# Government Formation in Presidentialism: disentangling the combined effects of pre-electoral coalitions and legislative polarisation\*

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#### Abstract

Recent research has shed light on the impact of pre-electoral coalitions on government formation in presidential democracies. However, the fact that pre-electoral coalitions are not automatically transformed into coalition cabinets has often gone under the radar. In this article, I argue that the importance of pre-electoral pacts for government formation depends on the degree of legislative polarisation. When parties are distant from one another in the ideological spectrum, presidents face more difficulties in breaking away from the pre-electoral pact and rearranging their multiparty alliances. Conversely, when polarisation is not pervasive, presidents have more leeway to build coalition cabinets different from the ones prescribed by pre-electoral coalitions. Drawing on a dataset of thirteen Latin American countries, the results support my claim and suggest that the relationship between government formation and the concession of office benefits for pre-electoral coalition members is more nuanced than previously assumed.

**Keywords:** Coalitional Presidentialism, Latin America, Government Formation, Pre-Electoral Coalitions, Presidentialism

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#### 1 Introduction

Research on presidential coalition governments shares many of the same topics covered by research on their parliamentary counterparts. That is to say, we can roughly separate the literature on coalitional presidentialism into three broad fields of study (Couto et al. 2021; Laver and Schofield 1990; Müller and Strøm 1999). To start, some scholars have especially been interested in the formation of coalition governments (Alemán and Tsebelis 2011; Freudenreich 2016). Others have sought to delve into coalition governance (Bertholini and Pereira 2017; Pereira and Mueller 2003; Silva and Medina 2023). Finally, some are keen on unpacking the reasons behind the breaking of presidential coalitions (Altman 2000; Chasquetti 2006).

Even still, we can further divide studies on the formation of coalition governments into two connected but quite different research streams. Coalition formation is actually an umbrella that encompasses both studies concerned with the partisan composition of coalitions and the distribution of ministerial portfolios within multiparty governments (De Winter et al. 2002). This paper is preoccupied explicitly with the former, asking about the degree to which pre-electoral coalitions influence the formation of subsequent governments.

Until recently, the literature had largely overlooked the timing issue in coalitional bargaining. However, irrespective of the system of government, the literature has shown the different ways in which bargainings prior to elections affect and constrain the behaviour of future coalition governments (Carroll 2007; Golder 2006; Kellam 2017; Strøm et al. 1994).

In a similar vein, the literature has also discussed how legislative polarisation impinges on the different facets of coalitions in distinct systems of government (Golder 2010; Kellam 2015; Laver and Shepsle 1994). For instance, research on legislative polarisation has shed light on how the divisiveness of party systems affects not only the formation but also the rupture of coalition governments (Albala et al. 2023a; Chiru 2015; Indridason 2011; Martin and Vanberg 2003).

In stark contrast, the interplay between legislative polarisation and pre-electoral agreements to bring about new governments has received much lesser treatment thus far, even though the scholarly literature has paid attention to either separately. In order to take the first step towards filling this gap in research on presidential regimes, I thus ask whether and to what extent legislative polarisation exerts influence on cabinet formation by conditioning the effects of pre-electoral coalitions. Leveraging data from 13 Latin American countries suggests this is the case, as potential governments derived from pre-electoral coalitions are more likely to emerge from the government formation game as legislative polarisation grows stronger.

The starting point is that pre-electoral coalition formation might impact government formation in presidential regimes. However, this is a contested claim in coalition theories. On the one hand, some argue that parties lacking competitive presidential candidates would be deprived of office-oriented incentives to join pre-electoral pacts since the president-elect could decide not to stick to her end of the bargain and simply choose not to designate any executive office position to members of the original pre-electoral agreement (Kellam 2017). On the other hand, others argue that pre-electoral pacts not only play a role in forming the next governments (Freudenreich 2016), but parties which were members of pre-electoral coalitions receive portfolios more proportionally to their legislative contribution than their counterparts that did not take part of these pre-electoral coalitions (Carroll 2007). Hence, the second line of thought suggests that pre-electoral coalitions ought to have an impact on government formation, whilst the first contradicts this idea.

Against this backdrop, my core claim departs from the argument that pre-electoral agreements matter for government formation. However, I take a step back and argue that the presidential parties' leeway towards government formation is conditional on the extent of legislative polarisation. The reason for this is that high ideological polarisation in the legislature substantially increases bargaining complexity. As reaching a multiparty agreement is not a simple task in polarised settings, formateurs have great incentives to build governments around the original pact, especially as breaking already-established

commitments is increasingly risky and costly under these contexts. In this way, I argue that pre-electoral coalitions serve as focal points on which presidential parties can objectively lay their foundations when party systems have parties far apart from one another on the left-right dimension. Conversely, party systems barely polarised allow presidents to seek better bargains than those made pre-electorally insofar as parties do not have highly antagonistic ideological preferences. As such, pre-election coalition members can fail to make it into the cabinet if the *formateurs* have greater wiggle room in selecting with whom to govern.

The remaining of this work proceeds as follows. The second section brings the literature on pre-electoral coalitions in parliamentary and presidential regimes to the fore. After that, I present how legislative polarisation influences government formation. The fourth section shows the connection between pre-electoral alliances and legislative polarisation on the unrolling of government formation under presidentialism. In this section, I outline how governments based on pre-election coalitions are more likely to form than fully post-electoral coalitions. The fifth section is devoted to presenting my research design. Subsequently, the sixth section displays and discusses the results. I then wrap up the article by summarising my claims and findings, in addition to suggesting new paths of research and discussing the degree to which my theory travels to other contexts.

# 2 Discussing Matters Prior to the Elections

Forming pre-electoral agreements is not a mere 'flavour of the month' issue in either parliamentary or presidential regimes. Pre-electoral commitments have been around at least since the end of World War II in parliamentary polities (Golder 2005), whereas trails of pre-electoral pacts trace back to 1925 for their presidential counterparts (Borges et al. 2021; Kellam 2015). Most importantly, multiparty pre-electoral coordination is still a trend in most recent elections in both parliamentary and presidential systems (Ibenskas 2016; Spoon and West 2015).

Early scholarship on pre-electoral coalitions in parliamentarism has revealed that po-

tential governments that coalesce at an early stage of the electoral cycle are more likely to form as actual governments than purely post-electoral governments (Martin and Stevenson 2001; Strøm et al. 1994). The rationale is pretty consolidated: political parties engage in pre-electoral bargaining to increase their likelihood of either forming or being a part of the upcoming government (Golder 2006; Debus 2009; Ibenskas 2016). In other words, parties join efforts and resources once they rationalise they can form the government together. The point is that parties expect to receive more votes in general elections when they form pre-electoral alliances than when they compete on their own (Allern and Aylott 2009; Christiansen et al. 2014). In general, in this context, parties coalesce around other parties with not-so-distant ideological preferences, and this is so for two solid reasons. Firstly, parties strive not to lose potential voters to other parties or coalitions. Secondly, it is much more challenging to strike policy agreements when parties disagree over several issues than when coalition partners have preferences close to one another (Cutler et al. 2016; Golder 2010).

The picture is quite different when we take a glimpse at presidential regimes. Initial research on presidentialism would deem the construction of pre-electoral agreements as unreasonable. The president-elect and her party would have no incentive to abandon some presidential perks in favour of their pre-electoral coalition partners since powers are fundamentally independent of one another (Stepan and Skach 1993), and the presidential election is basically a zero-sum game (Linz 1990, 1994). Moreover, as presidents dispose of constitutionally fixed terms, even if they renege on their promises, the parties that comprised the pre-electoral coalition would not be able to expel them from office earlier than expected (Cheibub 2007; Samuels and Shugart 2010).<sup>1</sup>

Nonetheless, as shown previously, pre-electoral alliances are not rare in presidential democracies. In fact, Albala (2021) even goes so far as to say that presidential polities have far more coalition cabinets derived from pre-election alliances than their parliamentary counterparts. Therefore, how does the literature explain the emergence of pre-electoral coalitions in presidentialism? More precisely, why would a party with a competitive presidential candidate search to make pacts with other partisan organisations

to back its own candidacy for the presidential office? Contrariwise, why would parties prefer to support someone else's application for the presidency rather than launching their own contestant?

To flesh out the reasons behind the construction of pre-electoral coalitions in presidential systems, I start by addressing the first question. Firstly, mirroring what occurs in parliamentary regimes, parties with competitive presidential candidates aim to form multiparty alliances in order to boost the vote share of their respective candidacies in the election looming on the horizon. Indeed, recent scholarship has brought to attention how presidential tickets strategically include vice-presidential candidates with specific traits to expand their potential voter base (Lopes 2022). This is the case as even in the absence of a viable presidential candidate, other parties might still provide politicians well-suited to a vote-seeking strategy in the presidential arena as vice presidents. This is only a single instance of how parties in a pre-electoral coalition combine different kinds of assets to leverage their odds of winning the presidential election.<sup>2</sup>

Outside vote-seeking considerations, engaging in pre-electoral alliances also enhances the presidential party's likelihood of securing a legislative majority in the aftermath of the election (Borges et al. 2021; Carroll 2007). Despite minority governments not being stripped out of their governability (Strøm 1990), it bears noting that presidential parties have compelling incentives to look for a majority parliamentary basis even prior to the elections. Majority status confers governments with higher capabilities of passing their legislative agenda, thus circumventing possible stalemates in the legislature and making governability more straightforward (Amorim Neto et al. 2003; Cheibub et al. 2004; Hiroi and Renno 2014; Kim 2008). In addition to increasing the likelihood of forming majority governments, pre-electoral coalitions are also the underpinning for long-standing coalition cabinets (Albala et al. 2023a). Accordingly, the formation of pre-electoral coalitions grants legislative support for a long time for presidents to get their bills approved.

Hence, political parties with competitive presidential candidates have clear-cut reasons to go after pre-electoral agreements. Still, we have not addressed the other side of the coin. Why do parties relinquish from running in the presidential elections on their own? In brief, the response lies in the fact that parties are able to reap vote, policy and office benefits from being a member of a successful pre-electoral coalition, whereas they could have gotten out of the presidential contest with empty hands had they chosen to launch a frail candidate.

The premise is that political parties without presidential aspirations do not abide by pre-electoral agreements at no cost. To start with, support in the presidential elections might come in exchange for benefits in elections at other levels, notably in gubernatorial, senatorial, and congressional electoral disputes (Borges 2019; Borges and Turgeon 2019). In this sense, some parties deliberately opt not to run for the national majoritarian election in order to focus on other electoral disputes (Borges et al. 2017; Spoon and West 2015). In return, presidential parties might directly or indirectly endorse their partners' contestants in other electoral races by withdrawing their own candidates, for instance. In fact, this was a standard procedure in the Chilean centre-left coalition *Concertación* in the wake of the fall of Pinochet (Albala 2013; Siavelis 2002).

Additionally, in a similar vein to parliamentary coalition agreements (Moury 2011), parties constrain the president-elect to stick to her electoral policy promises (Kellam 2017). Although governing coalitions do not necessarily form and display written agreements in presidential systems, the enacted public policy might be close to the preferences of pre-electoral parties because presidents might feel compelled to fulfil their electoral pledges and avoid disappointing their voters.

To conclude, pre-electoral coalitions also envision distributing office rewards to their members (Carroll 2007). As a result, parties engage in pre-electoral agreements while knowing beforehand that they will probably have a cabinet position if the pre-electoral coalition succeeds in the presidential election.

Yet, pre-electoral agreements are not set in stone. A colourful example is that not rarely pre-electoral coalitions are enlarged to accommodate other parties in post-electoral settings (Albala 2017; Freudenreich 2016). This article points out a nuance around the

government formation hitherto not explored in presidential regimes. The whole procedure of forming governments does not occur in a vacuum; instead, it takes place on a board where parties are spread across the political spectrum. Put differently, the government formation game takes place in party systems where political parties are ideologically less or more separated from one another. This study puts forward the idea that formateur parties are more constrained to build the government around pre-electoral coalitions in the degree to which ideological polarisation increases in the legislature, and the following sections explain why this should be so.

# 3 Legislative Polarisation and Government Formation

In general, polarisation is a broad concept that refers to the distance between groups regarding their stance on a specific issue. In recent years, research on polarisation has focused heavily on affective polarisation (e.g. Garzia et al. 2023), but other topics have also attracted attention, such as activist polarisation (Collitt and Highton 2021) and mass polarisation (Levendusky 2009). In this paper, I am more concerned with ideological polarisation in the legislature.

Legislative polarisation depicts how far political parties are ideologically distant from one another in the legislature of a given party system. By and large, party systems have varying levels of legislative polarisation over time. There is only a single instance where polarisation is null: when all parties share the very same political preferences. However, this is hardly the case in any democratic regime. To demonstrate this point, the left panel of Figure 1 shows the average level of legislative polarisation in Latin America in the period under study. In a complementary manner, to show how legislative polarisation is not stationary over time, the right panel of Figure 1 illustrates the degree of ideological polarisation at the party system level from 2016 to 2019 in the same region. As can be seen, Brazil's 2018 and Chile's 2017 general elections resulted in a degree of polarisation above the countries' respective averages, as opposed to Colombia's 2018 and Panama's 2019 general elections, which were below their countries' average levels of ideological

polarisation.

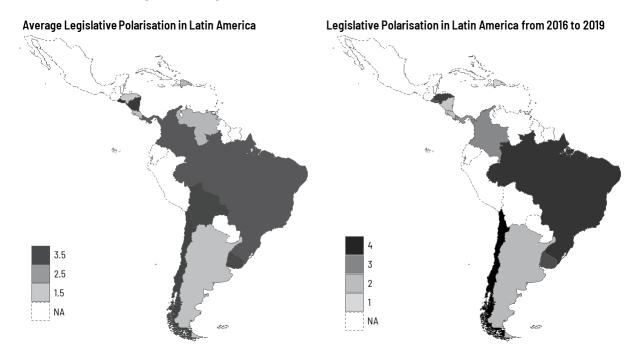


Figure 1: Legislative Polarisation in Latin America

Note: Parties' size and ideology come mostly from the DPEILA (Borges et al. forthcoming). Legislative polarisation has been measured by means of Dalton's Index and runs from 0 to 10 (see below for more information).

At the beginning, coalition theories ruled out the influence of ideological preferences on the government formation process. Rooted primarily in office-seeking assumptions, scholars argued that actual governments should consist of either minimal winning coalitions or coalitions with the fewest possible number of parties to retain a legislative majority (Leiserson 1966; Riker 1962). In short, either form would emerge as a consequence of parties' unwillingness to share the spoils of government with more parties than needed. However, initial models of government formation suffered from dismaying predictive power and frequently failed to explain the process underlying the rise of governments (De Winter et al. 2002; Laver and Schofield 1990). As a result, coalition theories rapidly acknowledged that political parties are also pushed by policy incentives (Axelrod 1970; De Swaan 1973).

More recently, most studies include both office- and policy-seeking propositions in their models of coalition formation (Druckman et al. 2005; Eppner and Ganghof 2017; Freudenreich 2016; Giannetti and Pinto 2018). The background is that potential cabinets marked by high ideological division are far less likely to form than alternatives that are

ideologically homogeneous. Despite taking policy penchant seriously, the literature still has a tendency to resort to a crude measure of the policy-seeking approach (Indridason 2011). In general, the bulk of studies on government formation operationalise ideological division as the distance between the most left-wing and the most right-wing parties within each potential government, thereby leaving aside the overall ideological differences among the parties comprising the party system.

As such, this measure entails one major problem: it disregards the general polarisation of party systems. To see how this can be consequential, consider Piñera's first cabinet in his first term in Chile. Figure 2 displays the percentage of seats in the lower chamber and the position of each political party in Chile at the time along the economic left-right dimension.<sup>3</sup>

Piñera's PEC and First Cabinet Chilean Party System as of 2010 50% 50% % of seats in the Lower Chamber % of seats in the Lower Chamber 40% 40% UDI UDI 30% 30% 20% 20% PPDPDC RΝ RN 10% 10% 5 6 10 3 4 7 8 5 6 Left-Right Dimension Left-Right Dimension

Figure 2: Piñera's Government Formation Process

Note: Parties' size and ideology hail from the V-Party dataset (Lindberg et al. 2022). The original 7-point scale was transformed into a 10-point scale for the sake of better visualisation. There was no available information on minor and regionalist parties, such as the Independent Regionalist Party (PRI, Partido Regionalista Independente).

On the left, Figure 2 shows the composition of both Piñera's pre-electoral coalition and first cabinet, along with their distribution along the ideological dimension and their share of seats. As can be seen, the coalition was comprised of two right-wing parties: the National Renewal (RN, *Renovación Nacional*), and the Independent Democratic Union

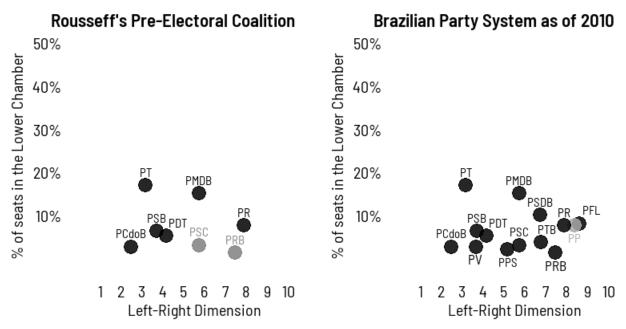
(UDI, *Unión Demócrata Independiente*). Likewise, the ideological position of each party present in the party system and their respective size in the legislature can be seen on the right side of Figure 2.

By and large, looking at the bigger picture of party systems provides us with further insight to make sense of government formation in presidential democracies, and this is demonstrated by the Chilean experience in 2010. From a theoretical standpoint, at the government formation stage, a pre-electoral coalition between the RN and the UDI leading to a cabinet composed of these two parties is entirely reasonable, especially considering the evolution of party competition in the country since re-democratisation. However, the lack of proper attention to polarisation glosses over how the party system was divided into two different camps. As a result, the RN could hardly afford to expel its pre-electoral partner to build a totally different governing coalition.

Nonetheless, not every presidential party is cloistered in such a constricted situation. To provide an example of the reverse scenario, Figure 3 illustrates the government formation process for the first cabinet of Rousseff in that same year in Brazil. In this example, we witness some pre-electoral members not being rewarded with cabinet posts in a political landscape with less pervading legislative polarisation.<sup>4</sup>

As I shall elaborate in the next section, the bottom line is that legislative polarisation and pre-electoral coalitions constrain the government formation to the point where the decision as to whom to invite to the cabinet does not depend solely on the parties that ultimately were invited to take a seat but also on the other parties available in the party system (Indridason 2011, p. 692). That is, amongst other things, in both instances, the formateur parties' decision to form their cabinets was made consciously after grasping how far parties were apart in the party system and considering that there was already a pre-electoral coalition up and running.

Figure 3: Rousseff's Government Formation Process



Note: Parties' size comes from the DPEILA (Borges et al. forthcoming), and parties' ideology hails from Baker and Greene (2011). The original 20-point scale was transformed into a 10-point scale for the sake of better visualisation. In the left panel, the parties in dark grey did not receive a cabinet post when Rousseff assumed the presidency. In the right panel, the party in light grey received a ministry even if it was not a member of the pre-electoral coalition.

# 4 The Entanglement between Pre-Electoral Coalitions, Legislative Polarisation, and Government Formation

The vast majority of the literature on pre-electoral coalitions in presidential democracies argues that being part of pre-electoral pact matters for portfolio allocation in the post-electoral scenario (Albala 2021; Albala et al. 2023a; Borges et al. 2021; Carroll 2007; Freudenreich 2016; Peron 2018). I take a step back and claim that the degree of legislative polarisation has a decisive impact on converting pre-electoral coalitions into coalition cabinets.

Legislative polarisation is known for increasing the complexity around multiparty bargaining in parliamentary regimes. This is materialised by the fact that governments take longer to form as legislative polarisation increases (Falcó-Gimeno and Indridason 2013; Golder 2010; Martin and Vanberg 2003). This clearly cannot happen under presidentialism because both the executive and the legislature have constitutionally fixed terms (Linz 1994), which means that governments have not only a date to end, but also a date

to begin their terms. Nevertheless, this does not preclude legislative polarisation from disturbing the government formation in presidentialism.

In the first place, multiparty negotiations do not represent a straightforward endeavour in fragmented party systems. Naturally, even if the presidential party still has the upper hand in many respects, sharing the power with other parties already entails bringing more veto players to the scene (Tsebelis 1995). Yet, they become inherently more difficult as legislative polarisation increases since parties hold increasingly irreconcilable views on various issues. Consequently, highly polarised settings present presidential parties with a smaller set of viable alternative governments, thereby reducing their leeway to build their cabinets. Conversely, slight legislative polarisation represents the best scenario for the executive once it has a great variety of feasible coalition alternatives.

My point is that pre-electoral agreements counteract the effect of legislative polarisation on cabinet formation. Although polarisation implies more bargaining complexity, pre-electoral agreements make parties abide by several compromises even before the elections take place. In the midst of these compromises, parties discuss common grounds over public policies to be implemented, which policies should be left aside, and ministries to be distributed amongst coalition members (Peron 2018). Thus, presidential parties have significant incentives to keep to their end of the bargain under polarised contexts and not dispatch any pre-electoral coalition member from the upcoming coalition government. The rationale is straightforward: building the new government around a previous, settled pre-electoral agreement is much simpler than finding the middle ground amongst other arrays of parties in an inhospitable party system.

Note that my contention does not implicate that legislative polarisation leads to greater or lesser formation of pre-electoral coalitions. On the contrary, my claim starts from the fact that pre-electoral pacts have already been made and, subsequently, constrain the government formation process increasingly more to the extent that *formateur* parties face greater ideological hurdles in the legislature. Also, I do not argue that parties far apart from one another cannot be part of the same pre-electoral pact. Even if their

ideological positions are starkly different, they can make concessions to each other and meet at the halfway. This can be exemplified by the pre-electoral coalition formed between the National Convergence (CN, Convergencia Nacional) and the Movement toward Socialism (MAS, Movimiento al Socialismo) in 1993 Venezuela, two parties located at opposite ends of the ideological camp. In spite of the distance between the parties at the same pre-electoral pact, my argument continues the same: the CN had more incentives to build the government around the pre-electoral coalition to the extent that legislative polarisation was moderately acute in the party system.<sup>5</sup> In the end, the CN preferred to form the government with the MAS as opposed to inviting other right-wing parties into the cabinet.

By contrast, meagre polarisation along economic and social policy lines provides fewer incentives for presidents to form governments based on pre-electoral alliances. Consider the following chain of events. To start, as legislative polarisation decreases, parties become less differentiated from one another and, as a consequence, have fewer disagreements over policy issues. In this sense, coalition bargaining is more amenable to be undertaken and might have many different outcomes. The greater resemblance in the party system ultimately favours presidential parties since they can forgo their original pre-electoral pact and strive to build a bargain more beneficial to themselves. In a hypothetical scenario, where the party system would look like an undifferentiated amalgam of parties from similar ideological positions, presidents could dismount their pre-electoral coalition and, rather than building a multiparty cabinet, decide to govern through *ad-hoc* coalitions.

This discussion relates to the question of fairness in coalition governments and returns to the conundrum of whether presidents share office payoffs with pre-electoral coalition parties. Some scholars suggest that coalition governments under parliamentarism have an internalised norm by which executive office positions are proportionally allocated in relation to each member's size in the legislature (Browne and Rice 1979; Browne and Frendreis 1980). The rationale is that proportional portfolio allocation does not derive from a purely rational approach but rather from a social norm about fairness. This reasoning could be roughly applied to pre-electoral agreements under presidentialism, where one

could argue that pre-electoral coalitions should naturally transform into post-electoral coalition cabinets. Coalition cabinets fully composed of pre-electoral coalition members should be the fairer outcome amongst all possible alternative governments once all parties relinquishing from launching a presidential candidate would still be compensated by being granted participation in the next government.

Arguments based on norm-driven behaviours, though, remain untested in the studies on government formation in presidential regimes. The literature is, nevertheless, split into different explanations based on the rational choice theory. On the one hand, presidential parties lack incentives to maintain a bargain struck prior to the elections since their survival is not reliant upon the legislature (Kellam 2017). On the other hand, presidents honour the pre-electoral pact because, in rational choice terminology, governing is a repeated interaction between presidents and parties in the legislature, in which presidential parties reap the benefits of keeping their word in pre-electoral agreements by demonstrating to be credible coalition partners (Borges et al. 2021).

These contradictory claims can be illustrated through the Brazilian case. Following the first stream of studies, as office-seeking would be out of the question, parties should join pre-electoral coalitions based solely on policy-seeking considerations (Kellam 2017). In this way, pre-electoral agreements should not thrive in Brazil as office-seeking parties abound in the country (Borges 2021). However, much to the contrary, the Brazilian presidential elections have been inundated with pre-electoral coalitions since the return to democracy in 1985. More surprisingly, several party leaders only agree to engage in multiparty bargaining if they can have an eye on portfolio distribution, even if the presidential and legislative elections have not taken place yet (Peron 2018). Taken together, the Brazilian experience has pointed out that parties without viable presidential candidates do expect office perks by joining a pre-electoral pact. Of course, though, anecdotal evidence from a single-case study should still be taken with a grain of salt.

That being said, my theory adds a nuance to the discussion about pre-election coalitions and their post-electoral fulfilment. Although the literature has mainly supported the idea that pre-electoral agreements matter once the government is in place, Kellam (2017) still has a point when she argues that presidents might enjoy their constitutional privileges and try to exploit the office payoffs of being the formateur of the coalition. In other words, presidents might break out from pre-electoral arrangements when they can construct a more beneficial bargain for themselves. This should be most likely to happen when the legislative polarisation is low, where presidential parties have more feasible alternative governments to build than they would have when parties are far apart from one another in the standard left-right dimension. This is in line with previous studies that have stood out how presidents resort to institutional features to favour themselves in the coalition formation and lawmaking process (Inácio and Llanos 2015; Silva 2022). By contrast, presidential parties have compelling incentives to form governments around pre-electoral agreements when the ideological polarisation in the legislature is high, as pre-electoral pacts serve as focal points that reduce bargaining costs, especially in comparison to forming a new government from scratch. Thus:

**Hypothesis:** The marginal effect of pre-electoral composition on cabinet formation grows in strength as legislative polarisation gets larger; this positive effect is most substantial when legislative polarisation is at its highest and vanishes as legislative polarisation decreases.

# 5 Research Design

In order to test my argument, I analyse patterns of government formation in thirteen Latin American countries. A comparative research design appears well-suited to the task as coalition governments are quite common in presidential regimes (Cheibub 2007; Cheibub et al. 2004), especially in Latin America (Chaisty et al. 2018; Couto et al. 2021). In other words, coalitional presidentialism is not a whim of a handful of countries but rather is a real tool to engender legislative majorities in the region.

My focus resides in Latin America for a few reasons. First, focusing on a single region helps to preserve the unit homogeneity of the research (King et al. 1994). Otherwise, the

results could be biased if the study had drawn on presidential regimes across different continents once non-observable features could be at play. At the same time, however, it could be said that the same logic discussed above regarding pre-electoral coalitions and legislative polarisation could be extended to encompass presidential government formation outside the Latin American scope. This leads to a second reason for centring the analysis on the Latin American context. Despite a few remarkable exceptions (Ariotti and Golder 2018; Hanan 2012; Kim 2011), data on presidential coalition governments in regions other than Latin America are not aggregated yet, thereby hindering comparative enterprises. Indeed, pre-election agreements have been scarcely addressed in African, Asian and Eastern European presidential countries<sup>8</sup> in contrast to the well-documented evidence when it comes to Latin American countries (Albala 2021; Borges et al. 2021; Freudenreich 2016; Kellam 2017).

To effectively test my hypothesis, I follow Freudenreich's (2016) lead and employ conditional logit models to study the patterns of government formation in presidentialism. Most remarkably, models based on conditional probabilities have a close-knit relationship with the literature on government formation under parliamentarism (e.g. Martin and Stevenson 2001). As Freudenreich (2016, p. 90) well noted, though, studies on presidential regimes have not followed the same methodological approach. A plausible reason for such a difference is that presidential systems significantly restrain the set of potential cabinets once the presidential parties are, most of the time, the *formateur* parties. This institutional feature might have prompted scholars to consider only the formed presidential cabinets in their analyses regarding the characteristics of presidential cabinets, such as their status in the legislature (e.g. Figueiredo et al. 2012).

The most popular statistical techniques to deal with coalitional presidentialism, however, provide misspecified estimates to grasp patterns of government formation. This happens because the structure of government formation makes the likelihood of forming a specific cabinet contingent on the other potential governments that could have borne out. In this way, government formation is a choice problem in which presidential parties contrast the utility of forming each alternative government with one another. To put it in presidential terminology, presidents have a whole set of possible governments from which they can choose only a single instance to come into existence. That is, just like passengers choose among different transportation systems to get to a destination (McFadden 1974), presidents are confronted with varying alternatives from which they have to choose one to form.

The dependent variable depicts whether the potential government was formed by assigning one to formed governments and zero to all others that remained only in the theoretical plan. In other words, my dependent variable is an indicator highlighting which government emerged from the coalition formation bargaining process. <sup>10</sup> It is worth noting that, since my claim pertains to the transition from pre-electoral coalitions to coalition cabinets, I examine only government formation opportunities that follow legislative or presidential elections. In this case, reshuffled cabinets are not present in what follows.

Data on government formation come from the ground-breaking work done by Freudenreich (2016), which I have updated to cover more recent cases of cabinet formation.<sup>11</sup> Following the standard procedure in parliamentary studies, only significant parties are taken into account for government formation processes. That is, parties with extremely minor legislative seats are excluded from the analysis since their size in the legislature does not influence interparty negotiations<sup>12</sup> (Budge et al. 2001; Sartori 1979). In practical terms, parties with less than one percentage of seats in the legislature are disregarded.

Table 1 displays the countries included in the dataset, their respective temporal coverage, their number of actual governments, and their percentage of minority presidential parties.

Information on political parties' ideological preferences and legislative polarisation comes from the Dataset of Parties, Elections and Ideology in Latin America (DPEILA) (Borges et al. forthcoming). The DPEILA provides the positioning of parties along the traditional economic left-right dimension by transforming the V-Party scores to a twenty-point scale. In turn, ideological polarisation in the legislature is measured using Dalton's (2008) Polarisation Index, calculated with a slight modification from the original

Table 1: Dataset Summary

Country	Period	Actual Governments	$\begin{array}{c} \text{Minority} \\ \text{Presidential Parties} \\ \text{(n } / \%) \end{array}$	% in the Dataset
Argentina	1983-2019	20	16 / 80.00	13.89
Bolivia	1982-2014	9	$6 \hspace{0.1cm} / \hspace{0.1cm} 66.67$	6.25
Brazil	1989-2018	10	10 / 100.00	6.94
Chile	1989-2018	9	$9 \ / \ 100.00$	6.25
Colombia	1978-2018	12	$7 \ / \ 58.33$	8.33
Costa Rica	1970-2020	14	$10\ /\ 71.42$	9.72
Dom. Republic	1978-2016	15	7 / 46.67	10.41
El Salvador	1984-2019	18	16 / 88.89	12.50
Honduras	1982-2018	10	$5 \ / \ 50.00$	6.94
Nicaragua	1997-2016	5	2 / 40.00	3.47
Panama	1989-2019	8	7 / 87.50	5.56
Uruguay	1985-2020	8	$5\ /\ 62.50$	5.56
Venezuela	1974-1999	6	$4 \ / \ 66.67$	4.16
Total	1970-2020	144	$104\ /\ 72.22$	100

formula. 13

$$Legislative Polarisation Index = \sum_{i=1}^{n} Pi(\frac{Si - Mj}{9.5} * 10)^{2}$$
 (1)

Where Pi is the proportion of seats of the party i, Si is the score of the party i in the left-right divide, and Mj is the mean left-right position of the party system j.<sup>14</sup> In plain terms, Dalton's Polarisation Index allows grasping the degree to which party systems are divided in the post-electoral scenario by weighting parties' positions by their size in the legislature.<sup>15</sup> More importantly, in the current ocean of different measures of polarisation, Dalton's index was explicitly built with party systems in mind. As such, it comes as no coincidence that this measurement has gained prominence among scholars in the last years (e.g. Carroll and Kubo 2021; Ecker and Meyer 2015; Lupu 2015).

The complementing central independent variable to the analysis is *Pre-Electoral Coalition (PEC)*, denoting whether potential governments derive their composition from pre-election coalitions. Importantly, potential coalitions excluding at least one of the pre-electoral coalition partners are coded as not based on pre-electoral alliances since the original multiparty pact is broken. On the other hand, alternatives containing all mem-

bers or representing an extended version of pre-electoral coalitions are deemed to be based on pre-electoral multiparty bargaining.<sup>16</sup>

Lastly, I employ most of the original variables used by Freudenreich (2016) to serve as controls for my hypothesised claim. As a matter of fact, most of them consist of standard variables in the literature on government formation in parliamentary democracies and are broadly summarised in office, policy, and institutional incentives in the bargaining process. The first control is *Minority*, and it captures whether potential coalitions have majority legislative support in the lower chamber or the only chamber in the legislature. <sup>17</sup> Number of Parties controls for the fact that parties prefer to form governments composed of fewer as opposed to more parties by indicating how many parties are present in each potential coalition. Turning to the policy aspect of the government formation process, Ideological Division captures the distance between the most rightist and leftist party in each potential coalition, Median Party indicates whether possible governments contain the median party in their composition, and Extreme Parties does the same for extreme parties. Lastly, Runner-up Party indicates whether potential coalitions include the party that finished as the second-most voted option in the last presidential election. For more information, Table A.2 in the Supplementary Material provides more details on the operationalisation of each variable in the models, and Table A.3 presents descriptive statistics.

#### 6 Results

Table 2 provides the results for the empirical implication of my theoretical argument. The first model considers only minority government formation bargaining processes, as coalition formation is more natural when presidential parties lack a legislative majority. The second model considers all presidents, regardless of their legislative status.

To start the analysis, as legislative polarisation never reaches zero, I focus the interpretation here mainly on the interaction term (Brambor et al. 2007). Both models indicate that the effect of pre-electoral coalitions appears to be conditional on the degree of legislative polarisation at the 0.01 level. For government formation opportunities un-

Table 2: Government Formation in Latin America

	Minority Presidents	All Presidents
	(1)	(2)
Minority	-1.397***	-1.214***
·	(0.334)	(0.315)
Number of Parties	-1.812***	-1.781***
	(0.164)	(0.149)
Ideological Division	$-0.175^{***}$	$-0.157^{***}$
	(0.056)	(0.051)
Median Party	1.321***	1.220***
	(0.327)	(0.314)
Extreme Parties	0.228	0.163
	(0.508)	(0.493)
Runner-up Party	-1.385***	-0.939***
	(0.397)	(0.326)
Pre-Electoral Coalition (PEC)	-2.682	-2.463
	(1.901)	(1.547)
PEC * Legislative Polarisation	2.644***	2.542***
	(0.669)	(0.567)
Cabinets	104	144
Number of Alternative Cabinets	147,736	149,452
Log Likelihood	-251.904	-302.924
N. I	* <0 1. ** <	·0 05. *** <0 01

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

der minority presidential parties, the first model tells us that, on average, the increase of one unit of legislative polarisation makes potential governments based on pre-electoral coalitions approximately 14 times more likely to form than alternative governments that exclude any pre-election coalition partner of their composition. The same pattern holds true when majority presidents are also taken into account, as potential coalitions based on pre-election coalitions are more likely to form as legislative polarisation increases.

To have a better view and a more consistent analysis of this relationship, Figure 4 plots the marginal effects of legislative polarisation and pre-election coalitions on government formation across a range of values of each other based on Model 1.

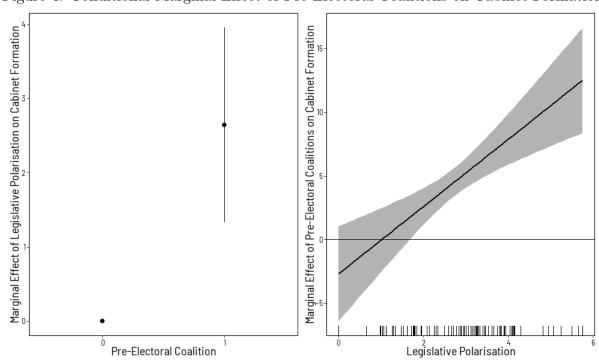


Figure 4: Conditional Marginal Effect of Pre-Electoral Coalitions on Cabinet Formation

On the left, we can see the marginal effect of legislative polarisation. As the interpretation of the impact of legislative polarisation on government formation requires a more comprehensive modelling strategy, as Indridason (2011) does for parliamentary democracies, I refrain from exploring this effect any further. Still, this plot helps leverage information concerning the importance of pre-electoral coalitions for coalition talks. <sup>18</sup> In fact, by holding all else constant, the plot on the left shows that, when based on a pre-

electoral coalition, potential governments are 1.3 to 3.9 times more likely to be formed than their counterparts not based on any kind of pre-electoral alliance, thereby replicating Freudenreich's (2016) findings when taking legislative polarisation into account.

In a complementary fashion, the plot on the right provides supportive evidence for the findings in Table 2 and depicts that legislative polarisation indeed conditions the effects of pre-electoral coalitions on cabinet formation. Except for low levels of ideological polarisation, where the 95% confidence intervals do not let us assure the exact impact of pre-electoral pacts on the formation of presidential governments, pre-election coalitions matter most as parties are more distanced from one another on the left-right policy dimension.<sup>19</sup> From a Legislative Polarisation Index of 1.76 onwards, the construction of pre-electoral pacts exerts increasingly more pressure on cabinet formation, increasing from 1.97 (0.30; 3.63) to 12.51 (8.38; 16.64) times the likelihood of formation of potential governments based on pre-electoral alliances. To attest to the empirical importance of this finding, 86 out of 104 formation opportunities under minority presidents analysed by the first model score more than 1.76 in the index of Legislative Polarisation, which means that disregarding legislative polarisation when studying pre-electoral affairs and government formation in Latin America is quite inadvisable.

To probe whether the above findings are robust, I conduct a series of robustness tests, all of which are available in the Supplementary Material. I test whether the purported relationship between pre-electoral alliances and legislative polarisation is sensitive to the distribution of upper chamber seats, the choice of ideological measure, the number of effective parliamentary parties, the occurrence of party primaries for the selection of presidential contestants, specific electoral institutions, party system institutionalisation, electoral volatility, varying party-voter linkages, the use of the liberal-conservative dimension instead of the traditional economic left-right, the ideological distance between presidential and median parties, and the extent of presidential powers. Additionally, I rerun the models excluding one country each time to assess whether my results are driven by a particular country. Overall, the robustness checks yield essentially the same results as compared to those from the original models. More remarkably, the interaction between

pre-electoral coalitions and legislative polarisation practically never loses statistical significance and, in fact, in some models, has a more pronounced coefficient than what was previously registered. Therefore, the findings are consistent across different modelling strategies.

### 7 Concluding Remarks

Pre-electoral coalitions are a trademark of electoral democracies. This paper has been concerned primarily with the impact of pre-electoral coalitions on government formation in presidential democracies, albeit agreements that pre-date elections are equally pivotal in parliamentary regimes (Golder 2006; Ibenskas 2016). This focus arises from the fact that the literature on coalitional presidentialism has long been puzzled about whether pre-electoral pacts matter or not to government formation. On the one hand, the impact of pre-election coalitions as a means to distribute office benefits is belittled as formateur parties need not act in accordance with the pledges made towards other parties (Kellam 2017). After all, presidential parties' survival in the executive is not reliant on the legislature (Linz 1990, 1994; Samuels and Shugart 2010). On the other hand, pre-electoral coalitions are seen as the spearheads of coalition cabinets. In this view, presidents do commit to allocating office pay-offs to pre-electoral coalition members, even if they are not constitutionally obliged to stick to their pre-electoral promises (Carroll 2007; Freudenreich 2016; Peron 2018).

This paper has sought to bring nuance to this discussion. I argue that presidents do not behave in such a black-and-white manner. Actually, their decision to build coalition cabinets around pre-electoral agreements depends on which context the government is embedded in. More specifically, pre-electoral pacts should increasingly constrain the government formation process as legislative polarisation is more pervasive in the party system. The explanation resides in the fact that an increased ideological dividedness at the party system level reduces presidents' wiggle room to build governing coalitions since parties have conflicting policy preferences. In this context, the utility of forming

governments around pre-electoral pacts increases as they largely reduce bargaining costs. Conversely, agreements struck prior to the elections do not offer the same advantage when legislative polarisation is shallow. When a party system is not composed of parties with too many disagreements on the left-right ideological dimension, presidential parties have varying possible multiparty governments at their disposal, and they may end up forming a government different from those derived from pre-electoral pacts.

To test my claim, I make use of a dataset comprising alternative governments of thirteen Latin American countries over fifty years. The conditional logit models highlight, across different specifications, that the effect of pre-election coalitions is substantially conditional on the degree of legislative polarisation. In other words, potential governments based on pre-electoral agreements are more likely to form as ideological polarisation increases in the legislature. As a consequence, barring the *formateur* party, pre-electoral coalition members should not take their participation in government for granted in barely polarised settings, even if the candidate they provided support won the presidential election. On the other hand, they should be more confident about being part of the government when the party system is strongly ideologically polarised in the legislature.

These findings contribute to a better understanding of government formation in multiparty presidential democracies and have particular implications for the study of preelectoral coalitions in presidentialism. Importantly, they also reveal another way by which polarisation impacts politics. While I remain neutral as to whether the moderating effect of legislative polarisation on government formation is good or bad from a normative standpoint, what we should take from the results is that we should not disregard legislative polarisation when studying government formation in presidential democracies.

Despite being tested on Latin American cases only, the theory put forward here applies to presidential democracies located outside the boundaries of Latin America. However, the generalisability of this work's findings depends on how the political competition is structured in other countries. More specifically, the results of this study are meaningful for presidential democracies that have party competition at least *minimally* subsumed

in the typical economic left-right spectrum. If this is not the case and the policy space is either multidimensional or based on non-programmatic lines, then it follows logically that we cannot extend the idea that the effect of pre-election alliances is conditional on the degree of legislative polarisation.

Looking down the road, the literature would greatly benefit from taking any policy dimension other than the traditional economic left-right division into consideration, even if it means sacrificing a comparative perspective at first. For example, African and Asian presidential democracies seem to have other prominent political cleavages shaping their party systems other than the traditional left-right divide (Hanan 2012; Kim 2011). Against this backdrop, the fact that not mere legislative polarisation, but multidimensional legislative polarisation can moderate the impact of pre-electoral coalitions in these countries merits further scholarly attention.

Additionally, despite the solid, robust results outlined above, recent deviant experiences suggest that alternative factors might also be relevant in accounting for the translation of pre-electoral coalitions into full-fledged governing coalitions. For example, even embedded in a heightened polarised scenario, the Workers' Party (PT, Partido dos Trabalhadores) did not reward all of its pre-electoral coalition partners with ministerial portfolios when Lula was sworn into office for his third term in Brazil in 2023. Going forward, scholars would do well to expand the scope of analysis to consider features beyond the government formation process. For example, future analyses can be enriched by taking into account the alternative "tools" that governments can resort to ensure governability (Raile et al. 2011). While only tentative speculation in nature, it can be the case that the pre-electoral coalition members deprived of cabinet posts are rewarded in another way in Brazil, such as through the favourable allocation of budgetary resources.

Likewise, there is great promise in advancing the link between pre-electoral coalitions and intra-party politics in future research. At the current stage, it is known that participation in coalition governments might trigger dissatisfaction within parties. In Venezuela, for instance, the moderate and the radical factions of the Movement for Socialism (MAS,

Moviemiento al Socialismo) vehemently opposed each other's view over participation in Caldera's government in the mid-to-late 1990s (Handlin 2017). As the formation of preelectoral coalitions implies different gains and losses for various sectors within each party, future investigations should gain from a closer examination of intra-party dynamics.

Finally, it should be stressed that pre-electoral coalitions not only influence party and electoral systems but also the accountability between voters and parties. First, as well noted by Spoon and West (2015, p. 401), even if pre-electoral coalitions may be mutually beneficial to pre-electoral coalition members, they are not necessarily a blessing for representation. Much to the contrary, multiparty electoral coordination may preclude voters from casting a vote on their favourite option, as pre-electoral alliances shrink the number of available candidates on the election day. However, to the best of my knowledge, the link between pre-election coalitions and representation has been weakly explored thus far in presidential democracies, either from a theoretical or an empirical standpoint. Hence, future studies would thrive from closing this gap in our current knowledge, especially in presidential countries in Latin America, which are known for their low levels of partisanship.

#### Notes

- 1. There is a persisting idea that presidents need not be concerned with their parties' seat share in the legislature to secure their survival in office (e.g. Jang 2023). However, this is the subject of an ongoing debate. Thus far, the literature has found mixed results regarding the effect of the size of the presidents' legislative contingent on their survival (Hochstetler and Edwards 2009; Martínez 2021; Negretto 2006; Pérez-Liñán and Polga-Hecimovich 2017). Hence, what we can take out of this discussion is that presidents are not necessarily doomed to fail if they lack control of a majority in the legislature, but this does not mean that they are shielded regardless of their legislative support.
- 2. As another example, in the Brazilian presidential elections, pre-electoral coalition members take advantage of the electoral legislation to increase the amount of free political advertising time on the media for their presidential candidate. This is because each party is allocated a corresponding amount of free airtime relative to its legislative seat share. Hence, reliant on their parties and their coalesced parties, presidential candidates may have a more extensive time of electoral free broadcasting than their foes.

- 3. In this article, the left-right dimension refers only to the traditional economic left-right, unless stated otherwise.
- 4. In the first section of the Supplementary Material, I provide two complementary graphical representations of my argument. More specifically, I show a case of a pre-electoral coalition fracturing and giving birth to a single-party government (Venezuela in 1978) and a case of a post-electoral enlargement of the pre-electoral pact (Panama in 1994). Together, these four visualisations present a more complete bird's-eye view of the conditional theory presented in the article.
- 5. The 1993 Venezuelan party system would have a low legislative polarisation in comparative terms. From a national perspective, however, ideological polarisation in 1993 was at its peak at the time and was a glimpse into the future of the highly polarised 1998 presidential election (Handlin 2017).
- 6. Of course, other scholars firmly disagree with this view and argue that coalition governments are primarily driven by rational thinking (Bäck et al. 2009; Ecker and Meyer 2019; Falcó-Gimeno and Indridason 2013).
- 7. An extension of this argument could preview that presidents may even increase cabinet size to accommodate pre-electoral coalition members. However, a recent study has shown that this is not the case (Albala et al. 2023b).
- 8. Kadima and Owuor (2014) and Kim (2008) are notable exceptions.
- 9. Strictly speaking, the presidential party can even stay out of office. The justification for that resides in the fact that some presidents maximise their utility by not including their party in the cabinet, thus opting for reaping the benefits of building co-optation or non-partisan cabinets (Albala 2013; Amorim Neto 1998).
- 10. For ease of understanding, I provide an illustration of this process and of my operationalisation in the second section of the Supplementary Material based on a real-world experience from Uruguay.
- 11. The steps behind the updating process are discussed in the third section of the Supplementary Material.
- 12. Furthermore, excluding very small parties from the sample is a way to deal with measurement errors, as experts get into trouble in estimating their policy positions (Marks et al. 2007). It is also noteworthy that, in so doing, not much information is lost in terms of coverage of the share of seats. In the most extreme case, in Argentina in 1991, the excluded parties did not amass more than 7% of the total number

of seats.

- 13. This is not necessarily a problem, as the reason for such a difference stems from the fact that the scales of ideological preferences are different. While Dalton (2008) relies on a ten-point scale, the DPEILA makes use of a twenty-point scale to locate parties across the ideology continuum.
- 14. I am grateful to an anonymous reviewer for suggesting a more readable explanation of this formula.
- 15. A brief discussion on the Legislative Polarisation Index is available in the fourth section of the Supplementary Material.
- 16. The argument of this paper does not differentiate between congruent and enlarged pre-electoral coalitions, as none of the original 'signatories' have been expelled from the multiparty agreement in either instance. Either way, the empirical support for my claim holds when segmenting the original variable into Congruent Pre-Electoral Coalition and Enlarged Pre-Electoral Coalition. The results are available in Table A.4 in the Supplementary Material.
- 17. Due to data unavailability on party's seat share in upper chambers across Latin America, I cannot gauge whether the distribution of seats in second chambers confounds the entangled relation between pre-electoral coalitions and legislative polarisation on the formation of presidential cabinets with the entire updated dataset. To examine if this is the case, I conduct a few robustness tests regarding bicameral settings in the Supplementary Material.
- 18. In so doing, I follow the advice of Berry et al. (2012) and Clark and Golder (2023) to test the conditional theory at hand as much as possible from different angles.
- 19. It is worth noting that the statistical insignificance of the point estimate when legislative polarisation reaches low levels does not raise concerns for the hypothesis tested here. This is because the underlying theory posits that the effect of pre-electoral coalitions should be larger as legislative polarisation increases; this effect is expected to lose strength as legislative polarisation decreases.

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Supplementary Material for 'Government Formation in Presidentialism: disentangling the combined effects of pre-electoral coalitions and legislative polarisation'

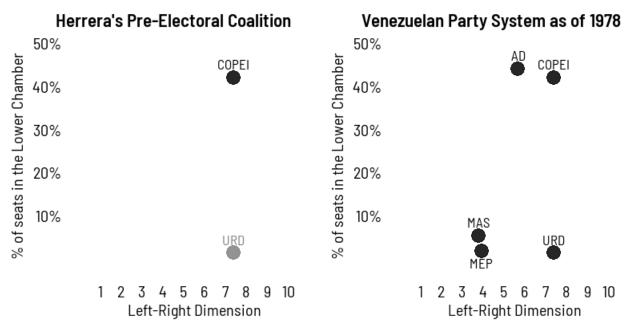
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# 1 Alternative Illustrations for the Entanglement between Pre-Electoral Coalitions and Legislative Polarisation

In the main text, I provided two examples of my argument. The first instance showcases a government formation process where the *formateur* party finds itself in a very constrained setting, where the party system is divided into two contrasting camps. In a complementary fashion, the second exemplification exhibits a government-forming process where the legislative polarisation is not as equally oppressive. While the former led to a coalition government that entirely reproduced its pre-electoral origin, the latter resulted in two former pre-electoral coalition members not receiving any government ministry. Below, I provide two extra graphical representations of my argument.

First, Figure A.1 shows the share of seats and ideological positions for Herrera's preelectoral coalition members on the left and does the same for the party system on the right. In this case, the pre-electoral coalition did not survive the election stage and the Democratic Republican Union (URD, *Unión Republicana Democrática*) was deprived of

Figure A.1: Herrera's Government Formation Process



Note: Parties' size comes from the DPEILA (Borges et al., forthcoming), and parties' ideology hails from Baker and Greene (2011). The original 20-point scale was transformed into a 10-point scale for the sake of better visualisation. The URD's policy position was missing and was therefore imputed from Freudenreich (2016). In the left panel, the URD - the pre-electoral member who ultimately was not rewarded with any government ministry - is in dark grey.

brasileiro), and the Social Christian Party (PSC, Partido Social Cristão) in the Brazilian example discussed in the main text. The difference resides in the fact that the presidential party did not look for any other party to join the government. In fact, at the time, Venezuela was at the height of the duopoly between the Democratic Action (AD, Acción Democrática) and the Independent Political Electoral Organization Committee (COPEI, Comité de Organización Política Electoral Independiente) enabled by the Pact of Punto Fijo (Handlin, 2017). Even if there is more story to be told about this particular case, of particular note for our purposes here is that the pre-electoral coalition fractured in a context of low legislative polarisation.

Drawing from an experience in Panama in 1994, Figure A.2 presents a case of postelectoral expansion of the pre-electoral pact. To be sure, this example does not perfectly capture the argument presented in the main text, and this is so for two reasons. First, while ideology certainly structures party competition to some extent (Nevache et al., 2023), clientelistic ties are widespread in the country, especially soon after redemocratisation, and should absolutely not be disregarded (Barragán, 2020). Second, due to their failed attempt to pass the electoral threshold, the two non-presidential pre-electoral coalition members were disbanded soon after taking office, and their members were subsequently incorporated by the presidential party (Rodríguez Mójica, 2000). As a result, this leaves the case in a grey area, as the pre-election coalition was neither totally fulfilled (the former pre-electoral coalition members did not formally receive cabinet posts) nor entirely broken (they were still part of the government, but from within the formateur's party). Notwithstanding these caveats, this example serves well to graphically show the paper's argument in the context of pre-election coalition enlargement.

Balladares's Pre-Electoral Coalition Panamanian Party System as of 1994 50% 50% of seats in the Only Chamber of seats in the Only Chamber PRD PRD 40% 40% 30% 30% PPA 20% 20% MPE MOLIRENA 10% 10% LIBRE 3 4 5 6 7 8 3 5 6 8 9 10 Left-Right Dimension Left-Right Dimension

Figure A.2: Balladares's Government Formation Process

Note: Parties' size and ideology hail from the V-Party dataset (Lindberg et al., 2022). The original 7-point scale was transformed into a 10-point scale for the sake of better visualisation. There was no available information on minor and regionalist parties. The policy positions of both junior pre-election coalition members - the Republican Liberal Party (LIBRE, Republican Liberal Party) and the Labour Party (PALA, Partido Laborista) - come from Freudenreich (2016). In the right panel, the party in light grey secured membership in the coalition even if it was not a member of the pre-electoral coalition.

Differently from Herrera's government formation bargaining process, Balladares found himself in a more constrained situation — albeit glaringly less so than that of Piñera in Chile in 2010. Even though the pre-electoral coalition was close to granting the government majority legislative support, legislative polarisation in the party system was at a moderate level. Through the lens of the article's argument, excluding any pre-electoral coalition member was relatively costly, even if their seat share was arguably low. In real-

ity, it made little sense not to include them in the government (or in the presidential party, to be more precise), as their party brands would be dissolved sooner rather than later, and the presidential party was desperately searching for a legislative majority. Thus, the question was not whether pre-electoral coalition members would be in the government when Balladares took office, but who else would be called to have a cabinet seat.

When the president-elect was sworn into office, the pre-electoral pact was then slightly modified by the inclusion of the Solidarity Party (PS, Partido Solidaridad) in the ministerial allocation process. Naturally, the Motherland Movement (MPE, Movimiento Papa Egoró) also emerged as one potential coalition partner at the post-election stage. However, the MPE decided not to align formally with either the government or the opposition. In the end, as the pre-electoral coalition formed the basis of the government — even if from inside the presidential party as previously discussed, the ensuing coalition cabinet represented an instance of pre-electoral coalition enlargement.

In combination, these two examples, along with those presented in the main text, cover the movements of the transition of pre-electoral coalitions into full-fledged governments. In this way, the argument underlying the relationship between pre-electoral coalitions and legislative polarisation applies to processes by which the government is a perfect mirror of the pre-electoral coalition (Chile in 2010 - Figure 2 in the main text), an enlarged version of it (Panama in 1994 - Figure A.2), a coalition government that does not include every pre-electoral coalition partner (Brazil in 2010 - Figure 3 in the main text), and a single-party government that breaks from the pre-electoral alliance (Venezuela in 1978 - A.1).

## 2 Government Formation Illustration

Let us examine the process of government formation in presidential democracies with the Uruguayan party system in 2000. By the end of the century, the Uruguayan party system was comprised of four political parties: the Colorado Party (PC, Partido Colorado), the National Party (PN, Partido Nacional), the Broad Front (FA, Frente Amplio), and the

New Space (NE, *Nuevo Espacio*). Against this backdrop, as soon Batlle was sworn into office, he could have built his cabinet in eight different ways,<sup>2</sup> as listed in Table A.1. The government formation process ultimately led to a coalition between the PC and the PN. In this specific case, the only option to be coded as 1 in our dependent variable is the actual government formed between the PC and the PN, while all the remaining options are coded as 0. Thus, the interest resides in explaining why this potential coalition emerged at the expense of the others. In this context, the conditional logit model is particularly well-equipped to provide a broad overview of the reasons for government formation in presidential settings.

Table A.1: Potential governments following the 1999 Uruguayan general election

Formateur	Coalition Partner(s)
PC	_
PC	FA
$\mathbf{PC}$	PN
PC	NE
PC	FA - PN
PC	FA - NE
PC	PN - NE
PC	FA - PN - NE

Note: The formed government is highlighted in bold.

# 3 Updating Dataset on Government Formation in Latin America

Here, I briefly outline the updating process of the dataset on government formation in Latin America, which was originally developed by Freudenreich (2016). The first step was ensuring that only democratic periods were inserted in the dataset. To do so, I checked which country-years were democratic based on Bjørnskov and Rode (2020) and the Polity V (Marshall and Gurr, 2020). Country-years deemed as either undemocratic or scoring below six on Polity V Index have been cast aside. Next, I retrieved information on the Latin American party systems to be updated from the DPEILA (Borges et al., forthcoming) and the V-Party dataset (Lindberg et al., 2022), such as the number of

parties in the legislature, their seat share, and their left–right placements. In the next stage, I looked for data on the composition of presidential cabinets and coded actual governments following Amorim Neto (2019), Camerlo and Martínez-Gallardo (2018), Nyrup and Bramwell (2020) and Silva (2022). Then, the last step consisted of coding which potential governments were based on pre-election coalitions. Data on most recent Latin American pre-election coalitions come mostly from Borges et al. (2021) and Lopes (2022), and, for cases not covered by scholarly literature yet, I relied on the countries' respective electoral committees or similar departments charged with electoral affairs.

To avoid falling victim to the violation of the independence of irrelevant alternatives (IIA), a different procedure was made to include Brazil's case in the wake of its 2018 legislative and presidential elections. In the aggregate, thirty parties gained representation in the lower chamber after the elections, with twenty-two holding more than one per cent of the share of seats. As a consequence, this number of parties would have generated more than two million potential governments and, thus, would make conditional logit regressions inviable. The solution found was to raise the threshold for inclusion in the dataset for this specific election from one to roughly two-and-a-half per cent of seats. However, to prevent losing information, I also considered relevant parties with known policy positions on the DPEILA, despite not holding two-and-a-half per cent of the seats of the Chamber of Deputies. In total, the parties dropped from the analysis hold, together, roughly 13.5% of the legislative seats, which are, regrettably, missed in the study.

Relatedly, I draw attention to the importance of not including minor parties in the dataset. Indeed, the exclusion of parties with less than one percentage of legislative seats is far from being a mere subtlety. More often than not, research on government formation considers that *formateur* parties have various coalition alternatives from which they choose only one to actually form. Taking out non-significant parties from the analysis prevents researchers from stumbling at measurement errors. To see why this is the case, let me consider the 2002 pre-electoral coalition led by Lula. Despite being comprised of five parties, the pre-electoral coalition embraced two very small parties, the Party of National Mobilization (PMN, *Partido da Mobilização Nacional*) and the Brazilian Communist

Party (PCB, Partido Comunista Brasileiro). Together, both parties accounted for exactly one seat following the 2002 general election in Brazil. Not surprisingly, neither party was invited to be part of the upcoming government. If the PMN and the PCB had been in the dataset on government formation, they would have caused two problems of major concern. Firstly, they would have wrongly generated more options of feasible coalition alternatives than there actually were. Secondly, and posing a graver threat to the research design, the inclusion of these petite parties would have made the researchers incorrectly assign the formed government as non-driven by a pre-election pact, as the two members had been dropped.

# 4 Brief Discussion on Legislative Polarisation

It is worth mentioning that the Legislative Polarisation Index applied in the main body of the article is not intended to measure the difference in legislative polarisation from the pre-electoral to the post-electoral scenario; instead, it is aimed to measure the ideological polarisation in the legislature after all actors know the election results. This point raises the question of whether political parties are fully aware of the policy preferences of one another when it is time to form a new cabinet after a general election. This situation is further aggravated by the fact that political actors are in a context inundated with imperfect information and bounded rationality (Shepsle, 2006).

In order to circumvent this problem, Curini and Pinto (2016) resort to the "average ideological range" of party systems by looking at the distance between the right-most party to the left-most party on a host of policy domains taking into consideration the previous government. However, this solution is far from ideal to be applied in this work for several reasons. Fist, the hypothesised causal effect put forward here concerns only the degree of legislative polarisation, not its change in comparison with a previous setting. Second, the "average ideological range" is blind to parties' size, thus assigning disproportional weight to small extremist parties and, consequently, not tapping neatly into the concept of legislative polarisation. The final nail in the coffin is the fact that this

paper measures ideological polarisation in the legislature for only one dimension, namely the standard economic left-right cleavage, whereas Curini and Pinto (2016) had data for party preferences in eight dimensions.

To sum up, despite the fact that the literature has come up with alternatives to deal with the uncertainty around government formation, changing the polarisation index to an ideological range does not seem fruitful for this work.

# 5 Variables and Descriptive Statistics

Table A.2: Variables and Operationalisation

	Table A.2: Variables and Operationalisation	
Variables	Operationalisation	Type
Actual Government	Whether the potential government emerged out of the government formation process. $1 = yes; 0 = no$	Dummy
Minority	Whether the potential government is in a minority situation in the only chamber of the legislature or in the lower chamber. $1=yes;0=no$	Dummy
Number of Parties	How many parties are included in each potential government.	Discrete
Ideological Division	The ideological distance between the left-most and the right-most parties within each potential government.  In turn, left parties were coded as positioned at 0.0, centre-left parties at 2.5, centre parties at 5.0, centre-right parties at 7.5, and right parties at 10.0	Discrete
Median Party	Whether the potential government contains the median party in its composition.  1 = yes; 0 = no  In turn, the median party was identified by, beginning at each extreme of the ideological spectrum, summing up the share of seats of each party in the party system and visualising which party adds the last remaining	Dummy
Extreme Parties	share for reaching a majority.  Whether the potential government contains extreme parties in its composition. $1 = \text{yes}; 0 = \text{no}$ In turn, extreme parties were identified as those located in a position more distant from the centre than the presidential party.	Dummy
Runner-up Party	Whether the potential government contains the party that finished as the second-most voted option in the presidential election. In the case of legislative elections, the Runner-up Party is the same as in the last presidential election. $1=yes;0=no$	Dummy
Pre-Electoral Coalition	Whether the potential government is based on any version of a pre-electoral coalition, either a congruent or an extended version thereof. $1=yes;0=no$	Dummy
Legislative Polarisation	The ideological polarisation in the legislature at each government formation opportunity following a presidential or legislative election.	Continuous

Table A.3: Descriptive Statistics

Variables	Mean	St. Dev.	Min	Max	$\overline{\mathbf{N}}$
DV:					
Actual Government	0.001	0.031	0	1	149,784
IV:					
Minority	0.363	0.480	0	1	149,784
Number of Parties	7.877	2.235	1	17	149,784
Ideological Division	6.911	1.962	0	10	149,784
Median Party	0.568	0.495	0	1	149,784
Extreme Parties	0.555	0.496	0	1	149,784
Runner-up Party	0.498	0.500	0	1	149,784
Pre-Electoral Coalition	0.049	0.217	0	1	149,784
Legislative Polarisation	3.201	0.714	0.0006	5.749	149,452

## 6 Robustness Tests

To test whether the combined effects of pre-electoral coalitions and legislative polarisation are not achieved by chance or due to a misguided operationalisation, I conduct a whole series of robustness tests to check the validity of my results. I begin by examining whether differentiating between coalition governments that perfectly match their pre-electoral composition from those that represent an increased version of the pre-electoral pact changes the sign, the statistical significance and the substantial power of the coefficient of the product term. The results can be seen in Table A.4.

Table A.4: Accounting for the Difference between Congruent and Enlarged PECs

Model 1	Model 2	Model 3
-1.334***	-1.385***	-1.380***
		(0.339)
-1.374****	$-1.401^{***}$	$-1.751^{***}$
(0.146)	(0.144)	(0.168)
-0.202***	-0.231***	-0.174***
(0.054)	(0.055)	(0.056)
1.210***	1.246***	1.318***
(0.322)	(0.311)	(0.329)
0.519	0.398	0.272
(0.433)	(0.413)	(0.511)
-1.444***	$-1.717^{***}$	$-1.337^{***}$
(0.393)	(0.390)	(0.399)
-0.304		-2.264
(1.619)		(2.023)
	-1.763	-3.172
	(1.858)	(2.265)
1.319**		2.566***
(0.530)		(0.704)
	1.324**	2.625***
	(0.601)	(0.771)
104	104	104
147,736	147,736	147,736
-280.698	-303.854	-250.693
	$-1.334^{***}$ $(0.335)$ $-1.374^{***}$ $(0.146)$ $-0.202^{***}$ $(0.054)$ $1.210^{***}$ $(0.322)$ $0.519$ $(0.433)$ $-1.444^{***}$ $(0.393)$ $-0.304$ $(1.619)$ $1.319^{**}$ $(0.530)$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Note: Minority presidents only \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

In the following, I investigate whether the lack of information on upper chamber status is troublesome for my analysis. With that in mind, I first re-run models with Freudenreich's (2016) original data, which have information on minority status in both lower and upper chambers. Then, I divide the original dataset into bicameral and unicameral countries and re-run models for bicameral countries only. I wrap up this part by repeating the last procedure on the updated dataset.

Next, I replace the V-Party measure with Baker and Greene's (2011) ideological classification of Latin American parties to check whether the findings remain the same regardless of the ideological measure choice. Then, I restrict the sample to include only those party systems with more than 2.5 effective number of parties and once again re-run the conditional logit models. This test, in particular, represents a most-likely scenario for the hypothesised theory to hold. This is the case as coalitional bargaining is more typical in more fragmented settings, and consequently, the product term between legislative polarisation and pre-electoral coalition should not lose statistical strength once less fragmented party systems are removed from the analysis.

This part's last battery of tests concerns gauging whether specific aspects of electoral systems and party systems have empirical implications for my argument. The first feature that may influence the transformation of pre-electoral coalitions into governing coalitions is the undertaking of common party primaries. Let us suppose that a set of parties agreed on defining its presidential and legislative candidates by means of conjoint party primaries. In that case, pre-electoral coalition members naturally have a higher likelihood of composing the next government if the pre-election alliance is successful in the electoral arena, as breaking the pre-electoral coalition apart is immensely costly. Consequently, cabinet formation would not have too much to do with legislative polarisation, but rather with party primaries per se.

Coding common party primaries proves to be extremely difficult, partly due to the nature of the scholarship on party primaries, which has not had a comparative empirical focus (Navarro and Sandri, 2017). To deal with it, I rely on a *proxy* measure by

coding whether or not presidential parties chose their candidates through a primary election. Even if I do not tap perfectly into the concept of *common* party primaries, this measure captures the degree of formalisation around the process of selecting presidential candidates and encapsulates pre-election coalitions that chose their presidential runner by resorting to a multiparty primary election. Hence, I narrow down the dataset only to those governments that had their presidents chosen through primary elections and then re-run the models.

I also control for the possible confounding effect of electoral institutions on the relationship between pre-election pacts and legislative polarisation. This is because electoral institutions can encourage interparty coordination across different levels of competition and, consequently, make pre-electoral pacts less prone to breaking in a post-electoral scenario, as parties have made concessions to one another in various arenas. Hence, I control for the use of proportional electoral systems and the application of the D'Hondt formula.

Lastly, I probe the extent to which my findings are valid when taking into account both the degree of party system institutionalisation and electoral volatility. Since governing is an iterative process, where pre-electoral coalition members can punish presidential parties for not inviting them to the cabinet in the past, it may be the case that *formateur* parties refrain from breaking pre-electoral pacts in politically stable party systems, where the vote turnover among parties is low from one election to another, and political brands remain the same over time. To see if this is the case, I use data on party system institutionalisation from Coppedge et al. (2023) and calculate electoral volatility based on the Pedersen Index (Pedersen, 1983) with information on parties' vote share from the DPEILA (Borges et al., forthcoming). I then restrict the sample to those cases above and below the median for both measures, respectively, and re-run the models.<sup>3</sup>

Table A.5 exhibits the results for the above tests.

Table A.5: Robustness Checks for Government Formation in Latin America

	Freudenreich Original (FO)	Bicameral Systems in FO	Bicameral Systems	Baker and Greene (2011)	ENPP >2.5	With Primaries	Proportional Systems	D'Hondt Method	PSI >0.724	Elec. Volat. <2.0%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Lower Chamber Minority	$-0.961^{**}$ (0.397)	$-1.493^{***}$ $(0.505)$	$-1.641^{***}$ (0.417)	$-0.823^*$ (0.450)	$-1.522^{***}$ (0.347)	-0.672 (0.566)	$-1.224^{***}$ (0.357)	-0.798 (0.616)	-1.575** (0.800)	-1.606** (0.721)
Upper Chamber Minority	$-1.140^{**}$ (0.460)	-0.393 (0.528)								
Number of Parties	$-1.974^{***}$ (0.201)	$-1.728^{***}$ (0.213)	$-1.646^{***}$ $(0.181)$	$-1.708^{***}$ (0.215)	$-1.793^{***}$ (0.165)	$-2.077^{***}$ $(0.302)$	-1.766*** $(0.171)$	$-2.407^{***}$ $(0.348)$	-1.339*** (0.337)	$-0.542^{***}$ (0.201)
Ideological Division	$-0.134^{**}$ (0.063)	$-0.133^*$ (0.074)	-0.158** (0.069)	$-0.138^*$ (0.077)	$-0.184^{***}$ (0.058)	-0.015 (0.107)	$-0.179^{***}$ $(0.059)$	0.036 $(0.105)$	$-0.526^{***}$ $(0.149)$	$-0.387^{***}$ (0.147)
Median Party	1.345*** (0.405)	1.214** (0.514)	1.448*** (0.431)	1.482*** (0.519)	1.281*** (0.333)	1.793*** (0.616)	1.229*** (0.347)	1.407** (0.654)	0.562 $(0.699)$	2.272** (1.119)
Extreme Parties	0.634 $(0.594)$	0.692 $(0.667)$	0.360 $(0.570)$	0.830 $(0.556)$	0.226 $(0.509)$	1.002 (0.781)	0.498 $(0.552)$	-0.117 (1.099)	-3.839 (4.221)	0.581 $(0.853)$
Runner-up Party	$-1.677^{***}$ (0.499)	$-1.472^{***}$ $(0.544)$	$-1.619^{***}$ $(0.499)$	$-1.188^{**}$ $(0.545)$	-1.308*** $(0.407)$	$-1.214^*$ (0.653)	$-1.312^{***}$ (0.428)	-0.483 (0.608)	-0.820 (0.837)	$-3.826^{***}$ (1.324)
Pre-Electoral Coalition (PEC)	-2.539 (2.159)	$-4.488^{*}$ (2.556)	-4.251** (2.131)	$-10.877^{***}$ $(4.051)$	-2.675 (1.896)	0.001 $(2.447)$	$-3.685^*$ (2.239)	$-9.182^{**}$ $(4.617)$	-13.354 (14.255)	-19.956 (13.874)
PEC * Legislative Polarisation	2.511*** (0.749)	2.953*** (0.901)	3.003*** (0.775)		2.617*** (0.666)	1.666** (0.833)	2.982*** (0.792)	6.621*** (2.085)	$8.057^*$ $(4.514)$	7.386* (4.291)
PEC * Legislative Polarisation (BG)				4.705*** (1.257)						
Cabinets Number of Alternative Cabinets Log Likelihood	79 55,432 -185.549	52 49,492 -150.321	64 141,236 -189.082	55 53,328 -150.247	94 147,644 -242.776	41 6,136 -88.958	93 142,528 -227.380	41 23,424 -72.632	36 149,200 -54.185	22 211,528 -126.760

 ${\it Note:}\ {\it PSI}\ {\it stands}\ {\it for}\ {\it Party}\ {\it System}\ {\it Institutionalisation}.$ 

p < 0.1; p < 0.05; p < 0.01

In the sequence, I also test whether the results reported in the main text are sensitive to different party-voter linkages. It might be the case that in party systems weakly shaped by ideological lines, potential coalition partners are willing to make a hefty of concessions just to get closer to the levers of power. This should be more likely to happen in party systems where clientelistic exchange is the main force behind citizen-politician linkage. To test for this possibility, I first rely on the expert survey organised by the Democratic Accountability and Linkages Project (DALP). More specifically, I make use of the country-average responses to the following question: 'In general, how much effort do politicians and parties in [COUNTRY] make to induce voters with preferential benefits to cast their votes for them?', for which experts could answer 'A negligible effort or none at all', 'A minor effort', 'A moderate effort' or 'A major effort'. The main advantage of the DALP data is that it provides a measure centred specifically on capturing to what extent political actors employ clientelistic strategies. The downside, though, is that the data is temporally bounded to the two years of 2008 and 2009. In order not to lose most of my observations, I make the hardly realistic assumption that the country averages do not change over the years.

To complement the analysis with an eye on overcoming this shortcoming, I also resort to the V-Dem dataset (Coppedge et al., 2023). Specifically, I draw on the *v2psprlnks* variable, which asks country respondents the most common form of party-voter linkage in a country in a given year. The responses lie in a continuum ranging from "Clientelistic" to "Policy/programmatic". In conjunction, the DALP and V-Dem datasets provide us with well-rounded information to further examine whether party linkages impinge the effects of pre-election coalitions and legislative polarisation on government formation. Table A.6 shows the results of re-running the analysis upon different subsets of the main text's original data according to the dominant party-voter linkage in each case.

Table A.6: Government Formation According to Different Types of Party-Voter Linkages

	DALP	Programmatic V-Dem	Clientelistic V-Dem
	(1)	(2)	(3)
Minority	-1.471***	-2.328***	-1.249***
	(0.387)	(0.751)	(0.403)
Number of Parties	-1.884***	-1.029***	-2.453***
	(0.180)	(0.260)	(0.238)
Ideological Division	-0.090	-0.582***	-0.027
	(0.060)	(0.147)	(0.064)
Median Party	1.247***	$1.173^{*}$	1.575***
v	(0.366)	(0.708)	(0.390)
Extreme Parties	$0.241^{'}$	$0.728^{'}$	$0.415^{'}$
	(0.512)	(1.170)	(0.601)
Runner-up Party	$-1.638^{***}$	$-2.087^{**}$	$-1.287^{***}$
- v	(0.476)	(0.830)	(0.481)
Pre-Electoral Coalition (PEC)	-2.361	-7.643	-1.319
,	(1.890)	(5.674)	(2.184)
PEC * Legislative Polarisation	2.293***	4.698**	2.126***
	(0.669)	(1.861)	(0.753)
Cabinets	75	29	75
Number of Alternative Cabinets	145,672	106,320	41,416
Log Likelihood	-205.265	-72.864	-154.700

Note: Minority presidents only

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

One more fact that deserves attention is that different from other regions, economic and socio-cultural policy positions represent essentially the same dimension in party competition in Latin America, barring minor details (Martínez-Gallardo et al., 2023; Rosas, 2005). As a result, this grants us one more opportunity to falsify the conditional theory put forward in the main text by replacing party policy positions on the classic economic left-right issues with party policy positions on the socio-cultural dimension. As our hypothesis testing requires data updated from time to time (i.e., after every legislative and presidential election), I rely again on the DPEILA (Borges et al., forthcoming). This time, I use the polz\_libcons\_st variable, which calculates legislative polarisation in the liberal-conservative dimension instead of the traditional left-right dimension. To put it in simple terms, this variable captures the extent to which the party system is polarised when it comes to the divide between liberal and conservative values. This liberal-conservative

dimension, in turn, draws from three V-Party's indicators, namely *v2parelig* (religious principles), *v2pawomlab* (working women), and *v2palgbt* (LGBT social equality). In this way, this dimension refers to parties' stance in relation to secularism, women's inclusion in the workforce, and, ultimately, the protection of individual liberties and rights. The results are shown in Table A.7.

Table A.7: Legislative Polarisation based on the Liberal-Conservative Dimension

	Model 1
Minority	-1.126***
	(0.365)
Number of Parties	-1.794***
	(0.177)
Ideological Division	$-0.175^{***}$
	(0.062)
Median Party	1.518***
	(0.362)
Extreme Parties	0.539
	(0.519)
Runner-up Party	-1.358***
	(0.455)
Pre-Electoral Coalition (PEC)	-3.352**
	(1.648)
PEC * Legislative Polarisation (Liberal-Conservative Dimension)	5.892***
	(1.085)
Cabinets	87
Number of Alternative Cabinets	143,164
Log Likelihood	-216.647

Note: Minority presidents only

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Still, it could be the case that the impact of pre-electoral coalitions on the government formation process is not only mediated by the degree of legislative polarisation but also by the ideological distance between presidential and median parties. To be sure, the underlying reasoning is that extremist presidents would be more willing to stick to their pre-election coalition partners because of their policy incompatibility with the rest of the parties in the legislature. Following from this, we can also explore whether more centrist presidential parties - relative to median parties - display the behaviour reported in the main text. In fact, if they do, our confidence in the paper's main findings should, there-

fore, be further enhanced. This is the case as centrist presidents are more malleable to policy compromise than their extremist counterparts (Arnold et al., 2017). As a result, they could be more open to rearranging their pre-electoral multiparty alliances by excluding pre-electoral coalition members in order to accommodate post-electoral partners. However, if the paper's results are robust, this relationship should be moderated by the degree of legislative polarisation. Table A.8 reports the complete regression estimates, and Figure A.3 provides a visual of the three-way interaction.

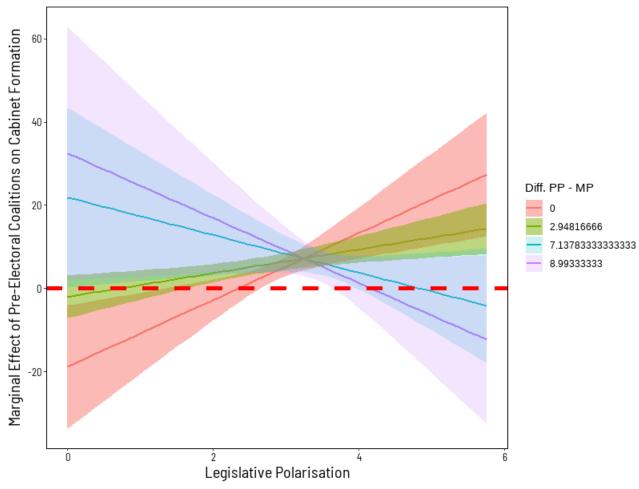
Table A.8: Three-way Interaction: PEC x Legislative Polarisation and Ideological Distance

	Model 1
Minority	$-1.411^{***}$
J	(0.343)
Number of Parties	-1.809***
	(0.172)
Ideological Division	$-0.186^{***}$
	(0.058)
Median Party	1.281***
	(0.341)
Extreme Parties	0.295
	(0.511)
Runner-up Party	$-1.587^{***}$
	(0.428)
Pre-Electoral Coalition (PEC)	-18.766**
	(7.517)
PEC * Legislative Polarisation	8.031***
	(2.598)
PEC * Diff. PP - MP	5.697**
	(2.483)
PEC * Leg. Polar. * Diff. PP - MP	-1.758**
	(0.754)
Cabinets	102
Number of Alternative Cabinets	139,032
Log Likelihood	-234.455
Note: Min anita masidanta anla	*** <0.1. *** <0.05. **** <0.01

*Note: Minority presidents only* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

In reverse order, we first see that the impact of pre-electoral coalitions on government formation increases as the legislative polarisation grows in strength at low levels of ideological difference between the presidential party and the median party. Specifically, this

Figure A.3: Three-way Interaction: PEC x Legislative Polarisation x Ideological Distance between the presidential party and the median party



Note: In this example, the ideological scale runs from 0 to 20. Of note this difference represents the absolute distance between presidential and median parties, as the direction of this difference is of no particular importance here.

can be seen in the red and green solid lines and their respective confidence intervals, which show the estimated behaviour when the difference between these parties is, respectively, 0 and 2.94. As such, this reinforces the paper's findings by telling us that more moderate presidents are increasingly willing to count on their pre-electoral partners as legislative polarisation deepens.

This trend is apparently bucked when the president's party is located far away from the median party, as demonstrated by the blue and purple solid lines and confidence intervals. In Figure A.3, the estimated effect of pre-electoral coalitions appears to diminish as legislative polarisation increases. However, this result is, above all, an artefact of the estimation procedure. This happens as only three governments have an ideological distance between the *formateur* party and the median party above 7.13, and, at the same time, were preceded by pre-electoral coalitions. These cases are Brazil in 2014, Panama in 1994, and Venezuela in 1999 - substantively, all of which formed coalition cabinets derived from pre-election arrangements.

Hence, this test reveals that while moderate presidents and their parties largely follow the argument elaborated in the main text, not much can be said about the behaviour of extremist presidents. Surely, further scrutiny of their behaviour in government formation opportunities is a promising avenue for future research.

Turning the attention to another test, past empirical research on pre-electoral coalitions in presidentialism has examined whether presidents' institutional powers are of great relevance to the topic (Albala, 2021; Borges et al., 2021). Given that powerful presidents could be more reluctant to adhere to their pre-electoral promises, the fact that presidential powers could distort the relationship presented in the main texts deserves further exploration.

Unlike past scholarship, I make the case of employing the presidential power scores developed by Doyle and Elgie (2016). Often, the body of research interested in executive-legislative relations in presidential democracies condenses presidential powers into two metrics: decree and veto powers. In short, the former captures the powers granted to presidents to unilaterally change legislation at their will, whereas the latter indicates to what extent presidents can stymie the policy-making process from producing legislative outcomes contrary to their will and/or the size of the legislative majority needed in assemblies to reverse such a power. The key point is that the presidents' formal executive authority is not reducible only to these two tools. For instance, in some democracies, presidents need not the legislature's support to appoint and dismiss cabinet ministers (Araújo et al., 2016). We should, thus, keep in mind that presidential prerogatives such as this are not captured by looking exclusively at the presidents' extent of decree and veto powers.

Against this backdrop, the main advantage of the scores provided by Doyle and Elgie

(2016) is that they represent an overarching measure of presidential powers. That is, their measure does not come with an explicit emphasis on some presidential prerogatives at the expense of others. Below, Table A.9 and Figure A.4 inspect whether constitutionally empowered presidents have deviant behaviour vis-à-vis their counterparts with less extensive prerogatives when it comes to the hypothesised connection between pre-electoral coalitions and legislative polarisation.

Table A.9: Three-way Interaction: PEC x Legislative Polarisation and Pres. Pow.

	Model 1
Minority	-1.273***
v	(0.341)
Number of Parties	-1.861***
	(0.169)
Ideological Division	$-0.150^{***}$
	(0.056)
Median Party	1.357***
v	(0.331)
Extreme Parties	0.268
	(0.513)
Runner-up Party	-1.294***
	(0.398)
Pre-Electoral Coalition (PEC)	1.090
	(10.215)
PEC * Legislative Polarisation	-1.610
	(3.712)
PEC * Presidential Power	-9.608
	(30.469)
PEC * Leg. Polar. * Pres. Power	10.992
	(11.106)
Cabinets	104
Number of Alternative Cabinets	147,736
Log Likelihood	-243.804

*Note: Minority presidents only* \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Despite the lack of statistical significance for the interactions in Table A.9, the only meaningful deviation is found in Figure A.4. In it, we visualise that for presidents with less extensive constitutional powers, the effect of pre-electoral coalitions on government formation is not distinguishable from zero across most observed values of legislative polarisation. More importantly for the test at hand, though, constitutionally powerful

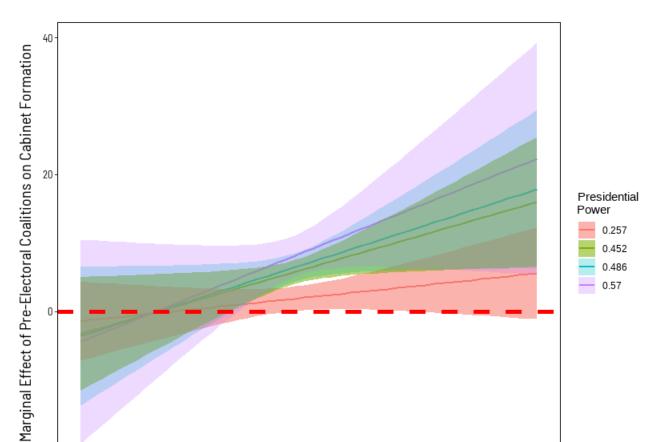


Figure A.4: Three-way Interaction: PEC x Legislative Polarisation x Pres. Pow.

presidents do not drop their pre-electoral coalition partners from their multiparty alliance once their term in office is inaugurated at a higher rate than their counterparts. Actually, the depicted pattern follows the one discussed at length in the main text: pre-electoral coalitions increasingly influence government formation processes as legislative polarisation toughens up, which is also valid for constitutionally powerful presidents.

Legislative Polarisation

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Finally, the conditional logit models have a particularity of being fixed-effect models, thereby soaking up all countries' features that remain constant over time. This entails two consequences. First, as the estimation is based on fixed effects, there is no need to control for country when employing conditional logit models. Second, and perhaps unexpectedly, differences in the number of alternative coalitions provided for each country are unproblematic insofar as country units do not bias the results. This last consequence is of particular interest as countries starkly differ from one another with regard to the

number of potential coalitions. Thus, I examine whether a particular country heavily influences the results by re-running the regressions excluding one country at a time.

Table A.10: Iterative exclusion of countries

	Without Argentina	Without Bolivia	Without Brazil	Without Chile	Without Colombia	Without Costa Rica	Without Dom. Rep.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Minority	$-1.776^{***}$ $(0.375)$	$-1.195^{***}$ $(0.357)$	$-1.381^{***}$ (0.374)	$-1.364^{***}$ (0.342)	$-1.341^{***}$ $(0.344)$	$-1.480^{***}$ (0.355)	$-1.331^{***}$ (0.343)
Number of Parties	$-1.585^{***}$ $(0.172)$	$-1.879^{***}$ $(0.178)$	$-2.301^{***}$ $(0.214)$	$-1.829^{***}$ $(0.167)$	$-1.772^{***}$ $(0.176)$	$-1.796^{***}$ $(0.171)$	$-1.787^{***}$ (0.166)
Ideological Division	$-0.255^{***}$ $(0.062)$	$-0.190^{***}$ $(0.063)$	-0.095 $(0.062)$	$-0.146^{***}$ $(0.056)$	$-0.195^{***}$ $(0.059)$	$-0.174^{***}$ $(0.059)$	$-0.209^{***}$ $(0.060)$
Median Party	1.090*** (0.351)	1.320*** (0.346)	1.545*** (0.357)	1.331*** (0.332)	1.151*** (0.349)	1.313*** (0.340)	1.496*** (0.336)
Extreme Parties	-0.018 $(0.552)$	0.478 $(0.529)$	-0.662 (0.804)	0.265 $(0.504)$	$0.465 \\ (0.515)$	0.226 $(0.511)$	0.299 $(0.513)$
Runner-up Party	$-1.387^{***}$ $(0.411)$	$-1.085^{***}$ $(0.405)$	$-1.099^{***}$ $(0.415)$	$-1.348^{***}$ $(0.400)$	$-1.721^{***}$ $(0.461)$	$-1.397^{***}$ $(0.414)$	$-1.357^{***}$ $(0.419)$
Pre-Electoral Coalition (PEC)	-0.993 (2.564)	-5.950** $(2.799)$	-2.609 (1.948)	-2.370 (1.887)	-2.019 (1.854)	-2.679 (1.898)	-2.673 (1.914)
PEC * Legislative Polarisation	2.004** (0.841)	4.479*** (1.152)	2.882*** (0.689)	2.299*** (0.667)	2.320*** (0.648)	2.619*** (0.668)	2.637*** (0.674)
Cabinets Number of Alternative Cabinets Log Likelihood	88 134,680 -216.374	98 141,336 -215.570	94 38,680 -180.570	95 146,712 -243.511	97 136,980 -225.783	94 146,856 -230.715	97 147,704 -241.811

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table A.10: Cont.

	Without El Salvador	Without Honduras	Without Nicaragua	Without Panama	Without Uruguay	Without Venezuela
	(8)	(9)	(10)	(11)	(12)	(13)
Minority	$-1.507^{***}$ $(0.355)$	$-1.528^{***}$ (0.343)	$-1.343^{***}$ (0.338)	$-1.275^{***}$ $(0.344)$	$-1.267^{***}$ (0.340)	$-1.478^{***}$ (0.342)
Number of Parties	$-1.780^{***}$ (0.169)	-1.808*** $(0.164)$	$-1.766^{***}$ $(0.165)$	$-1.763^{***}$ $(0.168)$	$-1.875^{***}$ (0.170)	$-1.773^{***}$ $(0.165)$
Ideological Division	-0.166*** $(0.062)$	$-0.169^{***}$ $(0.056)$	$-0.192^{***}$ $(0.058)$	$-0.162^{***}$ $(0.057)$	-0.140** (0.057)	$-0.185^{***}$ $(0.057)$
Median Party	1.637*** (0.380)	1.227*** (0.331)	1.327*** (0.329)	1.215*** (0.340)	1.369*** (0.339)	1.287*** (0.330)
Extreme Parties	0.290 $(0.521)$	0.214 $(0.509)$	0.224 $(0.509)$	0.307 $(0.542)$	0.243 $(0.510)$	0.299 $(0.509)$
Runner-up Party	$-1.564^{***}$ (0.439)	$-1.384^{***}$ (0.399)	$-1.351^{***}$ $(0.400)$	$-1.447^{***}$ $(0.422)$	$-1.627^{***}$ $(0.444)$	$-1.362^{***}$ (0.398)
Pre-Electoral Coalition (PEC)	-2.694 (1.921)	-2.676 (1.893)	-2.677 (1.896)	-4.318** (2.122)	-2.701 (1.914)	-1.928 (2.038)
PEC * Legislative Polarisation	2.580*** (0.673)	2.623*** (0.665)	2.625*** (0.668)	3.198*** (0.777)	2.693*** (0.675)	2.352*** (0.689)
Cabinets Number of Alternative Cabinets Log Likelihood	88 147,188 -230.939	99 147,672 -247.891	102 147,216 -248.252	97 143,248 -239.702	99 147,640 -239.096	100 146,920 -245.926

Note:

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Overall, the robustness checks yield essentially the same results as compared to those from the original models. More remarkably, the interaction between pre-electoral coalitions and legislative polarisation practically never loses statistical significance and, in fact, in some models, has a more pronounced coefficient than what was previously registered. Thus, the findings are consistent across different specifications.

## Notes

- The Uruguayan party system is much more complex than the one depicted here. The Uruguayan political
  parties are composed of several disparate factions. Following the comparative literature on Latin America,
  I refer to political parties per se instead of focusing on their intra-party dimension.
- 2. In presidential democracies, the number of potential governments is given by the formula 2<sup>n</sup>, where n is the number of parties excluding the president's party. In their parliamentary counterparts, the number of potential governments is calculated through 2<sup>n</sup> 1, where n is the number of parties in the party system. This slight difference is due to the fact that the *formateur* cannot be any other party than the president's party in presidentialism, whereas any party can be the *formateur* in parliamentarism.
- 3. Initially, some tests did not converge due to their small sample size. This is not surprising, though. After all, all soundness tests in this battery inevitably involve reducing the number of cabinets under study to some extent. To circumvent this issue, some models were estimated on data encompassing not only government formation bargaining processes following presidential and legislative elections but reshuffled cabinets as well. If anything, their inclusion in the analysis should bias against my findings, as presidential cabinets based on pre-electoral coalitions tend to be more durable (Albala et al., 2023) and, as a result, do not lead to as many reshuffles as their counterparts not based on any version of pre-electoral pacts. In any case, even if this work's conditional theory does not pertain to the domain of cabinet reshuffles, their inclusion is necessary to make some models possible (e.g., Model 6, Model 9, and Model 10 in Table A.5).
- 4. The dataset is available on https://sites.duke.edu/democracylinkage/data/.
- 5. I thank an anonymous reviewer for raising this point.

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