Who Gets What?
The Importance of Ministerial Budget in the Allocation of Portfolios in Presidential Multiparty Systems*

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Abstract

How influential is the president’s advantage in cabinet formation in presidential systems? Do presidents receive more and the most important portfolios? What factors lead to a more or less disproportionate distributions of portfolios? In this study, I suggest answers for these questions through a theory in which the disproportional allocation of portfolios can be explained by the privileged position of presidents as the permanent formateur of the cabinet, and also due to the absence of a vote of no-confidence in presidential systems. The results suggest that the president’s party has an advantage in the share of the portfolios, and over which portfolios it controls. Also, the size of the president’s party in the legislature only matters for the amount of the ministerial budget the president’s party controls.

Keywords: Coalition Government; Cabinet Formation; Portfolio Allocation; Presidential System; Latin America.

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1 Introduction

Although several studies (Deheza 1998; Lanzaro 2001; Cheibub 2007; Figueiredo, Salles, and Vieira 2009; Alemán and Tsebelis 2011) have identified multiparty cabinet coalitions as the standard way to govern Latin American presidential democracies, little is known about how this type of government is formed and how portfolios are distributed in presidential contexts. Our understanding of the proportionality\(^1\) or disproportionality of portfolio allocation in presidential systems is particularly scant. In this study I aim to fill this gap, suggesting answers for some important unanswered questions in the literature of portfolio allocation in presidential systems: How influential is the president’s advantage in the cabinet formation? Do presidents receive more and the most important portfolios? What factors lead to a more or less disproportionate distributions of portfolios?

In the literature on parliamentary governments, much of the debate on portfolio allocation has focused on Gamson’s hypothesis (1961), which states that the parties that compose the coalition are rewarded in proportion to their contribution to the legislative strength of the government. In the literature on presidential democracies, Amorim Neto (2006) developed the most popular measurement for portfolio allocation proportionality, called coalescence rate. Similar to Gamson’s measurement (in that they each provide overall summaries of the proportionality of allocations), the greater the coalescence rate, the more proportional the allocation of portfolios. In both systems of government, a measurement for portfolio allocation proportionality “has the advantage of synthesizing in a single indicator […] the distribution of portfolios according to the weight of parties in the legislature” (Figueiredo 2007, p. 203).

However, while studies on the proportionality of portfolio allocation in parliamentary

\(^1\) The term “proportionality” is sometimes used interchangeably with the terms “parity,” or “fairness” (Falcó-Gimeno and Indridason 2013, p. 226). In this paper I adopt the term “proportionality” due to its common use in the literature and also because it facilitates comparability with similar terms. In either case, the term implies that the government parties are rewarded with portfolios in proportion to their legislative seat share.
systems consider the salience of different portfolios (Warwick and Druckman 2001, 2006; Druckman and Roberts 2008), studies of presidential systems assume that all portfolios distributed by the *formateur* have the same weight, basing the distribution of portfolios solely on the legislative weight of each party that comprises the government’s coalition. In other words, the studies on the proportionality of portfolio allocation in presidential systems disregard the possible difference in importance and salience of portfolios.

The main contribution of this paper is the introduction of the ministerial budget as a proxy for portfolio salience to explain the disproportional distribution of portfolios in presidential systems, in order to qualify the president’s advantage in the cabinet formation. Although this research takes cues from the literature on parliamentary systems, it is not a blind application of parliamentary models onto the presidential context. The theory proposed here takes into account unique aspects of presidential systems, such as the president’s role as a permanent *formateur*, and the fixed-term nature of presidential governments.

Considering that in presidential systems the president is the permanent *formateur* of the cabinet and that a vote of no-confidence is absent, it is expected that the president’s party would have an advantage in the share of the portfolios and over which portfolios it controls. The findings of this study support this expectation. Also, the greater the legislative seat share of the president’s party, the greater the disproportionate allocation of more important portfolios—salient portfolios—to the benefit of the president’s party.

In the next section, I review the literature on portfolio allocation and proportionality. In Section 3, I develop the theory and hypotheses. In Section 4, I present and describe the data used in this study. In Section 5, I discuss the methods employed, and present the results and empirical findings. In Section 6, I discuss the findings, and present my final comments.

### 2 Proportionality in Portfolio Allocation

Compared to the vast literature on parliamentary systems, our understanding of whether portfolio allocation follows any degree of proportionality among the parties that compose
the government in presidential systems, is only starting to be explored. Below I present how the proportionality of portfolios’ distribution is usually measured in studies regarding parliamentary systems—by Gamson’s hypothesis—and will discuss in more detail the cabinet coalescence rate suggested by Amorim Neto (2000a; 2002; 2006), the best-known proportionality index in presidential studies.

2.1 Gamson’s Model

According to Gamson’s hypothesis (1961), parties should receive shares of portfolios proportional to their share of legislative seats. In Gamson’s own words (1961, p. 376), “any participant will expect others to demand from a coalition a share of the payoff proportional to the amount of resources which they contribute to a coalition.”

Thus, Gamson’s hypothesis can be expressed as:

\[ p_i = \alpha + \beta \times s_i + u_i \]  \hspace{1cm} (1)

Where \( p_i \) = the proportion of portfolios party \( i \) receives from the total of available portfolios; \( \alpha \) = intercept; \( \beta \) = slope or coefficient for the independent variable \( s_i \); \( s_i \) = the percentage of legislative seats governing party \( i \) holds when the cabinet is appointed, and; \( u_i \) = error term.

The perfect proportionality of portfolios’ distribution—Gamson’s hypothesis—implies that \( \beta \) should equal one, while \( \alpha \) should be zero. The expected value of \( u_i \) should also be zero, and any deviations around zero should be small and random. The expectations of this hypothesis have found inconsistent empirical evidence in studies on parliamentary systems. Whereas some authors present Gamson’s hypothesis as a strong empirical regularity in political science (Laver and Schofield 1990, p. 171; Bassi 2013, p. 789, Bergman and Hellström 2015, p. 361), other scholars reveal how the hypothesis is contradicted by the empirical evidence across different bargaining contexts (Browne and Frendreis 1980, Ansolabehere,
Snyder, Strauss and Ting 2005; Warwick and Druckman 2006; Falcó-Gimeno and Indridason 2013; Golder and Thomas 2014; Indridason 2015).

Among the scholars that discuss the proportionality implied by Gamson’s hypothesis, the literature has been divided among those who follow Baron and Ferejohn’s (1989) formal model of coalition formation, according to which the formateur has an advantage in the allocation of portfolios (see for example, Ansolabehere, Snyder, Strauss and Ting 2005), those who found little evidence for a formateur advantage and argue that a proportional distribution of portfolios is empirically consistent (Schofield and Laver 1985; Warwick and Druckman 2001, 2006; Falcó-Gimeno and Indridason 2013), and those who found a disproportionally large share of portfolios given to small parties (Browne and Frendreis 1980; Morelli 1999; Indridason 2015).

2.2 The Coalescence Rate

Regarding studies on presidential systems, the cabinet coalescence rate suggested by Amorim Neto (2000a) is the most popular measurement of proportionality of portfolio allocation. Based on the index of proportionality developed by Rose (1984), Amorim Neto’s (2000b; 2000a; 2006) cabinet coalescence measurement can be expressed as:

\[
\text{Coalescence} = 1 - \frac{\sum_{i=1}^{n}(|s_i - p_i|)}{2}
\]

Where \(s_i\) = the percentage of legislative seats governing party \(i\) holds when the cabinet is appointed, and; \(p_i\) = the proportion of portfolios party \(i\) receives from the total of available portfolios.

According to the equation above, the coalescence rate results from the summation of the absolute value of the difference between the percent of ministries and the percent of legislative seats for all parties that comprise the cabinet, divided by two, and subtracted by one. Thus, the rate varies between zero—no correspondence between cabinet shares and
legislative seats—and one—perfect correspondence between cabinet shares and legislative weights. In Amorim Neto’s definition (2000b, p. 4), coalescence “measures how the distribution of cabinet posts is roughly weighed vis-à-vis the dispersion of legislative seats across the legislative contingent of the parties joining the executive.”

Amorim Neto (2000a) expected that if a president and more than one party reach a coalition agreement about the composition of the cabinet, the distribution of ministerial portfolios would be proportional to the legislative weight of each party. In other words, the greater the coalescence rate, the more proportional the allocation of portfolios, which would support Gamson’s hypothesis. Amorim Neto (2006) found that the proportionality in the distribution of cabinet portfolios is positively affected by the size of the presidential party, and is negatively influenced by the presidential term year and the president’s degree of power.

However, Amorim Neto (2000b, p. 5) notes that an important concern about his proportionality rate refers to the assumption that all cabinet posts are of equal value. This is a strong assumption, because if we accept it we are assuming that two portfolios of different sizes and amount of resources have the same importance for the parties, and that it does not matter which portfolio the president offers to convince a party to join her government.

In this study, I do not assume that portfolios are of the same weight, and, by qualifying Amorim Neto’s findings (2006), I argue that the president’s advantage as a permanent formateur benefits her party with more and the most important portfolios in the formation of the cabinet.

3 Theory and Hypotheses: Privileged Position of the President and Ministerial Budget

Although the rationale for the formation of coalition governments can be seen as similar in parliamentary and presidential systems (Cheibub and Limongi 2002; Limongi 2003; Cheibub, Przeworski and Saiegh 2004, Cheibub 2007; Cheibub, Elkins and Ginsburg 2014)—that
is, it provides legislative support and greater influence on policy-making—an automatic application of parliamentary bargaining models of government formation to the presidential context would result in major misconceptions.

First, when a cabinet coalition dissolves in parliamentary systems, the chief of the executive branch is threatened by the possibility that a new coalition will be formed and his party will find itself on the side of the opposition. In presidential systems, however, when a cabinet coalition dissolves, the president remains as the permanent *formateur*, and she can form a new coalition during her constitutional term. If a *formateur* fails to form a coalition in a parliamentary system, then either a new round of bargaining initiates, another party gets a chance to be the *formateur*, or a caretaker government rules the country until an election is held and a new government is formed. In presidential systems, a failure of the president to form a coalition—when the parties reject the president’s offer—results in the president’s party ruling the government alone.

Moreover, in parliamentary systems, when the coalition’s members decide to leave the government, a ministerial crisis and a government fall are expected. However, in presidential systems, when party members of the government leave the coalition, they usually put the government into a minority position, but the president’s party remains in power until the president completes her constitutionally fixed-term (Chasquetti 2001). In other words, due to their independence from the legislature and the absence of the vote of no confidence, presidents remain in power even under adverse legislative conditions, other than in exceptional cases (Shugart and Carey 1992; Mainwaring 1993; Altman 2000b; Cheibub, Przeworski and Saiegh 2004; Cheibub 2007).

According to the theory proposed in this study, considering that in presidential systems the president is the permanent *formateur* of the cabinet and that a vote of no-confidence is absent, it is expected that the president’s party would have an advantage in the share of portfolios distributed. Moreover, by adding to the model a measure of the portfolio’s resource amount—the available ministerial budget—a presidential advantage over which portfolios it
controls is also expected.

Following the theory stated above, four hypotheses will be tested in this study. Given the privileged position of presidents as the permanent formateur in the formation of a government’s cabinet and the lack of a vote of no-confidence in presidential systems:

**Hypothesis 1a:** A disproportionate allocation of portfolios to the benefit of the president’s party is expected.

**Hypothesis 1b:** A disproportionate allocation of more important portfolios—salient portfolios—to the benefit of the president’s party is expected.

**Hypothesis 2a:** The greater the legislative seat share of the president’s party, the greater the disproportionate allocation of portfolios to the benefit of the president’s party.

**Hypothesis 2b:** The greater the legislative seat share of the president’s party, the greater the disproportionate allocation of more important portfolios—salient portfolios—to the benefit of the president’s party.

4 Data

The unit of analysis in this study is the governing party within the coalition. A governing party is defined according to whether a party does or does not hold a cabinet membership—that is, if the party controls at least one of the portfolios of the executive branch. Therefore, the use of the term *coalition* in this study refers to government coalition and not legislative coalition. The distinction is important to prevent misuse of the term, but also because it concerns the concept of proportionality here investigated. According to Laver and Schofield (1990, p. 129),

A legislative ‘coalition’ is no more than a group of legislators who vote together on a particular issue. This concept of coalition carries no connotation of permanence, of institutional status, or of any executive role whatsoever. A government coalition carries a very heavy connotation of stability, of agreement over a wide
range of issues, of formal institutional status that is only occasionally tested in the legislature, and of executive control, via cabinet portfolios, over all key policy areas.

Thus, in this study, a government coalition is composed by the president’s party and all parties that accept the ministerial posts offered by the president, whether these parties support the government in the legislature or not.

The examination of the disproportionality rate of portfolios’ distribution will be conducted using the Brazilian case. Besides data availability, there are other reasons to use the Brazilian case in this study. First, there is already a well-documented body of research on how essential coalition formation is for the Brazilian president to govern (Abranches 1988; Figueiredo and Limongi 1999, 2000; Amorim Neto 2002, 2006; Figueiredo and Limongi 2007; Melo and Pereira 2013). Second, the country has the most fragmented legislative branch in the world. By having several parties with representation in the legislative branch, the coordination of the president in the formation of her cabinet is more difficult. Third, Brazil currently has 24 ministries with a large variation on available ministerial budgets that, as of 2015, goes from the minimum of 1.38 billion reais (Ministry of Culture, managed by the Workers’ Party [PT]) to the maximum of 240 billion reais (Ministry of Social Security, also managed by the PT). Applying the proportionality indicator, Brazil reveals itself to be even more interesting when we consider that this case presents a high variation in the proportionality rate of portfolios’ allocation (Amorim Neto 2000a).

The data for this study were gathered from the Brazilian Center of Analysis and Planning (CEBRAP) and from the Budget Transparency analytical tool at the Getúlio Vargas Foundation website.2

The variables used in this study and some descriptive statistics are presented in Table 1.

With the number of observations equal to 104, in a time range from 1996 to 2015, the models to be estimated include two dependent variables—Portfolio Share and Ministerial

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2The Brazilian legislative data compiled by the CEBRAP can be viewed at http://neci.ffich.usp.br/node/506, and the budget data can be viewed at http://dapp.fgv.br/mosaico/.
Table 1: Variable’s Names and Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variables:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portfolio Share (%)</td>
<td>0.11</td>
<td>0.13</td>
<td>0.00</td>
<td>0.52</td>
<td>104</td>
</tr>
<tr>
<td>Ministerial Budget Share (%)</td>
<td>0.12</td>
<td>0.18</td>
<td>0.00</td>
<td>0.77</td>
<td>104</td>
</tr>
<tr>
<td><strong>Independent Variables:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislative Seat Share (%)</td>
<td>0.14</td>
<td>0.10</td>
<td>0.003</td>
<td>0.42</td>
<td>104</td>
</tr>
<tr>
<td>President’s Party</td>
<td>0.14</td>
<td>0.35</td>
<td>0</td>
<td>1</td>
<td>104</td>
</tr>
<tr>
<td>President’s Party Leg. Strength (%)</td>
<td>0.28</td>
<td>0.05</td>
<td>0.22</td>
<td>0.42</td>
<td>104</td>
</tr>
<tr>
<td>Surplus Party</td>
<td>0.62</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
<td>104</td>
</tr>
<tr>
<td>Effective Number of Parties (ENP)</td>
<td>9.42</td>
<td>1.44</td>
<td>7.14</td>
<td>13.22</td>
<td>104</td>
</tr>
<tr>
<td>Presidential Term Year</td>
<td>0.78</td>
<td>0.23</td>
<td>0.25</td>
<td>1.00</td>
<td>104</td>
</tr>
</tbody>
</table>

Budget Share—and six independent variables described below.

**Dependent Variables**

*Portfolio Share.* This is the first dependent variable, and it relates to the distribution of cabinet portfolios at the party level. Thus, this variable indicates the percentual number of portfolios party $i$ receives from the total number of portfolios available ($p_i$ in both Gamson’s model and Amorim Neto’s coalescence rate). The observations in the dataset for this variable range from 0—when a governing party holds no portfolio in the cabinet—and 0.52—when a governing party holds 52 percent of the portfolios available. On average, parties receive 11 percent of the portfolios available, with a standard deviation of 13 percent.

*Ministerial Budget Share.* This variable relates to the distribution of portfolios’ resources—measured as the ministerial budget share—at the party level. Thus, this variable is the percentage amount of the total ministerial budget controlled by party $i$ from the total cabinet budget available. The observations range from 0—when a governing party holds no portfolio in the cabinet—to 0.77—when a governing party controls 77 percent of the cabinet budget available. On average, parties receive 12 percent of the cabinet budget available with a standard deviation of 18 percent.\(^3\)

\(^3\)The portfolios considered in this study, with their respective average budget, can be seen in Figure 2 in
Independent Variables

Legislative Seat Share. This variable indicates the percentage of legislative seats governing party \( i \) held when the cabinet is appointed from the total number of legislative seats held by the government’s coalition. The observations for this variable range from 0.003 to 0.42. On average, governing parties hold 14 percent of the legislative seats controlled by the coalition with a standard deviation of 10 percent.\(^4\)

President’s Party. This is a dichotomous variable, assuming the value of 1 if it is the presidential party, and the value of 0 otherwise. As stated in Hypotheses 1a and 1b, the expectation is that when this variable assumes the value of 1, it increases the portfolio share and the ministerial budget share for the president’s party respectively, increasing the disproportion in the portfolio allocation.

President’s Party Legislative Strength. According to hypotheses 2a and 2b, it is expected that the greater the legislative strength of the president’s party, the greater the disproportionate allocation of portfolios is to the benefit of the president’s party. Thus, this variable is the percentage of legislative seats the president’s party held when the cabinet is appointed, which is a measurement of the size of the president’s party. According to the sample, the observations for this variable range from 0.22 to 0.42, revealing that the president’s party by itself never achieved the majority of the seats in the legislature (with a mean of 0.28 and a standard deviation of 0.05).

Surplus Party. According to Luebbert’s (1986) study on the formation of coalitions in parliamentary systems,

A minimum winning coalition would contain no excess parties [or surplus parties], and the withdrawal of one party would bring down the government. This situation permits a kind of blackmail of the dominant party (and all other parties) by a single dissatisfied party; for a party can leave the government at will, and thus compel the dominant party to choose between making concessions or

\(^4\)The list with all the governing parties considered in this study can be seen in Appendix B.
renegotiating the entire government agreement.

Although presidents have fixed terms, and the withdrawal of one party would not bring down the whole government, majority coalitions in presidential contexts—in which members of the government’s cabinet together control the majority of the legislative seats—can also be a majority either of a minimum size—just enough to form a legislative majority—or a surplus coalition—in which the withdrawal of one party does not turn the government into a minority coalition, i.e., a coalition in which members of the government’s cabinet together control less than half of the legislative seats available. Therefore, surplus parties can be understood as those parties unnecessary for the government to form a legislative majority. Considering that a dissatisfied surplus party cannot lead the government to a legislative minority, it is expected that a disproportionate smaller allocation of portfolios will be given to surplus parties. According to the sample, an average of 62 percent of the governing parties were surplus parties in their respective coalitions.

*Effective Number of Parties (ENP).* This variable is Laakso and Taagepera’s (1979) measurement of the fragmentation of the party system in the legislative branch. That is, $ENP = \frac{1}{s^2}$. The observations range from seven parties to thirteen parties, indicating a high fragmented party system (with a mean of nine parties). It is expected that when the number of parties represented in the legislature increases, the size of the president’s party decreases, and thus the need for the president’s advantage in forming a coalition government is greater. Also, as stated above, the greater the fragmentation of the party system, the more difficult it is for the president to coordinate the formation of her cabinet.

*Presidential Term Year.* This variable measures the elapsing of the president’s term, expressed as $\frac{T_e - T_c}{4}$. $T_e =$ the year the president’s term ends, $T_c =$ the current year of the president’s term, and 4 is the number of years of the president’s term as defined by the Brazilian constitution. Thus, a value of 0.25 refers to the first year of the president’s term, 0.5 is the second year, 0.75 is the third year, and 1 refers to the last year of the president’s term. This variable controls for the possibility that as new elections approach, the president
will attempt to give more electorally-influential governing parties more portfolios in order to build an electoral coalition and gain more votes (Altman 2000a,b).

5 Methods, Models, and Results

The standard method of testing Gamson’s hypothesis is to conduct a bivariate ordinary least squares regression (OLS) of the governing parties’ legislative seat share (legislative strength) on their share of portfolios. The results for the test of Gamson’s hypothesis using both dependent variables—i.e. portfolio share and ministerial budget share—in a presidential system can be seen in Table 2.

Table 2: Testing Gamson’s Hypothesis in a Presidential System

<table>
<thead>
<tr>
<th>Dependent variables:</th>
<th>Portfolio Share</th>
<th>Budget Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative Seat Share</td>
<td>1.030</td>
<td>1.329**</td>
</tr>
<tr>
<td></td>
<td>(0.086)</td>
<td>(0.122)</td>
</tr>
<tr>
<td>Constant</td>
<td>−0.036*</td>
<td>−0.075**</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>(N)</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>(R^2)</td>
<td>0.586</td>
<td>0.538</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses. Two-tailed test. * \(p<0.05\); ** \(p<0.01\).

Gamson’s Hypothesis: \(\alpha = 0; \beta = 1\).

Hypothesis Test:

For \(\beta\):
- Null Hypothesis \((H_0)\): \(\beta = 1\).
- Alternative Hypothesis \((H_a)\): \(\beta \neq 1\).

For \(\alpha\):
- Null Hypothesis \((H_0)\): \(\alpha = 0\).
- Alternative Hypothesis \((H_a)\): \(\alpha \neq 0\).

By using portfolio share as the dependent variable, the results presented in Table 2 suggest an almost perfectly proportional distribution of portfolios among larger parties—i.e., parties controlling a greater number of legislative seats—but indicate a bias for small parties. With a coefficient for legislative seat share equal to 1—not significantly different from one \((H_0\) for \(\beta\) at level 0.05)—and a constant significantly different from zero \((H_0\) for \(\alpha\) at level 0.05),
legislatively strong parties seem to receive a share of cabinet portfolios according to their weight in the legislature. By using *budget share* as the dependent variable, in turn, the results suggest a slight advantage for larger parties and a still biased portfolio allocation for small parties.

However, as revealed in Figure 1 below—i.e., the covariance between legislative strength on either share of portfolios and share of ministerial budget—we can see that interpreting the results of Table 2 as a perfect proportional portfolio and ministerial budget allocations is a hasty conclusion, and requires caution.

Figure 1: Testing Gamson’s Hypothesis by Portfolio Share and by Ministerial Budget Share in a Presidential System

The solid line in Figure 1 is the OLS estimate (with 95 percent confidence interval bands), and the dashed line is the expected linear line if Gamson’s hypothesis was perfectly supported \((\alpha = 0 \text{ and } \beta = 1)\). As we can see in Figure 1, the solid line is in the same direction and very close to the dashed line, apparently supporting Gamson’s hypothesis—including an overlap between the 95 percent confidence interval and Gamson’s hypothesis line in the top right side of the figures. Nevertheless, a closer look at the figures reveals that the previous result found in Table 2—i.e., a value for \(\beta\) close to 1—occurs not because observations for bigger parties are being well-predicted by the model, but rather because these cases split
fairly evenly above and below the regression line. This result is the consequence of residuals above and below the predicted regression line: bigger parties, similar in their size, receive a disproportionate shares of portfolios. While some strong legislatively parties—such as the Progressive Party (PP) from 1996 to 2002, the Democrats (DEM) in 1999, and the Brazilian Democratic Movement Party (PMDB) from 2002 to 2005—were underrepresented in the cabinet, other legislatively strong parties, particularly presidential parties (red dots)—such as the Brazilian Social Democracy Party (PSDB) from 1996 to 1999, and the Workers’ Party (PT) from 2003 to 2015—were overrepresented in the cabinet. This disproportion seems to be somewhat alleviated by the share of the ministerial budget, with presidential parties closer to the line representing Gamson’s hypothesis, and some non-presidential parties being above the Gamson’s line.

Therefore, the bivariate nature of the regression model depicted by the solid line in Figure 1 appears to lead to omitted variable bias in the coefficients. For more reliable results, and for testing the suggested hypotheses of this study, we need appropriate and better-specified models.

In order to test each of the hypotheses, I use OLS to estimate the following models:

- Model 1 and Model 2:

\[
depvar_{it} = \beta_1 + \beta_2 LegSeatShare_{it} + \beta_3 PresidentParty_{it} + \beta_4 Surplus_{it} + \beta_5 ENP_t + \beta_6 PresTerm_{it} + u_{it}
\]

Where \( depvar \) = dependent variables \( Portfolio Share \) and \( Ministerial Budget Share \).

Equation 3 above is specified to test hypotheses 1a—wherein a disproportionate allocation of portfolios that will benefit the president’s party is expected—and hypothesis 1b—wherein a disproportionate allocation of ministerial budget that will benefit the president’s party is expected.
Model 3 and Model 4:

\[ \text{depvar}_{it} = \beta_1 + \beta_2 \text{LegSeatShare}_{it} + \beta_3 \text{PresLegStrength} \]
\[ + \beta_4 \text{Surplus}_{it} + \beta_5 \text{ENP} + \beta_6 \text{PresTerm}_{it} + u_{it} \]

(4)

Where depvar = dependent variables Portfolio Share and Ministerial Budget Share.

According to hypotheses 2a and 2b, I suggest that the disproportionate portfolio share and ministerial budget share of the president’s party would increase as the legislative strength of the president’s party increases. These hypotheses are tested by Model 3 and Model 4 (see Equation 4), adding the independent variable “president’s party legislative strength” into the models. As the rationale in Model 3 and Model 4 is to test the effect of the legislative strength of the president’s party on portfolio and ministerial budget allocations against the legislative strength of other governing parties (i.e., non-presidential parties), these models are tested using a sub-sample that includes only non-presidential governing parties (therefore, there is no need to include the dichotomous variable “president’s party” to these models). The results are presented in Table 3 below.

The OLS results from Table 3 support hypothesis 1a and hypothesis 1b of this study: The expectations of a disproportionate allocation of portfolios and a share of the most important portfolios to the benefit of the president’s party are supported by the positive and statistically significant (at level 0.01) coefficients for “president’s party” in Model 1 and Model 2. Moreover, the coefficient for “president’s party legislative strength” is not significant in Model 3, but negative and significant (at level 0.01) in Model 4, revealing that the size of the president’s party matters only for the amount of the ministerial budget the president’s party controls. As the president’s party becomes larger—that is, legislatively stronger—the ministerial budget controlled by non-presidential governing parties becomes smaller.

Of the control variables, “presidential term year” is positive and significant (at level 0.05) in Model 2, regarding ministerial budget share. As new elections approach, the president
### Table 3: The Influence of the President’s Party Advantage, and Portfolios’ Salience

<table>
<thead>
<tr>
<th>Dependent variables:</th>
<th>% Portfolio (Model 1)</th>
<th>% Budget (Model 2)</th>
<th>% Portfolio (Model 3)</th>
<th>% Budget (Model 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislative Seat Share</td>
<td>0.485** (0.066)</td>
<td>0.866** (0.157)</td>
<td>0.432** (0.071)</td>
<td>0.665** (0.157)</td>
</tr>
<tr>
<td>President’s Party</td>
<td>0.260** (0.015)</td>
<td>0.213** (0.036)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pres. Party Legislative Strength</td>
<td></td>
<td></td>
<td>-0.233 (0.121)</td>
<td>-0.675* (0.267)</td>
</tr>
<tr>
<td>Surplus Party</td>
<td>-0.006 (0.011)</td>
<td>-0.024 (0.027)</td>
<td>-0.022 (0.015)</td>
<td>-0.087* (0.033)</td>
</tr>
<tr>
<td>Effective Number of Parties</td>
<td>0.001 (0.003)</td>
<td>0.002 (0.008)</td>
<td>-0.002 (0.004)</td>
<td>-0.011 (0.008)</td>
</tr>
<tr>
<td>Presidential Term Year</td>
<td>0.030 (0.021)</td>
<td>0.118* (0.049)</td>
<td>0.010 (0.021)</td>
<td>0.067 (0.045)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.023 (0.036)</td>
<td>-0.137 (0.085)</td>
<td>0.100 (0.070)</td>
<td>0.285 (0.154)</td>
</tr>
</tbody>
</table>

| N | 104 | 104 | 89 | 89 |
| $R^2$ | 0.897 | 0.684 | 0.553 | 0.489 |

**Notes:** Standard errors in parentheses. Two-tailed test. *p<0.05; **p<0.01.
increases the share of the ministerial budget among the governing parties. By considering that presidents’ parties near the end of their term might attempt to build a competitive electoral coalition in order to gain more votes in the upcoming election, the distribution of the ministerial budget to governing parties likely benefits the electorally-influential governing parties more consistently. Also, “surplus party” is negative and significant (at level 0.05) in Model 4. This result supports the expectation that a disproportionate smaller allocation of portfolios is given to surplus parties, given that a dissatisfied surplus party cannot lead the government to a legislative minority. These are empirical issues to be better explored in further research.

6 Discussion and Conclusions

By focusing on understanding how influential the president’s party advantage is in portfolio allocation, I found that the president’s party has an advantage in the share of the portfolios and in the value of the portfolios it controls. Also, qualifying Amorim Neto’s finding (2006), according to which the proportionality in the distribution of cabinet portfolios is positively affected by the size of the presidential party, the results in this study reveal that the size of the president’s party matters only for the amount of the ministerial budget the president’s party controls. The greater the legislative seat share of the president’s party, the greater the disproportionate allocation of more important portfolios—salient portfolios—to the benefit of the president’s party. Therefore, relaxing the assumption of presidential studies that all cabinet portfolios are of equal value, the privileged position of presidents as the permanent formateur of the cabinet and their constitutionally fixed term seem to give them an advantage in portfolio allocation, and also over which portfolios it controls.

Interestingly, the bargaining theoretical approach developed in studies on parliamentary systems—according to which the formateur has an advantage in the allocation of portfolios—seems to explain the disproportionate allocation of portfolios in presidential systems better than in parliamentary systems, which is an issue worth being explored in further research.
The results of this study are far from conclusive, and more research on the topic of portfolio allocation and portfolio share proportionality should be conducted. Although ministerial budget data are not easily gathered for different countries, the theory here proposed is not restricted to the Brazilian case. Common measurements of portfolio importance should be developed, and consequently cross-national studies incorporating many more democracies with variation on political institutions will be feasible and worth investigating.
Appendix A

Figure 2: Mean Budget of Brazilian Government’s Portfolios (1996-2015)

Source: Elaborated by the author, based on the “Budget Transparency” from the Getúlio Vargas Foundation.
## Appendix B

Table 4: Political Parties’ Name and Acronym

<table>
<thead>
<tr>
<th>Party’s name (Portuguese)</th>
<th>Acronym</th>
<th>Party’s Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democrats (Democratas)</td>
<td>DEM</td>
<td>25</td>
</tr>
<tr>
<td>Brazilian Communist Party (Partido Comunista Brasileiro)</td>
<td>PCB</td>
<td>21</td>
</tr>
<tr>
<td>Communist Party of Brazil (Partido Comunista do Brasil)</td>
<td>PCdoB</td>
<td>65</td>
</tr>
<tr>
<td>Democratic Labour Party (Partido Democrático Trabalhista)</td>
<td>PDT</td>
<td>12</td>
</tr>
<tr>
<td>Brazilian Democratic Movement Party (Partido do Movimento Democrático Brasileiro)</td>
<td>PMDB</td>
<td>15</td>
</tr>
<tr>
<td>Progressive Party (Partido Progressista)</td>
<td>PP</td>
<td>11</td>
</tr>
<tr>
<td>Socialist People’s Party (Partido Popular Socialista)</td>
<td>PPS</td>
<td>23</td>
</tr>
<tr>
<td>Party of the Republic (Partido da República)</td>
<td>PR</td>
<td>22</td>
</tr>
<tr>
<td>Brazilian Republican Party (Partido Republicano Brasileiro)</td>
<td>PRB</td>
<td>10</td>
</tr>
<tr>
<td>Republican Party of the Social Order (Partido Republicano da Ordem Social)</td>
<td>PROS</td>
<td>90</td>
</tr>
<tr>
<td>Brazilian Socialist Party (Partido Socialista Brasileiro)</td>
<td>PSB</td>
<td>40</td>
</tr>
<tr>
<td>Social Democratic Party (Partido Social Democrático)</td>
<td>PSD</td>
<td>55</td>
</tr>
<tr>
<td>Brazilian Social Democracy Party (Partido da Social Democracia Brasileira)</td>
<td>PSDB</td>
<td>45</td>
</tr>
<tr>
<td>Workers’ Party (Partido dos Trabalhadores)</td>
<td>PT</td>
<td>13</td>
</tr>
<tr>
<td>Brazilian Labour Party (Partido Trabalhista Brasileiro)</td>
<td>PTB</td>
<td>14</td>
</tr>
<tr>
<td>Green Party (Partido Verde)</td>
<td>PV</td>
<td>43</td>
</tr>
</tbody>
</table>

*Source*: Brazilian Superior Electoral Court (2014).
References


Altman, David. 2000a. “Coalition Formation and Survival under Multiparty Presidential 
Democracies in Latin America: Between the Tyranny of the Electoral Calendar, the Irony 
of Ideological Polarization, and Inertial Effects.” _Paper presented at the Meeting of the 
Latin American Studies Association, Hyatt Regency, Miami._

283.

Amorim Neto, Octavio. 2000a. “Gabinetes Presidenciais, Ciclos Eleitorais e Disciplina Legis- 

Amorim Neto, Octavio. 2000b. “Presidential Cabinets, Electoral Cycles, and Coalition Dis- 

pline in Brazil.” In _Legislative Politics in Latin America_, ed. Scott Morgenstern and Benito 
Nacif. Cambridge: Cambridge University Press.

Amorim Neto, Octavio. 2006. _Presidencialismo e Governabilidade nas Américas_. Rio de 
Janeiro: FGV; Konrad Adenauer Stiftung.

Weights and Formateur Advantages in the Formation of Coalition Governments.” _American 


