The Advantages and Disadvantages of Incumbency

Theory and Evidence from
British Elections, 1832-2001

Andrew C. Eggers†  Arthur Spirling‡

Abstract

The electoral advantages of incumbency have been shown extensively in the U.S. and, increasingly, in other developed democracies as well. Surprisingly, recent research indicates that incumbency is a disadvantage in some developing democracies, but explanations for this phenomenon are only beginning to emerge. We offer a theory of incumbency disadvantage that focuses on candidate characteristics and candidate selection. If the pool of candidates is the same from one election to the next, then in general narrowly-elected incumbents should be similar not only to the candidates they defeated to win office but also to the challengers against whom they defend their seats. Incumbency disadvantage arises naturally, however, if the candidate pool becomes more electorally appealing from one election to the next. We highlight a number of conditions under which this can happen and argue that these conditions are especially likely to be met in developing democracies. We provide evidence consistent with this idea from the U.K., where we show incumbency disadvantage in the 19th century. Our account suggests that incumbency disadvantage may not be due to corruption or voter discontent (as others have claimed) but rather emerges from the personalistic and dynamic nature of competition in developing countries.

†London School of Economics and Political Science. email: a.c.eggers@lse.ac.uk
‡Department of Government and Institute for Quantitative Social Science, Harvard University. email: aspirling@gov.harvard.edu

---

1First version: June, 2013. This version: April 1, 2014. We thank seminar audiences at Harvard University.
One of the most striking discoveries in recent comparative electoral research is that incumbent candidates and parties face a systematic electoral disadvantage in several developing democracies. That is, in India (Linden, 2004; Uppal, 2009; Aidt, Golden and Tiwari, 2011), Brazil (Klašnja and Titiunik, 2013), Zambia (MacDonald, 2013), and Eastern Europe (Roberts, 2008) researchers have found evidence that incumbents do poorly because they are incumbents. These findings are particularly surprising in light of numerous studies showing incumbency advantages in the United States (e.g. Erikson, 1971; Gelman and King, 1990; Cox and Katz, 1996; Lee, 2008) and other developed countries (Katz and King, 1999; Hainmueller and Kern, 2008; Horiuchi and Leigh, 2009; Ariga, 2010; Kendall and Rekkas, 2012).

Political scientists are only beginning to explain the phenomenon of incumbency disadvantage. At this early stage many open questions remain, including methodological issues about the comparability of estimates from different studies (De Magalhaes, 2013). What unites the emerging explanations of incumbency disadvantage is that they all view the phenomenon as a symptom of serious democratic shortcomings. Incumbency disadvantage has been viewed as the result of pervasive voter discontent (Roberts, 2008; Uppal, 2009), widespread corruption (Klašnja, 2013), and violent electioneering tactics (Aidt, Golden and Tiwari, 2011). (By comparison, the problems associated with incumbency advantage, such as slight insulation from electoral accountability, seem mild.) While both incumbency advantage and incumbency disadvantage seem to give politicians bad incentives, incumbency disadvantage seems to reflect an exasperation with politics or the political class that casts in doubt the effectiveness and durability of democracy (Svolik, 2013).

In this paper, we offer a framework for thinking about incumbency effects that suggests very different normative implications of incumbency disadvantage. We start from the observation that when an incumbent and a challenger face each other in an electoral contest, they may differ in two principal ways: officeholding (i.e. the incumbent holds the office while the challenger does not) and
quality (i.e. the incumbent may be more or less appealing than the challenger). Previous scholars have used both channels to explain incumbency advantage: incumbents may disproportionately succeed both because officeholding gives them resources and visibility and because they are more appealing than challengers on average. Prior efforts to explain incumbency disadvantage have acknowledged that in some circumstances officeholding may hinder incumbents (because, for example, voters are dissatisfied with government), but they have not considered the possibility that incumbents could be less appealing than challengers on average. We highlight a number of scenarios in which narrowly-elected incumbents could in fact have lower quality than the challengers they face, and we argue that these scenarios are particularly likely in developing countries.

Our approach to candidate selection blends insights from theoretical and empirical work on incumbency effects. Prior theoretical work (see Ashworth and Bueno De Mesquita, 2008, on the “quality difference” model) had reasoned that incumbents may disproportionately win at a given point in time because (by definition) they have won in the past, and thus they are likely to be intrinsically electorally attractive. While this is true of incumbents on average, differences between the average incumbent and the average challenger are not relevant for empirical work on incumbency effects, which tends to focus rather on the marginal incumbent. When we estimate incumbency effects via regression discontinuity design (RDD), for example, we focus on cases where the incumbent attained office in an election that was so close that in expectation the winner and loser were equally strong. To be sure, while RDD ensures that the marginal incumbent and her prior opponent are equally strong on average, it does not ensure that the marginal incumbent and her subsequent opponent are equally strong. Marginal incumbents could of course be stronger than their challengers, for example if there is a strong “scare-off” effect (Cox and Katz, 1996; Levitt and Wolfram, 1997), and this would contribute to incumbency advantage. What has not been recognized is that marginal incumbents may well be weaker than their challengers, for example if candidate selection is evolving along with voter preferences; this would contribute to incumbency advantage.
disadvantage. By reconsidering the role of candidate selection in light of empirical approaches to estimating incumbency effects, we shift attention away from the question of how winners and losers differ and toward the question of how the quality of candidates changes over time. Viewed in this way, findings of incumbency disadvantage become much less puzzling.

We offer illustrative evidence of the utility of this framework from the history of parliamentary elections in Britain. We assemble for the first time a detailed candidate-level database of electoral results going back to 1803, and we show (using regression discontinuity methods adapted for a multimember plurality context) that while party incumbency has been an advantage since the middle of the 20th century, it appears to have been a disadvantage during much of the 19th century. This is a remarkable finding on its own, in part because it suggests that incumbency disadvantage may not be a permanent feature of politics in the countries where it has recently been found. The finding of incumbency disadvantage in 19th century Britain makes sense within our framework: this was a period in which candidate characteristics were important to voters (Cox, 1987) and party institutions (including candidate selection processes) were struggling to keep up with franchise extensions, electoral reforms, and ongoing industrialization. To highlight the role of candidate selection in producing incumbency disadvantage, we focus on the prevalence of aristocratic titles among incumbent MPs: we show that when a party narrowly won an election it was more likely to put forward a candidate with a title in the next election; to the extent that aristocratic MPs were increasingly undesirable in the mass franchise period, this suggests a candidate selection-based disadvantage for incumbent parties. This example illuminates our broader point about candidate selection: when the electorate’s preferences over candidate types are changing, and candidate selection tends to change along with it, the incumbent party is more likely to be stuck with “yesterday’s model”, a disadvantage that will tend to counteract or even overwhelm any benefits officeholding.
1 Orientation

Scholars have offered many explanations for the phenomenon of incumbency advantage.\textsuperscript{2} Surveying the empirical and theoretical literature on incumbency effects, we can discern four distinct explanations. In an \textit{incumbent selection} account (formalized by Ashworth and Bueno De Mesquita, 2008), incumbents tend to defeat challengers for the same reason they are incumbents: they have high quality, which is why they won in the past. In a \textit{signaling} account (formalized by Caselli et al., 2013), incumbents tend to defeat challengers because incumbents have more extensive opportunities to signal their type to voters.\textsuperscript{3} In a \textit{seniority} account (formalized by Muthoo and Shepsle, 2014, building on McKelvey and Riezman (1992)), incumbents tend to defeat challengers because more experienced legislators are better equipped to provide benefits to the district;\textsuperscript{4} voters are thus rationally hesitant to replace an incumbent with an inexperienced newcomer. The fourth explanation (which we refer to as \textit{resources}) is that the powers and perquisites of office effectively act as campaign subsidies: incumbents receive free media attention and official budgets that they can use to build familiarity and support among the electorate; they also acquire a degree of power and influence that they can sell to support their electoral campaigns (Hall and Fouirnaies, 2014; Ashworth, 2006).\textsuperscript{5}

\textsuperscript{2}Incumbency effects have been conceived and measured in various ways in different settings. In this paper, we focus on incumbency effects as studied in the tradition of Erikson (1971); Gelman and King (1990); Lee (2008) – the district-level electoral advantage to a candidate or party of running as the incumbent rather than the challenger. This approach can be contrasted with other approaches that may reveal something about voter attitudes toward government, such as studying whether a given candidate does better or worse when his party is in power, or studying whether a party tends to do worse when it is in government.

\textsuperscript{3}Rational voters set a re-election hurdle that is difficult for low-quality incumbents to clear, but average-quality incumbents exert extra effort to clear it, which produces incumbency advantage even if incumbents and challengers are drawn from the same quality distribution.

\textsuperscript{4}In Muthoo and Shepsle (2014) this is because of an institutionalized seniority system; in Dick and Lott Jr (1993) it is because legislators simply get better at politics with experience.

\textsuperscript{5}In contrast to the above three explanations, the \textit{resources} explanation has not been specifically formalized in a model with rational voters; the literature on incumbency advantage has instead mostly assumed that voters are swayed by exposure to candidate messages. Ashworth (2006) offers a model of informative advertising with rational voters in which the ability of incumbents to raise money more cheaply adds to the incumbency advantage, but this mechanism presupposes an existing incumbency advantage (which is what allows incumbents to raise money more cheaply).
Along with these four explanations, scholars have explored a complementary explanation that we refer to as *challenger selection* (more commonly known as “scare-off”). The idea is that if incumbents have an electoral advantage over challengers (for any of the reasons above), this advantage may discourage strong candidates from challenging them, which tends to make the overall advantage larger. This account makes sense if stronger challengers tend to have higher opportunity costs of running for office, for example because they have higher private-sector salaries or more attractive political posts (Cox and Katz, 1996; Levitt and Wolfram, 1997).

Scholars have so far made very little progress in explaining incumbency disadvantage, in part because the findings are relatively new and in part because the literature on incumbency effects gives few clues as to how officeholding could be a liability. The explanation in Uppal (2009) is that voters are simply discontented with government performance; he shows that incumbents are more disadvantaged in states that provide fewer public goods. The idea that incumbency disadvantage is the result of dissatisfied voters tends to resonate with research portraying voters in many developing countries as disaffected and disillusioned with their political leaders, readily changing allegiances from one party to another (e.g. Mainwaring and Torcal, 2006). Although it may seem obvious that unhappy voters would want to “throw the bums out”, this account deserves scrutiny. It is clear why voters would throw out one incumbent who fails to meet expectations. But if voters consistently punish incumbents, it suggests that the new “bums” also fail to live up to expectations. Why would rational voters maintain expectations that incumbents *consistently* fail to meet? Two possible explanations emerge. One is that voters’ consistent anti-incumbent bias may not in fact be rationalizable: they are unhappy with government, so they feel repulsion at the idea of voting for the incumbent. This may well be the case, but it would certainly be inconsistent for political scientists to attribute incumbency disadvantage in developing countries to the discontent of irrational voters, given that no one seems prepared to attribute incumbency advantage in developed countries
to the complacency of irrational voters. A second explanation is that incumbency disadvantage may occur in one stage of a process of voter learning in which voters initially reject incumbents before eventually learning that challengers are just as bad.

The only formal account of incumbency disadvantage of which we are aware is an unpublished paper by Klašnja (2013). That paper effectively reverses the seniority explanation of incumbency advantage mentioned above: if experience in office makes politicians more effective at stealing (rather than providing local public goods, as in the conventional account), then voters quite reasonably will tend to favor an inexperienced challenger over an incumbent. In principle, one could similarly flip the resources explanation of incumbency disadvantage to explain incumbency disadvantage: in some settings it may be that incumbents actually have fewer electorally-valuable resources than challengers, for example because incumbents are required to physically be in the capital (while the challenger can be present in the constituency) or because public scrutiny makes it more difficult for incumbents to raise illegal campaign funds. By contrast, we see no way in which the incumbent selection and signaling explanations of incumbency advantage could be altered to produce incumbency disadvantage. As mentioned above and shown below, we find the incumbent selection account unhelpful in relation to recent empirical work on incumbency effects, which typically focuses on the marginal incumbent rather than the average incumbent. Any signaling-based account of incumbency disadvantage faces the challenge that incumbents typically have more opportunities to signal their type.

---

6 Eggers (2014) explores the idea that incumbency effects could arise from a (perceived) skewed distribution of candidate types, which could be interpreted in terms of hopefulness or pessimism.

7 This logic has been used by Meirowitz and Tucker (2013) to explain the dynamics of regime change, but the mechanism could apply just as well to elections.

8 In Klašnja (2013)’s political agency model, the opportunity to steal increases with tenure in office; the opportunity for greater rents in the future induces some “bad” incumbents to refrain from stealing in the first period, which (in equilibrium) reduces the probability of re-election and can thus lead to incumbency disadvantage even when most politicians are “good”.

9 Intriguingly, in Caselli et al. (2013)’s framework, if voters could commit to the ex ante optimal re-election threshold (e.g. by using supermajority rule) there could be incumbency disadvantage. (This point is made in footnote 29 of Caselli et al. (2013).) This probably does not explain incumbency disadvantage, but it offers a reason to think that an anti-incumbent bias may help voters by inducing incumbents to reveal more information about their type.
This paper makes two main contributions with respect to this theoretical background. First, it casts doubt on the incumbent selection account of incumbency effects: as we show in the next section, when we condition on prior electoral outcomes (as is standard in all empirical approaches to incumbency effects), it is no longer the case that incumbents are necessarily stronger than challengers. Second, it advances challenger selection as an important explanation of incumbency advantage and (especially) disadvantage. As noted above, challenger selection (as “scare-off”) has played a secondary role in existing accounts of incumbency advantage: scare-off can only exist if incumbents are already advantaged for some other reason. We take a broader view of challenger selection, arguing that it can produce differences between incumbents and challengers even in the absence of any other incumbency advantages or disadvantages, and that these differences could be particularly useful in explaining incumbency disadvantages in developing democracies.

2 Theoretical Framework

Consider a sequence of elections, one at time $t = 1$ and one at time $t = 2$. (See the schematic in Figure 1.) In the election at time 1 the seat is “open”, meaning that neither candidate is the incumbent. Two candidates emerge to contest the seat; each candidate has an associated type $\theta$ that is drawn from the distribution $g_1(\theta)$. In the second period the winner of the first election is assumed to run for re-election and a challenger emerges with $\theta \sim g_2(\theta)$.

We model the outcome of elections as depending on two factors: candidate type and officeholding. To make the analysis as parsimonious as possible, we think of these factors as directly affecting overall vote share: candidates of a higher type are simply better able to attract electoral support, perhaps because they are more charismatic or more skilled campaigners, and officeholding similarly
Figure 1: Schematic showing pair of elections and distribution of candidate characteristics

Period 1
(open seat)

First election
\[ \theta \sim g_1(\theta) \]

Period 2
(winner vs. challenger)

(If narrowly elected:)
\[ \theta \sim g_1(\theta)^2 \]

Second election
\[ \theta \sim g_2(\theta) \]

Note: In the first period two new candidates emerge, with each candidate’s \( \theta \) drawn from \( g_1(\theta) \); in the second period, the narrow winner defends his seat against a new candidate with \( \theta \) drawn from \( g_2(\theta) \). The distribution of candidate characteristics among close winners is derived in Section 2.2.

may confer resources that incumbents can use to attract support in a campaign.\(^{10}\) In each election, the vote share of candidate \( i \) is

\[
v_i = \frac{1}{2} + \alpha(\theta_i - \theta_j) + \beta(I_i - I_j)
\]

where \( \theta_i \) and \( \theta_j \) measure the types of \( i \) and \( j \) and \( I_i \) and \( I_j \) are indicators that take the value 1 if a given candidate is the incumbent and 0 otherwise. The parameter \( \alpha > 0 \) thus captures the electoral value of type advantages while the parameter \( \beta \) captures the electoral value of officeholding. In principle \( \beta \) could be either positive or negative, meaning that officeholding \textit{per se} could be an advantage or disadvantage.

\(^{10}\)We could alternatively frame our analysis of selection in terms of a voter’s signal extraction problem, as in Ashworth and Bueno De Mesquita (2008), but the main ideas emerge more simply from this approach.
2.1 Estimand

We focus on (two-party) incumbency advantage as measured by RDD methods:

$$\tau = \lim_{\epsilon \to 0} E\left[v_{i2} | v_{i1} = \frac{1}{2} + \epsilon\right] - E\left[v_{i2} | v_{i1} = \frac{1}{2} - \epsilon\right],$$

(1)
i.e. the difference in a party’s vote share at time $t + 1$ when it narrowly wins the seat at time $t$ and when it narrowly loses the seat at time $t$. In practice, researchers estimate this object (sometimes called “party incumbency advantage” to distinguish it from measures that focus on individual incumbency) using RDD methods that separately model the relationship between $v_{i2}$ and $v_{i1}$ for winners and losers; most simply, researchers would restrict analysis to cases where $v_{i2}$ was “close” to 1/2 and regress $v_{i2}$ on $v_{i1}$, an indicator for whether $v_{i1}$ is greater than 1/2, and the interaction between the two (Imbens and Lemieux, 2008).

We can easily characterize this estimand in terms of model parameters. The RDD estimate of incumbency effects in the model can be expressed as

$$\tau = 2 \times \left(\beta + \alpha \left( E[\theta_{i2}|v_{i1} = \frac{1}{2} + \epsilon] - E[\theta_{i2}|v_{i1} = \frac{1}{2} - \epsilon]\right)\right)$$

(2)

Equation 2 highlights the fact that incumbency effects in the model depend on the value of officeholding ($\beta$) but also on the electoral value of type ($\alpha$) as well as the expected type difference between marginal incumbents and challengers.

---

11In the case of this model, where all incumbents run for re-election, the approach of Gelman and King (1990) will yield a very similar result because it also conditions on first-period vote share. If $v2$ has the same slope (with respect to $v1$) for winners and losers, and the slope is fairly constant even as we move away from the threshold separating winners and losers, then the estimands in this context are identical.
2.2 Are winners of narrow elections better than the average candidate?

Given that higher types do better electorally, winners will have higher values of $\theta$ than losers on average. Ashworth and Bueno De Mesquita (2008) argue that this fact could explain the electoral advantages of incumbency: voters favor incumbents because incumbents are more appealing (which is why they previously won). In practice, however, empirical researchers use RDD or methods like Gelman and King (1990) that condition on an incumbent’s prior electoral result, which means that (implicitly or explicitly) they are comparing winners and losers who were in close elections. Narrowly-elected winners will not generally be stronger than the average candidate. Given a distribution of candidate types $g_1(\theta)$, the distribution of candidate types in close races (those in which the vote share of the winner is $1/2$) will be proportional to $g_1(\theta)^2$:

$$p(\theta_i | v_i = 1/2) \propto p(v_i = 1/2 | \theta_i) g_1(\theta_i)$$

$$= p(\theta_i = \theta_j | \theta_i) g_1(\theta_i)$$

$$= g_1(\theta_i) g_1(\theta_i)$$

(3)

(The last line follows from the assumption that $\theta_i$ and $\theta_j$ are identically and independently distributed.) Given a symmetric density of candidate types, the expected type of a narrow winner is thus the same as the expected type of the average candidate.\textsuperscript{12}

If the average narrowly successful candidate in the first-period election is the same as the average candidate in that election, then any type differences in Equation 2 that contribute to incumbency effects must come from differences between the pool of candidates who contest the first-period election and the pool of candidates who challenge the incumbent in the second-period election (i.e. differences between $g_1(\theta)$ and $g_2(\theta)$). That is, in this model incumbency effects can only result

\textsuperscript{12}Eggers (2014) shows that if the distribution of candidates types is not symmetric the average narrow winner is either better or worse than the average candidate, which could produce either incumbency advantage or disadvantage.
from officeholding effects and type differences between marginal incumbents and challengers (as shown in Equation 2), and type differences between marginal incumbents and challengers can only result from type differences between the candidates who emerge in open-seat races and those who challenge incumbents.

2.3 Reasons for changes in candidate selection

The literature on incumbency advantage in the U.S. has focused on just one reason why the candidates who emerge to fight an open-seat race may be different from those who emerge to challenge an incumbent. The common claim has been that strong potential challengers have higher opportunity costs of running for office than weak potential challengers; when officeholding is beneficial (and thus defeating an incumbent is more difficult than winning an open-seat race), candidates who emerge in open-seat races should be stronger on average. This is known as the “scare-off effect”.\textsuperscript{13} In this section we catalogue a number of other possible reasons for changes in candidate selection, many of which could result in (or amplify) incumbency disadvantage.

First and most simply, a phenomenon mirroring “scare-off” could result in stronger candidates emerging to challenge incumbents. If officeholding is a liability rather than an advantage (for example because the officeholder is able to spend less time in the constituency), then the same process that produces scare-off should produce its opposite, with strong challengers preferring to run against an incumbent than in an open-seat contest. This phenomenon (which might be called “reverse scare-off”) could therefore amplify officeholding disadvantages in the same way the “scare-off” effect is thought to amplify officeholding advantages.

“Scare-off” and “reverse scare-off” are predicated on the existence of officeholding advantages

\textsuperscript{13}Hall and Snyder (2013) find that a small part of the overall party incumbency advantage in the U.S. is due to the scare-off effect, where quality is measured based on prior officeholding.
or disadvantages (i.e. $\beta \neq 0$), but other sources of type differences between incumbents and challengers can arise independent of the electoral value of officeholding *per se*. Most simply, the pool of potential candidates could become stronger or weaker from one election to the next, due perhaps to changes in the relative desirability of a political career or broader improvements in education. Or, conditional on the quality of potential candidates, there may be changes in the selection of candidates, such that better and better candidates are chosen from one election to the next. This improvement might result from the development of intra-party institutions for selecting candidates, which is viewed as an important aspect of the consolidation of parties in a democracy (Sartori, 2005).

One important reason for changes in candidate selection is that the electorate’s tastes may evolve and fluctuate. For example, in times of economic trouble voters may prefer candidates with business experience; in times of war they may prefer candidates with military experience. (In the model, these changes can be thought of as changes in the value of $\alpha$, given a fixed characteristic such as business experience.) When such changes happen, the non-incumbent party may be able to produce a more appealing candidate on average, for two distinct reasons. First, when a given attribute is more valued by the electorate, candidates who possess that attribute would be more likely to assume the costs of putting themselves forward as candidates; the supply of potential candidates is thus likely to track changes in voter tastes. Second, given a pool of potential candidates, a selectorate that cares about winning (and possibly other goals such as leisure or rents) is more likely to select a candidate if that candidate’s attributes are currently valued by the electorate; the selection process is thus also likely to track changes in voter tastes.

By the same logic we may expect changes in the technology of campaigning to produce changes in the characteristics of candidates. Suppose $\theta$ measures the candidate’s physical attractiveness; if televised debates are introduced, we might expect the value of $\alpha$ to rise (meaning that attractive-
ness is more consequential for electoral outcomes). For the same reasons noted in the previous paragraph, this may lead to an increase in the attractiveness of the average candidate from one election to the next and thus incumbency disadvantage.

3 Challenger selection, political development, and incumbency disadvantage

We view the foregoing analysis as useful for thinking about why incumbents may be less advantaged or even disadvantaged in less established democracies, consistent with recent findings. Of course, in a given setting incumbency may be a disadvantage simply because officeholding is a liability ($\beta < 0$) for one of the reasons articulated in Section 1 (e.g. dissatisfied voters). But incumbency disadvantage could also come about because of changes in the pool of candidates who emerge from one election to the next, with each successive wave of candidates being more appealing (at the time it emerges, at least) than the last. Building on the analysis of the previous section, we offer two main explanations why such changes in challenger selection may be particularly relevant for explaining incumbency disadvantage in developing democracies.

First, in (some) developing democracies, parties and other key institutions of electoral accountability are in the process of becoming established as effective gatekeepers of the political process. Parties’ procedures for selecting candidates in a given country may be evolving in ways that result in more effective candidate selection, with more effort being exerted and more weight being placed on potential candidates’ electability as compared to connections and other factors. Auxiliary

---

14 Thus voter preferences for attractive candidates may be constant, but with new campaign technology attractive candidates may be able to derive more votes from their attractiveness (which is equivalent to an increase in $\alpha$).

15 As we have pointed out, when $\beta < 0$ incumbents may also suffer a type-disadvantage due to “reverse scare-off”.

16 For recent comparative studies of candidate selection, see Best and Cotta (2000); Hazan and Rahat (2010); Siavelis and Morgenstern (2012). Although this literature describes and tries to explain the variation in methods by which parties select candidates, there is little effort to assess the effectiveness of different methods at selecting appealing candidates.
institutions of political accountability such as media and civil society may also become more effective at discouraging low-quality types from standing for office by making it less likely that they will be elected. As the filters that select candidates become more effective, successive waves of candidates should be more appealing to the electorate. The selection of candidates should also become more responsive to changes in voter preferences and electioneering technology that take place. Both processes suggest that narrowly-elected incumbents may on average be less appealing than the candidates who challenge them.

Second, any type-based advantages that challengers enjoy can only produce incumbency disadvantage if voters pay sufficient attention to the individual characteristics of candidates (i.e. if $\alpha$ is large enough in Equation 2), and a variety of evidence suggests that candidate characteristics matter in developing democracies. The importance of personal characteristics in elections of course varies across political systems in both developing democracies and developed countries. The common view, however, seems to be that politics is relatively personal and less party-based in Brazil, India, and other developing democracies where incumbency disadvantage has been found. Mainwaring and Torcal (2006, at 204) note that “Outside the advanced democracies, more voters choose candidates on the basis of their personal characteristics without regard to party, ideology, or programmatic issues.” The personalistic nature of politics in Brazil, for example, is well-known, and has been linked to use of open-list elections (Samuels, 1999) and a weak party system (Mainwaring and Scully, 1995). Even in countries where vote choice is highly correlated with caste (as in India) or ethnicity (as in much of Africa), the personal appeal of particular politicians may affect the outcome by determining which groups line up behind which candidates.

In terms of the model, the development of media increases $\alpha$, the responsiveness of electoral outcomes to candidate quality. Svolik (2013) has argued that young democracies suffer from an influx of corrupt politicians who attempt to get rich from politics before the institutions of electoral accountability are solidly established; as democracy becomes consolidated and these institutions begin to operate properly, the quality of candidates should improve.
This analysis suggests a very different interpretation of incumbency disadvantage in developing democracies from the one that has been prevalent. It may be that voters are not unhappy with officeholders per se, but rather that the candidates who emerge to challenge incumbents simply have more electorally-desirable characteristics due to improvements in the pool of potential candidates, the nature of intraparty competition, and media scrutiny, perhaps in conjunction with changes in voter preferences and campaign technology. In contrast to explanations for incumbency advantage that have emerged so far, which tend to view incumbency disadvantage as a symptom of poor government, these explanations paint a far more benign view. If incumbency disadvantage emerges from changes in voters’ preferences or campaign technology (which are reflected in candidate selection), it could be normatively positive, negative, or neutral, depending on whether the newly-valued attributes are correlated with good policy outcomes. If incumbency disadvantage is the result of ever-better candidates emerging to compete for office (due to increasing supply of good potential candidates, improved intra-party competition, and heightened media scrutiny), then incumbency disadvantage could be viewed as a sign of unambiguous welfare gain.

4 Evidence from the United Kingdom

The foregoing analysis is intended to clarify how differences in candidate characteristics between incumbents and challengers could produce incumbency advantage or disadvantage. In this section we focus on analyzing incumbency effects in the United Kingdom since the early 19th century, a much longer period than has been analyzed in the U.K. or any other country. One clear advantage of focusing on Britain, aside from the long, essentially uninterrupted series of democratic elections under a more-or-less stable party system, is that elections took place under quite different conditions at different times. Early in the period we examine, the franchise was highly restricted, politics was personalistic, and parties played a very limited role in selecting candidates; over time, the electorate grew and parties became dominant both in choosing candidates and in structuring voter
preferences. Thus estimating incumbency effects using a common approach for such an extended series of elections gives us a way of assessing incumbency effects during different stages of Britain’s political development. We view the results as consistent with the framework offered above, and we argue that the results are fairly puzzling without the insights behind that framework. Still, we recognize that no study focusing on one legislature over time could conclusively test our framework; we return in the conclusion section to the question of how future work might provide such a test.

4.1 Expectations based on the framework and existing literature

The classic account of British politics in the decades after World War II is that the electorate pays little attention to candidate attributes or incumbents’ constituency activities; constituency-level voting results depend almost entirely on national partisan preferences (Ranney, 1965; Butler and Stokes, 1969). In such an environment, it is difficult to imagine that incumbency would have much of an electoral impact: if voters barely pay attention to who the incumbent is or what he or she does, there is no reason why a party’s narrow success or defeat in the constituency at time $t$ should predict its future success in the constituency. This account has begun to change in recent years; the consensus view currently seems to be that voters have begun to care about the attributes and constituency service of their MP, which is consistent with the observation that MPs have devoted an increasing amount of time to constituency service (Norton and Wood, 1993; Searing, 1994). An early proponent of this view (Cain, Ferejohn and Fiorina, 1984) compared incumbency advantage in the U.K. and U.S. by examining survey data from both countries, concluding that incumbency advantage in the U.K. is much smaller than that in the U.S. but still noticeable. Gaines (1998) studies electoral results from 1950 to 1992, concluding that there seemed to be a modest incumbency advantage in Britain but, contrary to what one might expect based on Cain, Ferejohn and Fiorina

\footnote{Omitted variable bias may explain some of the incumbency finding in Cain, Ferejohn and Fiorina (1984). The main finding is based on a vote choice regression showing that survey respondents are more likely to vote for Labour when a Labour incumbent is standing for re-election, controlling for respondents’ stated partisan preferences. The problem is that there is likely to be a correlation between the preferences of the average respondent in a constituency (even controlling for stated preferences) and the probability of a Labour incumbent running in that constituency.}
(1984) and subsequent studies documenting rising constituency service by MPs, this incumbency advantage did not seem to be rising over time. Katz and King (1999), focusing on the period from 1955 to 1992, provide confirmatory evidence of a small and steady incumbency advantage based on a multinomial model of vote choice that extends Gelman and King (1990).

As far as we know, no one has ever studied incumbency effects in Britain before 1950. What might we expect to find? In light of the framework studied above, we submit that an important consideration is the degree to which the electorate responded to candidates as opposed to parties at various points in time. The key work here was done by Cox (1987), who showed based on analysis of voter rolls from multimember constituencies that many voters cast a split-ticket vote (e.g. voted for one Liberal and one Conservative in a two-member district) during the mid-19th century but that this practice was on the decline. Cox sees this change as evidence of the development of a party-oriented electorate that paid more attention to party than to candidates (and would continue to do so into the 20th century). If we combine this observation with the fact that incumbent candidates performed little or no constituency service before the late 20th century and had essentially no way to obtain local policy benefits in an increasingly regimented government-vs-opposition system (Eggers and Spirling, 2014), then we might expect little or no incumbency effects from the late 19th century to the mid-to-late 20th century.

Going back a bit further, however, the framework above suggests a different story. In the period before the electorate was fully party-oriented according to Cox (1987), incumbent legislators had some power to secure local benefits and raise local issues in Parliament, which suggests that officeholding per se may have been an electoral advantage. Counteracting this, however, incumbents may well have been disadvantaged by changes in the process of candidate selection like the

\[\text{\footnotesize{19}}\]

On the other hand, in a period when active involvement in the constituency (“nursing” the constituency) was viewed as an important part of electioneering (at least in the run-up to the election), incumbents had the possible disadvantage that they typically spent most of their time far from the constituency.
ones described above. The middle of the 19th century was a time when the process of selecting candidates, the preferences of the electorate, and the nature of electoral campaigns were all changing. Ostrogorski (1902, at 444–448) describes the development of local party associations that took an increasingly active role in selecting candidates; by the second half of the 19th century, local “wire-pullers” had become adept at identifying a candidate whose personal characteristics and political convictions matched the tastes of the local electorate.20 Those local tastes were undergoing pronounced change as three major electoral reforms (1832, 1867, 1884) introduced new voters whose politics and voting behavior were a mystery even to the politicians who gave them the franchise;21 it is reasonable to expect that local party associations improved from one election to the next in their efforts to pick candidates who could appeal to these voters. Finally, the franchise extensions, combined with periodic electoral reforms22 and economic growth (Stokes et al., 2013, chapter 8) altered the relative effectiveness of various campaign strategies and thus changed the kind of candidate who could be electorally successful: whereas in many places a good candidate had been one who could buy votes and “treat” the electorate with beer and food, programmatic appeals became more effective with successive reforms and transformation of the electorate, such that the ability of the candidate to speak well about the issues of the day became relatively more important (O’Leary, 1962; Cox, 1987; Lizzeri and Persico, 2004). On top of all of this, during the 19th century a career in politics appears to have become feasible and attractive for a much broader set of people, as suggested by the dramatic reduction in the proportion of uncontested seats (particularly in the period between the second and third reform acts, when the proportion

20By comparison, in the 1840s members of the nascent local party associations merely reviewed potential candidates and voiced their personal views (with little formal process for arriving at a single candidate), a process which resulted in candidates who were, in Ostrogorski’s view, “not at all bad, while not unfrequently open to criticism” (pg. 152).

21Lord Cranborne famously referred to the Second Reform Act (1867) as a “leap in the dark”. Writing between the passage of reform and the 1868 election, Liberal judge and commentator Homersham Cox (1868, at 278) noted that “when the leap in the dark is made ... nobody knows who are to be the future governors of England. Hopeful Tories think the very poor class will be amenable to the influence of their superiors, and so the country will be saved from democracy. Others trust that only a small portion of the ‘residuum’ will be actually registered. But confessedly the matter is left in absolute uncertainty”.

22The most important reforms were the judicialization of corruption trials in 1868 (Eggers and Spirling, 2014), the introduction of the secret ballot in 1872, and the imposition of spending caps in 1883 (O’Leary, 1962).
of unopposed seats dropped from around half to under a quarter). In short, a number of factors suggest the possibility of type-based incumbency disadvantage in 19th-century British elections: candidate characteristics still mattered greatly, the process of candidate selection was in flux (as were voters’ tastes and electioneering technology), and the supply of candidates appears to have been increasing. In such a setting, it is plausible that the candidates who were selected to stand in a given election were more effective on average (at least for that election) than those candidates who narrowly won seats in the previous election.

To sum up, previous literature suggests that an incumbency advantage may have emerged in Britain sometime in the mid- to late-20th century. In the first half of the 20th century, when parties dominated and MPs played a negligible role in local affairs, it is hard to see why there would be incumbency effects of any kind. Going back to the mid-19th century, we see a combination of personalistic politics, improvements to candidate selection, and constant flux in electoral preferences and campaign technologies that suggests the possibility of type-based incumbency disadvantage.

4.2 Methods

We focus on the RDD-based estimate of party incumbency advantage (Lee, 2008), using the Conservatives as a reference party because this party was continuously among the top parties in the period we examine. Applying Lee (2008)’s method to incumbency advantage in the U.K. is unproblematic in the period after 1950 in which all districts elect only one member: one can define the running variable as the difference in vote share between the leading Conservative candidate and the leading non-Conservative candidate; when the running variable is positive a Conservative is elected and when the running variable is negative a non-Conservative is elected. Before 1950, however, we must contend with multimember districts, to which the Lee (2008) approach cannot be

---

23One could calculate the same quantity using Labour as the reference party (or even Alliance/Lib Dems); we focus on Conservative party because it alone was active and highly competitive throughout the entire period we examine.
directly applied. Between 1885 and 1950 there were only a handful of multimember constituencies, but before 1885 the majority of constituencies elected more than one member. If we hope to measure average incumbency advantage across all constituencies over time, we need to extend the Lee (2008) approach to multimember races.

Our approach in measuring incumbency effects in multimember districts is to focus on competition for the last seat, asking how the election of an additional Conservative affects subsequent outcomes. In practice, this means identifying the most marginal pair of candidates (one Conservative and one non-Conservative) who, in retrospect at least, most narrowly battled for the last seat – that is, the pair of candidates who could exchange the fewest votes between them with the result being that the Conservatives would win or lose a seat. More formally, the running variable is the smallest (in magnitude) winning margin between a Conservative candidate \( i \) and a non-Conservative candidate \( j \) such that exactly one of \( i \) and \( j \) is a winner.

Given the running variable defined in this way, the expected number of Conservative incumbents should jump by 1 at the threshold where the running variable goes from negative to positive. If all districts are SMDs, the jump is from 0 to 1; if all districts are double-member districts and Conservatives on average win one seat in closely contested constituencies, then the jump is from 0.5 to 1.5. The important point is that the number of Conservative incumbents jumps discontinuously where the running variable is 0 just as it does using the conventional running variable, and this allows us to estimate the effect of a party winning an additional seat using the same method for single- and multi-member districts.

24Table 3 gives the distribution of district magnitude since 1832.

25The RDD may be invalidated if candidates can systematically manipulate outcomes in close elections. As evidence of the validity of the RDD the McCrary (2008) test for sorting of the running variable passes overall and in each of the periods we examine below. (See Figure 8 for histograms and details.) In addition, lagged values of the treatment/outcome (number of Conservatives), the running variable, and the Conservative vote share are all balanced, as shown in Tables 1 and 5.
4.3 Data and summary statistics

Our analysis is based on a newly collected database of all electoral returns between 1832 and 2001 (general elections and by-elections). Although constituency-level electoral returns have previously been assembled for the 1832-1992 period,26 existing datasets lack identifiers for individual candidates as well as by-elections, which makes it impossible to track individual candidates or link MPs to their electoral records. As part of a larger data collection project, we therefore assembled more detailed electoral data: the name, vote total, and party affiliation of every candidate in all general and by-elections, 1832-2001.27

We obtained our electoral data from a variety of sources detailed in the Appendix. In total, 28,155 races took place between the general elections of 1832 and 2001. Each race is linked to a constituency, making it possible to easily link results across years from a single constituency or region. Where available, we record the official electorate at each point in time. For each of the 74,143 candidacies in these elections, we have the candidate’s name, party affiliation, and vote total. A total of 24,456 races are part of the 43 general elections that took place in this interval. These general election races form the basis of the subsequent analysis.

Figure 2 shows the number of races in each general election year in which the running variable (defined as above) is below 5 percentage points (top line) or below 2 percentage points (bottom line). The number of marginal races per election peaked in the period between the Third Reform Act and the First World War, although the number of very close races has been surprisingly stable between about 30 and 50 throughout the period we examine.

26 The data is available from http://www.electiondataarchive.org/ and was originally collected and published by Caramani (2007).

27 We have actually collected this data back to 1801 using Fisher (2009), Thorne (1986), and Walker (1978); we do not employ that data here because party labels are not available in these earlier volumes.
Figure 2: Number of marginal races over time

Note: We depict the number of races in each general election in which the vote share margin for the most marginal Conservative (defined as in the text, and expressed in percentage points) is below 5 (top line) or 2 (bottom line). The vertical gray lines indicate the Second and Third Reform Acts and the vertical gray bars identify the First and Second World Wars.
4.4 Estimates of incumbency advantage over time

Figure 3 shows graphically, for the entire sample of close elections, RDD estimates of the effect of the narrow victory of a marginal Conservative incumbent at time $t$ on the number of Conservative incumbents at time $t-1$ (top panel), time $t$ (middle panel), and time $t+1$ (bottom panel). In each panel, the left plot shows the average value of the outcome calculated at each percentage point of the running variable (from -20 to 20); the right plot shows the estimated effect, with pointwise 95% confidence interval, calculated at various bandwidths. The top panel provides a check of the validity of the RD: we do not expect the election of an additional Conservative at time $t$ to affect the number of Conservatives elected at time $t-1$. Indeed, there is no effect evident in the RD plot at left, nor does an effect emerge at any bandwidth in the sensitivity plot at right. The middle panel provides a manipulation check, i.e. a test of whether we see a one-unit increase in the number of Conservative incumbents when the running variable crosses 0. Indeed, this is what we see. The bottom panel provides an estimate of (seat-denominated) incumbency advantage – the effect of the (narrow) election of a Conservative on the number of Conservatives elected in the constituency in the next election. Pooling elections from the entire period, the incumbency advantage appears to be roughly zero.

Because we expect that incumbency advantage may have changed over time, we present in Figure 4 incumbency effect results (comparable to those in the bottom panel of Figure 3) for three different periods of parliamentary history since the Great Reform Act: 1832-1885, 1885-1945, and 1945-2001. Each panel depicts a different period; the left and right figures in each panel are as described above. Here we see clear evidence of an incumbency advantage only for the last period, no apparent incumbency advantage for the middle period, and negative (although only borderline

---

28For example, the point estimate where the bandwidth of 2 indicates the estimated jump across the threshold when we conduct a linear regression using data where the running variable is between -2 and 2 and allow separate slopes on each side of the threshold.
Figure 3: Balance check, manipulation check, and treatment effect, 1832-2001

Note: In the left plots we show the mean number of Conservatives elected at time $t-1$ (top), $t$ (middle), and $t+1$ (bottom) for each 1-point bin of Conservative margin at time $t$. In the right plots we show how the “effect” of crossing the threshold, estimated by local linear regression, depends on the bandwidth employed. (Numbers along the top of each sensitivity plot show the number of observations within each bandwidth.) The top row of plots thus provides a check of balance in the lagged outcome variable, the middle row of plots provides a manipulation check, and the bottom row of plots provides a measure of incumbency advantage pooled over the entire time period.
Figure 5 adopts a more flexible approach to showing the incumbency advantage over time. In that figure, each black dot corresponds to an estimate of incumbency advantage for a 60-year period of time centered around the indicated year, using a bandwidth of 2 percentage points to estimate the effect. For example, the dot at 1900 is based on a regression using all races between 1870 and 1930 in which the marginal Conservative won or lost by 2 percentage points or fewer. The gray dots indicate the corresponding 95% confidence intervals. Here we see incumbency advantages for several windows centered in the post-World War II period and incumbency disadvantages for windows centered before around 1880. Overall, the clear pattern is an increasing incumbency effect, starting from a point substantially below zero and ending at about 0.2.

Table 1 relies on the same periodization as Figure 4, reporting estimates of the incumbency effect in the top panel and estimates of the “placebo” effect of incumbency on the lagged outcome (number of Conservative incumbents at time $t - 1$) in the bottom panel. For each period and outcome, we show the effect estimate at a different bandwidth in each column; as an additional robustness check, in the last column we show the results using the Imbens and Kalyanaraman (2012) algorithm, which employs a triangular kernel and estimates the effect at an optimally chosen bandwidth. (Because the procedure often produced large bandwidths, we set a maximum of 10 percentage points.) Consistent with the above analysis, we find negative and borderline significant estimates of the incumbency effect for the earlier period, no detectable effect in the middle period, and positive and consistently significant estimates in the later period. As an indication that the analysis is capturing valid treatment effects, the placebo effect estimates are near zero and are significant only in the middle period at a very wide bandwidth.
Figure 4: Incumbency effect by period, 1832-2010

Note: In the left plots we show the mean number of Conservatives elected at time $t+1$ for each 1-point bin of Conservative margin at time $t$. In the right plots we show how the incumbency effect estimated by local linear regression depends on the bandwidth employed. (Numbers along the top of each sensitivity plot show the number of observations within each bandwidth.) Each row of plots corresponds to a different historical period.
Figure 5: Incumbency advantage over time

NOTE: Each black dot corresponds to an estimate of incumbency advantage for a 60-year period of time centered around the indicated year. Estimates are produced via local linear regression within a margin of 2 percentage points.
Table 1: Estimates of incumbency effect and “placebo” incumbency effect

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Period</th>
<th>Local linear reg. estimates</th>
<th>Imb-Kal estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BW=1 BW=2 BW=5 BW=10</td>
<td>Est</td>
</tr>
<tr>
<td>Number of Conservatives at time $t + 1$</td>
<td>1832-1885</td>
<td>-0.547* -0.394* -0.159 -0.149†</td>
<td>-0.132*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.24) (0.17) (0.114) (0.084)</td>
<td>(0.065)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[145] [291] [623] [1071]</td>
<td>[1376]</td>
</tr>
<tr>
<td></td>
<td>1885-1945</td>
<td>-0.105 -0.074 -0.008 0.021</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.125) (0.09) (0.056) (0.039)</td>
<td>(0.029)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[296] [631] [1491] [2771]</td>
<td>[3772]</td>
</tr>
<tr>
<td></td>
<td>1945-2001</td>
<td>0.198† 0.218* 0.163** 0.219***</td>
<td>0.178***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.12) (0.087) (0.056) (0.039)</td>
<td>(0.034)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[236] [469] [1135] [2279]</td>
<td>[2135]</td>
</tr>
</tbody>
</table>

| Number of Conservatives at time $t − 1$ | 1832-1885 | -0.081 -0.061 -0.112 0.003 | -0.007 |
|   |          | (0.253) (0.17) (0.11) (0.082) | (0.063) | 15   |
|   |          | [149] [304] [657] [1124]    | [1435] |
|   | 1885-1945 | 0.03 0.109 0.102† 0.09* | 0.077** |
|   |          | (0.119) (0.086) (0.055) (0.039) | (0.029) | 15   |
|   |          | [289] [608] [1463] [2686]   | [3655] |
|   | 1945-2001 | 0.13 0.025 0.067 0.064 | 0.058 |
|   |          | (0.121) (0.087) (0.056) (0.039) | (0.036) | 8.71 |
|   |          | [245] [488] [1184] [2365]   | [2055] |

Note: Table reports RD estimates of the effect of Conservative victory at time $t$ on the number of Conservatives holding the seat at time $t + 1$ (top) and time $t − 1$ (bottom). For each time period (1832-1885, 1885-1945, 1945-2010) and bandwidth (1, 2, 5, 10) we show the effect estimate calculated using local linear regression; in the right-most columns we also report the estimate produced by the Imbens and Kalyanaraman (2012) algorithm, which uses local linear regression with a triangular kernel at an asymptotically optimal bandwidth. (We impose a maximum bandwidth of 10 for the Imb-Kal analysis.) In all columns but the last one, the first number is the point estimate, the number in parentheses is the standard error, and the number in square brackets is the number of observations. The last column reports the optimal bandwidth chosen by the Imbens and Kalyanaraman (2012) algorithm. Guide to significance codes: † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. 29
4.5 Evidence of differences in candidate type

It is challenging to evaluate the importance of candidate selection in explaining incumbency disadvantage in the U.K. (or elsewhere) because most of the important candidate characteristics that might differ systematically between incumbents and challengers are difficult if not impossible to measure. In the literature on incumbency effects, the only candidate characteristic that scholars have attempted to measure is the candidate’s prior officeholding experience at the local level (e.g. Cox and Katz, 1996; Hall and Snyder, 2013). Measuring candidate characteristics in past elections is particularly difficult because generally much less is known about unsuccessful candidates than about successful ones.

We focus on perhaps the only feature of 19th-century candidates that can feasibly be measured: their names. As noted above, our dataset includes not just the vote totals by candidate but also the names of the candidates as they appeared in the source material (mainly, the volumes of F.W.S. Craig for this period). In the 19th century, the names of candidates inform us about one important candidate characteristic: membership in the aristocracy. In particular, many candidates for seats in the House of Commons used courtesy titles (“Viscount”, “Lord”, “Earl”, etc.) that indicate that they were the heir of a member of the peerage. Figure 6 shows the proportion of candidates by party (Conservative and other) whose names appear in the electoral records with such a title. Consistent with historical accounts (e.g. Cannadine, 1990), this was a period when the aristocracy was losing its grip political power and the proportion of aristocratic candidates was declining.

We speculate that membership in the aristocracy was of declining or even negative electoral value in the age of the mass electorate. The decline in the proportion of candidates with aristocratic

\footnote{The titles we include are “Lord”, “Baron”, “Earl”, “Marquess”, “Marquis”, “Viscount”, and “The Honorable”. Craig appears to have reported a candidate’s name and title as it appeared at the time of the election; for example, if a candidate acquired a new title between elections the name as it appears in Craig changes accordingly.}
Figure 6: Proportion of candidates with honorific titles, by party

Note: The list of titles appears in footnote 29.
titles (as shown in Figure 6) provides suggestive evidence in this direction, although clearly there may be other explanations.\textsuperscript{30} Even if being an aristocrat was not in itself a political liability, it seems plausible that aristocratic candidates might have been less appealing to the electorate due to other shortcomings. Although aristocrats played a smaller role in politics over time, they remained heavily over-represented in politics; to the extent that they owed their places to inherited wealth, family tradition, and deference among party elites, they were likely less impressive on other dimensions (such as intelligence, ability, and experience) than the non-aristocratic candidates who emerged through more meritocratic channels. We therefore surmise that candidates with aristocratic titles were \textit{on average} less electorally appealing than other candidates in the mid-to-late 19th century, and thus that holding a title serves as an acceptable (negative) proxy for candidate quality.

If this is the case, and if quality differences between challengers and narrowly-elected incumbents help explain the 19th-century incumbency disadvantage reported in the previous section, then we might expect aristocrat candidates to be more frequently found in cases where a party had previously narrowly won the constituency than in cases where it previously narrowly lost. When the party wins, the marginal candidate is more likely to run again in the same constituency than when the party loses;\textsuperscript{31} the winning side is thus more likely to be “stuck” with the old type of candidate, who (as suggested by Figure 6) is more likely to have an aristocratic title. If aristocrats were indeed less appealing on average, then this greater tendency of the winning side to field an aristocratic candidate could help explain the overall incumbency disadvantage we detect in this period.

To assess this idea, we carry out another RDD analysis in Figure 7 in which we test whether the proportion of candidates with aristocratic titles at time $t + 1$ is higher when a party narrowly wins (i.e. when the vote margin is positive at time $t$) than when it narrowly loses (i.e. when the

\textsuperscript{30} For example, fewer aristocratic families may have been able to afford a political career in a period of declining agricultural rents (Cannadine, 1990).

\textsuperscript{31} Evidence available on request.
vote is negative at time $t$). The left plot suggests that indeed this proportion was higher when the party won than when the party lost. The right plot shows that the estimated effect is positive and borderline significant at a variety of bandwidths. Under the assumption that aristocratic candidates were less appealing on average for the reasons given above, this provides suggestive evidence that narrowly-elected incumbents differed from their challengers in ways that might have contributed to incumbency disadvantage.

Figure 7: Both parties were more likely to run an aristocrat after a victory

Note: The left plot shows a party’s proportion of candidates with honorific titles at time $t + 1$ as a function of that party’s margin at time $t$ (binned means within 1 pct. point window). The right plot shows the RDD estimate at various bandwidths. The results indicate that a party is more likely to field an aristocrat when it wins than when it loses.

The first row of Table 2 shows the estimated effects at various bandwidths and using the Imbens-Kalyanaraman procedure. The estimated effect varies in size from about 0.02 to 0.05; given that

---

32Because we can observe this outcome for both parties, we define the running variable here for Conservative candidates at $t + 1$ as the Conservative margin at $t$ and for non-Conservative candidates at $t + 1$ as negative one times the Conservative margin at $t$. 

33
the baseline is about .1 (as shown in Figure 6) this is a substantial increase in the proportion of candidates with aristocratic titles. The effect is significant at the .01 level in every specification. For comparison, we also show the “placebo” effect of winning at time $t$ on the proportion of candidates at time $t$ who have aristocratic titles; the estimated effect is generally insignificant and inconsistent in sign.

Table 2: The effect of winning office at time $t$ on the number of candidates with honorific titles at time $t + 1$ (and $t - 1$), clustered SEs

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Local linear reg. estimates</th>
<th>Imb-Kal estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BW=1 BW=2 BW=5 BW=10</td>
<td></td>
</tr>
<tr>
<td>Candidates with titles, $t + 1$</td>
<td>0.05*** 0.031*** 0.018** 0.018**</td>
<td>0.021**</td>
</tr>
<tr>
<td></td>
<td>(0.008) (0.008) (0.006) (0.005)</td>
<td>(0.007) 10</td>
</tr>
<tr>
<td></td>
<td>[1354] [2782] [6498] [12246]</td>
<td>[12246]</td>
</tr>
<tr>
<td>Candidates with titles, $t$</td>
<td>0.003 -0.013† 0.009 0.013*</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>(0.008) (0.008) (0.007) (0.006)</td>
<td>(0.008) 10</td>
</tr>
<tr>
<td></td>
<td>[1478] [3026] [7110] [13342]</td>
<td>[13342]</td>
</tr>
</tbody>
</table>

Note: The dependent variable is the count of titles among candidates for a party (Conservative or non-Conservative) in a constituency. Because each constituency appears twice in the regression dataset, we cluster the standard errors at the constituency level.

It should be clear that we do not claim that this particular finding (the persistence of aristocratic candidates on the winning side of narrow contests) completely or even mostly explains the overall incumbency disadvantage we presented in the previous section. Rather, our claim is more general: quality differences between narrowly-elected incumbents and challengers explain the overall incumbency disadvantage. These quality differences may have been related to the persistence of aristocratic candidates, but they also may have involved other characteristics such as intelligence or campaigning ability that we have no hope of measuring. By showing differences in the prevalence of aristocratic titles among incumbent and non-incumbent candidates we attempt to highlight only the most easily measured of these differences.
We have highlighted candidate selection as a possible explanation for incumbency disadvantage, focusing in particular on the possibility that candidates chosen to run at time $t$ may be more appealing than the incumbents they face due to changes in the candidate pool, the process of candidate selection, voter preferences, and/or the technology of campaigning. We can conceive of other selection-based channels through which incumbency disadvantage may emerge. We mention two of these briefly here, leaving a fuller elaboration for future work. As in our main analysis, the advantage that challengers possess in these accounts emerges from the fact that they are chosen after incumbents are in office.

One possibility is that elections reveal information about which incumbents are vulnerable, and parties strategically deploy strong challengers to win seats from vulnerable incumbents. Returning to the simple two-period model analyzed above, suppose that candidate types are unknown \textit{ex ante} but revealed during the first-period election campaign; losing candidates are then deployed by strategic parties to challenge incumbents in the second period. Losing candidates will of course have lower quality on average than winning candidates, but in general one would expect overlap in the two distributions, with most losing candidates being stronger than at least one incumbent. A strategic party seeking to maximize seats could then deploy its challengers such that most of them are stronger than the incumbents they face.\footnote{Given that the challengers here are weaker than incumbents on average, the optimal strategy would involve sending the weakest challengers to be beaten by the strongest incumbents and pairing each other challenger with a slightly-weaker incumbent.} Thus even if challengers are not on average more appealing than incumbents in the second election (the possibility on which we focused above), they may be deployed such that most incumbents (including narrowly-elected ones) are defeated.
Another possibility is that collective voter preferences over candidate types are not transitive, such that match-ups matter: for each type of incumbent, there may be a type of challenger that (all else equal) can win. The logic here is the same as that behind McKelvey’s chaos theorem (McKelvey, 1976): if there is more than one dimension along which candidates differ, and voters have ideal points spread around this multidimensional space, then in general the winset of any given bundle of candidate characteristics is not empty. If, for example, voters have different ideas about the ideal age of an MP and the ideal degree to which that MP prioritizes local vs. national issues, then for any given incumbent there is in theory a challenger whose characteristics are preferred by a majority of voters. The disadvantage of an incumbent in this story is that she is a fixed target: in a game of rock-paper-scissors, she plays first.

6 Conclusion

In recent years, scholars of comparative politics have become interested in estimating incumbency effects in part because it offers a way to compare a normatively consequential feature of elections in different contexts. The as-yet-unexplained finding that incumbency appears to be a disadvantage in developing democracies (whereas it had been documented to be an advantage in the U.S. and, recently, other developed democracies) makes it more important that we produce both comparable evidence from a variety of contexts and analytical tools with which to explain this variation.

This paper has contributed to this literature by highlighting the role of candidate characteristics in producing incumbency effects. When we use RDD to focus on cases where a given party narrowly won or lost a previous race (and thus the party narrowly either attained or did not attain incumbency status), we can be confident that winners and losers of that race will be comparable on average (as will the circumstances in which a party wins and loses), but there is no guarantee that narrowly-elected incumbents and the candidates who challenge them will be comparable on
average. The literature on incumbency advantage in the U.S. is aware of this fact (e.g. Hall and Snyder, 2013), but previous scholars have tended to neglect type differences as an explanation for incumbency disadvantage and (perhaps more importantly) have overlooked the possibility that incumbents and challengers could systematically differ even in the absence of officeholding benefits or costs. We argued that these type-based incumbency effects may be most salient in developing democracies; in particular, we expect to see incumbency disadvantages where politics is personalistic and the pool of potential candidates is growing or improving, the process of candidate selection is improving, media scrutiny is developing, and/or there are substantial changes in voter preferences or electioneering technology from one election to the next.

Our empirical analysis has served to highlight these points in the U.K. Consistent with the perception that incumbency has become valuable in British politics, we provide the first RDD-based evidence that party incumbency was an electoral advantage in the period since World War II. Perhaps more surprisingly, we show evidence of incumbency disadvantage in 19th-century Britain, a period when politics was personalistic and undergoing the kind of changes that our framework suggests could lead challengers to be more appealing on average. We also show one piece of evidence that incumbent-party candidates systematically differed from challengers in a potentially disadvantageous way. Our analysis of the history of incumbency effects in Britain thus highlights the importance of change in a famously stable political system: not only has the electoral significance of incumbency changed over time, but the fact that incumbency was a disadvantage in the 19th century is (in light of our framework) a testament to the extent of the transformations taking place in candidate selection, voter preferences, and electoral competition during that period.

While our evidence from Britain highlights the usefulness of the framework in making sense of otherwise-puzzling results, it does not constitute a hard “test” of that framework. Our analysis does, however, highlight some predictions that could be tested in future work. The broad pre-
diction is that (type-based) incumbency disadvantage should generally be found in contexts where politics is personalistic and where candidate selection is either highly responsive to changes in voter preferences and electoral circumstances or increasingly able to produce candidates who appeal to voter preferences. The challenges facing scholars who hope to test this prediction should be clear. Even if we were able to produce credible measures of these features (i.e. degree to which politics is personalistic, responsiveness of candidate selection to preferences and circumstances, appeal of candidates over time), we do not yet have comparable estimates of incumbency effects from sufficient countries to carry out convincing tests. We hope that this paper has helped bring us closer to that point, both by contributing to the body of evidence on incumbency effects and by clarifying our theoretical understanding of where these effects might come from.
References


Cannadine, David. 1990. The decline and fall of the British aristocracy. Yale University Press New Haven, CT.

Caramani, Daniele. 2007. Elections in Western Europe since 1815: electoral results by constituencies. Macmillan.


Eggers, Andrew and Arthur Spirling. 2014. “Guarding the Guardians: Partisanship, Corruption and Delegation in Victorian Britain.”.


Hall, Andrew B. and James M. Jr. Snyder. 2013. “How Much of the Incumbency Advantage is Due to Scare-Off.”.


Klašnja, Marko. 2013. “Increasing Rents and Incumbency Disadvantage.”.


## Appendix

Table 3: Distribution of district magnitudes across UK parliamentary constituencies over time

<table>
<thead>
<tr>
<th>Period</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1832-1868</td>
<td>153</td>
<td>240</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>1868-1885</td>
<td>194</td>
<td>209</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>1885-1918</td>
<td>616</td>
<td>27</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1918</td>
<td>671</td>
<td>17</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1922-1945</td>
<td>577</td>
<td>18</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1945</td>
<td>603</td>
<td>17</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1950-2001</td>
<td>623-659</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Note:** Before 1874 occasional borough disenfranchisements led to slight variations that we omit here. The table is based on our own database of electoral records, compiled from various sources documented in the paper.
Definition of the running variable

As illustrated by Table 4, the running variable in the case of a single-member district (case (a), where \( m = 1 \)) is equivalent to the measure used in Lee (2008) (substituting Conservative for Democratic): when two candidates stand for office, the running variable is the difference between the Conservative candidate’s vote share (denoted \( C \)) and the non-Conservative candidate (denoted \( L \)). In a two-member district and a case like either (b) or (c), in which the “last winner” is a Conservative and the “first loser” is a non-Conservative (or vice versa), we can effectively ignore the first seat and treat it as a SMD contest for the second seat: the running variable is simply the difference in vote share between the marginal Conservative and the marginal non-Conservative. Finally, in a multimember case like (d) in which the marginal candidates are both either Conservatives or non-Conservatives, the running variable is the difference in vote share between the last Conservative to win and the first non-Conservative to lose or the first Conservative to lose and the last non-Conservative to win, whichever is smaller in magnitude. In all of these cases, the running variable captures the smallest exchange of votes that would need to take place for the Conservatives to win or lose a seat.\(^{34}\)

### Table 4: Illustration of generalized running variable

<table>
<thead>
<tr>
<th>Case</th>
<th>Ordered vote shares</th>
<th>Value of running variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 1</td>
<td>({L, C}) or ({C, L})</td>
<td>(C - L)</td>
</tr>
<tr>
<td>(b) 2</td>
<td>({C_1, C_2, L_1, L_2}) or ({C_1, L_1, C_2, L_2})</td>
<td>(C_2 - L_1)</td>
</tr>
<tr>
<td>(c) 2</td>
<td>({L_1, C_1, L_2, C_2}) or ({L_1, L_2, C_1, C_2})</td>
<td>(C_1 - L_2)</td>
</tr>
<tr>
<td>(d) 2</td>
<td>({C_1, L_1, L_2, C_2}) or ({L_1, C_1, C_2, L_2})</td>
<td>(\begin{cases} C_1 - L_2 &amp; \text{if }</td>
</tr>
</tbody>
</table>

**Note:** In representing the ordered vote shares we display in bold those that belong to winning candidates. The column labeled \( m \) indicates district magnitudes.

### Data sources

Our main data source for the period between 1832 and 1950 is the work of F.W.S. Craig (Craig, 1969, 1974, 1977), augmented by Walker (1978, 1992). With the help of a team of research assistants, we transcribed the information in these volumes in a common format. For general elections between 1950 and 1970 our source is the *Times Guide to the House of Commons* as digitized and processed by Eggers and Hainmueller (2009). For general elections since 1970 our source is the spreadsheets assembled by Iain Outlaw.\(^{35}\) By-election data from 1950 was collected from another

---

\(^{34}\)When all candidates are Conservatives or all candidates are non-Conservatives, this running variable is undefined, just as the standard running variable is undefined in an SMD where there are no Conservatives or only Conservatives.

\(^{35}\)These are available through Richard Kimber’s electoral data archive at [http://www.politicsresources.net/](http://www.politicsresources.net/).
online archive of electoral data. Winning candidates for each race were identified and matched to our database of MPs (which is in turn based on Michael Rush’s work), with missing MPs added in a small number of cases. All data were carefully checked for internal consistency, which allowed us to correct transcription errors and identify occasional mistakes in the original sources. For example, we checked cases where the district magnitude in a constituency was inconsistent across elections, cases where vote totals seemed unusually high or low relative to the electorate (suggesting a transcription error), and cases where a race appeared to be missing or duplicated for a constituency. The result of these efforts is the first unified and consistent electoral database covering the entire period between the Great Reform Act and 2001.

A.1 Tests for sorting in the running variable

Figure 8: Histograms of the running variable, by period

![Histograms for 1832-1885, 1885-1945, and 1945-2001](image)

Note: Histograms shown for the running variable by period. Using the McCrary (2008) test, we cannot reject the null of no jump in density at the threshold for the entire sample or for any of the time periods (p-values .80, .13, .39, and .91 respectively).

---

36[http://by-elections.co.uk/](http://by-elections.co.uk/).

37In almost all of these cases the winning candidate either never served in Parliament or served for an extremely short time.
Table 5: Extra placebo effects by period

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Period</th>
<th>Local linear reg. estimates</th>
<th>Imb-Kal estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BW=1</td>
<td>BW=2</td>
</tr>
<tr>
<td>Running variable in previous election</td>
<td>1832-1885</td>
<td>-4.41</td>
<td>-0.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.614)</td>
<td>(2.745)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.991</td>
<td>2.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.466)</td>
<td>(2.509)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.991</td>
<td>2.53</td>
</tr>
<tr>
<td></td>
<td>1945-2001</td>
<td>1.01</td>
<td>-0.216</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.022)</td>
<td>(2.135)</td>
</tr>
<tr>
<td>Conservative vote share in previous election</td>
<td>1832-1885</td>
<td>5.035</td>
<td>-3.723</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.63)</td>
<td>(5.277)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-2.032</td>
<td>1.896</td>
</tr>
<tr>
<td></td>
<td>1885-1945</td>
<td>(3.636)</td>
<td>(2.871)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.584</td>
<td>1.005</td>
</tr>
<tr>
<td></td>
<td>1945-2001</td>
<td>(2.677)</td>
<td>(1.826)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[245]</td>
<td>[488]</td>
</tr>
</tbody>
</table>

Note: See Table 1. These are placebo effects in the sense that if the assumptions of the RDD are met we should see no effect of winning at time $t$ on the running variable or the Conservative vote share in the previous period.
A.2 Effect of incumbency on vote share

In the paper we focus on the number of Conservative candidates as the outcome for analysis incumbency advantage. Here we report results in which the outcome is the share (our of 100) of the vote won by Conservative candidates. If no Conservative candidate runs in the subsequent election the share is 0; if no non-Conservatives run the share is 100.

Table 6: Estimates of incumbency effect and “placebo” incumbency effect (vote share basis)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Period</th>
<th>Local linear reg. estimates</th>
<th>Imb-Kal estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BW=1</td>
<td>BW=2</td>
</tr>
<tr>
<td>Vote share for Conservatives at time $t + 1$</td>
<td>1832-1885</td>
<td>-8.065</td>
<td>-7.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.548)</td>
<td>(5.207)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[145]</td>
<td>[291]</td>
</tr>
<tr>
<td></td>
<td>1885-1945</td>
<td>0.189</td>
<td>1.897</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.527)</td>
<td>(2.01)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[296]</td>
<td>[631]</td>
</tr>
<tr>
<td></td>
<td>1945-2001</td>
<td>5.939*</td>
<td>4.695**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.483)</td>
<td>(1.628)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[236]</td>
<td>[469]</td>
</tr>
<tr>
<td>Vote share for Conservatives at time $t - 1$</td>
<td>1832-1885</td>
<td>5.035</td>
<td>-3.723</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.63)</td>
<td>(5.277)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[149]</td>
<td>[304]</td>
</tr>
<tr>
<td></td>
<td>1885-1945</td>
<td>-2.032</td>
<td>1.896</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.636)</td>
<td>(2.871)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[289]</td>
<td>[608]</td>
</tr>
<tr>
<td></td>
<td>1945-2001</td>
<td>0.584</td>
<td>1.005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.677)</td>
<td>(1.826)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[245]</td>
<td>[488]</td>
</tr>
</tbody>
</table>

Note: See Table 1.
Figure 9: Incumbency effect by period, 1832-2010 (vote share basis)

NOTE: In the left plots we show the vote share won by Conservatives at time $t+1$ for each 1-point bin of Conservative margin at time $t$. In the right plots we show how the incumbency effect estimated by local linear regression depends on the bandwidth employed. (Numbers along the top of each sensitivity plot show the number of observations within each bandwidth.) Each row of plots corresponds to a different historical period.
Figure 10: Incumbency advantage over time (vote share basis)

NOTE: Each black dot corresponds to an estimate of incumbency advantage for a 60-year period of time centered around the indicated year. Estimates are produced via local linear regression within a margin of 2 percentage points.