# Reining in the Rascals: How Incumbency Mainstreams Challenger Parties

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Challenger parties, i.e. parties without prior government experience, have in recent years transformed politics in Europe and beyond, in some cases eventually joining governing coalitions. However, the process by which challenger parties gain access to power remains unclear. We argue that holding elected office in itself mainstreams challenger parties, improving their future chances of entering government. Compiling a data set of more than 2,500 local elections and 15,000 committee assignments from local governments in Denmark, we first demonstrate descriptively that challenger parties are initially excluded from executive power, but gradually gain access to it. We then use a regression discontinuity design to show that legislative incumbency increases challenger parties' access to government power in the following electoral term. Lastly, we use data from candidate surveys to investigate the mechanism underpinning this effect, showing that incumbent challenger parties take more moderate positions and use more mainstream language. Our findings shed new light on the 'centripetal' forces driving party system change.

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In countries across the world, established parties and politicians are giving way to populist insurgents, disrupting once stable national party systems. In European politics, where anti-establishment parties have a long pedigree, some have eventually entered the halls of government power. Recent examples include Finland's the Finns Party, the FPÖ in Austria, Greece's Syriza, and the Czech Republic's ANO 2011. All of these parties started out as fiercely anti-establishment, but eventually entered government, in many cases as a coalition partner with more established parties. But how do anti-establishment parties gain access to government coalitions with established parties?

Drawing on the framework of De Vries and Hobolt (2020), we refer to these anti-establishment parties as 'challenger parties', characterized by being previously unencumbered by government experience at the national level. Conversely, we refer to parties with national government experience as 'dominant parties'. While there is an extensive literature on how challenger parties capture voters and gain political representation (e.g., Arzheimer 2018; Rydgren 2008), there is comparatively little research into how they make the leap from representation in parliament to inclusion in (coalition) government. Some existing research highlights the role of office- and policy-maximizing motives of mainstream parties, suggesting that once governments including challenger parties become mathematically possible, dominant parties will be willing to include challenger parties as a means of forming government (De Lange 2012). At the same time, theories of 'party stigma' suggest that dominant parties will tend to exclude (some) challenger parties by default when forming governing coalitions (Twist 2019).

In this paper, we focus in an overlooked yet potentially important factor that explains how challenger parties become viable coalition partners: incumbency, i.e., prior representation in the legislature from which the government is formed. We argue that that incumbency mainstreams challenger parties, in part by making them more positionally moderate, in turn rendering them more viable coalition partners.

The effect we identify is distinct from other types of incumbency advantage identified in the literature. First and foremost, we show that the effect is not driven by a purely electoral incumbency advantage (Ansolabehere and Snyder Jr 2002; Dahlgaard 2016; Lee 2008). In our setting,

holding office does not increase the chance that a party runs again, their vote share, or their chance of being represented at the next election. We can therefore rule out that the incumbency effect is driven by higher levels of legislative representation or that incumbents have a stronger electoral mandate. The effect is also distinct from the well-documented incumbency advantage in government formation, whereby parties with a record of joint coalition membership are more likely to form a government (Martin and Stevenson 2010). We show that legislative incumbency affects government participation, an effect distinct from purely electoral as well as purely governmental types of incumbency advantage.

A perennial challenge in the study of party politics is the comparatively small number of available cases at the national level. To maximize the number of cases while holding constant the institutional context, we follow Bucchianeri (2020) and others in studying party competition at the subnational level. Specifically, we study local elections and subsequent local government formation processes in Denmark, where party and electoral systems at the local level resemble the national level (Elklit, Elmelund-Præstekær and Kjær 2017). In doing so, we build on earlier work that use local government formation processes to emulate the national level (Bäck 2008; Debus and Gross 2016; Skjæveland and Serritzlew 2010; Skjæveland, Serritzlew and Blom-Hansen 2007). We define challenger and dominant parties according to their status at the national level, and then study the effect of incumbency on parties' participation in local government.

We construct a large and novel data set covering more than 2,500 local elections. Using this data set, we implement a regression discontinuity design, comparing challenger parties that just gained access to the city council against those that just missed out with respect to their participation in local government following the subsequent election. This design allows us to obtain direct counterfactual comparisons between incumbent and non-incumbents. We find that for challenger parties, incumbency increases the probability of joining a coalition government by about 20 percentage points.

We test a number of additional implications of our argument that incumbency effect on government participation works by pulling parties toward the political mainstream. For one, we show that there is no equivalent incumbency effect for dominant parties, who are already part of the political mainstream. Second, using data from Voting Advice Applications, we show that, compared to non-incumbents, challenger parties with incumbent elected officials take more moderate policy positions and use language more similar to that of dominant parties. Taken together, our results suggests that holding elected office moderates challenger parties, making them more acceptable as government coalition partners.

We contribute to the existing literature in a number of ways. First and foremost, we provide causally credible evidence on the mainstreaming effect of incumbency, contributing to the literature on how extreme parties enter the political mainstream, a crucial topic in an era of political disruption. This finding also connects to the literature on government formation processes. While there is an extensive literature on office- and policy-maximizing motives, we argue that incumbency is an overlooked and important factor in explaining why some political parties enter into governing coalitions.

These substantive findings have important implications for the dynamics of party system change. It suggests that incumbency creates a 'centripetal' force: new parties enter the scene at the fringes of the political spectrum, but find themselves gradually drifting towards the center over the course of holding elected office. This means that their original positions can now be captured by new-comers, and the process can start over. We revisit the normative implications of this process in the conclusion.

In addition to these substantive contribution, we provide new data and methods for the study of coalition formation processes. We present and make available one of the largest data sets on coalition formation processes, which has potential applications to several other substantive questions. We also present a new method for calculating parties' representation thresholds under proportional representation with electoral coalitions. Whereas previous research has relied on bootstrap methods, we use an exact, analytical method to locate this threshold.

# 1 Coalition Government Formation and the Role of Incumbency

Why do some parties and not others join coalition government? Broadly speaking, we can distinguish between two waves of innovation in the study of government formation (Döring and Hellström 2013). The first theoretical models of coalition formation are from the 1960s and 1970s (Axelrod 1970; Riker 1962; Swaan 1973). They perceive coalition formation as a game taking place in the aftermath of an election, where parties are assumed to be rational actors trying to maximize office and/or policy goals. In these models, each election is a 'blank slate' where the outcomes of prior elections do not factor in. A second generation of government formation models started in the early 1990's, as researchers began to investigate more systematically which governments form, often using larger data sets to empirically investigate patterns of government formation (Laver, Laver and Shepsle 1996; Laver and Schofield 1998). This generation of empirical studies generally find that older theoretical models have limited explanatory power, suggesting that our understanding of the causes of coalition participation remains incomplete (Martin and Stevenson 2001).

After the turn of the millennium, researchers have started focusing on one explanatory factor at a time to better understand the process of government formation. However, only few studies that pay attention to what unfolded in previous elections and incorporate this in their predictions. Mattila and Raunio (2004) investigate electoral gains and losses on the likelihood of getting into government, while Tavits (2008) studies whether and to what extent defections from a government coalition are punished in later coalition formations. Furthermore, Martin and Stevenson (2010) show that coalitions are more likely to form if parties have worked together in the past and Bäck and Dumont (2007) show that governments are more likely to form if they are the incumbent administrations. Moreover, Grotz and Weber (2016) show that small parliamentary newcomers face a disadvantage in government formation in Central and Eastern Europe, while this is not the case for larger newcomers. However, they do not explore whether the newcomer disadvantage dimin-

<sup>&</sup>lt;sup>1</sup>Likewise, Warwick (1996) also found that a party's membership in the outgoing government and previous government experience significantly increases its chance of joining a coalition.

ishes over time. Thus, while there are studies that show that history impacts coalition formation, there are, to our knowledge, no existing studies that investigate the role of prior experience in parliament—or legislative incumbency—in itself on government formation.

As we outline in the following, legislative incumbency is potentially an important factor for explaining coalition formation because incumbency pulls parties toward the political mainstream. This is likely to predominantly affect challenger parties, which in contrast to dominant parties are not already part of the political mainstream. To flesh out our argument, we begin by specifying our concept of 'mainstreaming', a concept used ambiguously in the existing literature, before moving on to present the causal mechanism and our hypotheses.

### 1.1 Mainstreaming of challenger parties

The notion of political parties drifting toward the political mainstream is a perennial theme in political science. Indeed, Michel's (1915) foundational work on the sociology of political parties highlights how the practice of representative democracy shaves the edges off notionally radical socialist parties. This theme recurs in subsequent comparative work on the 'inclusion-moderation' hypothesis, which posits that radical parties and individuals become more moderate as a result of their inclusion in pluralist political processes (Buehler 2013; Schwedler 2011).

Somewhat confusingly, however, the more recent literature uses the concept of 'mainstreaming' in party politics in two entirely different, nearly antonymous senses. The first of these is the diffusion of fringe parties' positions and behavior into the established party system as mainstream norms become more accepting of positions formerly considered extreme. For example, Mudde (2019) identifies mainstreaming as the key constituent property of the current 'fourth phase' of far right politics. In Mudde's 2019 characterization of contemporary far right politics, mainstreaming refers to the establishment's adoption of challenger parties' extreme ideological tenets, policy positions, and rhetorical frames. As Moffitt (2021) notes, this phenomenon would be more appropriately labeled 'radicalization', as it implies that mainstream parties adopt characteristics once considered radical.

An alternative conceptualization, and one we adopt here, construes mainstreaming as a process

undergone by challenger parties themselves, whereby those parties adapt to the norms of dominant parties in the political mainstream. Akkerman, de Lange and Rooduijn (2016) argue that in practice, mainstreaming occurs along four dimensions, with challenger parties (i) taking more more moderate policy positions, (ii) expanding their issue agenda, (iii) softening anti-establishment positions, and (iv) severing ties with extreme organizations. This mainstreaming may be a strategic move on the part of challenger parties in order to realize policy, office, or vote objectives (Bergman et al. 1999).

Theoretically speaking, incumbency may increase challenger parties' chances of joining government even without any change in behavior on the part of challenger parties. Specifically, once a challenger party holds elected office, local dominant parties familiarize themselves with elected officials of the challenger party, who in the process become more palatable as governing partners. This desensitization on the part of dominant parties may in turn reflect a combination of personal acquaintance with elected officials of challenger parties and mere familiarity through repeated exposure. This implies that representation helps challenger parties access government without changes in their policy positions.

While we cannot entirely rule out desensitization as a mediating factor, we argue and show empirically that the effect of incumbency is driven partially by challenger parties themselves approaching the political mainstream. In the remainder of this section, we explain why, focusing on positional moderation as the causal mechanism.

## 1.2 The role of positional moderation in mainstreaming

Incumbent representatives for challenger parties face multiple incentives to moderate. While holding elected office, challenger parties' platforms will face scrutiny from dominant parties, which may in turn cause them to jettison the most extreme or infeasible elements of those platforms. Moreover, challenger party representatives are likely to adopt the rhetoric and mannerisms of their dominant party colleagues by sheer social learning. Both of these dynamics will move challenger parties holding elected office in the direction of a more moderate profile.

This moderation is likely consequential, since several classic theories of coalition formation

predict that moderation will in turn improve a party's chances of entering government. Axelrod's (1970) theory of minimal connected winning coalitions predicts that the parties will be ideologically 'connected' in the sense that all members will be adjacent to each other in the policy dimension. Similarly, the theory of 'minimal range coalitions' predicts that the winning coalition government will be the minimal winning coalition with the narrowest range in policy space (Swaan 1973). These policy-oriented theories of coalition formation share the assumption that actors enter into government motivated by a desire to enact their preferred policy once in office. This means that parties prefer to go into a coalition with ideologically similar parties. Consistent with this logic, prior research has found that right wing parties are indeed likely to be included when they are ideologically proximate to the mainstream right (De Lange 2012; Twist 2019).

Figure 1 presents a stylized illustration of our argument. Challenger parties elected in election t moderate in the process of holding elected office. Entering election t+1 as incumbents, they are more likely to enter a governing coalition following the election compared to the non-incumbent counterfactual. By virtue of our regression discontinuity design, we are able to compare otherwise identical elected and non-elected challenger parties at (a) with respect to their government coalition viability in (c). We take higher coalition viability in (c) as evidence of mainstreaming. We theorize that the effect of incumbency on mainstreaming is driven by moderation on the part of incumbent challenger parties (b).

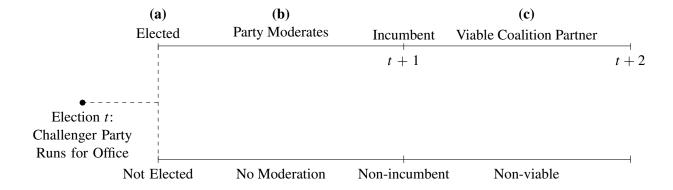


Figure 1: Overview of Theoretical Mechanisms

Theorizing moderation as the causal mechanism has important implications for when and where we should expect incumbency to matter. Specifically, because incumbency causes challenger parties to adopt the moderate traits of dominant parties, we should expect it to have an effect for challenger parties only. Compared to challenger parties, dominant parties tend to have a longer record of representation and by definition have already been shaped by government experience, so any additional moderating effects of incumbency on them will be negligible. Hence, we expect incumbency to moderate, and in turn improve the odds of joining government, only for challenger parties. We summarize these divergent expectations for challenger and dominant parties in hypotheses 1 and 2.

HYPOTHESIS 1: For challenger parties, incumbency increases the likelihood of joining a government coalition.

HYPOTHESIS 2: For dominant parties, incumbency has no effect on the likelihood of joining a government coalition.

To be sure, though our design allows us to credibly estimate the effect of incumbency on government participation, our regression discontinuity design is a 'black box' insofar as it does not reveal the exact mechanism driving the observed effect (Imai et al. 2011). This general caveat notwithstanding, we are able to provide some additional evidence on causal mechanisms. After evaluating hypotheses 1 and 2 below, we turn to evidence from candidate surveys, from which we can estimate party positions. Based on the theory outlined above, we formulate the following hypothesis:

HYPOTHESIS 3: Incumbent challenger parties take more moderate positions compared to non-incumbent challenger parties.

We test our theoretical expectations using data from local government formation processes in Denmark. To properly contextualize our analysis, we now outline key features of the study's empirical setting.

# 2 Empirical setting: Challenger party entry in Danish local government

With respect to examining party politics at the local rather than national level, studying local government offers at least three advantages (Laver and Schofield 1998, 9). First, it increases the number of cases, which enables us to use statistical methods that are hard to use when analyzing coalition formation on the national level. Second, political culture and institutions—broadly speaking, the institutional context of the coalition process—are important for coalition formation outcomes (Laver 1989; Laver and Schofield 1998). By focusing on local governments within the same country, we are able to hold this institutional context constant by design. Third, when studying the national level, it is harder to separate a party's status as a challenger party from its probability of being part of the governing coalition. In fact, once a party becomes a part of the national government it is, by the common conceptualization, no longer a challenger party (De Vries and Hobolt 2020). Considering the local level allows us to sidestep this issue, because a challenger party can obtain power locally while retaining its status as a challenger party nationally.

We focus on Denmark, as the Danish local government system can be described as a "political system in miniature" (John 2001, p. 30), where the party system, the electoral system, and the system for forming a government all resemble the national political system. Local politics are of high importance, and the municipal council has significant leeway to conduct and implement policies. Furthermore, there is a significant financial compensation for being a part of the governing coalition, meaning that both policy- and office gains are relevant. Thus, perhaps, Denmark has the ideal local political system to investigate the political representation of challenger parties. Below, we lay out this context in more detail, laying out how local governments work in Denmark, the coalition formation process and which challenger parties we focus on.

### 2.1 Local government in Denmark

Denmark is characterized by having the most decentralized public sector in Europe, and local public spending is 32 percent of GDP (Eurostat 2017; Sellers and Lidström 2007). Local governments are responsible for important public services such as schools, local infrastructure, some types of

social benefits, elderly care, child care, and cultural events. The municipalities are, within certain restrictions, free to set the local income tax rate and have wide discretion in most policy areas (Lassen and Serritzlew 2011).

The importance of local governments is manifest in the local elections, which take place every four years and are heavily contested. They receive much attention from national parties, the media, and the voters. This is reflected in the turnout, which consistently has been high: in 2017, the most recent round of local elections, turnout was at 70.6 percent (Hansen 2017).

There are currently 98 municipalities in Denmark, each with their own elected city council. However, the number of municipalities have varied over the time. In 1970 a municipality reform was implemented, where the number of municipalities were reduced from around 1300 to 277, while another reform in 2005 reduced the number of municipalities further to 98 (Blom-Hansen, Houlberg and Serritzlew 2014; Lassen and Serritzlew 2011). Following the latest reform the largest city council consists of 55 seats (Copenhagen), while the smallest consists of 9 seats (Læsø). Local elections are highly competitive: In the 2017 election, 9,558 candidates competed for 2,432 seats, meaning that around 1 in 400 voters were running for election (Dahl and Nyrup 2020).

The election system is proportional, and anyone able to amass 25 signatures in support of their candidacy can run in the election.<sup>2</sup> All local politicians run as part of a party. These can either be national parties, such as the Social Democrats and the Danish People's Party, or local parties that only run in one or a few municipalities. The national parties dominate the ballot and received more than 96 percent of all votes in the latest election in 2017.

### 2.2 Coalition formation

After the election the coalition formation process take place and the important posts are distributed between the governing coalition. The most important positions are the mayoralty and the appointed chairmen of the standing committee. Each committee has responsibility for a specific area such as day-care or primary education. The mayor chairs the most important committee, the economic

<sup>&</sup>lt;sup>2</sup>There are a few exceptions to this very low threshold: In major city municipalities the minimum is 50 signatures, and in Copenhagen municipality the minimum is 150.

committee, which sets the budget, coordinates between the different committees, and has administrative control with the municipal bureaucracy. The mayor and the committee chairmen can be said to have executive power in the municipality, implementing the will of the committees and the city council, and they can thus be thought of as analogous to a national government, with the mayor as a prime minister and chairmen as regular ministers. The mayor is normally the only full-time employed politician at the local level, but chairmen also receive a salary, which can be up to 40 percent of the salary of the mayor (Jyllandsposten 2017) and according to our data from 27 municipalities, on average, amounts to 200,000 DKK (27,000 EUR) annually.

There is a simple majority requirement in the investiture vote for all positions of power. The whole city council votes for the mayor, while it technically only are the members of the standing committee, who can vote for the chairman of their respective committee. However, in practice, the chairmen of the committees are found through a centrally organized agreement made between the parties represented in the city council. Apart from this and a deadline, which is around a month after the election, there are only few general rules governing the bargaining game, and no formateur is formally appointed to lead the negotiations (Skjæveland and Serritzlew 2010). It is a free-style system, and it is relatively open as to who gets the important positions. Furthermore, the process of local government formation is not centrally controlled in Denmark. Every coalition is possible, and there are many examples of local coalitions that would be unthinkable at the national level. This is exemplified by the high amount of unique coalitions. In 2017, there were 53 different combinations of coalitions across the 98 municipalities.

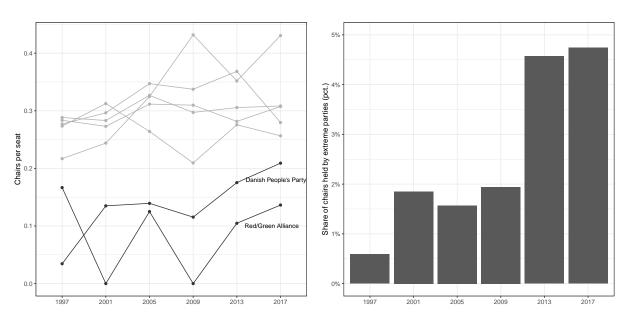
### 2.3 Challenger and dominant parties in local government

Evaluating our hypotheses requires us to distinguish between challenger and dominant parties in the context of Danish local government. For challenger parties, we focus on sizable challenger parties with extensive representation in local and national politics. One is the right-wing populist Danish People's Party (DPP) founded in 1995. On the other end of the political spectrum, the Red-Green Alliance (RGA) was formed as a collection of far left socialist and communist parties in 1989. Both parties have been represented in parliament throughout the period we examine here.

We focus on the DPP and the RGA because they are (a) relatively electorally successful, gaining representation in several localities across multiple elections, and (b) clear cases of challenger parties at the national level, having never entered government.

For simplicity, we disregard cases where a challenger party does not retain its challenger party status (Christian Democrats and Center Democrats), and cases where the challenger party fails to obtain broad local representation (The Progress Party). In online appendix M, we present our main analysis using these parties, and find nearly identical results.

We compare the DPP and the RGA to five dominant parties, defined here as parties which were part of a national government at least once since 1995. This group of parties consists of the Socialist People's Party, The Social Democrats, The Social Liberal Party, The Liberal Party, and the Conservative party. All of these parties have also been continually represented in parliament for the past 60 years.



- (a) Chair positions obtained per seat by dominant parties (light gray) and challenger parties (black).
- **(b)** Share of all chair positions held by challenger parties across post-1995 elections.

**Figure 2:** After entering the electoral arena, challenger parties pay a 'challenger party penalty', obtaining fewer chair positions per seat (left panel), but eventually gain access to power (right panel).

In Figure 2, we show that relative to the dominant parties, challenger parties have historically

been excluded from local government. As shown in panel (a), challenger parties persistently obtain markedly fewer chair positions per seat compared to the remaining dominant parties. Panel (b) shows that the share of all chair positions obtained by dominant parties increases over time, which is in part because the 'challenger party penalty' is decreasing, and in part because the challenger parties are securing more and better representation in the city councils.

# 3 Research Design

Our goal is to identify the causal effect of obtaining representation (i.e., getting at least one seat in the city council) on the probability that a party obtains a chairmanship of a standing committee at the subsequent election. As described above, obtaining a chairmanship effectively means that you get executive power in the local government and therefore is a part of the governing coalition.

We identify the effect of incumbency using a close elections regression discontinuity design (e.g., Eggers and Hainmueller 2009). In particular, we estimate the probability of obtaining a chairmanship for parties at the cut-off for those who were represented and those who were not represented in the city council at the last election. Assuming no discontinuities in the potential outcomes at the cut-off, this difference provides an unbiased estimate of the causal effect of incumbency. Using subgroup analyses, we can test whether the effect is similar for both challenger and dominant parties.

This approach effectively deals with many concerns that one might have when looking at the effect of incumbency. For example, that politicians who do not secure representation are less competent, have more extreme political views, or that representation is easier to obtain in certain type of municipalities.

## 3.1 Compiling a dataset on local coalition formation

We rely on a large, novel dataset containing complete data from more than 2,500 local elections and subsequent coalition formation processes in Denmark in the period 1971-2017. In total, the dataset covers more than 15,000 committee assignments and 22,335 party-year observations. In comparison, studies using cross-national data usually rely on far fewer observations: for example,

ParlGov – the largest database on coalition formation in parliamentary systems – covers only 990 elections (Döring and Manow 2019). As such, the dataset compiled for this paper may be one of the largest existing data sets containing information on government formation. However, in the analyses we mostly focus on data from the elections from 1997-2017, as these elections include both of the two challenger parties that are the focus of this paper.

Multiple sources are combined to build this dataset. Most importantly, we rely on *Kommunal Aarbog* (The Yearly Book on Municipalities). *Kommunal Aarbog*, which has been published since 1929, and contains contact information on employees in the public administration in Denmark, including chairmen of the municipal committees. Using this, we are able to map which positions that are allocated to different parties following each election.

Furthermore, we rely on *Statistiske Efterretninger om Befolkning og Valg fra Danmarks Statistik* (Statistical Information on Population and Elections from Statistics Denmark) to code both the results and the electoral alliances for each election. The data gathering process is described further in Larsen et al. (2019). Descriptive statistics are found in Appendix ??.

### 3.2 *Identifying the cut-off*

The vast majority of earlier studies that use close election regression discontinuity designs take place in first-past-the-post systems. In these systems, the cut-off at which a party is represented is simply the difference in vote share between the party of interest and the largest party of the other parties running.

Assignment of seats in Danish municipal election is based on a proportional divisor method where parties can form electoral coalitions (Cox 1997). If parties decide to form an electoral coalition, which they often do, then seats are first assigned to these coalitions, and then to the individual parties. (The electoral coalition is different from the governing coalition, and while there often are overlaps in the two, this is by no means guaranteed). As a result, the number of seats assigned to a party depends on the configuration of electoral coalitions, the votes cast for the different electoral coalitions, and the votes cast for the different parties within each coalition.

To our knowledge no prior studies have laid out a method that can calculate the representation

cut-off under this set of electoral rules. Instead, previous research relies on bootstrap methods, where an alternative number of votes are assigned to parties until the outcome changes (Dahlgaard 2016; Kotakorpi, Poutvaara and Terviö 2017). We developed a new method to calculate the exact threshold (for a similar approach that does not take electoral coalitions into account, see Folke 2014). A simple description of the method is laid out below. We we refer readers to Larsen et al. (2019) for a detailed description.

We first calculate the sum of votes each electoral alliance receives and calculate successive quotients for each electoral alliance using the formula:

$$quot_i = \frac{V_i}{s_m + 1}$$

, where  $V_i$  is the votes for party i and  $s_m$  is the number of the seats in the municipality. The party with the largest quotient wins one seat, and its quotient is then recalculated. We repeat this until the required number of seats are filled. Then we repeat the procedure within each electoral alliance, so the seats are distributed to each party. This gives us the actual allocation of seats in the municipality. We then calculate how many votes each electoral alliance would need to obtain an extra seat from another electoral alliance by finding the distance to the nearest quotient, denoted by  $T_{eai}$ . Using this method, we also calculate how many votes extra a party would need to obtain a seat from another member of the electoral alliance,  $T_{pi}$ .

Using this, we can now derive the number of votes a party needs to get an extra seat. If  $T_{pi} > T_{eai}$  the party obtains a seat from another party in its electoral alliance. The threshold is therefore equal to  $T_{pi}$ . However, if  $T_{pi} < T_{eai}$  the electoral alliance will receive an extra seat from another electoral alliance, and the party in question may not receive this extra seat. In this case we therefore create a fictional municipality, where the party in question receives a number of votes corresponding to  $V_i + T_{eai}$ .

We now repeat the whole procedure for this fictional municipality, and see whether the party in question would have obtained the extra seat. If this is the case the threshold is  $T_{eai}$ . If not, we evaluate whether  $T2_{pi} > T2_{eai}$  for the fictional municipality. If this is the case the threshold is

equal to  $T_{eai} + T2_{pi}$ . If not, the procedure is repeated until the party gains a seat. We use the same method to calculate how far a party is from losing a seat.

Having defined these thresholds, constructing a forcing variable that assign prior representation is relatively straight-forward. We simply subset on parties that received either one or zero seats, and record how many votes the parties with one seat were from losing a seat, and how many votes the parties with no seats were from obtaining a seat. To normalize the forcing variable, we divide it by the size of the electorate in the municipality.

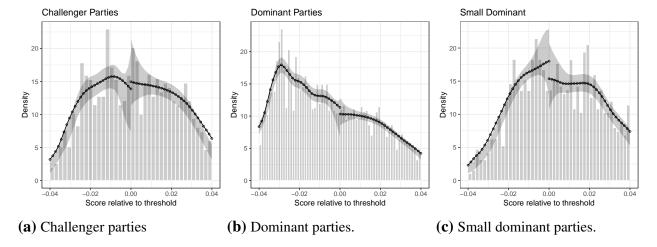
## 3.3 Assessing the validity of the design

The key identifying assumption is that the potential outcomes are continuous at the cut-off Lee (2008). One important breach of this assumption would be if specific parties sorted around the cut-off. In particular, if more politically astute parties were able to select into holding office, conditional on being at the cut-off, this would bias our estimated effect upwards.

As discussed above, the exact cut-off for assignment of representation is different from election to election and depends on the exact vote totals of the other parties. Even if local politicians or municipal electorates could select into exact vote shares for their own party, they would be hard pressed to know exactly how many votes this party would need in order to gain representation in the city council, because the exact number of votes needed depends on the complete distribution of votes across parties and electoral coalitions, which is, naturally, not revealed before the election. Consistent with this, Figure 3 shows that there is no evidence of sorting when examining the density of the forcing variable.

The lack of evidence of sorting in Figure 3 is supported by the fact that a formal McCrary test of a discontinuity in the density at the cut-off comes out insignificant (p > .6). We also find no discontinuity in predetermined variables that measure different features of the local party or the municipality the party is running in. This includes whether the party was in the governing coalition at the previous election, the size of the city council, the number of parties running, population, and other background variables. We present these analyses in Appendix B and  $\ref{eq:parties}$ ?

Overall, we find no evidence that parties are able to self-select into (or out of) representation



**Figure 3:** Density of the forcing variable for challenger parties, dominant parties, and small dominant parties. For dominant parties we only include elections after 1995, so that the election period for the challenger parties, who only ran after 1995, and dominant parties are similar. The bands are 95 percent confidence intervals.

around the cut-off, suggesting that we can use our RD design to estimate the causal effect of representation.

# 4 The Effect of Incumbency on Government Inclusion

We now turn to evaluating hypotheses 1 and 2 by estimating the effect of challenger and dominant parties obtaining a seat in the city council on their probability of joining the governing coalition in the subsequent election. Following Cattaneo, Idrobo and Titiunik (2020), we use local polynomial point estimation. This entails running weighted least squares regressions (WLS) of the forcing variable on the likelihood of joining a coalition above and below the cut-off, using the difference in model expectations of the WLS regression estimates at the cut-off as the estimator of the effect. We use a triangular kernel, and estimate our model within the MSE optimal bandwidth. We also estimate robust bias-corrected p-values and confidence intervals. These estimates are reported in the first row of Table 1.

Panel (a) of Figure 4 plots the relationship between our forcing variable, namely whether chal-

**Table 1:** RD effect of being elected to city council at t on being in coalition at t+1 for groups of parties

Party group	Estimate	p-value	95% CI	h	Obs. control	Obs. treatment
Challenger	0.173	0.029	[0.018;0.329]	0.0175	126	106
Non-extreme	-0.0844	0.14	[-0.196;0.028]	0.0197	488	474
Small dominant	-0.122	0.294	[-0.349;0.105]	0.017	187	172

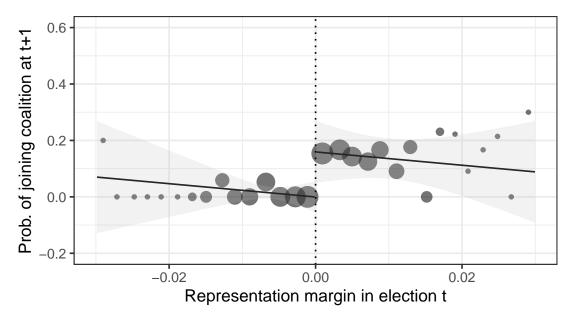
Note: Running variable is party's margin to get represented in the city council, outcome is joining the coalition (dummy = 1) or not (dummy = 0) in the following election. Estimate is the average treatment effect at the cutoff estimated with local linear regression with triangular kernel and MSE-optimal bandwidth. Column 3-7 report 95% robust confidence intervals, robust p-value, main optimal bandwidth, control observations within bandwidth, and treated observations within bandwidth.

lenger parties won one seat (the 'treatment group') or failed to win a seat (the 'control group') in the city council, and the predicted probability of joining the coalition in the subsequent election.

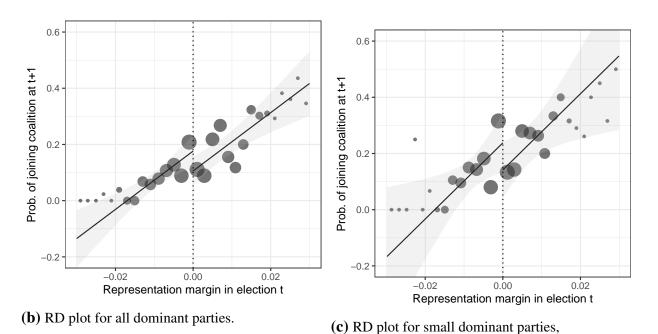
Consistent with hypothesis 1, we estimate that incumbency increases the probability that challenger parties enters the governing coalition (i.e., obtains a chairmanship) in the subsequent election with 17 percentage points. This is by all accounts a very large effect. A newly elected dominant party has a roughly 20 percent chance of being part of the governing coalition. For challenger parties the corresponding probability is around 5 percent. Our results thus suggest that incumbency on the part of the challenger party would shave off two thirds of this difference.

Notably, this overall effect is constrained by the fact that in many cases, there is no incentive for the largest party to include the challenger party (or other parties) in the governing coalition because they have a single party majority. In Appendix C we show that if we exclude coalition formation processes that feature a party that controls a majority of the seats, the effect doubles to around 35 percentage points.

We now turn to hypothesis 2, expressing the expectation that the effect of incumbency is muted for dominant parties. To explore whether this is the case, we estimate the effect of incumbency on the probability of joining the governing coalition for all dominant parties. We present a separate test considering only the two smallest dominant parties (the Conservative Party and the Social



(a) Regression discontinuity (RD) plot for challenger parties (the Danish People's Party and the Red-Green Alliance).



**Figure 4:** Prior representation increases the probability of joining the governing coalition for challenger parties (top panel), but not for dominant parties (bottom panels). Points represent binned means of the dependent variable, with point size determined by the weight the point has in the estimation of the effect. The bands represent 95 percent confidence intervals.

Liberals), which are more comparable in size to the challenger parties. We restrict our analyses to the years where both challenger parties also ran for office (i.e., after 1995), and use the same specification as for challenger parties. Results are reported in the second and third row of Table 1. The relationship between the forcing variable for the dominant parties and the probability of joining the coalition is visualized in panels (b) and (c) of Figure 4.

As expected, we find no effect of incumbency on government entry for dominant parties. If anything, the effect is in the opposite direction of what we find for challenger parties, although this is not statistically significant. The effect for challenger parties is significantly larger than the effect for dominant parties (p < 0.05). This suggest that having held office in the prior election period is not a general prerequisite for being admitted into the governing coalition: it is only challenger parties that experience this effect.

### 4.1 Alternative explanations

The lack of an effect amongst dominant parties helps rule out a number of potential alternative explanations for our findings. Most prominently, these findings suggest that the incumbency effect for challenger parties cannot be explained by parties becoming more experienced and skilled at legislative negotiations if they had a chance to participate in the last election. If experience was driving our results we would expect similar effects for the small dominant parties. A concern in this regard could be that the dominant parties have been around longer, and therefore they might have experience from prior election periods that substitute for incumbency. To address this issue, we look at whether there is an incumbency effect for dominant parties who have not been represented in a municipality for the two election periods (i.e., eight years before the election that assigns incumbency). We also do not find any incumbency effect for this subgroup of dominant parties (see Appendix F).

Another important alternative explanation is that challenger parties enjoy particularly large electoral incumbency advantages in terms of vote shares or representation, and this gives the chal-

<sup>&</sup>lt;sup>3</sup>To test this, we use a non-parametric bootstrap method on the difference in RDD estimates. The 95 percent bootstrap confidence interval for the difference is .01-.53.

lenger parties a better platform from which to negotiate (an advantage often also present at the local level, see Dahlgaard 2016; Trounstine 2011). However, we do not find any incumbency effect on electoral support for challenger parties (or dominant parties). In line with this, there is also no evidence that incumbency increases the probability that a challenger parties runs again or that incumbency increases the probability of future representation (for these analyses, see Appendix E). As such, out findings cannot be explained by challenger parties accruing an electoral advantage from incumbency that they can utilize at the negotiating table. Incumbent challenger parties are treated differently on average even though they enjoy the same average levels of support an have the same number of seats.

Finally, since incumbency does not effect the probability that a challenger party will secure representation in the city council, we can also rule out that the incumbency effect on government participation is simply the result of incumbent challenger parties being unavailable to take part in a coalition.

### 4.2 Auxiliary analyses and robustness tests

To further unpack our findings, we examine which type of committees chairmanships that the challenger parties obtained. We find the largest effects for the employment and zoning/planning committees – which are generally regarded as the more powerful committees. This suggest that the challenger parties are not given purely symbolic posts, but do in fact obtain real, executive power. These results are presented in Appendix G. In Appendix H we present treatment effects for individual parties. We see that only the two challenger parties, the Danish People's Party and the Red-Green Alliance, experience large and positive effects of incumbency on the probability of entering a governing coalition. In Appendix D we also show that there are no longer term effects of incumbency on the probability of joining a government coalition.

To test the robustness of our findings, we first look at whether our RD results are sensitive to our choice of the MSE optimal bandwidth. The identified effects for challenger parties are very stable across different choice of bandwidth, and only become statistically insignificant at very small bandwidths (i.e., .002). These analyses are presented in Appendix I. We then examine placebo cut-

offs in Appendix J, and only find a significant effect around the true cut-off for challenger parties. For the small dominant parties we do find a significant effect at a placebo cut-off, however, this is to be expected when examining a large number of placebo cut-offs. Finally, we examine different local-polynomial models and types of kernels to construct the weights in Appendix K and examine whether our findings are sensitive to the inclusion of controls in Appendix L. Again, we find that our findings are robust to these specification choices.

Finally, we also look at some other challenger parties. In the early 1970s the Centre Democrats, the Christian Democrats and the Progress Party formed in opposition to the existing five party structure. The former two parties eventually became part of the political mainstream, joining a coalition government in the mid 1980's. We have omitted these parties from the main analyses to get a cleaner comparison between small dominant and challenger parties, but in Appendix M we show that the coalition formation dynamics for these parties match our expectation. Overall we find that there is a statistically significant incumbency effect of government entry for these challenger parties, however, after the Centre Democrats and the Christian Democrats enter government at the national level, the incumbency effect disappears for these parties.

# 5 Incumbency and Challenger Party Moderation

Above we found that there is an incumbency effect on government participation for challenger parties, but not for dominant parties, in line with hypotheses 1 and 2. In this section, we present evidence relating to hypotheses 3, namely that incumbent challenger parties take more moderate positions compared to non-incumbent challenger parties. Specifically, we show that challenger parties with prior representation take less extreme policy positions and employ language more similar to dominant parties, both patterns consistent with the moderation account.

To do so, we rely on a rich data set on candidate positions and platforms in the 2013 and 2017 nationwide local elections. Fielded by the online political news site *Altinget* starting with the 2013 elections, these candidate surveys were developed as inputs to a voting advice application run by *Altinget*. Because only candidates with survey responses could be recommended in the voting

advice application, candidates faced a strong incentive to complete the survey. The full data set contains responses from 9,073 candidates in the 2013 elections and 9,544 candidates in the 2017 elections for a total of 18,617 sets of candidate responses.

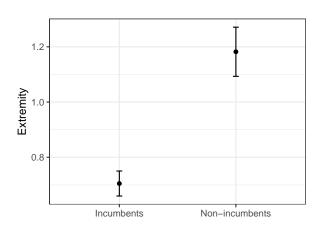
While the data set is rich at the candidate level, it nevertheless covers only two elections, far less than the full data set in the main analysis. Since the regression discontinuity design is very demanding in terms of statistical power (Schochet 2009), this leaves us with insufficient power for such a design. Instead, we present a set of pairwise comparisons of challenger parties with and without prior representation. Since these simple comparisons may be confounded by other differences between parties with and without prior representation, they do not have a strict causal interpretation. Still, they provide tentative evidence of the mechanism.

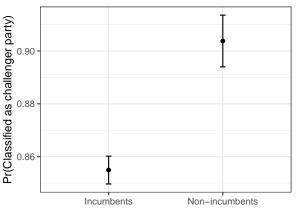
We assess party moderation in two ways. First, we consider the policy positions taken by parties in the candidate surveys. In each set of elections, candidates express their policy preferences by answering a series of questions about municipal policy issues on a Likert-type agree-disagree scale. The questions cover public policy debates in municipal conflicts such as taxation level, public service provision, and infrastructure. To simplify the analysis, we reduce each candidate's responses to a single scale using a multidimensional item response theory (IRT) method (Chalmers et al. 2012). In Appendix N, we show that party-level estimates exhibit high face validity, placing parties meaningfully along a left-right scale. We aggregate these candidate-level responses to obtain a party-level estimate for each municipality in each election. For each party, we then define its 'extremity' the absolute difference between the party's position and the average position across all parties in the municipality. Hence, this measure classifies parties whose candidates take far left or right positions relative to the municipality average as more extreme.

Second, we consider open-ended text responses in the same candidate survey, where candidates are asked to describe their electoral platform. Using these open-ended responses, we can assess whether incumbent challenger parties use less distinct language compared to those without prior representation. We rely on the approach introduced in Peterson and Spirling (2018), who propose using misclassification rates in a supervised learning model to learn about textual distinctiveness.

We fit a supervised learning model predicting party labels from electoral platforms. If the model is more likely to erroneously classify incumbent challenger parties as dominant parties, this tells us that the language used by those parties is relatively more similar to dominant parties' language. We implement this approach by fitting a support vector machine (SVM) model to the full set of 8,751 candidate platforms. We label each platform according to whether the candidate represents a challenger or dominant party. The SVM model then predicts party type based on word frequencies. To ensure that the model does not simply capture party labels used in the platforms themselves, we remove party names in the preprocessing stage, but otherwise include platforms as is.

We present the results from each of these tests of challenger party moderation in Figure 5.





- (a) Average extremity of challenger parties, measured as each party's absolute deviation from the municipality-level mean across parties.
- **(b)** Challenger parties' probability of being classified as a challenger party in a Support Vector Machines model trained on text from party platforms.

**Figure 5:** Tests comparing moderation of incumbent vs. non-incumbent challenger parties, based on candidate survey policy positions (left) and open-ended text responses (right).

Panel (a) of Figure 5 compares positional extremity for incumbent and non-incumbent challenger parties. As shown, incumbent challenger parties take far less extreme positions than do non-incumbent challenger parties. The difference is statistically significant (p < .001), and substantively significant: the difference of around .5 between the two groups corresponds to around one fifth of the full observed range of extremity across all parties.

Panel (b) compares extremity using the text-based measure, showing the average probability

of being correctly classified as a challenger party for incumbent and non-incumbent challenger parties. As shown, the SVM model generally predicts party type very well, with a precision of .99 and a recall rate of .95. In other words, challenger parties use sufficiently different language from dominant parties that party type can be predicted with high accuracy based on word use alone. However, this difference is not uniform: incumbent challenger parties are considerably less likely to be classified as challenger parties based on their election platforms. Whereas around 10 pct. of non-incumbent challenger parties are misclassified as dominant parties, around 15 percent of incumbent challenger parties are misclassified as dominant parties, a highly statistically significant difference. Substantively, this shows that incumbent challenger parties are more likely to employ language similar to that of dominant parties.

All in all, these analyses demonstrate that incumbent challenger parties take more moderate policy positions and use language more similar to that of dominant parties. While we are unable to assess the role of alternative causal mechanisms in a similar manner, this evidence indicates that moderation plays a substantial role in explaining the effect of incumbency.

## 6 Conclusion

On the rise for decades, challenger parties are now an entrenched feature of most European party systems. Once political outsiders, many of these have assumed real political power by joining a national governing coalition. How does this transition happen? In this article, we have investigated a hitherto overlooked factor for explaining challenger parties' access to governing coalitions: incumbency.

To study this, we used data from local governments in Denmark, where local city councils function as miniature parliaments, with parties bargaining for inclusion in the local government. Using a regression discontinuity design, we have shown that in contrast to dominant parties, challenger parties are (almost) fully excluded from access to government the first time they enter the city council. However, this initial hesitance disappears once extreme parties amass a record of representation. Once challenger parties obtain legislative representation, they are much more likely to

eventually become part of government coalition. Next, we investigated the mechanisms, demonstrating that incumbent challenger parties take relatively more moderate positions and use language relatively more similar to dominant parties. This suggests that moderation is a key causal mechanism driving the mainstreaming effect of incumbency among challenger parties.

The overall pattern emerging from this set of findings is one of a 'centripetal' party system: new parties emerge at the periphery, but as they amass a record of representation are gradually pulled towards the mainstream. This in turn frees up space for new challengers to emerge, and for the process to repeat itself.

What are the normative implications of this dynamic? To a first approximation, they are largely positive: our results suggest that multiparty parliamentary democracies are quite flexible in including and mainstreaming new, initially extreme voices. Indeed, our findings are consistent with the logic of the inclusion-moderation hypothesis, presented above. This in turn implies that measures designed to bar challenger parties from holding elected office, such as restrictions on ballot access, will be counterproductive insofar as they will impede the moderating effects of holding elected office.

From another perspective, our study offers less sanguine implications. Radical political movements often espouse the notion that mainstream parties, though once well-intentioned, have been co-opted by the establishment. Narrowly speaking, our findings are in fact consistent with this allegation. From the perspective of citizens with strongly anti-establishment attitudes, the main-streaming process undergone by challenger parties confirms their suspicions that representative democracy is 'rigged'. Hence, while the centripetal dynamic of challenger party mainstreaming is a stabilizing force for the party system itself, it may fuel discontent and estrangement among the former supporters of mainstreamed challenger parties. Understanding the interaction between these mass and party system-level dynamics is an important task for future research.

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# **Appendix: For Online Publication**

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A Descriptive statistics

Below the descriptive statistics are seen for the variables included in the main analysis and the variables used for the balance tests.

	Observations	Mean	Median	SD	Min	Max
Year	22355	1990.04	1989.00	13.32	1970.00	2017.00
Coalition membership in t+1	17301	0.36	0.00	0.48	0.00	1.00
Vote share	22346	0.13	0.07	0.13	0.00	0.73
Dist. to threshold (gain)	22346	0.03	0.03	0.02	0.00	0.43
Dist. to threshold (loss)	15105	0.03	0.02	0.02	0.00	0.19
Coalition membership (t-1)	16050	0.38	0.00	0.49	0.00	1.00
Mandates per party	22355	2.29	1.00	2.85	0.00	20.00
Mandates in the municipality	22355	18.96	17.00	4.93	9.00	31.00
Chairmen per party	22355	0.65	0.00	1.26	0.00	12.00
Chairmen in the municipality	22329	5.46	5.00	1.77	1.00	15.00
Number of parties running	22355	8.66	8.00	2.68	2.00	20.00
Population	7991	38930.06	28376.00	44692.00	1793.00	335684.00
Area (sq km)	7991	308.08	196.00	307.32	9.00	1488.00
Share immigrants (pct.)	7986	2.44	1.98	1.87	0.08	13.44
Operating expenses per person (DKK)	5916	34261.37	36811.00	8981.09	21140.00	76351.00
Expenses to service per person (DKK)	7991	134965.83	127280.00	41088.21	75714.00	349000.00
Average taxes per person (DKK)	7991	37801.79	32262.00	15148.77	17786.00	91231.00

### B Graphical balance tests

We verify that treatment and control units' characteristics are continuous around the cut-off for being represented in the city council, since marked differences on pre-treatment covariates can challenge the local randomization assumption (Caughey and Sekhon 2011). To do so, we estimate the effects of incumbency on a list of characteristics using the same RD design and estimation choices as in the paper.

The results are presented in the table below. First, we include variables concerning the election itself, such as the year of election, the lagged dependent variable, seats in the city council, number of chairmen, and the number of parties. Thereafter, we include background variables relating to the characteristics of the municipality, such as population, area, share of immigrants, and economic

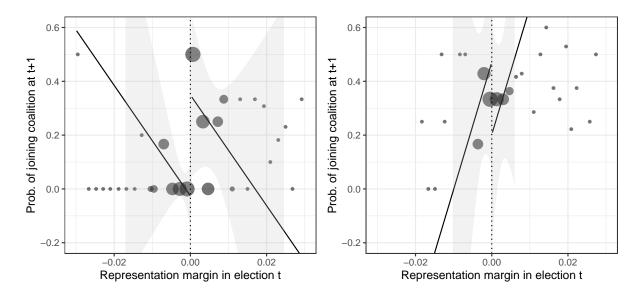
variables. Overall, the tests provide strong evidence for balance, particularly for challenger parties. There is some evidence of imbalance for small dominant parties (p < 0.1 for population, area, and taxes), and we control for these variables in Appendix L.

**Table B1:** RDD Balance Tests

Variable	Group	Estimate	Std.error	p-value
Year	Challenger Parties	-0.39	1.90	0.84
	Dominant Parties	-1.26	1.01	0.21
	Small Dominant	2.40	2.02	0.24
Previously in coalition	Challenger Parties	-0.05	0.07	0.41
	Dominant Parties	-0.01	0.06	0.88
	Small Dominant	-0.10	0.10	0.31
Seats in the council	Challenger Parties	-0.80	1.44	0.58
	Dominant Parties	-0.79	0.83	0.34
	Small Dominant	-1.23	1.28	0.34
Number of chairmen	Challenger Parties	0.34	0.45	0.45
	Dominant Parties	-0.12	0.24	0.61
	Small Dominant	-0.13	0.41	0.74
Number of parties	Challenger Parties	-0.30	0.70	0.67
	Dominant Parties	0.00	0.33	0.99
	Small Dominant	-0.36	0.60	0.55
Population	Challenger Parties	-10099.46	7626.61	0.19
	Dominant Parties	-2967.03	5330.55	0.58
	Small Dominant	-11872.57	6746.70	0.08
Area (sq mi)	Challenger Parties	26.21	98.57	0.79
	Dominant Parties	-95.14	45.71	0.04
	Small Dominant	-116.09	69.44	0.09
Share immigrants (pct.)	Challenger Parties	-0.30	0.37	0.43
	Dominant Parties	-0.18	0.21	0.39
	Small Dominant	-0.03	0.45	0.95
Operating expenses per person (DKK)	Challenger Parties	-1059.57	3593.75	0.77
	Dominant Parties	-2726.68	2033.13	0.18
	Small Dominant	4407.05	4023.23	0.27
Expenses to service per person (DKK)	Challenger Parties	-3139.42	2733.92	0.25
	Dominant parties	-1687.77	1305.51	0.20
	Small Dominant	2582.58	2562.75	0.31
Average taxes per person (DKK)	Challenger Parties	-7006.56	13386.60	0.60
	Dominant Parties	-1097.35	7392.52	0.88
	Small Dominant	21819.73	11131.46	0.05

## C Influential parties only

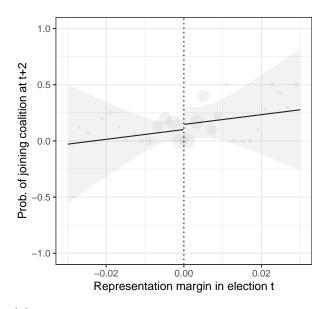
Below we only look at parties, which have a Shapley-Shubik Index (SSI) over 0. Building on Von Neumann, Morgenstern and Kuhn (1953), Shapley and Shubik developed a method of calculating how probable it was that a party is pivotal. The SSI reflects the proportion of all possible permutations of the parties in a council in which a specific party adds the votes necessary for a majority, when the parties contribute with their votes in turn. The SSI value is related to the size of the party, but the relationship is not strictly proportional. In other words, if a party has an SSI of 0 there are no theoretical coalitions where the party's votes are necessary to form a majority coalition. It is not surprising to see that the effect is much larger, when we only include parties that have a chance of becoming necessary for forming a coalition.



**Figure C1:** Prior representation increases the probability of joining the governing coalition for extreme parties (left panel), but not for mainstream parties (right panel), including only parties with an SSI > 0. Points represent binned means of the dependent variable, with point size determined by the weight the point has in the estimation of the effect.

## D Additional effects of incumbency in later elections

In this appendix we explore the longer term effect of incumbency on joining the governing coalition. We use the same RD design and estimation choices as in the paper. The figure on the left show the effect of incumbency on joining a coalition two elections after being represented and the figure on the right shows the effect of incumbency on joining a coalition three elections after being represented. We see that the positive effect of incumbency on joining the coalition only last for one election. Thus, there are no longer term effect of incumbency on joining the coalition for extreme parties.



1.0 O.5 O.0 O.0 O.0 O.0 O.0 O.0 O.0 O.0 Representation margin in election t

(a) Regression discontinuity plot for challenger parties (the Danish People's Party and the Red/Green Alliance). The cut-off is whether the party was represented at t, while the dependent variable is joining coalition at t+2

**(b)** Regression discontinuity plot for challenger parties (the Danish People's Party and the Red/Green Alliance). The cut-off is whether the party was represented at t, while the dependent variable is joining coalition at t+2

## E Exploring alternative causal paths

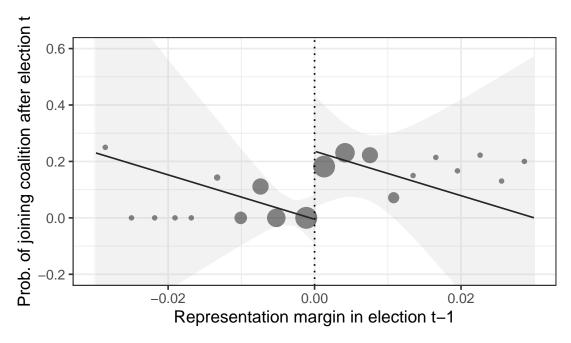
Following Lee (2008)'s pioneering work, is has been well established that barely winning or losing an election can have an effect on subsequent electoral outcomes. Our conclusion rests on the assumption that downstream effects on electoral outcomes cannot explain why challenger parties *are more* likely to join a coalition in the subsequent election, while *this is not* the case for dominant parties. For example, being represented may increase the vote share, the number of mandates, or whether a party runs in the following election only for challenger parties.

In this appendix, we rule out such concerns by showing that these factors cannot explain the effect of incumbency on the likelihood of joining a coalition in the subsequent election. We do so in two ways. First, we alter the analysis, so it is retrospective, meaning that we use the election where parties form the coalition as t, while the previous election, t-1, is used as the treatment. In that way, we only compare parties that are elected to the city council in election t, but where some did not gain a mandate in the last election (the untreated) while others were represented (the treated). Second, we run the RDD on a range of potential alternative explanations, showing that none of these are significant. Lastly, we also control for these and other variables in Appendix ??, albeit it is generally not recommended to try to fix imbalances using covariates (Cattaneo, Idrobo and Titiunik 2020). Taken together these results indicates that subsequent electoral outcomes cannot account for our main conclusion, namely that incumbency increases challenger parties' access to government through moderation.

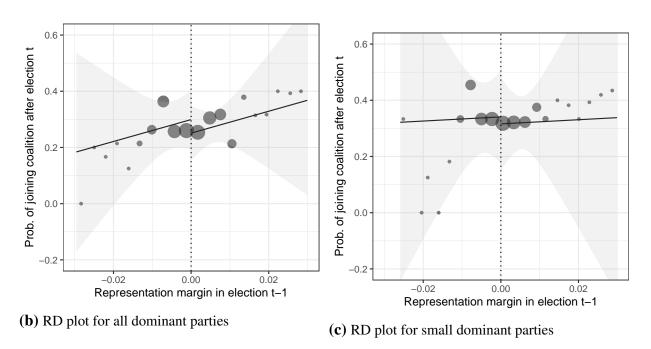
## **E.1** Retrospective analysis

In the following analysis we change the set-up of the analysis, so period t is the period where the coalition is formed, while t-1 is the election where the treatment is assigned. Although this may seem like semantics, it has an important implication, namely that we only include parties represented in election t. Therefore, the untreated parties are parties not elected to the city council in t-1, who are elected to the city council in t while the treated parties are elected to the city council in both period t-1 and t. This rules out any effect incumbency may have on re-election. Again, we find that challenger parties experience a large and significant effect of prior representation, while this is not the case for dominant parties. This provides strong support of the moderation thesis.

This is only one of several alternative statistical set-ups. For example, we could filter out parties that do not make it into the city council in t+1 in the original design or extrapolate missing observations. The results are consistent independent of design.



(a) Regression discontinuity (RD) plot for challenger parties (the Danish People's Party and the Red/Green Alliance).



**Figure E1:** Prior representation increases the probability of joining the governing coalition for challenger parties (top panel), but not for dominant parties (bottom panels). Points represent binned means of the dependent variable, with point size determined by the weight the point has in the estimation of the effect.

**Table E1:** RD effect of being elected to city council at t-1 on being in coalition at t for groups of parties

Party group	Estimate	p-value	95% CI	h	Obs. control	Obs. treatment
Challenger	0.257	0.0749	[-0.026;0.54]	0.0121	35	56
Dominant parties	-0.0395	0.721	[-0.256;0.177]	0.0134	128	291
Small Dominant	0.0221	0.904	[-0.338;0.382]	0.0118	66	120

Note: Running variable is party's margin to get represented in the city council in the last election, outcome is joining the coalition (dummy = 1) or not (dummy = 0) in this election. Estimate is the average treatment effect at the cutoff estimated with local linear regression with triangular kernel and MSE-optimal bandwidth. Column 3-7 report 95% robust confidence intervals, robust p-value, main optimal bandwidth, control observations within bandwidth, and treated observations within bandwidth.

## **E.2** Graphical tests of alternative explanations

In the following we present the results for alternative treatment outcomes that could be effected by the treatment, namely prior representation in the city council. To do so, we estimate the effects of incumbency on a list of variables using the same RD design and estimation choices as in the paper. With the exception of  $Parties\ running\ in\ t+1$ , we find no - or only a very small - difference for all variables. Hence, more parties - in addition to the challenger party - seem to enter the following election when a challenger party is elected to the city council. This may be because people with alternative views see an opening, when one challenger party is elected, feels vindicated and decide to run (Valentim 2018) or it may be a form of resistance to the challenger party. While this is an interesting finding that deserves further scrutiny, it cannot explain why challenger parties are more likely to enter the governing coalition. If anything, we would need to see the opposite pattern where fewer parties are running, making challenger parties more palatable.

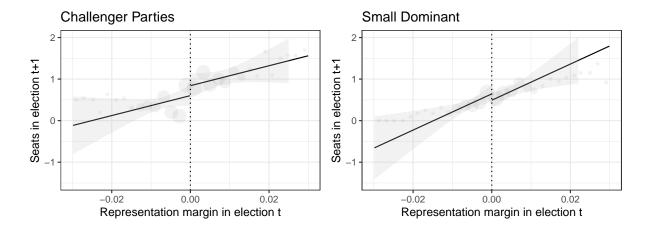


Figure E2: Mandates in t+1

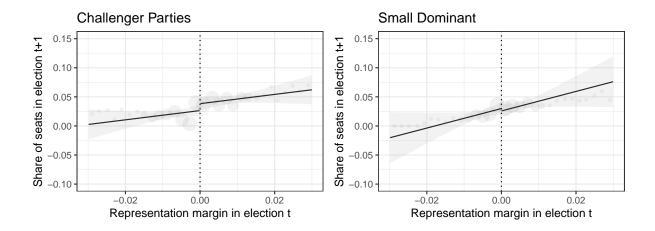


Figure E3: Share of mandates in t+1

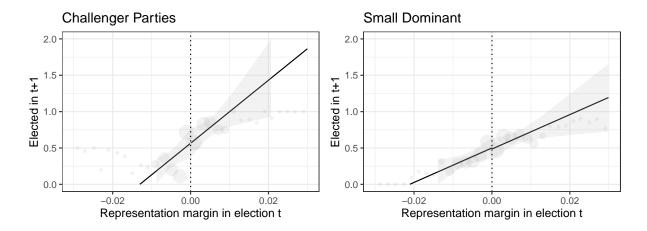


Figure E4: Elected in t+1

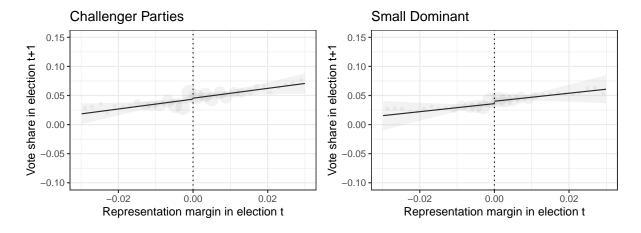


Figure E5: Vote share in t+1

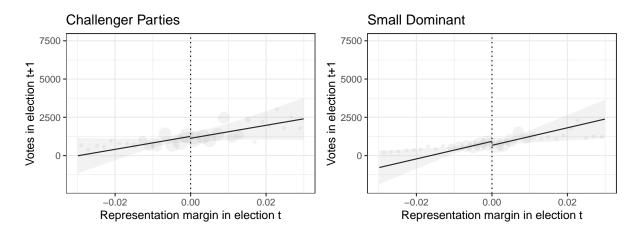


Figure E6: Vote share in t+1

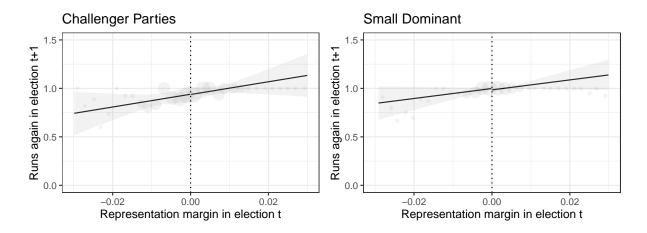


Figure E7: Runs again in t+1

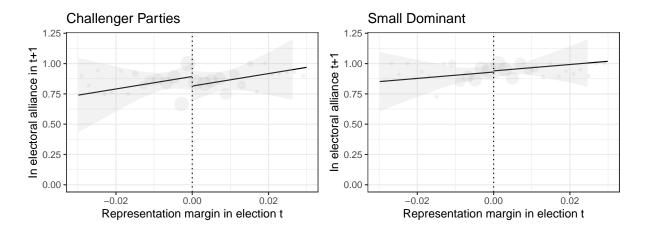


Figure E8: In an electoral alliance in t+1

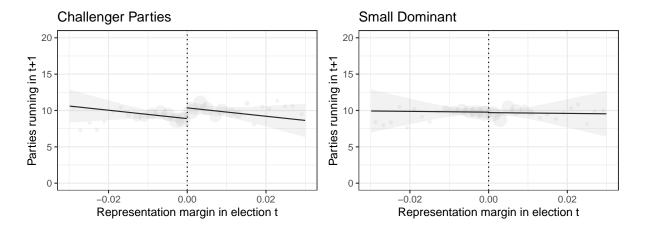


Figure E9: Parties running in t+1

# E.3 Tables for the graphical tests of alternative explanations

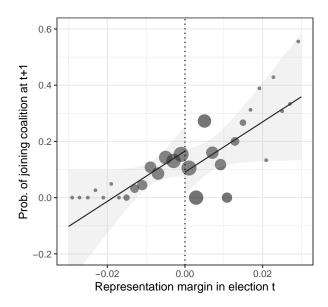
Below we provide the tables with the results from the graphical tests seen above. I addition to the results for challenger parties and small dominant parties, we also include all dominant parties in the table.

**Table E2:** RDD Alternative Paths

Variable	Group	Estimate	Std.error	p-value
Mandates in t+1	Challenger Parties	0.169	0.279	0.546
	Dominant Parties	-0.191	0.143	0.181
	Small Dominant	-0.211	0.222	0.343
Share of mandates in t+1	Challenger Parties	0.00976	0.011	0.373
	Dominant Parties	-0.013	0.0097	0.178
	Small Dominant	-0.00599	0.0136	0.66
Elected in t+1	Challenger Parties	-0.071	0.197	0.718
	Dominant Parties	-0.0755	0.0853	0.376
	Small Dominant	-0.044	0.171	0.797
Vote share in t+1	Challenger Parties	0.000688	0.00786	0.93
	Dominant Parties	-0.00633	0.00633	0.317
	Small Dominant	0.00423	0.00837	0.613
Votes in t+1	Challenger Parties	-164	363	0.651
	Dominant Parties	-45	133	0.736
	Small Dominant	-313	248	0.207
Runs again in t+1	Challenger Parties	-0.0907	0.131	0.489
	Dominant Parties	-0.0665	0.0695	0.339
	Small Dominant	-0.0202	0.112	0.857
In electoral alliance in t+1	Challenger Parties	-0.0932	0.113	0.409
	Dominant Parties	-0.0718	0.0631	0.255
	Small Dominant	0.00812	0.0712	0.909
Parties running in t+1	Challenger Parties	1.64	0.891	0.0653
	Dominant Parties	-0.465	0.595	0.434
	Small Dominant	-0.0347	0.795	0.965

# F New parties

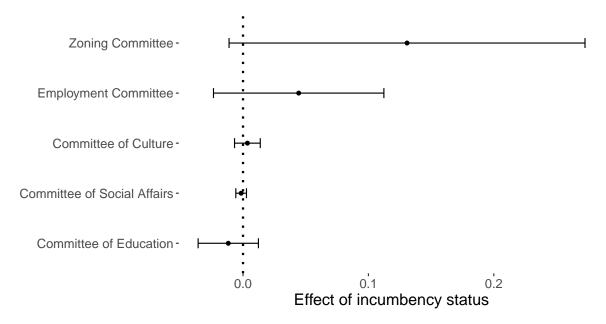
A difference between challenger parties and dominant parties is that dominant parties are more likely to have experience in the city council from elections prior to the treatment, meaning that they may have been represented historically despite not being represented in the given election. This is the case because dominant parties have a much longer electoral history. We might therefore be comparing challenger parties with dominant parties with prior representation, giving dominant parties an advantage in the coalition formation process. To rule this out we exclude dominant parties that have been represented in the two last elections before the treatment from the analysis and find that the results are similar. We use the same RD design and estimation choices as in the paper.



**Figure F10:** Regression discontinuity plot for all dominant parties post-1995, while only including parties that had not been represented in the city council in t-2 and t-3.

## G Effect by type of committee

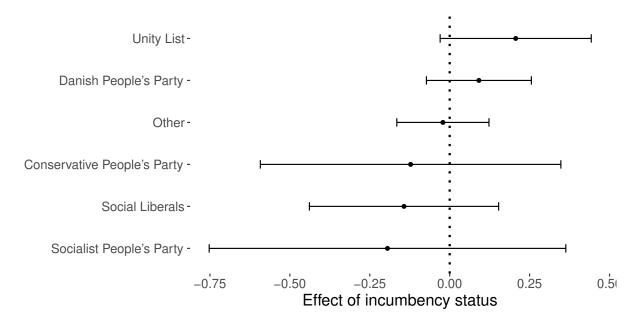
The table below shows the RD treatment effect for extreme parties on gaining the chairmanship for different types of committees. We use the same RD design and estimation choices as in the paper. We find that the effect is largest for the Zoning Committee and the Employment Committee. These are some of the more influential and important committees, meaning that challenger parties are not assigned to minor positions when they enter the coalition.



**Figure G11:** Does experience matter for the type of committee the extreme party gets control over? The RD treatment effect of incumbency status on gaining the chairmanship of different types of committees using the robust specification.

## *H Effect by party*

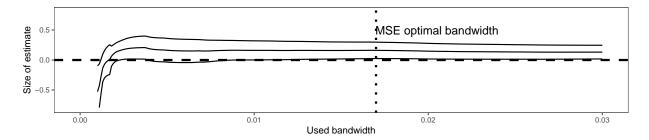
The table below shows the RD treatment effect for all parties in the period 1995-2017 (except for the two major parties, where there are not enough cases). We use the same RD design and estimation choices as in the paper. We see that the Unity List and the Danish People's Party face a large incumbency advantage if they were elected in the last city council, albeit it is just outside normal levels of statistical significance for both parties. There is no effect - or even a negative effect - for all other parties.



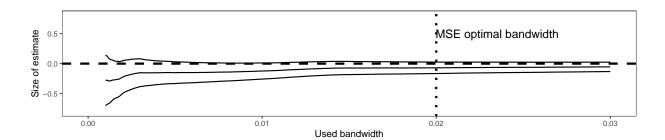
**Figure H12:** Does experience matter for different parties? The RD treatment effect of incumbency status on entering a governing coalition for Danish parties. Local parties are parties, which do not run nationwide but only in one or a few regionally clustered municipalities.

#### I Bandwidth tests

While we use the MSE optimal bandwidth in our main analysis, we may be interested in the sensitivity to the window choice to demonstrate that conclusions are not driven by the chosen bandwidth. We explore this in the graphs below. Naturally, the bandwidths are very large at very small bandwidths due to few observations and imprecise estimates. As the figures show, the conclusions drawn in the article do not vary based on the choice of bandwidth, since we find a large, significant effect for challenger parties across the range of bandwidths, while thee is no effect for dominant parties.



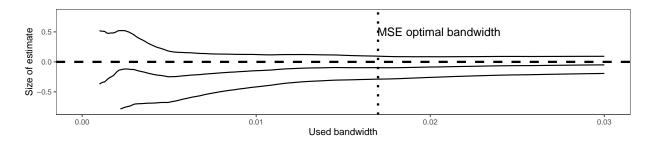
**Figure I1:** Bandwidth tests for challenger parties. We report the conventional estimate and standard error. The lines are 95 percent confidence intervals



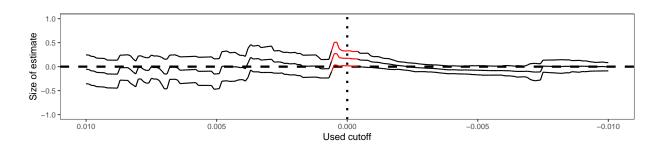
**Figure I2:** Bandwidth tests for dominant parties. We report the conventional estimate and standard error. The lines are 95 percent confidence intervals

#### J Placebo cut-offs

The graphs below chooses artificial cut-off values and analyzes the outcome of interest. We vary the cut-off from -1% to 1% of the votes. At these artificial cutoffs we use the same methods used to conduct the analysis as those used in the paper. The expectation is that no effect should be found at any of the artificial cutoffs (Cattaneo, Idrobo and Titiunik 2020). Rightly so, we only find the effect for challenger parties around the cut-off, while the placebo cut-offs essentially are zero. We do, however, find a positive effect for small dominant parties around 0.25% of the votes. We have no reason to suspect that this is anything but a statistical fluke. To substantiate this, we calculated the share of cut-offs that were significant for small dominant parties and dominant parties, which were respectively 3.4% and 3.9%, and thus not more than what we would expect by chance (5%).



**Figure I3:** Bandwidth tests for small dominant parties. We report the conventional estimate and standard error. The lines are 95 percent confidence intervals



**Figure J1:** Placebo tests for challenger parties. The lines are 95 percent confidence intervals.

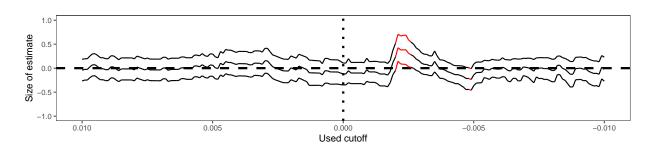
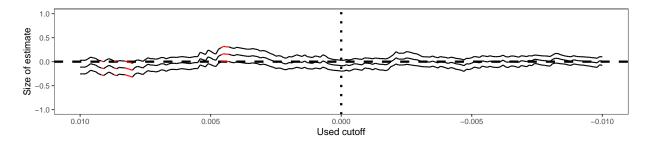


Figure J2: Placebo tests for dominant parties. The lines are 95 percent confidence intervals.



**Figure J3:** Placebo tests for all parties. The lines are 95 percent confidence intervals.

## K Using alternative specifications

In the main specifications, we follow the most recent literature by presenting local linear estimates combined with triangular kernels (Cattaneo, Idrobo and Titiunik 2020). This avoids multiple inference problems of higher order polynomials (Gelman and Imbens 2019) and reduce bias relative to local constant models (Fan and Gijbels 1996). In this appendix we present the results using alternative specifications. The substantive conclusions derived from all alternative specifications are similar to those presented in the paper.

First, we present the results estimated using local constant and quadratic (local) specifications in addition to the linear specification used in the paper. Here, we maintain the triangular kernel, optimal MSE bandwidth, and robust inference methods used in the paper. The results are seen in Table K1. Afterwards, we use different kernel functions to construct the local-polynomial estimator. Again, we maintain the remaining specifications used in the paper, meaning that we use the linear specification and the optimal MSE bandwidth. The results are seen in Table L1.

**Table K1:** RD effect of being elected to city council at t on being in coalition at t+1 for groups of parties

Polynomi	Polynomial								
order	Party Group	Estimate	p-value	95% CI	h	Obs. control	Obs. treatment		
0	Challenger Parties	0.14	0.029	[0.014;0.265]	0.0124	91	73		
0	Dominant Parties	-0.104	0.0888	[-0.223;0.016]	0.00466	110	105		
0	Small Dominant	-0.109	0.295	[-0.312;0.095]	0.00568	61	60		
2	Challenger Parties	0.176	0.0644	[-0.011;0.362]	0.0194	140	121		
2	Dominant Parties	-0.0847	0.22	[-0.22;0.051]	0.0271	678	618		
2	Small Dominant	-0.15	0.348	[-0.464;0.164]	0.0212	224	226		

Note: Running variable is party's margin to get represented in the city council, outcome is joining the coalition (dummy = 1) or not (dummy = 0) in the following election. Estimate is the average treatment effect at the cutoff estimated with the polynomial specified in polynomial order using triangular kernel and MSE-optimal bandwidth. Column 4-8 report 95% robust confidence intervals, robust p-value, main optimal bandwidth, control observations within bandwidth, and treated observations within bandwidth.

**Table K2:** RD effect of being elected to city council at t on being in coalition at t+1 for groups of parties

Kernel	Party Group	Estimate	p-value	95% CI	h	Obs. control	Obs. treatment
Epanechnikov	Challenger Parties	0.175	0.0335	[0.014;0.336]	0.016	117	97
Epanechnikov	Dominant Parties	-0.0777	0.178	[-0.191;0.035]	0.0185	459	442
Epanechnikov	Small Dominant	-0.113	0.332	[-0.34;0.115]	0.0156	171	158
Uniform	Challenger Parties	0.199	0.0272	[0.022;0.375]	0.0121	88	71
Uniform	Dominant Parties	-0.0946	0.434	[-0.331;0.142]	0.0121	135	131
Uniform	Small Dominant	-0.0617	0.318	[-0.183;0.059]	0.0144	351	358

Note: Running variable is party's margin to get represented in the city council, outcome is joining the coalition (dummy = 1) or not (dummy = 0) in the following election. Estimate is the average treatment effect at the cutoff estimated with the polynomial specified in polynomial order using triangular kernel and MSE-optimal bandwidth. Column 4-8 report 95% robust confidence intervals, robust p-value, main optimal bandwidth, control observations within bandwidth, and treated observations within bandwidth.

#### L Including control variables

While we show in Appendix B that the treatment and control units are balanced, some readers may still want to see the results with covariate-adjustment. It should be noted that it is not possible to fix a RD design in which predetermined covariates are discontinuous at the cutoff by using covariate-adjustment. Instead, the main justification for including covariates is generally efficiency gains (Cattaneo, Idrobo and Titiunik 2020).

In the fist model we include a control for "Year". In the second model, we include electoral controls (Mandates in the municipality, the Number of Chairmen, and the Number of Parties). In the third model, we include a range of background variables (Population, Area, Share of Immigrants, Operating Expenses per Person, Expenses to Service per Person, and Average Taxes per Person), and in the fourth model we include Lead Variables (Mandates in t+1, Share of Mandates in t+1, Elected in t+1, Voteshare in t+1, Votes in t+1, In an Electoral Alliance in t+1, Number of Parties Running in t+1).

The inclusion of control variables generally renders very similar results to the main specifications, albeit the estimation becomes somewhat more efficient. The only marked difference is the model including background variables, where the MSE-optimal bandwidth is much smaller, causing the results to the estimates to be somewhat larger, albeit in the direction expected in our hypotheses.

**Table L1:** RD effect of being elected to city council at t on being in coalition at t+1 for groups of parties

Controls	Party Group	Estimate	p-value	95% CI	h	Obs. control	Obs. treatment
Year	Challenger Parties	0.182	0.0227	[0.026;0.339]	0.0171	125	106
Electoral variables	Challenger Parties	0.19	0.0155	[0.036;0.345]	0.0171	125	106
Background variable	esChallenger Parties	0.323	0.0014	[0.125;0.52]	0.0112	48	53
Lead variables	Challenger Parties	0.188	0.0143	[0.038;0.338]	0.0173	125	106
Year	Dominant Parties	-0.0805	0.158	[-0.192;0.031]	0.0197	486	473
Electoral variables	Dominant Parties	-0.0863	0.129	[-0.198;0.025]	0.0198	491	475
Background variable	esDominant Parties	-0.163	0.048	[-0.325;-0.001]	0.0169	286	257
Lead variables	Dominant Parties	-0.0704	0.169	[-0.171;0.03]	0.0206	518	500
Year	Small Dominant	-0.12	0.343	[-0.367;0.128]	0.0147	161	153
Electoral variables	Small Dominant	-0.119	0.3	[-0.344;0.106]	0.017	187	172
Background variable	esSmall Dominant	-0.76	0.00107	[-1.216;-0.305]	0.00643	56	43
Lead variables	Small Dominant	-0.131	0.261	[-0.359;0.097]	0.0142	155	147

Note: Running variable is party's margin to get represented in the city council, outcome is joining the coalition (dummy = 1) or not (dummy = 0) in the following election. Estimate is the average treatment effect at the cutoff estimated with the polynomial specified in polynomial order using triangular kernel and MSE-optimal bandwidth. Column 4-8 report 95% robust confidence intervals, robust p-value, main optimal bandwidth, control observations within bandwidth.

## M Other challenger parties

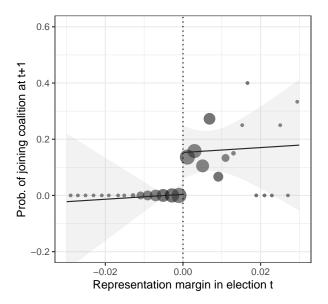
The Unity List and the Danish People's Party are not the only challenger parties in the Danish electoral history. Most of these parties, such as the Communist Party or the National Socialist Movement of Denmark, did not gain much electoral success, and we are therefore unable to test the mechanism on these parties.

However, there are other challenger parties of interest for our analysis. Below we explore the mechanism for the Christian Democrats, the Center Democrats, and the Progress Party. All three parties were elected to parliament for the first time in the 1973 general election which is also known as Jordskredsvalget (the Landslide Election). All three parties were excluded from the governing coalition until 1982, and thus "true" challenger parties until 1982. However, in 1982 the Christian Democrats and the Center Democrats formed a government together with the Liberal Party and the Conservative People's Party, causing them to change status from "challenger" to "dominant" parties, leaving only the Progress Party as a "challenger" party. We explore this in the table and the graph below, showing the results for the three parties throughout the period, before 1982, and after 1982. In line with our expectations, we find a larger effect of incumbency before 1982 than after both the Christian Democrats and the Center Democrats join the governing coalition. In table M2 we show the results both with and without the Progress Party (Z).

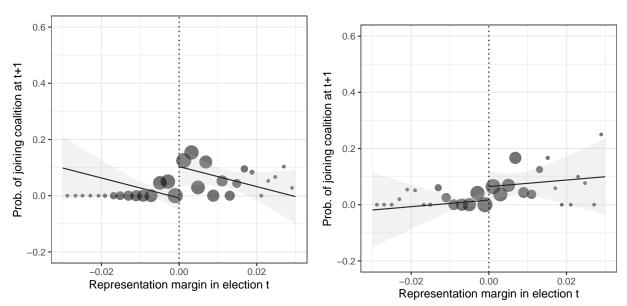
**Table M2:** RD effect of being elected to city council at t-1 on being in coalition at t for the Christian Democrats, the Center Democrats, and the Progress Party (not included in row 4 and 5)

Time period	Estimate	p-value	95% CI	h	Obs. control	Obs. treatment
Throughout	0.0843	0.0174	[0.015;0.154]	0.0218	618	525
Before 1985	0.122	0.0541	[-0.002;0.246]	0.0187	210	238
After 1985	0.0376	0.463	[-0.063;0.138]	0.0142	216	188
Throughout (without Z)	0.132	0.0904	[-0.021;0.286]	0.0147	250	154
Before 1985 (without Z)	0.262	0.234	[-0.17;0.694]	0.00973	76	50
After 1985 (without Z)	0.0702	0.511	[-0.139;0.28]	0.0103	84	63

Note: Running variable is party's margin to get represented in the city council in the last election, outcome is joining the coalition (dummy = 1) or not (dummy = 0) in this election. Estimate is the average treatment effect at the cutoff estimated with local linear regression with triangular kernel and MSE-optimal bandwidth. Column 3-7 report 95% robust confidence intervals, robust p-value, main optimal bandwidth, control observations within bandwidth, and treated observations within bandwidth.



(a) Regression discontinuity plot for the Christian Democrats and the Center Democrats throughout the whole period



**(b)** Regression discontinuity plot for the Christian Democrats and the Center Democrats before 1985.

(c) Regression discontinuity plot for the Christian Democrats and the Center Democrats after 1985.

**Figure M1:** Prior representation increases the probability of joining the governing coalition for the Christian Democrats, the Center Democrats, and the Progress Party throughout the whole period (top panel). Yet, we see that the effect is much larger before the Christian Democrats and the Center Democrats joined the governing coalition in 1985 (the bottom left plot) than after (the bottom right plot). Points represent binned means of the dependent variable, with point size determined by the weight the point has in the estimation of the effect.

N Party positions based on IRT measure

ΤK

# References for the appendix

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