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## The Impact of Bicameralism on the Disproportionality of Cabinet Portfolio Allocation

This study examines whether bicameralism affects cabinet composition in parliamentary democracy. While previous studies have examined the effect of bicameralism on the legislative process and cabinet duration, little is known about its effect on cabinet post allocation. Therefore, this study examines how and why the institutional and partisan strengths of upper chambers affect the outcome of coalition bargaining and post allocation. Theoretically, I argue that partisan strength in upper chambers enhances a party's bargaining position, resulting in disproportionality between the party seat and cabinet portfolio share of the lower chamber in coalition governments. The empirical results indicate that the level of disproportionality in cabinet portfolio allocation is higher in countries with strong upper chambers than in countries with weak or no upper chambers. I also investigate party level data in countries with strong upper chambers. After controlling for the party share of lower chambers in these countries, the advantage accrued by the upper chamber in terms of party seat share is likely to result in obtaining a higher share of cabinet portfolios.

**KEYWORDS:** coalition bargaining, cabinet portfolio allocation, Gamson's Law, bicameralism, Western Europe

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*Introduction*

THIS STUDY seeks to address the following questions: What is the relationship between bicameralism and cabinet composition in parliamentary democracies? How and why do upper chambers affect the patterns of coalition bargaining and cabinet portfolio allocation? A key feature of parliamentary democracy is the accountability of cabinets to the lower chamber of parliament (COX 1987; LAVER and SHEPSLE 1994; 1996; LAVER and SCHOFIELD 1998; MÜLLER and STROM 2000) and a single chain of delegation exists between citizens, MPs, government, and ministers (STRØM, MÜLLER, and BERGMAN 2003). Since coalition bargaining is a key to understanding the nature of parliamentary democracy, several researchers have theoretically and empirically analyzed cabinet formation and the cabinet post allocation process (STRØM, MÜLLER, and BERGMAN 2008). However, with a few notable exceptions (DRUCKMAN and THIES 2002; DRUCKMAN, MARTIN, and THIES 2005), the existing research on coalition bargaining tends to underestimate the role of the upper chamber and instead confines its focus to the relationship between cabinets and inter-party bargaining in the lower chamber. Thus, it remains a moot point as to what role bicameralism plays in the relationship between delegation and accountability under the parliamentary system.

In this paper, I analyze how the upper chamber influences the logic of delegation, coalition bargaining, and cabinet composition. Endogenizing the role of upper chambers in cabinet post allocation, I argue that the existence of a strong upper chamber creates a dual chain of the delegation and accountability mechanism, while a high seat share in the upper chamber enhances a party's bargaining power in symmetric bicameralism. To examine this argument, this paper analyzes inter-party coalition bargaining data from postwar Western Europe. First, empirical analysis of coalition cabinet data demonstrates that the institutional strength of the upper chamber causes disproportional cabinet portfolio allocation. Second, through an in-depth analysis of party-level data in symmetric bicameralism (Belgium, Italy, and Sweden), I demonstrate that party strength in the upper chamber results in an increased share of cabinet portfolios.

This paper proceeds as follows. The next section surveys the current state of research on cabinet portfolio allocations and bicameralism. I point out that the relationship between bicameralism and cabinet governance, in particular the effect of the upper chamber on cabinet composition, has rarely been examined. In the third section, I argue that party strength in the upper chamber can lead to extra bargaining power among coalition

parties. I then formulate hypotheses regarding the effect of bicameralism on cabinet portfolio allocation. In the fourth section, after discussing data and measurement issues, I analyze the relationship between the institutional strength of the upper chamber and the disproportionality of portfolio allocation by focusing on cabinet-level data. In the fifth section, I examine party-level data and the relationship between party seat share in the upper chamber and cabinet portfolio shares. Finally, I summarize the main points of my findings and conclude with some exploration of the implications of these insights for future research.

### *Literature Review*

#### THE EXISTING THEORETICAL AND EMPIRICAL RESEARCH ON CABINET PORTFOLIO ALLOCATION

Since cabinet post allocation is a crucial stage in coalition bargaining, several studies have examined cabinet portfolio allocation. The central concern of this field is how to reconcile the gap between theoretical models and the empirical evidence. According to Gamson's Law, governing coalition parties allocate cabinet portfolios in proportion to parties' seat share (GAMSON 1961; BROWNE and FRANKLIN 1973). While there is fairly broad agreement regarding this empirical law (WARWICK and DRUCKMAN 2001; 2006; DRUCKMAN and WARWICK 2005; VERZICHELLI 2008; BÄCK, DEBUS, and DUMONT 2011), bargaining theory predicts the advantage of formateur (BARON and FEREJOHN 1989; ANSOLABEHRE et al. 2005; BASSI 2013). Above all, CARROLL and COX (2007) point out the role of pre-electoral coalitions during an election campaign and argue that this pre-electoral cooperation between parties causes proportionality of cabinet portfolio allocation.

However, the rate of unexplained disproportionality remains an open question. Some researchers discuss the way in which institutional arrangements distort proportionality. For instance, VERZICHELLI (2008) has surveyed the literature on cabinet portfolio allocation by summarizing the empirical findings on proportionality. He then also conducted a systematic analysis of the disproportionality of portfolio allocations in 260 coalition governments in Western European countries in order to clarify why real world portfolio allocations deviate from proportionality. His findings show that several factors affect the proportionality of portfolio allocation, such as structural, ideological, and institutional factors. Since

he particularly emphasizes institutional factors<sup>1</sup> and discusses the role of bicameralism in cabinet politics (VERZICHELLI 2008, 250), it is worthwhile discussing how this institutional factor affects coalition bargaining, as well as cabinet portfolio allocations.

In this research, I analyze how institutional arrangement, particularly the strength of the upper chamber, influences disproportionality in portfolio allocation. While party strength in the electoral and legislative arena is a source of bargaining power, institutional arrangement in the government arena distorts the proportionality of cabinet portfolio allocation and results in an unequal distribution of portfolios.

#### THE ROLE OF BICAMERALISM IN COALITION BARGAINING

What is the role of bicameralism in coalition bargaining? While the existing theoretical research on bicameralism emphasizes its role in the legislative process and policy change (ANSOLABEHERE, SNYDER, and TING 2003; HELLER 2007; GAILMARD and HAMMOND 2011), there is little research on the role of upper chambers in the logic of delegation. On the basis of spatial modeling, RIKER (1992a; 1992b), TSEBELIS (1995), and TSEBELIS and MONEY (1997) discuss how the bicameral structure of parliament produces stability in majority voting decisions and policy changes. Furthermore, TSEBELIS (2002) conceptualizes the notion of a “veto player” and theoretically examines the relationship between bicameralism, the multi-party system, and policy change, pointing out that the number and relationship of “veto players” are sources of political stability. However, this framework has few implications with regard to the relationship between the bicameral system and cabinet governance. Theoretically, it remains a moot point: What role does bicameralism play in the logic of delegation? How can we locate the upper chamber in the chain of delegation and accountability in parliamentary systems?

1. VERZICHELLI (2008) points out the institutional effect of the vote of no confidence, the power of a prime minister, and the relationship between the two chambers. Recently, GOLDER, THOMAS et al. (2014) have regarded the vote of no confidence as important in explaining the gap between theoretical prediction and empirical patterns. They point out that the existence of the vote of no confidence forces large parties to concede cabinet portfolios to small parties and leads to disproportionality in cabinet portfolio allocations. In the same way, AMORIM and STRØM (2006) discuss how the presidency “breaks the chain” of delegation between parliamentary majority and cabinet and increases the number of non-partisan ministers. SAMUELS and SHUGART (2010) and SCHLEITER and MORGAN-JONES (2009; 2010) discuss the role of separation of powers and multiple chains of delegation in cabinet governance.

Some of the recent studies have indicated that bicameralism has an influence on coalition politics and cabinet governance. However, while they found bicameralism to affect cabinet formation and duration, little is known about cabinet composition and cabinet post allocation. First, DRUCKMAN and THIES (2002) examined how bicameralism has an impact on cabinet duration in ten European countries. Although they found no evidence of a relationship between the status of the upper chamber within the cabinet and cabinet formation, they did find that cabinets with upper chamber majority support are likely to survive longer. Their conclusion is that the upper chamber has a significant effect on cabinet duration, but not on cabinet formation. Second, DRUCKMAN, MARTIN, and THIES (2005) investigated the effect of bicameralism on government formation and demonstrated, by means of the conditional logit model, that bicameralism has an impact on cabinet formation in eight European countries. Specifically, they found that coalition governments with an upper chamber majority are more likely to form than those without an upper chamber majority.<sup>2</sup>

To sum up, these empirical findings show that bicameralism has a significant effect on cabinet governance, in particular, cabinet formation and duration. However, we know little about the relationship between bicameralism and cabinet portfolio allocations. From a theoretical perspective, it is worthwhile asking, therefore, what part bicameralism plays in the process of democratic delegation and how bicameralism affects cabinet allocations.

### *Theory and Hypothesis*

This study theorizes the role of bicameralism in coalition bargaining in terms of the logic of delegation in parliamentary democracies. Applying the principal-agent model to this field, STRØM, MÜLLER, and BERGMAN (2003) and SAMUELS and SHUGART (2010) identified the essence of the parliamentary system as a single chain of delegation from voters to legislators, from legislators to the chief executive, and from the chief executive to cabinet ministers. In terms of this theoretical perspective, the

2. Some empirical analysis on specific countries also found the same pattern. DIERMEIER, ERASLAN, and MERLO (2007) also examined the effect of bicameralism in Belgium and concluded that while it does not affect cabinet duration, it does affect government formation and cabinet type. The existence of dual responsibility causes an increase in surplus majority government and a decrease in minority government. MASUYAMA (2007) analyzed the Japanese National Diet and the relationship between upper chamber status and cabinet duration. He discovered how external popularity outside the parliamentary arena modified the effect of the government's status in the upper chamber on the cabinet.

bicameral system makes the logic of delegation and accountability more complex compared with a unicameral system. If an upper chamber existed, the chain of delegation would comprise a double chain delegation model. In these circumstances, the upper chamber's situation distorts the relationship between coalitions and cabinet governance.

In the case of symmetric bicameral systems (e.g., Belgium prior to 1995 and Italy), the cabinet is accountable to both the lower and upper houses of parliament. Given the assumption of this double chain of delegation model, it is no wonder that the institutional strength of the upper chamber and a party's seat share in the upper chamber should influence cabinet governance. The governing parties' strength in both the upper and lower houses influences their bargaining positions in coalition governments. Even in the case of asymmetric bicameralism (e.g., Germany), it is true that the cabinet is not accountable to the upper chamber; however, the upper chamber controls the legislative process and influences the success or failure of legislation. On the basis of this power to block bills, each party's share of seats in the upper chamber enhances its bargaining power. Parties' respective bargaining power in turn influences the division of cabinet portfolios. From an empirical viewpoint, an upper chamber disrupts the relationship between lower chamber seat share and cabinet portfolio share. In other words, bicameralism disrupts the empirical regularity known as Gamson's Law.

In this paper, I apply the logic of the double chain of delegation model to cabinet portfolio allocation. Based on this, I formulate the following two cabinet-level hypotheses regarding the relationship between the institutional strength of the upper chamber and disproportionality in cabinet portfolio allocations.

Hypothesis 1a: Bicameralism increases the disproportionality of portfolio allocation, while unicameralism decreases the disproportionality of portfolio allocation.

Hypothesis 1b: The stronger an upper chamber, the higher the level of disproportionality in cabinet portfolio allocation.

In order to disentangle the relationship between upper chamber and cabinet composition, this study also analyzes party-level data. While we can examine the deviation from Gamson's Law at the cabinet level, it is necessary to analyze party level data in order to confirm whether a party's strength in the upper chamber contributes an advantage in coalition bargaining. At the party level, I formulate the following hypotheses. The main hypothesis (hypothesis 2) concerns the relationship between party

seat share in the upper chamber and the party's share of cabinet portfolios. I derive this hypothesis from my central argument: The extra bargaining power derived from strength in the upper chamber leads to extra benefits in cabinet portfolio allocation.

Hypothesis 2: If the number of party seats in the upper chamber increases, the party will obtain more cabinet portfolios.

*Cabinet Level Analysis: The Effect of the Upper Chamber's Institutional Strength on Disproportionality in Cabinet Portfolio Allocation*

DEPENDENT VARIABLE

(DISPROPORTIONALITY OF CABINET PORTFOLIO ALLOCATION)

In order to investigate the relationship between bicameralism and cabinet portfolio allocation, this study utilizes datasets from the Comparative Parliamentary Democracy program.<sup>3</sup> This project contains the following datasets: the Comparative Parliamentary Democracy Data Archive dataset and the Portfolio Allocation in Western Europe dataset. These datasets consist of 424 cabinet-level data for 17 Western European democracies from 1945 to 1999. Specifically, as TABLE 1 shows, this sample comprises 260 cases. In the following, I set institutional strength as the independent variable and the disproportionality index of cabinet portfolio allocations as the dependent variable, and estimate the effect of bicameralism on cabinets.

Following the definition by VERZICHELLI (2008), the dependent variable comprises the disproportionality index of cabinet portfolio allocation.<sup>4</sup> Here, 0 indicates perfect proportionality, while a high figure

3. See <http://www.erdda.se/index.php/projects/cpd/> (accessed 26 August 2016).

4. I analyzed the unweighted cabinet portfolio allocation index for this statistical analysis. The overall results of the weighted cabinet portfolio index were similar.

	ALL GOVERNMENTS (%)	COALITION GOVERNMENTS (%)
2: Strong Upper Chamber	90 (21.2%)	61 (14.4%)
1: Weak Upper Chamber	146 (34.4%)	89 (21.0%)
0: No Upper Chamber	188 (44.4%)	110 (25.9%)
Total	424 (100.0%)	260 (61.3%)

TABLE 1. Bicameralism and coalition governments in European countries, 1945–1999.

indicates disproportionality of portfolio allocation. I calculate the disproportionality index as follows:

$$\text{Disproportionality Index} = \sum \left( \frac{m_i}{M} \right) - \left( \frac{s_i}{S} \right)$$

$m_i$ : number of ministry positions held by the  $i$ th party

$M$ : total number of ministry positions

$s_i$ : number of parliamentary seats held by  $i$ th party

$S$ : number of parliamentary seats held by the entire cabinet

FIGURE 1 indicates the variation in values of disproportionality indices by country. The mean value of the disproportionality indices is highest in Italy, and second highest in Belgium, two countries that have strong upper chambers. The index is lowest in Austria, and second lowest in Portugal, indicating relative proportionality between the upper and lower chambers in these countries.

INDEPENDENT VARIABLE

(INSTITUTIONAL STRENGTH OF THE UPPER CHAMBER)

The key independent variable is the institutional strength of the upper chamber. According to the classification of STRØM, MÜLLER, and BERGMAN (2003, 119), I differentiate symmetric bicameralism (countries with

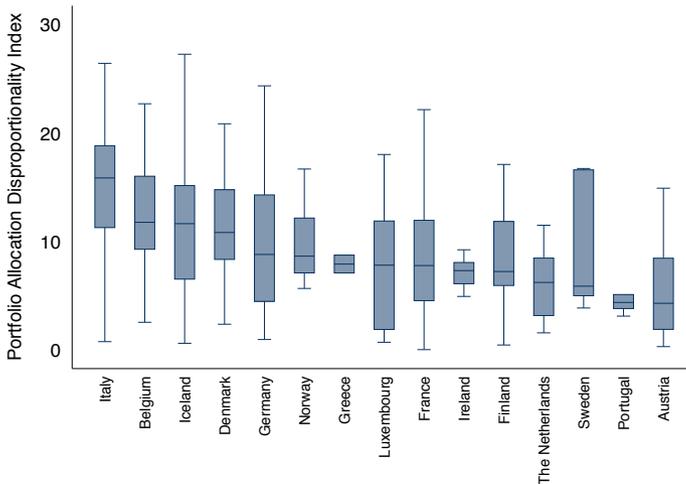


FIGURE 1. Cabinet portfolio allocation disproportionality index, 1945–1999.

INDEPENDENT VARIABLE	COUNTRIES	
2: Strong Upper Chamber (symmetric bicameralism)	Belgium (1946–1995) Sweden (1945–1970)	Italy (1948–1999)
1: Weak Upper Chamber (asymmetric bicameralism)	Austria Denmark (1945–1953) Germany The Netherlands United Kingdom	Belgium (1995–1999) France Ireland Spain (1979–1990)
0: No Upper Chamber (unicameralism)	Denmark (1953–1999) Greece Italy (1945–1948) Spain (1974–1979)	Finland Iceland Luxembourg Portugal Sweden (1970–1999)

TABLE 2. Institutional strength of the Upper Chamber in European countries.

strong upper chambers), asymmetric bicameralism (countries with weak upper chambers), and unicameralism (countries without upper chambers) (see TABLE 2). In the case of symmetric bicameralism, the governments are accountable to both chambers. In the case of asymmetric bicameralism, the upper chamber influences the legislative process and can delay legislation. On the basis of this classification, as shown in TABLE 2, I created the following category in order to measure the authority of the upper chamber: the difference between symmetric bicameral legislatures, asymmetric bicameral legislatures, and unicameral legislatures (“Strong / Weak / No Upper Chamber”). First, in the case of “Strong / Weak / No Upper Chamber,” I assign 2 to the cabinets in Belgium (1946–1995), Italy (1948–1999), and Sweden (1945–1970). I assign 1 to 146 out of 424 governments in the nine countries during the period of analysis. In cases where there is a unicameral system, I assign 0. Setting unicameralism as a baseline, I estimate the effects of each category: weak upper chamber and strong upper chamber.

#### CONTROL VARIABLES

I also consider the other control variables.<sup>5</sup> First, in addition to bicameralism, I consider the following institutional factors: “Constructive

5. For variable selection, while I refer to VERZICHELLI’S (2008) analysis and discussions, the model specification is not the same. I particularly focus on institutions and also consider various possible covariates.

Model 1	
All Coalition Governments	
<i>Institutional Factors</i>	
Strong Upper Chamber	3.489* (1.498)
Weak Upper Chamber	-0.052 (1.201)
Constructive No-Confidence	.578 (1.410)
PM Dissolution Powers	.517 (.992)
Semi-Presidentialism	-1.372 (1.114)
Junior Minister Institution	-1.091 (1.205)
<i>Structural Factors</i>	
Post Election Cabinet	-1.120 (.702)
Effective Number of Legislative Parties	-.894 <sup>+</sup> (.487)
Lower Chamber's Cabinet Seat Share	-.127*** (.029)
Number of Cabinet Parties	1.788*** (.523)
Number of Cabinet Members	-0.80 (.092)
<i>Preference Factors</i>	
No Core Party	-.441 (.906)
Median Party (1D) in Cabinet	-1.285 (1.077)
Median Party (2D) in Cabinet	1.404 <sup>+</sup> (.830)
<i>Time Factors</i>	
1940s	4.828** (1.572)
1950s	1.450 (1.244)
1960s	1.322 (1.210)
1970s	3.039** (1.163)
1980s	.475 (1.093)
Constant	16.918*** (3.111)
No. of Observations	260
R-Squared	.310
Adjusted R-squared	.255

Standard errors in parentheses:

<sup>+</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

TABLE 3: The effect of bicameralism on cabinet portfolio disproportionality index.

No-Confidence,” “PM Dissolution Powers,” “Semi-Presidentialism,” and “Junior Minister Institution.” Second, the following structural or cabinet attribute factors are examined: “Post Election Cabinet,” “Effective Number of Legislative Parties,” “Lower Chamber’s Cabinet Seat Share,” “Upper Chamber’s Cabinet Seat Share,” “Number of Cabinet Parties,” and “Number of Cabinet Members.” Third, I take into account the preference factors of “No Core Party,” “Median Party (1D) in Cabinet,” and “Median Party (2D) in Cabinet.” Finally, I also control for the time periods of cabinet.

#### RESULT OF STATISTICAL ANALYSIS ON DISPROPORTIONALITY INDEX IN THE 15 COUNTRIES

TABLE 3 indicates the statistical results of the cabinet level analysis in the fifteen European countries. First, the institutional strength of the upper chamber influences the disproportionality of the cabinet portfolio allocations. Model 1 in TABLE 3 shows the statistical results of the effect of the institutional strength on the disproportionality index. Although “Weak Upper Chamber (asymmetric bicameralism)” does not have a significant effect on disproportionality (Model 1), the binary variable “Strong Upper Chamber (symmetric bicameralism)” has a significant and positive effect on the dependent variables. FIGURE 2 shows the predicted values of the disproportionality index on the basis of model 1, which are 9.2 (No Upper Chamber), 9.2 (Weak Upper Chamber), and 12.7 (Strong Upper Chamber), respectively. This result implies that only symmetric bicameralism affects

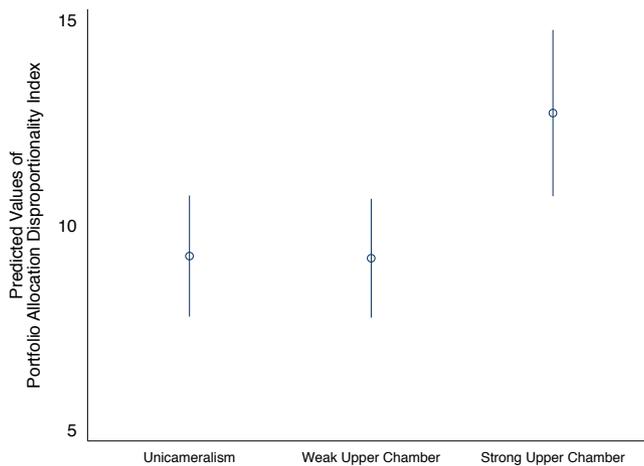


FIGURE 2: The effect of the institutional strength of the Upper Chamber on disproportionality.

cabinet composition and disrupts Gamson's Law. While bicameralism itself does not change cabinet post allocation, the institutional strength of the upper chamber modifies cabinet governance.

*Party Level Analysis: The Effect of the Institutional Strength of the Upper Chamber on Cabinet Portfolio Share*

DEPENDENT VARIABLE

(CABINET PORTFOLIO SHARE HELD BY EACH PARTY)

In this section, I investigate party-level data in three European countries (Belgium from 1946 to 1995, Italy from 1948 to 1999, and Sweden from 1945 to 1970) with symmetric bicameral systems. In particular, I test the hypothesis as to whether party strength in the upper chamber affects advantage in cabinet portfolio shares. The dependent variable in this section is the percentage share of cabinet portfolios held by each governing party. I simply divide the number of ministry positions held by each party by the total number of ministry positions.<sup>6</sup>

INDEPENDENT VARIABLE

(EXTRA PARTY SEAT SHARE IN UPPER CHAMBER)

The central concern of the analysis of this section is the relationship between upper chamber seat share and cabinet portfolio allocation share. While it is widely known that there is a strong empirical relationship between lower chamber seat share and portfolio share, the strong correlation between party seat shares in the two chambers prevents us from analyzing the effect of party seat share in the upper chamber. To solve this problem, this study calculates the difference between party seat share in the two chambers. I calculate the difference between a party's seat share in the upper chamber and lower chamber and label this "extra bargaining power." I use this value as an independent variable and the cabinet portfolio share as a dependent variable.

The key independent variable in the second part of the analysis is "Extra Bargaining Power," as derived from seat share in the upper chamber. I calculate the difference in percentages of seat share in the upper chamber and seat share in the lower chamber in order to measure the power derived

6. To do so, I use a dataset compiled by WARWICK and DRUCKMAN (2001; 2006). The author would like to thank both for generously sharing their dataset. I use unweighted cabinet portfolio share as a dependent variable.

from strength in the upper chamber. I calculate the independent variable as follows:

$$\text{Extra Bargaining Power (EBP)} = \left( \frac{u_i}{U} \right) - \left( \frac{l_i}{L} \right)$$

$u_i$ : number of parliamentary seats in the upper house held by each coalition party  $i$

$U$ : total number of parliamentary seats in the upper house

$l_i$ : number of parliamentary seats in the lower house held by each coalition party  $i$

$L$ : total number of parliamentary seats in the lower house

By definition, positive values indicate a strong status in the upper house while negative values indicate a weak status in the upper house. Furthermore, this index is not correlated with lower chamber seat shares.

#### CONTROL VARIABLES

I also added the following control variables, which are considered to be key factors affecting cabinet post shares. The first control variable is “Party Seats Lower Chamber” for which I calculate the percentage of party seat share in the lower chamber of the governing coalition parties. The second control variable is “Party Seats Upper Chamber,” which indicates the percentage of party seat share in the upper chamber of the governing coalition parties. The third control variable is “Formateur” and the remaining control variables are “Median Party in Lower Chamber” and “Median Party in Upper Chamber” in the first and second dimensions. I assign 1 if the median legislator in the upper chamber belongs to the party, and 0 otherwise.

#### RESULTS OF STATISTICAL ANALYSIS ON CABINET PORTFOLIO SHARE OF THE THREE COUNTRIES—BELGIUM, ITALY, AND SWEDEN

TABLE 4 shows the statistical results of the party-level analysis in the three European countries of, Belgium, Italy, and Sweden, which have symmetric bicameral systems.<sup>7</sup> Model 2 in TABLE 4 shows the relationship between party seat share in the lower chamber and cabinet portfolio share. Model 3 in the same table shows the relationship between party seat share in

7. While the table indicates the results of analysis on unweighted cabinet portfolio share, I also analyze weighted cabinet portfolio share using the same models. Consequently, the two results were similar.

	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6
Lower Chamber Party Seat Share	1.291*** (.078)		.311 (.380)		1.199*** (.084)
Upper Chamber Party Seat Share		1.158*** (.067)	.888*** (.337)		
Extra Upper Chamber Party Seat Share				2.913*** (.483)	.888*** (.337)
Formateur	-.218 (2.195)	1.093 (2.118)	.691 (2.117)	12.715*** (3.163)	.691 (-3.145)
Party of the Median in Lower Chamber (1D)	-1.911 (1.908)	-3.489 <sup>+</sup> (1.878)	-3.145 (1.926)	-3.434 (3.034)	-3.145 (1.926)
Party of the Median in Lower Chamber (2D)	1.354 (2.023)	1.237 (1.977)	1.304 (1.981)	-2.939 (3.085)	1.304 (1.981)
Party of the Median in Upper Chamber (1D)	.248 (2.282)	.414 (2.229)	.322 (2.234)	6.046 <sup>+</sup> (3.462)	.322 (2.234)
Party of the Median in Upper Chamber (2D)	.263 (2.243)	-.093 (2.198)	-.066 (2.200)	5.064 (3.420)	-.066 (2.200)
Constant	6.534*** (.831)	7.700*** (.763)	7.356*** (.872)	16.669*** (.915)	7.356*** (.872)
No. of Observations	145	145	145	145	145
R-Squared	.788	.797	.798	.496	.798
Adjusted R-squared	.779	.788	.788	.474	.788

Standard errors in parentheses:

<sup>+</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

TABLE 4: The effect of the institutional strength of the Upper Chamber on disproportionality.

the upper chamber and cabinet portfolio share (see FIGURE 3). Model 5 shows the effect of the key independent variable “Extra Bargaining Power (Extra Upper Chamber Party Seat Share),” which comprises the difference between upper chamber seat share and lower chamber seat share. I added lower chamber party seat share as a control variable in Models 4 and 6.

First of all, and most importantly, the key independent variable “Extra Bargaining Power” has a positive and significant effect on the dependent variable. The significant effect of the extra bargaining power remains when we consider lower chamber party seat share as a control variable. Furthermore, both the control variables of “Lower Chamber Party Seat Share” and “Upper Chamber Party Seat Share” have significant effects. After controlling

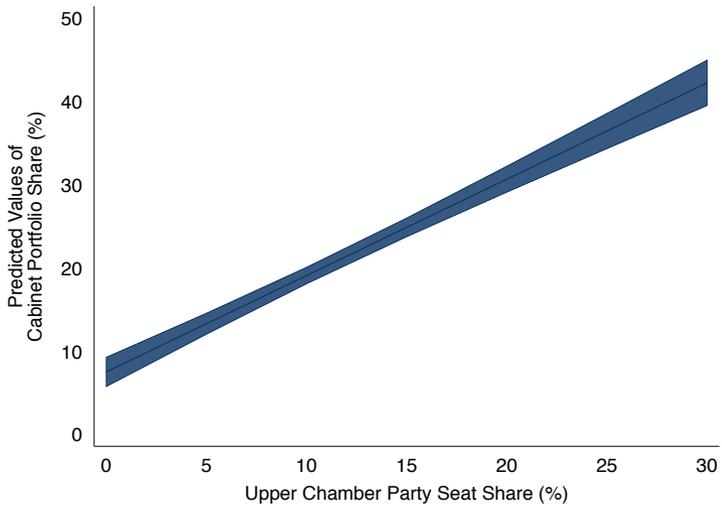


FIGURE 3. The effect of Upper Chamber party seat share on cabinet portfolio share.

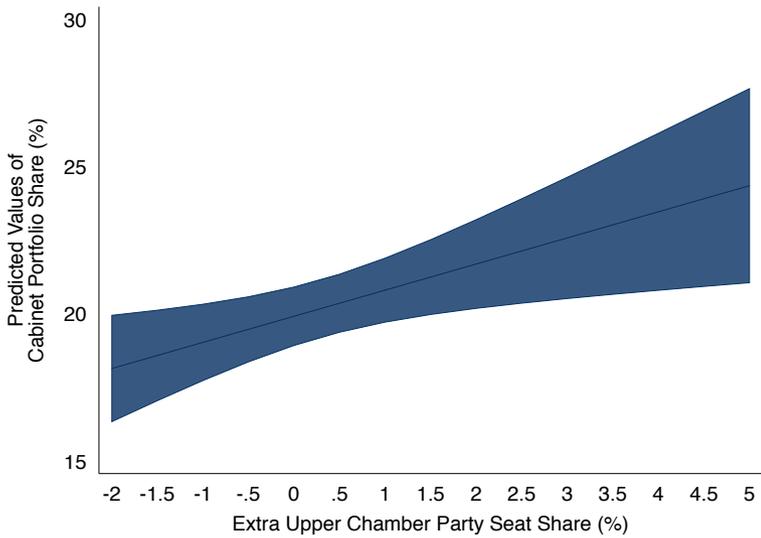


FIGURE 4. The effect of extra Upper Chamber party seat share on cabinet portfolio share.

for lower chamber party seat share, both upper chamber party seat share and extra bargaining power have significant effects.

Second, there is no significant effect of formateur or a median ideological position. In particular, the variable “the Median Party” does not have an effect at any level of significance.

Finally, as shown in FIGURE 4, I calculate the substantive effect of the extra bargaining power in Belgium, Italy, and Sweden on the basis of Model 8. If the extra bargaining power increases from -1 to 5 percentage points, the predicted value of the cabinet portfolio share also increases from 19.0 to 24.4 percentage points. Summing up, a 6 percentage point increase in extra bargaining power results in an approximately 5.4 percentage point increase in cabinet portfolio share.

### *Conclusion*

This paper has discussed the relationship between bicameralism and cabinet portfolio allocation. While Gamson’s Law predicts a strong empirical regularity in the proportionality between party seat share and cabinet portfolio share, there are unexplained deviations from this pattern. This research has demonstrated the role of the upper chambers in these deviations from proportionality. First, the institutional strength of the upper chamber causes disproportionality of cabinet portfolio allocations. The stronger the upper chamber, the greater the increase in the disproportionality index. Second, in countries with symmetric bicameral legislatures such as Italy and Belgium, the party seat share in the upper chamber has a significant effect on the cabinet portfolio share of a given party. Party strength in the upper chamber leads to benefits in terms of cabinet portfolio allocations. As the party seat share in the upper chamber increases, the party obtains more cabinet portfolios. The effect of “extra bargaining power” is clear when we consider the control variables. Third, from the theoretical standpoint of the logic of delegation, a strong upper house disrupts the relationship between the cabinet and lower house of parliament. Symmetric bicameral legislatures make the chain of delegation more complex. Substantively, weak upper chambers are almost the same as the unicameral system. While this research has only analyzed the bicameral systems in Western Europe, it is worthwhile investigating other bicameral cases outside of Europe.

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