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**Portfolio allocation and time out of office in coalition governments**

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# WORKING PAPERS

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IN COALITION GOVERNMENTS

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## **Abstract**

*Although research on portfolio allocation in coalition governments has provided a great number of studies, it has not seriously assessed the role of parties' impatience to reach office when it comes the time to bargain over the distribution of ministerial posts. Despite the empirical strength of the relationship between parties' seats and portfolios, there are reasons to take other variables into account to improve our understanding of portfolio allocation among coalition partners, one of them being how long had it taken to parties to leave the opposition and be part of a new government. The idea is very simple: the longer the period parties have not been able to enjoy the spoils of office, the more impatient and desperate they get, and thus the more they are willing to make concessions in the negotiation of the distribution of portfolios in exchange for their entrance in office. This intuition is supported substantively and modelled game-theoretically by making parties discount future idiosyncratically (more when they have been longer in opposition). Two hypotheses stem from this formal model. On the one hand, the overall influence of the time out of office should disadvantage parties when bargaining over portfolios. On the other hand, the fact of being the formateur should offset this effect since the offers of formation are made based on receivers' impatience rather than on the offerer's one. Empirical results do largely support the theoretical expectations, using a considerable variety of specifications of the variables and a series of robustness checks. Finally, the work deepens into the issue of causality through the use of matching techniques based on the propensity score and provides evidence in favour of a causal (negative) effect of the length of time a given party has been in opposition on the office payoffs it manages to receive.*

## INTRODUCTION

After elections, if no single party has obtained the absolute majority of seats in Parliament, the negotiation over government formation between parties begins. One of the likely outcomes of this process is a coalition government. In order for this to be possible, at least two parties need to agree on several issues. One of them is the portfolio allocation, which constitutes the most visible face of what each party has obtained in the bargaining process over formation. Although it is true that the power every partner will have in cabinet cannot be measured by means of the ministries it will control only, portfolio allocation represents the bottom line of the political process and often determines how influential will parties be when making policies (Laver and Schofield 1990).

But what accounts for the fact that some parties obtain more portfolios than others? The scholarly interest in identifying the variables behind the distribution of ministerial posts in coalition governments dates back to two seminal articles by William A. Gamson (1961a,b). Since then on, political scientists have developed both theoretical and empirical investigations aimed at answering the who-gets-what-and-why question. As stated by Druckman and Warwick (2005), researchers have assessed the potential impact of nearly all variables that one can think matter for the allocation of office payoffs. In so doing, what has become more evident is the generalised prevalence of the Gamson's Law, namely that parties forming a coalition government will receive a share of portfolios proportional to the amount of resources (seat share) that each contributes to the coalition. The attributed status of "law" gives a clue about its strong predictive power.

Unfortunately, as Indridason (2009: 18) points out, "[t]he perceived robustness of Gamson's Law appears to have discouraged efforts to consider what other factors influence portfolio allocation". It is true that there are some exceptions to this, most notably the variables formateur status and parties' bargaining power -beyond seat share (voting weight, etc.)-, and to a lesser extent institutional variations, electoral

expectations, parties' ideologies, and other cabinet characteristics. However, the length of time a party has been out of office, with its likely consequences on the (im)patience to participate in the next government, has never been addressed as an important issue in the bargaining over portfolios in coalitions, neither theoretically nor empirically. This is the object of the current study.

From the theoretical side, and despite the idea of proportionality between seat share and portfolio share was already intuitively reasonable, a precise theoretical account of how we should expect portfolios to be distributed among coalition partners lacked until late eighties. Baron and Ferejohn (1989) then offered a model of bargaining in legislatures with a precise theoretical example about parties negotiating over portfolios in a coalition government formation. Since then on other authors have further developed the theoretical underpinnings of portfolio allocation in multiparty governments, most of them basing on Baron and Ferejohn's ideas, which is undoubtedly "the most frequently used formal model of legislative bargaining" (Fréchette *et al.* 2005a: 1498). Interestingly enough, the predictions of most of these models had little to do with the observed empirical regularity of the Gamson's Law: the party taking charge of the formation negotiations should receive a disproportionate share of payoffs regardless of the exact distribution of seats in Parliament.

The empirical studies in this field after Gamson (1961a,b) started already in the seventies and are still a fruitful area for political scientists (e.g. Browne and Franklin 1973; Browne and Frendreis 1980; Schofield and Laver 1985; Mershon 2001; Warwick and Druckman 2001; Verzichelli 2008). Over the years, the measurement of the dependent variable has been subject to some refinements to account for the different importance of different ministries (Browne and Feste 1975; Budge and Keman 1990; Laver and Hunt 1992; Druckman and Warwick 2005). But the use of these more precise measures did little more than reinforce the empirical success of the Gamson's Law. This in turn has led political scientists to care even more about

the theoretical underpinnings of this law, which are weak at best weak, with scholarly efforts coming from the formal, experimental, and case-study sides.<sup>1</sup>

The mismatch between theoretical predictions and real-world evidence invites further research on the issue, despite current empirical models accounting for much the variance of the dependent variable ( $R^2$ s near 90%). Scholars should not cease to inquire about other factors that may be put on the table when negotiating the distribution of executive offices and of which we can provide a firmer theoretical basis. This work assesses the potential effect of parties having had to wait long in opposition on their willingness to trade portfolios for entrance, something that no study has done before. Besides, jointly with the traditional portfolio share, it also considers the deviations from the Gamson's Law as a dependent variable. If we can improve our understanding of those situations in which parties receive more/less than they should according to their seat share, we will most likely gain insight on what explains who gets what in coalition formation negotiations.<sup>2</sup>

This article claims that if parties are (somewhat) office-seeking -which is probably one of the most prevalent assumptions in political science-, then it is very reasonable to think that increasing time without tasting the sweet flavour of office will make them more impatient. On theoretical grounds, the issue of impatience has been dealt with by the introduction of temporal discounting. That is, passing time comes at a cost meaning that everything

else constant, a given payoff is valued less tomorrow than it is today. However, in the theoretical research of coalition bargaining over formation this discount factor has always been considered to be common across all parties -otherwise, it has not been to my knowledge yet-. It is true that more general formal bargaining models on legislative bargaining relax this assumption of commonality and allow the discount factor to vary across players, but this is not made with the intention to account for how coalition parties distribute ministerial posts when they agree on forming a government (Merlo and Wilson 1995).

On the empirical side, neither the concept of impatience nor the time a party has been out of office have been addressed further than in passing when analyzing portfolio allocation in coalition governments. In the present work I study the consequences of long periods in opposition when it comes the time to settle an agreement on the formation of a multiparty government. I do this by developing a very simple model that accounts for the effect of idiosyncratic discount factors in the bargaining over portfolios. As it may have been expected by intuition, impatience happens to have a negative impact on the office payoffs that the party will eventually receive, but an interesting interaction with the formateur status arises from theory. Being designated with the task of forming government offsets the effect of impatience because the formation offers are based on the receivers' utilities rather than on the offerers' ones. The implications of the model are tested against the data by considering the time a party has been out of office as a proxy for impatience. Empirical evidence does largely support the theoretical predictions.

The remainder of the article is organised as follows. First, it presents a theoretical bargaining model of government formation based on alternating offers from which concrete hypotheses on the effect of idiosyncratic impatience are drawn. Secondly, it deals with the data and the operationalization of variables, while methodological issues are addressed and empirical analyses offered in the next section. Finally, before offering the conclusions, the article deepens into the

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<sup>1</sup> Some studies containing formal approximations to the study of portfolio allocation are Morelli (1990), Carroll and Cox (2007). Experimental approaches to the issue can be found in Diermeier and Morton (2005), or Fréchette *et al.* (2005b). A study combining both the formal and experimental sides is Fréchette *et al.* (2005a). For some case studies or compilations of case studies dealing with Gamson's law refer to Müller and Strom (2000), or Bäck *et al.* (2009).

<sup>2</sup> Other authors have already shown the usefulness of taking Gamson's mispredictions as a dependent variable before (see Schofield and Laver 1985). See also Warwick and Druckman (2006).

issue of the causality behind the relation between parties' time out of office and received portfolios through matching techniques.

## THE ARGUMENT

I develop a bargaining model of government formation where no party has the absolute majority of seats and a coalition government will emerge if any of the negotiation rounds succeeds. The intention of this model is to identify the dynamics provoked by parties' impatience when it comes the time to allocate portfolios in a coalition government. Following the tradition started by the seminal contributions of Rubinstein and Baron and Ferejohn the model presented here is one of alternating offers rather than a demand-based one.<sup>3</sup>

Each bargaining round is modelled as an extensive form game in which Nature (e.g. the Head of State) moves first and selects a party  $i$  to be the formateur in that bargaining round. Then  $i$  chooses one party  $j$  among the other potential coalition partners and offers it a share of portfolios to be under  $j$ 's control in case these two do finally form a government. Next, the party receiving the offer can either accept or reject it (i.e. in a closed rule fashion). If the former happens, the game ends and the two parties reach office, sharing portfolios with the agreed distribution. When a rejection occurs, the bargaining round fails and ends, but the game continues with Nature moving again and with the same subsequent structure.

Regarding the model's assumptions, it has to be said first that the model does only talk about the negotiation over office payoffs, keeping silent on policy compromises. However, it does not really require parties to be policy-indifferent. In fact, as suggested later, there are reasons to link parties' impatience and policy-orientation substantively. It is true, though,

that the model does only look at the specific outcome of the distribution of ministerial posts, and thus parties in this work are assumed to derive utility from office payoffs only ("holding policy constant"), just like in most of the other theoretical models trying to predict portfolio allocations.<sup>4</sup> As Budge and Laver put it, the assumption that those involved in coalition bargaining are motivated by the desire to get into government can be defended in two ways. Politicians may value the rewards of office per se, intrinsically, but also instrumentally, for the ability it gives to affect public policy. In fact, the instrumental motive can be extended to electoral reasons as well, incumbency may give an advantage in future elections, and party leaders may seek office for this reason too (Budge and Laver 1986; Strom and Müller 1999). Following Baron and Ferejohn's (1989) notation,  $v_i \in [0,1]$  is the portfolio share received from which parties derive their utility.

Second, impatience is crucial in this model and it is allowed to vary across parties. On the one hand, there is a common discount factor  $\delta \in (0,1)$  so that the utility  $u_i$  party  $i$  derives from a formation agreement at round  $t$  equals  $\delta^{t-1} v_i$ . That is, the later an agreement is reached, the less the utility parties derive from the same portfolio share. On the other hand, there is a party-specific part of this discount factor. I allow parties to vary in terms of impatience. A given party  $i$  may discount future more/less than a party  $j$ . If that is the case, one should add an idiosyncratic  $\tau_i$  to capture  $i$ 's impatience in the exponent of  $\delta$  so that  $u_i = \delta^{t-1+\tau_i} v_i$ . As it will be seen below, this  $\tau_i$  is approximated through the

<sup>3</sup> Seminal articles by Rubinstein (1982) and Baron and Ferejohn (1989). Alternating offers models by Harrington (1990), Austen-Smith and Banks (1989), Kalandrakis (2004, 2006), Indridason (2009). For demand-based models see Selten (1992), Winter (1994a,b), Morelli (1999), or Carmignani (2001).

<sup>4</sup> As mentioned in Müller and Strom (1999: 8-11), policy pursuit is typically presented as a supplement to, rather than a substitute for, office seeking. Besides, they argue that formal models in political science have tended to concentrate on one party goal only, yet not because rational choice theorists do not realize that such actors have complex objective functions, but rather because it is often not tractable to incorporate such complexities in a model.

time each party has remained out of office (i.e. in opposition).

Third, the recognition rule for being the formateur is closely related to the distribution of seats in such a way that the probability  $p_i$  that party  $i$  is appointed as formateur mirrors its percentage of seats in

Parliament  $(p_i = s_i / \sum_{i=1}^n s_i)$ . This

theoretical assumption is quite standard and, as showed recently by Diermeier and Merlo (2004), it accurately fits the data as well.

Finally, the number of bargaining rounds is limited to two. If after two rounds negotiations to form a majority coalition have failed, then the Head of State forms a care-taker government until the next elections. Along the lines of Morelli (1999), I assume that this care-taker government does not distribute any private benefit to parties. Hence, due to their office-seeking nature, parties will receive a 0 payoff in case the two bargaining rounds fail.<sup>5</sup>

### Impatience, Time out of Office, and a Three-Party Case

As indicated above, political parties' impatience to enjoy the spoils of office plays a central role in this model. What I assume is that the longer the time a party has stayed out of office, the more impatient it is to reach government. Put differently, long periods in opposition make parties discount future more intensely. This assumption is addressed substantively later. As a result,  $\tau_i$  is no more (no less) than a measure of the time a party has been out of government and thus  $\tau_i \in [0, \infty)$ . Hence, during the negotiation process of government formation, a party  $i$  that has been in the very last cabinet has a  $\tau_i = 0$ , which means that it does only discount the payoffs it gets by the universal/common

discount factor, while it does not idiosyncratically ( $\delta_i = \delta^{t-1}$ ). On the other hand, for a party  $j$  that has not taken part in the last cabinet composition  $\tau_j > 0$ , with a specific value that equals the consecutive units of time that it has been in opposition.

For the sake of simplicity, let's imagine a concrete situation in which elections have already taken place in a given country. Three parties A, B, and C ran for office in these elections but none of them got enough seats to form a government on their own. Hence, the scenario is such that any sum of two parties' seats is sufficient to reach the threshold needed to form a government. In order to clarify the negotiation game, let me present graphically the first bargaining round in an extensive form (namely, through a game tree).<sup>6</sup>

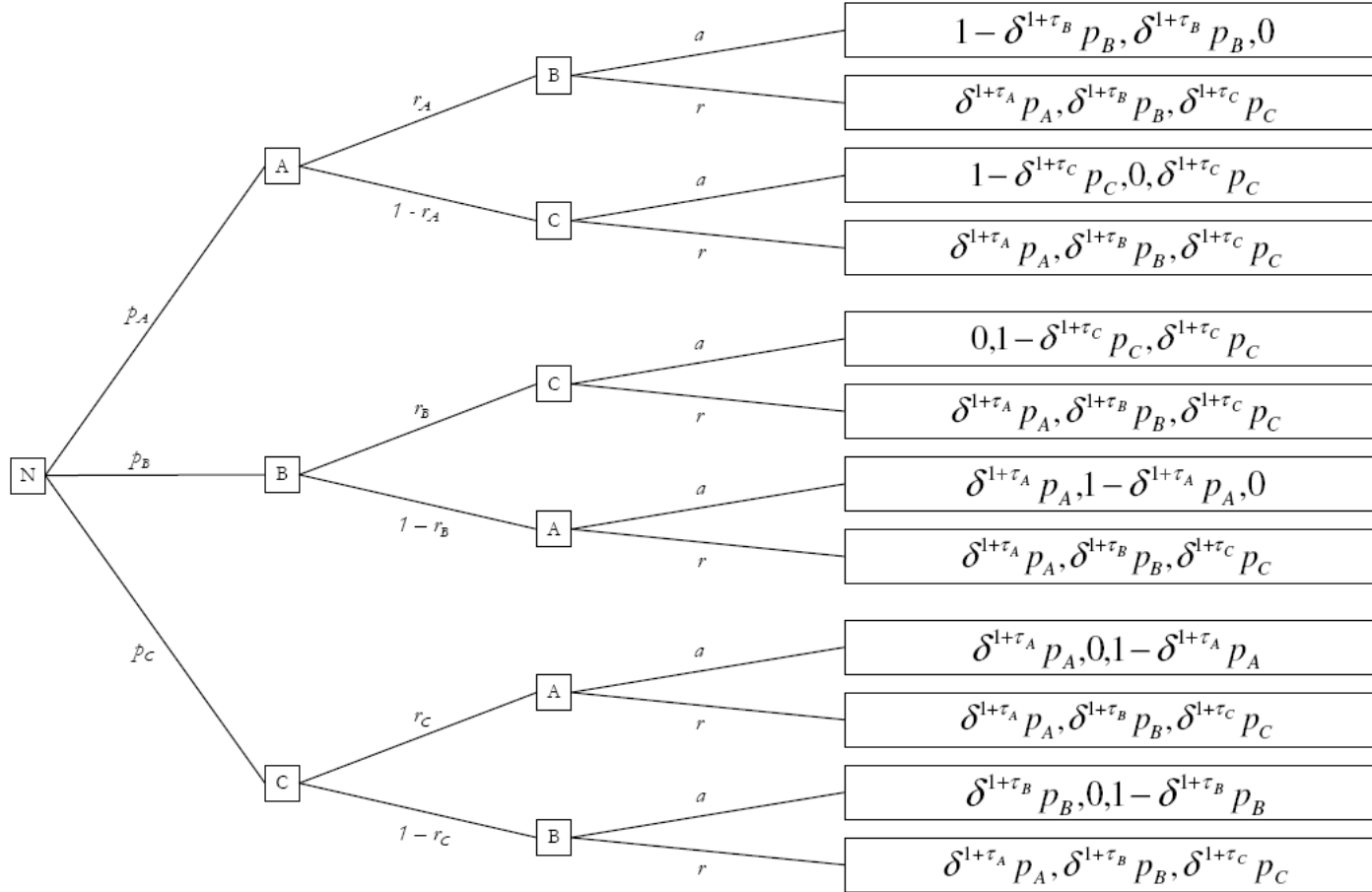
In terms of notation, note that action  $a$  means accepting the formateur's offer, while by choosing  $r$  the receiver would reject it. The probability that the formateur  $i$  makes an offer to party  $i+1$  (A to B, B to C, and C to A) is captured by  $r_i$ , whereas  $1 - r_i$  reflects the likelihood that formateur  $i$  makes its formation offer to party  $i+2$  (A to C, B to A, and C to B). Thus,  $r_A$  is the probability that, if designated, formateur A makes an offer to party B, whereas with probability  $1 - r_A$ , the former would present the offer to A. If party B is selected as formateur, then with probability  $r_B$  the offer would be made to C, and  $1 - r_B$  would refer to the likelihood of an offer to A. Likewise,  $r_C$  and  $1 - r_C$  capture the probability of an offer to A and B, respectively, when C is the formateur. Finally,  $p_i$  is the probability that party  $i$  is appointed formateur, which I assume it perfectly mirrors party  $i$ 's seat share.

<sup>5</sup> The number of possible repetitions is thus finite so as to resemble real government negotiations better. Increasing the number of bargaining rounds does not change the main theoretical conclusions of the model regarding the direction of the effect of parties' impatience. See also the footnote on hypothesis 2.

<sup>6</sup> The tree of the second round mirrors the first one but the payoffs are as simple as [0,0,0] when the formateur's offer is rejected and [1,0,0], [0,1,0], or [0,0,1] when the receiver accepts the offer of the formateur A, B, or C, respectively.



**FIGURE 1. Extensive form Game for the Formation of a Coalition Government: First Round**



When it comes to the payoffs, it is clear that when the receiver rejects the formateur's offer in the second round, then every party receives a 0 payoff. Hence, a given party  $j$  will accept any offer from  $i$  as long as  $u_j \geq 0$  (I assume weak domination in the sense that if a party is indifferent between  $a$  and  $r$ , it will choose  $a$ ). As a result, if the game had moved to the second round, the party  $i$  having been given the chance to be the formateur would make a successful offer that kept every private benefit for itself (that is, all the ministries) and none for party  $j$ , and a coalition government between parties  $i$  and  $j$  would form.

Then, immediately before moving to the second round and let nature choose a formateur for the second time, the continuation value of party  $i$  (i.e. the utility it would derive from moving to this second round when still in the first round) would be  $u_i = \delta^{1+\tau_i} p_i$ . This is each parties' payoff when the first round happens to fail (i.e. when the receiver of the offer of the first round's formateur rejects it; see figure 1). Hence, the formateur  $i$  appointed in the first round will offer  $j$  a  $v_j = \delta^{1+\tau_j} p_j$ , while keeping  $v_i = 1 - \delta^{1+\tau_j} p_j$  for itself, and a government between  $i$  and  $j$  will form in the first round. Will formateur  $i$  be interested in making this offer to  $j$  rather than make an unacceptable one and move to the second round? The answer is obviously yes, it always will, since by definition  $1 - \delta^{1+\tau_j} p_j > \delta^{1+\tau_i} p_i$  (remember that no  $p_i$  is greater than .5, what means that  $1 - \delta^{1+\tau_j} p_j > .5 > \delta^{1+\tau_i} p_i$ ).

Now imagine party A has been appointed formateur in the first round. Will it offer the formation of government to B or to C? In other words, will  $r_A$  be 1 or 0?  $r_A$  will be 1 if:  $1 - \delta^{1+\tau_B} p_B > 1 - \delta^{1+\tau_C} p_C$ , which implies that  $\tau_B - \tau_C > \frac{\log p_C - \log p_B}{\log \delta}$ . As one can see, the longer party B has been out of office in comparison to C, the more likely it is that party A chooses B to make a

formation offer. This is because the former will need to offer less portfolios to gain the latter's acceptance. Basically, then, what  $\tau_j$  does is to decrease partner's  $j$  price. Quite obviously, if  $\tau_B = \tau_C$  the choice of party A would be entirely dependent on the seat share of B and C (it would choose B if  $p_B < p_C$  and vice versa). That means that longer periods in opposition can compensate a greater seat share in terms of the price of potential partners for the formateur.

### Hypothesizing the Effect of the Time out of Office: The Formateur Advantage

So in general, which are the consequences of the time parties have been out of office for portfolio allocation? To answer this question, a quick look to parties' ex ante values (expected portfolios from the formation game before Nature selects the first formateur) will help. Take party A as an example:

$$v_A = p_A \left[ r_A \left( 1 - \delta^{1+\tau_B} p_B \right) + (1 - r_A) \left( 1 - \delta^{1+\tau_C} p_C \right) \right] + p_B \left[ (1 - r_B) \delta^{1+\tau_A} p_A \right] + p_C \left[ r_C \delta^{1+\tau_A} p_A \right]$$

To know which is the effect of the time A has been out of government on the expected share of portfolios it will receive, we should know whether  $\partial v_A / \partial \tau_A$  is positive, negative or 0. Now let nature choose the first round formateur. If A is appointed, then:

$$v_A = 1 \left[ r_A \left( 1 - \delta^{1+\tau_B} p_B \right) + (1 - r_A) \left( 1 - \delta^{1+\tau_C} p_C \right) \right] + 0 \left[ (1 - r_B) \delta^{1+\tau_A} p_A \right] + 0 \left[ r_C \delta^{1+\tau_A} p_A \right]$$

while if it is not,

$$v_A = 0 \left[ r_A \left( 1 - \delta^{1+\tau_B} p_B \right) + (1 - r_A) \left( 1 - \delta^{1+\tau_C} p_C \right) \right] + 1 \left[ (1 - r_B) \delta^{1+\tau_A} p_A \right] + 0 \left[ r_C \delta^{1+\tau_A} p_A \right]$$

in case B is selected as formateur or

$$v_A = 0 \left[ r_A \left( 1 - \delta^{1+\tau_B} p_B \right) + (1 - r_A) \left( 1 - \delta^{1+\tau_C} p_C \right) \right] + 0 \left[ (1 - r_B) \delta^{1+\tau_A} p_A \right] + 1 \left[ r_C \delta^{1+\tau_A} p_A \right]$$

in case it is C the designated one.

Interestingly enough, then:

$$\frac{\partial v_A}{\partial \tau_A} \begin{cases} = 0 & \text{when party A is selected formateur} \\ < 0 & \text{when party A is not selected formateur} \end{cases} \quad 7$$

So the effect of the time a given party has been out of office on the share of portfolios obtained is status-specific. When a party is the receiver of coalition formation offers, then the more impatient it is the worse-off it gets in terms of ministerial posts. However, when that party is the formateur then its impatience does not play any role in the office payoffs it gets. The latter happens because the offers are made on the basis of the other players' impatience while the formateur simply keeps the rest.<sup>8</sup>

This article aims at offering hypotheses about the influence of how long parties have been absent in power on portfolio allocation. More concretely, the intention is to answer to what extent the time passed out of office (theoretically modelled here as impatience) turns into a disadvantage when it comes the time to negotiate over office payoffs. Then, more than point predictions, I concentrate on comparative statics, which is what has been done through the partial derivatives above. The hypotheses to be put under empirical test in the next pages are thus the following:

<sup>7</sup> Specifically, when party B is the formateur,  $\partial v_A / \partial \tau_A = (1 - r_B) \delta^{1+\tau_A} p_A \log \delta$ , and when it is party C the one with the task of forming a government,  $\partial v_A / \partial \tau_A = r_C \delta^{1+\tau_A} p_A \log \delta$ . Given that  $\delta \in (0,1)$ , then it is clear that both partial derivatives yield a negative value as  $\log \delta < 0$ .

<sup>8</sup> The reader may have easily noted that this model the expected payoff of the game for party A increases with  $p_A$  and decreases with  $p_B$  and  $p_C$ . Then, this means that the portfolio share each party will receive will be proportional to its seat share, consistently with most theoretical models dealing with portfolio allocation and with the very robust empirical pattern that one finds in the data. The thing is to what extent this proportionality effect is mediated by the impatience of players ( $\tau_i$ ), which is the question this work addresses.

*Hypothesis 1: In general, the more the time a party has been out of office, the more likely it is to get under-compensated in terms of portfolio allocation in a coalition government formation.*

*Hypothesis 2: The consequences of the time passed out of office when negotiating portfolios in the formation of a coalition government will be much less severe (if any) for formateur parties.<sup>9</sup>*

### Substantive interpretation

The argument presented in this section has been very simple and mostly intuitive even before any game-theoretical model was needed. However, to what extent is the effect of absences in government weaker/stronger for formateur than non-formateur parties does not follow such an intuitive line of reasoning since informal stories in various directions could be spelled out. The core of the argument is that the longer parties are out of office, the more impatient they become, and the more willing they are to settle an agreement for a

<sup>9</sup> It is true that the formateur advantage (i.e. the ability of making its own impatience irrelevant for the allocation of portfolios) would somewhat diminish if more than two bargaining rounds would be allowed. The derivative  $\partial v_i / \partial \tau_i$  for the formateur would no longer be 0 but negative. However, a formateur advantage remains. Take a situation in which three negotiation rounds are allowed and compare the expected payoff party A would get if chosen as formateur in the first round with the one it would receive if B was designated with this task. Under the former situation,

$$v_A = \left[ r_A \left( 1 - \delta^{1+\tau_A} \left[ p_A r_C \delta^{1+\tau_C} p_B + p_B \left( r_B (1 - \delta^{1+\tau_C} p_C) + (1 - r_B) (1 - \delta^{1+\tau_C} p_A) \right) + p_C (1 - r_C) \delta^{1+\tau_C} p_B \right] \right) + (1 - r_A) \left( 1 - \delta^{1+\tau_C} \left[ p_A (1 - r_A) \delta^{1+\tau_C} p_C + p_B r_B \delta^{1+\tau_C} p_C + p_C \left( r_C (1 - \delta^{1+\tau_C} p_A) + (1 - r_C) (1 - \delta^{1+\tau_C} p_B) \right) \right] \right) \right]$$

, whereas if B is the formateur then

$$v_A = \left[ (1 - r_B) \delta^{1+\tau_C} \left[ p_A \left( r_A (1 - \delta^{1+\tau_C} p_B) + (1 - r_A) (1 - \delta^{1+\tau_C} p_C) \right) + p_B (1 - r_B) \delta^{1+\tau_C} p_A + p_C r_C \delta^{1+\tau_C} p_A \right] \right]$$

. Clearly, the effect of  $\tau_A$  on A's expected payoff is notably most negative in the latter situation, when it is not selected as formateur (proof from the author upon request). The formateur status does still make the negative effect of the time out of office less worse, and thus the interactive hypothesis is still valid. This offsetting effect in fact does only disappear in the limit, if bargaining rounds are assumed to be infinite.

smaller share of the pie. Substantively, that is sustained in the notion that parties at some point feel the urge to be in the driver's seat. Why should it be the case? There are different stories that could be told. One is about policy. Parties' that have not been in office for a long time may be eager to join because policy may have deviated far from their ideal point while in opposition. That of course would provide room for interesting extensions of the basic argument, in which not all parties may become equally desperate for deciding policy from the cabinet's seats, but depending on its ideology and the partisanship of previous governments. That, though, is beyond the scope of this work.

Another reason why impatience and time out of office should be related refers to intra-party politics. Control over office by and large provides politically discretionary governmental and subgovernmental appointments, control over government contracts, preferential treatment, etc. Given that party activists perform demanding organizational tasks and professional services, party leaders need to compensate them, at least partly, by private benefits. The fact that public office generates private benefits such as the abovementioned ones will make party leaders to feel the need to reach office at some point, if only for those below them. As Müller and Strom (1999: 15-6) put it, "[b]ecause party resources typically depend so heavily on elective office, compensation tends to be prospective. Activists perform needed services in exchange for promises of future benefits to be delivered if and when the party wins office".

There can be obviously other motives behind parties' impatience. But in any case a situational determinant such as office deprivation will most likely increase impatience as well. Some real-world examples supporting this claim are in order. They are taken from a book by Wolfgang C. Müller and Kaare Strom, where they analyze cases of conflicting parties' goals in Western Europe.

Party leadership decisions are made in specific situations, and the nature of these situations may differ in important ways, even when institutions and

organizations do not. The same party leaders may have different trade-off functions in different situations. [...] Parties that have previously been electorally successful but starved of office benefits, such as the Italian PCI in the 1970s, may be willing to swallow unusual compromises in order to gain representation at the cabinet table, whereas parties used to executive office may be more willing to wager such benefits in the hope of securing electoral gains, as did Norwegian Labor Prime Minister Thorbjørn Jagland in 1997.<sup>10</sup>

Similarly,

One situational factor that may easily affect strategies of party leaders is their initial endowments of votes, office, and policy benefits. Broadly speaking, we would expect that the less a given party has enjoyed of a particular good, the more it is likely to value that type of payoff. In Sweden, for example, the nonsocialist parties, and particularly the Liberals and Conservatives, had been out of office for so long that it was desperately important to them to position themselves well for the upcoming elections. [...] The new Conservative leader, Gosta Bohman, was especially eager to cement an alliance with the Liberals and the Center Party. The situation of office deprivation no doubt contributed to the policy compromises that the nonsocialist parties, and the Conservatives specifically, were willing to make.<sup>11</sup>

Broadly speaking, this paper argues that long periods without "tasting" office will represent a liability for parties when bargaining with others. More specifically, the argument presented in this work concentrates on the consequences of this disadvantage *for the allocation of office payoffs*, yet an analogous mechanism applies for the willingness to make other types of concessions. Strom's (1999: 208-11) account of the political decisions of Rolf Presthus, the leader of the Norwegian Conservative party and potential Prime Minister if non-socialist parties in

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<sup>10</sup> Müller and Strom (1999: 24-5).

<sup>11</sup> Müller and Strom (1999: 299).

opposition coordinated, is another good example of this:

Presthus apparently chose to accept big risks and to “swallow camels” in order to gain the prime ministership. He was willing to accept quite unpalatable policies and take substantial electoral risks in the hope of dislodging Brundtland. [...] This agreement obviously represented a major concession by the Conservatives, a concession that would turn into a humiliating rout. Clearly, Presthus blinked first. Initially, both the Center Party and the Conservatives had taken a tough bargaining stance. What accounts for the Center Party’s success against the Conservatives in this game? Two factors seem plausible: (1) the credible constraints on Jakobsen versus the wide discretion given to Presthus and (2) *the greater impatience (higher discount rate) of Presthus* [...]. These circumstances eventually doomed the Conservatives in their negotiations.<sup>12</sup>

Even more explicitly, Hillebrand and Irwin’s (1999: 124-6) interpretation of a bargaining round of the 1989 government formation in the Netherlands nicely illustrates the concrete question this paper discusses: to what extent office deprivation can lead parties to be willing to trade the amount of ministerial posts for the very entrance in office.

This break in the coalition suddenly opened the door again for the Labour Party. Even those who believed that the Christian Democrats would accept the Socialists only as a last resort could see that this was an ideal opportunity. Some in the Labour Party went even further in their analysis and saw this as a do-or-die situation. The desire and pressure for office were greater than at any time in recent memory. If Labour could not obtain governmental responsibility now, it might never again do so. If, under these circumstances, the party, as the second largest party in the country, could not show that it was capable of being an acceptable coalition partner and a responsible governing party, it would lose all credibility with the voters. [...]. [Following 1989 general election, the

Labour Party] demanded that D66 be included in any negotiations regarding a centre-left coalition. The Christian Democrats countered with the proposal that this was agreeable, but that any ministerial posts allocated to D66 would have to come out of the Labour allocation. [...] In the past, such a demand would have been rejected outright by Labour negotiators. In previous Cabinet formations they had placed their own demands on the number of posts they felt they should have. Now they were being asked to accept a less than proportional share. Out of their overwhelming desire to return to power and out of fear that a Christian Democratic-Liberal coalition, with or without D66, might yet be arranged, Labour submitted to the demand.

From this example it appears to be clear that the more desperately a given party wants office (i.e. the more it values it), the less office payoffs it will need to settle an agreement. This willingness to trade “office for office”, so to speak, might seem paradoxical at first sight, but a counterexample will help to support the point. If it is true that political parties tend to value office more highly under favourable economic conditions than under times of crisis, they will have to be offered more if a given negotiating partner wants its participation in government in harsh times (i.e. so as to reach its critical point of indifference between entering and staying out). Giving more portfolio payoffs will be one of the ways to gain this acceptance. By contrast, and as a logical consequence, parties will accept entrance for a lower share of the pie if incumbency is a tasty reward by itself.

## DATA AND VARIABLES

The empirical test of my hypotheses requires information on portfolio allocations in coalition governments and needs observations to be each party in each government. This is because the main argument is party-specific as opposed to studies treating the proportionality of portfolio allocation as a cabinet feature. The dataset ‘Portfolios Data’ from Paul V. Warwick and James N. Druckman provides the needed structure and party-specific

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<sup>12</sup> Emphasis added.

variables. It includes information about portfolios received (both saliency-weighted and not), seat shares, bargaining power indexes, and formateur status, among others. The dataset covers the coalition governments of 14 Western European democracies from 1945 to 2000.<sup>13</sup>

### The variable Time Out of Office

Given its generalised omission, it is not strange that the database used did not incorporate any variable measuring how long partners in coalition cabinets had been in opposition before entering government. Hence, I had to start a data collection process to measure that time. The main objective was to attribute every party-government observation a value measuring the period passed between the end of the last government that included a given party and the moment when the current government formed with the presence of that party. I measured that value both in i) years passed and ii) number of government formations occurred.<sup>14</sup> Although years do already measure accurately the time passed since the last occasion a certain party was in office, recall that the theoretical mechanism proposed here is based on parties' impatience. As a result, it made sense to include as well the number of government formations occurred in that period without resulting in the entrance of that party, as "missed opportunities" may sum to parties' eagerness. Besides, that additional measure would be interesting so as to test the robustness of the findings.

It is worth saying here that the database 'Portfolios Data' does only include data on *coalition* governments. Obviously, in order to measure appropriately the main independent variable it was indispensable to take into account all governments, and not

only multiparty ones.<sup>15</sup> To incorporate them I merged the mentioned database with that used by Warwick (1994) to study government survival. However, the latter had no information for years after 1989 so I had to complete by myself the rest of years with the absent single-party governments resorting to the Keesing's Record of World Events'.

From then on, I had to deal with two additional issues: i) the starting point (i.e. the first government under consideration) and ii) what to do with those parties created after that starting point. Regarding the former, the reference point has been the first government for which I had data after 1945.<sup>16</sup> No information about pre-1945 governments has been used to calculate the variable *Time Out of Office*.<sup>17</sup> So I attributed a value for each party-government observation except for the first governments in each country since it would not make sense to do it arbitrarily for them.

About new parties, measuring the time they stayed in opposition had to consider a reference point temporally posterior to the first post-1945 government formation. Clearly, if a modern green party reaches office in 1995, one cannot say that it has been 50 years waiting to do so. So I carefully analyzed each country's Parliamentary composition after every election and ascribed a later reference point for every party without representation in the first Parliament.<sup>18</sup> Given the theoretical aim

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<sup>15</sup> Imagine a situation in which a party that has never been in a coalition before that finally enters one has led several single-party governments in the past. Obviously, one cannot say that this party has never been in office before their eventual participation in the multiparty government and that its impatience when negotiating portfolio payoffs has been increasing since 1945.

<sup>16</sup> Recall that for those parties with non-democratic periods the starting year is a later one, and that for France the dataset does only take into account the Fifth Republic (1959 onwards).

<sup>17</sup> One way to think about it is to consider parties' interactions and impatience as if they started from scratch after 1945 or the year in which the first post-IIWW government formed.

<sup>18</sup> Further details on how I treated changing party labels and mergers are provided upon request.

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<sup>13</sup> The countries are Austria, Belgium, Denmark, Finland, France (Fifth Rep.), Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, and (West) Germany.

<sup>14</sup> In fact the calculations were based on months rather than years, although the final variables here are presented in years but without losing measurement detail (e.g.: 15 months = 1.25 years).

of this work, I ruled out the dates of foundation and of first receiving votes and opted for the first time these parties obtained Parliamentary representation (namely, one seat at least) since it is from that moment on that a party can formally reach office.<sup>19</sup>

The resulting variables to measure the time out of office are thus *Time Out of Office (Y)* (in years) and *Time Out of Office (F)* (in government formations) although I chose two different specifications for each. Apart from the measurement explained hitherto, I also calculated how long a party had been out of government in comparison to the rest of the partners (cabinet mean value of that variable). Since the main purpose of this article is to test to what extent the time a given party has not been in office makes any difference when it comes the time to bargain *with coalition partners* over the allocation of portfolios, this second empirical specification is theoretically relevant as well. Hence, the statistical models are presented taking the main independent variable both in absolute and relative terms (time out of office relative to the mean of cabinet partners).<sup>20</sup> A summary of the means by country of these *Time Out of Office* variables is presented in Table 1.

### The Rest of Variables

The dependent variable of this work is the share of ministerial posts that each party receives out of the bargaining over formation. So the first specification of the dependent variable is simply the share of portfolios received by a given party (*Portfolio Share*).

Given the prevailing relationship between seats and portfolios (i.e. Gamson's law), I also used another measure of parties' office payoffs. Since I am interested in analyzing whether or not the length of the period a party has been

outside office becomes a relative liability when sitting at the portfolios' negotiation table, I take the 'normal allocation' (proportionality between seat shares and portfolio shares) as a reference point and consider deviations from that distribution in order to measure ministerial under- and over-compensations. That is, to what degree the final representation obtained by each party diverges from the portfolios it 'should' have received according to the 'fair and normal' Gamson's law. This is what Warwick and Druckman (2006: 657) call the *Portfolio Differential*, namely the difference between portfolio share and seat share. The resulting value can be either positive or negative, with the former indicating that the party has received an over-sized portfolio share, and the latter reflecting under-compensation relative to party's size.<sup>21</sup> Note that, unlike other works,<sup>22</sup> the aim here is to predict party-specific deviations from proportionality and not the overall cabinet disproportionality.

Both dependent variables (*Portfolio Share* and *Portfolio Differential*) are in turn measured i) considering the simple proportion of ministries obtained and ii) adjusting them according to their importance.<sup>23</sup> This is why the results presented in the next section are divided in two tables: one for the non-weighted measures and the other for the weighted ones. That will allow knowing whether the effect of the independent variables on the endogenous one is different depending on how we measure the latter.

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<sup>19</sup> To know that I resorted mainly to country-specific sources of election data. More details are provided from the author upon request.

<sup>20</sup> I have also run the analyses with a relative measure of *Time Out of Office* but removing the formateur from the calculation of the cabinet mean (consistently with Hypothesis 2). The results are offered in Tables A1 and A2 in the appendix and remain essentially unchanged.

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<sup>21</sup> It is worth saying here that Warwick and Druckman's (2006) treatment of this variable had an exploratory purpose only, just showing its correlation with parties' bargaining differential (see below).

<sup>22</sup> See for instance Verzichelli (2008).

<sup>23</sup> The weighted measure chosen is what Warwick and Druckman (2006) call 'Weighted Portfolio Share II', which extends the directly covered portfolios in their survey to produce saliencies for all portfolios held in the various governments through a number of procedures. See also Druckman and Warwick (2005) for a thorough discussion of the measurement of portfolio salience.

**TABLE 1. Variable Time Out of Office (Means by Country)**

|                      | Time Out of Office (Y) |            |            | Time Out of Office (F) |            |            | Time Out of Office (Y) |            | Time Out of Office (F) |            |
|----------------------|------------------------|------------|------------|------------------------|------------|------------|------------------------|------------|------------------------|------------|
|                      | - Absolute -           |            |            | - Absolute -           |            |            | - Relative -†          |            | - Relative -†          |            |
|                      | All parties            | Formateur  | Non-Form.  | All parties            | Formateur  | Non-Form.  | Formateur              | Non-Form.  | Formateur              | Non-Form.  |
| Austria              | 1.6                    | 0.0        | 3.1        | 0.6                    | 0.0        | 1.3        | -1.6                   | 1.6        | -0.6                   | 0.6        |
| Belgium              | 1.5                    | 0.6        | 1.9        | 0.9                    | 0.3        | 1.2        | -0.7                   | 0.3        | -0.6                   | 0.2        |
| Denmark              | 2.9                    | 1.6        | 3.6        | 1.8                    | 1.1        | 2.3        | -1.0                   | 0.6        | -0.6                   | 0.3        |
| Finland              | 1.6                    | 1.3        | 1.8        | 1.7                    | 1.2        | 1.8        | -0.2                   | 0.1        | -0.3                   | 0.1        |
| France (Fifth Rep.)  | 0.9                    | 0.9        | 0.9        | 0.6                    | 0.6        | 0.6        | -0.3                   | 0.1        | -0.2                   | 0.1        |
| Iceland              | 1.9                    | 1.1        | 2.4        | 0.9                    | 0.7        | 1.1        | -0.5                   | 0.4        | -0.1                   | 0.1        |
| Ireland              | 3.8                    | 3.8        | 3.7        | 1.7                    | 1.7        | 1.6        | -0.1                   | 0.0        | 0.0                    | 0.0        |
| Italy                | 1.0                    | 0.1        | 1.3        | 1.3                    | 0.1        | 1.7        | -0.7                   | 0.2        | -1.0                   | 0.3        |
| Luxembourg           | 1.5                    | 0.3        | 2.8        | 0.5                    | 0.1        | 0.9        | -1.2                   | 1.2        | -0.4                   | 0.4        |
| Netherlands          | 1.6                    | 0.3        | 2.1        | 1.0                    | 0.2        | 1.4        | -1.2                   | 0.5        | -0.9                   | 0.4        |
| Norway               | 5.5                    | 4.5        | 5.9        | 2.3                    | 1.9        | 2.5        | -0.8                   | 0.3        | -0.4                   | 0.2        |
| Portugal             | 0.9                    | 1.4        | 0.5        | 1.4                    | 2.2        | 0.9        | 0.4                    | -0.3       | 0.6                    | -0.4       |
| Sweden               | 6.0                    | 4.3        | 7.1        | 2.8                    | 2.1        | 3.3        | -0.6                   | 0.4        | -0.1                   | 0.1        |
| (West) Germany       | 1.4                    | 1.3        | 1.5        | 0.7                    | 0.5        | 0.8        | -0.3                   | 0.2        | -0.2                   | 0.2        |
| <i>All Countries</i> | <i>1.8</i>             | <i>1.1</i> | <i>2.1</i> | <i>1.2</i>             | <i>0.6</i> | <i>1.5</i> | <i>0.0</i>             | <i>0.0</i> | <i>0.0</i>             | <i>0.0</i> |

† A column for "All parties" is not included since by construction the means would be 0 for the measurement in relative terms.



The rest of variables included as regressors in the statistical analyses are the traditional ones for the study of coalition governments' portfolio allocation. First, parties' *Seat Share* and parties' legislative *Voting Weight* (a typical index of power). These two variables measuring parties' endowments are included when the dependent variable is *Portfolio Share*. Following Warwick and Druckman, when the endogenous variable is *Portfolio Differential* the two independent variables mentioned are collapsed in one single variable so as to measure parties bargaining strength relative to their size. This is the *Bargaining Differential*: the difference between parties' voting weight and seat share. Again this variable can take positive values (over-endowment in terms of bargaining power relative to size) and negative ones (under-endowment). Second, I also include a dummy control (0-1) for non-invested or care-taker governments under the label *Care-taker*.

Finally, I have obviously included the formateur status as an independent variable as well (*Formateur* is 1 for those parties appointed with the task of forming the government and 0 for the rest). As presented in the previous section, this is not only a control variable but one with theoretical substance. The interactive nature of hypothesis 2 tells that the statistical models should include the interaction *Time Out of Office* \* *Formateur* so as to capture to what extent the effect of the first component is different for those proposing offers of coalition formation as opposed to those receiving them (recall that the expectation is that impatience will play a disadvantaging role for non-formateur parties only).

## EMPIRICAL ANALYSIS

Given the nature of the dependent variable, I used OLS linear regressions as statistical technique, and specified robust standard errors. The full econometric models estimated are thus the following:<sup>24</sup>

$$\text{Portfolio Share} = \alpha + \beta_1^+(\text{Seat Share}) + \beta_2^+(\text{Voting Weight}) + \beta_3^+(\text{Formateur}) + \beta_4^-(\text{Time Out of Office}) + \beta_5^+(\text{Time Out of Office} * \text{Formateur}) + \beta_6^-(\text{Care-taker})$$

$$\text{Portfolio Differential} = \alpha + \beta_1^+(\text{Bargaining Differential}) + \beta_2^+(\text{Formateur}) + \beta_3^-(\text{Time Out of Office}) + \beta_4^+(\text{Time Out of Office} * \text{Formateur}) + \beta_5^-(\text{Care-taker})$$

As Indridason (2009) points out, though, the empirical analysis of portfolio allocation among coalition parties is complicated by two factors. First, the data are bounded (i.e. the dependent variable cannot range beyond the interval 0%-100%). Second, since the number of portfolios is fixed, an increase of those allocated to one party must be accompanied by a reduction in the number of portfolios distributed to some other party. The consequence of the latter is that the errors for parties belonging to the same coalition are correlated and the degrees of freedom are less than the number of parties. Both problems have to do with portfolio allocation data being compositional data.<sup>25</sup> Although several methods have been developed to address the issue of compositionality, most of them have focused on how contextual factors affect some composite characteristics. In the case of portfolio allocation analyses, though, the main explanatory variables are not contextual but party-specific. Approaches using seemingly unrelated regressions do not seem particularly well suited either for the case of study here, since the number of composites (parties) needs to be the same across observations. This is obviously not the case for coalition governments.

Yet research on portfolio allocation in multiparty governments has attempted to deal with the fact of data being compositional. While some have simply dropped one party from each cabinet (Fréchette *et al.* 2005a; Carroll and Cox 2007), others have adopted a different approach by clustering standard errors by cabinets (Warwick and Druckman 2006). However, whereas the former takes into account that there are less pieces of information than actual parties, it omits the

<sup>24</sup> The  $\beta$ 's superscripts indicate the expected sign of the coefficient for each variable.

<sup>25</sup> In this regard see Aitchison (1982).

problem of correlated errors. And with the latter, it is exactly the opposite that occurs. Besides, the bounded nature of the endogenous variable is not addressed by any of them. More recently, though, Indridason (2009) has offered an alternative that can address the three problems mentioned without having to abandon the OLS framework. It uses the additive logratio transformation on the data and clusters errors by cabinet to take into account interdependency in the allocation of portfolios.

In the appendix I have followed this approach and calculated the additive logratio of *Portfolio Share*, *Seat Share*, and *Voting Weight* with respect to the largest party in terms of seats (which implies dropping this party for each cabinet). Since working with this method causes dropping most of the formateurs (which is a substantive independent variable in this work), I have also decided to proceed like Warwick and Druckman (2006) and run the analyses specifying clustered standard errors by government but keeping all the parties. Another reason for doing the latter was that differentials and logratio transformations are not compatible. So in order to be able to run the models with differentials as well (*Portfolio Differential* and *Bargaining Differential*) I opted for the latter approach even though it does not account for the degrees of freedom issue. Finally, I have also run the models as in the main text but with fixed effects by country. All these models are presented in Tables A3 to A8 of the appendix, which are intended to serve as robustness checks for the findings that are presented and discussed next.

### **The influence of the *Time Out of Office***

The results yielded by this model are displayed in the tables and figures presented below.

Table 2 offers the estimates for the models with the unweighted dependent variable. That is, just considering the portfolios received by each party as if all of them were valued the same. A quick look to the table shows that the hypotheses posed in the second section work reasonably well,

especially the first one. Generally speaking, the more the time a party has been in opposition, the less the portfolios it (is willing to) receives when it eventually enters a coalition government. The simple (without interactions) models (1), (2), (5), (6), (9), (10), (13), and (14) show this overall trend. Aside from that, the concrete *Time Out of Office* measurement seems to exert a slight influence on the results. The number of past government formations that were not conducive to the participation of the party in government appear to work somewhat better than if measured through pure units of time (i.e. years). However, this difference is hardly appreciable and it completely disappears when both years and number of government formations are calculated in relative terms (that is, in relation to coalition partners).

The corresponding models in Table 3 reveal the same, if not even stronger, tendency. The length of the period a given party has stayed out of power makes it end up under-compensated in office payoffs (now weighted by importance). And that is both if this variable is considered in absolute and relative terms. Again, a minor difference in favour of the number of formations' measurement emerges, but this time it is even a weaker one. Signs are once more in the right direction and those that do not reach conventional levels of statistical significance are really close to them.

Finally, most of the remaining variables behave as expected. Both parties' size and parties' strength make them more able to win portfolios in cabinet –models (1) to (4) and (9) to (12) in both tables–. So parties receive office payoffs in proportion to their seat share (though not exactly on a 1:1 basis as Gamson's law would suggest) and besides get helped by their bargaining power when trying to obtain the most portfolios possible. When looking at differentials –models (5) to (8) and (13) to (16)–, estimates go in the anticipated direction as well. A party that is over-endowed in terms of bargaining power (in relation to its size) manages to receive more portfolios than what one would expect by just looking at its seat share. To end with, let me address the formateur issue in the next lines.

**TABLE 2. Regression Analyses for Parties' Portfolio Allocations (Non-Weighted)**

|                                | Time Out of Office in Absolute Terms |                       |                       |                       |                            |                       |                       |                       | Time Out of Office in Relative Terms |                      |                       |                       |                            |                      |                       |                       |
|--------------------------------|--------------------------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|--------------------------------------|----------------------|-----------------------|-----------------------|----------------------------|----------------------|-----------------------|-----------------------|
|                                | DV: Portfolio Share                  |                       |                       |                       | DV: Portfolio Differential |                       |                       |                       | DV: Portfolio Share                  |                      |                       |                       | DV: Portfolio Differential |                      |                       |                       |
|                                | (1)                                  | (2)                   | (3)                   | (4)                   | (5)                        | (6)                   | (7)                   | (8)                   | (9)                                  | (10)                 | (11)                  | (12)                  | (13)                       | (14)                 | (15)                  | (16)                  |
| <i>Seat Share</i>              | 0.7825***<br>(0.021)                 | 0.7814***<br>(0.021)  | 0.7823***<br>(0.021)  | 0.7808***<br>(0.021)  |                            |                       |                       |                       | 0.7817***<br>(0.021)                 | 0.7813***<br>(0.021) | 0.7819***<br>(0.021)  | 0.7819***<br>(0.021)  |                            |                      |                       |                       |
| <i>Voting Weight</i>           | 0.1086***<br>(0.028)                 | 0.1089***<br>(0.028)  | 0.1090***<br>(0.029)  | 0.1112***<br>(0.029)  |                            |                       |                       |                       | 0.1106***<br>(0.028)                 | 0.1106***<br>(0.028) | 0.1100***<br>(0.028)  | 0.1097***<br>(0.028)  |                            |                      |                       |                       |
| <i>Bargaining Differential</i> |                                      |                       |                       |                       | 0.2021***<br>(0.025)       | 0.2029***<br>(0.025)  | 0.2034***<br>(0.025)  | 0.2043***<br>(0.024)  |                                      |                      |                       |                       | 0.2031***<br>(0.025)       | 0.2034***<br>(0.025) | 0.2029***<br>(0.025)  | 0.2028***<br>(0.025)  |
| <i>Formateur</i>               | -0.0347***<br>(0.008)                | -0.0348***<br>(0.008) | -0.0350***<br>(0.009) | -0.0365***<br>(0.008) | -0.0583***<br>(0.008)      | -0.0585***<br>(0.008) | -0.0595***<br>(0.008) | -0.0608***<br>(0.008) |                                      |                      | -0.0345***<br>(0.008) | -0.0343***<br>(0.008) |                            |                      | -0.0582***<br>(0.008) | -0.0580***<br>(0.008) |
| <i>Time Out of Office (Y)</i>  | -0.0006+<br>(0.000)                  |                       | -0.0006<br>(0.000)    |                       | -0.0005<br>(0.000)         |                       | -0.0007<br>(0.000)    |                       | -0.0011**<br>(0.001)                 |                      | -0.0014**<br>(0.001)  |                       | -0.0012**<br>(0.001)       |                      | -0.0014**<br>(0.001)  |                       |
| <i>Time Out of Office (F)</i>  |                                      | -0.0012***<br>(0.000) |                       | -0.0014***<br>(0.000) |                            | -0.0011**<br>(0.000)  |                       | -0.0014***<br>(0.000) |                                      | -0.0013**<br>(0.001) |                       | -0.0015***<br>(0.001) |                            | -0.0013**<br>(0.001) |                       | -0.0015***<br>(0.001) |
| <i>TOO (M) * Formateur</i>     |                                      |                       | 0.0002<br>(0.001)     |                       |                            |                       | 0.0011<br>(0.001)     |                       |                                      |                      | 0.0015<br>(0.001)     |                       |                            |                      | 0.0012<br>(0.001)     |                       |
| <i>TOO (F) * Formateur</i>     |                                      |                       |                       | 0.0020<br>(0.002)     |                            |                       |                       | 0.0035*<br>(0.002)    |                                      |                      |                       | 0.0017<br>(0.002)     |                            |                      |                       | 0.0015<br>(0.002)     |
| <i>Care-taker</i>              | 0.0151<br>(0.025)                    | 0.0156<br>(0.025)     | 0.0152<br>(0.025)     | 0.0162<br>(0.025)     | 0.0144<br>(0.026)          | 0.0148<br>(0.026)     | 0.0149<br>(0.026)     | 0.0159<br>(0.026)     | 0.0154<br>(0.025)                    | 0.0154<br>(0.025)    | 0.0157<br>(0.025)     | 0.0158<br>(0.025)     | 0.0147<br>(0.026)          | 0.0147<br>(0.026)    | 0.0150<br>(0.026)     | 0.0151<br>(0.026)     |
| <i>Constant</i>                | 0.0630***<br>(0.004)                 | 0.0638***<br>(0.004)  | 0.0631***<br>(0.004)  | 0.0639***<br>(0.004)  | 0.0465***<br>(0.003)       | 0.0471***<br>(0.003)  | 0.0470***<br>(0.003)  | 0.0476***<br>(0.003)  | 0.0620***<br>(0.004)                 | 0.0620***<br>(0.004) | 0.0621***<br>(0.004)  | 0.0620***<br>(0.004)  | 0.0458***<br>(0.003)       | 0.0458***<br>(0.003) | 0.0459***<br>(0.003)  | 0.0458***<br>(0.003)  |
| Observations                   | 775                                  | 775                   | 775                   | 775                   | 775                        | 775                   | 775                   | 775                   | 775                                  | 775                  | 775                   | 775                   | 775                        | 775                  | 775                   | 775                   |
| R-squared                      | 0.896                                | 0.896                 | 0.896                 | 0.896                 | 0.363                      | 0.365                 | 0.364                 | 0.366                 | 0.896                                | 0.896                | 0.896                 | 0.896                 | 0.365                      | 0.365                | 0.365                 | 0.365                 |
| Adj. R-squared                 | 0.895                                | 0.895                 | 0.895                 | 0.895                 | 0.360                      | 0.361                 | 0.360                 | 0.362                 | 0.895                                | 0.895                | 0.895                 | 0.895                 | 0.361                      | 0.361                | 0.361                 | 0.361                 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

\* indicate confidence intervals from .8 to .9.

Robust standard errors in parentheses.

**TABLE 3. Regression Analyses for Parties' Portfolio Allocations (Weighted)**

|                                | Time Out of Office in Absolute Terms |                       |                      |                       |                            |                      |                      |                       | Time Out of Office in Relative Terms |                       |                       |                       |                            |                       |                       |                       |
|--------------------------------|--------------------------------------|-----------------------|----------------------|-----------------------|----------------------------|----------------------|----------------------|-----------------------|--------------------------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
|                                | DV: Portfolio Share                  |                       |                      |                       | DV: Portfolio Differential |                      |                      |                       | DV: Portfolio Share                  |                       |                       |                       | DV: Portfolio Differential |                       |                       |                       |
|                                | (1)                                  | (2)                   | (3)                  | (4)                   | (5)                        | (6)                  | (7)                  | (8)                   | (9)                                  | (10)                  | (11)                  | (12)                  | (13)                       | (14)                  | (15)                  | (16)                  |
| <i>Seat Share</i>              | 0.7626***<br>(0.019)                 | 0.7615***<br>(0.019)  | 0.7616***<br>(0.019) | 0.7605***<br>(0.019)  |                            |                      |                      |                       | 0.7616***<br>(0.019)                 | 0.7611***<br>(0.019)  | 0.7620***<br>(0.019)  | 0.7623***<br>(0.019)  |                            |                       |                       |                       |
| <i>Voting Weight</i>           | 0.1015***<br>(0.026)                 | 0.1018***<br>(0.026)  | 0.1040***<br>(0.026) | 0.1058***<br>(0.026)  |                            |                      |                      |                       | 0.1040***<br>(0.026)                 | 0.1040***<br>(0.026)  | 0.1029***<br>(0.026)  | 0.1025***<br>(0.026)  |                            |                       |                       |                       |
| <i>Bargaining Differential</i> |                                      |                       |                      |                       | 0.2181***<br>(0.025)       | 0.2189***<br>(0.025) | 0.2207***<br>(0.025) | 0.2211***<br>(0.025)  |                                      |                       |                       |                       | 0.2194***<br>(0.025)       | 0.2197***<br>(0.025)  | 0.2190***<br>(0.025)  | 0.2187***<br>(0.025)  |
| <i>Formateur</i>               | 0.0180**<br>(0.008)                  | 0.0180**<br>(0.008)   | 0.0166**<br>(0.008)  | 0.0150*<br>(0.008)    |                            |                      | -0.0137*<br>(0.008)  | -0.0151*<br>(0.008)   |                                      |                       | 0.0186**<br>(0.008)   | 0.0187**<br>(0.007)   |                            |                       | -0.0110<br>(0.008)    | -0.0108<br>(0.008)    |
| <i>Time Out of Office (Y)</i>  | -0.0008+<br>(0.000)                  |                       | -0.0009*<br>(0.000)  |                       | -0.0006+<br>(0.000)        |                      | -0.0010**<br>(0.000) |                       | -0.0014**<br>(0.001)                 |                       | -0.0019***<br>(0.001) |                       | -0.0015***<br>(0.001)      |                       | -0.0019***<br>(0.001) |                       |
| <i>Time Out of Office (F)</i>  |                                      | -0.0014***<br>(0.000) |                      | -0.0017***<br>(0.000) |                            | -0.0012**<br>(0.001) |                      | -0.0017***<br>(0.000) |                                      | -0.0017***<br>(0.001) |                       | -0.0020***<br>(0.001) |                            | -0.0017***<br>(0.001) |                       | -0.0020***<br>(0.001) |
| <i>TOO (M) * Formateur</i>     |                                      |                       | 0.0010<br>(0.001)    |                       |                            |                      | 0.0022*<br>(0.001)   |                       |                                      |                       | 0.0026*<br>(0.001)    |                       |                            |                       | 0.0022+<br>(0.001)    |                       |
| <i>TOO (F) * Formateur</i>     |                                      |                       |                      | 0.0035*<br>(0.002)    |                            |                      |                      | 0.0054**<br>(0.002)   |                                      |                       |                       | 0.0029+<br>(0.002)    |                            |                       |                       | 0.0026+<br>(0.002)    |
| <i>Care-taker</i>              | 0.0125<br>(0.021)                    | 0.0130<br>(0.021)     | 0.0129<br>(0.021)    | 0.0140<br>(0.020)     | 0.0116<br>(0.021)          | 0.0121<br>(0.021)    | 0.0126<br>(0.020)    | 0.0137<br>(0.020)     | 0.0128<br>(0.021)                    | 0.0128<br>(0.021)     | 0.0134<br>(0.021)     | 0.0136<br>(0.021)     | 0.0119<br>(0.021)          | 0.0119<br>(0.021)     | 0.0124<br>(0.021)     | 0.0126<br>(0.021)     |
| <i>Constant</i>                | 0.0543***<br>(0.004)                 | 0.0550***<br>(0.004)  | 0.0545***<br>(0.004) | 0.0551***<br>(0.004)  | 0.0337***<br>(0.003)       | 0.0342***<br>(0.003) | 0.0346***<br>(0.003) | 0.0350***<br>(0.003)  | 0.0530***<br>(0.004)                 | 0.0530***<br>(0.004)  | 0.0532***<br>(0.004)  | 0.0531***<br>(0.004)  | 0.0329***<br>(0.003)       | 0.0328***<br>(0.003)  | 0.0330***<br>(0.003)  | 0.0328***<br>(0.003)  |
| Observations                   | 775                                  | 775                   | 775                  | 775                   | 775                        | 775                  | 775                  | 775                   | 775                                  | 775                   | 775                   | 775                   | 775                        | 775                   | 775                   | 775                   |
| R-squared                      | 0.915                                | 0.916                 | 0.915                | 0.916                 | 0.241                      | 0.243                | 0.244                | 0.248                 | 0.915                                | 0.915                 | 0.916                 | 0.916                 | 0.244                      | 0.244                 | 0.245                 | 0.245                 |
| Adj. R-squared                 | 0.915                                | 0.915                 | 0.915                | 0.915                 | 0.237                      | 0.239                | 0.239                | 0.244                 | 0.915                                | 0.915                 | 0.915                 | 0.915                 | 0.240                      | 0.240                 | 0.240                 | 0.240                 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

+ indicate confidence intervals from .8 to .9.

Robust standard errors in parentheses.

### A Formateur effect? The Difference between Weighted and Unweighted Portfolios

The effect of the *Formateur* variable deserves special attention. The first thing to note is that counter to expectations the party entrusted with the task of forming government does not necessarily become over-compensated in portfolio allocation. It is thus not always an advantage to be the formateur. In fact, it mostly depends on how we measure the dependent variable. In Table 2 we see that the coefficients associated to *Formateur* are systematically negative. It means that once we control for size and bargaining strength, the fact of being responsible of making government formation offers disadvantages the party in terms of the absolute number of ministries it receives. However, the picture looks noticeably different when portfolio salience is taken into account.

According to Warwick and Druckman (2006: 647), “[w]ith the application of salience weightings, [...] lumpiness is smoothed out and a truer assessment of the nature of the underlying relationship becomes obtainable”. Lumpiness refers to the fact that “portfolios are always allocated in their entirety to single parties”. That may produce a bias in favour of small parties in portfolio allocation if salience is ignored.<sup>26</sup> In turn, then, that could be one of the reasons why once size and power characteristics are taken into account, the formateur status of a given party does not provide any boost to the office payoffs received. This is somehow supported in Table 3, which offers the results with the weighted dependent variable (both shares and differentials). Contrary to Table 2’s preliminary conclusions, having the task to form government makes parties more likely to obtain a larger share of office payoffs. This is what the positive coefficients of the variable *Formateur* in models (1) to (4) and (9) to (12) suggest. This is not the case, though, when considering differentials.

Formateur parties appear not to be over-compensated in relation to their size.<sup>27</sup>

However, as suggested in the theoretical part of the article, the formateur advantage may emerge in a different way as well. If formateur parties make their offers on the basis of their potential partners’ continuation values, the formers’ impatience should not matter for portfolio allocation. The flip side of this argument is that impatience (i.e. the extent to which parties discount the future which, as said, is in turn related to the time they have been out of office) becomes a liability for receiver parties only. We have seen that *on average* the time a party has stayed in opposition makes it more likely to become under-compensated in terms of portfolios. But does the formateur status make any difference as suggested in hypothesis 2?

A distinction between weighted and non-weighted portfolios comes out again. In Table 2 we see that only one out of the eight interactive specifications –model (8)– turn to reach statistical significance. Indeed, it does run in the expected direction since the sign is positive, which suggests that the disadvantage provoked by impatience is somewhat offset by the fact of being the formateur party. This finding stems much more clearly from Table 3. Seven out of the eight interactions reach conventional levels of statistical significance and they do behave in the anticipated direction.

A graphical representation of this interactive relationship may ease interpretation.

These figures present linear prediction plots with statistical confidence intervals (90%) showing the two-way relationship between *Time Out of Office* (in absolute and relative years) on several measurements of office payoffs (portfolio shares, differentials, unweighted, and weighted). They suggest that a long stay in opposition results in a significant bargaining burden for non-formateur parties, whereas it is not (so much) the case for formateur ones. And this is especially true when considering

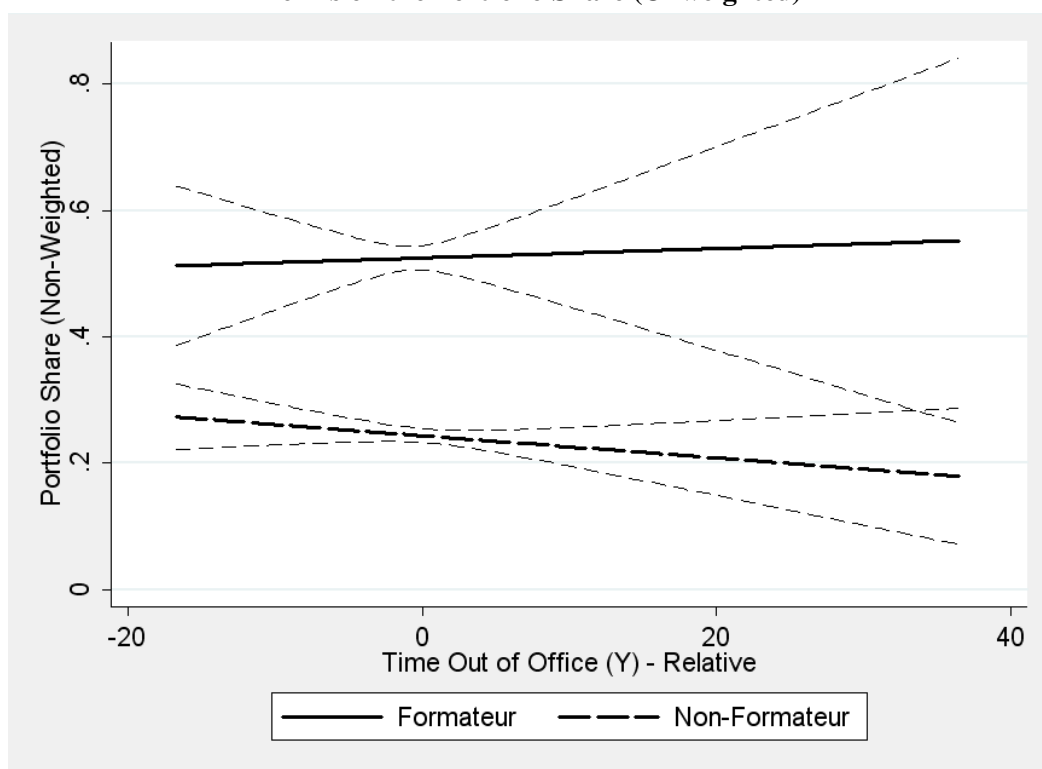
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<sup>26</sup> For the lumpiness concept, see Warwick and Druckman (2001).

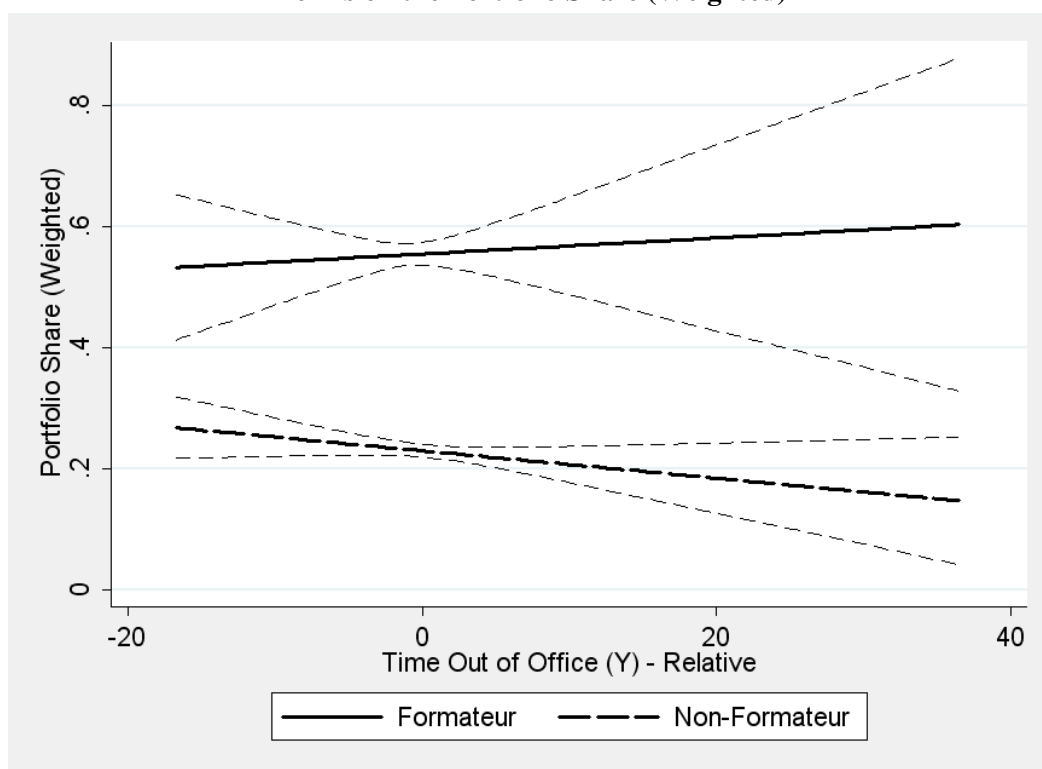
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<sup>27</sup> This is somewhat counter Ansolabehere *et al.*’s (2005) finding on the formateur advantage.

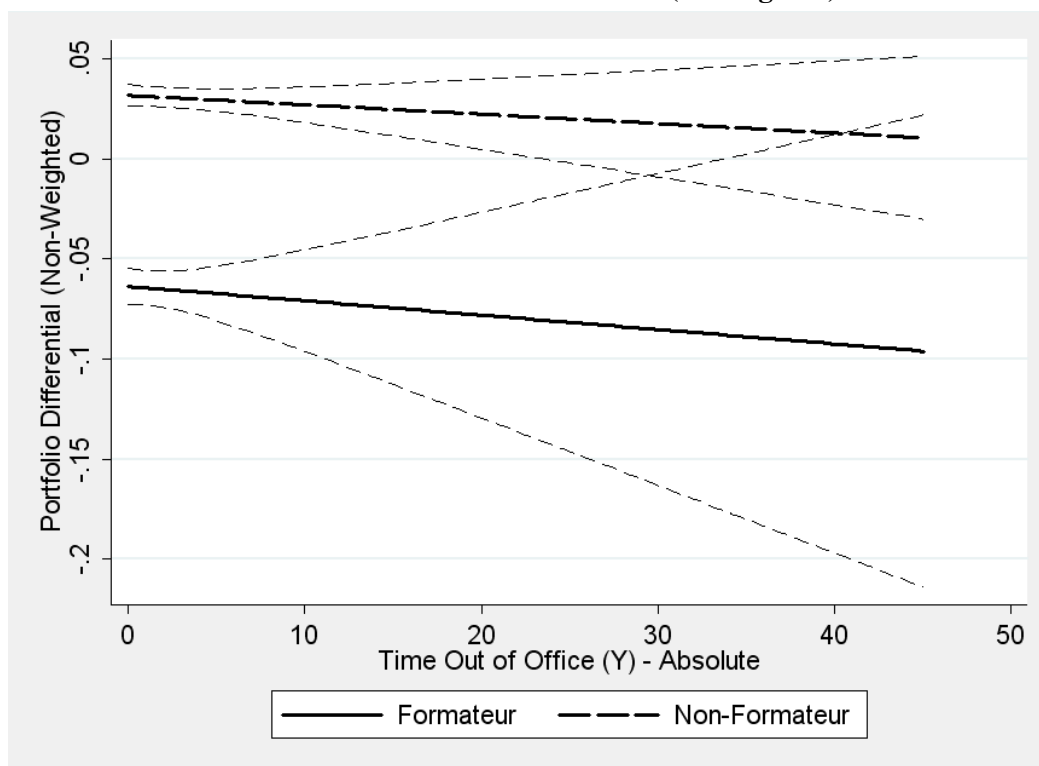
**FIGURE 2. Fitted Predicted Values for the Effect of Time Out of Office (Y) in Relative Terms on the Portfolio Share (Unweighted)**



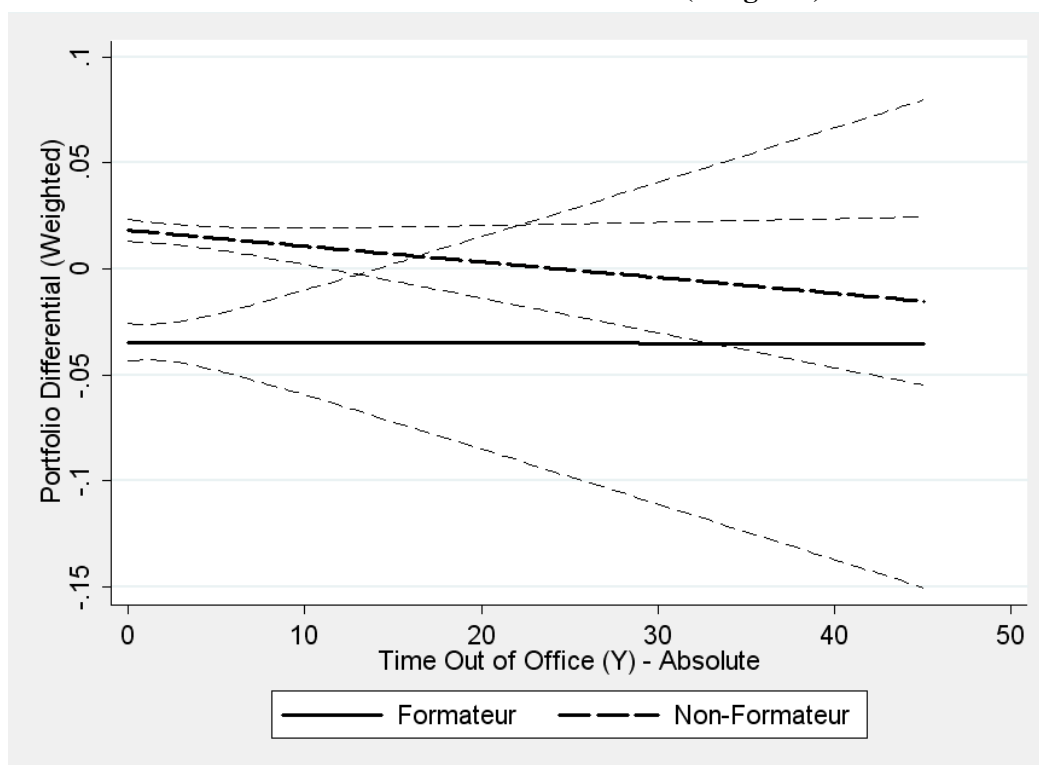
**FIGURE 3. Fitted Predicted Values for the Effect of Time Out of Office (Y) in Relative Terms on the Portfolio Share (Weighted)**



**FIGURE 4. Fitted Predicted Values for the Effect of Time Out of Office (Y) in Absolute Terms on the Portfolio Differential (Unweighted)**



**FIGURE 5. Fitted Predicted Values for the Effect of Time Out of Office (Y) in Absolute Terms on the Portfolio Differential (Weighted)**



saliency-weighted portfolios. Except for figure 5 –where the slopes of the predicted values are almost the same regardless of party status–, we can see that in all the rest the formateur party is not really disadvantaged by the length of their absence in office, yet this is the case for those parties that were not entrusted with the task of government formation.

For instance, from figure 4 we can predict that a mean non-formateur party that has stayed 10 years less in opposition than its cabinet partners' mean will approximately receive a 25% of the total office payoffs allocated, yet the same party but having stayed 20 years out of office more than the cabinet's mean will receive a 19%. Similarly, figure 6 implies that 20 years in opposition make a mean non-formateur party to go from a 2% of over-compensation in relation to its size, to a hardly “fair” payoff. By contrast, the same period in opposition for a formateur party will not make them more under-compensated (flat solid line). Certainly, these numbers do make a real difference, especially when the phenomenon of portfolio allocation is supposed to be entirely explained by parties' size (mainly) and other power characteristics (to a smaller extent).

The robustness checks using different methods that are provided in the appendix do worth a comment as well. As the reader will see, results hold robustly with all methods, except for the interaction with the additive logratio transformation. As hinted above, that may well be because by dropping each largest party, most of the formateurs disappear from the data, making it difficult to derive any conclusions from the interactive variables. The estimates presented in Tables A1 to A8 are very similar to those in the previous tables, showing a systematically negative effect of the variables *Time Out of Office* and the interactions *Time Out of Office\*Formateur* behaving as expected, especially when considering saliency-weighted portfolios.

## ON THE CAUSALITY OF THE MAIN EFFECT: AN EXPLORATION USING MATCHING TECHNIQUES

Up to this point the article has shown that, controlling for a set of traditional variables, those parties that stay a longer time out of office tend to be under-compensated in terms of portfolio payoffs when they eventually reach a coalition government, especially for non-formateur parties. But to what extent is this relation really causal?

In the first part of the article it has been theorised that the causal micro-mechanism goes through impatience. Everything else the same, parties want to reach office, and the longer the period they have not been able to do so, the more their impatience increases. If so, they start discounting the future more and more and that is something that arises when it comes the time to negotiate the formation of a coalition government. Put informally, the longer they have been in opposition, the more desperate they get to reach office, and the more willing they are to trade portfolios for the “mere” entrance in government. But this causal argument only holds under a particular theoretical assumption, namely that the reason why they have not entered office is they have been unable to do so but not unwilling. It assumes that parties always want to reach office if they have the opportunity, and do not refuse entrance into government for some other strategic reasons beyond office payoffs.<sup>28</sup> For instance, one could think that those that stay longer periods in opposition are more policy-seeking rather than office-seeking and this is precisely the reason why when for whatever reason they finally get into office in a coalition government, they get fewer portfolios than they “should”. Simply because they may value office less.

However, from a game-theoretic perspective, if a given party values each piece of office less, the implication would be that it should be given more to reach

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<sup>28</sup> Arguments in this vein are sketched, for instance, in Müller and Strom (1999). For an application to the Spanish case, see Reniu and Bergman (2003).



their indifference threshold. As a result, this argument would yield expectations contrary to those in this paper and against the real-world evidence we have seen. Other stories behind the observed relations would include extremist or non-coalitionable parties. To the extent that most parties in a certain country judge others as undesirable partners, it is more likely that the latter will be deprived from office. One of the solutions to fight this partners' reluctance and increase its attractiveness would be to decrease its own price and thus accept a smaller payoff than a potential partner who has (or could have) been regularly in office. Nevertheless, this argument would work through impatience still, though now the reason behind it would not be just random inability to reach office, but caused by other parties' preferences.

In any case, such questions should be addressed and deepening into the issue of causality seems advisable. Although it is true that the empirical evidence provided here does not operate in a theoretical vacuum (a formalised model and substantive examples have been offered in the second section), the extent to which the effect of the *Time Out of Office* variable on the portfolio payoffs obtained is truly causal needs to be addressed empirically as well.

Given our theoretical purpose, it appears that a good way to proceed is to take parties with similar ex ante propensities to be longer times out of office and, among them, compare the effect of actual stays in opposition on their chances of being over-/under- compensated in terms of office payoffs in coalition governments. This intuition is similar to the one behind matching techniques to estimate the average effect of a treatment for those treated. To put things clearly, the treatment here would be the time a given party has been out of office. And the question is then to what extent a party that has been "treated" with some time out of office is disadvantaged in the negotiation of portfolios in a coalition government formation when compared to a similar party that has not been treated (e.g. was present in the previous government).

## Estimating the Average Treatment Effect for the Treated

As suggested above, since there are reasons to believe that the assignment to treatment is not random across parties, then one has to think of those variables (observables) that may be conducive or influence participation into treatment in such a way that assignment to treatment is unconfounded given these pre-treatment variables. That is, the Conditional Independence Assumption. Estimating the conditional probability of receiving the treatment given the pre-treatment variables will allow using matching based on the propensity score (Rosenbaum and Rubin 1983). Then, once the propensity score to participate into treatment is estimated, the second step is to estimate the average effect of the treatment given the propensity score. According to Becker (2009), ideally in this step one would like to i) match cases and controls with exactly the same (estimated) propensity score, ii) compute the effect of treatment for each value of the (estimated) propensity score, and iii) obtain the average of these conditional effects. Since in practice this is quite unfeasible (it is rare to find pairs with exactly the same propensity score), there are several alternatives to perform this step. Here I will concentrate on two of them: Radius and Kernel matching on the score.

Roughly put, radius matching on the score consists of finding the control units (non-treated) whose propensity scores differ from the score of the treated unit by less than a given tolerance level, for all the control units; compare their outcomes (main dependent variable) given the variables used in the estimation of the propensity score; and compute an average of the differences which will be the average treatment effect for the treated.<sup>29</sup> On the other hand, the kernel matching estimator can be interpreted as a particular version of the radius method in which every treated unit is matched with a weighted average of all control units with weights that are

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<sup>29</sup> It is also worth mentioning that one needs to allow for replacement of control units, that when a treated unit has no control within the chosen radius it takes the nearest control, and that the unmatched control units are dropped.

inversely proportional to the distance between the treated and the control units.

In the concrete case of this article the explained procedure has taken the following form. To begin with, although in this section I have been referring to treated and untreated (or control) units, the *Time Out of Office* treatment is not binary but continuous. Since the standard way to proceed with matching is through binary treatments, the first step was to make my main independent variable dichotomous.<sup>30</sup> I have chosen a twofold strategy to do so. In a first specification, I have considered as treated those that have not been in the previous government and untreated those that were present in the last cabinet. In other words, the treatment would be received by those with *Time Out of Office* ( $Y/F$ )  $> 0$  while for the controls *Time Out of Office* ( $Y/F$ )  $= 0$ . The consideration of the treatment group was more restrictive in the second specification. I took the upper decile of the distribution of *Time Out of Office* and considered those equal or above that value as treated and those below as

frequencies for both treatment specifications are displayed in Table 4.

So which “observables” may be conducive to parties’ participation into treatment? In other words, which are the variables that should be included in the estimation of the propensity score? As suggested above, there are reasons to believe that some parties’ characteristics make them more prone to be longer periods out of office, such as their “office-seekingness”. Since there is no such an observable variable, I have generated party dummies to identify their ideological family: communist, socialist, liberal, Christian-democrat, conservative, far-right/populist, green, and regionalist. Belonging to one of these categories instead of another may make parties more likely to participate into the treatment we are interested in. Besides, including these categories may also address the issue of to what extent parties are considered as non-coalitionable (e.g. ideologically extreme ones) and thus they may be more likely to stay longer times in opposition. In addition

**TABLE 4. Binary Treatment Based on Time Out of Office (Frequencies and Percentages)**

|                               |             | First specification<br>( $>0$ vs 0) |            | Second specification<br>(Upper Decile vs The Rest) |            |
|-------------------------------|-------------|-------------------------------------|------------|----------------------------------------------------|------------|
|                               |             | Frequencies                         | Percentage | Frequencies                                        | Percentage |
| <i>Time Out of Office</i> (Y) | Non-treated | 542                                 | 67.16      | 697                                                | 86.37      |
|                               | Treated     | 265                                 | 32.84      | 110                                                | 13.63      |
| <i>Time Out of Office</i> (F) | Non-treated | 540                                 | 66.91      | 694                                                | 86.00      |
|                               | Treated     | 267                                 | 33.09      | 113                                                | 14.00      |

untreated. Specifically, *Time Out of Office* ( $Y$ )  $\geq 5.33$  and *Time Out of Office* ( $F$ )  $\geq 4$  as treated, and the rest as control units.<sup>31</sup> The

<sup>30</sup> There have been some recent efforts to develop an extension of the propensity score methodology that allows for estimation of average causal effects with continuous treatments such as the one proposed by Hirano and Imbens (2004). However, its use is at its very birth and the applications have been rare. All in all, I have considered more reasonable to proceed in the standard way and “binarise” the treatment.

<sup>31</sup> For both specifications I have only considered the absolute terms of the variable *Time Out of*

to ideology, I have also included an institutional variable (which is observable by definition) that makes entrance of parties in office (and also the formation of multiparty governments) more or less likely: the electoral system. More

*Office*, and not the relative ones. This is because it is far more straightforward to consider the treatment as a given amount of time in opposition than as more or less time than the other partners. Besides, it would not make much sense to estimate the propensity score to participate into treatment where the treatment would actually depend on the treatment of others.

concretely, I have chosen the average district magnitude as the summary variable.

As Caliendo and Kopeinig (2008: 38-9) point out, there is some controversy on the type of variables that should be included in the estimation of the propensity score: “there are both reasons for and against including all of the reasonable covariates available. Basically, [...] that the choice of variables should be based on [...] theory and previous empirical findings”. In order to make the results of the estimation of the average treatment effect as comparable as possible to the evidence offered in the previous section, I have also included all the independent variables used there (except *Time Out of Office*, of course). This follows Rubin and Thomas’ advice against “trimming” models in the name of parsimony, arguing that a variable should only be excluded from analysis if there is consensus that the variable is either completely unrelated to the outcome or not a proper covariate (Rubin and Thomas 1996). If there are doubts about these two points, they explicitly advise to include all the relevant variables in the propensity score estimation.

As said, the specific techniques chosen to match treated and untreated units have been radius and kernel matching. Regarding the former, I have matched each treated variable with all controls within an interval of  $\pm 0.1$ .<sup>32</sup> The kernel used to weigh the importance of the control units given their propensity score distances to the treated observation has been the Gaussian or normal, which is the standard one. It is also worth mentioning that to ensure more rigorous comparability the estimations have been produced with an option that imposes a common support by dropping treatment observations whose propensity score is higher than the maximum or less than the minimum propensity score of the controls. Finally, the Stata module used to perform such analyses has been *psmatch2*.<sup>33</sup>

Results are presented in Table 5.<sup>34</sup>

Estimates in Table 5 imply that we are closer to be able to say that the time a given party has stayed out of office causally affects the share of portfolios it gets in the bargaining of a coalition government formation. Through the matching procedure it has been shown that even considering parties that have a similar ex ante propensity to be in opposition for a certain period of time, actual absence in office disadvantages parties in terms of portfolio payoffs. The observed coefficients are negative as expected, and that is regardless of the *Time Out of Office* specification and of the type of matching technique used. Besides, we can infer that this is a statistically significant effect in all cases (90% confidence or above).

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<sup>32</sup> The estimated propensity score runs from 0.066 to 0.690.

<sup>33</sup> For this Stata command refer to Leuven and Sianesi (2003).

<sup>34</sup> As usual when estimating average treatment effects for the treated with matching techniques,

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I have chosen the bootstrapping approach to statistical inference by computing bootstrap standard errors with 50 repetitions (as default in *psmatch2*).

**TABLE 5. Average Treatment Effect for the Treated with Two Matching Methods**

|                                           |                           | Treatment: Time Out of Office (>0 vs 0) |          |            |                         |                   | Treatment: Time Out of Office (Upper Decile vs The Rest) |          |            |                         |                   |
|-------------------------------------------|---------------------------|-----------------------------------------|----------|------------|-------------------------|-------------------|----------------------------------------------------------|----------|------------|-------------------------|-------------------|
|                                           |                           | Treated                                 | Controls | Difference | Observed<br>Coefficient | Bootstrap<br>S.E. | Treated                                                  | Controls | Difference | Observed<br>Coefficient | Bootstrap<br>S.E. |
| <b>Share of Portfolios (Non-Weighted)</b> |                           |                                         |          |            |                         |                   |                                                          |          |            |                         |                   |
| <i>Time Out of Office (Y)</i>             | Unmatched                 | 0.2804                                  | 0.3547   | -0.0743    |                         |                   | 0.2833                                                   | 0.3372   | -0.0539    |                         |                   |
|                                           | Matched (Radius 0.1)      | 0.2813                                  | 0.2963   | -0.015     | -0.0150**               | 0.0073            | 0.2833                                                   | 0.3155   | -0.0321    | -0.0321**               | 0.0128            |
|                                           | Matched (Gaussian Kernel) |                                         | 0.2952   | -0.0139    | -0.0139**               | 0.0056            |                                                          | 0.3113   | -0.028     | -0.0280**               | 0.0129            |
| <i>Time Out of Office (F)</i>             | Unmatched                 | 0.2806                                  | 0.3549   | -0.0743    |                         |                   | 0.2801                                                   | 0.3383   | -0.0582    |                         |                   |
|                                           | Matched (Radius 0.1)      | 0.2815                                  | 0.2951   | -0.0136    | -0.0136*                | 0.0074            | 0.2801                                                   | 0.3186   | -0.0385    | -0.0385***              | 0.0122            |
|                                           | Matched (Gaussian Kernel) |                                         | 0.2938   | -0.0123    | -0.0123*                | 0.0071            |                                                          | 0.313    | -0.0329    | -0.0329***              | 0.0118            |
| <b>Share of Portfolios (Weighted)</b>     |                           |                                         |          |            |                         |                   |                                                          |          |            |                         |                   |
| <i>Time Out of Office (Y)</i>             | Unmatched                 | 0.2763                                  | 0.3566   | -0.0803    |                         |                   | 0.2779                                                   | 0.338    | -0.06      |                         |                   |
|                                           | Matched (Radius 0.1)      | 0.2773                                  | 0.2909   | -0.0136    | -0.0136*                | 0.0073            | 0.2779                                                   | 0.3125   | -0.0345    | -0.0345***              | 0.0119            |
|                                           | Matched (Gaussian Kernel) |                                         | 0.2899   | -0.0126    | -0.0126**               | 0.0061            |                                                          | 0.3088   | -0.0308    | -0.0308**               | 0.0146            |
| <i>Time Out of Office (F)</i>             | Unmatched                 | 0.2761                                  | 0.357    | -0.0809    |                         |                   | 0.2747                                                   | 0.3392   | -0.0644    |                         |                   |
|                                           | Matched (Radius 0.1)      | 0.2771                                  | 0.2895   | -0.0124    | -0.0124**               | 0.0059            | 0.2747                                                   | 0.3174   | -0.0427    | -0.0427***              | 0.0156            |
|                                           | Matched (Gaussian Kernel) |                                         | 0.2884   | -0.0113    | -0.0113*                | 0.0064            |                                                          | 0.3118   | -0.0371    | -0.0371***              | 0.0125            |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Logistic model to estimate the propensity score:  $Time\ Out\ of\ Office = \alpha + \beta(Communist) + \beta(Socialist) + \beta(Christian-democrat) + \beta(Conservative) + \beta(Far-Right/Populist) + \beta(Green) + \beta(Regionalist) + \beta(Average\ District\ Magnitude) + \beta(Seat\ Share) + \beta(Voting\ Weight) + \beta(Formatteur) + \beta(Time\ Out\ of\ Office) + \beta(Care-taker)$

The balancing property was satisfied in all cases.

## CONCLUDING REMARKS

Although the study of portfolio allocation in coalition governments has been a very fruitful field for political scientists, it has not assessed the role of parties' impatience to reach office more than anecdotally or in passing. This article has claimed that despite the empirical strength of the relation between parties' seats and portfolios, there are reasons to take other variables into consideration to improve our understanding of how are ministerial posts distributed among coalition partners. In this work it has been argued that one of these variables might be how long parties have had to wait to leave the opposition and be part of a government.

The idea presented in this article may already have an intuitive appeal: the longer the period parties have not been able to enjoy the spoils of office, the more impatient and desperate they get, and thus the more they are willing to make concessions in the negotiation over government formation in exchange for their entrance in office. This intuition has been supported substantively with some examples and modelled formally as well, forcing parties to discount the future more when they have been longer in opposition. Two hypotheses have been derived from this model. On the one hand, the overall influence of the time out of office should be negative in terms of bargaining over portfolios. On the other hand, the fact of being the formateur should offset this disadvantage since the offers of formation are made based on receivers' impatience rather than on the offerer's one.

Empirical evidence has largely supported the theoretical expectations with a considerable variety of specifications of the dependent and independent variables and robustness checks. If anything, what has come up is a tendency for saliency-weighted portfolios to perform somewhat closer to expectations than when ministerial posts were counted in absolute numbers only. The last step of this research has been to deepen into the issue of causality by providing evidence in favour of a causal (negative) effect of the length of time a given party has been in opposition on the office payoffs it manages to receive. This

has been done through matching "treated and untreated" parties based on similar propensities to be out of office.

All in all, this article has offered new insight on the study of portfolio allocation in coalition governments through the inclusion of a variable not taken into account hitherto. This original contribution may be of use for future research efforts, both theoretical and empirical. Among others, possible extensions should further look at the conditionality of the effect of the time out of office. Most likely, different parties will be affected differently according to party characteristics beyond the (non-)formateur status. Ideology, and its relation to the partisanship of previous governments, would be one. Likewise, parties' internal organizations may influence how far leaders look ahead when evaluating payoffs, as they may be rendered more/less vulnerable under the threat of replacement. Beyond party-specific features, institutions may play a role too. The degree to which they favour incumbents will probably affect parties' impatience, since in some countries those in opposition may already have good access to policy influence. Another interesting implication of the arguments presented in this work is that everything else the same, parties that have been out of government for long periods of time should be more likely to enter government as its relative price as a partner will decrease. Finally, the effect of this work's main independent variable on other types of concessions beyond office payoffs such as policy compromises would merit further attention as well. These are just some examples of how the contribution made here could be taken up in future political science research.

## APPENDIX

**TABLE A1. Regression Analyses for Parties' Portfolio Allocations (Non-Weighted)**

| Time Out of Office in Relative Terms (Calculated without the formateur) |                       |                       |                       |                       |                            |                       |                       |                       |
|-------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
|                                                                         | DV: Portfolio Share   |                       |                       |                       | DV: Portfolio Differential |                       |                       |                       |
|                                                                         | (1)                   | (2)                   | (3)                   | (4)                   | (5)                        | (6)                   | (7)                   | (8)                   |
| <i>Seat Share</i>                                                       | 0.7809***<br>(0.021)  | 0.7808***<br>(0.021)  | 0.7812***<br>(0.021)  | 0.7818***<br>(0.021)  |                            |                       |                       |                       |
| <i>Voting Weight</i>                                                    | 0.1106***<br>(0.028)  | 0.1107***<br>(0.028)  | 0.1094***<br>(0.028)  | 0.1094***<br>(0.028)  |                            |                       |                       |                       |
| <i>Bargaining Differential</i>                                          |                       |                       |                       |                       | 0.2037***<br>(0.025)       | 0.2037***<br>(0.025)  | 0.2033***<br>(0.025)  | 0.2028***<br>(0.025)  |
| <i>Formateur</i>                                                        | -0.0354***<br>(0.008) | -0.0350***<br>(0.008) | -0.0339***<br>(0.008) | -0.0341***<br>(0.008) |                            |                       | -0.0579***<br>(0.008) | -0.0578***<br>(0.008) |
| <i>Time Out of Office (Y)</i>                                           | -0.0013***<br>(0.000) |                       | -0.0021***<br>(0.001) |                       | -0.0013***<br>(0.000)      |                       | -0.0020***<br>(0.001) |                       |
| <i>Time Out of Office (F)</i>                                           |                       | -0.0014***<br>(0.000) |                       | -0.0018***<br>(0.000) |                            | -0.0014***<br>(0.001) |                       | -0.0018***<br>(0.000) |
| <i>TOO (M) * Formateur</i>                                              |                       |                       | 0.0020**<br>(0.001)   |                       |                            |                       | 0.0017*<br>(0.001)    |                       |
| <i>TOO (F) * Formateur</i>                                              |                       |                       |                       | 0.0017<br>(0.001)     |                            |                       |                       | 0.0015<br>(0.001)     |
| <i>Care-taker</i>                                                       | 0.0149<br>(0.025)     | 0.0148<br>(0.026)     | 0.0153<br>(0.025)     | 0.0152<br>(0.025)     | 0.0142<br>(0.026)          | 0.0140<br>(0.026)     | 0.0145<br>(0.026)     | 0.0145<br>(0.026)     |
| <i>Constant</i>                                                         | 0.0618***<br>(0.004)  | 0.0618***<br>(0.004)  | 0.0619***<br>(0.004)  | 0.0618***<br>(0.004)  | 0.0455***<br>(0.003)       | 0.0455***<br>(0.003)  | 0.0455***<br>(0.003)  | 0.0454***<br>(0.003)  |
| Observations                                                            | 775                   | 775                   | 775                   | 775                   | 775                        | 775                   | 775                   | 775                   |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Robust standard errors in parentheses.

**TABLE A2. Regression Analyses for Parties' Portfolio Allocations (Non-Weighted)**

| Time Out of Office in Relative Terms (Calculated without the formateur) |                       |                       |                       |                       |                            |                       |                       |                       |
|-------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|-----------------------|
|                                                                         | DV: Portfolio Share   |                       |                       |                       | DV: Portfolio Differential |                       |                       |                       |
|                                                                         | (1)                   | (2)                   | (3)                   | (4)                   | (5)                        | (6)                   | (7)                   | (8)                   |
| <i>Seat Share</i>                                                       | 0.7609***<br>(0.019)  | 0.7607***<br>(0.019)  | 0.7613***<br>(0.019)  | 0.7623***<br>(0.019)  |                            |                       |                       |                       |
| <i>Voting Weight</i>                                                    | 0.1038***<br>(0.026)  | 0.1040***<br>(0.026)  | 0.1021***<br>(0.026)  | 0.1020***<br>(0.026)  |                            |                       |                       |                       |
| <i>Bargaining Differential</i>                                          |                       |                       |                       |                       | 0.2199***<br>(0.025)       | 0.2200***<br>(0.025)  | 0.2193***<br>(0.025)  | 0.2186***<br>(0.025)  |
| <i>Formateur</i>                                                        | 0.0173**<br>(0.008)   | 0.0177**<br>(0.008)   | 0.0193**<br>(0.008)   | 0.0191**<br>(0.007)   |                            |                       | -0.0106<br>(0.008)    | -0.0105<br>(0.008)    |
| <i>Time Out of Office (Y)</i>                                           | -0.0015***<br>(0.001) |                       | -0.0026***<br>(0.001) |                       | -0.0015***<br>(0.001)      |                       | -0.0025***<br>(0.001) |                       |
| <i>Time Out of Office (F)</i>                                           |                       | -0.0017***<br>(0.001) |                       | -0.0023***<br>(0.001) |                            | -0.0017***<br>(0.001) |                       | -0.0023***<br>(0.001) |
| <i>TOO (M) * Formateur</i>                                              |                       |                       | 0.0028***<br>(0.001)  |                       |                            |                       | 0.0024**<br>(0.001)   |                       |
| <i>TOO (F) * Formateur</i>                                              |                       |                       |                       | 0.0026**<br>(0.001)   |                            |                       |                       | 0.0024*<br>(0.001)    |
| <i>Care-taker</i>                                                       | 0.0123<br>(0.021)     | 0.0120<br>(0.021)     | 0.0127<br>(0.021)     | 0.0128<br>(0.021)     | 0.0114<br>(0.021)          | 0.0112<br>(0.021)     | 0.0118<br>(0.021)     | 0.0118<br>(0.021)     |
| <i>Constant</i>                                                         | 0.0527***<br>(0.004)  | 0.0527***<br>(0.004)  | 0.0529***<br>(0.004)  | 0.0527***<br>(0.004)  | 0.0324***<br>(0.003)       | 0.0324***<br>(0.003)  | 0.0324***<br>(0.003)  | 0.0323***<br>(0.003)  |
| Observations                                                            | 775                   | 775                   | 775                   | 775                   | 775                        | 775                   | 775                   | 775                   |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10  
Robust standard errors in parentheses.

**TABLE A3. Regression Analyses for Parties' Portfolio Allocations (Non-Weighted) with Additive Log Ratio Transformation and Clustered Standard Errors**

|                                   | DV: <i>AddLogRatio(Portfolio Share)</i> |                      |                     |                      |                                      |                      |                      |                      |
|-----------------------------------|-----------------------------------------|----------------------|---------------------|----------------------|--------------------------------------|----------------------|----------------------|----------------------|
|                                   | Time Out of Office in Absolute Terms    |                      |                     |                      | Time Out of Office in Relative Terms |                      |                      |                      |
|                                   | (1)                                     | (2)                  | (3)                 | (4)                  | (5)                                  | (6)                  | (7)                  | (8)                  |
| <i>AddLogRatio(Seat Share)</i>    | 0.578***<br>(0.038)                     | 0.580***<br>(0.038)  | 0.578***<br>(0.038) | 0.580***<br>(0.038)  | 0.580***<br>(0.039)                  | 0.580***<br>(0.039)  | 0.580***<br>(0.039)  | 0.580***<br>(0.039)  |
| <i>AddLogRatio(Voting Weight)</i> | 0.219***<br>(0.049)                     | 0.213***<br>(0.048)  | 0.219***<br>(0.049) | 0.213***<br>(0.048)  | 0.212***<br>(0.049)                  | 0.212***<br>(0.049)  | 0.212***<br>(0.049)  | 0.212***<br>(0.049)  |
| <i>Formateur</i>                  | -0.053<br>(0.056)                       | -0.049<br>(0.056)    | -0.049<br>(0.059)   | -0.051<br>(0.060)    | -0.050<br>(0.056)                    | -0.046<br>(0.056)    | -0.050<br>(0.056)    | -0.046<br>(0.056)    |
| <i>Time Out of Office (Y)</i>     | -0.007**<br>(0.003)                     |                      | -0.007**<br>(0.003) |                      | -0.010***<br>(0.003)                 |                      | -0.010***<br>(0.003) |                      |
| <i>Time Out of Office (F)</i>     |                                         | -0.010***<br>(0.003) |                     | -0.010***<br>(0.003) |                                      | -0.010***<br>(0.002) |                      | -0.010***<br>(0.002) |
| <i>TOO (M) * Formateur</i>        |                                         |                      | -0.004<br>(0.005)   |                      |                                      |                      | 0.001<br>(0.007)     |                      |
| <i>TOO (F) * Formateur</i>        |                                         |                      |                     | 0.002<br>(0.008)     |                                      |                      |                      | -0.003<br>(0.008)    |
| <i>Care-taker</i>                 | 0.281*<br>(0.145)                       | 0.287**<br>(0.145)   | 0.281*<br>(0.145)   | 0.287**<br>(0.146)   | 0.285**<br>(0.139)                   | 0.286**<br>(0.138)   | 0.285**<br>(0.139)   | 0.286**<br>(0.139)   |
| <i>Constant</i>                   | 0.052<br>(0.033)                        | 0.049<br>(0.032)     | 0.052<br>(0.033)    | 0.049<br>(0.032)     | 0.037<br>(0.031)                     | 0.036<br>(0.031)     | 0.037<br>(0.031)     | 0.036<br>(0.031)     |
| Observations                      | 486                                     | 486                  | 486                 | 486                  | 486                                  | 486                  | 486                  | 486                  |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Standard errors clustered by cabinet in parentheses.



**TABLE A4. Regression Analyses for Parties' Portfolio Allocations (Weighted) with Additive Log Ratio Transformation and Clustered Standard Errors**

|                                   | DV: <i>AddLogRatio(Portfolio Share)</i> |                      |                      |                      |                                      |                      |                      |                      |
|-----------------------------------|-----------------------------------------|----------------------|----------------------|----------------------|--------------------------------------|----------------------|----------------------|----------------------|
|                                   | Time Out of Office in Absolute Terms    |                      |                      |                      | Time Out of Office in Relative Terms |                      |                      |                      |
|                                   | (1)                                     | (2)                  | (3)                  | (4)                  | (5)                                  | (6)                  | (7)                  | (8)                  |
| <i>AddLogRatio(Seat Share)</i>    | 0.567***<br>(0.040)                     | 0.570***<br>(0.039)  | 0.567***<br>(0.040)  | 0.570***<br>(0.039)  | 0.571***<br>(0.040)                  | 0.571***<br>(0.040)  | 0.570***<br>(0.040)  | 0.571***<br>(0.040)  |
| <i>AddLogRatio(Voting Weight)</i> | 0.227***<br>(0.050)                     | 0.217***<br>(0.049)  | 0.227***<br>(0.050)  | 0.217***<br>(0.049)  | 0.216***<br>(0.051)                  | 0.215***<br>(0.050)  | 0.216***<br>(0.051)  | 0.215***<br>(0.050)  |
| <i>Formateur</i>                  | 0.261***<br>(0.054)                     | 0.269***<br>(0.054)  | 0.263***<br>(0.057)  | 0.266***<br>(0.057)  | 0.269***<br>(0.055)                  | 0.274***<br>(0.054)  | 0.272***<br>(0.055)  | 0.274***<br>(0.054)  |
| <i>Time Out of Office (Y)</i>     | -0.010***<br>(0.003)                    |                      | -0.010***<br>(0.004) |                      | -0.013***<br>(0.004)                 |                      | -0.013***<br>(0.004) |                      |
| <i>Time Out of Office (F)</i>     |                                         | -0.013***<br>(0.003) |                      | -0.013***<br>(0.003) |                                      | -0.012***<br>(0.003) |                      | -0.012***<br>(0.003) |
| <i>TOO (M) * Formateur</i>        |                                         |                      | -0.002<br>(0.005)    |                      |                                      |                      | 0.010<br>(0.011)     |                      |
| <i>TOO (F) * Formateur</i>        |                                         |                      |                      | 0.003<br>(0.007)     |                                      |                      |                      | -0.001<br>(0.010)    |
| <i>Care-taker</i>                 | 0.273***<br>(0.094)                     | 0.283***<br>(0.092)  | 0.273***<br>(0.094)  | 0.283***<br>(0.093)  | 0.280***<br>(0.083)                  | 0.280***<br>(0.083)  | 0.280***<br>(0.084)  | 0.280***<br>(0.083)  |
| <i>Constant</i>                   | -0.092***<br>(0.032)                    | -0.100***<br>(0.031) | -0.092***<br>(0.032) | -0.100***<br>(0.031) | -0.117***<br>(0.031)                 | -0.119***<br>(0.031) | -0.117***<br>(0.031) | -0.119***<br>(0.031) |
| Observations                      | 486                                     | 486                  | 486                  | 486                  | 486                                  | 486                  | 486                  | 486                  |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

Standard errors clustered by cabinet in parentheses.

**TABLE A5. Regression Analyses for Parties' Portfolio Allocations (Non-Weighted) with Clustered Standard Errors**

|                                | Time Out of Office in Absolute Terms |                      |                      |                      |                            |                      |                      |                      | Time Out of Office in Relative Terms |                      |                      |                      |                            |                      |                      |                      |
|--------------------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|
|                                | DV: Portfolio Share                  |                      |                      |                      | DV: Portfolio Differential |                      |                      |                      | DV: Portfolio Share                  |                      |                      |                      | DV: Portfolio Differential |                      |                      |                      |
|                                | (1)                                  | (2)                  | (3)                  | (4)                  | (5)                        | (6)                  | (7)                  | (8)                  | (9)                                  | (10)                 | (11)                 | (12)                 | (13)                       | (14)                 | (15)                 | (16)                 |
| <i>Seat Share</i>              | 0.782***<br>(0.023)                  | 0.781***<br>(0.023)  | 0.782***<br>(0.023)  | 0.781***<br>(0.023)  |                            |                      |                      |                      | 0.782***<br>(0.023)                  | 0.781***<br>(0.023)  | 0.782***<br>(0.023)  | 0.782***<br>(0.023)  |                            |                      |                      |                      |
| <i>Voting Weight</i>           | 0.109***<br>(0.031)                  | 0.109***<br>(0.031)  | 0.109***<br>(0.031)  | 0.111***<br>(0.031)  |                            |                      |                      |                      | 0.111***<br>(0.031)                  | 0.111***<br>(0.031)  | 0.110***<br>(0.031)  | 0.110***<br>(0.031)  |                            |                      |                      |                      |
| <i>Bargaining Differential</i> |                                      |                      |                      |                      | 0.202***<br>(0.027)        | 0.203***<br>(0.027)  | 0.203***<br>(0.027)  | 0.204***<br>(0.027)  |                                      |                      |                      |                      | 0.203***<br>(0.027)        | 0.203***<br>(0.027)  | 0.203***<br>(0.027)  | 0.203***<br>(0.027)  |
| <i>Formateur</i>               | -0.035***<br>(0.009)                 | -0.035***<br>(0.009) | -0.035***<br>(0.010) | -0.037***<br>(0.010) | -0.058***<br>(0.009)       | -0.059***<br>(0.009) | -0.059***<br>(0.010) | -0.061***<br>(0.010) | -0.035***<br>(0.009)                 | -0.035***<br>(0.009) | -0.034***<br>(0.009) | -0.034***<br>(0.009) | -0.059***<br>(0.009)       | -0.058***<br>(0.009) | -0.058***<br>(0.009) | -0.058***<br>(0.009) |
| <i>Time Out of Office (Y)</i>  | -0.001<br>(0.000)                    |                      | -0.001<br>(0.000)    |                      | -0.001<br>(0.000)          |                      | -0.001<br>(0.000)    |                      | -0.001**<br>(0.000)                  |                      | -0.001***<br>(0.000) |                      | -0.001**<br>(0.000)        |                      | -0.001***<br>(0.000) |                      |
| <i>Time Out of Office (F)</i>  |                                      | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |                            | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |                                      | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |                            | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |
| <i>TOO (M) * Formateur</i>     |                                      |                      | 0.000<br>(0.001)     |                      |                            |                      | 0.001<br>(0.001)     |                      |                                      |                      | 0.001<br>(0.001)     |                      |                            |                      | 0.001<br>(0.001)     |                      |
| <i>TOO (F) * Formateur</i>     |                                      |                      |                      | 0.002<br>(0.002)     |                            |                      |                      | 0.004*<br>(0.002)    |                                      |                      |                      | 0.002<br>(0.002)     |                            |                      |                      | 0.001<br>(0.002)     |
| <i>Care-taker</i>              | 0.015**<br>(0.007)                   | 0.016**<br>(0.006)   | 0.015**<br>(0.007)   | 0.016**<br>(0.006)   | 0.014***<br>(0.002)        | 0.015***<br>(0.002)  | 0.015***<br>(0.002)  | 0.016***<br>(0.002)  | 0.015**<br>(0.007)                   | 0.015**<br>(0.007)   | 0.016**<br>(0.007)   | 0.016**<br>(0.007)   | 0.015***<br>(0.002)        | 0.015***<br>(0.002)  | 0.015***<br>(0.002)  | 0.015***<br>(0.002)  |
| <i>Constant</i>                | 0.063***<br>(0.004)                  | 0.064***<br>(0.004)  | 0.063***<br>(0.004)  | 0.064***<br>(0.004)  | 0.046***<br>(0.003)        | 0.047***<br>(0.003)  | 0.047***<br>(0.003)  | 0.048***<br>(0.003)  | 0.062***<br>(0.004)                  | 0.062***<br>(0.004)  | 0.062***<br>(0.004)  | 0.062***<br>(0.004)  | 0.046***<br>(0.003)        | 0.046***<br>(0.003)  | 0.046***<br>(0.003)  | 0.046***<br>(0.003)  |
| Observations                   | 775                                  | 775                  | 775                  | 775                  | 775                        | 775                  | 775                  | 775                  | 775                                  | 775                  | 775                  | 775                  | 775                        | 775                  | 775                  | 775                  |
| Number of groups (Governments) | 259                                  | 259                  | 259                  | 259                  | 259                        | 259                  | 259                  | 259                  | 259                                  | 259                  | 259                  | 259                  | 259                        | 259                  | 259                  | 259                  |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10  
Standard errors clustered by cabinet in parentheses.

**TABLE A6. Regression Analyses for Parties' Portfolio Allocations (Weighted) with Clustered Standard Errors**

|                                | Time Out of Office in Absolute Terms |                      |                     |                      |                            |                      |                     |                      | Time Out of Office in Relative Terms |                      |                      |                      |                            |                      |                      |                      |
|--------------------------------|--------------------------------------|----------------------|---------------------|----------------------|----------------------------|----------------------|---------------------|----------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|
|                                | DV: Portfolio Share                  |                      |                     |                      | DV: Portfolio Differential |                      |                     |                      | DV: Portfolio Share                  |                      |                      |                      | DV: Portfolio Differential |                      |                      |                      |
|                                | (1)                                  | (2)                  | (3)                 | (4)                  | (5)                        | (6)                  | (7)                 | (8)                  | (9)                                  | (10)                 | (11)                 | (12)                 | (13)                       | (14)                 | (15)                 | (16)                 |
| <i>Seat Share</i>              | 0.763***<br>(0.021)                  | 0.761***<br>(0.021)  | 0.762***<br>(0.021) | 0.760***<br>(0.021)  |                            |                      |                     |                      | 0.762***<br>(0.021)                  | 0.761***<br>(0.021)  | 0.762***<br>(0.021)  | 0.762***<br>(0.021)  |                            |                      |                      |                      |
| <i>Voting Weight</i>           | 0.101***<br>(0.028)                  | 0.102***<br>(0.028)  | 0.104***<br>(0.028) | 0.106***<br>(0.028)  |                            |                      |                     |                      | 0.104***<br>(0.028)                  | 0.104***<br>(0.028)  | 0.103***<br>(0.028)  | 0.103***<br>(0.028)  |                            |                      |                      |                      |
| <i>Bargaining Differential</i> |                                      |                      |                     |                      | 0.218***<br>(0.027)        | 0.219***<br>(0.027)  | 0.221***<br>(0.027) | 0.221***<br>(0.027)  |                                      |                      |                      |                      | 0.219***<br>(0.027)        | 0.220***<br>(0.027)  | 0.219***<br>(0.027)  | 0.219***<br>(0.027)  |
| <i>Formateur</i>               | 0.018**<br>(0.009)                   | 0.018**<br>(0.009)   | 0.017*<br>(0.009)   | 0.015*<br>(0.009)    | -0.011<br>(0.009)          | -0.012<br>(0.009)    | -0.014<br>(0.010)   | -0.015<br>(0.010)    | 0.017*<br>(0.009)                    | 0.018**<br>(0.009)   | 0.019**<br>(0.009)   | 0.019**<br>(0.009)   | -0.012<br>(0.009)          | -0.012<br>(0.009)    | -0.011<br>(0.009)    | -0.011<br>(0.009)    |
| <i>Time Out of Office (Y)</i>  | -0.001*<br>(0.000)                   |                      | -0.001*<br>(0.001)  |                      | -0.001<br>(0.000)          |                      | -0.001**<br>(0.000) |                      | -0.001**<br>(0.001)                  |                      | -0.002***<br>(0.001) |                      | -0.002***<br>(0.001)       |                      | -0.002***<br>(0.001) |                      |
| <i>Time Out of Office (F)</i>  |                                      | -0.001***<br>(0.000) |                     | -0.002***<br>(0.000) |                            | -0.001***<br>(0.000) |                     | -0.002***<br>(0.000) |                                      | -0.002***<br>(0.000) |                      | -0.002***<br>(0.000) |                            | -0.002***<br>(0.000) |                      | -0.002***<br>(0.001) |
| <i>TOO (M) * Formateur</i>     |                                      |                      | 0.001<br>(0.001)    |                      |                            |                      | 0.002<br>(0.002)    |                      |                                      |                      | 0.003*<br>(0.001)    |                      |                            |                      | 0.002<br>(0.001)     |                      |
| <i>TOO (F) * Formateur</i>     |                                      |                      |                     | 0.004*<br>(0.002)    |                            |                      |                     | 0.005**<br>(0.002)   |                                      |                      |                      | 0.003<br>(0.002)     |                            |                      |                      | 0.003<br>(0.002)     |
| <i>Care-taker</i>              | 0.012**<br>(0.005)                   | 0.013***<br>(0.005)  | 0.013**<br>(0.005)  | 0.014***<br>(0.005)  | 0.012***<br>(0.002)        | 0.012***<br>(0.003)  | 0.013***<br>(0.003) | 0.014***<br>(0.003)  | 0.013**<br>(0.006)                   | 0.013**<br>(0.006)   | 0.013**<br>(0.005)   | 0.014***<br>(0.005)  | 0.012***<br>(0.002)        | 0.012***<br>(0.002)  | 0.012***<br>(0.002)  | 0.013***<br>(0.002)  |
| <i>Constant</i>                | 0.054***<br>(0.004)                  | 0.055***<br>(0.004)  | 0.054***<br>(0.004) | 0.055***<br>(0.004)  | 0.034***<br>(0.003)        | 0.034***<br>(0.003)  | 0.035***<br>(0.003) | 0.035***<br>(0.003)  | 0.053***<br>(0.004)                  | 0.053***<br>(0.004)  | 0.053***<br>(0.004)  | 0.053***<br>(0.004)  | 0.033***<br>(0.003)        | 0.033***<br>(0.003)  | 0.033***<br>(0.003)  | 0.033***<br>(0.003)  |
| Observations                   | 775                                  | 775                  | 775                 | 775                  | 775                        | 775                  | 775                 | 775                  | 775                                  | 775                  | 775                  | 775                  | 775                        | 775                  | 775                  | 775                  |
| Number of groups (Governments) | 259                                  | 259                  | 259                 | 259                  | 259                        | 259                  | 259                 | 259                  | 259                                  | 259                  | 259                  | 259                  | 259                        | 259                  | 259                  | 259                  |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10  
Standard errors clustered by cabinet in parentheses.

**TABLE A7. Regression Analyses for Parties' Portfolio Allocations (Non-Weighted) with Fixed Effects**

|                                | Time Out of Office in Absolute Terms |                      |                      |                      |                            |                      |                      |                      | Time Out of Office in Relative Terms |                      |                      |                      |                            |                      |                      |                      |
|--------------------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|
|                                | DV: Portfolio Share                  |                      |                      |                      | DV: Portfolio Differential |                      |                      |                      | DV: Portfolio Share                  |                      |                      |                      | DV: Portfolio Differential |                      |                      |                      |
|                                | (1)                                  | (2)                  | (3)                  | (4)                  | (5)                        | (6)                  | (7)                  | (8)                  | (9)                                  | (10)                 | (11)                 | (12)                 | (13)                       | (14)                 | (15)                 | (16)                 |
| <i>Seat Share</i>              | 0.760***<br>(0.021)                  | 0.760***<br>(0.020)  | 0.760***<br>(0.021)  | 0.760***<br>(0.020)  |                            |                      |                      |                      | 0.760***<br>(0.021)                  | 0.760***<br>(0.021)  | 0.760***<br>(0.021)  | 0.760***<br>(0.021)  |                            |                      |                      |                      |
| <i>Voting Weight</i>           | 0.097***<br>(0.028)                  | 0.097***<br>(0.028)  | 0.097***<br>(0.029)  | 0.099***<br>(0.028)  |                            |                      |                      |                      | 0.098***<br>(0.028)                  | 0.098***<br>(0.028)  | 0.097***<br>(0.028)  | 0.098***<br>(0.028)  |                            |                      |                      |                      |
| <i>Bargaining Differential</i> |                                      |                      |                      |                      | 0.220***<br>(0.025)        | 0.220***<br>(0.025)  | 0.221***<br>(0.025)  | 0.221***<br>(0.025)  |                                      |                      |                      |                      | 0.220***<br>(0.025)        | 0.220***<br>(0.025)  | 0.220***<br>(0.025)  | 0.220***<br>(0.025)  |
| <i>Formateur</i>               | -0.031***<br>(0.008)                 | -0.030***<br>(0.008) | -0.030***<br>(0.008) | -0.031***<br>(0.008) | -0.060***<br>(0.008)       | -0.060***<br>(0.008) | -0.061***<br>(0.008) | -0.062***<br>(0.008) | -0.031***<br>(0.008)                 | -0.031***<br>(0.008) | -0.030***<br>(0.008) | -0.030***<br>(0.008) | -0.060***<br>(0.008)       | -0.060***<br>(0.008) | -0.059***<br>(0.008) | -0.059***<br>(0.008) |
| <i>Time Out of Office (Y)</i>  | -0.001***<br>(0.000)                 |                      | -0.001**<br>(0.000)  |                      | -0.001**<br>(0.000)        |                      | -0.001***<br>(0.000) |                      | -0.001**<br>(0.000)                  |                      | -0.002***<br>(0.000) |                      | -0.001***<br>(0.000)       |                      | -0.002***<br>(0.000) |                      |
| <i>Time Out of Office (F)</i>  |                                      | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |                            | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |                                      | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |                            | -0.001***<br>(0.000) |                      | -0.001***<br>(0.000) |
| <i>TOO (M) * Formateur</i>     |                                      |                      | -0.000<br>(0.001)    |                      |                            |                      | 0.001<br>(0.001)     |                      |                                      |                      | 0.002<br>(0.001)     |                      |                            |                      | 0.001<br>(0.001)     |                      |
| <i>TOO (F) * Formateur</i>     |                                      |                      |                      | 0.001<br>(0.002)     |                            |                      |                      | 0.003<br>(0.002)     |                                      |                      |                      | 0.001<br>(0.002)     |                            |                      |                      | 0.001<br>(0.002)     |
| <i>Care-taker</i>              | 0.020<br>(0.023)                     | 0.020<br>(0.023)     | 0.019<br>(0.023)     | 0.020<br>(0.023)     | 0.021<br>(0.025)           | 0.021<br>(0.025)     | 0.022<br>(0.025)     | 0.022<br>(0.025)     | 0.019<br>(0.023)                     | 0.019<br>(0.023)     | 0.020<br>(0.023)     | 0.019<br>(0.023)     | 0.021<br>(0.025)           | 0.021<br>(0.025)     | 0.021<br>(0.025)     | 0.021<br>(0.025)     |
| <i>Constant</i>                | 0.072***<br>(0.004)                  | 0.072***<br>(0.004)  | 0.072***<br>(0.004)  | 0.072***<br>(0.004)  | 0.050***<br>(0.003)        | 0.050***<br>(0.003)  | 0.050***<br>(0.003)  | 0.050***<br>(0.003)  | 0.070***<br>(0.004)                  | 0.070***<br>(0.004)  | 0.071***<br>(0.004)  | 0.070***<br>(0.004)  | 0.048***<br>(0.003)        | 0.048***<br>(0.003)  | 0.048***<br>(0.003)  | 0.048***<br>(0.003)  |
| Observations                   | 775                                  | 775                  | 775                  | 775                  | 775                        | 775                  | 775                  | 775                  | 775                                  | 775                  | 775                  | 775                  | 775                        | 775                  | 775                  | 775                  |
| Number of countries            | 14                                   | 14                   | 14                   | 14                   | 14                         | 14                   | 14                   | 14                   | 14                                   | 14                   | 14                   | 14                   | 14                         | 14                   | 14                   | 14                   |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10  
Robust standard errors in parentheses.

**TABLE A8. Regression Analyses for Parties' Portfolio Allocations (Weighted) with Fixed Effects**

|                                | Time Out of Office in Absolute Terms |                      |                      |                      |                            |                      |                      |                      | Time Out of Office in Relative Terms |                      |                      |                      |                            |                      |                      |                      |
|--------------------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|--------------------------------------|----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------|
|                                | DV: Portfolio Share                  |                      |                      |                      | DV: Portfolio Differential |                      |                      |                      | DV: Portfolio Share                  |                      |                      |                      | DV: Portfolio Differential |                      |                      |                      |
|                                | (1)                                  | (2)                  | (3)                  | (4)                  | (5)                        | (6)                  | (7)                  | (8)                  | (9)                                  | (10)                 | (11)                 | (12)                 | (13)                       | (14)                 | (15)                 | (16)                 |
| <i>Seat Share</i>              | 0.743***<br>(0.019)                  | 0.743***<br>(0.019)  | 0.742***<br>(0.019)  | 0.742***<br>(0.019)  |                            |                      |                      |                      | 0.743***<br>(0.019)                  | 0.742***<br>(0.019)  | 0.743***<br>(0.019)  | 0.743***<br>(0.020)  |                            |                      |                      |                      |
| <i>Voting Weight</i>           | 0.092***<br>(0.026)                  | 0.092***<br>(0.026)  | 0.093***<br>(0.026)  | 0.095***<br>(0.026)  |                            |                      |                      |                      | 0.093***<br>(0.026)                  | 0.093***<br>(0.026)  | 0.091***<br>(0.026)  | 0.092***<br>(0.026)  |                            |                      |                      |                      |
| <i>Bargaining Differential</i> |                                      |                      |                      |                      | 0.234***<br>(0.026)        | 0.234***<br>(0.026)  | 0.236***<br>(0.026)  | 0.235***<br>(0.026)  |                                      |                      |                      |                      | 0.234***<br>(0.026)        | 0.234***<br>(0.026)  | 0.234***<br>(0.026)  | 0.233***<br>(0.026)  |
| <i>Formateur</i>               | 0.022***<br>(0.007)                  | 0.022***<br>(0.007)  | 0.021***<br>(0.008)  | 0.020**<br>(0.008)   | -0.012<br>(0.008)          | -0.012<br>(0.008)    | -0.014*<br>(0.008)   | -0.015*<br>(0.008)   | 0.021***<br>(0.007)                  | 0.022***<br>(0.007)  | 0.023***<br>(0.007)  | 0.022***<br>(0.007)  | -0.012<br>(0.008)          | -0.012<br>(0.008)    | -0.011<br>(0.008)    | -0.011<br>(0.008)    |
| <i>Time Out of Office (Y)</i>  | -0.001**<br>(0.000)                  |                      | -0.001***<br>(0.000) |                      | -0.001**<br>(0.000)        |                      | -0.001***<br>(0.000) |                      | -0.002***<br>(0.001)                 |                      | -0.002***<br>(0.001) |                      | -0.002***<br>(0.001)       |                      | -0.002***<br>(0.001) |                      |
| <i>Time Out of Office (F)</i>  |                                      | -0.001***<br>(0.000) |                      | -0.002***<br>(0.000) |                            | -0.001***<br>(0.000) |                      | -0.002***<br>(0.000) |                                      | -0.002***<br>(0.000) |                      | -0.002***<br>(0.000) |                            | -0.002***<br>(0.001) |                      | -0.002***<br>(0.001) |
| <i>TOO (M) * Formateur</i>     |                                      |                      | 0.001<br>(0.001)     |                      |                            |                      | 0.002<br>(0.001)     |                      |                                      |                      | 0.003**<br>(0.001)   |                      |                            |                      | 0.002*<br>(0.001)    |                      |
| <i>TOO (F) * Formateur</i>     |                                      |                      |                      | 0.003<br>(0.002)     |                            |                      |                      | 0.005**<br>(0.002)   |                                      |                      |                      | 0.002<br>(0.002)     |                            |                      |                      | 0.002<br>(0.002)     |
| <i>Care-taker</i>              | 0.017<br>(0.019)                     | 0.017<br>(0.019)     | 0.017<br>(0.019)     | 0.017<br>(0.019)     | 0.019<br>(0.020)           | 0.019<br>(0.020)     | 0.020<br>(0.019)     | 0.020<br>(0.019)     | 0.016<br>(0.019)                     | 0.016<br>(0.019)     | 0.017<br>(0.019)     | 0.017<br>(0.019)     | 0.018<br>(0.020)           | 0.018<br>(0.020)     | 0.019<br>(0.020)     | 0.019<br>(0.020)     |
| <i>Constant</i>                | 0.062***<br>(0.004)                  | 0.062***<br>(0.004)  | 0.062***<br>(0.004)  | 0.062***<br>(0.004)  | 0.036***<br>(0.003)        | 0.036***<br>(0.003)  | 0.037***<br>(0.003)  | 0.037***<br>(0.003)  | 0.060***<br>(0.004)                  | 0.060***<br>(0.004)  | 0.060***<br>(0.004)  | 0.060***<br>(0.004)  | 0.035***<br>(0.003)        | 0.035***<br>(0.003)  | 0.035***<br>(0.003)  | 0.035***<br>(0.003)  |
| Observations                   | 775                                  | 775                  | 775                  | 775                  | 775                        | 775                  | 775                  | 775                  | 775                                  | 775                  | 775                  | 775                  | 775                        | 775                  | 775                  | 775                  |
| Number of countries            | 14                                   | 14                   | 14                   | 14                   | 14                         | 14                   | 14                   | 14                   | 14                                   | 14                   | 14                   | 14                   | 14                         | 14                   | 14                   | 14                   |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10  
Robust standard errors in parentheses.

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