Lastly, I outline my expectations for incumbency effects in state elections.

For the two studies that use close elections to detect incumbency effects in Australia, the evidence is mixed. One unpublished study by Horiuchi and Leigh (2009) on the incumbency effect in lower house elections uses close elections, geographic discontinuity and random ballot instrumentation to investigate the impact of incumbent status on vote shares in Australia.³ Oddly, while the paper has been cited in a handful

²The precise form of preferential voting differs between states. For example, preferential votes are optional in New South Wales, Tasmania, and Australian Capital Territory. Whereas a ballot is only valid if all running candidates are ranked under full-preferential voting, optional preferential voting does not require voters to order all candidates.

³However, their use of randomised ballot order as a weak instrumental variable is likely to generate biased estimates.

of studies that marshal it as evidence of an incumbency advantage in Australia, closer inspection of the paper's conclusions reveal that evidence for incumbency effects is at best inconsistent, and varies with the methodological strategy employed. Triangulating estimates between the various methods, they conclude that the true incumbency advantage lies somewhere between 0 to 6%. Eggers et al. (2015) also analyze incumbency in Australian federal elections (among other countries) to illustrate the validity of close-election incumbency studies, but the number of observations is limited. Since the analysis of Australia is tangential to the overall project of their paper, the authors do not report the magnitude of the advantage even while suggesting it exhibits a systematic incumbency advantage (260).⁴

A comparison of incumbency studies in countries with similar political system seems to imply/implies that Australian incumbents should receive a net advantage. One cross-national study of 25 industrialized countries listed Australia remarkably high in incumbent candidate re-election rates, second only to the United States (Matland and Studlar 2004, 93). In Canada, Kendall and Rekka (2012, 1573) find that the incumbent party enjoys, on average, a 9.4% to 11.2% greater probability of winning. In Irish elections, which are determined by the proportional representation version of Australia's single-winner preferential vote, Redmond and Regan (2015) document an 18 percentage point increase for incumbent candidates who rerun and receive 25% more first preference votes.

On the basis of the positive findings from the two studies on Australia mentioned above and the overwhelming empirical evidence from other mature democracies, I hypothesize that the causal impact of incumbency on electoral fortunes are, on average, positive. In sum:

⁴To understand whether voters, on average, tend to vote for the incumbent party or candidate in close Australian electoral competitions, my analysis departs from theirs on several fronts: the disaggregation of incumbency effects into personal incumbency, the use of first preference outcomes, and the investigation of state elections. I also use an expanded data set of all elections from 1955 to 2019.

H_1 : *There exists an overall incumbency advantage (defined as the sum of partisan and personal incumbency effects) in close contests for seats in the Australian House of Representatives.*

Political Institutions, Partisanship, and Incumbent Evaluations

On the other hand, an assessment of elements found to have meaningful influence on incumbent advantages in other settings suggest that incumbency effects are limited in Australia. For instance, gerrymandering, a popular explanation for incumbent dominance in the United States, is unlikely to have a significant impact in Australia since an independent electoral body, the Australian Electoral Commission (AEC), is responsible for redistricting (Newton-Farrelly 2009). Another notable example is the sparse evidence for economic voting, the well-known phenomenon whereby perceptions of strong national or personal economic performance strengthens support for incumbents, in Australia. Hellwig and McAllister (2016) posit that the muddled attribution of blame is one reason why the economic vote is muted. In their view, the clarity of responsibility endowed by its *de facto* two-party system is counterbalanced by blurred liability supplied by a bicameral system in which the upper house has a significant legislative role. Although explanations that draw on voters' economic evaluations can work in both directions (producing advantages and disadvantages), the minimal connection between economic and incumbent evaluations hints at the potentially weak link between voters' choices and the actions of incumbent politicians in Australia.

What else might be responsible for the lackluster connection? An important backdrop for voting in Australia are the mandatory voting laws enforced at nearly every level of government. This, coupled with the frequency with which the voting population must show up at the polls means that a substantial portion of voters are likely to be uninterested and/or uninformed compared to voluntary systems. Fowler (2018) suggests that when voters lack information about candidates, "incumbency is an informative signal of quality and voters will update their beliefs accordingly." If incum-

bency itself serves as a heuristic for the quality of a candidate, and voters who are forced to participate in elections use it as a cognitive shortcut in their vote calculus, then, incumbents ought to benefit on average.⁵

Yet, there is good reason to believe that the influence of compulsory voting on incumbency is mediated by partisanship. If this is the case, then a quality-based heuristic replaces a partisanship heuristic. Then, a mitigating element that would serve to reduce incumbent advantages is strong partisan attachments in Australia. High levels of partisanship — partly a consequence of heuristics induced by the high information burden of a compulsory voting system — has been found to significantly influence the evaluations of Australian voters (McAllister, Sheppard, and Bean 2015, Singh and Thornton 2013). In turn, we might expect the stability of party ties to work against personal incumbency effects in favour of partisan incumbency dynamics, as the magnitude of incumbency effects rests on voters who are not strong partisans and who are therefore more prone to changing their vote in consideration of incumbency.

From this perspective, a win for the incumbent Labor Party in Australia's stable two-party system amounts to votes from Labor partisans plus votes from those who have shifted their choice in light of the Labor Party's incumbent status (i.e., undecided voters or those who weakly prefer the Coalition). If instead the Coalition is incumbent, the Labor Party again receives votes from its party supporters, but loses votes to the Coalition from voters who are persuaded by incumbency. This implies that incumbency effects grow as the group of non-partisan voters becomes more sizeable. Eggers and Spirling (2017) show precisely this inverse relationship in the United Kingdom. To the degree that compulsory voting reinforces partisanship, incumbency advantages will be more subdued in Australia. I expect that the size of any electoral advantage

⁵This heuristic could offer the opposite signal in some developing countries where incumbency can be an indication of corruption (Klašnja and Titiunik 2017). The following anecdotal comparison of two Latin American countries with compulsory voting exhibits how the direction of incumbency effects is sensitive to the political context. In Brazil, there is a strong anti-incumbency effect found in mayoral elections (De Magalhaes 2015). In Chile, a country that only recently adopted voluntary voting, there is a notable advantage for the incumbent coalition (Salas 2016).

will be close to those found in the United Kingdom, a country with comparable levels of party loyalty.⁶

This raises another question with a testable implication. Since the 1970s, many have documented growing partisan dealignment (Holmberg 2007 for a review) and the increasing instability of voter-party relationships (Wren and McElwain 2009). Despite retaining relatively high levels of partisanship, Australia too has seen party attachments weaken and the erosion of party identification over time (Dalton and Wattenberg 2002). Trends in Australian political preferences point to clear citizen detachment from the major political parties over time (Cameron and McAllister 2019, 28, Marks 1993). Considering declining party loyalties and the inverse relationship between partisanship and incumbency effects, I propose that:

H₂ : *The overall incumbency effect is greater in recent years than in prior decades.*

Tensions Between Partisanship and Personalization of Politics in Australia

This downward trend of loosening party ties has led to the emergence of research on the so-called personalization of politics. Increasing personalization — where the “political weight of the individual actor in the political process increases over time, while the centrality of the political group (i.e., political party) declines” (Rahat 2007) — is expected to accompany decreasing voter reliance on party affiliation. The question becomes: Are voters casting their ballot for the incumbent Australian Labor Party or for its candidate?

A starting point for understanding how much individual politicians rather than parties matter in Australia is to consider the “candidate-centeredness” of its political system, or the extent to which a country’s institutions place emphasis on fostering personal reputations (the “personal vote”) versus one in which votes are largely tied to the party (Cain, Ferejohn, and Fiorina 2013, Zittel 2017 for an overview). For example, whereas intraparty competition in multi-member districts is said to encourage

⁶See, for example, Wattenberg 1982 (26) for a sense (up until 1980) of party attachment levels in four Anglo-American democracies. Since a systematic cross-national comparison is beyond the scope of this paper, this is an informal expectation.

personal vote-seeking (Shugart 2001), closed-list PR systems lie at the opposite extreme. Australia, with its preferential voting regime, ranks among the highest on the Farrell-McAllister Index (Söderlund 2016, Farrell and McAllister 2005), a measure of the candidate-centeredness of a country. Research in this area is largely comparative, but Bean (1990) finds that local MPs personalities exert a significant effect on voting shares even after controlling for party identification and attitudes towards party leader in the 1987 Australian federal election.

Still, party organizations remain strong in Australia and trends towards dealignment have not been as precipitous as it has been elsewhere (Dalton and Wattenberg 2002). The existence of vote transfers in the Australian electoral system incentivizes “vote pooling,” which emphasizes party loyalties rather than personal reputations (McAllister 2015, Carey and Shugart 1995). “How to vote” cards reinforce this system. From the perspective of a legislator in a centralized system, the necessity of securing party support and resources entails catering to party demands, sometimes at the expense of constituents (weakening the incentive to cultivate a personal vote). Thus, the Australian political landscape exhibits elements of personalization, but also of strong partisanship reinforced by the compulsory vote.

Do party evaluations crowd out candidate evaluations? Although it is challenging to unambiguously disaggregate individual incumbency effects from partisan ones, I provide in the results a first look into personal incumbency effects in Australia. I test the thesis that incumbent candidates still receive more votes on average than their non-incumbent challengers even after removing the contribution of votes for the incumbent party.

H₃ : There exists an individual-level, personal incumbency advantage in close Australian House elections.

State Elections

Lastly, because incumbency effects may vary at different levels of government, I also look for evidence in state elections.⁷ I expect the state-level incumbency effects to be similar in magnitude to the ones from federal analysis. If anything, they may be slightly larger because smaller constituencies could offer more opportunities for personal vote-seeking. For example, Kang et al. (2018) note that the decentralized nature of local politics means incumbency is an impediment for re-election in national elections, but a boon in mayoral elections. Simultaneously, I do not expect these results to deviate substantially from federal elections because party ties may still displace personalistic voting at the state level.

H_{1A} : An overall incumbency advantage of equal or greater magnitude can also be found in state elections.

H_{3A} : A personal incumbency advantage can also be found in state elections.

3 Methodology

The challenge of estimating incumbency effects is that incumbents and non-incumbents are not directly comparable.⁸ Lee's (2008) seminal work applies a Regression Discontinuity Design (RDD) under the assumption that bare-losers in close elections can be the counterfactual group for bare-winners in close elections. A Sharp RDD relies on the identification strategy that the vote share determines incumbency in a future election. That is, electoral rules dictate that any party or candidate that obtains greater than 50% of the vote share is bestowed incumbent status in the next election. Below

⁷For comparability, I examine only elections for State Legislative Assemblies, the lower house of state parliaments, and not Legislative Councils. The latter's election procedures varies greatly by state.

⁸Prior work has primarily relied on either differences between an incumbent candidate's first and second term ("sophomore surge") or differences between retiring incumbents and their successors ("retirement slump"). To estimate the personal incumbency advantage, both strategies require the strong assumption that the decision to run for election is unrelated to the vote share.

this threshold, parties or candidates are, by definition, non-incumbents. Under a conventional sharp RDD, the “forcing variable” (vote share) deterministically assigns the treatment variable (incumbency). Exploiting this discontinuity generated by electoral rules, the success of a political actor in a race is a function of barely winning or losing the previous election.

It is easy to see the RDD’s intuitive appeal. It relies on the notion that in close elections, candidates who just-win and those who just-lose are comparable on average. As such, any confounding characteristics are, in theory, “as-if” randomly distributed for bare-winners and bare-losers. However, using RDDs as a means of detecting incumbency effects have also come with controversy. There has been considerable debate over the validity of its identification assumptions, with some finding evidence of sorting effects, the endogenous manipulation by candidates or parties near the point of discontinuity (e.g. Grimmer et al. 2011, Caughey and Sekhon 2011, Gordon and Landa 2009). In contrast, supporters of the method document little systematic sorting patterns (notably Eggers et al. 2015, but also Ariga et al. 2016, Erikson and Rader 2017, Cuesta and Imai 2016). In the penultimate section, I elaborate on the threat of sorting in Australia and perform falsification tests to confirm the robustness of my findings.

Incumbency Effects: What’s in a name?

Critically, while Lee’s (2008) innovation in applying the RDD at the party-level sidestepped problems of selection bias, it entailed that the estimated quantity be interpreted as an overall incumbency advantage, the composite of both partisan incumbency effects and personal incumbency effects. This paper evaluates incumbency effects as measured by two quantities: 1) the overall incumbency advantage and 2) the personal returns due to incumbency. I first pool all elections to estimate the *overall* incumbency advantage according to Lee (2008), the most common approach in this literature. Then, I evaluate personal incumbency effects through candidate-level analyses.

In making this distinction between individual and overall (party) incumbency effects, I assume that voters consider two broad groups of factors in their assessment of candidates. Simply, in a pool of candidates that are equal in all else save party affiliations, a voter will choose the candidate from party A if she generally favours party A over another party. But if said voter perceives a candidate from the other party as holding more favorable personal qualities (i.e., more experience), then she might nonetheless choose this candidate over the one from her preferred party.

The *overall incumbency effect*, which Lee (2008) calls the “incumbent party advantage” (David S. Lee 2008, Appendix B, 695), is the answer to the question: *How would a party have performed in the next election had they not held the seat (i.e. had the party lost the election)?* The overall incumbency advantage is an amalgamation of all intermediate factors including partisan, financial, quality differential, deterrence effects, and other personal incumbency (dis)advantages. I use a different naming convention here because it makes explicit that this quantity of interest is a weighted average of partisan and personal incumbency effects. The analysis involves using party-level data since it is concerned with the identity of the party irrespective of the running candidate.

As Erikson and Titiunik (2015) write, the party incumbency advantage is conceptually distinct from the personal incumbency advantage, because, “for instance, the incumbent party could build an organisational structure that continues to benefit future candidates independently of these candidates’ personal incumbency status” (104). The *personal incumbency effect* is therefore the electoral gains to an office-seeker that is owed to individual traits beyond the effects attributable to the incumbent party. Following Lee’s lead, early studies using Regression Discontinuity Designs to estimate the causal effect of incumbency paid little attention to this nuance. Later works began to refine Lee’s method by placing sharp bounds on estimates of a personal incumbency effect. To recover the personal incumbency advantage, I use candidate-level data.

Overall Incumbency Effects

A simplifying feature of studying Australian electoral politics is that it has a stable two-party system and members of the lower house are elected from single-member constituencies. Consequently, a simple model where either the Australian Labor Party (ALP) or its chief opposition, the Coalition (comprised of the National Party and the Liberal Party),⁹ serves as the reference party is sufficient for analyses in which the unit of observation is a political party. The forcing variable is the reference party's vote share in an election at time t , which decides treatment status (incumbency) in the next election at $t+1$. For example, the outcome of the 2016 federal elections can be regressed on party's vote share in the following election in 2019.

Formally, the overall incumbency advantage is defined by quantity (1) in the limit as the party vote share approaches 50% from above and below.

$$\pi \equiv \mathbb{E}[Y_{d,t+1}(W_{dt} = 1) - Y_{d,t+1}(W_{dt} = 0)] \quad (1)$$

Where d represents one of Australia's 150¹⁰ Commonwealth Electoral Divisions (CED). The outcome variable Y is one of three metrics of party success: probability of winning, the two-party vote share, and the first preference vote share. $Y_{d,t+1}(W_{dt} = 1)$ is the potential outcome of one of the dependent variables at time $t + 1$ if unit d is treated (wins the previous election). Conversely, $Y_{d,t+1}(W_{dt} = 0)$ is the potential outcome at time $t + 1$ if unit d is not treated. Using party-level data, π can be estimated via:

$$Y_{d,t+1} = \beta Win_{dt} + f(VoteShare_{dt}) + \gamma Incumbent_{dt} + Z'_{dt}\delta + \epsilon_{dt} \quad (2)$$

In this equation, $f(\cdot)$ denotes a polynomial control function,¹¹ Win is the treatment variable, $VoteShare$ is the forcing variable. In the United States, Caughey and

⁹In some states, the Coalition is known under alternative names, such as the Country Liberal Party (CLP) in Northern Territory and the Liberal National Party (LNP) in Queensland and New South Wales.

¹⁰The exact number differs somewhat from election to election subject to redistricting, but differences are trivial.

¹¹In the main text, this is local-linear. Different polynomial orders are applied in bandwidth sensitivity tests in Appendix 15.

Sehkkon (2011) have found severe imbalances in several covariates in the area around the threshold (such as financial advantage) that call into question whether elections can be considered randomly assigned in the limit. In all specifications, I control for whether there is an ALP or Coalition incumbent running in the current race. The impetus behind this is explained in Section 6, but in short, this covariate adjustment accounts for imbalances in the incumbent party win rate. In some model specifications (matrix Z), I also include additional covariates: the number of candidates running in a division, as well as state and decade dummies.¹²

Local-linear analyses, where weighted linear regressions are fit separately in a small window on both sides of the threshold ($VoteShare_{dt} = 0.5$), are featured in the main text as is standard in the literature.¹³ To determine the appropriate window size, I employ Calonico, Cattaneo, and Titiunik’s (2015) data-driven selection algorithm (henceforth, CCT-optimal), which computes a bandwidth that optimizes the bias-variance ratio.¹⁴ The resulting CCT-optimal bandwidths generally hovers around 5% to 7% on either side of the threshold. Readers may reasonably worry that these windows are too wide to be considered competitive elections. Therefore, I also manually fix the bandwidth at 1%, 2% and 3% (or 2%, 4% and 6% margin of victory, respectively) as robustness checks.¹⁵ Within the bandwidths, a triangular kernel function puts greater weight on observations closer to the threshold.¹⁶

Recent experimental research by Hyytinen et al. (2018) shows that using local-linear inference with CCT-optimal bandwidths when applied in this application is prone to positive biases, but when coupled with the bias-correction and robust in-

¹²Strictly speaking, if the RDD is identified, then these covariates are unnecessary. Covariate information can be exploited to boost the precision of estimates. I have included these results as a form of robustness check in the Appendix.

¹³Following RDD common practice, I also run models with higher-order polynomials. Results of these regressions can be found in Appendix 15. Since the bias of close-margin difference in means has been widely cited, only local-polynomial estimates are presented.

¹⁴The CCT method of calculating the optimal bandwidth optimizes the mean squared error (MSE) of the local-polynomial point estimator with respect to the size of the bandwidth. Quantities of bias and variance in the MSE are in turn dependent on the kernel function and order of polynomial chosen.

¹⁵I note, however, that even a ± 15 is not uncommon in the literature. See, for example, Kendall and Rekkas (2012) for the Canadian case and Eggers and Spirling (2017) for the United Kingdom.

¹⁶For the main text, a triangular kernel is used, but in additional sensitivity tests, I run models with uniform and Epanechnikov kernel functions. Estimates vary only slightly and interpretations remain substantively unchanged.

ference procedure of Calonico et al. (2015), the RD estimate can replicate experimental treatment effects. For this reason, all coefficients in the results are bias-corrected, and standard errors are robust and clustered at the level of electoral divisions.

Personal Incumbency Effects

Parsing the personal from the overall incumbency advantage is considerably more difficult because we must use candidate-level data. Endogeneity is introduced when the unit of analysis is the candidate rather than the party. Whereas parties contest in all races (i.e., there is a Labor and Coalition candidate in virtually all divisions across all elections), individuals choose to compete and that decision to rerun influences whether they won or lost previously. Therefore, the possibility of strategic retirement, for example, can compromise any causal interpretations and determine whether additional assumptions about the behaviour of politicians are necessary. Instances where an incumbent individual runs in a division for which their party is not incumbent would be the ideal scenario to test personal incumbency advantage. But these circumstances are rare and in practice, only present when an individual switches parties.

Some have suggested that it is possible to recover the personal incumbency advantage with a party-level analysis using a RDD (Kendall and Rekkas 2012, Erikson and Titiunik 2015, Song 2018). This, however, requires the assumptions that i) any incumbency effect is uniform across all parties, and ii) there is no partisan incumbency effect in divisions where the no incumbent would rerun, or that these types of divisions are negligible. Results of the overall incumbency effect demonstrate that the advantage differs between ALP and Coalition incumbents and the first assumption is unlikely to hold. Regarding the second, despite decreases in partisan loyalties in many countries including Australia, the country's experience with declining partisanship has not been as steep as most Western democracies. Thus, the assumption of no partisan incumbency advantage is likely too strong. Leveraging term limits in certain American states, Fowler (2014) also estimates a personal incumbency effect. Unlike the United States, however, there are no caps on the number of three-year terms that

an Australian MP can serve. Another strategy involves a sufficient sample of open seats (Erikson and Titiunik 2015), in which there is no strategic retirement. However, there are too few open-seat races in the Australian sample for meaningful inference.

Most studies that purport to estimate the personal incumbency advantage using a RDD have taken one of two paths. The first uses candidate-level data under an unconditional model where all candidates who do not rerun are treated as losers (De Magalhaes 2015). Formally, let R_i be an indicator for whether candidate i runs in the election at $t + 1$, which is a function of $W_i = 1$ if the candidate wins the election at t , or $W_i = 0$ if the candidate loses the election at t . Y_i is the potential outcome variable for the probability of winning in the election at $t + 1$, or one of the other dependent variables: two-candidate vote share, first preference vote share, and the personal vote. It follows that the unconditional estimand, or the *Intention-to-treat* effect is:

$$\tau_{ITT} = \mathbb{E}[Y_{i,t+1}(1)R_{i,t+1}(1) - Y_{i,t+1}(0)R_{i,t+1}(0)] \quad (3)$$

The alternative is to estimate the effect of incumbency on future vote shares after conditioning on the sample of those who choose to run. Therefore, the conditional quantity can be expressed as:

$$\tau_{FRD} = \mathbb{E}[Y_{i,t+1}(1) - Y_{i,t+1}(0)|R_{i,t+1}(1)] \quad (4)$$

τ_{FRD} is otherwise known as a *Fuzzy Regression Discontinuity Design* because those who become incumbent do not always run, and reasons for this attrition are likely non-random. As with any RDD, both quantities are conditional on being in a close region around the discontinuity, but subscripts are omitted here to simplify notation. Below, I estimate both the unconditional and conditional effects.

Unless it so happens that all winners and losers of close elections rerun ($\mathbb{E}[R_i(1) - R_i(0)] = 0$), the unconditional estimate will differ from one that conditions on rerunning. Of candidates that re-run in the full sample, incumbents contend 1.6 times more than challengers. Of those that won in the preceding election, 73% chose to rerun. By

contrast, 32% of losers reran. For reference, these figures are roughly on par with those in Canada (Song 2018).

Song (2018) demonstrates that the unconditional RD effect tends to overestimate incumbency advantage and underestimate incumbency disadvantage. Given this problem, Anagol and Fujiwara (2016)¹⁷ estimate bounds on the effect of incumbency conditional on rerunning. First, candidates are categorized as belonging to one of the following groups: *always-takers* (would always rerun regardless of outcome in preceding election), *never-takers* (would never rerun), *compliers* (would rerun only if they won), and *defiers* (would rerun only if they lost).¹⁸ Conditional bounds can be estimated provided there are no defiers. Although it is not possible to rule out the presence of defiers altogether, it is nonetheless a reasonable assumption since the population of defiers is likely negligible. Then: ¹⁹

$$\begin{aligned} \tau_{FRD} = \mathbb{E}[Y_i(1) - Y_i(0)|R_i(1)] = & \quad (5) \\ & I. \left\{ \frac{1}{\mathbb{E}(R_i(1) = 1)} \right. \\ & II. \left\{ \times \left[\mathbb{E}[Y_i(1)R_i(1) - Y_i(0)R_i(0)] \right. \right. \\ & III. \left\{ - \mathbb{P}(R_i(1) > R_i(0)) \right. \\ & IV. \left\{ \times \mathbb{E}[Y_i(0)|R_i(1) > R_i(0)] \right] \end{aligned}$$

$\mathbb{E}(R_i(1) = 1)$ is average probability of rerunning for incumbents. The first term inside the square parentheses (II.) is the unconditional RD effect (Equation 3). III. is the crucial intermediate step, the probability of being either an *always-taker* or a *complier*. In other words, it is the impact of winning on the decision to run in the next election. The final term (IV.) on the RHS, the expected outcome of election $t + 1$ for a compliant bare-loser had they chosen to rerun, is unobservable. To obtain the upper bound, I assume that this term equals zero — that a complier who lost at t would never

¹⁷Also see Lee (2009), and Kang et al. (2018).

¹⁸See Appendix 10 for specific mathematical definitions of each latent class in the potential outcomes framework.

¹⁹All terms conditional on being at the cutoff, $x = 0$. Likewise, subscript $t + 1$ is excluded for notational simplicity. Proof is available in Appendix of Anagol and Fujiwara (2016)

win at $t + 1$ had they chosen to rerun.²⁰ Setting this quantity to one generates the lower bound.

Since the lower bound that bare-losers would always win the next election had they chosen to rerun is excessively restrictive, following Song (2018), I also estimate τ_{FRD} (4) with two further assumptions, A1 (6) and A2 (7).

A₁ : *The likelihood of winning in election $t + 1$ for compliers who lost at t is less than or equal to the likelihood of victory for complying bare-winners $t + 1$.*

$$\mathbb{E}[Y_i(0)|R_i(1) > R_i(0)] \leq \mathbb{E}[Y_i(1)|R_i(1) > R_i(0)] \quad (6)$$

A₂ : *The likelihood of winning in election $t + 1$ for compliers who lost at t is less than or equal to half the likelihood of victory for complying bare-winners at $t + 1$.*

$$\mathbb{E}[Y_i(0)|R_i(1) > R_i(0)] \leq \frac{\mathbb{E}[Y_i(1)|R_i(1) > R_i(0)]}{2} \quad (7)$$

4 Data

With the exception of elections prior to 2004,²¹ data on electoral results is largely drawn directly from the Australian Electoral Commission. For supplementary information such as division-level political ideology, I also utilise the Australian Election Study’s Voter Surveys. The main explanatory variable and the dependent variables are constructed from twenty-five federal elections (running approximately once every three years) from 1955 to 2019. Under the RDD approach, incumbency status in elections 1955 through 2016 are used to predict electoral outcomes in 1958 through 2019. Where the party is the unit of interest (i.e., in estimating the overall incumbency effects), I use *Two-Party Preferences*, the final distribution of vote shares among the major contenders, the Australian Labor Party and the Liberal-National Coalition. After accounting for re-

²⁰This is an upper bound on the RD effect of personal incumbency because in the counterfactual scenario where rerunning bare-losers have no chance of winning, the effect for bare-winners will be inflated.

²¹For 2001 and earlier, I rely on Adam Carr’s Australian Election Archive, available [here](#). All scripts to replicate the analyses in this paper can be found [here](#).

districting,²² this yields about 2,700 races, 16% of which are open-seat contests, for the party-level analysis.²³

A candidate-level data set where units of observation are individuals is constructed using *Two-Candidate Preferences* (TCP). This is analogous to TPP data except that the final two competitors (after all votes have been redistributed) do not have to be from one of the major political parties. In cases where the remaining two candidates are from the ALP and one of the Coalition parties, the TCP is the same as the TPP. There are a total of 5,700 observations in the candidate-level data (Table 2).

	n	mean	sd	median	min	max
First Preferences	2741	0.41	0.12	0.41	0.14	0.80
ALP Vote Share	2742	0.49	0.09	0.49	0.22	0.80
Coalition Vote Share	2528	0.50	0.09	0.51	0.06	0.78
ALP Win	2736	0.45	0.50	0.00	0.00	1.00
Coalition Win	2524	0.54	0.50	1.00	0.00	1.00
ALP Victory Margin	2736	-0.01	0.18	-0.02	-0.57	0.60
Coalition Victory Margin	2524	0.01	0.18	0.01	-0.60	0.57
Open Seat	2473	0.16	0.37	0.00	0.00	1.00
ALP Incumbent	2737	0.40	0.49	0.00	0.00	1.00
Coalition Incumbent	2527	0.48	0.50	0.00	0.00	1.00
Division Political Ideology	2742	4.78	0.23	4.77	4.13	5.32
Year	2742	1989	18.51	1990	1955	2019

Table 1: Descriptive Statistics for Party-level Data (Two-Party Preferred)

Naively using TPP and TCP distributions might be insufficient given Australia’s adoption of the full preferential ballot. Consider a simple graphical model of incumbency effects under a preferential voting system in Figure 1. The node “Close Margin” represents the treatment assignment mechanism and restriction of the sample to close elections. Races that are won or lost by close margins in time t directly determines whether a political actor is incumbent in $t + 1$. The effect of the treatment (“Incumbent”) on Two-Party or Two-Candidate Preferences is confounded by factors influencing first preference and two-party results. While preferential voting moderates the

²²Where electoral divisions are simply renamed, they are recoded to match across years, and new seats that emerge from year to year are eliminated altogether. The omission of these divisions should do not substantially bias the results since redistribution is conducted by an independent body.

²³Descriptive statistics for federal elections are presented in Table 8. State election descriptives can be found in Appendix 9.

	n	mean	sd	median	min	max
First Preferences	5711	0.42	0.12	0.42	0.01	0.80
Two-party Vote Shares	5718	0.50	0.10	0.50	0.01	1.45
Candidate Victory Margin	5701	-0.00	0.19	0.00	-0.90	0.90
ALP Incumbent	5443	0.51	0.50	1.00	0.00	1.00
LNP Incumbent	5443	0.48	0.50	0.00	0.00	1.00
Open Seat	5155	0.16	0.37	0.00	0.00	1.00
Division Political Ideology	5718	4.79	0.23	4.78	4.13	5.32
Year	5718	1989	18.57	1990	1955	2019

Table 2: Descriptive Statistics for Candidate-level Data (Two-Candidate Preferred)

NOTE: There is roughly twice as many observations in the TCP data because the unit of analysis is the individual. As the name implies, there are two candidates per race. The TPP data is formatted such that each observation represents one electoral contest.

direct manipulation of outcomes, parties' "how to vote" cards, which instruct voters to order their preferences in a way that favour the party, are a regular feature of Australian politics. In theory, this creates a back-door path between the treatment and the TPP/TCP. Unlike previous research, which has ignored this possibility, I use the first preferences distribution as an alternative outcome variable. This data also allows me to search for which candidates re-run among the entire collection of contestants instead of the reduced two-candidate pool.

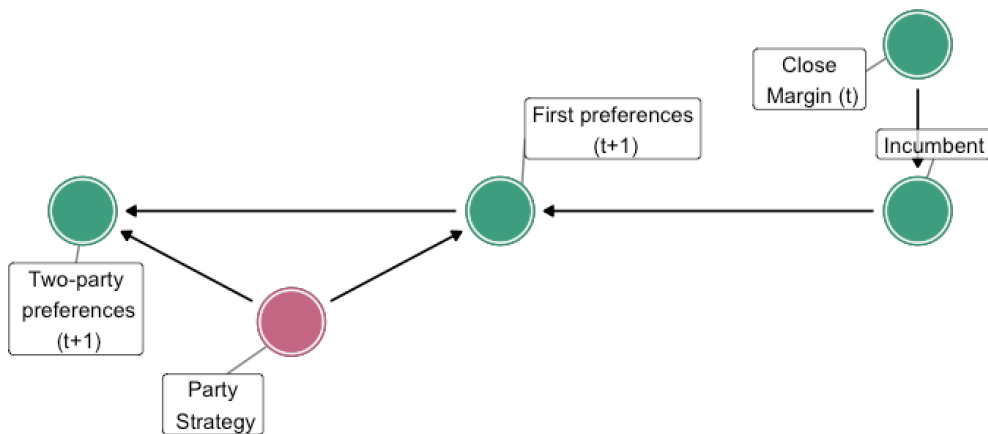


Figure 1: Directed Acyclic Graph of Incumbency in Australian Races

To refine measurement of electoral gains to incumbent individuals as opposed to parties, I take advantage of data from Australia’s popularly-elected Senate. Because the timing of Senate elections typically coincide with House elections,²⁴ one simple way to calculate the personal vote is to subtract a party’s Senate vote share in a division from the first preference vote for a candidate in the same division.²⁵ For example, House vote shares are mapped to Senate vote shares by division in New South Wales in figure 10 for incumbent Coalition members in Appendix 11.²⁶ I use these values in addition to the three primary outcomes as a robustness check when estimating personal incumbency effects.

5 Results

Overall Incumbency Advantages

Figure 2 illustrates the incumbency advantage for the three outcome variables for both parties. Each point represents the mean score of the dependent variable within bin lengths of about half a percent, and the vertical bars are point-wise 95% confidence intervals. In each instance, there is a small, but discernible “jump” at the 50% vote share threshold.²⁷

Section A of Table 4 presents the overall RD estimates for federal elections. On average, Labor Party incumbents see a 2 and 3 percentage point increase in TPP and First Preference vote shares, respectively. In other words, the proportion of initial votes for the ALP would be 3% less had they not won the seat in a prior election. As we will see, TPP and TCP outcomes consistently underestimate the incumbency advantage

²⁴The mismatch of upper and lower house elections are more common in elections of earlier decades. I only use the elections where the two co-occur.

²⁵Australian Senators and are, until recently (2013 onwards), elected through a Group Voting Ticket system.

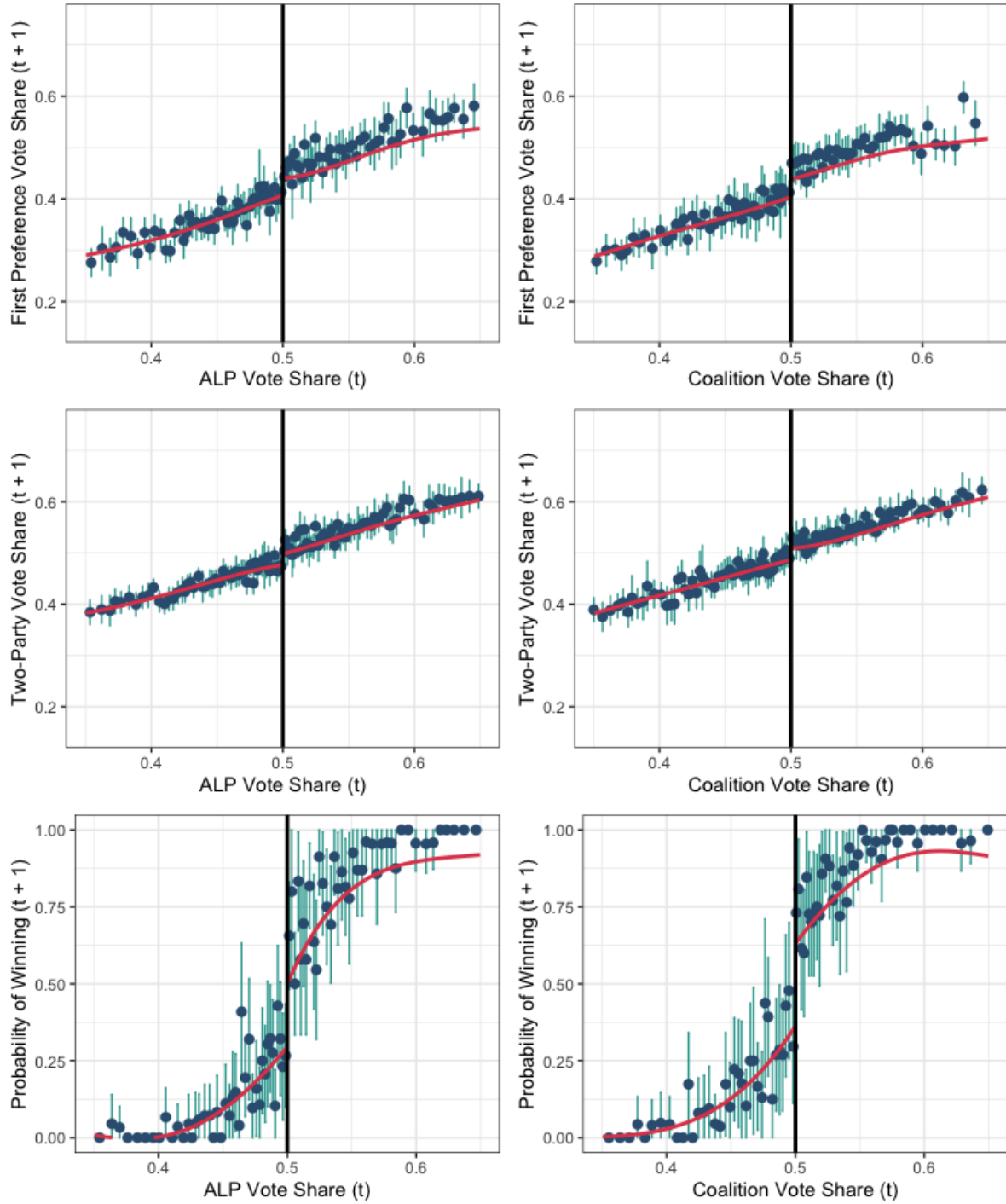
²⁶This strategy was adapted from [Simon Jackman](#), who rightfully cautions that this method of computing “personal” electoral gains does not account for the possibility that a significant personal incumbency effect could generate residual advantages/disadvantages for the party’s Senate vote, either exaggerating or understating the difference in the personal vote. Nevertheless, this might be the best option among imperfect methods.

²⁷Importantly, while these plots are useful visualisations of the global effect, we are only concerned with the estimate at the discontinuity.

compared to First Preferences. This gives credence to the insight that merely inspecting the remaining two opponents in an instant-runoff system dilutes findings that use TCP/TPP instead of primary vote shares. The effect on the probability of winning is similarly positive. There is a 20 percentage point increase in the probability of winning an election for divisions where the ALP is incumbent. These findings are robust to the inclusion of state and decade dummies, and the number of candidates running in the division (Appendix 12, Table 12). As a point of comparison, the post-1950s incumbency advantage for the Liberal Party in Canada is appreciably larger at 7% to 10% vote share increases (Kendall and Rekkas, 2012, 1574). These estimates mirror the incumbency advantage for Conservatives in close races against Labour in the United Kingdom (Eggers and Spirling, 2017, 910).

Table 4 also reveals that the overall effect of incumbency is more generous for Coalition parties, a conclusion that holds even after including state and decade covariates. This asymmetry is somewhat surprising since in a strictly two-party system, the overall incumbency effect is symmetric due to the fact that gains for one party are by definition losses for the other. The unevenness of effect sizes intimate that treating Australia as a two-party system may be inadequate in some applications.

Figure 2: Overall Incumbency Effect in Australian Federal Elections



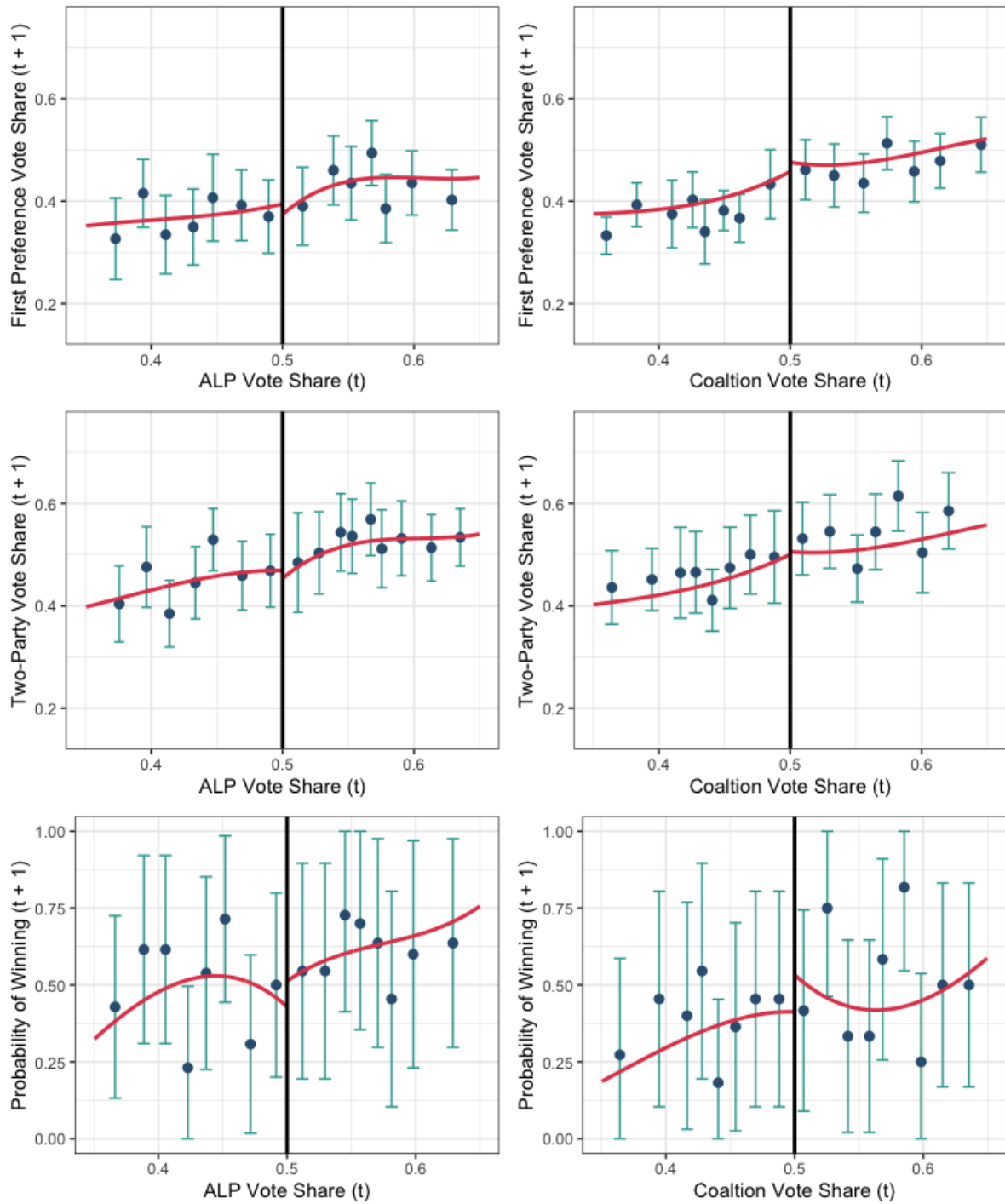
NOTE: Points are not single observations but represent binned averages, which produces a cleaner visualisation of the discontinuous effect than a plotting all observations. Global regression lines in red are fit with a fourth-degree polynomial. The quantile-spaced bins are selected through the Integrated Mean Squared Error (IMSE) method.

Table 4: Regression Discontinuity Estimates for Overall Incumbency Effect

A: Federal		RD	Bandwidth	Effective
	Outcome	Estimate	[L; R]	Num. Obs.
Labor	Two-Party Preferences	0.0204 [0.01; 0.03]	[0.06; 0.06]	(664, 535)
	Probability of Winning	0.2028 [0.09; 0.32]	[0.07; 0.06]	(747, 549)
	First Preferences	0.029 [0.01; 0.05]	[0.06; 0.06]	(714, 530)
Coalition	Two-Party Preferences	0.0216 [0.01; 0.04]	[0.06; 0.05]	(476, 528)
	Probability of Winning	0.2655 [0.15; 0.38]	[0.08; 0.07]	(581, 699)
	First Preferences	0.044 [0.02; 0.07]	[0.09; 0.06]	(637, 604)
B: State				
Labor	Two-Party Preferences	-0.0451 [-0.11; 0.02]	[0.11; 0.06]	(176, 105)
	Probability of Winning	-0.0545 [-0.37; 0.26]	[0.09; 0.06]	(148, 110)
	First Preferences	-0.0427 [-0.11; 0.03]	[0.11; 0.06]	(172, 95)
Coalition	Two-Party Preferences	-0.0349 [-0.10; 0.03]	[0.09; 0.09]	(137, 136)
	Probability of Winning	0.0144 [-0.28; 0.30]	[0.12; 0.09]	(169, 136)
	First Preferences	-0.0565 [-0.12; 0.01]	[0.07; 0.10]	(96, 154)

NOTE: Local-linear regressions with triangular kernels. Parentheses below RD coefficients represent 95% confidence intervals.

Figure 3: Overall Incumbency Effect in Australian State Elections



NOTE: Points are binned averages of the dependent variable. Global regression lines in red are fit with a fourth-degree polynomial. Quantile-spaced bins are selected through the Integrated Mean Squared Error (IMSE) method. This results in binwidths that are 2% to 3%.

Against hypothesis H_{1A} , there is neither an advantage or disadvantage in state elections for either the Coalition or the ALP (Section B of Table 4). There are much fewer races in the sample of state elections, however, and any effect is likely too small to be detected with the limited data. Figure 3 plots points for bins of 2% to 3% in length to accommodate the smaller sample. For the most part, the local-linear regressions do not separate at the threshold unlike the federal elections.

Table 6: Incumbency Effects Before and After 1990

		Pre-1990	Post-1990
Outcome		RD Estimate	RD Estimate
Labor	First Preferences	0.0347 [0.011; 0.058]	0.0317 [0.002; 0.061]
Coalition	First Preferences	0.0402 [0.006; 0.074]	0.0313 [0.003; 0.06]

NOTE: The CCT-optimal bandwidths are roughly $\pm 6\%$ in all models in this table. Local-linear regressions with triangular kernels. Parentheses below RD coefficients represent 95% confidence intervals.

If partisanship and incumbency advantage are inversely related, and attachment to the major parties has weakened over time, then incumbency effects should be larger now than in decades prior (H_2). To examine whether there is support for this empirically, I split the sample into two periods: before and after the 1990 Commonwealth election. This break point is chosen because even though the decline in partisan ties has been gradual, the steady rise of competitive minor parties like the Greens began around this time. The difference between pre-1990 and post-1990 RD estimates is not only substantively small, it is antithetical to the hypothesized direction. Again, the trends differ between parties. The numbers (Table 6) indicate that the modest incumbency advantage that once disproportionately favoured Coalition incumbents has more or less equalized so that both incumbents from either party receives 3% more first preference votes. However, differences are not statistically significant at conventional levels. That incumbency advantage has, in fact, experienced a reduction in the midst

of falling partisanship contradicts the theory put forth at the outset and is a potentially fruitful puzzle for future research.

Personal Incumbency Disadvantage

Does incumbency also inspire larger vote shares for individuals? Personal incumbency effects are calculated with candidate-level data, first assuming differences in rerunning rates are negligible (the unconditional quantity outlined in Equation (3)), and then accounting for the influence of winning on candidates' decision to rerun (the conditional effect according to Equation (4)).

The unconditional RD estimate is positive with respect to all four dependent variables. Candidates who win an election and choose to rerun in the next can expect a 5 percentage point inflation of their first preferences, 2.5 of their two-candidate vote shares, and their chances of winning to improve by 30 percentage points. Patterns in state elections broadly replicate those in the analysis of federal elections, except with greater uncertainty.

As noted in Section 3, these figures treat incumbent candidates who do not rerun as if they had rerun and lost in the subsequent election. In the Australian sample, the average probability of rerunning for bare-winners is relatively high (83%). Unsurprisingly, the effect of barely winning an election has a significant influence on a candidate's likelihood of rerunning in a successive election. A bare-winner is 56 percentage points more likely to run than a bare-loser (Figure 13 in Appendix). To account for the effect of winning on rerunning, the upper and lower bounds on a conditional personal incumbency effect are summarized in Figures 4 and 5.

Incumbent candidates appear to receive less votes than non-incumbents after conditioning on rerunning rates. Although these results are not conclusive, they point to evidence of an individual incumbency disadvantage. That is, we would expect any incumbency effect to fall within the range marked by the (red) conservative upper and lower bounds. They bracket zero, but the majority of the constrained region falls below zero. The maximum possible effect is a 7 percentage point increase in first pref-

erences. By suppressing the lower bound such that bare-losers would receive only as many (A_1) or half as many votes (A_2) as winners in the next election had they chosen to rerun (blue),²⁸ the effect is more sensible but still negative. On the probability of winning and the personal vote,²⁹ the numbers are more equivocal, and could be construed as a null effect. For state elections, the conditional incumbency effects in Figure 5 tell the same story, albeit even less definitively.

If incumbent legislators are truly disadvantaged, then the unconditional estimates tend to exaggerate the personal incumbency effect. Unconditional effects tell us there tends to be a small net benefit to bare-winners whether or not they choose to rerun. But once selection into candidacy in a future election is considered, there is an average 8.5 percentage point (A_2 estimate) decrease in their first preference votes among those who decide to rerun. When we recognize the relative intensity of partisanship in Australia, the finding becomes less perplexing. Taken at face value, it signifies that the overall incumbency advantage — which is comprised of the personal disadvantage (or non-advantage, the more conservative interpretation) and an unknown partisan incumbency effect — must be driven by the latter. That the overall incumbency effect is still positive after a disadvantage (or non-advantage) for individual legislators points to the strength of party identities in Australia. The results have natural implications for the debate on whether Australia should be seen as a candidate-centered or party-centered country. They favour the interpretation that party voting in Australia continues to dominate, and personalization in Australia is less developed than some literature has assumed.

²⁸Note that these assumptions apply to the unobservable potential outcome, IV , in the estimator in Equation 5. A_1 in Equation (6) and A_2 in Equation (7)) explicitly defines these assumptions.

²⁹Figure 11 in Appendix 11

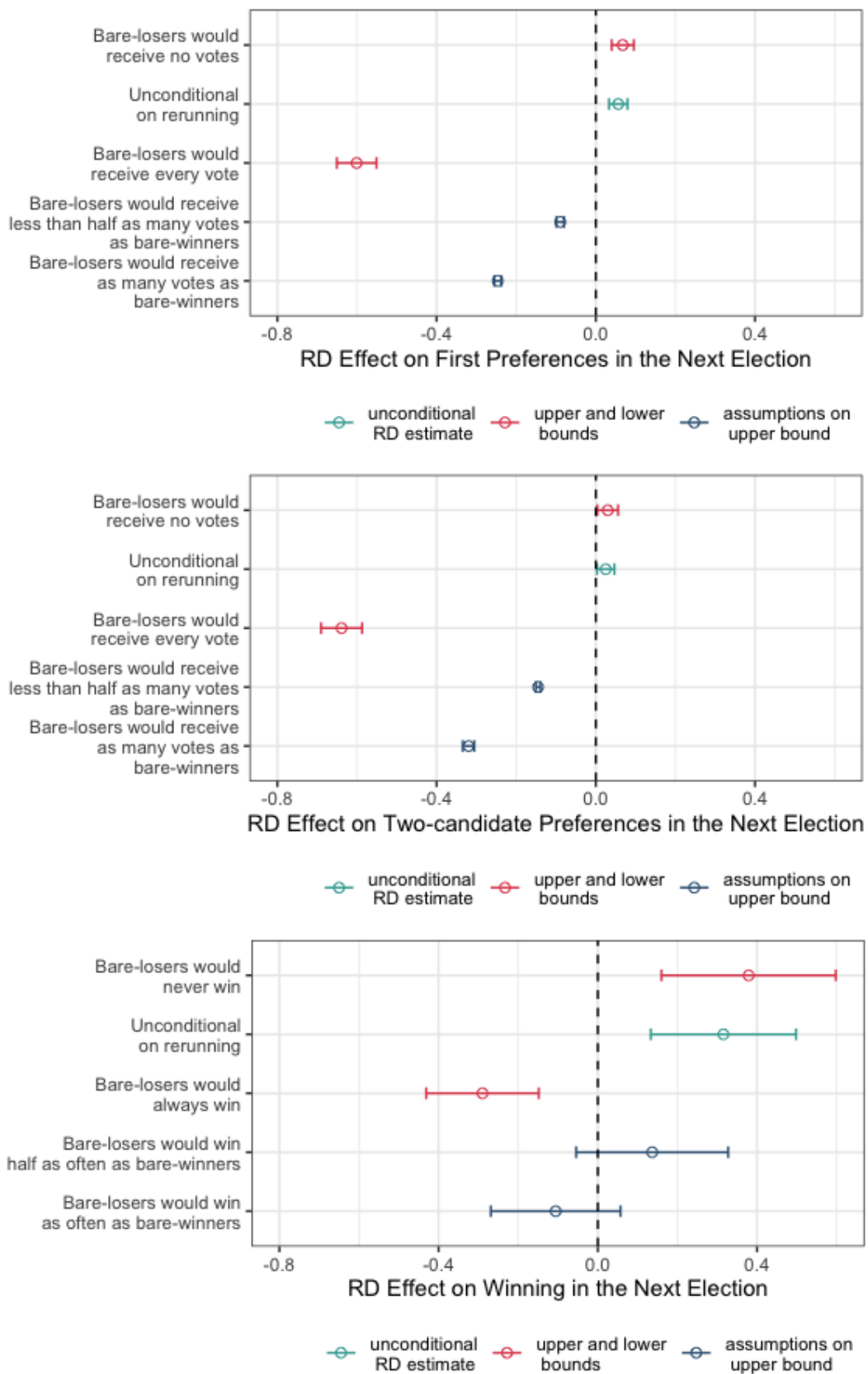


Figure 4: Bounds on RD Effect in Candidate-level Analysis of Federal Elections

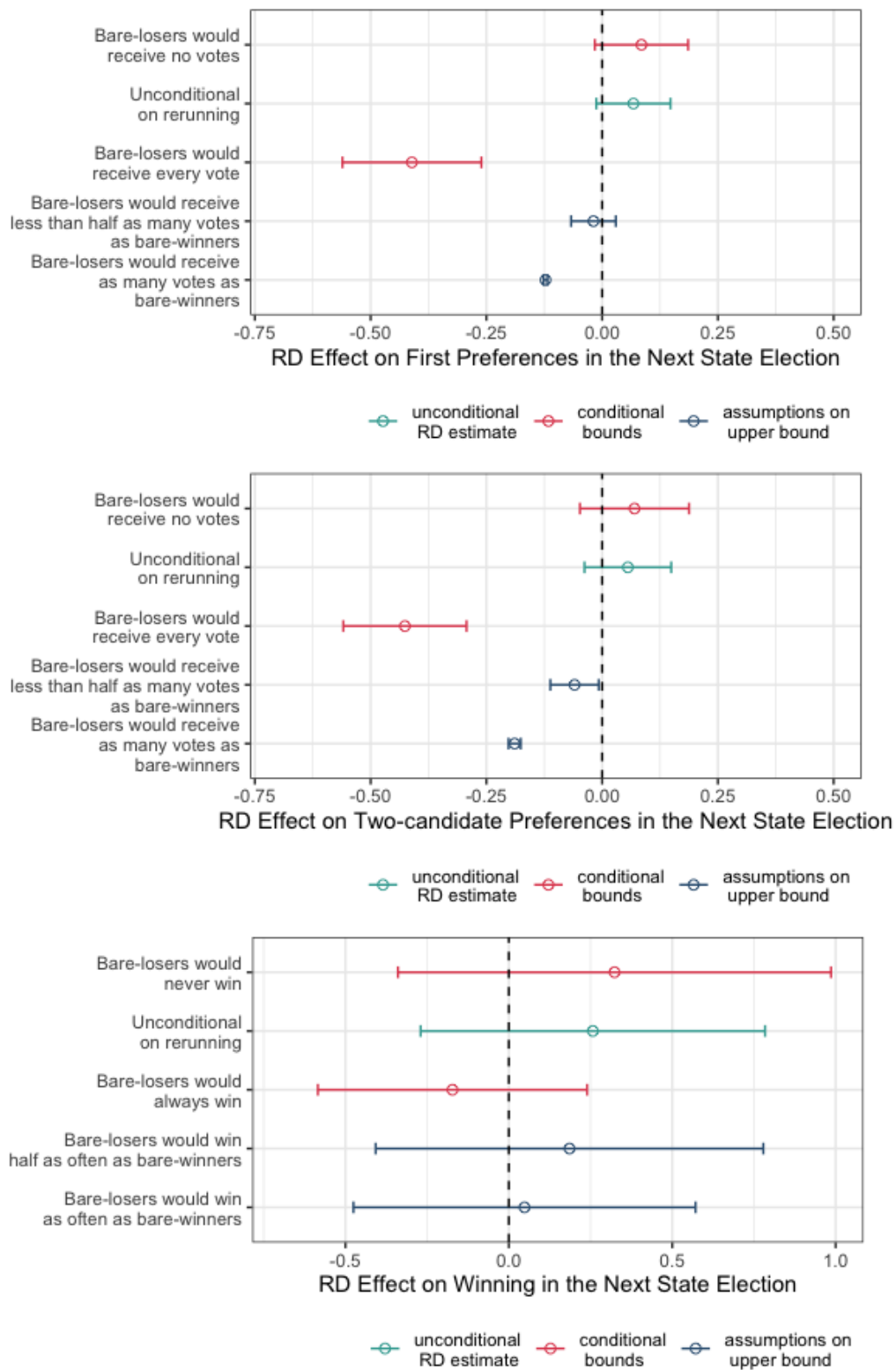


Figure 5: Bounds on RD Effect in Candidate-level Analysis of State Elections

6 Is Incumbency in Close Australian Elections As Good As Randomly Assigned?

The validity of RDDs is contingent on the continuity assumption: there is no structural break in potential outcomes at the threshold. In this application, a claim to the causal interpretation of results assumes that parties and candidates are not able to systematically manipulate observations in the area around the threshold. This is possible when well-organized campaigns are able to obtain precise information about likely electoral outcomes and engage in behaviour that skews them in their favour (Caughey and Sekhon 2011). Parties and candidates can behave very differently in very competitive elections when the motivation to do so is higher.

While the continuity assumption is not directly testable, a standard strategy in the RDD literature is to leverage the fact that bare-winners and bare-losers of close elections should be comparable in other regards, and to look for imbalances of the forcing variable across all relevant factors. A violation of RDD assumptions would occur if, for example, the Labor disproportionately win in close races over their Coalition challengers.

One way to look for evidence of sorting is to check the density of the forcing variable. This is typically done with a Wald test for the null hypothesis that there is no discontinuity at the threshold. The plots in Figure 6 show results of the density test developed by Cattaneo, Idrobo, and Titiunik (2019).³⁰ The p-value of each test is reported below the subfigures. They indicate that we find evidence in favour of no sorting. Despite the appearance of a discontinuity at the 0.5 threshold, the difference is not statistically significant in either the two-party or two-candidate samples.

The most pressing concern is that there are significant discrepancies between treated and control units when incumbents from either party are running.³¹ Although the density tests in Figure 6 indicate that neither party has a general advantage in close

³⁰This is a modification of McCrary's manipulation test that uses local-polynomial estimators.

³¹This is much like the imbalances found for U.S. House races in the post-World War II period (Caughey and Sekhon (2011)).

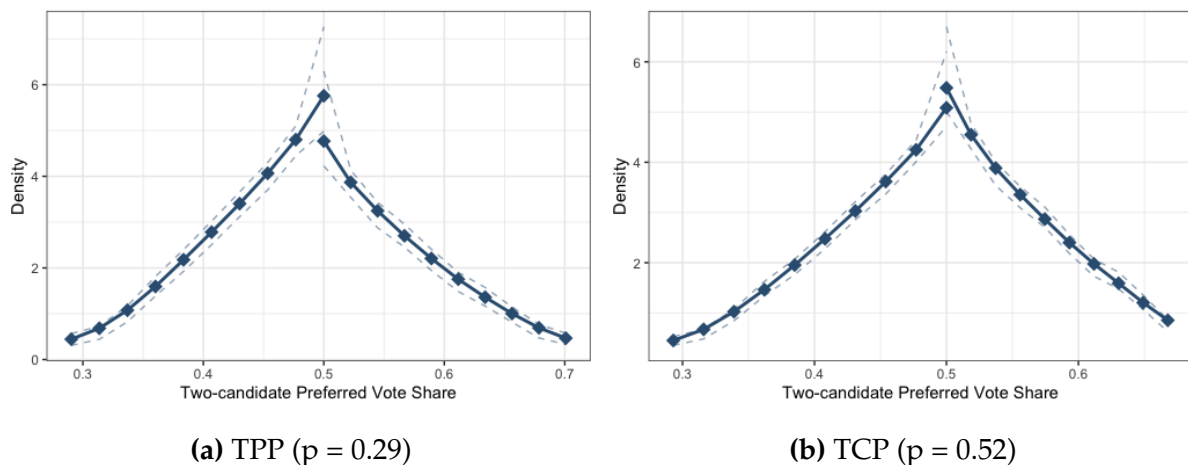


Figure 6: Density of the Forcing Variable

elections, Figure 7, which plots levels of vote shares for Labor incumbents and Coalition incumbents separately, exhibits a clear advantage for parties in seats for which they already occupy. Moving from the region immediately left of the threshold to its immediate right ($\pm 0.5\%$), there is a 116 percent increase (19 to 42) in the number of close contests won where the Labor is incumbent. This means that the Labor are much more likely to barely win seats they won last time than to barely lose them. The difference is even starker for seats with Coalition incumbents who barely win seats 205% more than they barely lose. As a result, Labor Party bare-loser are more likely to be from divisions that were previously held by Coalition members.

This appears to invalidate the continuity assumption necessary for RD analysis to hold. However, Erikson and Rader (2017) and Eggers et al. (2015) suggest that these imbalances may be treated as statistical flukes if theoretical reasons for manipulation have been ruled out or convincingly addressed. Researchers may then proceed using covariate adjustment, as I have done in the main results, to correct these imbalances. In addition, “No manipulation at the threshold” is a helpful dictum generally, but not a strict rule. McCrary (2008) distinguishes between partial and complete manipulation; in the former, “the running variable is under the agent’s control, but also has an idiosyncratic element” (4). Partial manipulation doesn’t usually lead to identification problems. However, in complete manipulation, “when the running variable is en-

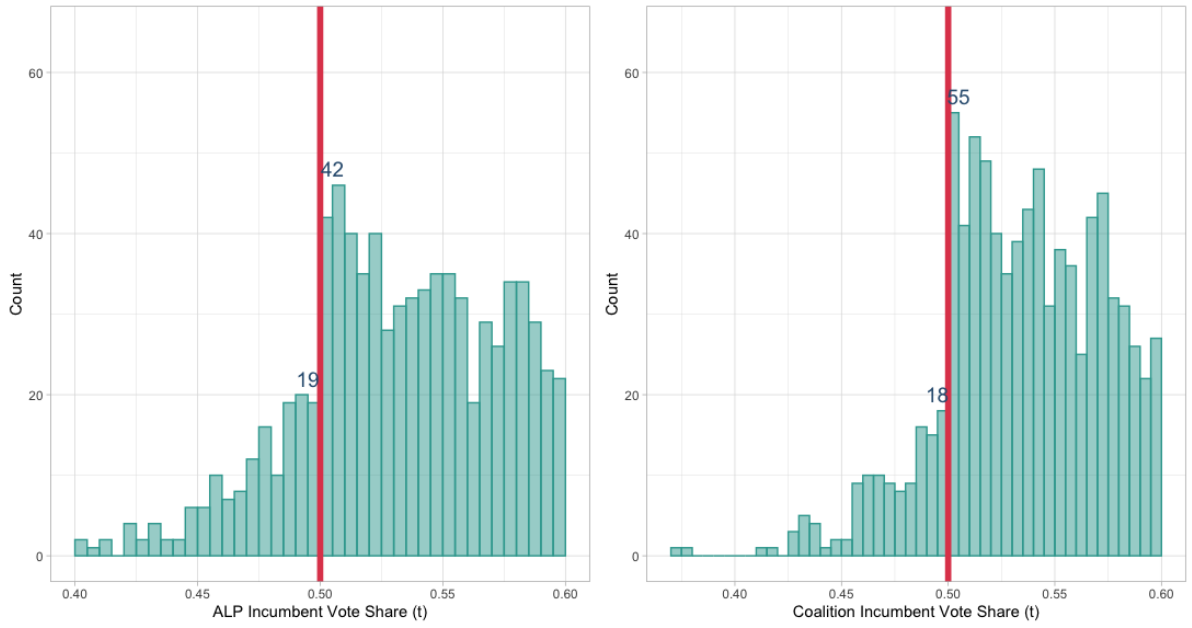


Figure 7: Incumbent Imbalances in Close Elections

Bins represent half a percent (0.5%) of the vote share.

tirely under the agent’s control,” (4) identification is under serious threat.³² Even when partial manipulation is present, it seems that under mild regularity conditions, identification of meaningful parameters can still be obtained under partial manipulation (David S. Lee 2008). In order to scrutinize the soundness of RDD for close Australian elections, it is important to examine the theoretical mechanisms that underlie this imbalance. The threats to causal identification fall, broadly, into one of two categories: pre-election manipulation and post-election manipulation.

Pre-election Manipulation

Figure 9 displays the RD effect in falsification tests on a set of pre-election covariates.³³ Model specifications mimic those in the main results save the outcome variables listed on the vertical axis. To control the family-wise error rate induced by multiple testing,

³²Instead, “the crucial issue is whether the random component is ‘non-trivial’ relative to the precision with which the relationship between z and y can be estimated” (Caughey and Sekhon 2011, 387).

³³These are recommended by Eggers et al. (2015).

the confidence intervals have been adjusted using Bonferroni’s correction procedure.³⁴ The bottom four rows are lagged outcome variables of the two-party and first preference vote shares for both the Labor and Coalition in the prior election.³⁵ I also include tests for open seat races, the division’s political ideology score, and the percentage turnout in each division for that election. *Division Political Ideology* checks the median ideological position of electoral divisions.³⁶ None are statistically significant at the 0.05 level.

How precise are pollsters?

If pollsters, and by extension campaign organizers who have access to their predictions, are able to accurately forecast the proportion of votes for each party, parties and candidates may mobilize extra effort or resources when seats are known to be tight. Thus, a crucial question is: *How well can pollsters predict the outcome of close Australian elections?*

Given that voting in Australian national elections is mandatory, observers of Australian elections may have an upper hand compared to those in voluntary systems. This is because voting laws effectively remove the uncertainty that comes from voter turnout. Yet, preferential voting also provides ample opportunity for first preferences to diverge from two-party counts. To examine the degree of accuracy campaign managers must have in order to produce the asymmetry observed above, I briefly investigate one possible generative process in Appendix 17. Through this exercise, I find that for pre-electoral manipulation to produce the kind of imbalances observed in the data, parties and candidates would have to predict their expected vote shares within less

³⁴Many (Ariga et al. 2016, Erikson and Rader 2017, Eggers et al. 2015) have pointed out the pitfalls of over-reliance on tests that inflate the chances of obtaining statistical flukes.

³⁵Many of the covariate imbalances found by Caughy and Sekkon (2011) (i.e., experience, number of previous terms, campaign expenditure, and donations) “all tap into a single underlying factor (incumbency) and so are not independent pieces of information” (Eggers et al. 2015, 263). Indeed, after controlling for incumbent party the models, any significant imbalances disappear. I find the same pattern in Australia. $t - 1$ vote shares for either party are no longer significant after conditioning on the party of the incumbent.

³⁶Since there are a limited number of individual responses for each division, I compute the scores via Multilevel Regression and Post-Stratification. See Appendix 16.

than 0.11 percentage points, on average. This is a razor thin margin, and a standard that is unlikely to be met by any campaign.

One could be concerned that continually improving polling and aggregation techniques signify that predictions, ergo parties' information about probable election outcome has also grown over time. In a pooled study of 45 countries, Jennings and Wlezien (2018) find some evidence that that polling error for national elections has declined in the last 60 years for a subset of these countries (including Australia). Moreover, Australia's polling error (at least in the 2016 election) is lower than in others.

Yet widespread criticism of the major pollsters (all of which failed to predict a Coalition victory) in the recent 2019 national election demonstrates how there remains serious, or at least meaningful, ambiguity in the final outcomes. Furthermore, the level of precision necessary to systematically manipulate races on a seat-by-seat basis requires the use of single-seat polling, which are much less reliable than national polls.³⁷ Of course, this does not preclude the possibility that campaigners could attain this level of precision at a future date. For the cautious reader, this may not be enough to assuage concerns of manipulation. Anticipating this, I controlled for incumbency in the main results. The RD effects with and without this control differ only minutely and does not alter substantive interpretations.

Post-election Manipulation

A second strand of manipulation tactics involves post-election activities such as ballot processing and recounts. For recounting processes to produce systematic sorting in close elections, they a) must occur frequently enough and b) the court ruling or recount should frequently resolve in favour of the incumbent. In Australia, the Australian Electoral Commission (AEC) mandates that, "where the margin of votes between the first and second-ranked candidates at the completion of the distribution of preferences for a House election is less than 100, a full recount of all formal and informal ballot papers will be undertaken as a matter of policy" (AEC, 4). In the 2007

³⁷Goot 2018, 119

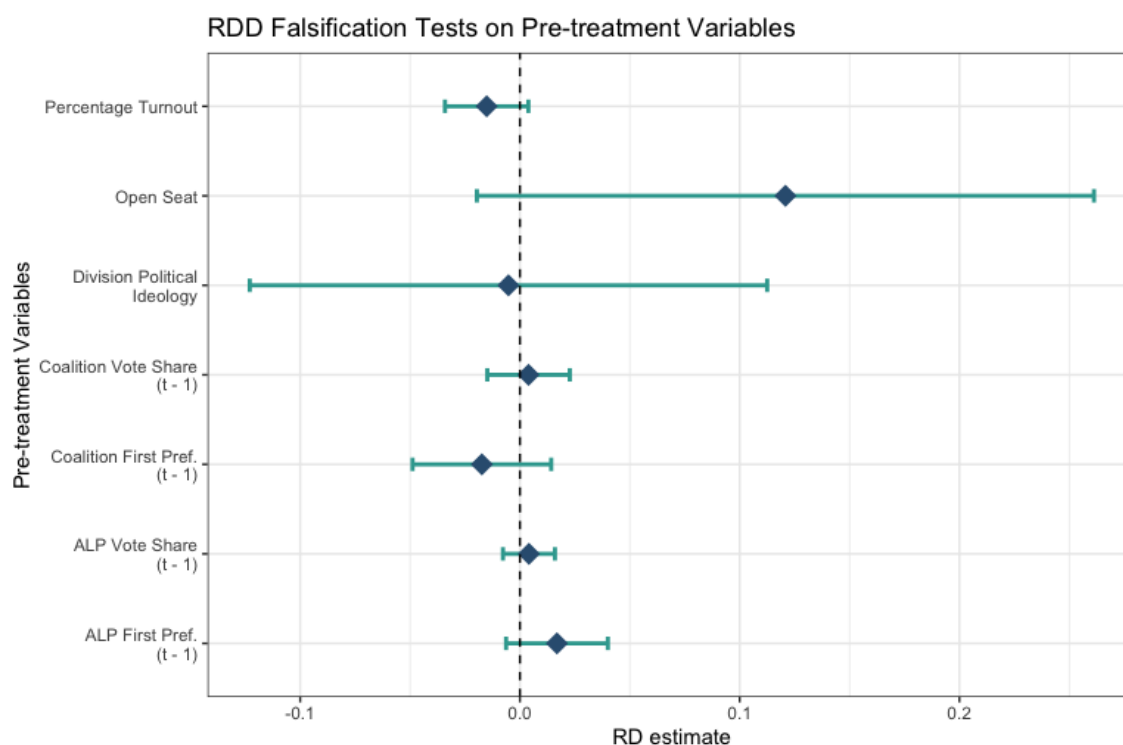


Figure 9: Regression Discontinuity Falsification Tests

race for the McEwen seat, the court ruled in favour of a reversal of the original election outcome. The initial count favouring ALP candidate Rob Mitchell was challenged by losing candidate, Fran Bailey. The AEC granted her additional votes in a recount, however this was overruled by a High Court decision upon appeal by the Labour. This is to say, recounts require mobilisation of an immense amount of resources, and is unlikely to occur at a large scale.

7 Discussion

Australian political parties who become incumbents tend to secure more support in a successive federal election. As expected, this advantage is much more subdued than in other mature democracies. I speculate that this is in part due to the strong partisan preferences of its voters. This study has also shown that, while there is a small overall advantage to incumbent parties in Australian lower house elections, this effect exists alongside a personal incumbency disadvantage or non-advantage for indi-

vidual candidates. The nil to negative effect for incumbent legislators is currently a mystery, but it offers additional insight on the strength of partisanship in Australia. Due to imbalances found on the forcing variable, I consider possible sources of pre and post-election manipulation in close elections and argue that these imbalances do not present insurmountable threats to causal estimation. In the main results, incumbent win rates were included in each RD specification for the unconvinced. Another unexpected discovery is that incumbency effects have not increased since the 1990s, a finding that is inconsistent with research theorizing that diminished party loyalties increase the magnitude of incumbency effects. Even so, this could be interpreted as a manifestation of Australia's enduring partisanship. The limited reduction in partisan preferences over time might be too trivial to observe changes in incumbency effects.

Estimating the overall impact of incumbency on electoral fortunes is a first step, but discriminating the various sources of an incumbent's advantage or disadvantage will be necessary to progress our understanding of political competition. Although I have made an initial attempt at doing so by disaggregating the advantage to incumbent parties from the personal advantage to legislators, there is more heterogeneity yet to be examined. Within overall incumbency effects, how much can be attributed to a financial advantage? A name recognition advantage? A deterrence effect?

The extensive attention paid to incumbency advantage speaks to the concern that democratic institutions are capable of generating considerable inequities in electoral competition between office-seekers. These advantages dictate the options available to voters, and have radical implications for the well-being of democratic governance. If elected officials become too insulated from and removed from re-election concerns, incumbency advantage compromises an electorate's ability to hold the officeholder accountable. These reasons have motivated, and continue to motivate, the study of incumbency. This paper takes a different perspective. By viewing incumbency as a product of not only the conduct of political actors, but also voter inclinations shaped by electoral rules, incumbency studies can offer much more by way of insights on the interaction of electoral institutions, partisanship, and incumbency.

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APPENDIX

8 First Preferences Descriptive Statistics

	n	mean	sd	median	min	max
First Preferences	15175	0.19	0.20	0.07	0.00	0.80
Incumbent	14206	0.17	0.38	0.00	0.00	1.00
Year	15177	1994	17.54	1998.00	1955	2019

Table 8: Descriptive Statistics for First Preferences Data

9 State Elections (2004-2018)

Table 9: State Elections

State	Elections
NSW	2011, 2015, 2019
Queensland	2004, 2009, 2012, 2015, 2017
Victoria	2014, 2018
Western Australia	2013, 2017
Southern Australia	2014, 2018
Northern Territory	2012, 2016

Table 10: List of state elections in the sample

	n	mean	sd	median	min	max
First Preferences	1031	0.38	0.12	0.39	0.01	0.70
ALP Vote Share	1047	0.49	0.13	0.50	0.15	0.81
Coalition Vote Share	990	0.50	0.13	0.50	0.09	0.85
ALP Win	1047	0.51	0.50	1.00	0.00	1.00
Coalition Win	990	0.49	0.50	0.00	0.00	1.00
ALP Victory Margin	1047	-0.01	0.25	0.01	-0.69	0.62
Coalition Victory Margin	990	0.01	0.26	-0.01	-0.62	0.69
ALP Incumbent	620	0.53	0.50	1.00	0.00	1.00
LNP Incumbent	582	0.47	0.50	0.00	0.00	1.00
Year	1047	2013	4.06	2015	2004	2019

Table 11: Descriptive Statistics for State Elections Data

10 Latent Group Classification of Candidates

$$G_i = \begin{cases} \textit{Always-takers}, & \text{if } [R_i(1), R_i(0)] = (1, 1) \\ \textit{Compliers}, & \text{if } [R_i(1), R_i(0)] = (1, 0) \\ \textit{Defiers}, & \text{if } [R_i(1), R_i(0)] = (0, 1) \\ \textit{Never-takers}, & \text{if } [R_i(1), R_i(0)] = (0, 0) \end{cases} \quad (8)$$

$R_i(1)$ and $R_i(0)$ represent potential outcomes for whether a candidate re-runs at time $t + 1$. A claim to causal identification of the personal incumbency effect using candidate-level data assumes that there are no defiers ($R(1)$ is strictly greater than $R(0)$).

11 Constructing the Personal Vote

This figure illustrates that in nearly all cases, the personal vote is a positive value since House votes are larger than Senate votes. I take the difference between a candidate's first preference vote and their party's Senate share to get the "personal vote" and use this value as an alternative outcome variable.

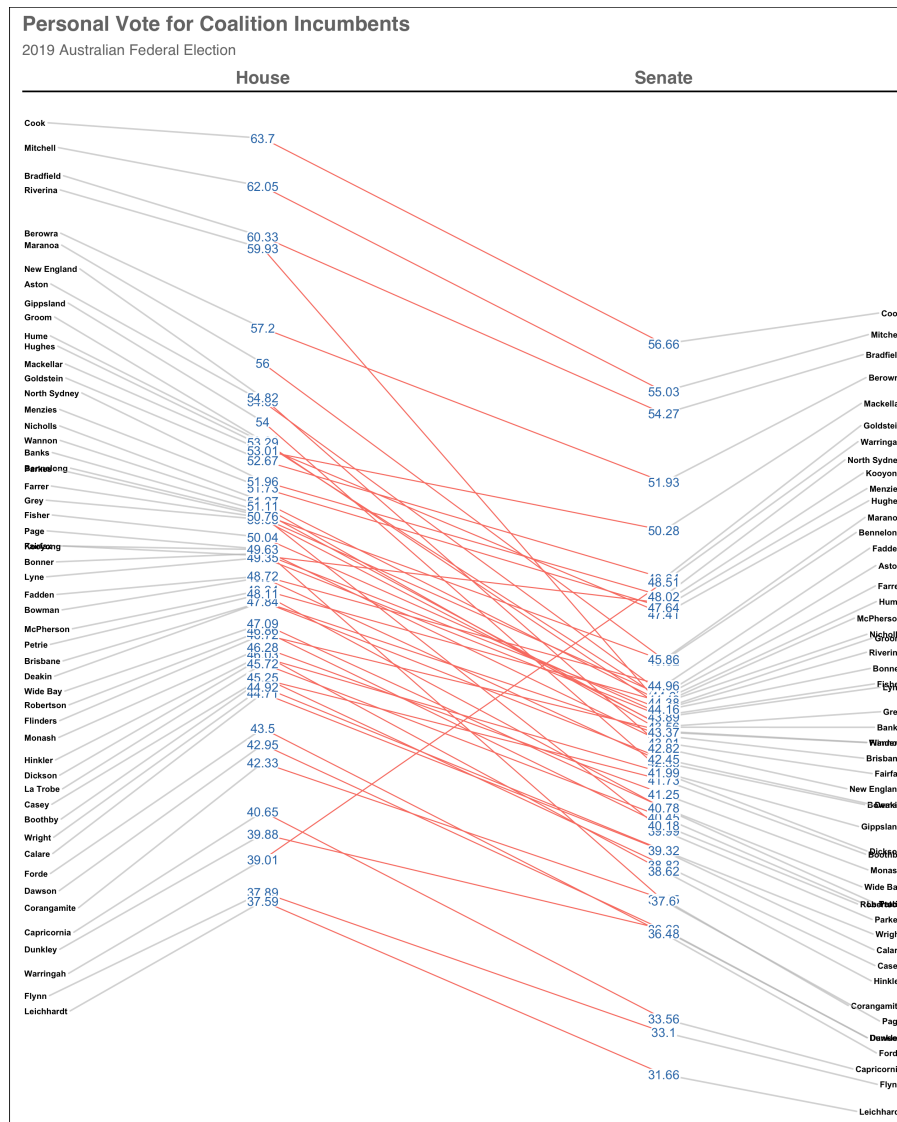


Figure 10: House and Senate First Preference Vote Shares in 2019

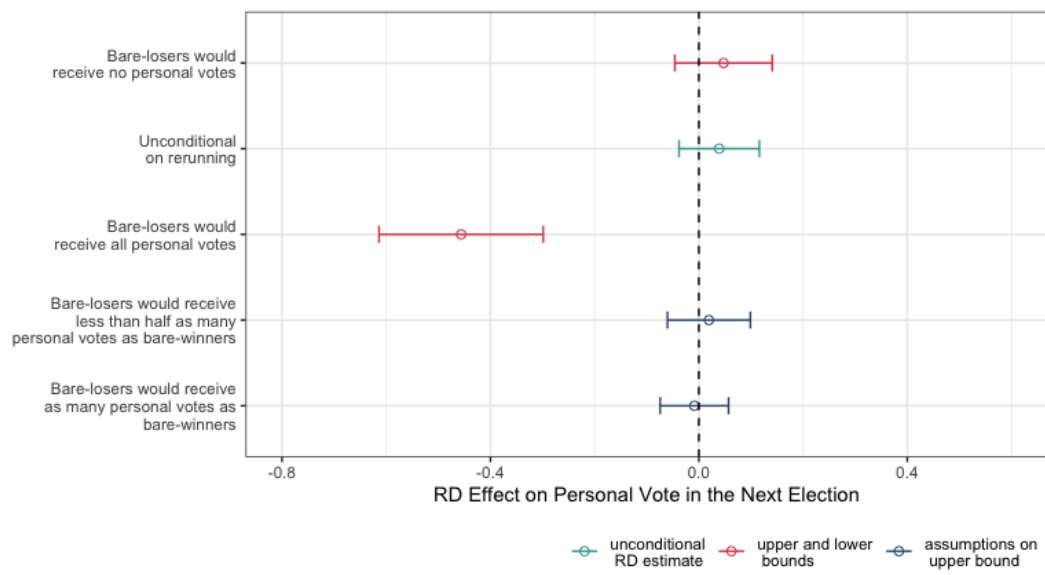


Figure 11: RD Effect on the Personal Vote in Federal Elections

12 Robustness with Additional Covariates

Table 12: RD Effect on First Preferences and Probability of Winning with Covariates

Party	RD Effect on First Pref.	Bandwidth [L; R]	Effective Num. Obs.	Covariates
ALP	0.046 [0.02; 0.07]	[0.06; 0.06]	(623, 536)	\oplus
Coalition	0.0482 [0.02; 0.07]	[0.07; 0.06]	(476, 542)	\oplus
ALP	0.0195 [0; 0.04]	[0.06; 0.06]	(561, 415)	\otimes
Coalition	0.0414 [0.02; 0.07]	[0.07; 0.05]	(397, 430)	\otimes
Party	RD Effect on TPP	Bandwidth [L; R]	Effective Num. Obs.	Covariates
ALP	0.0243 [0.01; 0.04]	[0.06; 0.06]	(604, 517)	\oplus
Coalition	0.0311 [0.02; 0.05]	[0.07; 0.04]	(468, 416)	\oplus
ALP	0.0175 [0; 0.03]	[0.05; 0.06]	(496, 415)	\otimes
Coalition	0.0215 [0.01; 0.04]	[0.07; 0.04]	(415, 375)	\otimes
Party	RD Effect on Pr(Win)	Bandwidth [L; R]	Effective Num. Obs.	Covariates
ALP	0.2234 [0.11; 0.34]	[0.07; 0.07]	(722, 546)	\oplus
Coalition	0.2803 [0.15; 0.41]	[0.08; 0.07]	(565, 652)	\oplus
ALP	0.1856 [0.07; 0.3]	[0.07; 0.08]	(621, 508)	\otimes
Coalition	0.1981 [0.07; 0.32]	[0.09; 0.07]	(500, 554)	\otimes

Num. Candidates in Division = \oplus . Decade + State Dummies = \otimes

Brackets below RD coefficients represent 95% confidence intervals.

13 Incumbency Advantage Over Time

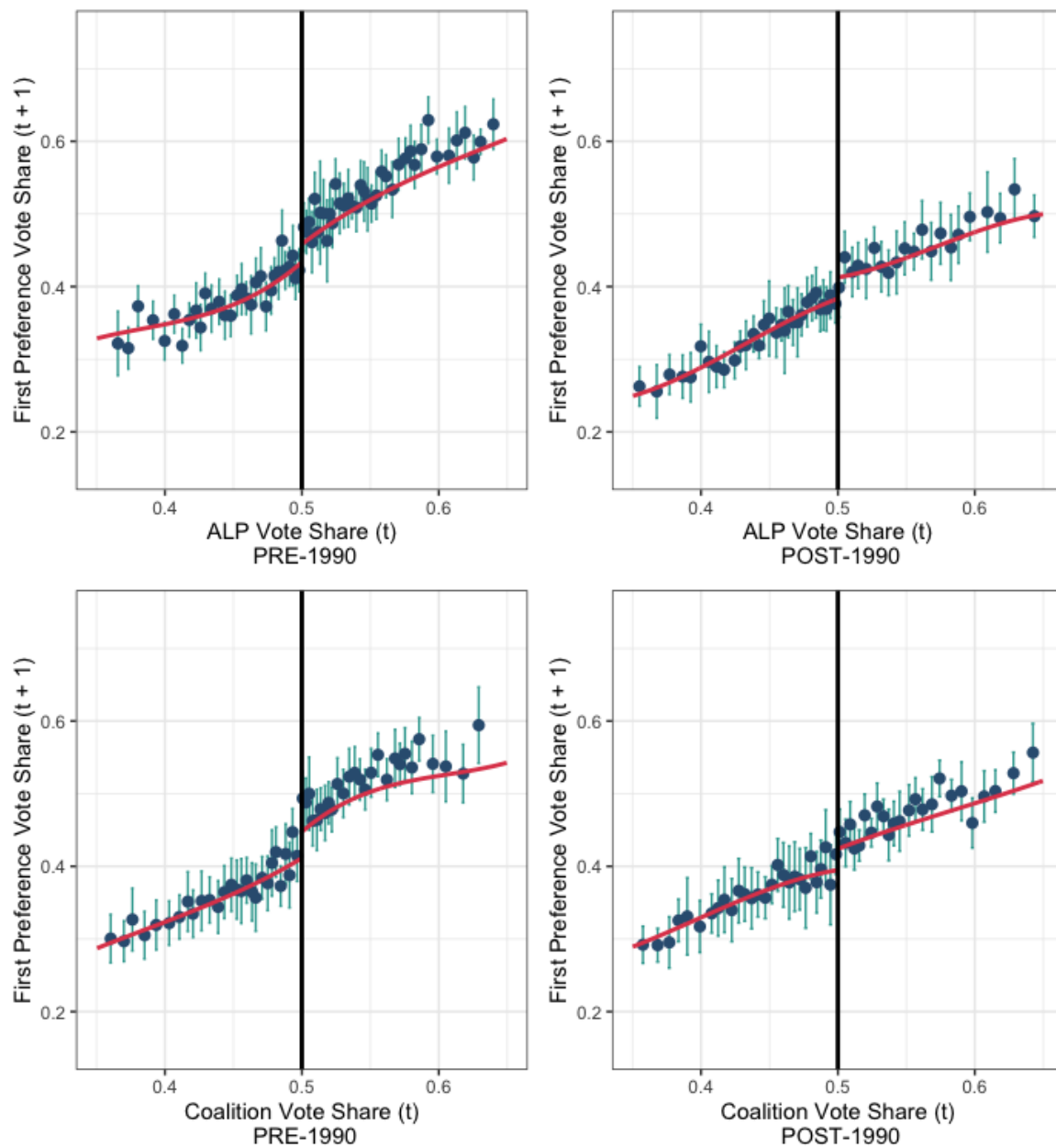


Figure 12: Incumbency Effects Before and After 1990

Incumbent party advantages exist in both periods and there is no significant increase in effect magnitude since 1990.

14 Probability of Rerunning

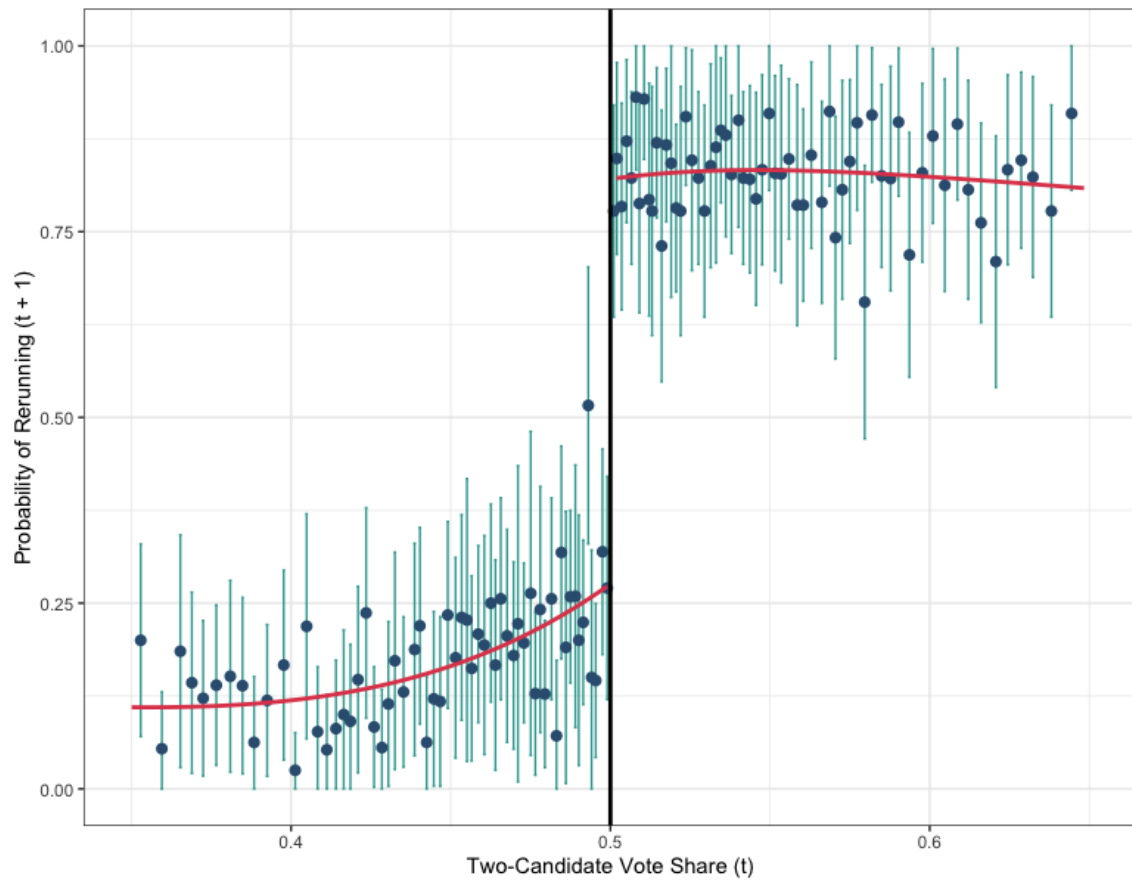


Figure 13: Candidate's Probability of Rerunning in Next Election

15 Sensitivity of RD Model Specifications

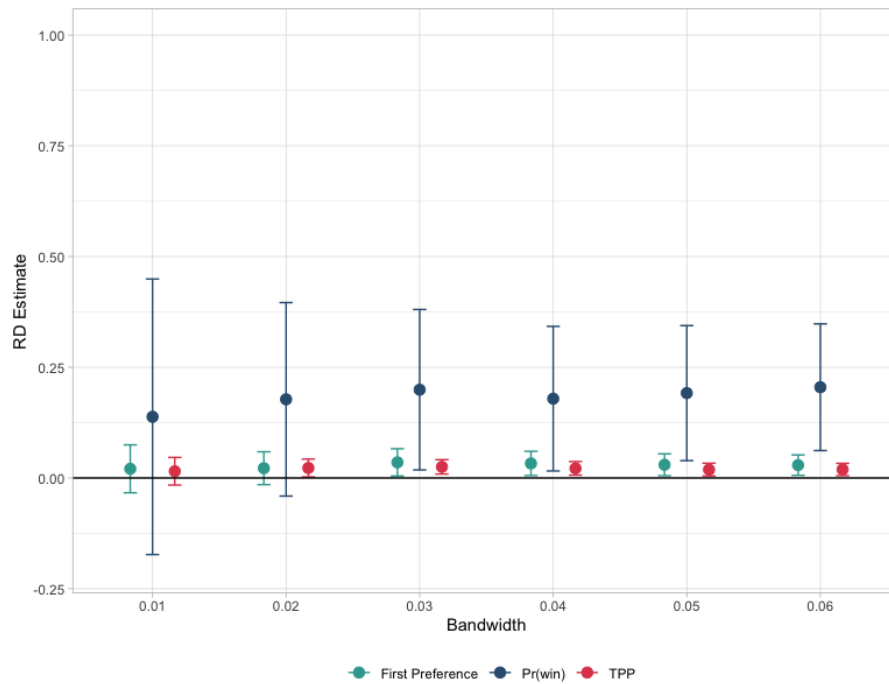


Figure 14: Labor Party's Overall Incumbency Effect with Different Bandwidths

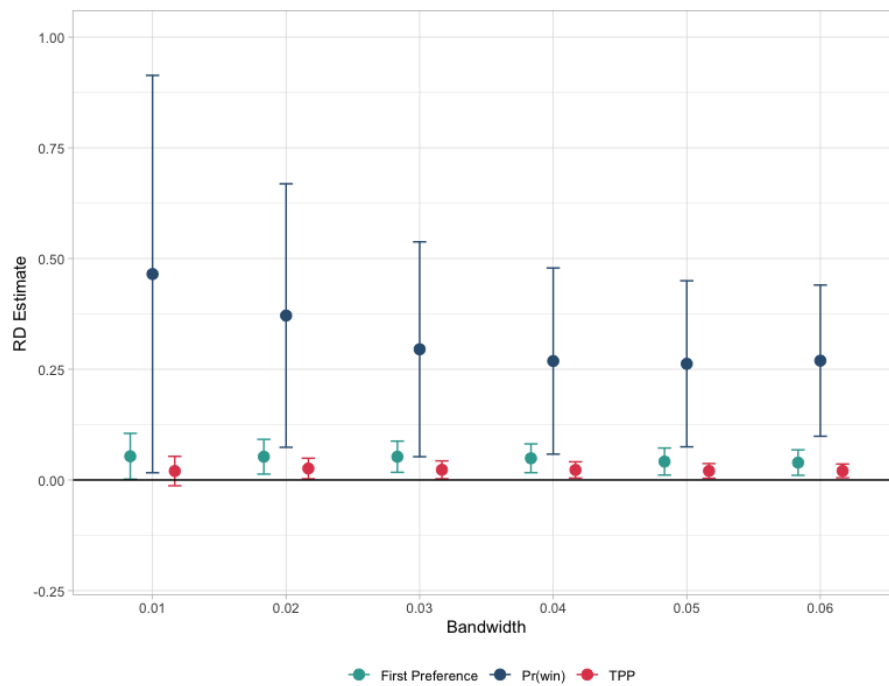


Figure 15: Coalition's Overall Incumbency Effect with Different Bandwidths

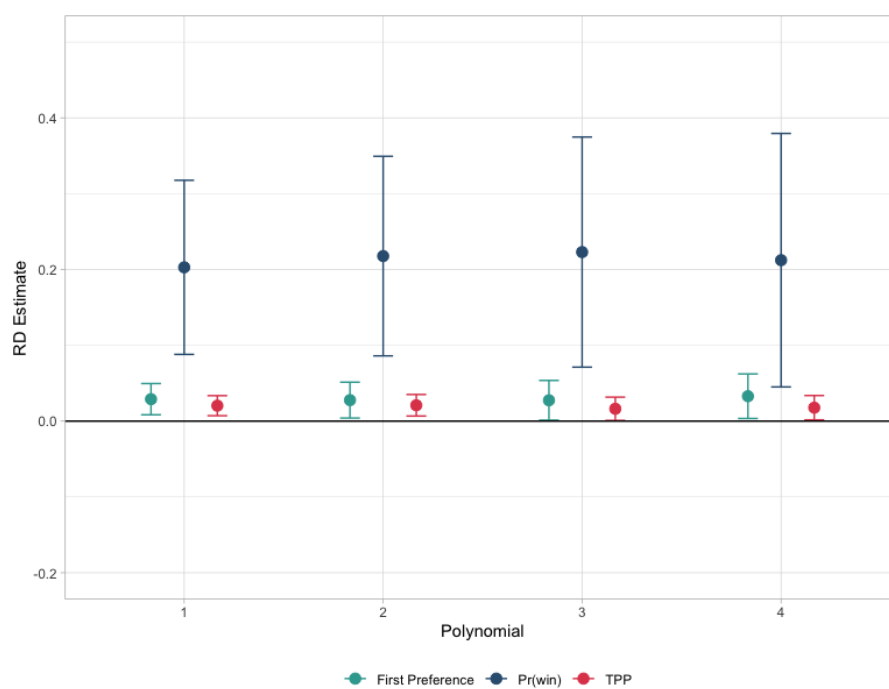


Figure 16: Labor Party's Overall Incumbency Effect with Higher Order Polynomials

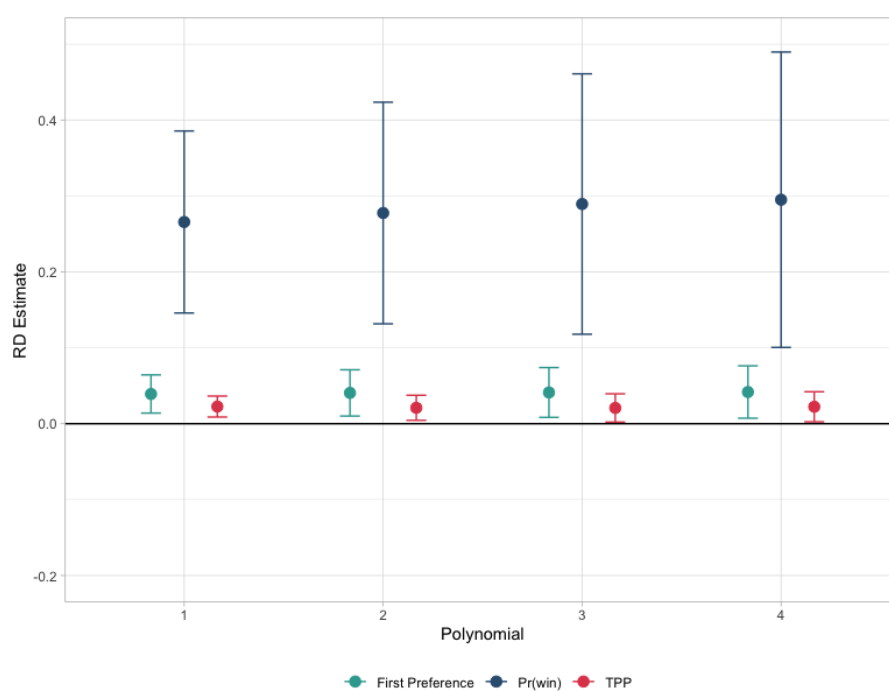


Figure 17: Coalition's Overall Incumbency Effect with Higher Order Polynomials

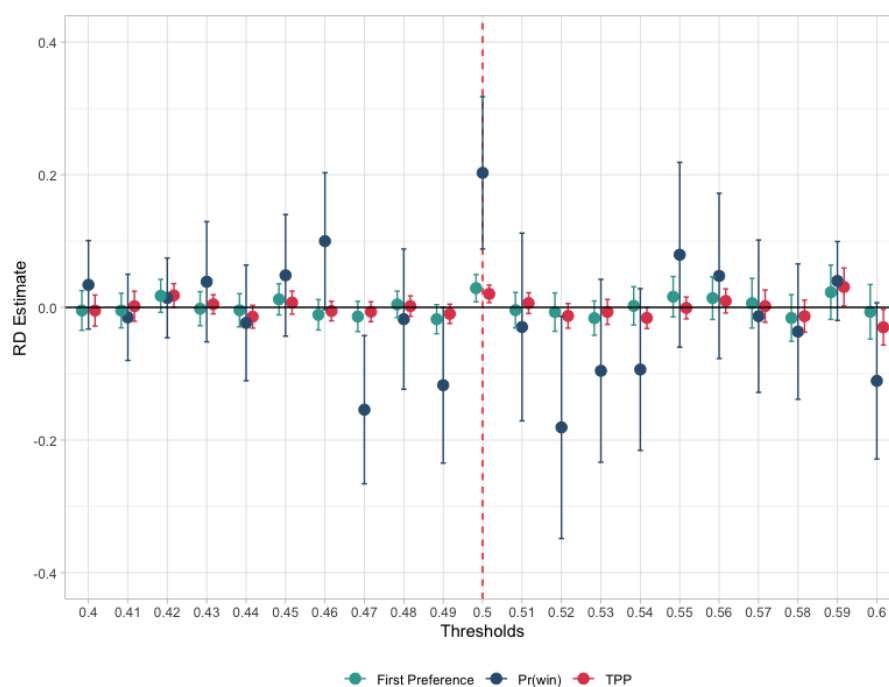


Figure 18: Labor Party's Overall Incumbency Effect at Various Thresholds

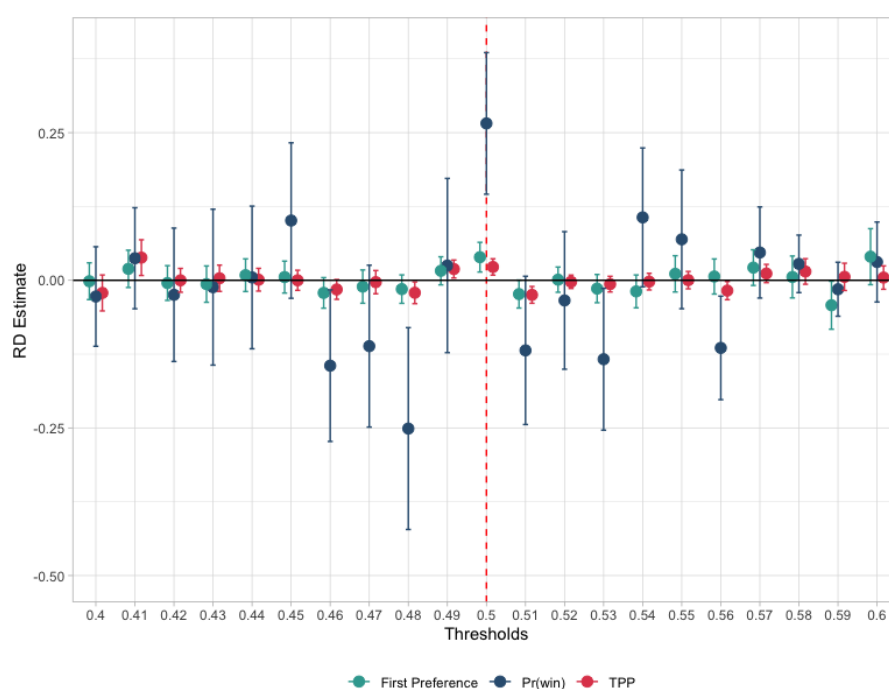


Figure 19: Coalition's Overall Incumbency Effect at Various Thresholds

16 Multilevel Regression Post-Stratification for Division-level Partisanship Estimates

A multilevel Regression and Post-stratification model is used to estimate political ideology in each electoral division. A post-stratification frame is constructed using the joint distribution of division, age group, education level, marital state, and household income from the 2016 Australian census. Auxiliary variables for % indigenous population and population density by division are also included.

As it stands, one limitation of this approach is its inability to capture dynamic processes of division-level ideology scores because one census round is used to map estimates.

17 A Model of Pre-electoral Manipulation in Australia

To better understand the sorting problem, I simulate the level of precision and control parties need for sorting to be plausible in close elections. This is in line with the strategy of Eggers et al. (2015, Appendix C) where they simulate the following model:

$$Y = \delta + \gamma + (\kappa \times S) \quad (9)$$

Where Y is an incumbent's vote share in $t + 1$, δ represents a signal about their chance of winning in an upcoming election (i.e., via polls), γ captures the error of this signal, κ is the effect of extra effort (what the authors call a “secret weapon,” such as additional financing) exerted by a party anticipating a close race, which is activated by the binary indicator, $S \in \{0, 1\}$. An actor's decision to mobilize this “secret weapon” is a function of the perceived effect of deploying and not deploying it (difference in probability with and without κ) on the probability of winning as well as the cost of doing so (α). That is,

$$S \equiv \mathbb{1}\left\{\Phi\left(\frac{\kappa + \delta - 0.5}{\epsilon}\right) - \Phi\left(\frac{\delta - 0.5}{\epsilon}\right) > \alpha\right\}$$

The signal is modelled with parameter values that are taken from the incumbent's vote share distribution in Australia, $\delta \sim \mathcal{N}(\mu = 0.58, \sigma = 0.067)$. The error is assumed to be centered at 0, $\gamma \sim \mathcal{N}(0, \epsilon)$. To find the degree of signal precision (ϵ) necessary to produce an imbalance for incumbent parties observed in the data, Eggers et al. look for the largest value of ϵ given various values of α and κ . In Australia, the incumbent party in $t - 1$ wins 2.73 times more often than they lose.³⁸ In my simulation, I find the maximum signal error necessary to produce an imbalance of 2.73 or greater is 0.0011.³⁹ In other words, the largest possible value of ϵ that can produce the same level of im-

³⁸In the window ± 0.025 , there are only 41 observations in the TPP data. The incumbent party fell within $(0, 0.025]$ 30 times and fell in $[-0.025, 0)$ 11 times. Thus, the imbalance is $30:11 = 2.73$. I should test the imbalance for different window sizes. It also looks like I only looked at the imbalance at the party-level.

³⁹Details and script to run simulation are [here](#).

balance in Australian Lower House elections is 0.0011 (0.11 percentage points). This implies that for pre-election strategic behaviour to produce the observed imbalance, parties would have to predict their expected vote shares *at most* within 0.11 percentage points, on average.

Figure 20 plots levels of imbalance against simulated values of absolute error (γ in equation (9)). It illustrates that when the error is low (precision of estimated vote share is high), the imbalance is greater. Intuitively, we expect that the ability to anticipate vote shares with a high degree of precision would allow incumbents to organize additional resources for these races that plausibly generates greater asymmetry in close margin elections.

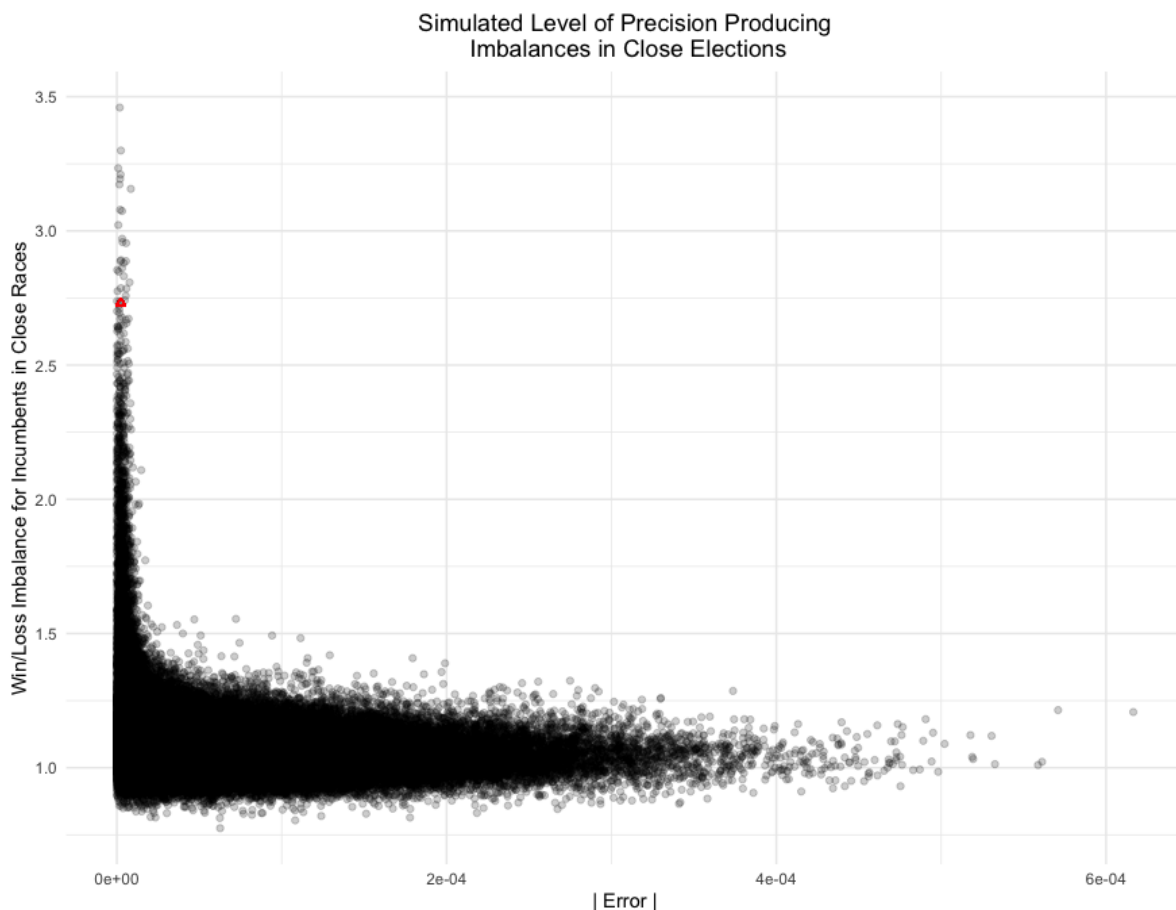


Figure 20: Incumbent vote share imbalances in close elections.