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ABSTRACT

In parliamentary democracies, parties negotiate with each other to form a coalition, and the resulting portfolio allocation reflects their bargaining outcome over coalition payoffs. This study demonstrates that the share of portfolios given to the prime minister's party often reflects neither proportionality nor formateur advantage theories because portfolios are used to defuse tensions among coalition partners as well as to reward them for joining a coalition. The empirical work shows that the prime minister's party surrenders more portfolios not only as its bargaining power in assembling a coalition declines, but also as the policy preferences of coalition partners become more divergent because of the need to put together the coalition.

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1. INTRODUCTION

In the existing literature on coalition governance, some argue that cabinet portfolios will be allocated *proportional* to a party's seat share in the coalition, while others argue that the formateur party—the party formally given the first opportunity to build a coalition and typically the party from which the prime minister hails—will get a share that is *more than proportional* to its seat share. However, prime ministerial parties do not appear to enjoy any advantage in portfolio allocation even though prime ministers take a leading role in the negotiations between parties. Moreover, their allocation outcomes actually vary considerably over time and across countries. Why do sometimes prime ministerial parties receive far fewer portfolios than their seat shares while at other times they do not?

The considerable variation in allocation outcomes suggests that, unlike in the existing literature, cabinet portfolios may not be simply allocated among coalition member parties dependent upon the resources they contribute to the establishment of a coalition. Furthermore, while the allocation of cabinet portfolios has been discussed in the context of forming a winning coalition in the parliament, the formation of a coalition alone may not fully explain portfolio allocations. To provide a more accurate picture of the mechanisms at work in portfolio allocation, this paper examines the various changes in the portfolio share given to the prime minister's party, because an exclusive focus on the prime minister's party will allow us to investigate the allocation mechanisms in particular by controlling for party status in the government.

In this paper, to understand the significant variation in allocation outcomes, I propose a theoretical framework that accounts for portfolio allocation as a product of bargaining between parties concerned about policy payoffs as well as office payoffs resulting from the formation of a coalition government. These concerns affect the bargains that parties will choose to strike with potential and existing coalition partners because the influence over government policies varies by

the type of party. The framework builds from a core premise: the prime minister's party has a greater control over policy than other parties in the government. Since every party knows that the prime minister is able to exert considerable influence in the process of making government policies, in order to form a coalition, the prime minister's party needs to compensate coalition partners for their future policy concessions in the bargaining over cabinet portfolios.

From this theoretical framework, I develop testable hypotheses that articulate the circumstances under which the prime minister's party is likely to surrender various numbers of cabinet seats. I then conduct a series of empirical analyses using data drawn from coalition governments in thirteen Western European countries. The empirical work demonstrates that the prime minister's party surrenders more portfolios not only as it gains a greater advantage over policies in the government, but also as coalition partners need to make greater concessions to the prime minister's party due to divergent policy preferences among them. These results suggest that portfolio allocation works as an important instrument for the prime minister to defuse tensions among coalition parties as well as to reward them for joining a coalition; therefore, the share of portfolios given to the prime minister's party often reflects neither proportionality nor formateur advantage theories.

2. PATTERNS OF PORTFOLIO ALLOCATION

The existing literature on coalition governments treats cabinet portfolios as a reward for joining a coalition and examines how they are distributed among parties in the process of coalition formation. In the literature, two approaches explain the numerical distribution of cabinet portfolios, one empirical and the other theoretical. The empirical research tradition shows that the share of portfolios given to each party in a coalition is *proportional* to the amount of

resources the party contributes to the coalition, most notably the share of parliamentary seats (Gamson 1961; Browne and Franklin 1973; Browne and Frendreis 1980). This proportionality proposition is called “Gamson’s Law.” The other research tradition relies on formal theories that focus on the institutional role of the agenda-setter—formateur party advantage (Baron and Ferejohn 1989). This tradition of studies predicts that the formateur party will gain a share of portfolios that is *more than proportional* to its seat share within the coalition.

The main concern of previous studies of portfolio allocation has been to explain the apparent contradiction between these two traditions. These studies particularly focus on testing the proportionality of distributed portfolios and the existence of a formateur advantage. Scholars disagree over whether the formateur party takes a larger share of portfolios than other coalition partners do (Diermeier and Morton 2005; Fréchette et al. 2005; Ansolabehere et al. 2005), but empirical studies show that coalition parties overall tend to receive proportional shares of portfolios in relation to their seat shares in the coalition (Warwick and Druckman 2001, 2006; Druckman and Warwick 2005).¹

Despite the voluminous literature on portfolio allocation, however, an important systematic deviation from proportionality and much of the variation in allocation outcomes have yet to be accounted for. If we scrutinize the relationship between portfolio shares and seat shares in Western European countries, we find that the pattern of allocation is different between prime ministerial parties and other junior parties; the prime minister’s party often receives *fewer* portfolios than it should under prevailing proportionality and formateur-advantage theories (see

¹ Some recent studies attempt to explain the logic behind the proportional allocation of cabinet portfolios (e.g., Morelli 1999; Carroll and Cox 2007) because empirical studies do not account for the proportional tendency in overall allocation outcomes.

Warwick and Druckman 2001). Furthermore, there is also considerable variation in their allocation outcomes across countries and over time within countries.²

These allocation patterns in thirteen Western European countries between 1945 and 2000 show that contrary to proportionality and formateur-advantage theories, the prime minister's party often receives a smaller share of portfolios than its seat share. Moreover, the degree of deviation from proportionality varies greatly across cabinets as well as across countries. The existing studies examine the overall trend of portfolio shares allocated to coalition member parties and do not explain various important changes in portfolio allocations. For instance, Browne and Frensdreis (1980) argue that larger parties tend to receive fewer portfolios than their seat shares because those parties are able to surrender portfolios without losing control of the cabinet. They call this the "relative weakness effect." Since a prime minister often hails from the largest party within the coalition (Warwick 1996; Martin and Stevenson 2001), some might think that what we observe here is because of this relative weakness effect. However, this effect does not fully account for the prime ministerial parties' negative deviations from proportionality, because they still experience the same tendency even when their size is relatively small within

² Schofield and Laver (1985; 1990) attempt to explain the country-by-country variations in allocation outcomes and argue that coalition systems can be classified into the two types: those in which the proportionality norm is used to allocate portfolios and those in which the bargaining norm is used. They suggest that the bargaining norm is dominant where the bargaining environment is less stable because coalitions tend to be relatively short-lived and parties seek more direct access to policy payoffs under such circumstances. Their explanation, however, cannot account for the significant changes in portfolio allocation over time within countries.

the coalitions.³ Warwick and Druckman (2001) also argue that the under-compensation to the prime minister's party could be explained by the inherent value of the prime minister's post because portfolio weights may not accurately reflect the importance of cabinet ministers. However, these weights cannot explain the variation in allocation outcomes sufficiently. In the following sections, this study examines the significant variation in portfolio allocation outcomes in order to understand the bargaining dynamics in coalition governments.

3. PRIME MINISTERS AND POLICY INFLUENCE

As a key mechanism that underlies portfolio allocation, I emphasize the importance of the influence of parties over government policies at the policy-making stage because, at the bargaining table, political parties are seeking not merely to maximize their control over cabinet portfolios but also to attain their preferred policy outcomes after they form a coalition. Political parties that wish to form a coalition government have to negotiate with each other about common policies that they are going to pursue, and it is not always easy for them to overcome their differences as they do not want to sacrifice their policy goals to compromise with other parties. The electorate expects individual parties to pull government policies toward the position that they had announced during the electoral campaign (Kedar 2005). Since parties will face the electorate in the future, they fear that voters will discredit them for making too many compromises in the coalition. In order to avoid being punished by voters, coalition parties work to advance government bills and policies in ways that they can use to appeal to their supporters.

³ Among the prime ministerial parties whose size is smaller than the average value in the dataset (130 cases), 65.4% of them (85 cases) have a negative deviation from proportionality in allocation outcomes.

Such coalition parties are not equally able to exert influence over government policies. The influence varies by the type of party. In coalition governments, prime ministerial parties typically have greater control over policy than other parties because the institutional rules favor the prime minister over other ministers (see Bergman et al. 2003). By using such powers as setting the agenda and controlling ministerial jurisdictions, prime ministers can wield enormous influence in the process of managing the coalition government. For instance, the confidence vote procedure allows the prime minister to suppress rebellion and to solve potential conflicts within the government; thus, the prime minister's party can pull government policies toward its ideal position by using the ability of attaching a confidence motion to government bills (Huber 1996). Furthermore, the prime minister's party is in an advantageous position in finding a mutually beneficial agreement among coalition parties when they make government policies because, as the agenda setter of the cabinet, the prime minister is able to choose a policy that he/she prefers from a set of policies agreeable among coalition parties (see Tsebelis 2002). While individual ministers are able to make policy proposals in their jurisdictions, the prime minister of a coalition government actively engages in building consensus among cabinet ministers with different interests.⁴ Indeed, cabinet ministers in Western European countries report that they usually consult with the prime minister when they experience a conflict with other ministers or when they wish to raise a controversial issue in the cabinet (Müller et al. 1993). Accordingly, overall

⁴ In contrast to the assumption about cabinet portfolios made by Laver and Sheplse (1996), policy outcomes of coalition governments are not necessarily the product of ministerial autonomy (see Warwick 1999; Tsebelis 2002, 106-109). For instance, junior ministers are appointed from different parties than the corresponding ministers so that they can monitor each other (Thies 2001).

policy outcomes of coalition governments are often biased toward the preferences of the prime minister's party (Warwick 2001). The result of an expert survey also indicates that the position of the prime minister receives the highest rating among cabinet ministers in those countries (Druckman and Warwick 2005). Therefore, as we have seen in Germany after the 2005 election, political parties seek to occupy the premiership when they form a coalition government. These results suggest that the prime minister's party plays a significant role in a coalition government in exerting a considerable influence over government policies.

The difference of policy influence between parties affects portfolio allocation. As the prime minister's party can exploit its position to exert more influence on policy than other parties in a coalition government, it is willing to trade off on the number of portfolios; on the other hand, coalition partners demand more portfolios to compensate them for their potential disadvantage in the policy-making process. To put it differently, at the bargaining table, the prime minister's party has "weakened" bargaining leverage in portfolio allocation because of the advantage of policy control given to the prime minister. Once parties decide to form a coalition, they have to be concerned about governance at the policy-making stage in order to achieve their policy goals. These concerns about governance affect the outcomes of bargaining over cabinet portfolios. At the time of negotiation, if you think you are going to be prime minister, you know that you are able to have greater influence over policy than other parties. Similarly, if other parties think you are going to be prime minister, they know that you can exert considerable influence in the process of making government policies. As everyone knows that the prospective prime minister is going to be able to enjoy a significant advantage in governance later on, the prime minister's party has to strike a bargain over cabinet portfolios not only to assemble a majority winning coalition in the parliament, but also to compensate coalition members for their inherent

disadvantage in the process of making government policy. Recognizing this, the prime minister's party gives additional portfolios to junior coalition parties in order to offset their disadvantage at the policy-making stage. In summary, cabinet portfolios are partly used to complement the difference of policy influence between parties.

The need for the prime minister to compensate for policy influence is not always constant. It varies depending on the diversity of policy preferences among coalition parties because coalition partners have to give greater concessions when they have different policy preferences. Multiple parties collectively form a coalition, but they have more or less divergent policy preferences. Since political parties recognize the difficulty in overcoming their differences in making policies, they may attempt to form a coalition that is less likely to face internal conflicts, such as a minimal winning coalition that has the smallest number of parties necessary to command a parliamentary majority (Riker 1962; Leiserson 1968) or a minimal connected winning coalition that is composed of parties with similar policy preferences (Axelrod 1970). However, the attributes of coalitions that are actually formed are indeed quite diverse. As there are various constraints in the selection of coalition partners (see Warwick 2005; Tavits 2008), parties do not always form such an efficient coalition. Even if they did, their ideological diversity still varies across coalitions because, for instance, party systems are different or parties change their policy platforms over time. The policy differences among coalition parties increase the likelihood that they will face internal conflicts in the process of making policies. If parties do not share similar policy goals, they are required to make greater concessions to the prime minister's party at the policy-making stage. As a result, junior coalition partners demand extra portfolios at the bargaining table; on the other hand, the prime minister's party surrenders additional portfolios to compensate for their disadvantage in making government policies.

While the divergence of policy preferences among coalition parties affects the need for the prime minister to compensate for their policy disadvantage, it does not conclusively address the amount of concessions made in portfolio allocation. My theory further suggests that, in addition to the necessity of compensating for policy disadvantage, the prime minister's strength of policy control also varies across coalitions. In parliamentary democracies, a leader of the largest party tends to assume the prime minister's post, but not every prime minister is able to exert considerable influence over government policy. The shadow of potential winning coalitions affects the bargaining over government policy between coalition parties at the policy-making stage. Political parties that wish to firmly control the government need to command a parliamentary majority. When the prime minister's party has limited capability to assemble a winning coalition in the parliament, potential and existing coalition parties are able to take a tough stand in the policy-making process because they can walk away from the bargaining table without losing any benefits (Lupia and Strøm 2008). Those coalition parties are likely to have a credible threat against the prime minister as they can build an alternative coalition without the prime minister's party. Accordingly, the prime minister's ability to exert influence over policy varies depending on the relative bargaining power of the prime minister's party within the coalition—the less bargaining power the prime minister's party has, the weaker its influence over government policies.⁵ When the prime minister's party has only a limited power to control

⁵ The balance of bargaining power between parties varies significantly across coalitions. Some coalitions are formed between parties with almost equal bargaining power to form a majority winning coalition (e.g., a grand coalition), while others are formed between parties with a wide margin in their bargaining power (e.g., a coalition formed between a large party and small party). This difference affects the prime minister's power to influence coalition policy.

government policies, it is less likely to surrender more portfolios to coalition parties than necessary merely to form a coalition.

I have so far explained that two factors—the prime minister’s power of policy influence and the necessity of compensation for policy disadvantage—affect the share of portfolios given to the prime minister’s party. The prime minister has greater policy influence than other parties in the policy-making process, and his/her party’s bargaining power determines the relative power of policy influence in the coalition. Furthermore, the diversity of policy preferences among coalition parties increases the need for the prime minister to compensate coalition members for their potential disadvantage at the policy-making stage. These two factors help explain the empirical regularity observed in Western Europe that contradicts prevailing proportionality and formateur-advantage theories. However, the two factors do not necessarily affect the prime minister party’s portfolio share independently of each other. There is an important interaction between the two factors, and the effect of one factor is mediated by the presence of the other factor.

Although prime ministerial parties are likely to surrender portfolios to junior coalition partners depending on the divergence of policy preferences among them, some of them do not compensate in portfolio allocation due to their limited power to influence on government policies. In other words, when the prime minister’s party has only limited control over government policies, it has no incentive to surrender extra portfolios to junior partners. Hence, the effect of policy divergence on the portfolio share given to the prime minister’s party should be small when the prime minister’s party has only weak bargaining power within the coalition. Similarly, while prime ministerial parties are likely to enjoy greater influence over government policies than other parties, some of them do not need to make any concessions in portfolio allocation due to the

similarity of policy goals among coalition parties. To put it differently, when coalition member parties do not have much conflict with the prime minister's party in making government policies, the power of policy control held by the prime minister becomes less important in allocating cabinet portfolios. Therefore, the effect of the prime minister's advantage over coalition policy on the portfolio share given to the prime minister's party should be small when coalition member parties have similar policy preferences. This reasoning generates the following hypotheses that articulate the circumstances under which the prime minister's party is likely to surrender portfolios:

Hypothesis 1: The prime minister's party receives fewer portfolios as coalition member parties have more divergent policy preferences. Moreover, the effect of policy divergence on the portfolio share given to the prime minister's party declines (or disappears) as the party loses the power to influence government policies.

Hypothesis 2: The prime minister's party takes fewer portfolios as it gains greater power to influence government policies. In addition, the effect of the prime ministerial party's power of policy influence on its portfolio share becomes smaller (or disappears) the more coalition member parties have similar policy goals.

4. DATA AND MEASURES

In order to test the hypothesis, in this section I elaborate appropriate measures of variables in the empirical model. The dataset for the empirical analysis is composed of all coalition governments formed in thirteen Western European countries between 1945 and 2000, which include those

cabinets formed after an election as well as after a coalition breakdown between elections.⁶ It excludes, however, care-taker governments and coalition governments in which one of the parties by itself commands a majority of seats in the parliament, because the politics within the coalition are different in those cases. This leaves 242 observations in the dataset.

Dependent Variable

The dependent variable, labeled *Cabinet portfolios*, is the difference between the prime ministerial party's portfolio share and its seat share in the coalition (i.e., the portfolio share given to the prime minister's party relative to its seat share). The empirical tradition of existing studies on portfolio allocation has emphasized the proportional relationship between portfolio shares and seat shares because parliamentary seats are important political resources that parties contribute to a coalition to make legislative decisions (see Browne and Franklin 1973; Warwick and Druckman 2006). However, considerable variation exists in the disparity between the portfolio share and the seat share observed among the prime ministerial parties over time. In order to explain this variation, I employ a dependent variable that takes a difference between the prime ministerial party's portfolio share and its seat share in the coalition.

⁶ Following the existing studies on portfolio allocation (Warwick and Druckman 2001, 2006), the countries in my dataset include Austria, Belgium, Denmark, Finland, Germany, Iceland, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, and Sweden. However, France has been excluded because, different from other countries, the president has extensive powers in government (e.g., the president chairs the Council of Ministers) and, as a result, many prime ministers in France do not act as a head of government (see Thiebault 1997; Elgie and Machin 1991).

There are three distinct measures of cabinet portfolios: (1) unweighted portfolios, (2) weighted portfolios, and (3) cabinet membership.⁷ The first measure counts the number of cabinet ministries that the parties head in the government.⁸ There may be some concerns about using the number of cabinet ministries, however, because some portfolios such as the Finance Minister and the Foreign Minister can be more important than others. If parties take into consideration the importance of cabinet ministries in the bargaining, this measure may not accurately reflect the coalition payoffs with which they are dealing. To account for this possibility, the second measure employs the number of cabinet ministries weighted by their salience scores obtained from an expert survey (Druckman and Warwick 2005). These two measures focus on the number of *cabinet ministries* that parties are going to control in the government. However, parties may instead care about the number of *cabinet members* that they are going to send to the cabinet, because a cabinet is a decision-making organ in the government.⁹ In addition, some cabinet members hold multiple portfolios concurrently; these concurrent positions could inflate or deflate the portfolio share because, for example, a deputy prime minister, who is usually appointed from a junior coalition party, tends to hold other portfolios at the same time. To deal with this concern, the third measure instead counts the

⁷ The data on unweighted and weighted cabinet portfolios were produced by James Druckman and Paul Warwick.

⁸ In thirteen Western European countries, the average number of portfolios is 18.96. This measure does not include junior cabinet ministers, as with the existing literature on portfolio allocation, because the allocation mechanism of these positions is different (see Thies 2001).

⁹ In this measurement, regardless of his/her position, each minister is considered equally valuable because everyone is able to cast one vote at cabinet meetings.

number of cabinet members that each party sends to the government.¹⁰ I will employ each measure separately as a dependent variable and present all results.

Explanatory Variables

The first explanatory variable is *Policy divergence*—the difference in policy preferences among political parties that join a coalition. The need for the prime minister to compensate for policy disadvantage increases as coalition parties have more diverse policy preferences. To measure the divergence of policy preferences, I employ the ideological distance between the prime minister's party and other coalition parties.¹¹ The ideological distance is measured by the range of the left-right ideology scores of coalition parties. The range is calculated by taking an absolute value of the difference between the prime minister's party and other coalition partners on the ideological scale. It is given by the following formula: $\sum |x_{PM} - x_i|$ where x_{PM} is the ideology score of the prime minister's party and x_i is the ideology score of the i^{th} party within the coalition.¹² This variable is constructed from left-right ideology scores based on party manifestos, which are provided by Budge et al. (2001).

¹⁰ I collect the data of cabinet membership by using *Keesing's World News Archive*.

¹¹ I also used the ideological distance between the left-most party and the right-most party in a coalition in order to test the robustness of the empirical results because the prime minister's party may be able to take advantage of its policy influence effectively when coalition members are likely to disagree with each other due to their diverse policy preferences. Using this measure, I still obtained substantively the same results.

¹² To reduce the positive skew in the distribution, this variable is transformed by taking the square root.

The second explanatory variable is *Bargaining power*—the ability of the prime minister’s party to command a parliamentary majority, relative to other coalition parties. The power of the prime minister’s party to control policy in a coalition government depends on the strength of its bargaining power in assembling a winning coalition in the parliament. The existing literature on portfolio allocation has employed multiple measures of the prime minister party’s bargaining power because formal models make predictions of portfolio allocation in terms of bargaining power to assemble a winning coalition in the parliament (Ansolabehere et al. 2005). This paper employs the party’s bargaining power differently from these existing studies: I use the prime ministerial party’s bargaining power within the coalition to describe the relative strength of its ability to influence policies in the coalition government.

The best known examples of measuring parties’ bargaining power in the tradition of cooperative game theory are the Shapley-Shubik index (Shapley and Shubik 1954) and the Banzhaf index (Banzhaf 1968). These power indices describe the relative importance of a party in building majority winning coalitions in the parliament.¹³ However, these power indices assume that any type of winning coalition is equally likely to be formed; hence, they ignore the possibility that cost-efficient coalitions such as minimal winning coalitions may be more likely to emerge (Riker 1962; Leiserson 1968; Axelrod 1970). In contrast to the power indices, in order

¹³ A major difference between these two indices is that the Shapley-Shubik index takes into account the order in which parties join a coalition, while the Banzhaf index does not. That is, the Shapley-Shubik index models the dynamics of the communication process between parties assuming that they share some uniform standard by which to judge coalitions, while the Banzhaf index implicitly assumes parties assemble a winning coalition without considerable communications between them (Straffin 1977; 1988).

to measure the relative importance of a party in building majority winning coalitions in the parliament, Ansolabehere et al. (2005) introduce the minimum-integer voting weights based on the number of minimum-winning coalitions that individual parties are able to establish in the legislature. I employ the share of minimum-integer voting weights in a coalition as a measure of the prime ministerial party's relative bargaining power, but the results presented in this paper do not depend on the choice of these different measures.¹⁴

Control Variable

I employ a control variable—*Ideological location*—to provide a fully specified model. This control variable describes the ideological location of the prime minister's party. While the ideological distance between the prime minister's party and other coalition parties is important, the ideological location of the prime minister's party can also matter at the policy-making stage because a party tends to have the most leverage when it is located at the center of a coalition (see Martin and Stevenson 2001; Tsebelis 2002). Thus, I expect there to be a relationship between the prime minister party's portfolio share and where the party stands in the coalition. The ideological location is measured by taking the absolute value of the difference between the prime minister party's ideology score and the average score of the coalition weighted by each party's size. It is given by the following formula: $|x_{PM} - \bar{x}|$ where x_{PM} is the ideology score of the prime minister's

¹⁴ I employed the two power-index measures to assess the robustness of the empirical results and obtained substantively the same results. As increasing the size of a party tends to improve its bargaining position, I also used the prime ministerial party's seat share within the coalition as a measure of the prime minister's strength of control over policy. The results based on this seat-share measure are substantively the same as the ones based on other bargaining-power measures.

party and \bar{x} is the weighted average score of the coalition.¹⁵ In other words, this variable describes how far away the prime minister's party is located from the ideological center of the coalition.

5. ANALYSIS AND FINDINGS

The hypothesis suggests that the prime minister's power to influence government policy as well as the necessity of compensation for the coalition partners' policy disadvantage affects the portfolio share given to the prime minister's party. These two factors are determined by the prime ministerial party's bargaining power and the presence of policy divergence, respectively. In order to capture the conditional feature of this hypothesis, I introduce an interaction term between *bargaining power* and *policy divergence* into the empirical model. The following model is used to test the hypothesis:

$$\begin{aligned}
 PM's\ cabinet\ portfolios &= \beta_0 + \beta_1\ Bargaining\ power + \beta_2\ Policy\ divergence \\
 &+ \beta_3\ Bargaining\ power \times Policy\ divergence \\
 &+ \beta_4\ Control + \varepsilon
 \end{aligned}$$

Table 1 presents the results of the regression analysis. To construct the dependent variable, I employ three measures of coalition payoffs: (1) cabinet portfolios, (2) weighted cabinet portfolios, and (3) cabinet membership. These results are shown separately in the table. There are

¹⁵ In order to reduce the positive skew in the distribution, this variable is transformed by taking the square root.

two models for each type of dependent variable. The first model estimates only the effects of the two factors independently of each other. The second model incorporates an interaction term between the two factors and fully estimates the equation. I employ robust standard errors, where identical compositions of coalition parties are the clusters, in order to conduct the hypothesis testing. The table reports estimates of the coefficients and the robust standard errors.

[TABLE 1 ABOUT HERE]

The results in Table 1 provide strong support for the hypotheses. My findings suggest that the portfolio share given to the prime minister's party relative to its seat share decreases as it gains greater bargaining power in the coalition, holding everything else constant. For all three measures of coalition payoffs, the coefficient estimate of *bargaining power* (β_1) in the first model is negative and statistically significant.¹⁶ This result appears to be puzzling because it indicates that a party with a strong bargaining power in a coalition takes fewer portfolios than its seat share. However, this is consistent with my theory because it demonstrates that the prime minister secures greater control over policy than other parties in the coalition when his/her party has a strong bargaining power to assemble a coalition, and as a result, the prime minister's party

¹⁶ This coefficient is also substantively significant. The results show that a one-standard-deviation increase in the value of the bargaining power is associated with a 3-4 percentage point decrease in the prime ministerial party's portfolio share relative to its seat share. This outcome implies that the bargaining power (i.e., the strength of the prime minister's policy control) alone could produce an 18-20 percentage point difference in the prime ministerial party's share of cabinet portfolios (the equivalent of 4-5 portfolios in the cabinet) in total.

surrenders portfolios in order to accommodate the demand from coalition partners to compensate for their disadvantage at the policy-making stage.¹⁷

The prime ministerial party's portfolio share also varies depending on the divergence of policy preferences among coalition parties. The results in Table 1 show that the coefficient estimate of policy divergence (β_2) in the first model is negative and statistically significant, suggesting that the portfolio share given to the prime minister's party decreases as coalition parties' policy goals differ if everything else is held constant.¹⁸ This surrender of cabinet portfolios is made because the prime minister's party, which is able to exert considerable influence over policy in the government, needs to compensate coalition partners for their policy disadvantage in order to form a coalition. In other words, the result suggest that while the prime minister is willing to trade off on the number of portfolios, it occurs when coalition partners have to make a great compromise to the prime minister's party in making government policies due to

¹⁷ Some might wonder why the prime minister's party, with a stronger bargaining power than other coalition parties, does not use this leverage to gain more portfolios. The reason for this is because weak parties, which seek to attain their policy goals, refuse to join such a coalition without gaining extra portfolios, knowing that the prospective prime minister's party can exert considerable influence over policy at the policy-making stage in the future.

¹⁸ This effect is substantively significant as well. The results indicate that a one-standard-deviation increase in policy divergence is associated with a decrease in the prime ministerial party's portfolio share of around four percentage points, or the equivalent of about one position in the cabinet. This outcome implies that policy divergence could produce approximately a 20 percentage point difference in the prime ministerial party's portfolio share (the equivalent of 5 portfolios) across its entire range.

the disparity of their policy goals.

I have shown the effects of two factors—bargaining power and policy divergence—on the portfolio share given to the prime minister’s party. My hypotheses further predict that the two factors affect portfolio allocation in an interactive manner. First, the effect of policy divergence on the prime ministerial party’s portfolio share will be smaller as the prime ministerial party’s bargaining power to form a coalition weakens because the prime minister is less likely to trade off on the number of portfolios when he/she has only limited power to influence government policies in the coalition. Second, the effect of bargaining power on the prime ministerial party’s portfolio share will be smaller as the divergence of policy preferences decreases because the prime minister’s advantage over policy influence is less important when coalition member parties have similar policy goals. The coefficient of the interaction term (β_3) in the second model captures how the effect of one factor is mediated by the presence of the other factor.¹⁹ A negative coefficient in this case implies that, as suggested by the hypotheses, the effect of each factor on the prime ministerial party’s portfolio share disappears as the value of the other factor decreases. The results in Table 1 show that this coefficient is negative as predicted and also statistically significant at the 1% level for all measures of coalition payoffs. Accordingly, the data reject the null hypothesis that the two factors have no effect on portfolio allocation in an interactive manner.

This result can be visually confirmed by Figure 1 and Figure 2, which plot the estimated

¹⁹ The interpretation of the coefficients of bargaining power and policy divergence (β_1 and β_2) in the second model is tricky because these coefficient estimates indicate the effect of one factor when the value of the other factor is zero. However, the value of zero in each variable actually exceeds the observed range of the data.

marginal effect of one factor on the prime ministerial party's portfolio share over the range of the other factor. I first interpret the results in Figure 1. The horizontal axis of this figure indicates the value of the prime minister's bargaining power within the coalition. The vertical axis displays the predicted marginal effect of policy divergence on the portfolio share given to the prime minister's party. The black sloped line demonstrates how the marginal effect of policy divergence changes across the range of the prime minister's bargaining power. The two gray lines along the black line indicate the upper and lower bounds of the 95% confidence interval. Figure 1 demonstrates that, when the prime minister's party has strong bargaining power in the coalition (i.e., when the prime minister has greater control over policy than other parties), policy divergence makes a significant difference to the prime ministerial party's portfolio share, whereas when the prime minister's party has only weak bargaining power (i.e., when the prime minister has limited control over policy), policy divergence has a smaller effect on the prime ministerial party's portfolio share.²⁰ This result is consistent with Hypothesis 1, suggesting that prime minister's party surrenders portfolios to coalition partners depending on the need to compensate for their policy disadvantage only when the prime minister is able to exert a considerable influence over policy in the government.

[FIGURE 1 AND 2 ABOUT HERE]

Figure 2, on the other hand, tells the story of portfolio allocation from the opposite angle. That is, the horizontal axis displays the degree of policy divergence between the prime minister's party and other coalition parties, while the vertical axis indicates the predicted marginal effect of

²⁰ More than 80% of the sample observations fall into the range of significance.

the prime ministerial party's bargaining power on its portfolio share. This figure demonstrates that, when coalition parties have divergent policy goals, the bargaining power of the prime minister's party greatly affects its portfolio share (i.e., the prime minister's party surrenders more portfolios to coalition partners as the prime minister increases the power to exert influence over policy in the government). However, when the coalition parties have similar policy goals, the bargaining power of the prime minister's party does not have much effect on its portfolio share (i.e., the prime minister's party does not give up portfolios even when the prime minister has the power to exert control over policy).²¹ As consistent with Hypothesis 2, this result implies that the prime minister's party surrenders portfolios to coalition partners in order to compensate for their disadvantage in exerting influence over coalition policy.

These findings indicate that portfolio allocation is not solely determined by the share of parliamentary seats that parties contribute to a coalition. Since cabinet portfolios are distributed among coalition parties to command the parliamentary majority, coalition member parties take more portfolios as they contribute more seats to the coalition. However, this is not the whole story of portfolio allocation and coalition politics. The prime minister's party often takes fewer portfolios than its seat share in the coalition. Moreover, the degree of deviation from proportionality varies considerably across countries as well as over time within countries. The empirical results presented in this section demonstrate that, in addition to the shares of parliamentary seats, the party's influence over policy and the policy divergence among coalition parties together alter the prime ministerial party's portfolio share in a very systematic manner. Furthermore, the results also explain why the share of portfolios given to the prime minister's party reflects neither proportionality nor formateur advantage in most of the Western European

²¹ In Figure 2, more than 90% of the sample observations fall into the region of significance.

countries. The prime minister often surrenders portfolios to coalition partners because parties are seeking not merely to maximize their control over cabinet portfolios but also to attain their preferred policy outcomes. Therefore, the prime minister, who has a greater control over policy than other parties, concedes on the number of portfolios to accommodate the demand from coalition partners to compensate for their policy disadvantage. These results strongly support my central claim that the policy-making stage as well as the coalition formation stage affects portfolio allocation among coalition parties.

6. CONCLUSION

In this paper, I developed a theoretical framework that accounts for portfolio allocation as the result of bargaining between political parties concerned about governance at the policy-making stage in which they have to participate after joining a government. The formation of a coalition government is not the sole purpose for political parties. Even after they build a coalition, they still have to work together in order to take advantage of government authority. However, coalition parties may not agree with each other because they want to pull government policies toward their positions so as to avoid being punished by their supporters. The prime minister exerts greater influence over policy than other parties in managing the coalition government, particularly in forging consensus among coalition parties with divergent policy goals, because, in parliamentary democracies, the institutional rules favor the prime minister over other ministers in making government policies. Accordingly, the prime minister's party in a coalition government often surrenders more cabinet portfolios than necessary merely to form a coalition in order to accommodate the demand from coalition partners to offset their disadvantage at the policy-making stage.

My theoretical framework explains not only why the prime minister's party accepts fewer portfolios than its proportional share but also how much of a loss the prime minister has to accept in allocating cabinet portfolios. The characteristics of coalition parties are different and so is the coalition's governance. The composition of the coalition government affects the possibility of policy conflicts among coalition parties. The need for the prime minister to compensate coalition partners for their policy disadvantage will be higher when coalition parties have more diverse policy preferences as they will have to make greater concessions to the prime minister's party, which has the power to exert influence over policy in managing the coalition government. In order to compensate for their disadvantage at the policy-making stage, the prime minister surrenders portfolios to coalition partners. At the same time, the prime minister's power to influence over policy declines as his/her party has weaker bargaining power to form a coalition because coalition partners are more likely to be able to pose a credible threat to the prime minister's party. Therefore, portfolio allocation outcomes vary depending on the coalition's prospective governance as well as the relative strength of the prime ministerial party's bargaining power in building a majority winning coalition.

To test my argument, I drew on a dataset that included coalition governments in thirteen Western European countries between 1945 and 2000. The empirical findings suggest that, consistent with my argument, the prime minister's party changes its share of portfolios depending on (1) the relative strength of its bargaining power in assembling a winning coalition and (2) the degree of policy divergence among coalition parties. Moreover, the effect of one factor is mediated by the presence of the other factor. When the prime minister's party has relatively weak bargaining power in the coalition, the policy divergence factor does not appear to affect its portfolio share because the prime minister's party does not have much advantage in

control over policy in managing the coalition government. On the other hand, when the prime minister's party has strong bargaining power relative to other coalition parties, the policy divergence factor appears to affect its portfolio share significantly because the prime minister has to surrender portfolios when coalition partners have divergent policy goals in order to compensate for their disadvantage at the policy-making stage.²² Accordingly, the divergence of policy preferences among coalition parties decreases the portfolio shares given to the prime minister's party more markedly the greater the strength of its bargaining power within the coalition. The empirical findings also suggest that, when coalition parties have similar policy goals, the bargaining power of the prime minister's party does not appear to affect its portfolio share because coalition parties do not have much conflict with the prime minister over policy; however, when coalition parties have divergent policy preferences, the portfolio share given to the prime minister's party appears to depend on the relative strength of its bargaining power because coalition partners demand compensation for their policy disadvantage when the prime minister's party has a greater influence over policy than other parties. Therefore, the bargaining power of the prime minister's party changes its portfolio share more markedly the greater the divergence of policy preferences among coalition parties. The results support my argument that cabinet portfolios are allocated among parties to accommodate both coalition formation and coalition governance.

²² The prime minister does not need to surrender portfolios when coalition partners share similar policy preferences with the prime minister's party because their policy disadvantage does not prevent them from obtaining their preferred policy goals.

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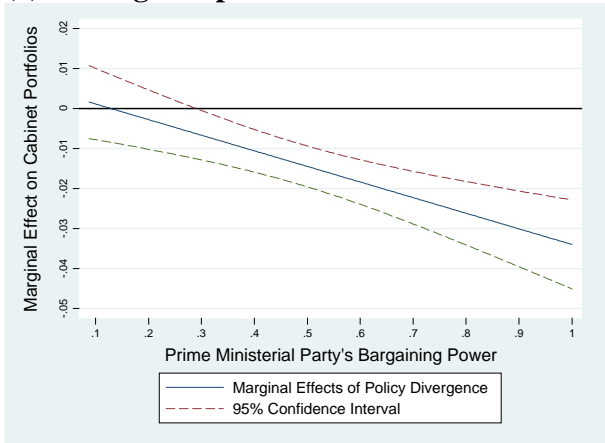
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Figure 1 Marginal Effects on Prime Ministerial Party's Portfolio Share (1)

(a) Unweighted portfolios



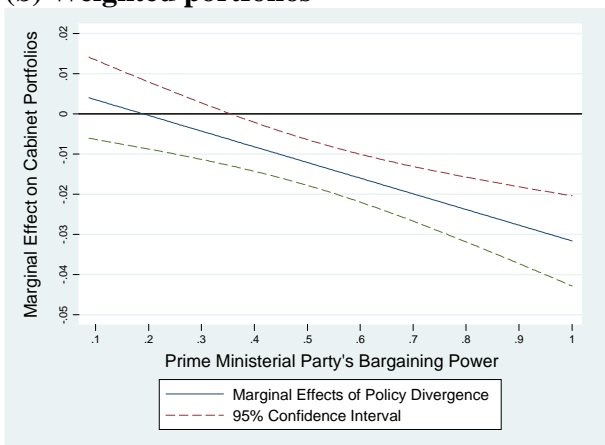
X-axis:

Prime ministerial party's bargaining power

Y-axis:

Marginal Effects of policy divergence on the prime ministerial party's portfolio share

(b) Weighted portfolios



(c) Cabinet membership

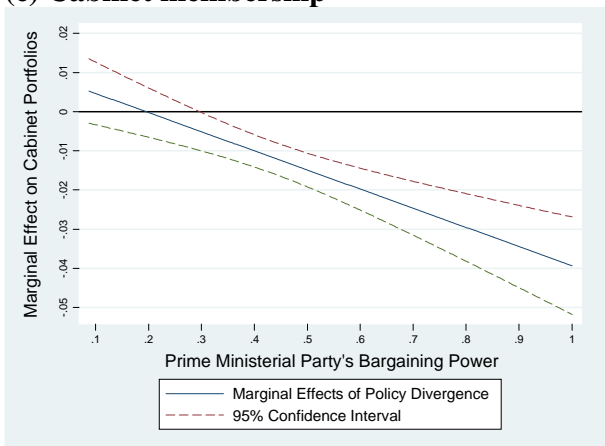
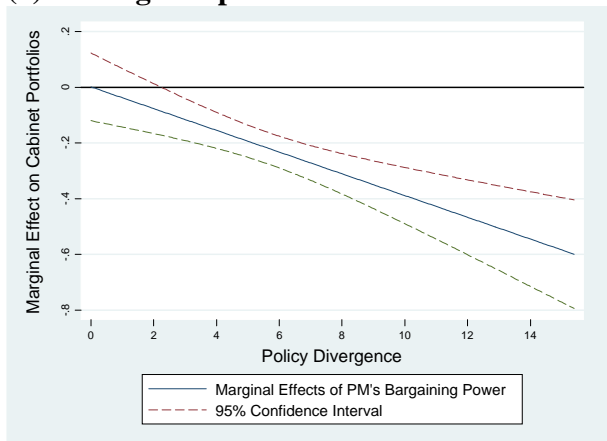


Figure 2 Marginal Effects on Prime Ministerial Party's Portfolio Share (2)

(a) Unweighted portfolios



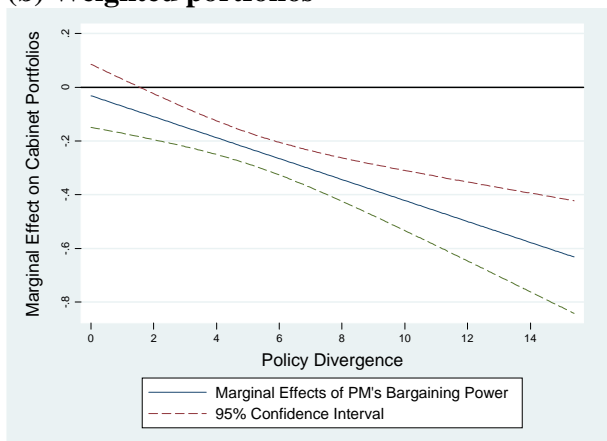
X-axis:

Policy divergence among coalition parties

Y-axis:

Marginal Effects of prime ministerial party's bargaining power on its portfolio share

(b) Weighted portfolios



(c) Cabinet membership

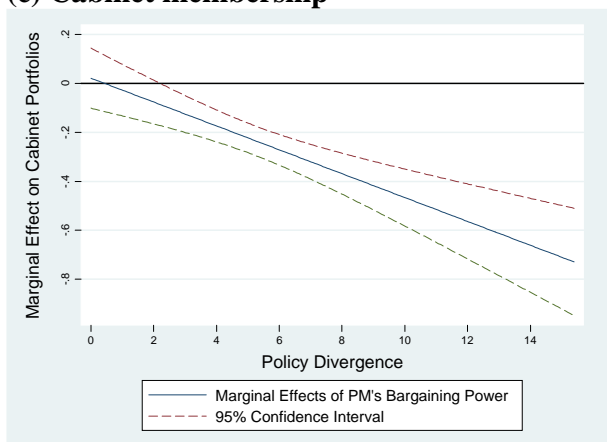


Table 1: Effect of Policy Divergence and Bargaining Power on Prime Ministerial Party's Portfolio Share

Independent variables	Dependent variable: PM Party's Cabinet Portfolios (Portfolio Share - Seat Share)					
	Unweighted portfolio		Weighted portfolio		Minister membership	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Policy divergence	-0.013 (0.003)***	0.005 (0.005)	-0.011 (0.003)***	0.007 (0.006)	-0.013 (0.002)***	0.010 (0.005)*
Bargaining power	-0.213 (0.030)***	0.002 (0.062)	-0.246 (0.032)***	-0.031 (0.060)	-0.247 (0.034)***	0.022 (0.063)
Policy divergence × Bargaining power	-	-0.039 (0.010)***	-	-0.039 (0.010)***	-	-0.049 (0.011)***
Ideological location	0.034 (0.005)***	0.035 (0.005)***	0.030 (0.005)***	0.032 (0.005)***	0.029 (0.005)***	0.031 (0.004)***
Constant	0.035 (0.021)*	-0.074 (0.035)*	0.077 (0.021)***	-0.031 (0.034)	0.074 (0.021)***	-0.062 (0.030)**
R-squared	0.325	0.361	0.359	0.395	0.380	0.444
N	219	219	219	219	219	219

Robust standard errors (clustered by coalition) in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1% (two-tailed)