Assembly dissolution powers and incumbency advantages in coalition formation

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Abstract

Are dominant governing parties with discretion to call early elections better able to negotiate their return to office? Dominant incumbents in parliamentary democracies sometimes have extensive powers to dissolve parliament, which enables them to affect coalition bargaining. Yet, whether these powers advantage them in forming the next coalition remains poorly understood. To address this gap, this paper develops a theory of coalition formation in the shadow of parliamentary dissolution. Incumbents who can dissolve the assembly, it argues, are more likely to return to government than their peers who lack this power because they enjoy greater bargaining leverage and reputational advantages in coalition formation. The article tests this expectation using mixed and conditional logistic regression analysis of data on 631 government formation opportunities and 433,401 potential coalitions and finds that coalition leaders with discretion to dissolve parliament secure significant advantages in negotiating their return to power.

Key words
Assembly dissolution, coalition formation, cabinet formation, incumbency advantage, legislative bargaining

Do dominant governing parties with the power to call early elections enjoy advantages in negotiating their return to office? The formation of coalition governments is one of the most consequential negotiation processes in politics, and like other bargaining processes, it does not occur independently of the institutional context. Institutions can affect outcomes by giving some actors powers to control and structure the process. Nearly a quarter of a century ago, Lupia and Strøm (1995: 651) proposed that the power of parliamentary dissolution, may have these qualities, making it one of the institutional rules "that most directly impinge on party bargaining over executive coalitions." To date, however, this proposition remains unexplored.

Assembly dissolution is permitted in almost every parliamentary democracy (Strøm and Swindle 2002), and dominant incumbents, that is the Prime Minister's party, which is typically also the largest coalition partner, often have a pivotal role in deciding whether early elections are called (Goplerud and Schleiter 2016). The power to call, or threaten, parliamentary elections has long been viewed as the executive's counterweight to parliament's ability to dismiss the government (e.g., Cox 1987; Linz 1994). It confers on dominant governing parties with favourable electoral prospects the opportunity to realize electoral advantages and strengthens their hand in legislative bargaining by enabling them to extract concessions from other parties, particularly those with a desire to avoid elections (Lupia and Strøm 1995; Becher and Christiansen 2015). This power may be especially consequential in developed parliamentary democracies, where government formation is most often the result of negotiations in parliament rather than of elections alone because single party parliamentary majorities are rare (Gallagher *et al.* 2011: 401). Yet, in the literature on coalition formation, the lack of attention to the election timing powers of coalition leaders remains a striking omission. This paper addresses the gap and asks.

A large and sophisticated literature examines the process of coalition bargaining (Riker 1962; Axelrod 1970; Laver 1998; Martin and Stevenson 2001, 2010; Glasgow *et al.* 2011; Bassi 2013), and documents that incumbents enjoy extraordinary success in securing their return to government. According to Martin and Stevenson (2001), outgoing coalitions re-form around 35 percent of the time. Powell (2000: 49) finds that incumbent governments are completely replaced after just 17 percent of the elections in his sample. Glasgow *et al*. (2012) report that incumbents are more likely to form the next government than other potential coalitions and significantly more advantaged than others, a result that is confirmed by other studies (Glasgow *et al*. 2011; Glasgow and Golder 2015). In accounting for this varying incumbency advantage, previous studies argue that some outgoing governing parties may profit from two types of procedural rules that structure coalition negotiations (Strøm *et al.* 1994; Warwick 1996; Shugart and Wattenberg 2001).[1] The continuation rule (Diermeier and Roozendaal 1998) empowers the outgoing prime minister to attempt to form the next government (Bäck and Dumont 2007, 2008), and caretaker provisions make the outgoing government the reversion point in coalition negotiations (Strøm *et al.* 1994: 311). No pre-existing studies in this extensive literature, however, give consideration to the incumbent's dissolution powers.

We propose that the advantage of incumbents in negotiating their return to government derives, in part, from the power of assembly dissolution. Dominant governing parties that can invoke early elections, we argue, are more likely to return to government than their peers without such powers for two reasons: (i) they can influence under which circumstances a new round of coalition bargaining is initiated and extract concessions from other parties during the coalition negotiation process, and (ii) while in office, they have superior opportunities to unify their coalitions and benefit reputationally from securing policy and legislative success, which advantages them in coalition negotiations. These two

mechanisms particularly benefit incumbents in parliamentary coalition bargaining between elections (compared to after elections), once any benefits that may derive from dissolution powers in the electoral arena are taken into account. We test this argument using data on 631 government formation opportunities and 433,401 potential coalitions and find that governing parties, which can invoke early elections, achieve significantly greater success in bargaining over coalition formation than their peers who lack this power. Moreover, this advantage is particularly large in inter-electoral coalition bargaining. This finding has implications for the literatures on coalition bargaining, political institutions and incumbency advantages, which we discuss in the conclusion.

Dissolution power, incumbency and bargaining for executive power

Existing work has considered how parties use assembly dissolution power for opportunistic election calling and to manage government terminations, but we know surprisingly little about the implications of these powers for the ensuing negotiations about coalition formation.

The literature on opportunistic election timing shows that governments employ their discretion to dissolve parliament for partisan advantage. By timing elections to coincide with favourable circumstances such as peaks in their popularity and performance, incumbents choose to be held accountable "at the most advantageous time for them – when they expect to win" (Smith 2004: 1; see also Ito 1990; Palmer and Whitten 2000; Kayser 2005, 2006; Chowdhury 2009). Recent findings indicate that governing parties derive a significant electoral bonus from this strategy (Alcantara and Roy 2012; Schleiter and Tavits 2016; Schleiter and Tavits 2018).

Assembly dissolution powers also affect parliamentary bargaining about executive coalitions (Grofman and Van Roozendaal 1994, 1997; Strøm and Swindle 2002; Schleiter and Morgan-Jones 2009). According to formal models of bargaining about government

termination developed by Lupia and Strøm (1995) and Diermeier and Merlo (2000), parties with the power to dissolve parliament do not inevitably exploit peaks of popularity by triggering early elections. Instead, they may use their popularity as a bargaining chip and *threaten* an early election to extract other benefits from parties which stand to lose seats. For instance, a dissolution threat deployed by popular parties against an unpopular prime minister may be used to trigger a government change without intervening elections (Lupia and Strøm 1995: 649). However, these models share an assumption that a decision to dissolve the legislature lies with parliament rather than the government. In reality, as we have seen above, the dominant governing party often has a central and privileged role in determining whether early elections are held (Strøm and Swindle 2002; Goplerud and Schleiter 2016).

To date, no fully articulated argument exists of how leading governing parties can employ their election timing powers to influence parliamentary coalition bargaining. Here we develop such an argument building on insights drawn from the literatures on coalition negotiations, government termination and legislative policy bargaining. Discretion to dissolve parliament, we argue, advantages dominant incumbent parties by (i) enabling them to trigger coalition re-negotiations under conditions that systematically favour their return to power (i.e., when they are popular and the opposition is not), and (ii) allowing them to better unify the government, demonstrate greater policy and legislative success, and build a reputation for effectiveness in government. Both types of advantage, we argue, increase their chances of re-entering government compared to parties that lack assembly dissolution powers.

Advantages in coalition re-negotiation

Parliamentary parties bargain about coalition formation when no single party controls a majority of legislative seats after elections or following the termination of a government during the parliamentary term. As we have seen above, the literature on opportunistic election

timing focuses on the benefits that incumbents can derive in the *electoral arena* from calling elections at opportune moments. Here we focus on the additional advantages that incumbents can be expected to reap from assembly dissolution powers in the *parliamentary arena,* i.e., by initiating and securing coalition renegotiations through inter-electoral terminations.[2]

Lupia and Strom's (1995) model of government termination has direct implications for understanding how dissolution powers advantage incumbent parties in this context: Leaders who can credibly threaten dissolution because their party is popular, can re-negotiate their coalition by exerting leverage over parties that fear electoral losses. Dissolution power enables them to extract – in office currency – the costs to other parties of early elections:[3] For instance, the prospect of an early election can be used to secure the agreement of parties that previously opposed the government to join and support it, or to force fractious minor coalitions partners out of the cabinet. In sum, leaders with assembly dissolution powers are systematically better able to re-negotiate their coalitions when they are popular and conditions favour their return to office than their peers who lack such powers.

The motivations of incumbents to re-negotiate their coalitions reflect the broader office, policy and electoral goals of political parties, which are well understood (Riker 1962; Axelrod 1970; De Swaan 1973; Strøm 1990). For instance, governing parties may initiate new coalition negotiations to broaden the government's legislative support and its prospects of surviving in office, to reduce policy tensions within the cabinet, and to address electoral risks.

Anecdotally, we see numerous instances in which incumbents re-negotiate their coalitions by invoking the prospect of early elections. In November 2016, for instance, the Danish Prime Minister Lars Løkke Rasmussen negotiated an expansion of his parliamentary support, after he had formed Denmark's smallest minority government in 40 years. Against the background of the prime minister's discretion to dissolve parliament and his party's rising

popularity since the June 2015 elections, Løkke Rasmussen stressed the risk of a snap election to end months of policy battles by striking an agreement between his Liberal Party, the Conservatives and the Liberal Alliance.[4] Broadening his minority government to a three-party coalition provided more solid parliamentary support for his agenda of tax cuts and limited public spending.[5] Similarly, Finland's Prime Minister Juha Sipilä, conjured the spectre of early elections in June 2017, when he ejected the nationalist Finns party from his three-party centre-right coalition, after the popularity of the Finns plunged and it chose a new anti-immigration leader.[6] Citing differences with the new leader of the Finns in core values, immigration policy and policy regarding the EU, Prime Minister Sipilä, negotiated their replacement by bringing the smaller Swedish People's Party and Christian Democrats into the government.[7]

Advantages in reputation building

Leaders also profit from the discretion to dissolve parliament via a second, reputational advantage because this power enables them to be more effective in government. This advantage applies equally in government formation negotiations that follow elections and inter-electoral government terminations.

When selecting coalition partners, parties care not only about the spoils of office and the compatibility of policy platforms, but also about the effectiveness of their partners in unifying the government, passing legislation, and achieving policy goals. Entering into coalition with more effective partners shapes the anticipated policy and electoral benefits of coalition government, which gives partners with a demonstrated track record of effectiveness an advantage in coalition negotiations.

Incumbents who control assembly dissolution powers enjoy significant procedural advantages in securing agreement about policy and legislation. The availability of the

dissolution threat enables prime ministers to supplant policy disagreements with a choice about early elections. As long as early elections are less desirable than the government's preferred policy to relevant actors, this can allow a prime minister to better to unify their own party, enable their coalition partners to unite behind government policy, and to extract concessions from the opposition. Such dissolution threats are particularly valuable to premiers who might otherwise struggle to achieve legislative agreement to obtain consent and secure legislative success (Becher and Christiansen 2015), e.g., leaders of minority governments, those facing significant legislative opposition, and those leading parties or coalitions with internal differences.

Coalition leaders benefit reputationally from the use of this power for two reasons. First, its relevance to the premier's effectiveness is often difficult to observe. A dissolution threat, like other high-profile restrictive procedures, *need never be invoked* for it to be consequential (Huber 1996: 279). The *implicit* availability of a dissolution threat in itself alters parties' anticipated payoffs and thereby affects the outcomes of legislative bargaining. Moreover, even when dissolution threats are deployed, they are most often made *privately,* not publicly. This is because public threats have audience costs which reduce their payoff to the incumbent (Becher *et al.* 2017: 257; Huber 1996; Strøm and Swindle 2002). Hence, incumbent party whips manage dissent among their legislators behind closed doors whenever possible (Lynch and Whitaker 2013; Rogers and Walters 2015), and party leaders tend to keep bilateral negotiations to resolve coalition policy conflicts private (Ceron 2016).

Second, even in the rare instances when dissolution threats are publicly observable, they can be expected to benefit the premier's party reputationally. A sizeable literature shows that effectiveness is valued in government leaders, even when it is achieved by costly means**.** For instance, prime ministers who consolidate their authority by dismissing ministers or purging their party of dissenters typically remain popular (King and Allen 2010),[8] and voters

tend to reward incumbents electorally who engage in costly manipulation of the economy to signal competence and performance (for reviews see Franzese and Jusko 2006; Shi and Svensson 2006). Likewise, voters respond to opportunistic election timing with net support for the incumbent despite their disapproval of the opportunism when economic performance is strong (Schleiter and Tavits 2018). Rewards for effectiveness also apply in coalition bargaining. Incumbents who have demonstrated their effectiveness in managing policy and legislative conflicts have a greater chance of returning to power. As Martin and Stevenson (2010) show, governments whose members have demonstrated a capacity to govern together without public conflict are likely to remain in office (see also Clark *et al.* 2012). Conversely, Tavits (2008) finds that following a coalition breakup, the conflicting parties are less likely to form another coalition in future. Thus, effectiveness in office and success in managing conflicts is taken into account by potential coalition partners.

To sum up, incumbents with powers to dissolve parliament are better able to (i) trigger inter-electoral terminations and coalition re-negotiations under conditions that systematically favour their return to office, and (ii) demonstrate effectiveness in office, which confers a reputational advantage in coalition negotiations. These expectations give rise to our first hypothesis:

Hypothesis 1: Coalitions led by incumbents with extensive assembly dissolution power have a higher probability of forming.

Our second hypothesis differentiates between the two mechanisms: In government formations during the lifetime of a parliament, leaders with dissolution powers not only profit from their reputational advantages, but also from their ability to initiate new coalition negotiations when it suits them best, i.e., when they expect to benefit. Following elections, by contrast, the strategic timing advantages are reaped in the electoral arena so that any

additional incumbency advantages in parliamentary coalition bargaining derive solely from the reputational mechanism. Controlling for election outcomes, we therefore anticipate that:

Hypothesis 2: Coalitions led by incumbents with extensive assembly dissolution power are particularly advantaged in inter-electoral government formation negotiations compared to bargaining after elections.

Empirical strategy

A challenge in studying incumbency advantages in government formation is that a party's incumbency status and its probability of being included in the next government are likely to be endogenous to unobserved factors such as the dominant governing party's underlying competence. Competent parties are more likely to serve as dominant incumbents in outgoing governments and that same underlying competence also increases the probability that they will successfully negotiate their return to the next government. Endogeneity bias therefore affects empirical tests of incumbency advantages when unobserved competence affects current and future inclusion in government and its effects are not modelled.

Our research design enables us to address this concern by focusing on the difference between the effect of incumbency on entering the next government at high and low levels of constitutional assembly dissolution power. The difference between these two conditional effects can be estimated without bias if the potential source of endogeneity (i.e., the underlying competence of the dominant governing party) is equally present in constitutional contexts with high and low assembly dissolution powers (see Rajan and Zingales 1998 and Frye 2010 for a similar approach).

Constitutional rules regulating parliamentary dissolution are unlikely to be systematically correlated with the level of government competence for two reasons. First, dissolution powers are typically constitutionally enshrined as part of broader constitutional

settlements that result from crisis, revolution, regime collapse, defeat in war, or independence (Elster 1995: 371). In these situations, high levels of uncertainty about the effects of institutional rules generally prevent parties from choosing institutions that maximize their interests (Andrews and Jackman 2005). Second, most constitutions are entrenched, precisely in order to restrict the ability of incumbent governments to change the constitutional framework for their own benefit. Hence, constitutional change typically requires the support of a super-majority, or even cross-temporal coalitions with intervening elections. High and low levels of governmental assembly dissolution powers can therefore plausibly be conceived as exogenous to an incumbent government's underlying competence. As a result, we can estimate the difference between the conditional effects of incumbency on coalition inclusion at each level of government assembly dissolution power without bias.[9]

Data and dependent variable

To test our hypotheses, we use an original data set covering 631 coalition formation opportunities, i.e., situations in which parties bargain and form a new government, in 32 parliamentary democracies from World War II or democratization to 2015.[10] This makes our dataset significantly more comprehensive than the data employed in other recent studies (Martin and Stevenson 2001, 2010; Bäck and Dumont 2008). The data are constructed on the basis of the coalition governments included in the ParlGov database (Döring and Manow 2016), and are dominated by observations from Western and Eastern Europe, which is the focus of most previous work, but also extend to developed democracies beyond these two regions.[11] Several recent studies demonstrate that the determinants of government formation do not differ significantly across the two parts of Europe (Garett *et al*. 2011; Bergman *et al*. 2015). Following Müller and Strøm (2000: 12), we record a government formation opportunity whenever there is a change in the party composition of a government; a change

in the identity of the prime minister; or a parliamentary election. We code the first government formation opportunity following a parliamentary election as *Post-Electoral*, all other formation opportunities that occur at other times during the parliamentary term are coded as *Inter-Electoral*. Since we are interested in the formation of fully empowered party-based coalition governments, we exclude from our sample formation opportunities in which caretaker and technocratic cabinets form, as well as situations where a single party controls a parliamentary majority (further information about formation opportunities by country is available in the supplementary information, table SI 1.1).

Each coalition formation opportunity is a bargaining situation in which a given party could potentially form a coalition with any other combination of parties.[12] Formally expressed, 2^p - 1 governments could potentially form, where p denotes the number of legislative parties.[13] Our data include 631 formation opportunities (54 per cent occur post-election, 46 per cent inter-election) that generate over 433,000 potential coalitions. Building on Martin and Stevenson (2001), we analyse the formation of a government coalition as an unordered discrete choice problem in which a formation opportunity (rather than each potential coalition) is the unit of analysis and the estimand of interest is the probability that each potential coalition forms. Hence, our dependent variable is an indicator that takes a value of "1" for the potential coalition which forms in and "0" for all other potential governments associated with that formation opportunity.

Explanatory and control variables

Our explanatory variables focus on the incumbency characteristics and dissolution powers of potential coalitions. Since we are interested in the impact of the *dominant coalition partner's discretion to dissolve*, we focus on the formation of coalitions that are controlled by the dominant party in the previous coalition and record a potential government as including the

dominant *incumbent* when it is the status quo coalition or contains the previous PM party (see Martin and Stevenson 2010). Descriptive statistics and information about data sources and the coding of all variables are available in the supplementary information, tables SI 1.2 and SI 1.3.

To measure the constitutional (PM or government) dissolution powers available to dominant incumbents, we draw on the index developed by Goplerud and Schleiter (2016). Index scores vary between 0, denoting incumbents that have no formal influence on dissolution (e.g., Austria) and a maximum value of 10, which records complete discretion to dissolve the parliament (e.g., Denmark).[14] Conceptually, we are interested in whether incumbents with discretionary control of parliamentary dissolution can raise their chances of re-entering the government. We therefore dichotomize this variable and categorize incumbents as having discretionary control over dissolution if their dissolution power score is at least 8 following Goplerud and Schleiter (2016) (see SI 2.1 for an analysis employing an alternative, lower cut-off).[15] *High dissolution powers* is an indicator variable that takes a value of "1" when this condition applies (otherwise "0"). Since the level of dissolution powers in a country is invariant across all potential coalitions that are associated with a particular formation opportunity, this institutional variable can enter the analysis only in interaction with a key choice-specific variable that distinguishes potential coalitions from each other. A test of our hypothesis that the effect of incumbency on coalition inclusion is *conditional* on assembly dissolution powers demands precisely that, i.e., an interaction of our incumbency variable with dissolution powers. Hence, we interact these two variables. As a result, we obtain a categorical variable that captures:

(1) potential coalitions that include a dominant incumbent with discretion to dissolve (*High dissolution powers – incumbents,* when both indicators take a value of "1");

(2) potential coalitions that include a dominant incumbent without discretion to dissolve (*Low dissolution powers – incumbents,* when the incumbency indicator is "1" and the dissolution powers indicator takes a value of "0");

(3) potential coalitions that exclude the dominant incumbent and have no discretion to dissolve (*Low dissolution powers – non-incumbents,* when both indicators take a value of "0").

The fourth theoretical possibility, i.e., potential coalitions for which the dominant incumbent indicator takes a value of "0" and discretion to dissolve takes a value of "1", is ruled out by construction because constitutions do not vest *discretion* to dissolve in minor coalition partners or the parliamentary opposition to the government (see SI 2.4 for a robustness check that accounts for the potential additional role of presidential heads of state in determining dissolutions). The exclusion from a proto-coalition of the dominant incumbent therefore also implies that no actor in that coalition has discretion to dissolve.

Figure 1 presents the distribution of incumbency and dissolution power attributes in in the full sample of potential coalitions and among those coalitions that actually form. Among the 433,401 potential coalitions, those that exclude the dominant incumbent and lack discretion to dissolve make up the majority of cases (51.32%), but are underrepresented among the governments that actually form (26.7%). Coalitions that include the dominant incumbent and lack discretion to dissolve account for just over 45% of all potential coalitions and are overrepresented among the positive cases (60%). Incumbency therefore appears to advantage parties. Still more overrepresented are coalitions with dominant incumbents who have discretionary power to dissolve parliament. These cases account for 3.34% of the potential coalitions and more than quadruple the share (15%) of coalitions that form.

[Figure 1 about here]

Turning from descriptive to regression analysis, we control for a series of variables that capture the size and ideological features of potential coalitions. The probability that a coalition will form is known to decline in *Minority* status, coded 1, otherwise 0 (Bäck and Dumont 2007; Vries and Kersbergen 2007); the *Number of Parties in Coalition,* coded as the size-weighted count (Leiserson 1968); *Ideological Divisions in Coalition* (Leiserson 1968; De Swaan 1973), measured as the absolute left-right ideological distance between the most distant pair of parties in a coalition, and with the presence of anti-system parties in a coalition (*Antisystem Presence in Coalition,* Budge and Keman 1990), measured as the greatest anti-system score of any party within a potential coalition. The latter two variables are based on comparative manifesto data (Volkens *et al.* 2016).[16] Conversely, a government is expected to have a higher probability of forming when it is a *Minimal Winning Coalition* (Gamson 1961; Riker 1962); when it includes the *Largest Party in Coalition* (Warwick 1996; Glasgow et al. 2011; Bucur and Cheibub 2017), and when it includes the *Median Party in Coalition* (Laver and Schofield 1990; Bäck and Dumont 2008; Keman 2011). The latter three coalition properties are coded as indicator variables (1, otherwise 0).

Other control variables record institutional, historical, and electoral influences on coalition formation: Since minority governments are less likely to form when the institutional context requires a vote of investiture (Strøm 1990; Bergman 1993), we include an indicator that identifies each potential *Minority Government with Investiture Requirement*. Parties may prefer to form coalitions with partners that they trust and understand (Franklin and Mackie 1983). We therefore control for *Familiarity*, by calculating, for our data, an index proposed by Martin and Stevenson (2010: 509-510), which captures the previous experience by parties in a potential coalition of governing together.[17] Finally, because parties' electoral performance influences coalition formation (Martin and Stevenson 2010; Glasgow *et al.* 2011), we account for the average change in seat share (*Average Seat Change*) experienced

by each potential government between the most recent election and the election prior to that (Martin and Stevenson 2010: 510).[18] Controlling for average seat change and largest party status enables us to distinguish the *electoral* bonuses that may accrue to incumbents with extensive assembly dissolution powers from the *legislative* coalition bargaining advantages that they realize.

Analysis and results

Two statistical models have dominated recent analyses of government formation as an unordered discrete choice problem: McFadden's (1974) conditional logit model (following Martin and Stevenson, 2001), and the mixed logit model which can accommodate random coefficients that make it possible to take account of unobserved heterogeneity in the government formation process (following Glasgow *et al*. 2012). Since both have distinct advantages and drawbacks, we present our results using both estimation methods.[19] We follow Glasgow *et al.* (2012) and determine which variables should enter the mixed logit model as random coefficients by applying a Lagrange multiplier equivalent test.

The results are reported in table 1. Columns 1a and 1b focus on the results of the conditional logit estimation, columns 2a and 2b on mixed logit estimation. The first model in each pair (1a and 2a) evaluates our first hypothesis – that assembly dissolution powers increase the capacity of incumbent parties to negotiate their inclusion in the next government. Models 1b and 2b test our second hypothesis that incumbents draw greater parliamentary bargaining advantages from dissolution powers when coalition negotiations occur between rather than after elections. Table 1 reports regression coefficients and standard errors from both analyses, along with standard deviations of the random coefficients in the mixed logit model. Both pairs of models estimate substantively similar average effects of an incumbent's discretion to dissolve the assembly on coalition inclusion.

[Table 1 about here]

Model 1a shows that coalitions with incumbents who control extensive assembly dissolution powers are significantly more likely to form, as is consistent with our first hypothesis. An odds ratio transformation of the coefficients shows that a coalition, which includes dominant incumbents with discretion to call early elections, is 5.3 times more likely to form the baseline, non-incumbent coalition, and 2.5 times more likely to form than a predominantly incumbent coalition without such powers. An *F*-test indicates that the difference between this pair of coefficients is statistically significant ($p < 0.05$).[20] Model 2a confirms this advantage and additionally highlights heterogeneity surrounding the average effect. The mean random coefficient of 1.97 for *High dissolution powers – Incumbents* with a statistically significant standard deviation of 3.85 suggests that incumbents with discretion to dissolve are advantaged in returning to office 70% of the time but disadvantaged the remaining 30%. This indicates that the advantages to incumbents of controlling dissolution powers are not equally realized in all government formation situations, as is consistent with anecdotal evidence that miscalculations and bargaining failures occasionally occur when parties bargain about government formation.

Model 1b differentiates between the two mechanisms that generate these advantages by interacting *Dissolution powers, Incumbency,* and *Electoral context.* The results support our second hypothesis that (controlling for a potential coalition's electoral performance) discretion to dissolve gives dominant incumbents greater advantages in parliamentary coalition bargaining between elections compared to after elections. The odds ratio transformation of the coefficients in model 1b suggests that in *inter-electoral bargaining*, coalitions with dominant incumbents that have discretionary dissolution powers are 17.6 times more likely to form than the baseline, non-incumbent coalition, and almost 4 times more likely than a coalition with incumbents who lack such powers (the difference between

these coefficients is statistically significant, $p < 0.05$). In *post-electoral negotiations*, the advantages of incumbents with dissolution powers are significantly smaller: Coalitions that include incumbents with extensive dissolution powers are three and a half times more likely to form than a coalition that excludes the dominant incumbent party (odds ratio 3.5, statistically significant at $p < 0.01$), and almost three times more likely to form than a coalition that includes a dominant incumbent party without discretionary dissolution powers (odds ratio 1.23, not statistically significant). The mixed logit analysis (model 2b) confirms that dominant incumbents with extensive control over dissolution are more successful in securing coalition inclusion in inter-electoral than post-electoral bargaining. In addition, this analysis highlights differences in the heterogeneity surrounding these effects: In inter-electoral replacements incumbents not only enjoy larger advantages, but they are also more consistently advantaged (82% of the time, as indicated by the coefficient of 3.46, and the standard deviation of 3.81, both statistically significant at $p < 0.01$) than in post-election formations (65% of the time; coefficient 1.38, standard deviation 3.64, both statistically significant at $p < 0.01$).

Across the two model specifications the control variables have the anticipated effects. The odds of coalition formation increase when a potential coalition has minimal-winning status, includes the largest party, the median party, parties that are familiar with each other and parties that have increased their legislative seat share in the previous election. Conversely, the probability of coalition formation decreases in minority status and its combination with investiture requirements, the number of parties in a coalition, presence of anti-system parties, and magnitude of the ideological divisions between potential coalition partners. All of these coefficients are statistically significant.

In sum, our findings indicate that potential coalitions, which include dominant incumbents with discretion to dissolve have significantly higher odds of forming than

coalitions without such powers (whether they include or exclude the dominant incumbent party; hypothesis 1). This advantage compounds any electoral bonus that such incumbents can derive from the strategic timing of elections, which we control for. Moreover, the legislative bargaining advantage is most pronounced in inter-electoral coalition formations (hypothesis 2) in which incumbents with dissolution powers benefit from their ability to (i) trigger coalition re-negotiations under conditions that systematically favour their return to office, and (ii) their enhanced capacity to build a reputation as effective coalition partners. In contrast, in post-election formations, legislative bargaining advantages derive only from the second, reputational mechanism, once electoral performance is accounted for.

Robustness

To assess the robustness of these results we focus on our main models (1a and 1b),[21] and first implement an alternative (lower) threshold to identify incumbents with high dissolution powers (results available in SI 2.1). Second, we take account of additional confounders that, according to the findings of previous work, may influence coalition formation, but for which data are not available for the full set of countries and time periods covered by our data set. These variables include the conflictual termination of the previous coalition, which is thought to mediate incumbency effects (Martin and Stevenson 2010; Glasgow *et al.* 2011), pre-electoral alliances, which may make coalition formation more likely, and anti-pacts, which may make coalitions less likely (Laver and Budge 1992; Strøm and Leipart 1992; Martin and Stevenson 2001: 39–40; Golder 2010). We re-estimate our pooled main model on the subsample of the data for which these variables are available (results reported in SI 2.2). Third, we examine whether the institutional effects which we uncover are due to compound causation, i.e., the bundling of dissolution powers with three other political and institutional attributes of political systems that may account for the observed pattern: Dissolution powers

may coincide with a "continuation rule," which empowers the incumbent cabinet to make the first government formation attempt after an election (Diermeier and Roozendaal 1998: 621). Polities with fragmented party systems may be more likely to feature dissolution powers as a means to address assembly gridlock, and may simultaneously raise the incumbent's chances of returning to power by creating opportunities to exploit a complex parliamentary arithmetic. Incumbent assembly dissolution powers may also be bundled with presidential influence on government formation, which may be the crucial determinant of an incumbent's chances of returning to power (Bucur and Cheibub 2017). To distinguish the effects of dissolution powers from the features with which these powers may be bundled, we remove from our sample, one category at a time, cases (i) which apply the continuation rule, (ii) with high party system fragmentation, and (iii) which feature presidents with extensive influence on government formation, and re-estimate our main models on the reduced dataset (results available in SI 2.3). Fourth, we re-estimate our main models excluding cases in which presidents have extensive influence on assembly dissolution (results reported in SI 2.4) to examine whether the effects that we attribute to incumbents could in fact be driven by the role of presidents in government formation (Goplerud and Schleiter 2016). Finally, re-estimate our main models omitting non-European, and perhaps exceptional, parliamentary systems from our sample (results available in SI 2.5). Our finding that incumbents with extensive assembly dissolution are on average more successful in negotiating their return to office than coalitions of incumbents and non-incumbents without access to extensive dissolution powers is robust to these alternative specifications.

Conclusion and implications

This study takes the long overdue step of integrating into our understanding of coalition bargaining the power to dissolve parliament, which is a fundamental aspect of institutional

variation among parliamentary democracies. All coalitions result from negotiations and dominant incumbents often have significant power to call early elections. As a result, the question of how these parties use the shadow of elections to shape coalition bargaining outcomes is central to a better understanding of parliamentary democracy.

Dominant incumbents, we argue, derive from this power an advantage in bargaining about office via two mechanisms: First, they can use the threat of dissolution to control coalition negotiations by initiating bargaining rounds and extracting concessions from other parties. Second, when in power, they are better able to unite their coalitions and resolve legislative conflicts, which gives them an advantage in building a reputation as effective and desirable coalition partners compared to their peers who lack dissolution powers. Our results offer the first evidence that incumbents with discretion to dissolve enjoy advantages in parliamentary coalition bargaining via both mechanisms. These results are reliable and robust to a wide range of specification tests.

By uncovering this incumbency advantage, our study contributes to a more nuanced and realistic understanding of real-world coalition bargaining. Actual coalition bargaining does not typically take place among *all* parties in parliament, but is most often confined to a sub-group of parties that can secure a place at the negotiating table because they have the power to structure the bargaining situation or because they are perceived as particularly desirable partners. Our results are consistent with the argument that dominant incumbents with discretion to dissolve parliament are advantaged in both respects, which helps to explain why they return to office with such extraordinary frequency.

To the literature on comparative political institutions our study contributes a first account of the previously uncharted implications of assembly dissolution powers in the arena of government formation. To date, this literature has shown that dissolution powers enable governing parties to shape the durability and termination mode of cabinets (Grofman and Van

Roozendaal 1994, 1997; Strøm and Swindle 2002; Schleiter and Morgan-Jones 2009); realize sizable electoral bonuses in opportunistically timed elections (Alcantara and Roy 2012; Schleiter and Tavits 2016); and extract concessions from other parties in bargaining over policy (Becher and Christiansen 2015). Our research suggests that dissolution powers have equally important political implications for negotiations about coalition formation in the legislative arena by systematically skewing the coalition outcomes in the incumbent's favour.

Our findings also add to the literature on incumbency advantages. This body of work has consistently focussed on the electoral arena. By widening the scope of inquiry beyond elections, we show that assembly dissolution powers also give rise to incumbency advantages in parliamentary coalition bargaining, which may be as important as the bonuses that incumbents can realise in elections.

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Disclosure statement

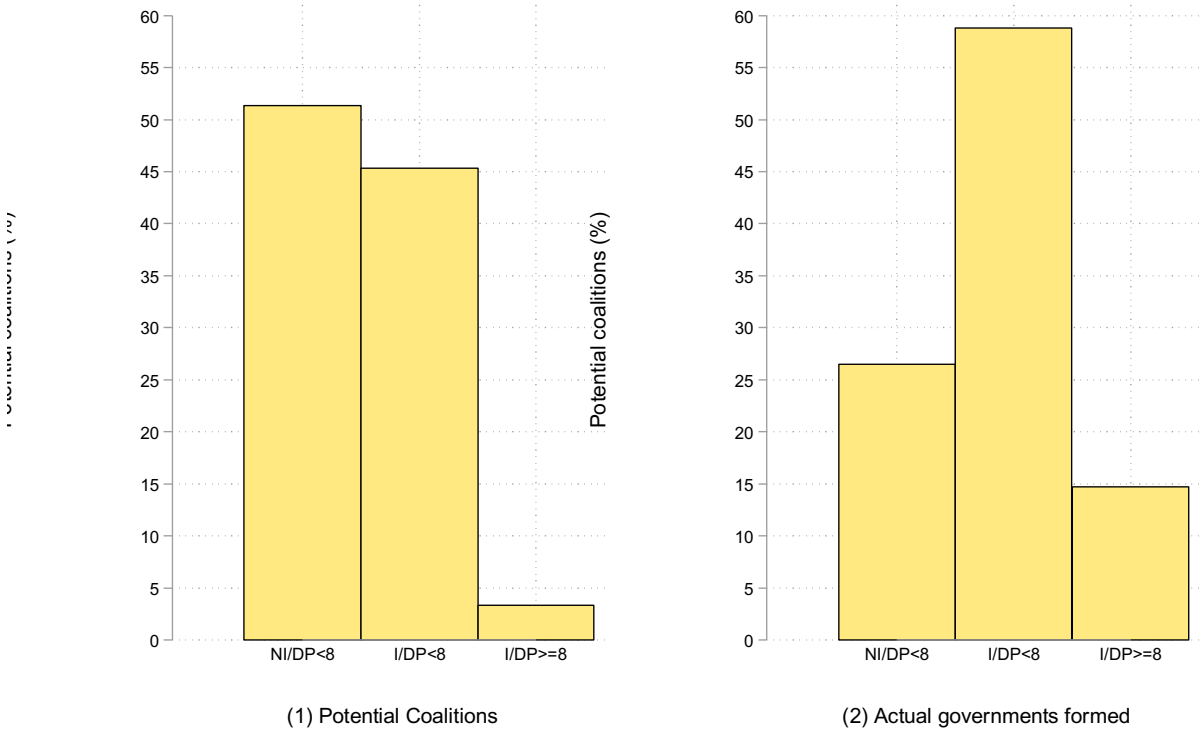
The authors have no conflict of interest to declare.

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Figure 1: Incumbency and dissolution attributes among potential coalitions and actual governments



Note: I = Incumbents; NI = Non-Incumbents; DP = Dissolution Powers

Table 1: Effect of dissolution powers on coalition formation (conditional and mixed logit analysis, dissolution powers >= 8)

	(1a)	(1b)	(2a)		(2b)	
	Conditional logit		Mixed logit			
	Pooled	Post/Inter-electoral formations	Pooled		Post/Inter-electoral formations	
	Mean	Mean	Mean	SD	Mean	SD
*Dissolution powers * Incumbency*						
Low dissolution powers - Incumbents	0.740***		0 .937***			
	(0.131)		(0 .139)			
High dissolution powers - Incumbents	1.664***		1.970***	3.854***		
	(0.236)		(0.446)	(0.806)		
*Dissolution powers * Incumbency * Electoral context*						
Low dissolution powers - Incumbents - Inter-election		1.535***			1.695***	
		(0.215)			(0.226)	
High dissolution powers - Incumbents - Inter-election		2.869***			3.468***	3.812***
		(0.541)			(0.976)	(1.317)
Low dissolution powers - Incumbents - Post-election		0.209			0.396**	
		(0.164)			(0.175)	
High dissolution powers - Incumbents - Post-election		1.256***			1.388***	3.645***
		(0.259)			(0.492)	(0.965)
Coalition Characteristics						
Minority Government	-0.475**	-0.535***	-0.637***		-0.677***	
	(0.206)	(0.208)	(0 .217)		(0.218)	
Minimal Winning Coalition	1.147***	1.130***	1.108***	-0.037	1.096***	0.024
	(0.131)	(0.131)	(0.133)	(0.378)	(0.133)	(0.406)
Number of Parties in Coalition	-0.254***	-0.272***	-0.243***		-0.253***	

	(0.066)	(0.067)	(0.069)		(0.070)	
Largest Party in Coalition	0.801***	0.804***	0.786***	0.059	0.792***	0.068
	(0.131)	(0.133)	(0.139)	(0.467)	(0.141)	(0.413)
Median Party in Coalition	1.131***	1.126***	1.132***		1.131***	
	(0.115)	(0.116)	(0.119)		(0.120)	
Ideological Divisions in Coalition	-0.017***	-0.017***	-0.018***		-0.018***	
	(0.003)	(0.003)	(0.003)		(0.003)	
Minority Government with Investiture Requirement	-0.240	-0.157	-0.194		-0.140	
	(0.175)	(0.176)	(0.186)		(0.186)	
Antisystem Presence in Coalition	-0.064***	-0.066***	-0.083***	-0.058	-0.092***	-0.071*
	(0.016)	(0.016)	(0.023)	(0.037)	(0.026)	(0.038)
Familiarity	3.551***	3.441***	3.693***	0 .121	3.607***	0.056
	(0.366)	(0.367)	(0.381)	(0.506)	(0.381)	(0.551)
Average seat change	0.071***	0.064***	0.073***		0.066***	
	(0.009)	(0.009)	(0.010)		(0.010)	
N-Formation opportunities	631	631	631		631	
N-Potential coalitions	433,401	433,401	433,401		433,401	
Log-likelihood	-2299	-2283	-2235		-2221	
Average p-value for rejecting IIA	0.75	0.72				

Note: Omitted category – non-incumbent coalitions. Standard errors in parentheses (clustered by formation opportunity). For each model, the "Mean" column indicates the mean coefficients and the "SD" column indicates the standard deviation of the random coefficients. * p<0.10, ** p<0.05, *** p<0.01.

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Endnotes

[1] In addition, incumbents can also benefit from a preference for familiarity, prior success of governing together, electoral gains, or aversion to the bargaining costs of negotiating a new coalition (Franklin and Mackie 1983; Warwick 1996; Tavits 2008; Martin and Stevenson 2010). Our empirical analysis controls for such preferences.

[2] We follow the widespread consensus of conceptualizing a government formation opportunity as arising with every inter-electoral government termination (through a change of prime minister or governing parties) and general election (Müller and Strøm 2000: 12). Note, however, that some scholars discount formation opportunities in which government composition changes but there is "no opportunity" to select a new PM party (Glasgow *et al*. 2011: 943). This approach assumes that PM parties which survive coalition re-negotiations were never at risk and discounts the uncertainty inherent in the bargaining process. For the purposes of our study, whether or not a PM party holds on to office – for instance, when a coalition partner defects or tensions in the government require broadened legislative support – is an outcome of theoretical interest. For this reason, we apply the most widely applied conceptualization of a government formation opportunity rather than limiting the sample.

[3] Constitutionally, dissolution power is never placed in the hands of a minor coalition partner alone. Hence, to the extent that these parties influence assembly dissolution, it is via the collective powers of the cabinet.

[4] "Danish PM names new coalition ministers, reducing risk of snap poll," *Reuters,* http://www.reuters.com/article/us-denmark-government-idUSKBN13N0NW

[5] "Danish Premier Expands Ruling Coalition in Drive to Lower Taxes," *Bloomberg,* 27 November 2016, https://www.bloomberg.com/news/articles/2016-11-27/danish-government-set-to-expand-into-coalition-of-three-parties

[6] "Finnish Premier Faces Dwindling Options to Avoid Election," *Bloomberg*, 13 June 2017, https://www.bloomberg.com/news/articles/2017-06-12/finnish-premier-faces-dwindling-options-to-avoid-new-election

[7] "Finnish PM to break up coalition, kick out nationalists," *Reuters,* 12 June 2017, http://www.reuters.com/article/us-finland-government-idUSKBN1932AA

[8] https://theconversation.com/boris-johnsons-move-to-purge-21-no-deal-brexit-rebels-will-have-electoral-consequences-122983

[9] In SI 2.3 we examine further assumptions that underpin our empirical strategy, including concerns about compound causation.

[10] The countries and time periods included in our sample are: Australia 1946-2013, Austria 1945–2008, Belgium 1946–2011, Bulgaria 1991-2014, Croatia 2000-2011, the Czech Republic 1993-2014, Denmark 1945–2014, Estonia 1992-2015, Finland 1944–2014, France IV 1945-1958, France V 1959-2014, Germany 1949-2013, Greece 1974-2013, Hungary 1990-2014, Iceland 1942-2013, Ireland 1944–2011, Israel 1949-2006, Italy 1946–2014, Latvia 1990-2014, Lithuania 1990-2012, Luxembourg 1945–2013, Netherlands 1946–2012, Norway 1945–2013, Poland 1989-2014, Portugal 1975-2011, Romania 1990-2014, Slovakia 1990-2012, Slovenia 1990-2013, Spain 1977-2011, Sweden 1945–2010, Turkey 1983-2014, and UK 1945-2010.

[11] A robustness test in which the analysis is restricted to European governments is available in SI 2.5.

[12] Including all coalitions that could potentially form in studies of coalition formation is standard practice in the field (Martin and Stevenson 2001, Martin and Stevenson 2010). This is because it is not possible to establish whether a factor makes coalition formation more (or less) likely by studying only those coalitions that form or are most likely to form. Such an approach would be equivalent to selecting on the dependent variable.

[13] Our identification of potential coalitions and the calculation of party ideology related independent variables is based on parties included in the comparative manifesto data set (Volkens *et al.* 2016).

[14] The index scores for PMs and governments in the countries and time periods covered by our data are available in the supplementary information, table SI 1.4.

[15] An alternative specification adopting a lower threshold of 5 (the mid-point on the 0-10 scale) for recording extensive dissolution powers is available in SI 2.1.

[16] Alternative measures of party positions based on expert opinions offer static snapshots that do not adequately capture changes in party positions over time (Budge 2000).

[17] Martin and Stevenson (2010, 509-510) construct their familiarity index by measuring to what extent each pair of parties has experience of governing together, weighted by their expected portfolio shares, summed across all such pairs to create the potential government's familiarity score, and discounted by time elapsed.

[18] Previous work suggests that additional variables, including pre-electoral pacts, anti-pacts, and the conflictual termination of the previous government may influence coalition formation. Data regarding these attributes are not available for our full dataset. We address the concern that these variables might be omitted confounders by re-estimating our main model on the sub-sample for which these variables are available (results reported in SI 2.2).

[19] Conditional logit models are computationally efficient but are based on an assumption that outcomes are independent of irrelevant alternatives (IIA), which implies that the probability of choosing one coalition does not depend on other alternatives in the choice set. When employing the conditional logit model, we follow Martin and Stevenson (2001) and test for global violations of the IAA assumption (however, note Glasgow *et al.'*s (2012) reservations about this test). Mixed logit models make it possible to relax the IIA assumption but are

computationally complex, which can generate identification problems and render parameter estimates unstable.

[20] The bottom row of table 1 reports *p*-values for the test of the IAA assumption recommended by Martin and Stevenson (2001), which indicate that the assumption is not globally violated in our application the conditional logit model.

[21] We employ the conditional logit model for robustness testing because a mixed logit model yields substantively very similar results but gives rise to identification and separation problems in several of the supplementary analyses.