Government Formation and Termination in European Democracies with Presidential Heads of State

by

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To My Family
Curriculum Vitae

Shin-Goo Kang was born in Seoul, Republic of Korea, on June 16, 1972. He received his Bachelor of Arts degree in 1995 and Master of Arts degree in Political Science in 1997 at Seoul National University. He taught cadets from 1997 to 2000 at the Republic of Korea Air Force Academy. He came to the University of Rochester in the Fall of 2001. He pursued his graduate studies in Comparative Democratic Institutions and Political Process under the direction of G. Bingham Powell Jr. and received his Master of Arts degree in 2005. He received a W. Allen Wallis Institute of Political Economy Fellowship from 2004 to 2006.
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Abstract

In most European democracies, a government can form and stay in office based on a continuous process of bargaining and negotiation among parliamentary parties constrained by the set of institutional arrangements that governs the process, since a parliamentary majority can remove the government from office at any time of its tenure. The primary goal of this dissertation is to study the role and influence of presidential heads of state in the government formation and termination processes in European democracies. How to form and sustain a viable coalition in a multi-party parliament where there is no single majority party has been one of the most intensively studied subjects of comparative politics. However, the role and influence of the heads of state in these important democratic processes has been neglected in the literature even if the heads of state are elected presidents.

In particular, the dissertation focuses on the president’s constitutional power to select a formateur who makes a proposal for a prospective government over which negotiations take place within parliamentary parties when an opportunity to form a new government arises and the power to call or not to call an election when the incumbent government loses the confidence of parliament before the parliament completes its full constitutional term. Focusing on these constitutionally endowed powers of the presidents, the dissertation derives a number of theoretical hypotheses that link the preference of the presidents to the outcomes of bargaining processes and tests them against the real world data.

The dissertation shows with strong evidence that the presidents in European democracies have used their constitutionally endowed powers effectively to advance their political interests through the formation and maintenance of their preferred governments in multiparty parliamentary environments. Researchers in the field of comparative politics have often focused on the broad contrast in constitutional designs, such as parliamentarism and presidentialism. The dissertation, thus, suggests that there are significant limitations to such an aggregate approach. The dissertation generates new insights on the mechanisms through which important political actors – e.g., the government, the parliament, and the president – interact with each other to affect the national policy makings under diverse institutional arrangements.
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Chapter 1

Introduction: President in the Politics of Coalition

Unlike the U.S. presidential system where the elected head of state – President – runs the government\(^1\) for a constitutionally fixed term independently of the support of the Congress, in most European democracies, the head of state is not normally the chief executive and the government headed by the Prime Minister is politically responsible to the Parliament.\(^2\) Hence, most European democracies are often classified as parliamentary systems and the role of heads of state in the politics of European democracies has received little scholarly attention.

The primary goal of this dissertation is to study the influence of the presidential heads of state in the politics of European democracies where the governments are politically responsible to the parliament. In particular, I focus on the influence of the presidential heads on the formation and termination processes of the government coalition. My main argument of this study is that the presidential heads of state in European democracies have effectively used their constitutionally endowed powers to advance their political interests through the formation and maintenance of their preferred governments. The findings in the following chapters, as you shall see, provide empirical evidence supporting this argument.

In European democracies, the political responsibility of government to the parliament means that a parliamentary majority can remove the incumbent government

\(^1\)Throughout this study, I define the term “government” narrowly so that it refers to the highest executive branch of national political institutions. Thus, the terms government, cabinet, and executive are used interchangeably.

\(^2\)The national body of elected representatives of the people in a democratic regime is generically called the “legislature.” In many European democracies, however, the term is often misleading since most legislations are originated by the executive. In Ireland, for instance, virtually all legislation consists of governments bill. A private members’s bill was passed in 1989 for the first time for over forty years (Gallagher et al. 1995, 45). Moreover, in France a particular government bill can become law even without voting if the government makes the adoption of a bill an issue of confidence and no censure motion is carried out in the Assemblée nationale [National Assembly, lower chamber of the French Parliament] (Article 49.3 of the Constitution). Hence, throughout this dissertation, I use the term, “parliament,” referring to the national institution of elected representatives in the sense that its main function is to sustain confidence in a government (Shugart and Carey 1992, 3).
from office if it chooses to do so. A procedural device ensuring this principle in a parliamentary system is the vote of no confidence. A government must resign when a parliamentary majority demonstrates its lack of confidence by defeating the government in a vote of no confidence in order for a polity to be called a parliamentary system. In most European democracies, this procedure is laid out in elaborate detail in constitutional documents. Even if this is not the case, such as in the United Kingdom, “there is nonetheless a very strong presumption that a government will in fact resign if defeated in a confidence vote” (Gallagher 1995, 29).

Note that, strictly speaking, a confidence relationship between the government and the parliament constitutes a necessary condition of a parliamentary system. Although this relationship is defined solely over the survival of government, it implies practically the dependence of the formation of the government on the parliament as well. A government opposed by a parliamentary majority will be removed from office immediately after formation. Then, in turn, there is no point of forming it. Thus, according to the principle of government responsibility to parliament, a government can form and stay in office only if it is not opposed by a parliamentary majority.

The principle of government responsibility to parliament appears to be straightforward. However, complications arise when it is applied to the real world politics. In a modern democracy, various interests that exist in a polity are aggregated through the election of representatives of political parties in the Assembly. In a pure parliamentary system, the election of members of Parliament is the only way that is allowed for the citizens to express their preferences over the governing program. Once elected, members of the same party normally vote in a unified manner. That

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3 As a countermeasure to the motion of no confidence – usually initiated by the opposition parties in parliament, governments may commit their survival explicitly to the fate of a particular bill or to a statement of general policy. Scholars of European coalition politics often differentiate the cases where the initiative rests with the opposition – a motion of no confidence, or censure – from the ones with the cabinets – a motion of confidence (Huber and McCarty 2001; Bergman et al. 2003, 157). Although interesting, the substantial implication is the same. With respect to this differentiation, government defeat implies a successful motion of no confidence or a failed motion of confidence.

4 The only exception in Western Europe is Switzerland. Swiss government cannot be removed from office before the end of its term after it is formed by the parliament. Thus, Switzerland cannot be a parliamentary system.
is, political parties behave like a *unitary actor*.

In this context, if there is a single majority parliamentary party, it is not too hard to find a government that can be supported by a parliamentary majority. The single majority party cabinet headed by its own leader will be most likely to emerge and remain in office until the end of its term. Indeed, this is what we frequently observe in the politics of Britain, the birthplace of parliamentary democracy. However, the British case is not very representative of the political systems where the governments are politically responsible to the parliaments. A single party majority is certainly not a norm but an exception.

On the contrary, most parliamentary elections have produced parliaments in which no single party controls a majority of parliamentary seats, partly due to the Proportional Representation electoral systems (Duverger 1954, 1986; Lijphart 1994; Cox 1997). Hereafter, we call this situation a *minority parliament*. According to the principle of political responsibility, minority parliaments imply that parties need to form a *coalition* to claim a parliamentary majority that can sustain a government in a (potential) confidence vote. Minority parliaments imply further that there exist a *potentially huge number of possible coalitions* that can claim a parliamentary majority.

In this environment, party leaders must bargain with each other over whatever they pursue in the national politics in order to form a government. They are often forced to compromise policy pledges they made to the electorate during the campaign. Typically, but not necessarily, parties in a governing coalition share cabinet portfolios.\(^6\) Formation is not the end of the politics of coalition, however. Coalitions

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\(^5\)Theorists of European parliamentary system have frequently made an assumption that political parties can be treated as unitary actors. Empirical evidence has been repeatedly provided that the members of the same party do, indeed, tend to behave like a single actor by voting in a unified manner particularly when they decide on an important matter such as the vote of confidence. In this study, I assume that parties are “unitary actors” following this tradition. Laver and Schofield (1990, esp. Chapter 2 and Appendix A) provide an excellent discussion on the plausibility and consequences of relaxing the assumption.

\(^6\)We often observe that minority cabinets are supported by external support parties which do not take a seat in the cabinet.
are not as cohesive as individual parties. Unfolding political events may lead any member party in a governing coalition to find an alternative coalition more attractive than the incumbent at any moment during the term of office. When this happens, a coalition may well break down unless a counteroffer is made by the other government partner. Therefore, a government in a minority parliaments can only function based on a continuous process of bargaining and negotiation between parties in a coalition in every phase of its life: from the formation to the termination.

In a modern political system, important policy decisions are made and implemented by the government. Also, many researchers have shown that government decisions are affected by the partisan characteristics of government (e.g., Franzese 2002; McDonald et al. 2004; Powell and Kang 2007). Given the prevalence of minority parliaments in a political system where the governments are politically responsible to parliament, therefore, understanding the process of how parties form and maintain a government coalition provides one of the most important keys to explain and predict the politics in this type of political systems.

Over the past half century, a great deal of theoretical and empirical work has been devoted to the task of explaining and predicting the formation and termination of governing coalitions in a multiparty minority parliament. Besides the importance of the topic in the democratic decision-making process, certain features of coalition politics have made the study more amenable than other topics in political science in theoretical and empirical aspects. In a theoretical side, the process involves a relatively few players (individual parties), identifiable goals (office or policy preferences), and the rules of the games (institutional arrangements). In an empirical side, information on the theoretically interesting variables – for example, party composition of government coalition, duration of government, mode of terminations – is relatively easy to operationalize and obtain (Warwick 1996, 471-472).

Various factors have been proposed and verified as determinants of this important democratic process by the students of coalition politics. Earlier scholars have mainly

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7Cheibub (2007) reports that more than 73 per cent of government bills are approved by the national assembly in 604 democratic country-years since 1946 (88-89). In a parliamentary system alone, the rate is about 81 per cent. Also see footnote 2.
focused on the *structural attributes* of parliamentary parties and party systems, such as individual parliamentary party seat shares, ideological policy preferences, party fragmentation, ideological diversity, and polarization. More recent researchers, influenced by the *neo-institutional approach*, have studied the *role of institutions* in structuring the outcomes of bargaining process by inducing *strategic interactions* among parliamentary parties. All in all, our understanding of the formation and termination of governing coalition in minority parliaments has been significantly improved based upon the findings in the previous research.  

What has been missing in this old but still active research tradition, however, is the *role played by the head of state* in the politics of coalition. We hardly find anything related to the head of state in the long list of variables identified as important determinants of coalition politics that have been compiled by the previous scholars. In fact, scholars often assert that the heads of state in these political systems – mostly in European democracies – are largely *ceremonial figureheads*, in contrast to the U. S. President. However, the role played by the heads of state in the formation and termination of government coalitions has not even been questioned and investigated in any systematic manner in the previous literature. This implies, in practice, virtually all previous literature on coalition politics has made an implicit assumption that a government coalition would rise and fall independently of the head of state.

How reasonable is this assumption? This simple question has received little attention in the previous literature. The assumption *may be upheld* if any of the following conditions is satisfied: either the head of state has no power to affect the process or the preference of the head of state over the alternative governments is not systematically related with partisan politics. Neither condition seems tenable if we take a look at the practices of politics in most European democracies.

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8The literature on the formation and termination (duration) of coalition governments has been developed rather independently. In this study, I will also analyze these two closely related processes separately. More extensive reviews of literature will be provided separately later in the relevant chapters. Theoretical efforts to explain the dynamic relations of these two closely related processes have made progress recently (e.g., Diermeier and Merlo 2000).
First, most European constitutions have endowed the heads of state with important powers regarding the formation and termination of government. Although specific provisions vary widely across systems, in general most heads of state in European democracies may decide whether to call a general election and, thereby, dissolve the parliament when the incumbent government collapses before the parliament fulfills its full constitutional term. After election – regardless of whether it takes place early or on a regular electoral calendar – or after the head of state decides not to call an election at the event of the collapse of incumbent government, there is a void in the executive power requiring the formation of new government. Most heads of state have a constitutional power to initiate the government formation bargaining process by appointing or nominating a Prime Minister candidate – so-called formateur – subject to parliamentary approval and conclude the process by appointing cabinet ministers proposed by the Prime Minister.

As I noted above, there is a huge number of arithmetically possible potential coalitions that can claim a parliamentary majority in a normal minority parliament. Theoretical efforts have been made to reduce the size of the prediction sets of potential coalitions that may actually form. But even the most sophisticated theories often predict multiple equilibrium governments that can survive the confidence vote. Recent theorists have argued that a formateur party in this environment is in a privileged position to extract additional gains from its coalition partner due to its agenda setting role of proposing alternative governments over which negotiations take place (Laver and Schofield 1990, 208-209; Austen-Smith and Banks 1988; Baron 1991, 1993). In spite of its importance, the selection of formateur has been left unmodelled in the theoretical literature. The literature has overlooked the fact that the appointment of formateur is typically a task reserved for the head of state in most European democracies. Therefore, we can easily expect that a head of state may induce a preferred government alternative by appropriately appointing a formateur under this circumstance.

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9Every European constitution prescribe a maximum term of office for Parliament. This is commonly called “the Constitutional Interelection Period (CIEP).” A general election should take place before the parliament reaches the end of CIEP. Most European countries allow an early election to take place during the term of the incumbent Parliament except Norway where an early election is not allowed. Sweden is also exceptional in that an extraordinary election does not prevent a regularly scheduled election from occurring.
Moreover, every defection from government coalition may result in the termination of government. Whenever the incumbent government terminates, an early election is always a real possibility in these political systems. Some party in a government coalition might want to bring down the incumbent government upon the anticipation of a favorable electoral swing unless compensation is made by the other government partner. Others might prefer to form a new government with parties outside of the original coalition rather than make a compensation to their partner that rides high in opinion polls. All these critical considerations on the maintenance of government coalition hinge crucially on whether the dissolution of parliament and an early election is likely to follow the defeat of a government. Most heads of state in European democracies are constitutionally required to be involved in this important decision-making process.

It should be clear by now that most heads of state, who have been generally perceived as ceremonial figureheads, actually possess considerable institutional powers at their disposal with regard to the formation and termination of government coalition. Now we consider the preference of the heads of state over alternative governments.

If we take a look at the political systems where the government is politically responsible to the parliament, we can see that there exist three different types of heads of state: *Hereditary Monarchs*, *Parliament-selected Presidents*, and *Popularly-elected Presidents*.

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10 In Western Europe, Belgium, Denmark, Luxembourg, the Netherlands, Norway, Spain, Sweden, and the United Kingdom are monarchies. The monarchs are mainly kings or queens, but Luxembourg has a grand duke.

11 In Western Europe, Germany, Italy, and Greece elect their presidents in the Parliament, or specially convened equivalent national organization. For example, the Federal President of Germany is elected by an absolute majority of votes in the *Bundestag* and an equal number of delegates elected by the *Lantags*.

12 The method of popular election might not be direct. For example, in Finland before 1988, voters voted for a party list to elect an electoral college for president with a similar rule used in the parliamentary election. In those days, electors in the electoral college did not pledge to a particular presidential candidate. Also, they cast multiple ballots to elect the president when there is no majority in the first round of voting (Shugart and Carey 1992, 212). An important qualification of this electoral system is that the electoral college is convened by popular vote for the sole purpose...
When the head of state is a hereditary monarch, there might indeed exist a good reason to expect that the heads of state prefer to recuse themselves from the partisan politics, as Rose and Kavanagh (1976) suggest, “Monarchs have remained in power where the reigning family has been willing to withdraw from a politically active role. Reciprocally, monarchies have fallen when the monarch has sought to continue to assert political power” (568, requoted from Lijphart 1999, 140). What they suggest, however, is not that a monarch as a head of state does not have a preference over the alternative governments but that a monarch’s concern of preserving his or her stance as an apolitical figure might outweigh his or her concern of having a preferred government formed and maintained. When there is no clear majority in parliament and the parliamentary parties’ effort to reach an agreement meets a deadlock, that is, when circumstances are favorable to a monarch as a head of state, he or she is likely to play an active role in the politics of coalition, as shown by Vis (1983) with the cases from the Queens of the Netherlands.

A popular perception about the role of heads of state in this situation is that they serve as a neutral arbiter. They are presumed to moderate the political conflicts in a nonpartisan manner. I believe this notion is not entirely realistic but overly idealistic. Most of all, a government represents a package of policies agreed by the members of a coalition as a winner of political competition. Different governments imply different policy packages and memberships of coalitions. In this political competition, for any alternative preferred by some party, there always exists another alternative preferred by other party. When there is no clear winner in this competition, every decision made by the head of state will eventually side with one or the other, not

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of electing the president. In Western Europe, Austria, Finland, France V, Iceland, Ireland, and Portugal elect their president by popular votes.

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13 According to Vis (1983), the role of the Queen in the formation process is the most discussed topic in the unwritten part of the constitution in the Netherlands. The Queen usually takes the first step in the formation process by beginning to consult separately the Speaker of the Second Chamber and the parliamentary leader of each party in the Second Chamber. After the initial consultation, the Queen appoints one or more informateurs first to explore the possibility of various coalitions, and a formateur later upon the report by the informateurs. But the Dutch Queen sometimes makes decisions different from the recommendations of the informateurs. For instance, in 1994, the Dutch Queen appointed a Socialist informateur, Wim Kok (PvdA), against the proposal of the first informateur to appoint a new informateur from the Liberal Party (VVD). In the end, Wim Kok became the Prime Minister of the three party coalition of PvdA, D66, and VVD (de Winter 1994).
both. Simply speaking, there is no such role as a *neutral* arbiter in this political competition.

A real difficulty of the analysis of the role of the hereditary monarchs as heads of state in the politics of coalition is that there is no way that we can infer their true preferences *a priori* over the alternative governments. As a symbol of national unity, they have never had any party affiliation, in addition to the fact that they are not required to stand before any kind of electorate.

However, the same excuse for not taking into account the role of heads of state in the politics of coalition cannot be taken for granted with respect to the other type of heads of state, *Presidents*. Regardless of whether they are elected by the parliaments or by popular votes, presidents are *elected politicians*. Most of the presidents have had a long and prominent political career before they assume their presidencies.

In preparation of this study, I surveyed the career paths of the presidential heads of state in Nine Western European democracies. I report the result in the Appendix 1, table A1. The 61 presidents in table A1 comprise the entire population of postwar presidents in Western Europe from the end of WWII until 2007 excluding the interim presidents who assumed the office without an election due to the death of their predecessor.\(^\text{14}\) We can find in the table that more than 55 per cent of the presidents (34 out of 61) had served as cabinet ministers as a party member before they took the presidency. Even 15 of them had served as the prime minister of their country. Even if they had not had a position in the national governments, still many of them had a prominent political office before their presidencies such as mayor of major city, party chairman, and diplomat. Most of them (54 out of 61) were publicly endorsed or supported by political parties in their elections to the presidency.

The career paths of the presidents, I believe, clearly suggest that it is not quite reasonable to assume that these presidents have no clear preferences over the alternative governments. How can we expect that a president, who used to be an ardent partisan politician, would suddenly behave like a nonpartisan once he or she assumes

\(^{14}\text{Note that, in table A1, Constantine Karamanlis, the former President of Greece, has two entries.}\)
the office? Rather it would be much more plausible to assume that these presidents have a clear preferences over the alternative governments in a given political environment and that these preferences would be similar to the ones of the parties with which they are affiliated.

We have seen that most heads of state – hence, the presidents, too – have quite considerable institutional powers over the formation and termination of government coalition. Now we have a good reason to believe that the presidents have a preference over the alternative governments. A logical conclusion, then, is that the presidents will use the powers to induce and defend their preferred government as long as it is not opposed by a parliamentary majority. Therefore, there is no real ground for the implicit assumption that a government coalition would rise and fall independently of the heads of state in these political systems, particularly when the heads of state are elected presidents.

One might argue that the electoral concerns of the presidents provide an incentive for them to build a larger base of support than that of their own parties and these will lead the presidents to exert their influence in a nonpartisan manner. It might be true or not, but it certainly suggests more reasons to examine the influence of the presidents in these important democratic process in a scientific manner. The influence is a matter to be tested, not to be assumed away.

The influence of the president in these important democratic political processes should be put into a thorough investigation for a more comprehensive understanding of the political system where the government is politically responsible to the parliament. Assuming a role of ceremonial figurehead for the presidents and ignoring the influence would not get us very far from our current understanding of these political systems. It also entails a danger of omitted variable bias if we do not consider the potential distortions made by the influence of the president.

When a popularly elected president coexists with a government that is politically responsible to the parliament, we call this regime semi-presidential.\textsuperscript{15} Most Euro-

\textsuperscript{15}It is Duverger’s article (1980) that first introduced semi-presidentialism as an academic concept
pean semi-presidential countries have been classified and studied as parliamentary systems by previous researchers, although occasional exceptions have been made for France or Finland. A primary justification of this approach is that they function like a parliamentary system. The presidents in these countries do tend not to interfere with the day-to-day business of governments run by the prime ministers who are politically responsible to parliament. What the researchers have overlooked, however, is that the formation and survival of governments might already reflect the influence of the presidents. If this is true, then the governments of semi-presidential systems are qualitatively different from those of pure parliamentary systems. In a normative sense, this implies that the voters in semi-presidentialism have an alternative mechanism of control over the government through the popular election of the presidents. Therefore, the investigation of the influence of the president on the formation and termination of government has important normative and practical implications on the politics of this new constitutional design.

Thus, the main task of this dissertation is to study the influence of the president on the formation and termination of government in the political systems where the governments are politically responsible to the parliament. In so doing, I will also compare the influence of the popularly-elected presidents with that of the parliament-selected presidents. I begin to take up this task in Chapter 2, where I develop a theoretical model of government formation with presidential heads of state. The model represents a political system where the government must have a majority parliamentary support in order to form and the presidential head of state chooses a party-formateur - to make a government formation proposal at each round of bargaining stage. The main contribution of this model to the previous theoretical literature on the coalition formation is that it explicitly incorporates the strategic selection of the formateur by the president into the government formation bargaining process, which has not been endogenized in the literature (e.g., Austen-Smith and Banks 1988; Baron and Ferejohn 1989). My analysis focuses on the equilibrium selection

in English. Duverger's (1980) concept of semi-presidentialism contains another element such that “[The president of the republic] possesses quite considerable powers (emphasis added).” This element has generated a lot of criticisms and debates over the concept of semi-presidentialism because of its ‘ambiguity’ (Bahro et. al. 1998; Elgie 1999). We here adopt Elgie’s reformulation of the definition of semi-presidentialism, which excludes the controversial second element (1999, 13).
strategies by the presidential head of state in equilibria of the model and provides empirical tests on the observable implications drawn from the model.

In Chapter 3, I provide the results of in depth empirical analyses of the influence of presidential heads of state on the two most important features of the outcomes in the government formation process – the identity of Prime Minister and the party composition of the coalition – with a newly constructed data set. The result provides strong empirical evidence that presidential heads of state in European democracies have effectively induced their preferred governments among potential alternatives. The analyses also suggest that we can improve significantly our ability to predict the correct government formation outcomes by explicitly considering the variables associated with the president.

In Chapter 4, I examine the effects of the president’s discretionary power to dissolve the parliament on the government termination process. After deriving several theoretical hypotheses that link the configuration of ideological policy positions of the president and the parliamentary parties to the duration of coalition government, I test these hypotheses on real world data. The chapter also suggests an important linkage from the termination to the formation of government coalition by providing an analysis of electoral performances of important players of the politics of coalitions.

Finally, Chapter 5 concludes this study with a summary of findings and a discussion of their implications for our current debate on the democratic political process.
Appendix 1: Political Career Paths of the Presidents

The following table A1 reports the results of survey on the career paths of 61 presidents in nine Western European countries. The list excludes some interim presidents who assumed the office without an election due to the death of their predecessor. I report the most politically relevant career for each president, based on the subjective judgment. In the table, “Party” refers to the party affiliation of the president. The coding is based on formal affiliation, candidate nomination and public endorsement in the presidential election, and previous political career paths. I thank Acir Almeida for kindly sharing his data on the presidential electoral support and endorsement. Based on his data, information on career before taking presidency is further collected by the author to verify the codings. When I was not confident about the party affiliation of the president after I collected all the information listed above, I decided not to code the party affiliation for the president. That explains the 6 remaining presidential heads of state.

<table>
<thead>
<tr>
<th>Country</th>
<th>President / Career before Presidency</th>
<th>Date In / Date Out</th>
<th>Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td><strong>Karl Renner</strong>&lt;br&gt;(Chancellor of Austria)</td>
<td>12/20/1945 / 4/30/1951</td>
<td>SPÖ</td>
</tr>
<tr>
<td>Austria</td>
<td><strong>Theodor Körner</strong>&lt;br&gt;(SPÖ MP in 1924. Mayor of Vienna)</td>
<td>5/1/1951 / 4/30/1957</td>
<td>SPÖ</td>
</tr>
<tr>
<td>Austria</td>
<td><strong>Adolf Schärf</strong>&lt;br&gt;(SPÖ party chairman/ Vice Chancellor of Austria)</td>
<td>5/1/1957 / 6/8/1965</td>
<td>SPÖ</td>
</tr>
<tr>
<td>Austria</td>
<td><strong>Franz Jonas</strong>&lt;br&gt;(Mayor of Vienna)</td>
<td>6/9/1965 / 5/17/1980</td>
<td>SPÖ</td>
</tr>
<tr>
<td>Austria</td>
<td><strong>Rudolf Kirchschläger</strong>&lt;br&gt;(Minister of Foreign Affairs)</td>
<td>5/18/1980 / 5/3/1986</td>
<td>SPÖ</td>
</tr>
<tr>
<td>Austria</td>
<td><strong>Kurt Waldheim</strong>&lt;br&gt;(Minister of Foreign Affairs)</td>
<td>5/4/1986 / 7/7/1992</td>
<td>ÖVP</td>
</tr>
<tr>
<td>Austria</td>
<td><strong>Thomas Klestil</strong>&lt;br&gt;(Ambassador to the UN and U.S.)</td>
<td>7/8/1992 / 7/7/2004</td>
<td>ÖVP</td>
</tr>
<tr>
<td>Austria</td>
<td><strong>Heinz Fischer</strong>&lt;br&gt;(Ambassador to the UN and U.S.)</td>
<td>7/8/2004 / Present</td>
<td>SPÖ</td>
</tr>
<tr>
<td>Finland</td>
<td><strong>Carl Gustaf Emil Mannerheim</strong>&lt;br&gt;(Commander-in-chief)</td>
<td>8/4/1944 / Present</td>
<td>None</td>
</tr>
<tr>
<td>Finland</td>
<td><strong>Juho Kusti Paasikivi</strong>&lt;br&gt;(Prime Minister 1944-1946/ Chairman of KOK)</td>
<td>3/8/1946 / 3/1/1956</td>
<td>KOK</td>
</tr>
<tr>
<td>Finland</td>
<td><strong>Urho Kekkonen</strong>&lt;br&gt;(Prime Minister 1950-53/54-56)</td>
<td>3/1/1956 / 1/27/1982</td>
<td>KESK</td>
</tr>
<tr>
<td>Finland</td>
<td><strong>Mauno Koivisto</strong>&lt;br&gt;(Prime Minister 1968-70/79-82)</td>
<td>1/27/1982 / 3/1/1994</td>
<td>SDP</td>
</tr>
<tr>
<td>Finland</td>
<td><strong>Martti Ahtisaari</strong>&lt;br&gt;(Diplomat/ Secretary of State to the Foreign Minister)</td>
<td>3/1/1994 / 3/1/2000</td>
<td>SDP</td>
</tr>
<tr>
<td>Finland</td>
<td><strong>Tarja Halonen</strong>&lt;br&gt;(Minister of Social Affairs/ Justice/ Foreign Affairs)</td>
<td>3/1/2000 / Present</td>
<td>SDP</td>
</tr>
<tr>
<td>Country</td>
<td>President / Career before Presidency</td>
<td>Date In / Date Out</td>
<td>Party</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------</td>
<td>--------------------</td>
<td>-------</td>
</tr>
<tr>
<td>France</td>
<td>Charles de Gaulle 1/8/1959 UNR/Prime Minister 1958</td>
<td>6/19/1969 UDR</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>François Mitterrand 5/21/1981</td>
<td>First Secretary of the French Socialist Party 5/16/1995</td>
<td>PS</td>
</tr>
<tr>
<td>France</td>
<td>Nicolas Sarkozy 5/16/2007</td>
<td>Minister of the Interior 2005-07 Present</td>
<td>UMP</td>
</tr>
<tr>
<td>Germany</td>
<td>Theodor Heuss 9/13/1949</td>
<td>Co-Founder of Democratic People’s Party (now, FDP) 9/12/1959</td>
<td>CDU</td>
</tr>
<tr>
<td>Germany</td>
<td>Heinrich Lübke 9/13/1959</td>
<td>Member of CDU nominated by Adenauer 6/30/1969</td>
<td>SPD</td>
</tr>
<tr>
<td>Germany</td>
<td>Gustav Heinemann 7/1/1969</td>
<td>Minister of Justice 6/30/1974</td>
<td>FDP</td>
</tr>
<tr>
<td>Germany</td>
<td>Walter Scheel 7/1/1974</td>
<td>Chairman of FDP/ Minister of Foreign Affairs 6/30/1979</td>
<td>CDU</td>
</tr>
<tr>
<td>Germany</td>
<td>Karl Carstens 7/1/1979</td>
<td>Chairman of CDU/CSU parliamentary group 6/30/1984</td>
<td>SPD</td>
</tr>
<tr>
<td>Germany</td>
<td>Richard von Weizsäcker 7/1/1984</td>
<td>Mayor of West Berlin 6/30/1994</td>
<td>CDU</td>
</tr>
<tr>
<td>Germany</td>
<td>Roman Herzog 7/1/1994</td>
<td>President of the Federal Constitutional Court 6/30/1999</td>
<td>CDU</td>
</tr>
<tr>
<td>Germany</td>
<td>Johannes Rau 7/1/1999</td>
<td>Chairman of SPD 6/30/2004</td>
<td>SPD</td>
</tr>
<tr>
<td>Germany</td>
<td>Horst Köhler 7/1/2004</td>
<td>Chairman of IMF Present</td>
<td>CDU</td>
</tr>
<tr>
<td>Greece</td>
<td>Konstantinos Tsatsos 6/20/1975</td>
<td>Minister for Culture 5/14/1980</td>
<td>ND</td>
</tr>
<tr>
<td>Greece</td>
<td>Karolos Papoulias 3/12/2005</td>
<td>Founder of PASOK Present</td>
<td>PASOK</td>
</tr>
<tr>
<td>Iceland</td>
<td>Sveinn Björnsson 6/17/1944</td>
<td>MP/Minister to Denmark/Regent of Iceland 6/28/1952</td>
<td>None</td>
</tr>
<tr>
<td>Iceland</td>
<td>Kristján Eldjárn 6/30/1968</td>
<td>Director of the National Museum of Iceland 7/31/1980</td>
<td>None</td>
</tr>
<tr>
<td>Country</td>
<td>President / Career before Presidency</td>
<td>Date In / Date Out</td>
<td>Party</td>
</tr>
<tr>
<td>---------</td>
<td>------------------------------------</td>
<td>--------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Iceland</td>
<td>Vigðís Finnbogadóttir Artistic Director of the Reykjavik Theatre Company</td>
<td>8/1/1980 / 7/31/1996</td>
<td>None / Ab</td>
</tr>
<tr>
<td>Iceland</td>
<td>Ólafur Ragnar Grímsson Minister of Finance 88-91</td>
<td>8/1/1996 Present</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>Seán T. O’Kelly Tanaiste(DPM) 37-45</td>
<td>6/25/1945 / 6/24/1959</td>
<td>FF / FF</td>
</tr>
<tr>
<td>Ireland</td>
<td>Eamon de Valera Taoiseach(PM) 51-54/57-59</td>
<td>6/25/1959 / 6/24/1973</td>
<td>FF / FF</td>
</tr>
<tr>
<td>Ireland</td>
<td>Cearbhall Ó Dálaigh Chief Justice of the Irish Supreme Court</td>
<td>12/19/1974 / 10/22/1976</td>
<td>FF / FF</td>
</tr>
<tr>
<td>Ireland</td>
<td>Mary Robinson Member of the Irish Senate</td>
<td>12/3/1990 / 9/12/1997</td>
<td>Labour /</td>
</tr>
<tr>
<td>Ireland</td>
<td>Mary McAleese Journalist</td>
<td>11/10/1997 Present</td>
<td>FF / Present</td>
</tr>
<tr>
<td>Italy</td>
<td>Enrico De Nicola Provisional Head of State</td>
<td>6/29/1946 / 5/11/1948</td>
<td>None / PLI</td>
</tr>
<tr>
<td>Italy</td>
<td>Luigi Einaudi Governor of Banca d’Italia</td>
<td>5/11/1948 / 5/11/1955</td>
<td>PLI / DC</td>
</tr>
<tr>
<td>Italy</td>
<td>Antonio Segni Prime Minister 55-57/59-60</td>
<td>5/11/1962 / 12/27/1964</td>
<td>DC /</td>
</tr>
<tr>
<td>Italy</td>
<td>Giuseppe Saragat Minister of Foreign Affairs 63-64</td>
<td>12/24/1971 / 12/28/1964</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>Giovanni Leone Prime Minister 63,68</td>
<td>12/24/1971 / 7/7/1978</td>
<td>DC / PSI</td>
</tr>
<tr>
<td>Italy</td>
<td>Alessandro Pertini President of the Chamber of Deputies</td>
<td>7/8/1978 / 6/22/1985</td>
<td>PSI / DC</td>
</tr>
<tr>
<td>Italy</td>
<td>Francesco Cossiga Prime Minister 79-80</td>
<td>6/23/1985 / 5/24/1992</td>
<td>PSI / DC</td>
</tr>
<tr>
<td>Italy</td>
<td>Oscar Luigi Scalfaro Minister of Interior 86-87</td>
<td>5/25/1992 / 5/17/1999</td>
<td>DC /</td>
</tr>
<tr>
<td>Italy</td>
<td>Carlo Azeglio Ciampi Governor of Banca d’Italia 79-93/Prime Minister 93-94</td>
<td>5/18/1999 / 5/9/2006</td>
<td>None /</td>
</tr>
<tr>
<td>Italy</td>
<td>Giorgio Napolitano Minister of the Interior 96-98</td>
<td>5/10/2006 Present</td>
<td>PD / Present</td>
</tr>
<tr>
<td>Portugal</td>
<td>Aníbal Cavaco Silva Prime Minister 85-95</td>
<td>3/9/2006 / Present</td>
<td>PSD / Present</td>
</tr>
</tbody>
</table>
Chapter 2

A Theory and Empirical Analysis of Government Formation with Presidential Heads of State

The primary goal of this chapter is to explore the relationship between the president and the resulting government as an equilibrium outcome of a noncooperative game theoretical model of government formation bargaining process within multi-party minority parliament environments. The role played by the presidential head of state in the government formation process in the political system where the governments are politically responsible to the parliament has been largely ignored in the literature of comparative politics, regardless of whether they are selected by parliament or elected by popular vote.

However, it has not been uncommon that the presidential head of state in some of European democracies exerted some influence on government formation processes. The best-known examples would concern the Presidents of the French Fifth Republic. However, France is not unique. Duverger (1980, 169) views the formation of the “great coalition” of the Socialist Party [SPÖ] and the People’s Party [ÖVP] in Austria up to 1966 as the result of the interference by the socialist Presidents T. Körner and A. Schärf, against the will of the ÖVP, which wanted an alliance of the right with the Liberals [VdU/FPÖ (since 1956)]. As another example, the coalition of the conservative National Coalition Party [KOK] and the Social Democratic Party [SDP] in Finland 1987 is largely attributed to the socialist President Mauno Koivisto’s effort to prevent the bourgeois coalition of the Centre Party [KESK] and the KOK (Rau-

\[1\] For instance, in 1962, President de Gaulle asked Prime Minister M. Debré to resign and appointed his close advisor G. Pompidou, who had never been a member of the National Assembly, after the signing of the Evian agreement with the Algerian nationalist (Keesing’s 1962, 116694). Ten years later, in 1972, Prime Minister J. Chaban-Delmas tendered his resignation at the request of President Pompidou after he had managed to win the vote of confidence two months earlier. P. Messmer, a close associate of former President de Gaulle, was appointed Prime Minister on the following day (Thiébault 2000; Keesing’s 1972, 95454)

\[2\] It is controversial whether the ÖVP’s proposal to make a coalition with VdU was realistic. Müller suggests that it might be the strategy of the ÖVP to blame the president and the SPÖ for the exclusion of the Liberals (1999, 31).
nio and Wiberg 2003, 308). The coalition was unprecedented in the postwar Finnish history in that the KOK had been in opposition since the 1966 general election. Indeed, the long exclusion of the KOK from government provides another aspect of the presidential influence in that the previous President Urho Kekkonen (KESK) persistently opposed the participation of the KOK in government during his tenure from 1956 to 1981 (Keesing’s 1983, 78162). Also, Portugal had three “presidential cabinets” consisting solely of nonpartisan civilian experts in 1978-79 (Magone 2000). With regard to the parliament-selected presidents, we know that President Scalfaro played an important role in the turbulent transition period in the mid 1990s in Italy (Verzichelli 2003).

Besides the examples mentioned above, we can find a number of case studies by country experts suggesting distortions induced by presidential heads of state in the outcomes of government formation bargaining in other European democracies.3 Despite these anecdotal episodes and many other suggestions made by country specialists, theoretical efforts to provide a systematic account for this relationship have not been made until recently.4

A practical difficulty might explain the paucity of academic interest in the role of heads of state in these political systems. That is, the preferences of the heads of state are quite often “not open to quantification,” as Klaus von Beyme (1983, 343) suggested. This practical difficulty might be true for the constitutional monarchies. However, it is not strictly applicable to the presidential heads of state, who in general have had long political careers before taking their presidencies, as we saw in the previous chapter. Assuming a role of ceremonial figurehead for the presidential heads of state and ignoring the influence entails a danger of “omitted variable bias.” This chapter is a modest attempt to develop a theoretical model that provides insights

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3 All of the examples in the above are from the presidential heads of state in European democracies. We also have some anecdotes provided by country specialists about the influence of the constitutional monarchs. For example, Vis (1983) provides an interesting account of the active role of the Dutch Queen in the government formation process. Also, Lieven de Winter (1995) shows that the Belgian King sometimes expresses explicit preference for a government relying on a two-third majority. For an overview of the role of constitutional monarchs in the formation process, see Bogdanor (1984).

4 A notable exception is Strøm and Amorim Neto (2006).
into the government coalition formation process when we assume an active role of the presidential head of state.

When a government is terminated, then parties in parliament have an opportunity to form a new government. If parliamentary parties can freely negotiate with one another based solely upon their relative ideological positions and seat shares – the so-called, ‘freestyle’ bargaining situation – as assumed by most coalition theories based on cooperative bargaining model,\(^5\) then there would be no room to consider other institutional constraints including the role of the presidential heads of state on the government formation process. That is, the formation process would be entirely a matter of parties in parliament, if the assumption holds. In practice, however, such situation is rather rare (Strøm, et al. 2003:150-1; Laver and Schofield 1990:208).

Contrary to the institution-free assumption made by the traditional cooperative game theorists, a typical government formation bargaining process in European democracies is regulated by a number of institutional arrangements.\(^6\) In most cases, the head of state – either a monarch, a parliament-selected president, or a popularly elected president – initiates the process by nominating or appointing a prime minister designate – the so-called formateur.\(^7\) Then the appointed formateur is given a mandate to put together a potential governing coalition. The ideological policy programme and the distribution of portfolios are negotiated with potential coalition partners. If the Prime Minister designate is successful in getting agreements on the terms of bargaining from potential partners, then the formateur proposes a government including the allocation of cabinet portfolios to the parliament for an approval.

\(^5\)For example, Riker 1962; Leiserson 1968; Axelord 1970; de Swaan 1973; Peleg 1981.

\(^6\)I surveyed the constitutional provisions on the process of government formation in these countries. Table A2 in the Appendix 2.1 reports the results focusing on the role of the presidents. The following description is based on this survey. For comprehensive survey of institutional arrangements of cabinet inauguration in Western European democracies including the constitutional monarchy, see also Strøm et al. 2003:148-152.

\(^7\)Notable exceptions are Ireland, Greece, and Sweden. In Greece, the Constitutional Revision in 1986 contains detailed provisions that the President should follow in the appointment of the Prime Minister designate. In Ireland, any member of Dáil or Seanad Éireann is entitled to propose a PM candidate. In Sweden, the Speaker of Parliament – not the monarch – nominates a PM candidate. In some constitutional monarchies such as the Netherlands, Belgium, and Denmark, an informateur is often appointed prior to the selection of formateur. The informateur’s main task is to search for viable alternatives under different PM candidates in the name of the monarch (De Winter 1995).
If the formateur’s attempt to form a government fails, then a new selection is made by the head of state. Formal parliamentary voting can be engaged in any of the steps above, depending on the country’s formal constitution and informal convention, or it is also possible that there is no parliamentary approval voting for a new government. However, in the latter case, the parliament still retains the right to unseat the incumbent government when it wants to do so.

Based on these findings, an alternative approach emphasizing the role of institutional arrangements in structuring the outcomes of government formation bargaining processes began to attract much academic attention in the early 1980s. Part of the reason for this renewed interest in institutional arrangement can be found in traditional coalition theories. A problem with the traditional coalition theories is that they often fail to identify a unique solution among possible outcomes, given the generic nonexistence of the core. Since the early 1980s, many versions of noncooperative game theoretical models of coalition politics have been devised to induce a unique equilibrium outcome – or a smaller set of equilibrium outcomes by imposing some exogenous institutional structure, as an alternative to the cooperative game theory.\(^8\)

The number of institutional arrangements that might affect the coalition formation processes in Europe is huge. Among the many institutional arrangements that have been paid attention to by the scholars, however, the *formateur* system is particularly important. Most of noncooperative game theories employ some version of formateur rule in their model and often the formateur selection rule determines the equilibrium outcomes.

In a general bargaining environment described above, the political party chosen to make a proposal has been found to enjoy additional benefits in the bargaining environment compared with the other parties by many noncooperative game theorists (Baron and Ferejohn 1989; Diermeier and Merlo 2004). In a recent paper, Kalandrakis (2006) shows that, in a canonical model of sequential bargaining over a

\(^8\)A partial list includes: Austen-Smith and Banks 1988; Baron and Ferejohn 1989; Baron 1991, 1993; Crombez 1996; Diermeier and Merlo 2000; Baron and Diermeier 2001.
divisible good, for all non-empty, monotonic voting rule and for all discount factors, for every division of the good, there exists a set of recognition probabilities\(^9\) such that the division of the good represents the expected payoffs in a pure strategy Stationary Subgame Perfect Nash Equilibrium [Proposition 1] (445). This implies that the rule governing the selection of the proposer – not the proposal right by itself – would be a more important source of power than other factors that might affect the outcomes of coalition formation bargaining process, including voting rights, patience, and complicated equilibrium strategies, in the very general bargaining environment that he considers.

In spite of the importance, the selection of formateur (proposer) has been left unmodelled in most of noncooperative games of coalition formation based on the proposer model. Virtually all of the noncooperative bargaining models of coalition formation have been built on either predetermined order (Austen-Smith and Banks 1988) or probabilistic order (Baron and Ferejohn 1989) with respect to the selection of formateur (Diermeier and Merlo 2004, 785). That is, the selection of formateur has not been fully endogenized in the model of the coalition formation. The literature, however, has overlooked the practice that, in most European democracies with presidential heads of state, the appointment of formateur is typically a task left for the presidents regardless of whether the president is elected by popular vote or by parliament.

By ignoring this institutional feature, theoretical models of government formation in European democracies implicitly assume that the head of state is non-strategic. An essential part of the model presented in the next section is to explicitly incorporate the strategic choice of the presidential head of state into the noncooperative model of government formation bargaining processes.

The model presented in the next section represents a political system where the government must have a majority parliamentary support in order to form and the president chooses a party to make a government formation proposal – formateur –

\(^9\)Precisely, this means a vector of probability that each player is recognized as a formateur in a bargaining round.
at each round of bargaining stage. Therefore, the model might be applied to semi-presidential systems in which the president is elected by popular vote as well as to parliamentary republic in which the president is indirectly selected by parliament.\textsuperscript{10} In the model, strategic interactions between the presidential head of state and parliamentary parties occur mainly because the player who actually determines the exact terms of negotiation is the party not the president.

The analysis of equilibria of the model shows that the president’s equilibrium selection strategy depends on her own ideal policy position, the degree to which she cares about the distribution of transferable benefits for her own party, and the relative distribution of party ideological policy positions. Particularly, I find that the president whose ideal policy position is closest to the median party often selects one of the remaining extreme parties as the first formateur; that the president, if she is a member of extreme parties, always selects her own party to be the formateur at the first round of government formation bargaining; that the president never selects the most ideologically distant party to the first formateur; and, finally, that the president may not induce the government that he or she would most feasibly prefer in nonstrategic environment.

Empirical analysis on 146 governments of 7 Western European democracies with presidential head of state provides support for some theoretical implications drawn from the model. In particular, it shows that, when the presidential heads of state are elected by popular vote – \textit{i.e.}, in semi-presidential systems, the more ideologically distant the party of the president is from the median party, the more likely the party of the president is to be appointed Prime Minister. In other direction, this implies that as the party of the president is getting closer to the parliamentary

\begin{footnotesize}
\textsuperscript{10}The list of semi-presidential system in Europe includes Austria, Finland, France V., Iceland, Ireland, Portugal, Bulgaria (after 1991), Croatia, Lithuania, Poland, Romania, Slovakia (after 1999), and Slovenia. The list of parliamentary republic includes Germany, Italy, Greece, Albania, Bulgaria (before 1991), Czech Republic, Estonia, Hungary, Latvia, Slovakia (before 1999). Strictly speaking, the model cannot be applied to Ireland and Greece, since the presidents of Ireland and Greece do not have any constitutional right with regard to the government formation. Therefore, these two countries and Eastern European countries - to which reliable measure of key independent variables are not available - are excluded from empirical analysis. In contrast, Sweden (after 1975) might be included in the latter category, since the Speaker of Parliament plays the equivalent role in the government formation bargaining.
\end{footnotesize}
median, the president and the prime minister are less likely to have the same party affiliation. This finding seems rather unintuitive, given the traditional image of presidential heads of state who are presumed to represent the central forces of political competition in a country.

The result, however, is anticipated by the theoretical model. The driving force of this expectation is that the policy preference of the president is defined by the ideological position of the resulting government and that the latter, in turn, is partially determined by the relative distribution of party ideological positions. More precisely, the resulting government’s ideological policy position is not the exact proportional reflection of the consisting party ideological positions. In the bargaining environment that we consider, the parliamentary median party constitutes a government that it will dominate when it is recognized to form a coalition at the first round of bargaining, due to its strategic location. This might result in pulling the ideological position of the anticipated coalition further away from the president compared with other alternatives. On the contrary, when the ideological position of presidential head of state is relatively extreme, appointing her own party member prime minister is the best response action that she can take if all other things are equal.

In the sense that the model considers strategic choice of formateur by the presidential head of state, this chapter is closely related with Morelli (1999), Bloch and Rottier (2002), and Amorim Neto and Strom (2004). Morelli (1999) studies the role of the head of state in a very similar bargaining model with regard to the number of players and player’s preferences. In his model, Morelli (1999) explicitly assumes that the head of state has the same preferences as the median voter and, as a result, the head of state always calls the median party to form the government first. Morelli (1999), however, does not consider the case in which the head of state and political parties have divergent policy preferences. This highlights the difference of this chapter from Morelli (1999).

The main puzzle of Bloch and Rottier (2001) is whether the head of state who has the power to designate a fixed order in which parties are recognized to form coalitions can influence the party composition of government coalition. With sim-
ple games, they show that the power allows the head of state to include the most favorable party in the coalition and to exclude the least favorable party out of the coalition, but that the president cannot fully manipulate the entire composition of government coalition in a general $n$-person game. According to Bloch and Rottier (2002), only when the party competition satisfies the apex game structure, the head of state can dictate the entire composition of government. However, they do not consider the ideological preferences of the head of state and the model of this paper does not assume that the presidential head of state can credibly commit a fixed order of selection before the game begins. These points make the model of this chapter different from Bloch and Rottier (2002).

Amorim Neto and Strøm (2006) examines the relationship between the president and the incidence of nonpartisan cabinet ministers, based on a game theoretic model of coalition formation. They also provide statistical evidences showing that the president, particularly when popularly elected, alters the outcomes of cabinet formation. The difference of this chapter from theirs is that I restrict my attention to the partisan characteristics of coalition formation with presidential heads of state, while they are focusing on the proportion of nonpartisan cabinet ministers in the cabinet.

The remaining chapter proceeds as follows. In the next section, I present a non-cooperative game theoretic model of government formation with presidential head of state. The following Section 2.2 reports the analysis of equilibrium focusing on the relation between the president’s equilibrium selection strategy and the resulting government outcome. In Section 2.3, I present the results of empirical analysis based on the implications drawn from the model. The final Section 2.4 concludes this chapter.

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11 This condition is satisfied when there exist one large player and $n - 1$ small players and the large player only needs one of the small players to form a winning coalition.

12 Although they claim that they stress on the impact of popularly elected president on the cabinet formation, they also estimates the effect of president in general on the cabinet formation together.
2.1 Model of Government Formation

The model that I consider in this essay is a noncooperative bargaining game in which players are three political parties and a president. Proportional representation electoral rule typically produces multiple political parties. Since increasing the number of parties in the model will increase the number of possible coalitions and, hence, the complexity of the bargaining situation, for the tractability, I consider here only three political parties. Let $\Omega = \{L, M, R\}$ denote the set of political parties.

The model assumes that there exist a one-dimensional policy space $X \subseteq \mathbb{R}$ and a fixed amount $Y \in \left[\frac{1}{4}, 1\right]$ of nonnegative transferable benefits to be distributed for the parties. Let $y$ be a triple, $(y_L, y_M, y_R)$, such that $y_j \geq 0 \ \forall j \in \Omega$ and $\Sigma_{j \in \Omega} y_j = Y$.\(^{13}\)

Each party $j \in \Omega$ has preferences for a policy $x \in X$ as well as for the nonnegative transferable benefits distributed for the party $y_j \in [0, Y]$. Each party has an ideal policy position $x_j$ defined over $X$. Without loss of generality, it is further assumed that $x_L = 0$, $x_M \in \left[\frac{1}{3}, \frac{1}{2}\right]$, and $x_R = 1$. For the notational convenience, let $x_{jk}$ be the midpoint between two distinct parties ideal policy positions. That is, $x_{jk} = \frac{x_j + x_k}{2}$, for $j, k \in \Omega$ with $(j \neq k)$.

We assume that the preference of party $j \in \Omega$ is represented by a quasi-linear utility function $U_j(x; y)$ as follows:

$$U_j(x; y) = -(x - x_j)^2 + y_j.$$

The quasi-linear utility representation for parties implies that the preferences of parties are assumed to be linear in nonnegative transferable benefits for party $y_j$, quadratic in government policy $x$, and additively separable.\(^{14}\)

\(^{13}\)Presumably, the fixed amount of transferable benefits represents benefits from participation in government coalition. We could interpret this as distribution of cabinet portfolios. As will be shown shortly, I assume that parties have preferences over policy which is separately bargained with other parties. In that case, if we narrowly interpret the fixed amount of transferable benefits as cabinet appointment, this implies that holding cabinet portfolio has no bearing on policy making processes, which does not seem to be valid. Therefore, I rather prefer to interpret $Y$ somewhat broadly including non-cabinet ministerial appointments, other patronage-based office appointments, allocation of departmental resources, et cetera.

\(^{14}\)The quasi-linear utility representation is also used in Austen-Smith and Banks (1988), Morelli
The model has another player in addition to the three parliamentary parties: a president, $P$, with an ideal policy position $x_P \in X$. Further, it is assumed that the president is affiliated with a party and that the party with which the president is affiliate has the closest ideal policy position to the president. If the two party is equally distant from the president, we assume that the president is a member of the more extreme party. That is, $P \in L$ if and only if $x_P \in [x_L, x_{LM}]$; $P \in M$ if and only if $x_P \in (x_{LM}, x_{MR})$; and $P \in R$ if and only if $x_P \in [x_{MR}, x_R]$.

For the president, I assume the following utility representation function with respect to a policy and distribution of transferable benefits: For $P \in j \in \Omega$ and $\beta_j \in [0, 1)$,

$$U_P(x, y) = -(x - x_p)^2 + \beta_j y_j,$$

where $\beta_j \in [0, 1)$ is a known exogenous parameter representing how much the president cares about the distribution of transferable benefits for the party $j \in \Omega$ with which the president is affiliated.

In the model, $y_j$ represents nonnegative transferable benefits for the individual party $j \in \Omega$, which is assumed to be separately negotiated from policy with other parliamentary parties. Therefore, the current utility representation form implies that the president cares about the office spoils for her own party members besides the ideological policy position of the resulting government, but not as much as the political parties.

Perhaps, it might be appropriate to assume that the president does not care about the office spoils for her own party, since the president does not have any direct access to the transfers allocated to the individual party. However, in most cases, the presidential heads of state are career politician. Many of them had served Prime Minister or other important cabinet ministers as a party member before they as-

(1999), Diermeier and Merlo, and Baron and Diermeier (2001). In Baron and Diermeier (2001), however, it is assumed that the transferable benefits for a party $j$, $y_j$, can be negative. As will be shown later, the primary mechanism of government formation bargaining is to use transferable benefits to reward government partners who compromise their policy preferences. In Baron and Diermeier’s (2001) model, the party which is disadvantaged by the status quo policy is willing to do anything to induce policy concession by the formateur and the party has limitless resources. I believe it is not too reasonable assumption. Therefore, negative transfer is not allowed in this paper.
sumed the presidency. Virtually all of them had clear party endorsement in their election to the presidency.15 In this regard, we can expect that the president would still have an affinity with former fellow partisans and prefer former colleagues to get the office spoils. Moreover, election to the presidency necessarily involves active support from party, regardless of the election mode. Therefore, the presidential heads of state need to appease their fellow party members. With this respect, assuming no preference over the party office spoils for the presidential head of state seems too strict. Therefore, we assume that besides the policy, the president has preference over the office spoils for her own party members and let \( \beta \) represent the degree of connection between the president and his or her own party.16

The game proceeds as follows. Figure 2.1 depicts the game tree. At \( t = 0 \), after a general election and before the game begins, each political party \( j \in \Omega \) is given a parliamentary seat share \( w_j \) and a status quo policy \( q \in X \), which will be imposed if no party succeeds in forming a government. Let \( w = (w_L, w_M, w_R) \), \( w_j \geq 0 \ \forall j \in \Omega \), be a vector of legislative seat share, normalized so that \( \sum_{j \in \Omega} w_j = 1 \). One of the key characteristics of government in European democracies is that the government should command a parliamentary majority in order to stay in office. Therefore, we assume a majority rule to determine the parliamentary voting outcome. Let \( D = \{ C \subseteq \Omega : \sum_{k \in C} w_k > \frac{1}{2} \} \) be the set of majority coalitions in parliament. Given this voting rule, if a party receives more than half of the total number of parliamentary seats, it will form a single party majority government and the voting is trivial. Therefore, it is further assumed that no party receives more than or equal to half of the total number of seats in parliament. Formally, \( w_j < \frac{1}{2} \) for all \( j \in \Omega \).

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15 Recall the Table A1. in Appendix 1.

16 An alternative approach is to assume that the presidential heads of state have a lexicographic preference defined over policy and nonnegative transferable benefits, respectively. That is, we can assume the preference of the presidential head of state as follows: The presidential head of state first considers the expected policy position of resulting governments. If there are actions that yield the same policy position, then the presidential head of state breaks her indifference by choosing an alternative that induces the most office spoils for her own party. We solve the game based on this assumption. The results are almost identical, in terms of equilibrium outcomes. The reason for using the current assumption of utility representation form for the presidential head of state is that it provides richer implications. The results based on the alternative assumption are available upon request.
At $t = 1$, the president, $P$, chooses a party $s_P^1 = j \in \Omega$. Then the selected party $j$ proposes a potential government $(x_1^j; y_1^j)$. The proposal will be voted in parliament. If $C_1^j = \{k \in \Omega : k \text{ votes for } (x_1^j; y_1^j)\} \in D$, then the game ends. Otherwise, the game proceeds to $t = 2$. At $t = 2$, the president, $P$, chooses a party between the remaining two parties, that is, $s_P^2 = k \in \Omega \setminus \{s_P^1\}$. The selected party $k$ proposes a potential government $(x_2^k; y_2^k)$. If $C_2^k \in D$, then the game ends. Otherwise, the game proceeds to $t = 3$. At $t = 3$, the remaining party $h \in \Omega \setminus \{s_P^1, s_P^2\}$ will be chosen to make a proposal $(x_3^h; y_3^h)$. If $C_3^h \in D$, then the game ends. Otherwise, the game proceeds to $t = 4$. If no government formation proposal is successful, at $t = 4$, a caretaker government will assume office and implement $x^4 = q \in X$ with no distribution of transferable benefits to any party, that is, $y^4 = (0, 0, 0)$.

With regard to the selection rule of the game, I assume that every party can be given a chance to make a proposal to form a government if no government has been formed until then and that no party is recognized as a formateur after its first attempt has failed. For example, if $L$ is recognized as a formateur and $L$’s proposal fails to win a necessary support in parliament at the first round, then $M$ or $R$ can be a proposer at the next round. If its proposal is also turned down in parliament, then the remaining party will be recognized as a formateur automatically at the final
round. If all the attempts of political parties to form a government have failed, I assume that a caretaker government assume offices and the status quo then remains in place with no distribution of office-holding benefits across political parties. The status quo might be interpreted as the policy position of the previous government. However, as will be shown later, the status quo does not affect the equilibrium outcome in terms of policy agreement $x^*$ and distribution of transferable benefits $y^*$.

Therefore, the model describes that the president’s selection strategy at $t = 2$ – that is, $s^2_p$ – is restricted by the president’s first choice – $s^1_p$ – when the latter fails to form a government. The same is also true for the president’s last choice. Indeed, when the first two selected party fail to form a government, the president have no remaining alternative but one party that has not been chosen. Moreover, the president can only decide the identity of the formateur not the content of the proposal made by the formateur. These two settings of the model, combined together, make the president strategically select a party for a formateur at each round of government formation bargaining.

All the information required for a player to make a decision is assumed to be common knowledge. Therefore, the solution concept of this game is a subgame perfect Nash equilibrium and backward induction can lead us to find the solution. For a strategy profile to be an equilibrium, the proposal strategy should be optimal for the proposer given the response strategies of other parties and the president’s selection strategy; a response strategy for a party should be optimal for the party given the proposal strategy, the response strategy for the others, and the president’s selection strategy; and a selection strategy of the president should be optimal given parties’ proposal and response strategies.

Since all the information including the other parties’s ideal policy positions and the president’s ideal policy preference, which is used to expect what party will be recognized as a formateur at the next round of bargaining if the government formation attempt result in failure, each party knows what would happen following votes given a strategy profile. This implies that when a party is required to vote on a proposal, it can rationally compare its expected utility from rejecting the proposal with
its payoffs from accepting the present proposal. In turn, this implies that, given the characteristic of parliament seat share such that a proposer should induce at least one among the other two parties to form a government, the proposer should offer one of the other two potential coalition partners with at least as much as it could get by rejecting the proposal – so-called, *continuation value*.

With regard to the response strategies, we assume that each party must accept the current proposal if and only if it gives as high utility as the rejection does. That is, we require the party response strategy adopt stage-undominated voting strategy to avoid some unreasonable voting strategies being included in an equilibrium.\(^{17}\) With regard to the proposal strategy for parties, an optimal proposal must give the highest utility for the proposer among the alternatives which can get an affirmative vote from at least one of the other two parties.

Finally, the president must select the party whose recognition gives the highest payoff given parties’ proposal and response strategies at a given stage of the game. Formal presentation of strategies and equilibrium conditions are given in the Appendix 2.2.

### 2.2 Analysis of Equilibrium

In this section, I will present a summary on equilibria of the game. Formal statements and proofs can be found in the Appendix 2.2. The analyses will concentrate on the president’s equilibrium selection strategy and the resulting outcome of government formation bargaining – in terms of policy \(x^*\), distribution of transferable benefits \(y^*\), and government coalition \(C^*\) – with respect to the president’s exogenous conditions – \(x_P\) and \(\beta\) – and the relative distribution of party ideal policy positions - \((x_L, x_M, x_R)\).

I first begin with the following example of government formation bargaining without assuming a role of presidential head of state to see how parties bargain over policy when a fixed amount of nonnegative transferable benefits are available. Suppose a

\(^{17}\text{Otherwise indicated, an equilibrium in the remaining of the paper refers to a subgame perfect Nash equilibrium with stage-undominated voting strategy.}\)
parliament consists of three non-majority parties whose ideal policy positions are

\[ x_L = 0, \quad x_M = \frac{5}{12}, \quad \text{and} \quad x_R = 1. \]

Also suppose \( q = \frac{5}{12} \) and \( Y = 1 \). Finally, suppose, for a moment, parties anticipate that \( M \) would be selected at \( t = 1 \), \( L \) at \( t = 2 \), and finally \( R \) at \( t = 3 \). The following Figure 2.2 depicts the bargaining environment and the terms of utility maximizing party proposals when a party is recognized to form a government at \( t = 1, 2, 3 \), when they anticipate the order of selection follows \( M, L, \) and \( R \).

\[ \begin{align*}
\{ x^2_L & = x_{LM} \\
y^3_L & = \frac{31}{156} \\
y^3_{LM} & = \frac{49}{576} \\
y^3_{LR} & = 0 \}
\end{align*}\]

\[ q = \frac{5}{12} \]

\[ \begin{align*}
x^2_L & = x_{LM} \\
y^3_L & = 0 \\
y^3_{LM} & = \frac{49}{576} \\
y^3_{LR} & = 0 \\
\end{align*}\]

\[ \begin{align*}
x^3_R & = x_{MR} \\
y^3_R & = 0 \\
y^3_{RM} & = \frac{49}{576} \\
y^3_{RR} & = 0 \\
\end{align*}\]

\[ \begin{align*}
x^3_M & = x_M \\
y^3_M & = 0 \\
y^3_{MM} & = 1 \\
y^3_{LR} & = 0 \\
\end{align*}\]

\[ x_L = 0 \quad \frac{x_M}{2x_M - x_{MR}} \quad x_M = \frac{5}{12} \quad x_{MR} \quad x_R = 1 \]

\[ \begin{align*}
x^3_L & = x_{LM} \\
y^3_L & = 0 \\
y^3_{LM} & = \frac{49}{576} \\
y^3_{LR} & = 0 \\
\end{align*}\]

\[ \begin{align*}
x^3_M & = x_M \\
y^3_M & = 0 \\
y^3_{MM} & = 1 \\
y^3_{LR} & = 0 \\
\end{align*}\]

\[ \begin{align*}
x^3_R & = x_{MR} \\
y^3_R & = 0 \\
y^3_{RM} & = \frac{49}{576} \\
y^3_{RR} & = 0 \\
\end{align*}\]

**Figure 2.2: An Example of Party Proposal Strategies**

At \( t = 3 \), parties know that if \( R \)'s proposal fails to win necessary support, then a caretaker government would assume the office. When this happens the other parties’ continuation values are \( v^2_L = -\left(\frac{5}{12}\right)^2 \) and \( v^3_M = 0 \). Considering the other parties’ continuation values, \( R \) would form a coalition with ideologically closer party, that is, \( \{R, M\} \). This is because \( R \) only need support by one party and forming a coalition with \( M \) would give a higher payoff. Note that, in this particular example, the anticipated policy position is the midpoint of \( x_M \) and \( x_R \). That is, \( R \) gives away some portion of transferable benefits for a closer policy position. Indeed, \( R \) can take all transferable benefits without moving policy position. However, it would give \( R \)

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18 The utility maximizing proposals are calculated using Lemma 1 in the Appendix 2.2.
lower utility.\footnote{Comparing }\footnote{Comparing }\footnote{Indeed, with quasi-linear utility representation, the midpoint between two parties’ ideal points has a critical meaning. From the perspective of the proposer, if the proposer expects the reversion policy position beyond this point, the proposer should transfer benefits to meet the other party’s continuation value in order to induce a little bit closer ideal policy-position. This compromise in transferable benefits in exchange for a closer policy position still makes the proposer better-off up to the midpoint. However, beyond this point – that is, if the proposer induce policy closer than the midpoint – the gain from closer ideal policy will not exceed the utility loss from losing transferable benefits to make the partner indifferent, since it grows in increasing rate. On the other hand, when the proposer is relatively advantaged by the reversion policy position, the proposer may want to compromise policy preferences if the potential partner can compensate with transfers. The partner...}

At $t = 2$, when $L$ is recognized to make a proposal, $L$ knows what would happen if its proposal results in failure. For $L$, $R$’s support is too expensive to buy. Rather $L$ would choose $M$ as a partner. In order to win $M$’s support, $L$ need to satisfy $M$’s continuation value, $v^2_M = -\left(\frac{17}{24} - \frac{5}{12}\right)^2 + \frac{49}{576}$. Among the acceptable proposals, $L$ might choose a policy such that $x = x_M - (x_{MR} - x_M) = 2x_M - x_{MR}$ while keeping the portion of transferable benefit for $M$ constant and taking $R$’s expected portion for itself. However, $L$ would rather choose the proposal specified in the above figure. Note that in this proposal, $L$ makes policy concession in order to get more transferable benefits. Indeed, this would make $L$ better off. Lemma 1 in the Appendix 2 shows that this is the utility maximizing proposal strategy for $L$ when $L$ tries to form a coalition $\{L, M\}$. It is also worth noting that policy concession by $L$ would not happen if $M$ expects no transferable benefits from the next bargaining stage, due to the nonnegativity of transferable benefits.

The principal difference between the two parties’ – $L$ and $R$ – proposal strategies comes from the potential partner $M$’s relative status with regard to the reversion policy position. When the partner is relatively favored by the reversion policy position ($t=3$), the proposer ($R$ in this case) is willing to sacrifice transferable benefits to induce a closer agreed policy position. When the partner is relatively disfavored by the reversion policy position ($t=2$), the proposer ($L$ in this case) is willing to policy preference in order to get more transferable benefits.
Getting back to the example, we can see that at \( t = 1 \), when \( M \) is recognized to form a government, \( M \) can enforce its own ideal policy position to be approved by the partner (\( R \) in this case) while keeping all the transferable benefits.\(^{22}\) It explicitly shows what it means to be the median party in a government formation bargaining. Indeed, this result of the median party imposing ideal policy position while keeping all the transferable benefits is quite general. By virtue of its strategic policy position, at any time period \( t \), if \( M \) is recognized as formateur, \( M \) can always induce the same “best” outcome. At any \( t = 1, 2, 3 \), \( M \) would always have a party – either \( L \) or \( R \) – which expects no office holding benefits from the failure of the present government formation attempt – the proposer at the next round of bargaining would try to form a coalition with \( M \) (Lemma 2 in Appendix 2.2) – and the anticipated equilibrium government’s ideal policy position at the next period does not lie in the interval between \( M \) and the party’s ideal point.

With this simple example, we can find, first, that how parties bargain over policy when a fixed amount of nonnegative transferable benefits are available; second, that the median status seems to have strategic advantage in a government formation bargaining game; finally, that, when parties have the same order of selection of formateurs, the common anticipated order will induce unique outcome of the game in terms of coalition \( C^* \), policy \( x^* \), and distribution of transferable benefits \( y^* \).

Indeed, repeatedly using the two lemmas in Appendix 2.2, we can solve the game for each possible order of selection for the formateurs by the presidential head of state. The result is given in Appendix 2.2. In equilibria, parties set their continuation values depending on the expectation of which party might be the formateur and what proposal would be made by the party and the parties’ proposal strategies represents their expectations about the other parties’ voting strategies. Hence, a common expectation of the order of selection for the formateurs induce the unique government outcome. Note that, given the assumption of complete information, is willing to do it up to the midpoint if it can afford. However, this does not always happen. In that case, because of the nonnegativity of transferable benefit, we expect inefficient bargaining outcome.

\(^{22}\)Note that \( U_R(x_M; 0) = -\left(\frac{5}{12} - 1\right)^2 > v_R = -\left(\frac{5}{24} - 1\right)^2. \)
there is no reason that parties have divergent expectations about the presidential selection strategy when they know about the president’s ideal policy positions and the parameter value of $\beta$.

When the equilibrium proposal and response strategies are identified for each potential order of formateurs, a remaining problem is to specify the equilibrium selection strategies for the president. Specifying the president’s selection strategy is rather straightforward since the president’s action space is finite for each stage and the information is complete.

However, there still remains a problem. The problem is that the president is often indifferent among more than one party depending on the president’s anticipation about the resulting government. In a typical dynamic game of complete information, we consider each selection which would lead to one possible outcome of the subgame separately. In that case, we usually have multiple equilibria. However, in this paper, we impose an assumption of indifference breaking rule for president particularly at $t = 2$ to restrict the set of equilibria. According to the sequence of the game, if the president is required to select a party at $t = 2$, although it does not happen in equilibrium in this paper, and the president is indifferent between the two remaining parties, the president can choose any of them. However, president’s utility at $t = 1$ can still vary depending on the president’s choice at $t = 2$, because the anticipation affects the parties’ proposal and response strategies at $t = 1$. In this case, we assume that the president can credibly commit to take an action that can induce the president’s preferred outcome at $t = 1$.

As will be shown later, however, this assumption does not exclude all the multiple equilibria. Indeed, we often find multiple equilibria for each set of conditions exogenous conditions. When we stated earlier that each order of formateurs induces the unique government outcome, this did not mean that the game has a unique equilibrium government, since at that stage, we did not specify the equilibrium selection strategies for the presidential head of state. The reason for the existence of multiple equilibria is that $P$ is often indifferent between parties at the first stage of government formation bargaining given the set of exogenous conditions.

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23 A similar assumption is made in Austen-Smith and Banks to induce a unique legislative bargaining outcome (1988, pp. 413-414).
I now present a summary of the equilibria of the model focusing on the equilibrium selection strategies for the presidential head of state. The equilibrium selection strategies for $P$, and the properties of the equilibria, depend on a set of conditions that involve $P$'s ideal policy position $x_P$, the parameter of how much the presidential head of state cares about the distribution of transferable benefits $\beta$, and the parties equilibrium proposal and response strategies. The latter also depends on the relative distribution of party ideal policy positions. There are a large number of cases to consider, but several substantive points can be made from the analysis of the equilibria. These are summarized below.

- **In all equilibria, the first formateur’s proposal is always accepted in parliament.** However, the presidential head of state does not always choose the ideologically closest party by the assumption of the model, the party to which the president belongs to form a government at the first round of bargaining.

- **The presidential head of state whose ideal policy position is closest to the median party often selects one of the remaining parties to the first formateur, particularly when $\beta$ is sufficiently small.**

- **The interval of presidential head of state’s ideal policy position who would choose the first formateur from other parties shrinks as the value of $\beta$ increases.**

- **When the presidential head of state is a member of the most distant party from the median party, the presidential head of state always select her own party to the first formateur.**

- **The presidential head of state never selects the most ideologically distant party to the first formateur.**

- **The presidential head of state may not induce the most preferred government in nonstrategic environment for some conditions.**

The following series of figures show how we can get the above findings from the analysis of the equilibrium strategies for the presidential head of state. Since we assume that the president’s ideal policy position $x_P$, the parameter of how much the
president cares about the distribution of transferable benefits $\beta$, and the relative distribution of party ideal policy positions are exogenously given, the following figures depict the equilibrium strategies for the presidential head of state according to these conditions. The following Figure 2.3 depicts equilibrium selection strategies when $x_M = \frac{1}{2}$ and $\beta = 0$. In all the following figures, we exclude the case where $x_P$ lies on a particular point of the policy space. Note that the president’s party affiliation does not matter in this case since we assume $\beta = 0$.

![Figure 2.3: Equilibrium Selection Strategy when $x_M = \frac{1}{2}$ and $\beta = 0$](image)

Note that for the president whose ideal position lies in the interval $(x_M, \frac{x_{LM} + x_M}{2})$, equilibrium selection strategy is $LRM$. That is, the model predicts that the president would choose party $L$ as the formateur at the first round of government formation bargaining, even though the president ideal policy position is closer to the median party than to the party $L$. Indeed, only the president whose ideal policy position is closer to the median than the extreme party is predicted to choose the first formateur from one of the remaining extreme parties, according to the equilibria of the game.

The logic is rather simple. As we can see in the previous example, the median status is particularly advantageous for the parties in government formation bargaining processes. When the median is selected to make a proposal, the party can always
enforce its own ideal point to be accepted by one of the other remaining parties while keeping all transferable benefits. On the other hand, the extreme parties are rather disadvantageous in the bargaining processes. The best policy outcome they can obtain is the midpoint between the medians ideal point and its own ideal point.

Since we assume $\beta = 0$ in this case, the president whose ideal policy position is sufficiently close to the extreme party prefer to select the party even though its ideal policy position is not the closest one. However, the equilibrium selection strategy for the presidential head of state induce ideologically closest government in this case.

The predictions, however, are a little bit different if we assume $\beta > 0$. The following Figure 2.4 depicts equilibrium selection strategies when $x_M = \frac{1}{2}$ and $\beta > 0$. Note that the president’s party affiliation does matter in this case, since we assume $\beta > 0$.

---

**Figure 2.4: Equilibrium Selection Strategy when $x_M = \frac{1}{2}$ and $\beta > 0$**

After we assume $\beta > 0$, we can find that the president always selects own party – that is, the ideologically closest party – to make a proposal at $t = 1$. This change comes from the fact that the president cannot enforce a fixed order of selection before the game begins. As an example, consider a president from the median party whose ideal policy position is sufficient close to $x_{LM}$. That is, $x_P = x_{LM} + \epsilon$ such that $\epsilon$ is small enough. If $\beta$ is also sufficient small – much smaller than $\epsilon$ – we can still find the president prefer the resulting government outcome induced by $LRM$ than the
one induced by $MLR$. However, for this president, if $L$’s attempt result in failure, there is no way that the president choose party $R$ to form a government at $t = 2$. In order for this to happen, the president should convince party $M$ that she would select $R$ at $t = 2$ so that $M$ accepts $L$’s offer. Simply, it is not credible threat given the parties’ proposal and voting strategies at $t = 2$.

What if the median is closer to one of the remaining parties? This would be more realistic settings for coalition formation environments. The following Figure 2.5 depicts the equilibrium selection strategy for the president when $x_M \in \left[\frac{1}{3}, \frac{1}{2}\right)$ and $\beta = 0$. Again the president’s party affiliation does not matter in this case since $\beta = 0$.

---

**Figure 2.5: Equilibrium Selection Strategy when $x_M \in \left[\frac{1}{3}, \frac{1}{2}\right)$ and $\beta = 0$**

We can easily find some changes from the Figure 2.4. Let us start with one of the extreme party $L$ that is relatively favored by party $M$. Whereas for the president of party $L$ equilibrium strategy is $LRM$ in the previous Figure 2, now equilibrium prediction shows $LMR$ and $MLR$. The logic behind this change is the same as the previous case. Now for the president, choosing $R$ at $t = 2$ is not a credible action, since $R$’s proposal will never be closer than the median ideal policy position while $M$ will propose its own ideal policy position. Therefore, when the president select $L$ at $t = 1$, $M$ and $R$ both expect that the next selection would be $M$. Given this expectation, their continuation values and the party $L$’s proposal is correspondingly determined. Similarly, if the president selects $M$ at $t = 1$, $L$ and $R$ expect that
the next selection would be \( M \). Both selection strategies will induce the same policy outcome such that \( x_M \). This is the reason why we have multiple equilibria in this case. Moreover, note that the outcome is not the most preferred government for the party \( L \) in nonstrategic environment, either. That is, party \( L \) prefer the outcome induced by selection strategy \( LRM \) to the outcome by \( LMR \).

With regard to the president of party \( M \), we can find that selecting her own party member is not a unique equilibrium outcome in any of the interval and that the ideal point interval in which the president choosing \( R \) at \( t = 1 \) is increased from the previous case.

We do not find any difference with regard to the president of party \( R \). The presidential head of state, as a member of the party relatively more distant from the median, can still induce her most favorable government with an equilibrium selection strategy. Compared with the case of the president of party \( L \), the result suggests that being favored by the median entails trade-off in this bargaining situation.

![Figure 2.6: Equilibrium Selection Strategy when \( x_M < \frac{1}{2} \)](image)

\[
\begin{align*}
\frac{1-\beta_L}{2} (\frac{1}{2} + x_M) & \quad \frac{1}{2} (\frac{1}{2} + x_M) + \beta_M \cdot \frac{Y}{1-2x_M} \\
LMR & \quad LRM & \quad MLR; & \quad MRL & \quad MRL & \quad RML & \quad RLM \\
& \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\
x_L = 0 & \quad x_{LM} & \quad x_M < \frac{1}{2} & \quad x_{LR} & \quad x_{MR} & \quad x_R = 1 \\
& \quad \frac{x_M + x_{LR}}{2} \\
& \quad P \in L & \quad P \in M & \quad P \in R
\end{align*}
\]

\( \beta_L \geq \beta^*_L \equiv \frac{1}{2x_M+1}, \beta_M \leq \beta^*_M \equiv \frac{1-2x_M}{4Y}, \text{ and } \beta_R > 0 \)
Finally, Figure 2.6 depicts the equilibrium selection strategies for the president when \( x_M \in \left[ \frac{1}{3}, \frac{1}{2} \right) \), \( \beta_L \geq \beta^*_L \equiv \frac{1}{2x_M+1} \), \( \beta_M \leq \beta^*_M \equiv \frac{1-2x_M}{4Y} \), and \( \beta_R > 0 \). As in previous comparison between Figure 3 and 4, the change from \( \beta = 0 \) to \( \beta > 0 \) induces rather big change in the equilibrium behavior. First of all, we can find that, in most cases, the president select the party whose ideal policy position is closest to the president, in the present context, the party that the president is affiliated with. The only exceptions are found in the president whose ideal policy position is sufficiently close to the party \( R \). However, we can also find that the interval is rather narrow.

An interesting point with regard to the Figure 2.6 compared with others is that we can find two critical points in this figure. First, given that \( \beta_L \geq \beta^*_L \equiv \frac{1}{2x_M+1} \), the president whose ideal policy position is such that \( x_P = \frac{1-\beta_L}{2} (\frac{1}{2} + x_M) \) indifferent her selections at \( t = 2 \) between \( MR \) and \( RM \), if her first selection \( L \)'s attempt to form a government would be failed. For all \( x_P < \frac{1-\beta_L}{2} (\frac{1}{2} + x_M) \), \( LRM \) would not be an equilibrium selection strategy for the president, even though they – president and other party member – both prefer the outcome induced by \( LRM \). Note that as \( \beta \) increases, the critical value \( \frac{1-\beta_L}{2} (\frac{1}{2} + x_M) \) would decrease. That is, the interval supporting \( LRM \) as the equilibrium selection strategy is enlarged.

Next, given that \( \beta_M \leq \beta^*_M \equiv \frac{1-2x_M}{4Y} \), the president whose ideal policy position is such that \( x_P = \frac{1}{2} (\frac{1}{2} + x_M) + \beta_M \cdot \frac{Y}{1-2x_M} \) is indifferent at \( t = 1 \) between selecting \( M \) and \( R \). If the president chooses \( M \), the president would induce rather distant policy outcome with bigger transferable benefits for her party. If the president chooses \( R \), the president would induce closer policy outcome with no transferable benefits for her party. Since \( \beta^*_M \equiv \frac{1-2x_M}{4Y} \) is sufficiently small, this is true. Now consider the president whose ideal policy position is such that \( x_P = \frac{1}{2} (\frac{1}{2} + x_M) + \beta_M \cdot \frac{Y}{1-2x_M} + \epsilon \) (\( \epsilon \)). The president would prefer \( RLM \) to \( RML \), since it would induce a closer policy position as well as some positive transferable benefits. However, \( LM \) at \( t = 2 \) would not be supported as an equilibrium strategy. Note that, as \( \beta \) increases, the critical value \( \frac{1}{2} (\frac{1}{2} + x_M) + \beta_M \cdot \frac{Y}{1-2x_M} \) would also increase. This, in turn, results in the enlargement of the interval of president’s ideal policy positions who would select her own party member at \( t = 1 \) in equilibrium.
Again, we do not find any difference with regard to the president of party $R$. She can still induce her most favorable government with an equilibrium selection strategy.

So far we have been exploring the relation between the equilibrium selection strategy for the president and the resulting government outcome. We have found that the equilibrium outcome is uniquely induced by the presidential head of state’s equilibrium selection stage. That is, each selection strategy is related with unique equilibrium government. This does not necessarily mean that the game has unique equilibrium since the presidential head of state is often indifferent between parties when the president’s action – choice – is required.

However, we have found that the presidential head of state’s equilibrium selection strategy is depending on her ideological policy position $x_P$ and the parameter representing the degree of connection between the president and her own party $\beta$ as well as the distribution of political parties’ ideal policy position. More specifically, we have seen that the change of these exogenous values often induce rather big change in the resulting government as an equilibrium outcome. The principal mechanism of this interaction is that when the president makes a selection of formateur at the first round of bargaining, the other parliamentary parties’ voting strategies at the first stage are depending on their anticipation of the president’s second choice. This, in turn, affects the proposer’s proposal strategy. Eventually, the presidential head of state’s equilibrium selection strategy is also depending on political parties’ equilibrium proposal and voting strategies. Therefore, we have found that the presidential head of state may not induce the government that she would most prefer in nonstrategic environment, if the selection order to induce the government includes noncredible threat to the political parties.

We have also found that the president whose ideal policy position is close to the median party often selects one of the remaining extreme parties; that when the degree to which the president cares about the nonnegative transferable benefits for her own party is high – i.e., when $\beta$ is sufficiently big – the president always selects her own party to the first formateur; that the president, as a member of extreme parties, always selects her own party to the first formateur; and, finally, that the president
never selects the most ideologically distant party to the first formateur. Empirically testing these implications is the main task of the next section.

2.3 Empirics

2.3.1 Dependent Variable and Testable Hypotheses

From the analyses of equilibrium selection strategy for presidential head of state and corresponding equilibrium government outcomes, we can formulate several hypotheses to be empirically tested. Although there are many features implied by the model - for example, government policy position and distribution of transferable benefits, most of them are difficult to operationalize. Hence, in this section, I focus on only one observable feature of the model presented in the previous section, which can be relatively easily operationalized. For each government formed, we can ask whether the president and prime minister have the same party affiliation. Based on this question, we can construct a variable, \( P = PM \), which will be used as the main dependent variable of this empirical analysis section. \( P = PM \) takes on a value of 1 if the president and prime minister have the same party affiliation and 0 otherwise.

According to the equilibrium analyses, some presidents need to appoint prime minister candidate from other parties to maximize her payoff while others do not, depending on her own ideal policy position – \( x_P \), how much she cares about the distribution of transferable benefits – \( \beta \), and the relative ideal policy position of parties – \((x_L, x_M, x_R)\). That is, we found in the previous section that the conditions for the president not to appoint her own party member prime minister are (1) \( P \in M \), (2) \( x_P \) is sufficiently close to \( x_R \), \(^{24}\) and (3) \( \beta_M \) is sufficiently small, (4) given the relative policy position of parties such that \( x_L(= 0) < x_M(\leq \frac{1}{2}) < x_R(= 1) \).

Having a right to propose potential government is valuable. When a party holds the right, the party can exploit it to extract extra benefits while making potential government partner indifferent between accepting and rejecting the offer. The proposer may sacrifice some portion of transferable benefits for a closer government policy to get an acceptance vote from potential partner if it will eventually increase

\(^{24}\)Note that we assumed \( x_{LM} < x_P < x_{MR} \) if \( P \in M \).
his payoffs. The proposer may also make policy concessions for a bigger portion of transferable benefits if it will increase his payoffs and the potential coalition partner can afford it.

When parties compete on a uni-dimensional issue space as in the model, the median parliamentary party’s position is especially valuable since it can impose its ideal policy position to be accepted by one of the remaining extreme parties while keeping all of the transferable benefits. On the contrary, the best that an extreme party can achieve in terms of policy agreement is the midpoint between the median and its own ideal points. When this happens, the extreme party cannot take all of the transferable benefits.

From the president’s view point, when she is a member of median party, this particular advantage for the median is not always good. Her ideal policy position may be closer to the midpoint between the median and one of the extreme party’s ideal points than to the median’s ideal point although the latter is still closer to her own ideal point than the extreme party’s ideal point is. Compared with this case, if the president is a member of extreme parties, appointing her own party member prime minister is always the best response to the parties’ proposal and voting strategies. From these expectations, we can formulate the following hypothesis with ceteris paribus conditions:

**Hypothesis 1.** *The party of the president is less likely to be appointed prime minister when it is the parliamentary median party than otherwise.*

Appointing prime minister from other parties requires that the parameter representing the connection between the president and his or her own party – $\beta$ – should be sufficiently small. Otherwise, even when the president is a member of median party, she will prefer to appoint her own party member prime minister for a bigger transferable benefits. If the president is indirectly selected by parliament, her electoral constituency mainly consists of the representatives of parliamentary parties.\(^\text{25}\)

\(^{25}\)Although most of the constitutions provide special election body for the president – for example, the Bundesversammlung [Federal Convention] in Germany and the joint session of bicameral parliament in Italy, it mainly consists of the representatives of the parliamentary parties.
Therefore, the presidential election is heavily dominated by the political parties in these political systems. In this environment, the candidates for the president are likely to be chosen from the senior members of political parties and they are also likely to have strong ties with their own parties that mainly consist of their former colleagues. On the other hand, if the president is popularly elected, her electoral constituency is the whole eligible mass public, not just the party members. The presidents under these institutional arrangements are likely to be much freer from the partisan concerns over the matters that are not directly related to the national policy making such as the distribution of office-related spoils.

Based on this difference in the mode of presidential elections and the electoral constituencies, we can expect that the tie between the president and his or her own party should be much stronger – i.e., a bigger $\beta$ – when the president is indirectly elected in parliament than when the president is elected by popular vote. Thus, I expect that the parliament-selected presidents would care more about the distribution of transferable benefits among parliamentary parties than the popularly-elected presidents. Hence, I formulate the following hypothesis with *ceteris paribus* conditions:

**Hypothesis 2.** The party of the president is less likely to be appointed prime minister under the popularly-elected presidents than under the parliament-selected presidents.

If the president is not a member of median party, on the other hand, appointing her own party member prime minister is always her best response to the parties' proposal and voting strategies, as we saw earlier. Strictly speaking, the theoretical model does not imply any difference of the incentive for the president of one of the two remaining extreme parties. We, however, might expect that if a presidential party is more distant from the median than the other, the president would have stronger incentive to appoint her own party member prime minister.

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26 The fact that we often observe “an outsider” candidate, although endorsed by major parliamentary parties in popular presidential elections provides additional validity of this expectation. Shugart and Carey (1992) provide a discussion about the outsider candidate in popular presidential elections (particularly, 33-35)
since the party is put into a more disadvantaged bargaining position. Indeed, when \( x_L(= 0) < x_M(< \frac{1}{2}) < x_R(= 1) \), \( P \in L \), and \( \beta_L = 0 \) as in Figure 2.5, the president, as a member of parliamentary party \( L \), is indifferent between selection strategies \((L, M, R)\) and \((M, L, R)\). That is, we have multiple equilibria in this particular exogenous condition. Both of the equilibrium selection strategies result in the same ideal policy position of \( x_M \), while the distributions of transferable benefits are different. On the other hand, if the president is a member of party \( R \), only \((R, M, L)\) is her best response for all \( \beta_R \geq 0 \). With this reasoning behind, I can formulate the following – rather exploratory – hypothesis:27

**Hypothesis 3.** The more ideologically distant the party of the president is from the parliamentary median party, the more likely the party is to be appointed Prime Minister.

### 2.3.2 Data and Independent Variables

Having stated the three hypotheses regarding the determinant of whether the president and prime minister have the same party affiliation, we now test them against cross-national data. As you might already notice, the empirical test of hypotheses requires locating party policy positions on a uni-dimensional issue space. There has been a large literature on party policy positions of Western European democracies.28 However, research on policy positions of Eastern European political parties as well as other regions including Latin America countries – another important source of data on government formation with presidential head of state – is rather in inception. Therefore, there is a trade-off between the validity of measurements and the number of observations in this empirical project. In this paper, I restrict our attention to the observations from Western European countries. By this restriction, we can be assured that our estimation results are relatively free from bias induced by the

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27 Another way to consider this case is to assume that, although it is not modelled in this paper, appointing her own party member prime minister entails some positive *audience cost* \( c > 0 \).

28 For a comprehensive survey of literature and the relative advantages and disadvantages of different methods of estimating party policy position, see Benoit and Laver (2006, especially Chapter 3).
measurement error on key independent variables.\textsuperscript{29}

The data set includes information on 146 governments from 7 Western European democracies with presidential head of state since the end of WWII. Germany and Italy have indirectly elected presidential head of state. Austria, Finland, France Fifth Republic, Iceland, and Portugal have directly elected presidential head of state.\textsuperscript{30} I count a new government whenever (1) a change in the prime minister; (2) a general parliamentary election; (3) or a change in the party composition of government coalition, following Müller and Strøm (2000,12). With this counting rule, we can initially count 204 governments from these countries after the end of WWII to the most recent years that we can use the manifesto analyses to measure party policy position. However, this set of governments include 20 governments formed under single party majority parliament environments, 7 technocratic governments,\textsuperscript{31} and 15 caretaker governments. Among the remaining 163 governments, we could not identify party affiliation of the presidential head of state for 10 governments. Also, for 7 cases out of the remaining 153 governments, the Prime Ministers do not have party affiliations. I excluded these governments from our analysis and finally have information on 146 governments in our data sets – 61 from the systems with parliament-selected presidents and 85 from the system with popularly-elected presidents.

\textit{Popular Election, Median President, and Ideological Distance between Median and President} are the main independent variables of interest in this empirical analysis. \textit{Popular Election} is a dummy variable, which takes on a value of 1 if the president is elected by popular vote. \textit{Median President} measures the median status of the party

\textsuperscript{29}However, it also entails the danger from selection bias and small sample may yield insignificant statistical results.

\textsuperscript{30}Greece and Ireland are also systems with presidential head of state. The Greek president is indirectly elected by Parliament. The Irish president is directly elected by popular vote. As we can see in the table A2, however, the presidents in these two countries, have no constitutional power with regard to the government formation. Specifically, the Greek constitution provides an article such that the selection of formateur should follow the order of parliamentary seat share (Article 37). In Ireland, nominations for the position of \textit{Taoiseach} [Prime Minister] are proposed by individual deputies. Hence, these two countries are excluded from the data set.

\textsuperscript{31}All of the 7 technocratic governments are formed in the system with popularly-elected presidents. This is very interesting characteristic of the system with popularly-elected presidents. However, this is not the main concern of this paper.
of the president. It takes on a value of 1 if the party of the president is the median parliamentary party and 0 otherwise. *Ideological Distance between Median and President* is a cardinal variable measuring the ideological distance between the party of the president and the median parliamentary party. As I noted earlier, the latter two variables are based on the party policy positions in each government formation opportunity. I used the manifesto analysis provided by the Manifesto Research Group [MRG] (Budge et al. 2001). Particularly, I compute the left-right position of party using the formula provided by Kim and Fording (1998). For convenience, I rescale the measure so that it takes on a possible range of 0 to 1 and that the smaller score indicates greater support for the leftist policies. 32

To control other factors, I introduced the following variables:33 *President is the largest, Effective Number of Parliamentary Parties, and Polarization.* *President is the largest* is a dummy variable taking on a value of 1 if the party of the president party is the largest party in a parliament. Coalition theorists have often reported that the largest party status is one of the most important determinants of party becoming prime minister (Warwick 1996; Diermeier and Merlo 2004; Ansolabehere et al. 2005; Bäck and Dumont 2006). Therefore, I expect that this variable has a strong positive effect on the dependent variable. *Effective Number of Parliamentary Parties* in each government formation opportunity is calculated following Laakso and Taagepera (1979). It is expected to have a negative association with the dependent variable in this analysis. As the number of effective parliamentary party is

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32Based on 13 Pro-Left categories 13 Pro-Right categories identified by Laver and Budge’s factor analysis (1993), Kim and Fording (1998) compute IDParty as follows:

\[
\text{Pro-Left categories} - \text{Pro-Right categories} \over \text{Pro-Left categories} + \text{Pro-Right categories}
\]

The measure takes on a possible range of -100 (R) to 100 (L) (in percentage) Therefore, we reversed the order of subtraction and rescaled it.

33We are not aware of any research on the determinants of whether the president and prime minister have the same party affiliation. However, there exists large literature on the determinants of party’s being appointed prime minister in parliamentary system. Partial list of this literature includes Warwick (1996), Ansolabehere et al. (2005), Martin and Stevenson (2001), etc. The control variables introduced here haven been proven to be statistically significant factors on the odds of becoming government formateur by Warwick’s (1996) probit estimation. Since individual parties in each government formation attempts are treated as a unit of observation in Warwick’s probit estimation, it severely violates “independence” assumption. However, some methodological defects do not wholly negate the legitimate reasoning for introducing these variables.
getting larger in a fixed policy interval, the chance of the president finding a party whose policy position is close to her would be increasing. Then, the likelihood of the president appointing her own party member prime minister would be decreasing if all else being equal. *Polarization* indicates the general ideological dispersion of the party system. It is expected to have a negative association with the dependent variable since the incentive of the president to build a broader coalition is likely to increase as the party system is more ideologically dispersed.

### 2.3.3 Descriptive Statistics

Table 2.1 reports the descriptive statistics for the key variables in the data set. A variable, *President in the Government Coalition*, is also included in the table because it shows particularly interesting feature of the outcomes of government formation processes in these political systems, although it is not used as a variable in the following econometric model. *President in the Government Coalition* is a dummy variable taking on a value of 1 if the party of the president is a member of government coalition.

We can see in the table that the party of the president is a member of government coalition in about 84% cases (123 out of 153). Since the party holds the premiership in 70 cases, it shows that in the remaining 53 cases, the party of the president participates in coalition government as a junior partner. With this finding, it is safe to state that the party of the president is more likely to participate in government coalitions than other parties. I believe this simple finding suggests effectively the influence of the president in the outcomes of government formation in these political systems that has been ignored in the previous research. There has been a large literature on the determinants of party participation in government. For example, the median status, previous membership, electoral winner, *etc.* have been reported as the determinants in many previous works. However, none has paid attention to

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34 *Polarization* is calculated as follows: \( \text{Polarization} = \sqrt{\sum_{i=1}^{N} s_i (\tilde{x}_i - \bar{x})^2} \), where \( N \) denotes the absolute number of parliamentary party, \( s_i \) party \( i \)’s parliamentary seat share, \( \tilde{x}_i \) party \( i \)’s ideal position on a uni-dimensional policy space, \( \bar{x} \) the weighted mean position of parties on that scale. Therefore, it measures the weighted standard deviation of party ideological positions. It slightly modifies Warwick’s (1998) measure of polarization reflecting the uni-dimensional policy space assumption.
this simple party characteristic, which is quite substantial as we can see in the table.

Table 2.1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables:</th>
<th>Type of President</th>
<th>Statistics †</th>
<th>Total</th>
<th>Parliament-Selected</th>
<th>Popular Election</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Observations:</td>
<td>N</td>
<td>146</td>
<td>61</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P = PM (0/1)</td>
<td>sum</td>
<td>70</td>
<td>36</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ˆp</td>
<td>0.480</td>
<td>0.590</td>
<td>0.400</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.042)</td>
<td>(0.064)</td>
<td>(0.054)</td>
<td></td>
</tr>
<tr>
<td>Median President (0/1)</td>
<td>sum</td>
<td>53</td>
<td>26</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ˆp</td>
<td>0.363</td>
<td>0.426</td>
<td>0.318</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.040)</td>
<td>(0.064)</td>
<td>(0.040)</td>
<td></td>
</tr>
<tr>
<td>Ideological Distance between Median President and President</td>
<td>ˆµ</td>
<td>0.125</td>
<td>0.073</td>
<td>0.163</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.013)</td>
<td>(0.012)</td>
<td>(0.020)</td>
<td></td>
</tr>
<tr>
<td>President is the largest (0/1)</td>
<td>sum</td>
<td>65</td>
<td>35</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ˆp</td>
<td>0.445</td>
<td>0.574</td>
<td>0.353</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.041)</td>
<td>(0.064)</td>
<td>(0.052)</td>
<td></td>
</tr>
<tr>
<td>Effective Number of Parliamentary Parties</td>
<td>ˆµ</td>
<td>3.781</td>
<td>3.468</td>
<td>4.005</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.086)</td>
<td>(0.114)</td>
<td>(0.116)</td>
<td></td>
</tr>
<tr>
<td>Polarization</td>
<td>ˆµ</td>
<td>0.172</td>
<td>0.148</td>
<td>0.191</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.007)</td>
<td>(0.010)</td>
<td>(0.008)</td>
<td></td>
</tr>
<tr>
<td>President in the Government Coalition (0/1)</td>
<td>sum</td>
<td>123</td>
<td>53</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ˆp</td>
<td>0.843</td>
<td>0.869</td>
<td>0.824</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.030)</td>
<td>(0.044)</td>
<td>(0.042)</td>
<td></td>
</tr>
</tbody>
</table>

Note: † For the dummy variables, denoted by (0/1), sum and proportion (ˆp) are reported. For the continuous variables, mean (ˆµ) is reported. The entries in parentheses under mean and proportion are the standard errors.

A series of simple t-tests comparing the two types of the president suggest that, when the presidents are selected by parliament, we are more likely to observe that the president and prime minister have the same party affiliation; that the party of the president holds the parliamentary median status; that – probably as a result of the previous characteristic – the party of the president is closer to the median; that the party of the president is the largest parliamentary party; that the party system

³⁵It is worth noting that, out of 20 cases in which the presidential party is not a member of government coalition, we could find either strong pre-electoral coalition by opposition parties - 5 cases from France and Portugal - or the popularly elected president’s party is the parliamentary median - 7 cases from Austria, Finland, and Iceland.
has a smaller number of effective parties; and that the party system is less polarized.

Particularly interesting finding in Table 2.1 is the difference in the parliamentary status of the party of the presidents – that is, the median and the largest party status – between the two types of the presidents. The figures in the table strongly suggest that factors contributing to the success of presidential candidates might be different in the two systems, which is not modelled in the previous section. We leave it for future research.

2.3.4 Estimation Results

Since the dependent variable, $P=PM$, is a binary outcome variable, probit estimation is an appropriate method to analyze the data. Table 2.2 reports the results of estimation.

### Table 2.2: Probit Estimation of $P=PM$

<table>
<thead>
<tr>
<th>Models:</th>
<th>2.1</th>
<th>2.2</th>
<th>2.3</th>
<th>2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.749</td>
<td>-0.856</td>
<td><strong>-0.859</strong></td>
<td>-0.313</td>
</tr>
<tr>
<td></td>
<td>(-1.45)</td>
<td>(-1.6)</td>
<td>(-1.68)</td>
<td>(-0.54)</td>
</tr>
<tr>
<td>President is the largest</td>
<td><strong>1.949</strong></td>
<td><strong>1.936</strong></td>
<td><strong>2.048</strong></td>
<td><strong>2.200</strong></td>
</tr>
<tr>
<td></td>
<td>(7.55)</td>
<td>(7.28)</td>
<td>(7.61)</td>
<td>(7.56)</td>
</tr>
<tr>
<td>Effective Number of Parliamentary Parties</td>
<td>0.025</td>
<td>0.019</td>
<td>0.058</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>(0.19)</td>
<td>(0.15)</td>
<td>(0.44)</td>
<td>(0.56)</td>
</tr>
<tr>
<td>Polarization</td>
<td>-1.265</td>
<td>-1.839</td>
<td>-2.869</td>
<td>-3.127</td>
</tr>
<tr>
<td></td>
<td>(-0.75)</td>
<td>(-1.04)</td>
<td>(-1.39)</td>
<td>(-1.5)</td>
</tr>
<tr>
<td>Popular Election</td>
<td>0.366</td>
<td><strong>-0.965</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.04)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median President</td>
<td>-0.093</td>
<td>0.688</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.35)</td>
<td>(1.56)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Popular Election × Median President</td>
<td><strong>-1.329</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-2.32)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideological Distance between Median and President</td>
<td>1.393</td>
<td><strong>-5.515</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.54)</td>
<td>(-2.35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Popular Election × Ideological Distance between Median and President</td>
<td><strong>8.431</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.29)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$N$</td>
<td>146</td>
<td>146</td>
<td>146</td>
<td>146</td>
</tr>
<tr>
<td>PCP (%)</td>
<td>82.88</td>
<td>82.88</td>
<td>82.88</td>
<td>84.25</td>
</tr>
</tbody>
</table>

Note: Dependent variable is $P=PM$, which takes a value of 1 if the president and the prime minister have the same party affiliation and 0 otherwise. $t$-statistics are shown in parentheses. Bold represents the statistical significant at the .05 level (one-tailed)
Model 2.1 and Model 2.2 include the variable, Median President, to estimate the effect of the median status of the party of the president on the probability of the president and the prime minister having the same party affiliation. Model 2.3 and Model 2.4 include the variable, Ideological Distance between Median and President, to estimate the effect of the ideological distance between the party of the president and the median parliamentary party on the same dependent variable. I do not include the two variables together in the same specification since the two variables essentially capture similar feature of government formation opportunities.

The estimation results provides partial support for the theoretical expectations formulated above. It is partial in that the theoretical expectations – particularly, hypotheses 1 and 3 – are supported very well when the president is elected by popular vote, but not when the president is selected by parliament. Comparison of Models 2.1 and 2.2 clearly shows that if the president is elected by popular vote, the party of the president is less likely to be appointed prime minister and, hence, the president and the prime minister are likely to have different party affiliations when the party of the president is the parliamentary median party. The result from Model 2.4 further shows that the relationship is continuous. That is, it shows that the more ideologically distant the party of the president is from the parliamentary median party, the more likely the president and the prime minister share the same party affiliation when the presidents are elected by popular vote.³⁶

It is worth reemphasizing that the strong negative effect of the ideological distance between the popularly-elected president and the parliamentary median party from the estimates of Model 2.4 represents the combined tendencies such that when the party of the president is close to the median, the president is less likely to appoint her own party member prime minister and that when the party of the president is rather extreme, the president is more likely to appoint her own party member prime minister. These results from the systems with popularly elected presidents provide strong support for the theoretical expectations drawn from the model presented in

³⁶The linear combination of the coefficient estimates on Ideological Distance between Median and President and Popular Election × Ideological Distance between Median and President from model 4 yields the partial effect of the variable when the president is elected by popular vote. The resulting coefficient estimate is 2.916 (= −5.515 + 8.431) with t-ratio 2.87 (p-value is 0.002).
the previous section.

In order to see the substantive magnitude of the estimates of interest, I depict the following Figure 2.7. The figure shows the variation in the predicted probability of the president and the prime minister having the same party affiliation with respect to the hypothetical change in the ideological distance between the president and the parliamentary median when the president is elected by popular vote. The figure also shows the variation in the predicted probability with respect to the largest status of the party of the president. To calculate the predicted probability, I set other values at their means.

![Figure 2.7: Predicted Probability of P=PM under Popularly-Elected President](image)

The figure clearly shows that the estimated effects are not only statistically significant but also substantively big. For example, when the party of the popularly-elected president is not the largest parliamentary party, a standard deviation (0.183)
increase from the mean (0.163) in the ideological distance between the president and the parliamentary median party yields a change in the predicted probability of the president appointing her own party member prime minister from 14 percent to 29 percent. A further increase by one standard deviation produces the predicted probability of 50 percent.

On the other hand, the theoretical expectations are not supported very well when the presidents are selected by parliaments. Indeed, the estimates from model 4 even suggest that the party of the parliament-selected president is less likely to be appointed prime minister, as the party is getting more distant from the median parliamentary party, as opposed to the expectations.

However, we should be very cautious for the case of parliament-selected presidents. Note that the negative coefficient estimate on Popular Election of model 2.4 is statistically significant. That is, the result provides support for the theoretical expectation based on the difference in the electoral constituencies of the two types of the presidents (Hypothesis 2). The result shows that the party of the president is less likely to be appointed prime minister when the president is elected by popular vote than when he or she is selected by parliament. In other words, this implies that we are more likely to observe the president and the prime minister having the same party affiliation when the president is selected by parliament than otherwise.

Recall the previous descriptive statistics (Table 2.1) that the party of the parliament-selected president is more likely to be the largest parliamentary party than its counterpart. The largest party status of the party of the president clearly contributes to the higher probability of the president and the prime minister having the same party affiliation in the systems with the parliament-selected presidents, according to the estimation results. The revealed empirical regularity is estimated against this background. That is, the systematic difference is not just a product of the difference in the frequency of party obtaining the largest party status.

Hypothesis 2 is drawn from the difference in the electoral constituencies of these systems and the resulting theoretical consideration on the parameter representing the
connection between the president and her own party. Indeed, the analysis of equilibria in the previous section suggested that when the president cares much about the share of transferable benefits for her own party — i.e., when $\beta$ is sufficiently big — appointing her own party prime minister at the first round of bargaining process is always a best response by the president, regardless of the ideological position of the latter. However, the theoretical models did not lead us to expect the negative effect of Ideological Distance between Median and President in the empirical Model 2.4. The present setup for empirical analysis cannot show whether the party of the parliament-selected president has systematic advantages in the appointment of prime minister compared with other parties in the parliament. It requires a more in-depth and different analysis.

However, these conflicting results clearly suggest that the parliament-selected president might have different constraints on the mechanisms of influence in the government formation bargaining process from those of the popularly-elected presidents. Also, the empirical analysis largely suggest that the theoretical model presented in the previous section reflects well the process under the popularly-elected presidents. The differences in the mechanisms of influence on the government formation bargaining process associated with different types of presidents require a more thorough investigation.

2.4 Concluding Remarks

The role played by the heads of state in the politics of European democracies where the governments are politically responsible to the parliament has been largely ignored in the literature on comparative politics, even when the heads of state are elected presidents. The primary goal of this chapter has been to explore the relation between the presidents and the resulting government as an equilibrium outcome through the analysis of noncooperative game theoretical model of government formation bargaining and to empirically test theoretical implications drawn from the model.

The model presented in this chapter explicitly incorporates the strategic selec-
tion of the formateur by the president into the government formation bargaining process, which has been left unmodelled in the theoretical literature. The principal mechanism of the strategic interaction in the model is that it is the parliamentary party that actually determines the exact terms of negotiation and the president is only allowed to affect the negotiation by the selection of the formateur. When the president appoints a formateur at the first round of bargaining, the other parliamentary parties’ voting strategies on the proposal of the first formateur depend on their anticipations about the president’s second choice when it fails to win necessary support. This, in turn, affects the first formateur’s proposal strategy. Eventually, the president’s equilibrium selection strategy also depends on the parliamentary parties’ equilibrium proposal and voting strategies.

The equilibrium analysis of the model shows that the equilibrium selection strategy by the president depends critically on the configuration of ideological policy positions of the president and the parliamentary parties as well as the degree to which the president cares about the distribution of transferable office-related benefits for her own party. Particularly, the analysis suggests that the president whose ideal policy position is close to the median party may select one of the remaining extreme parties as the first formateur when the parameter representing the connection between the president and her own party is sufficiently small; that the president as a member of an extreme party, always selects her own party to be the first formateur; and that the presidential head of state never selects the most ideologically distant party to be the formateur at the first round of government-formation bargaining process. The analysis also suggest that, under some conditions, the president may not induce the government that he or she would most prefer in the nonstrategic environments.

The theoretical model is developed to represent a political system where the government must have a majority parliamentary support in order to form and the presidents choose a party – formateur – to make a proposal for a prospective government on which voting for approval takes place within parliament. Thus, the model might be applied to the semi-presidential systems in which the presidents are elected by popular vote as well as to the parliamentary republic in which the presidents are
selected by parliament. However, empirical analysis on 146 governments of 7 Western European democracies with presidential heads of state provides partial support for the theoretical implications drawn from the model. It is partial in that the theoretical expectation is supported very well when the president is elected by popular vote, but not when the president is selected by parliament.

Specifically, the estimation results have shown that when the presidents are elected by popular vote, the more ideologically distant the party of the president is from the median party, the more likely the president and the prime minister share the same party affiliation. This empirical regularity cannot be seen when the presidents are selected by parliament. However, we should be cautious for the case of parliament-selected presidents. The result does not suggest that there is no evidence of influence systematically related with the parliament-selected presidents. Rather, the result provides support for another theoretical expectation that the party of the president is more likely to be appointed prime minister when the president is selected by parliament than when the president is elected by popular vote.

These findings have led us to believe that the government-formation bargaining processes under two different types of presidential heads of state might be governed by different principles and that the theoretical model presented in this chapter reflects well the process under the popularly elected presidents. The conflicting findings also suggest that we need a more thorough investigation for a better understanding of the mechanisms through which the presidential heads of state influences the government-formation bargaining process under different institutional arrangements. This is the main task of the next chapter.
Appendix 2.1: Constitutional Powers of the President over the Formation of Government

The following table A2 reports the survey on the constitutional powers of the presidents in nine Western European democracies over the process of the government formation. English translations of constitutional documents are provided by International Constitutional Law project, available at <http://www.oefre.unibe.ch/law/icl/>.

Table A2: Constitutional Powers of the President over the Formation of Government in Nine West European Democracies

<table>
<thead>
<tr>
<th>Country</th>
<th>Source</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Article 70</td>
<td>The Federal Chancellor and, on his recommendation, the other members of the Federal Government are appointed by the Federal President.</td>
</tr>
<tr>
<td>Finland</td>
<td>Section 61</td>
<td>(1) The Parliament elects the Prime Minister, who is thereafter appointed to the office by the President of the Republic. The President appoints the other Ministers in accordance with a proposal made by the Prime Minister. (2) Before the Prime Minister is elected, the groups represented in the Parliament negotiate on the political programme and composition of the Government. On the basis of the outcome of these negotiations, and after having heard the Speaker of the Parliament and the parliamentary groups, the President informs the Parliament of the nominee for Prime Minister. The nominee is elected Prime Minister if his or her election has been supported by more than half of the votes cast in an open vote in the Parliament. (3) If the nominee does not receive the necessary majority, another nominee shall be put forward in accordance with the same procedure. If the second nominee fails to receive the support of more than half of the votes cast, the election of the Prime Minister shall be held in the Parliament by open vote. In this event, the person receiving the most votes is elected.</td>
</tr>
<tr>
<td>France V.</td>
<td>Article 8</td>
<td>(1) The President of the Republic shall appoint the Prime Minister. He shall terminate that appointment when the latter tenders the resignation of the Government. (2) On the proposal of the Prime Minister, he shall appoint the other members of the Government and terminate their appointments.</td>
</tr>
<tr>
<td>Country</td>
<td>Source</td>
<td>Content</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>---------</td>
</tr>
</tbody>
</table>
| Germany | Article 63 | (1) The Federal Chancellor is elected, without debate, by the Bundestag on the proposal of the Federal President.  
(2) The person obtaining the votes of the majority of the members of the Bundestag is elected. The persons elected must be appointed by the Federal President.  
(3) If the person proposed is not elected, the Bundestag may elect within fourteen days of the ballot a Federal Chancellor by more than one-half of its members.  
(4) If there is no election within this period, a new ballot shall take place without delay in which the person obtaining the largest number of votes is elected. If the person elected obtained the votes of the majority of the members of the Bundestag the Federal President must appoint him within Seven days of the election. If the person elected did not receive this majority, the Federal President must within even days either appoint him or dissolve the Bundestag. |
| Greece  | Article 37 | (1) The Federal Ministers are appointed and dismissed by the Federal President upon the proposal of the Federal Chancellor.  
(2) The leader of the party having the absolute majority of seats in Parliament shall be appointed Prime Minister. If no party has the absolute majority, the President of the Republic shall give the leader of the party with a relative majority an exploratory mandate in order to ascertain the possibility of forming a Government enjoying the confidence of the Parliament.  
(3) If this possibility cannot be ascertained, the President of the Republic shall give the exploratory mandate to the leader of the second largest party in Parliament, and if this proves to be unsuccessful, to the leader of the third largest party in Parliament. Each exploratory mandate shall be in force for three days. If all exploratory mandates prove to be unsuccessful, the President of the Republic summons all party leaders, and if the impossibility to form a Cabinet enjoying the confidence of the Parliament is confirmed, he shall attempt to form a Cabinet composed of all parties in Parliament for the purpose of holding parliamentary elections. If this fails, he shall entrust the President of the Supreme Administrative Court of of the Supreme Civil and Criminal court of of the Court of Auditors to form a Cabinet as widely accepted as possible to carry out elections and dissolves Parliament. |
Table A2. Constitutional Powers of the President over the Formation of Government (cont.)

<table>
<thead>
<tr>
<th>Country</th>
<th>Source</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>Article 15</td>
<td>The President appoints Ministers and discharges them. He determines their number and assignments.</td>
</tr>
</tbody>
</table>
| Ireland | Article 13 | (1.1) The President shall, on the nomination of Dáil Éireann, appoint the Taoiseach, that is, the head of the Government or Prime Minister.  
(1.2) The President shall, on the nomination of the Taoiseach with the previous approval of Dail Eireann, appoint the other members of the Government. |
| Italy | Article 92 | (2) The president appoints the prime minister and, on his advice, the ministers. |
| Portugal | Article 190 | (1) The Prime Minister is appointed by the President of the Republic after consultation with the parties represented in the Assembly of the Republic, due regard being given to the election results.  
(2) The remaining members of the Government are appointed by the President of the Republic on the proposal of the Prime Minister. |


Note:  
a The new Finnish Constitution that took effect in 2000. The old Constitution prescribes, “after consulting the various parliamentary factions, the President shall appoint citizens of Finland known for their honesty and ability to serve as members of the Council of State” (Section 36.2). No investiture vote was required by the old Constitution.  
b Nominations for the position of Taoiseach are done by individual deputies. The quorum is 20 MPs and the candidate that first secures a majority of those voting wins the vote.  
c The government has to appear before each chamber no later than ten days after its appointment to get a vote of confidence (Article 94.3).
Appendix 2.2: Formal Presentation

Formal Presentation of Strategy Profile and Equilibrium Conditions

A strategy profile for president consists of parties which will be chosen by the president at \( t = 1, 2, 3 \). Given the characteristic of the selection rule, however, it can be fully specified by the first two choices of the president. At \( t = 1 \), the president can choose any one of the parties as a proposer. Let \( s^1_P \in \Omega \) denote the president's first choice. The second choice of the president is restricted by which party was the formateur, the proposal made by it, and the voting result in parliament at \( t = 1 \). Therefore, \( s^2_P : \Omega \times X^1 \times \Delta(Y)^1 \times \{0, 1\}^3 \to \Omega \) with \( s^2_P(j, x^1, y^1, r^1) \neq j \), for all \( j \in \Omega \) and all \((x^1, y^1, r^1) \in X^1 \times \Delta(Y)^1 \times \{0, 1\}^3 \). At \( t = 3 \), \( s^3_P \) is obviously induced by history. Therefore, a strategy profile for the president can be simply represented by a pair \( s_P = (s^1_P, s^2_P) \).

A strategy profile for party \( j \in \Omega \) consists of two elements: a proposal strategy when \( j \) is recognized as a formateur and a voting strategy specifying whether \( j \) votes for or against the proposal at \( t = 1, 2, 3 \). In the game, since the order of proposer is not predetermined by any condition, a proposal strategy for party \( j \in \Omega \) should be defined for every \( t = 1, 2, 3 \). Let \( s^j = (s^j_1, s^j_2, s^j_3) \) for \( j \in \Omega \) be a proposal strategy for party \( j \), in which \( s^j_1 = (x^j_1, y^j_1) \) denote a proposal strategy for \( j \in \Omega \) when \( j \) is recognized at \( t = 1, 2, 3 \). Next, let \( H^j_t \) for \( t = 1, 2, 3 \), be a set of histories ending with the recognition of party \( j \) as a formateur at \( t \). Then a proposal strategy for party \( j \) when \( j \) is recognized as a formateur at \( t \) can be represented by the function, \( s^j_1 : H^j_t \to X \times \Delta(Y) \).

Similarly, a response strategy for party \( j \) can be defined as a function of president’s selection strategy and parties’ proposal and response strategies. Let \( H^j_t = \bigcup_{k \in \Omega} H^j_k \). Then a response strategy for party \( j \in \Omega \) can be defined as \( r_j : H^j_t \times X^1 \times \Delta(Y)^1 \to \{0, 1\} \) specifying whether party \( j \) votes for (1) or against (0) the proposal at \( t = 1, 2, 3 \). A strategy profile of the game can be denoted by \( \sigma = (s_P; s_L; s_M; s_R; r_L, r_M, r_R) \).

Let \( v^j_t(\sigma) \) be j’s continuation value at \( t = 1, 2, 3 \). An equilibrium of this game should satisfy the following conditions: (1) For all \( t \) and all \( j \in \Omega \),

\[
r^*_{j}(x^t, y^t) = \begin{cases} 
1 & \text{if and only if } U^t_j(x^t, y^t) \geq v^j_t(\sigma), \\
0 & \text{otherwise}, 
\end{cases}
\]

given the proposal strategy of parties; (2) \( (x^t_{j*}, y^t_{j*}) \) must solve

\[
\max U^t_j(x^t_{j*}, y^t_{j*}) \text{ subject to } k \in \Omega \setminus \{j\} \mid r^t_k = 1 \geq 1;
\]

and (3) for \( t = 1, 2 \),

\[
U^t_P(x^t_{s^t_P}, y^t_{s^t_P}) \geq U^t_P(x^t_{s^t_Pp}, y^t_{s^t_Pp}),
\]

for all \( s^t_P \in S^t_P \) and all histories.

Formal Presentation of Equilibrium

We begin by introducing the following notations to facilitate the proceedings. For any \( x \in X \), let \( x^+ \equiv x_M - (x_M - x) \) if \( x < x_M \) and \( x^- \equiv x_M - (x - x_M) \) if \( x > x_M \). Therefore,
\( x^+ (x^-) \) refers to the symmetric point of \( x < x_M \) (\( x > x_M \)) with respect to \( x_M \) to the right (left). Given the restriction such that \( x_M \in \left[ x_t, \frac{x_t + x_{t+1}}{2} \right] \), we can find the following order:

\[
x_L \leq x_{MR} \leq x_{LM} \leq x_{LR} \leq x_M \leq x_{LR} \leq x_{LM} \leq x_{MR} \leq x_L^+ \leq x_R.
\]

Next, with regard to selection strategy for \( P \) the following is the optimal proposal strategy for \( i \):

- \( \text{restriction imposed by own action at } x \) (left). Given the restriction such that \( x + 1 \leq x \),

**Lemma 1.** Let \( i \) and \( j \) be the two parties with \( x_i \) and \( x_j \) as their ideal policy points. (Assume \( x_i < x_j \).) Suppose that \( x^{t+1} \in X \) and \( y^{t+1} = \alpha (0 \leq \alpha \leq Y) \) are the expected outcome at \( t + 1 \) in equilibrium. Suppose that party \( i \) is recognized as a formateur at \( t \) (\( t \leq 3 \)). Then the following is the optimal proposal strategy for \( i \) with respect to \( x^{t+1} \) and \( \alpha \) when \( i \) tries to form a coalition with \( j \).

1. When \( |x^{t+1} - x_j| \geq |x_i - x_j| \),
   - (a) if \( 0 \leq \alpha < (x^{t+1} - x_j)^2 - (x_i - x_j)^2 \),
     \[
     \begin{align*}
     x_i^{t+1} &= x_i, \\
     y_i^{t+1} &= 0, \\
     y_{ii}^{t+1} &= Y.
     \end{align*}
     \]
   - (b) if \( (x^{t+1} - x_j)^2 - (x_i - x_j)^2 \leq \alpha < (x^{t+1} - x_j)^2 - (x_{ij} - x_j)^2 \),
     \[
     \begin{align*}
     x_i^{t+1} &= x_j - \sqrt{(x^{t+1} - x_j)^2 - \alpha}, \\
     y_i^{t+1} &= 0, \\
     y_{ii}^{t+1} &= Y.
     \end{align*}
     \]
   - (c) if \( (x^{t+1} - x_j)^2 - (x_{ij} - x_j)^2 \leq \alpha \leq Y \),
     \[
     \begin{align*}
     x_i^{t+1} &= x_{ij}, \\
     y_i^{t+1} &= (x_{ij} - x_j)^2 - (x^{t+1} - x_j)^2 + \alpha, \\
     y_{ii}^{t+1} &= Y - y_{ij}^{t+1}.
     \end{align*}
     \]

2. When \( |x_i - x_j| > |x^{t+1} - x_j| \geq |x_{ij} - x_j| \),
   - (a) if \( 0 \leq \alpha < (x^{t+1} - x_j)^2 - (x_{ij} - x_j)^2 \),
     \[
     \begin{align*}
     x_i^{t+1} &= x_j - \sqrt{(x^{t+1} - x_j)^2 - \alpha}, \\
     y_i^{t+1} &= 0, \\
     y_{ii}^{t+1} &= Y.
     \end{align*}
     \]

The following Lemma 1 is useful to find how parties propose to form a government when nonnegative transferable benefits are allowed, if they are selected to make a proposal. In the Lemma 1, \( y_{ij}^{t+1} \) denotes \( j \)'s transferable benefit from \( i \)'s proposal. Similarly, \( y_{ii}^{t+1} \) denotes \( i \)'s transferable benefit from its own proposal. The proof of Lemma 1 involves repeated applications of Kuhn-Tucker Theorem. Thus I omit the proof. Proof is available upon request.

**Lemma 1.** Let \( i \) and \( j \) be the two parties with \( x_i \) and \( x_j \) as their ideal policy points. (Assume \( x_i < x_j \).) Suppose that \( x^{t+1} \in X \) and \( y^{t+1} = \alpha (0 \leq \alpha \leq Y) \) are the expected outcome at \( t + 1 \) in equilibrium. Suppose that party \( i \) is recognized as a formateur at \( t \) (\( t \leq 3 \)). Then the following is the optimal proposal strategy for \( i \) with respect to \( x^{t+1} \) and \( \alpha \) when \( i \) tries to form a coalition with \( j \).
(b) and if \((x^{t+1*} - x_j)^2 - (x_{ij} - x_j)^2 \leq \alpha \leq Y\),

\[
\begin{align*}
    x_i^{s*} &= x_{ij}, \\
    y_{ij}^{s*} &= (x_{ij} - x_j)^2 - (x^{t+1*} - x_j)^2 + \alpha, \\
    y_{ii}^{s*} &= Y - y_{ij}^{s*}.
\end{align*}
\]

3. When \(|x_{ij} - x_j| > |x^{t+1*} - x_j|\),

(a) if \(0 \leq \alpha < Y - (x_{ij} - x_j)^2 + (x^{t+1*} - x_j)^2\),

\[
\begin{align*}
    x_i^{s*} &= x_{ij}, \\
    y_{ij}^{s*} &= (x_{ij} - x_j)^2 - (x^{t+1*} - x_j)^2 + \alpha, \\
    y_{ii}^{s*} &= Y - y_{ij}^{s*};
\end{align*}
\]

(b) if\(Y - (x_{ij} - x_j)^2 + (x^{t+1*} - x_j)^2 \leq \alpha \leq Y\),

\[
\begin{align*}
    x_i^{s*} &= x_j - \sqrt{Y + (x^{t+1*} - x_j)^2 - \alpha}, \\
    y_{ij}^{s*} &= Y, \\
    y_{ii}^{s*} &= 0.
\end{align*}
\]

Note that the above lemma can be applied symmetrically to the case in which party \(i\) makes a proposal to form a government with party \(j\) whose ideal point lies to the left of \(x_i\). The following Lemma 2 states to which party a party should make a proposal to form a government when it is selected by the president. Proof of Lemma 2 is omitted. Proof is available upon request.

**Lemma 2.** If \(i\) is recognized as a formateur at \(t \leq 2\), \(i\) makes a proposal to form a coalition government with the party who will not be recognized at \(t + 1\).

**Equilibrium Proposal Strategy for Party at \(t = 2\)**

Now consider equilibrium proposal strategy for party \(j \in \Omega\) at \(t = 2\). When a party is recognized to form a government at \(t = 2\), the party knows what would happen when its attempt to form a government fails. That is, the party knows the identity of the next formateur, when it fails. Using Lemma 1 and 2, we can identify equilibrium proposal strategy for party \(j \in \Omega\) at \(t = 2\) for each \(s_p^2\). Let \(x^2(s_p^2)\) and \(y^2(s_p^2) = (y_1^2(s_p^2), y_2^2(s_p^2), y_R^2(s_p^2))\) be the equilibrium policy and nonnegative transferable benefit distributional outcome. Then the following constitutes equilibrium proposal strategy for party \(j \in \Omega\) at \(t = 2\) given \(s_p^2\).

1. \(s_p^2 = MR\)

\[
\begin{align*}
    x^2(MR) &= x_M; \\
    y_1^2(MR) &= 0; \\
    y_M^2(MR) &= Y; \\
    y_R^2(MR) &= 0.
\end{align*}
\]

2. \(s_p^2 = RM\)

\[
\begin{align*}
    x^2(RM) &= x_LR(= \frac{1}{2}); \\
    y_1^2(RM) &= (\frac{1}{2})^2 - x_M^2; \\
    y_M^2(RM) &= 0; \\
    y_R^2(RM) &= Y - (\frac{1}{2})^2 + x_M^2.
\end{align*}
\]
3. $s_p^2 = LR$
   
   (a) $q \leq x_L$ or $x_L^+ \leq q$
   \[ \begin{cases} x^{2*}(LR) = x_L; \\ y_{2L}^{2*}(LR) = Y; \\ y_{2R}^{2*}(LR) = 0; \\ y_{R}^{2*}(LR) = 0. \end{cases} \]

   (b) $x_L < q < x_{LM}$ or $x_{LM}^+ < q < x_L^+$
   \[ \begin{cases} x^{2*}(LR) = q(q^-); \\ y_{2L}^{2*}(LR) = Y; \\ y_{2R}^{2*}(LR) = 0; \\ y_{R}^{2*}(LR) = 0. \end{cases} \]

   (c) $x_{LM} \leq q \leq x_{LM}^+$
   \[ \begin{cases} x^{2*}(LR) = x_{LM}; \\ y_{2L}^{2*}(LR) = Y - (x_{LM} - x_M)^2 + (q - x_M)^2; \\ y_{2R}^{2*}(LR) = (x_{LM} - x_M)^2 - (q - x_M)^2; \\ y_{R}^{2*}(LR) = 0. \end{cases} \]

4. $s_p^2 = RL$
   
   (a) $q \leq x_L(= 0)$ or $x_L^+ \leq q$
   \[ \begin{cases} x^{2*}(RL) = x_L^+; \\ y_{2L}^{2*}(RL) = 0; \\ y_{2R}^{2*}(RL) = 0; \\ y_{R}^{2*}(RL) = Y. \end{cases} \]

   (b) $x_L < q < x_{MR}$ or $x_{MR} < q < x_L^+$
   \[ \begin{cases} x^{2*}(RL) = q(q^+); \\ y_{2L}^{2*}(RL) = 0; \\ y_{2R}^{2*}(RL) = 0; \\ y_{R}^{2*}(RL) = Y. \end{cases} \]

   (c) $x_{MR} \leq q \leq x_{MR}$
   \[ \begin{cases} x^{2*}(RL) = x_{MR}; \\ y_{2L}^{2*}(RL) = 0; \\ y_{2R}^{2*}(RL) = (x_{MR} - x_M)^2 - (q - x_M)^2; \\ y_{R}^{2*}(RL) = Y - (x_{MR} - x_M)^2 + (q - x_M)^2. \end{cases} \]

5. $s_p^2 = LM$
   \[ \begin{cases} x^{2*}(LM) = x_M; \\ y_{2L}^{2*}(LM) = Y; \\ y_{2R}^{2*}(LM) = 0; \\ y_{R}^{2*}(LM) = 0. \end{cases} \]
First, suppose \( P \in L \in \Omega \) with \( x_P \in [0, x_{LM}] \).

1. Suppose \( s^1_P = L : EU_P(MR) = -(x_M - x_P)^2 \) and \( EU_P(RM) = -(\frac{1}{2} - x_P)^2 \). Therefore, \( EU_P(MR) = EU_P(RM) \), if \( x_M = \frac{1}{2} \). Otherwise \( (x_M < \frac{1}{2}) \), \( EU_P(MR) > EU_P(RM) \), since \( x_P \leq x_{LM} \). Therefore, \( s^2_P = MR \).

2. Suppose \( s^1_P = M : EU_P(LR) > EU_P(RL) \), for all \( x_P \in [0, x_{LM}] \). Therefore, \( s^2_P = LR \).

3. Suppose \( s^1_P = R : EU_P(LM) = EU_P(ML) = -(x_M - x_P)^2 \). Therefore, \( P \) is indifferent between \( LM \) and \( ML \).

Second, suppose \( P \in M \in \Omega \) with \( x_P \in (x_{LM}, x_{MR}) \).

1. Suppose \( s^1_P = L : EU_P(MR) = -(x_M - x_P)^2 \) and \( EU_P(RM) = -(\frac{1}{2} - x_P)^2 \). If \( x_M = \frac{1}{2} \), \( EU_P(MR) = EU_P(RM) \). If \( x_M \neq \frac{1}{2} \), \( EU_P(MR) > EU_P(RM) \), for \( P \) such that \( x_P \in (x_{LM}, \frac{x_M + x_{MR}}{2}) \); \( EU_P(MR) < EU_P(RM) \), for \( P \) such that \( x_P \in (\frac{x_M + x_{LM}}{2}, x_{MR}) \); and \( P \) is indifferent between \( MR \) and \( RM \) when \( x_P = \frac{x_M + x_{LM}}{2} \).

2. Suppose \( s^1_P = M : When q < x_{MR}^{-} or x_{MR} < q, EU_P(LR) \geq EU_P(RL) \) if and only if \( x_P \in (x_{LM}, x_M] \). The equality holds only when \( x_P = x_M \). When \( x_{MR}^{-} \leq q < x_{LM} \) or \( x_{LM} < q \leq x_{MR} \), \( EU_P(LR) = EU_P(RL) \) if and only if \( x_P \in (x_{LM}, \frac{x_M + x_{MR}}{2}] \). The equality holds only when \( x_p = \frac{x_M + x_{MR}}{2} \).

3. Suppose \( s^1_P = R : EU_P(ML) = EU_P(LM) = -(x_M - x_P)^2 \). Therefore, \( P \) is indifferent between \( LM \) and \( ML \).

Finally, suppose \( P \in R \in \Omega \) with \( x_P \in [x_{MR}, x_R] \).

1. Suppose \( s^1_P = L : EU_P(MR) = -(x_M - x_P)^2 \) and \( EU_P(RM) = -(\frac{1}{2} - x_P)^2 \). If \( x_M = \frac{1}{2} \), \( EU_P(RM) = EU_P(MR) \). Otherwise, \( EU_P(RM) > EU_P(MR) \).

2. Suppose \( s^1_P = M : Regardless of q, EU_P(RL) > EU_P(LR) \) for all \( x_P \in [x_{MR}, x_R] \).

3. Suppose \( s^1_P = R : EU_P(LM) = EU_P(ML) = -(x_M - x_P)^2 \). \( P \) is indifferent between \( LM \) and \( ML \).

**Equilibrium Selection Strategy for** \( P \) **at** \( t = 2 \) **(** \( s^2_P^* \) **when** \( \beta > 0 \)

Given the above party proposal strategy, we can identify equilibrium selection strategy for \( P \) at the outset of \( t = 2 \). Denote the expected utility for \( P \) induced from taking a selection strategy \( s^2_P^* \) by \( EU_P(s^2_P^*) \).

First, suppose \( P \in L \in \Omega \) with \( x_P \in [0, x_{LM}] \) and \( \beta_L \in (0, 1) \).
1. Suppose $s_P^1 = L : EU_P(MR) = -(x_M - x_P)^2$ and $EU_P(RM) = -(\frac{1}{2} - x_P)^2 + \beta_L(\frac{1}{2} - x_M^2)$. Therefore, if $x_M = \frac{1}{2}$, $EU_P(MR) = EU_P(RM)$ for all $\beta_L \in (0, 1)$.

If $x_M < \frac{1}{2}$, since $x_P \leq x_{LM}$, for $\beta_L < \frac{1}{2x_M - 1}$, $EU_P(MR) > EU_P(RM)$.

Therefore, $s_P^2 = MR$ if $\beta_L < \beta_L^*$. For any $\beta_L \geq \beta_L^*$, $EU_P(RM) \geq EU_P(MR)$ if and only if $x_P \geq \frac{1 - \beta_L}{2}(\frac{1}{2} + x_M)$.

The equality holds when $x_P = \frac{1 - \beta_L}{2}(\frac{1}{2} + x_M)$.

Therefore, for any $\beta_L \geq \beta_L^*$, $s_P^2 = MR$ if $x_P \in [x_L, \frac{1 - \beta_L}{2}(\frac{1}{2} + x_M)]$ and $s_P^2 = RM$ if $x_P \in (\frac{1 - \beta_L}{2}(\frac{1}{2} + x_M), x_{LM}]$. If $\beta_L \geq \beta_L^*$ and $x_P = \frac{1 - \beta_L}{2}(\frac{1}{2} + x_M)$ are both satisfied, then $P$ is indifferent between $MR$ and $RM$.

2. Suppose $s_P^1 = M : EU_P(LR) > EU_P(RL)$ for all $\beta_L \in (0, 1)$. Therefore, $s_P^2 = LR$.

3. Suppose $s_P^1 = R : EU_P(LM) = -(x_M - x_P)^2 + \beta_L Y > EU_P(ML) = -(x_M - x_P)^2$ for $\beta_L \in (0, 1)$. Therefore, $s_P^2 = LM$.

Second, suppose $P \in M \in \Omega$ with $x_P \in (x_{LM}, x_{MR})$ and $\beta_M \in (0, 1)$.

1. Suppose $s_P^1 = L : EU_P(MR) = -(x_M - x_P)^2 + \beta_M Y$ and $EU_P(RM) = -(\frac{1}{2} - x_P)^2$. When $x_M = \frac{1}{2}$, $EU_P(MR) > EU_P(RM)$, since $\beta_M > 0$. When $x_M \neq \frac{1}{2}$, for all $\beta_M \in (0, 1)$, for $P$ such that $x_P \in [x_{LM}, \frac{x_M + x_{MR}}{2}]$, $EU_P(MR) > EU_P(RM)$. For any $x_P \in (\frac{x_M + x_{MR}}{2}, x_{MR})$, we can find $\beta_M$ such that $\beta_M = 1\frac{x_M - x_P}{x_M - x_P + 2x_{LM}}$. This particular combination of $x_P$ and $\beta_M$ makes $P$ indifferent between $MR$ and $RL$.

Therefore, for a fixed $\beta_M$, for all $P$ such that $x_P \in [x_{LM}, x_{MR}]$, $EU_P(LR) > EU_P(RL)$. For any $x_P \in (x_M, \frac{x_M + x_{MR}}{2})$, we can find a $\beta_M \in (0, 1)$ such that $\beta_M = \frac{x_{MR} - 2x_P + q}{x_{MR} - 2x_P + q}$. This particular combination of $x_P$ and $\beta_M$ makes $P$ indifferent between $LR$ and $RL$.

2. Suppose $s_P^1 = L : EU_P(MR) = -(x_M - x_P)^2 + \beta_M Y$ and $EU_P(RM) = -(\frac{1}{2} - x_P)^2$. When $x_M \leq \frac{1}{2}$, $EU_P(LR) > EU_P(RL)$; and for a fixed $x_P$, $\forall P$ such that $x_P < x_P$, $EU_P(LR) > EU_P(RL)$ and for a fixed $x_P$ such that $x_P \in (x_{LM}, x_{MR})$, $EU_P(LR) > EU_P(RL)$. For $x_P \in (x_M, \frac{x_M + x_{MR}}{2})$,

3. Suppose $s_P^1 = R : EU_P(LM) = -(x_M - x_P)^2 + \beta_M Y > EU_P(ML) = -(x_M - x_P)^2$ for $\beta_M \in (0, 1)$. Therefore, $s_P^2 = ML$ if $\beta_L \in (0, 1)$.

Finally, suppose $P \in R \in \Omega$ with $x_P \in [x_{MR}, x_R]$ and $\beta_R \in (0, 1)$.

1. Suppose $s_P^1 = L : EU_P(MR) = -(x_M - x_P)^2$ and $EU_P(RM) = -(\frac{1}{2} - x_P)^2 + \beta_R(Y - \frac{1}{2} + x_M^2)$. Therefore, for $x_P \in [x_{MR}, x_R]$, $EU_P(RM) > EU_P(MR)$, and, hence, $s_P^2 = ML$.

2. Suppose $s_P^1 = M : EU_P(RL) > EU_P(LR)$ for all $x_P \in [x_{MR}, x_R]$.

Therefore, $s_P^2 = RL$.

3. Suppose $s_P^1 = R : EU_P(LM) = EU_P(ML) = -(x_M - x_P)^2$. $P$ is indifferent between $LM$ and $ML$. 

Equilibrium Proposal Strategy for Party at $t = 1$

Repeatedly using the Lemma 1 and 2 above, we can also solve the game for each order of selection of the formateurs by $P$. Combining the two lemmas’ implications, we can find that each order of selection will induce unique government outcomes in terms of coalition $C^*$, policy $x^*$, and distribution of transferable benefits $y^*$. The following summarizes equilibrium government outcome for each possible selection order by the president when all the parties have the same expectation about the presidential selection strategy. For the notational convenience, $s_P = jkh$, for $\{j, k, h\} = \Omega$ with $j \neq k$, $k \neq h$, and $j \neq h$, represents that the president selects $j \in \Omega$ at $t = 1$, $k \in \Omega$ at $t = 2$, and $h \in \Omega$ at $t = 3$. Similarly to the above, let $x^{1*}(s_P)$ and $y^{1*}_k(s_P)$ be the resulting government policy and the proportion of nonnegative transferable benefits for $k \in \Omega$, given $s_P$. It is important to note that the following does not specify the president’s equilibrium selection strategy yet.

1. $s_P = LMR$

\[
\begin{align*}
C^*(LMR) &= \{L, R\}; \\
x^{1*}(LMR) &= x_M; \\
y^{1*}_L(LMR) &= Y; \\
y^{1*}_M(LMR) &= 0; \\
y^{1*}_R(LMR) &= 0.
\end{align*}
\]

2. $s_P = LRM$

\[
\begin{align*}
C^*(LRM) &= \{L, M\}; \\
x^{1*}(LRM) &= x_{LM}; \\
y^{1*}_L(LRM) &= Y - (x_{LM} - x_M)^2 + (x_{LR} - x_M)^2; \\
y^{1*}_M(LRM) &= (x_{LM} - x_M)^2 - (x_{LR} - x_M)^2; \\
y^{1*}_R(LRM) &= 0.
\end{align*}
\]

3. $s_P = MLR$

\[
\begin{align*}
C^*(MLR) &= \{M, R\}; \\
x^{1*}(MLR) &= x_M; \\
y^{1*}_L(MLR) &= 0; \\
y^{1*}_M(MLR) &= Y; \\
y^{1*}_R(MLR) &= 0.
\end{align*}
\]

4. $s_P = MRL$

\[
\begin{align*}
C^*(MRL) &= \{M, L\}; \\
x^{1*}(MRL) &= x_M; \\
y^{1*}_L(MRL) &= 0; \\
y^{1*}_M(MRL) &= Y; \\
y^{1*}_R(MRL) &= 0.
\end{align*}
\]

5. $s_P = RLM$

\[
\begin{align*}
C^*(RLM) &= \{R, M\}; \\
x^{1*}(RLM) &= x_{MR}; \\
y^{1*}_L(RLM) &= 0; \\
y^{1*}_M(RLM) &= (x_{MR} - x_M)^2; \\
y^{1*}_R(RLM) &= Y - (x_{MR} - x_M)^2.
\end{align*}
\]
6. \( s_p = RML \)

\[
\begin{align*}
C^*(RML) &= \{R, L\}; \\
\mathbb{1}^*(RML) &= x_{LR}; \\
y_L^*(RML) &= \left(\frac{x}{2}\right)^2 - x_M^2; \\
y_M^*(RML) &= 0; \\
y_R^*(RML) &= Y - \left(\frac{x}{2}\right)^2 + x_M^2.
\end{align*}
\]

**Equilibrium Selection Strategy for \( P \): \( s_p^* \)**

We are about to present the main findings of this paper: equilibrium selection strategy for \( P \). Before presenting the result, we introduce an assumption we make to select a smaller set of equilibria. As we can see in the previous analysis of \( s_p^* \), \( P \) is often indifferent between 2 actions. However, \( P \)'s utility at \( t = 1 \) can still vary depending on \( P \)'s choice at \( t = 2 \), because the anticipation affects the parties’ proposal and response strategies at \( t = 1 \). In this case, we assume that the president can credibly commit to take an action that can induce \( P \)'s preferred outcome at \( t = 1 \). A similar assumption is made in Austen-Smith and Banks to induce a unique legislative bargaining outcome (1988, pp. 413-414). As will be shown shortly, however, this assumption does not exclude all the multiple equilibria.

Since we assume that \( P \)'s ideal policy position – \( x_P \) – and \( \beta \) are exogenously given, we present equilibrium selection strategies for \( P \) depending on these conditions in the following propositions. The first proposition presents the president’s equilibrium selection strategy, \( s_p^* \), when \( x_M = \frac{1}{2} \) and \( \beta = 0 \). Since \( \beta = 0 \), the president’s party affiliation does not affect the equilibrium outcome. Note that \( S_p^* \) represents the set of equilibrium selection strategies for the president.

**Proposition 1.** When \( x_M = \frac{1}{2} \) and \( \beta = 0 \), the following constitutes equilibrium selection strategies for the president:

1. If \( x_P \in [x_L, \frac{x_M + x_M}{2}] \), then \( S_p^* = \{LRM\}; \)
2. If \( x_P = \frac{x_M + x_M}{2} \), then \( S_p^* = \{LRM, LMR, MLR, RML\}; \)
3. If \( x_P \in (\frac{x_M + x_M}{2}, x_M) \), then \( S_p^* = \{LMR, MLR, RML\}; \)
4. If \( x_P = x_M \), then \( S_p^* = \{LMR, MLR, MRL, RML\}; \)
5. If \( x_P = \) \( x_M \), then \( S_p^* = \{LMR, MRL, RML\}; \)
6. If \( x_P = \frac{x_M + x_M}{2} \), then \( S_p^* = \{LMR, MRL, RML\}; \)
7. and if \( x_P = (\frac{2x_M + x_M}{2}, x_R] \), then \( S_p^* = \{RML\}. \)

**Proof.** Case 1. Suppose \( x_P \in [x_L, \frac{x_M + x_M}{2}] \). Note that \( EU_P(LR) > EU_P(RL) \) and \( EU_P(LM) = EU_P(ML) \). In the latter case, \( EU_P(RML) > EU_P(RLM) \), for all \( x_P \in [x_L, \frac{x_M + x_M}{2}] \). Also note that \( EU_P(MR) = EU_P(RM) \) and \( EU_P(LRM) > EU_P(LMR) \). Since \( EU_P(LRM) > EU_P(LML) = EU_P(RML) \), LRM is the only equilibrium selection strategy for \( P \). Case 2. Suppose \( x_P = \frac{x_M + x_M}{2} \). All others are the same except that \( EU_P(LRM) = EU_P(LMR) \). Since \( EU_P(LRM) = EU_P(LMR) = EU_P(MLR) = EU_P(RML) \), LRM, LMR, MMR, and RML are all equilibrium selection strategies for \( P \). Case 3. Suppose \( x_P \in (\frac{x_M + x_M}{2}, x_M) \). Note that \( EU_P(LR) > EU_P(ML) \) and \( EU_P(LM) = EU_P(ML) \). \( EU_P(RML) > EU_P(RLM) \), in the latter case. However, \( EU_P(LMR) > EU_P(LRM) \), although \( EU_P(MR) = EU_P(RM) \). Since \( EU_P(LRM) = EU_P(MLR) = EU_P(RML) \), LMR, MMR, and RML are all equilibrium selection strategies for \( P \). Case 4. Suppose \( x_P = x_M \). Note that \( EU_P(MR) = \)
equilibrium selection strategies for \( P \). The remaining cases can be solved symmetrically.

The following proposition presents equilibrium selection strategies for the president when \( x_M = \frac{1}{2} \) and \( \beta > 0 \). Since \( \beta > 0 \), the president’s party affiliation does matter in this case. Recall that we assume \( P \in \mathcal{L} \) if and only if \( x_P \in [x_L, x_{LM}] \); \( P \in \mathcal{M} \) if and only if \( x_P \in (x_{LM}, x_{MR}) \); and \( P \in \mathcal{R} \) if and only if \( x_P \in [x_{MR}, x_R] \).

**Proposition 2.** When \( x_M = \frac{1}{2} \) and \( \beta > 0 \), the following constitutes equilibrium selection strategies for the president:

1. If \( x_P \in [x_L, x_{LM}] \), then \( S_P^* = \{LMR\}; \)
2. If \( x_P \in (x_{LM}, x_M) \), then \( S_P^* = \{MLR\}; \)
3. If \( x_P = x_M \), then \( S_P^* = \{MLR, MRL\}; \)
4. If \( x_P = (x_M, x_{MR}) \), then \( S_P^* = \{MRL\}; \)
5. And if \( x_P = [x_{MR}, x_R] \), then \( S_P^* = \{RLM\}. \)

**Proof.** Case 1. Suppose \( x_P \in [x_L, x_{LM}] \). Note that at \( t = 2 \), \( EUP(\mathcal{M}) = EUP(\mathcal{R}) \) and \( EUP(\mathcal{LR}) > EUP(\mathcal{R}) \). Also note that \( EUP(\mathcal{L}) > EUP(\mathcal{R}) \) and \( EUP(\mathcal{M}) > EUP(\mathcal{R}) \). Since \( EUP(\mathcal{LR}) > EUP(\mathcal{M}) > EUP(\mathcal{R}) \), \( \mathcal{LR} \) is the only equilibrium selection strategy for \( P \). Case 2. Suppose \( x_P \in (x_{LM}, x_M) \). Note that \( EUP(\mathcal{M}) > EUP(\mathcal{R}) \) and \( EUP(\mathcal{M}) > EUP(\mathcal{L}) \), since \( \beta_M > 0 \). Given \( x_P \), \( EUP(\mathcal{L}) > EUP(\mathcal{R}) \). Since \( EUP(\mathcal{M}) > EUP(\mathcal{LR}) = EUP(\mathcal{R}) \), \( \mathcal{MR} \) is the only equilibrium selection strategy for \( P \). Case 3. Suppose \( x_P = x_M \). \( EUP(\mathcal{M}) > EUP(\mathcal{R}) \) and \( EUP(\mathcal{M}) > EUP(\mathcal{L}) \), since \( \beta_M > 0 \). However, \( EUP(\mathcal{L}) = EUP(\mathcal{R}) \) and \( EUP(\mathcal{M}) = EUP(\mathcal{R}) \). Since \( EUP(\mathcal{M}) = EUP(\mathcal{MR}) > EUP(\mathcal{LM}) = EUP(\mathcal{R}) \), both \( \mathcal{ML} \) and \( \mathcal{MR} \) are equilibrium selection strategies for \( P \). The remaining cases can be solved symmetrically.

The following proposition presents the president’s equilibrium selection strategy, \( S_P^* \), when \( x_M \in \left[\frac{1}{3}, \frac{1}{2}\right) \) and \( \beta = 0 \). As before, the president’s party affiliation does not matter under this condition.

**Proposition 3.** When \( x_M \in \left[\frac{1}{3}, \frac{1}{2}\right) \) and \( \beta = 0 \), the following constitutes equilibrium selection strategies for the president:

1. If \( x_P \in [x_L, x_M] \), then \( S_P^* = \{LMR, MLM\}; \)
2. If \( x_P \in (x_M, \frac{x_M + x_{LM}}{2}) \), then \( S_P^* = \{LMR, MLM\}, S_P^* = \{LMR, MML\}, \) or \( S_P^* = \{LMR, MML, MRL\}. \)
3. If \( x_P = \frac{x_M + x_{LM}}{2} \), then \( S_P^* = \{LMR, MLM, MML, RLM\}; \)
4. If \( x_P \in (\frac{x_M + x_{LM}}{2}, \frac{x_M + x_{MR}}{2}) \), then \( S_P^* = \{RML\}; \)
5. If \( x_P = \frac{x_M + x_{MR}}{2} \), then \( S_P^* = \{RML, RLM\}; \)
6. And if \( x_P = \frac{x_M + x_{MR}}{2}, x_R \), then \( S_P^* = \{RLM\}. \)
Proof. Case 1. Suppose \( x_P \in [x_L, x_M] \). Note that \( EU_P(MR) > EU_P(RM) \) and \( EU_P(LR) > EU_P(RL) \). Also note that \( EU_P(LM) = EU_P(ML) \) and \( EU_P(RML) > EU_P(RLM) \). However, \( EU_P(LMR) = EU_P(MLR) > EU_P(RML) \). Therefore, LMR and MLR are equilibrium selection strategies for \( P \). Case 2. Suppose \( x_P \in (x_M, \frac{2M+x_R}{2}) \). Note that \( EU_P(MR) > EU_P(RM), EU_P(ML) = EU_P(ML) \), and \( EU_P(RML) > EU_P(RLM) \). However, equilibrium selection at \( t = 2 \) between LR and RL depends on \( x_P \) and \( q \). When \( q < x_{MR} \) or \( x_{MR} < q, EU_P(LR) < EU_P(RL) \). Since \( EU_P(LMR) = EU_P(MRL) > EU_P(RML) \), LMR and MRL are equilibrium strategies for \( P \). When \( x_{MR} \leq q < x_{LM} \) or \( x_{LM} < q \leq x_{MR} \) for \( P \) such that \( x_P < \frac{2−x_MR}{2}, EU_P(LR) > EU_P(RL) \). For such \( P \), LMR and MLR are equilibrium strategies. For \( P \) such that \( x_P > \frac{q+x_MR}{2}, LMR \) and MRL are equilibrium strategies. For \( P \) such that \( x_P = \frac{q−x_MR}{2} \), LMR, MLR, and MRL are all equilibrium strategies. When \( x_{LM} \leq q \leq x_{LM}^* = \frac{x_M+x_R}{2}, EU_P(LR) > EU_P(RL) \). For such \( P \) therefore, LMR and MLR are equilibrium strategies. Case 3. Suppose \( x_P = \frac{x_M+x_L+MR}{2} \). Note that \( EU_P(RM) = EU_P(MR) \) and \( EU_P(LMR) > EU_P(RLM) \). Note also that \( EU_P(RML) > EU_P(RLM) \). Finally, \( EU_P(LR) = EU_P(RL) \) and \( EU_P(MLR) = EU_P(MRL) \). Since \( EU_P(MLR) = EU_P(MLR) = EU_P(RML) \), LMR, MRL, and RL are all equilibrium selection strategies for \( P \). Case 4. Suppose \( x_P \in (\frac{2M+x_R}{2}, \frac{2M+3x_R}{2}) \). Note that \( EU_P(LR) > EU_P(RL) \) and \( EU_P(MR) > EU_P(ML) \). Also note that for such \( P \), \( EU_P(ML) = EU_P(ML) \) and \( EU_P(RML) > EU_P(RLM) \). Since \( EU_P(RML) > EU_P(MLR) > EU_P(LRM) \), RML is the only equilibrium selection strategy for \( P \). Case 5. Suppose \( x_P = \frac{2M+3x_R}{2} \). Note that \( EU_P(RM) > EU_P(MR) \) and \( EU_P(RL) > EU_P(LR) \). Note also that \( EU_P(ML) = EU_P(ML) \) and \( EU_P(RML) = EU_P(RML) \). Since \( EU_P(RML) = EU_P(MLR) > EU_P(MRL) > EU_P(LRM) \), RML and RL are both equilibrium strategies for \( P \). Case 6. Suppose \( x_P = (\frac{2M+x_R}{2}, x_R) \). Note that \( EU_P(RM) > EU_P(MR) \) and \( EU_P(RL) > EU_P(ML) \). Note also that \( EU_P(LM) = EU_P(ML) \) and \( EU_P(RML) > EU_P(RML) \). Since \( EU_P(RML) > EU_P(MRL) > EU_P(LRM) \), RML is the only equilibrium selection strategy for \( P \). 

Finally, the following proposition presents the president’s equilibrium selection strategy, \( s_P^* \), when \( x_M \in (\frac{1}{2}, \frac{1}{2}) \) and \( \beta > 0 \).

**Proposition 4.** Let \( \beta_L^* = \frac{1}{2x_M+1} \) and \( \beta_M^* = \frac{1−2x_M}{4x_M \beta} \). When \( x_M \in [\frac{1}{1}, \frac{1}{2}] \) and \( \beta > 0 \), the following constitutes equilibrium selection strategies for the president:

1. If \( P \in L \),
   (a) when \( \beta_L < \beta_L^* \), \( s_P^* = \{LMR\} \);
   (b) when \( \beta_L \geq \beta_L^* \),
      • for \( x_P \in [x_L, \frac{1−\beta_L}{2} + x_M) \), \( s_P^* = \{LMR\} \);
      • for \( x_P = \frac{1−\beta_L}{2} + x_M \), \( s_P^* = \{LMR, LRM\} \);
      • for \( x_P = (\frac{1−\beta_L}{2} + x_M, x_L) \), \( s_P^* = \{LRM\} \).

2. If \( P \in M \),
   (a) when \( x_P \in [x_M, x_M] \), \( s_P^* = \{MLR\} \) for all \( \beta_M \in (0, 1) \).
   (b) when \( x_P \in (x_M, \frac{x_M+x_R}{2}) \), either \( s_P^* = \{MLR\} \), \( s_P^* = \{MRL\} \), or \( s_P^* = \{MLR, MRL\} \) for all \( \beta_M \in (0, 1) \), depending on \( q \).
   (c) when \( x_P \in (\frac{2M+x_M+MR}{2}, x_{MR}) \).
\[ \text{for } \beta_M \geq \beta_M^*, S_P^* = \{ \text{MRL} \}, \]
\[ \text{for } \beta_M < \beta_M^* \text{ and } x_P \in \left( \frac{x_M + x_{MR}}{2}, \frac{1}{2} (1 + x_M) + \beta_M \cdot \frac{Y}{1 - 2x_M} \right), S_P^* = \{ \text{MRL} \}, \]
\[ \text{for } \beta_M < \beta_M^* \text{ and } x_P = \frac{1}{2} (1 + x_M) + \beta_M \cdot \frac{Y}{1 - 2x_M}, S_P^* = \{ \text{MRL, RML} \}, \]
\[ \text{for } \beta_M < \beta_M^* \text{ and } x_P \in \left( \frac{1}{2} (1 + x_M) + \beta_M \cdot \frac{Y}{1 - 2x_M}, x_{MR} \right), S_P^* = \{ \text{RML} \}. \]

3. If \( P \in R, S_P^* = \{ \text{RLM} \}. \)

\text{Proof.} Case 1. Suppose \( P \in L. \) Hence, \( x_P \in [x_L, x_{LM}] \). Note first that \( EU_P(\text{LR}) > EU_P(\text{RL}) \) and \( EU_P(\text{LM}) > EU_P(\text{ML}) \). Since \( \min \{ EU_P(\text{LM}), EU_P(\text{LR}) \} > EU_P(\text{MLR}) > EU_P(\text{RML}) \), the equilibrium selection strategy at \( t = 1 \) depends on the selection at \( t = 2 - s^*_P \) between \( MR \) and \( MR \). Case 2. First suppose \( x_P \in (x_{LM}, x_M) \). Note that \( EU_P(\text{LR}) > EU_P(\text{RL}), EU_P(\text{MR}) > EU_P(\text{RM}), \) and \( EU_P(\text{ML}) > EU_P(\text{LM}) \). Since \( EU_P(\text{MLR}) > EU_P(\text{LMR}) > EU_P(\text{RML}), \) MLR is the only equilibrium selection strategy for \( P \). Now suppose \( x_P \in [x_M, \frac{x_M + x_{MR}}{2}] \). Note that \( \frac{x_M + x_{MR}}{2} + \beta_M \cdot \frac{Y}{1 - 2x_M} = \frac{x_M + x_{MR}}{2} \). Therefore, given \( \beta_M > 0, EU_P(\text{MR}) > EU_P(\text{RM}) \). Also note that \( EU_P(\text{ML}) > EU_P(\text{LM}) \). However, selection between \( LR \) and \( RL \) varies depending on \( x_P, \beta_M \), and \( q \). In any case, \( EU_P(\text{MLR}) = EU_P(\text{MRL}) > EU_P(\text{LMR}) \geq EU_P(\text{RML}), EU_P(\text{LML}) = EU_P(\text{RML}) \) if and only if \( x_P = \frac{x_M + x_{LM}}{2} \). Therefore, either \( MLR \) or \( MRL \) (or both) is the equilibrium selection strategy for \( P \) when \( x_P \in [x_M, \frac{x_M + x_{MR}}{2}] \) and \( \beta_M > 0 \). Finally suppose \( x_P \in (\frac{x_M + x_{MR}}{2}, x_{MR}) \). Note that \( EU_P(\text{ML}) > EU_P(\text{LM}) \) and \( EU_P(\text{RL}) > EU_P(\text{LR}) \). Selection between \( MR \) and \( RM \) varies depending on \( x_P \) and \( \beta_M \). However, \( EU_P(\text{MRL}) > \max \{ EU_P(\text{LMR}), EU_P(\text{LML}) \} \). Therefore, playing \( L \) at \( t = 1 \) is strictly dominated by playing \( M \) for such \( P, EU_P(\text{MRL}) = -(x_M - x_P)^2 + \beta_M Y \) and \( EU_P(\text{RML}) = -(\frac{1}{2} - x_P)^2 \). Setting \(-(\frac{1}{2} - x_P)^2 = -(x_M - x_P)^2 + \beta_M Y \) and solving, we can get \( x_P = \frac{1}{2} (1 + x_M) + \beta_M \cdot \frac{Y}{1 - 2x_M} \). This particular \( x_P \) and \( \beta_M \) make \( P \) indifferent between \( RML \) and \( MRL \). Also, it should be satisfied that \( x_P < x_{MR} = \frac{x_M + x_{MR}}{2} \). Hence, \( \beta_M < \frac{1 - 2x_M}{4Y} \). Let \( \beta_M^* = \frac{1 - 2x_M}{4Y} \). For any \( P \) such that \( \beta_M \geq \beta_M^* \) and \( x_P \in (\frac{x_M + x_{MR}}{2}, x_{MR}) \), MRL is the only equilibrium selection strategy for \( P \). For any \( P \) such that \( \beta_M < \beta_M^* \) and \( x_P \in (\frac{x_M + x_{MR}}{2}, \frac{1}{2} (1 + x_M) + \beta_M \cdot \frac{Y}{1 - 2x_M}) \), MRL is the only equilibrium selection strategy for \( P \). For any \( P \) such that \( \beta_M < \beta_M^* \) and \( x_P \in (\frac{1}{2} (1 + x_M) + \beta_M \cdot \frac{Y}{1 - 2x_M}, x_{MR}) \), MRL is the only equilibrium selection strategy for \( P \). For any \( P \) such that \( \beta_M < \beta_M^* \) and \( x_P = \frac{1}{2} (1 + x_M) + \beta_M \cdot \frac{Y}{1 - 2x_M} \), MRL and RML are both equilibrium selection strategies for \( P \). Case 3. Finally, suppose \( P \in R. \) Hence, \( x_P \in [x_{MR}, x_R] \). Note that \( EU_P(\text{LM}) = EU_P(\text{ML}) \) and \( EU_P(\text{RL}) > EU_P(\text{LR}) \) for all \( x_P \in [x_{MR}, x_R] \) and \( \beta_R \in (0, 1) \). Also note that \( EU_P(\text{RM}) > EU_P(\text{MR}) \). Since \( EU_P(\text{RML}) > EU_P(\text{RML}) \) and \( EU_P(\text{RML}) > EU_P(\text{MLR}) > EU_P(\text{RML}), \) RLM is the only equilibrium selection strategy for \( P \) such that \( x_P \in [x_{MR}, x_R] \). \( \square \)
Chapter 3

The Influence of Presidential Heads of State on Government Formation in European Democracies: Empirical Evidence

The simple empirical analysis of the previous chapter provides some evidence of influence of presidential heads of state on a particular aspect of government formation bargaining process in the political systems where the governments are politically responsible to the parliament. In particular, we found that whether the president and the prime minister have the same party affiliation is systematically associated with the type of the president and the ideological relation between the president and the parliamentary median party. Moreover, the result also suggested differences in the mechanisms of influence between the popularly-elected presidents and the parliament-selected presidents. However, the setup of the previous empirical analysis is too simple and narrow to reveal the full – and more complicated – aspects of the presidential influence on the government formation bargaining process in these political systems. Most of all, the empirical evidence for the influence of the parliament-selected presidents was largely inconclusive. Therefore, in this chapter, I pursue this task further by taking a more exploratory approach. That is, the primary goal of this chapter is to subject the presidential influence on the various aspects of the outcomes of government formation bargaining process into an intensive empirical scrutiny. In order to do so, I take advantage of the vast body of literature on the politics of coalition.

Given typical multiparty, minority parliamentary environments, how parliamentary parties form a coalition and who gets into government have been one of the most intensively studied research question in the comparative politics literature. Historically, the early development had been led primarily by the theorists. The fact that the process involves a relatively few players (individual parties), identifiable goals (cabinet portfolio or policy preference) and the exogenously given rules of the game (institutional arrangements on the bargaining procedure) had certainly made
it amendable for the early students of coalition politics to analyze theoretically this important democratic process. However, the parallel progress in the explanation and prediction of actual government coalitions had been delayed until this gap was filled by Martin and Stevenson (2001).

Before Martin and Stevenson (2001), researchers had not yet subjected the various competing hypotheses drawn from different theories to an appropriate multivariate statistical analysis. Most of all, the previous econometric tools could not deal with the choice problem upon multichotomous alternatives, which is an intrinsic nature of the government formation process. That is, only one government – regardless of whether it consists of a single party or multiple parties – can actually form in a given opportunity to form a new government. The problem is that there exist a – potentially – huge number of arithmetically possible potential coalitions in any government formation opportunity.

Realizing this deficiency, Martin and Stevenson (2001) developed a carefully specified econometric – conditional logit – model of government formation and empirically tested the competing hypotheses by including “the operationalization of most of the major theories of government formation” (34) in the previous literature. By building on Martin and Stevenson’s work, I can take account of the presidential influence on the outcomes of the government formation bargaining process while controlling for the effects of the determinants that have been suggested in the literature on the politics of coalition.

As I have repeatedly pointed out, the influence of the presidential heads of state on the outcomes of government formation bargaining process has been neglected in the comparative politics literature, including Martin and Stevenson (2001). In most theoretical and empirical literature on coalition politics has assumed away the head of state as a ceremonial figurehead who places no constraint on this important parliamentary decision-making processes. Based on this negligence, most European democracies have been classified as parliamentary systems and their government formation processes have been analyzed equally without much attention to the differences in other finer institutional details – including the type of head of state – in
the previous empirical works until recently.

However, the analysis in the previous chapter clearly suggests that some aspects of the outcomes of government formation bargaining processes are systematically related with the presidential heads of state. Considering the results, neglecting the influence of the head of state on the government formation bargaining process is somewhat serious omission in our effort to understand the politics of European democracies, particularly when the heads of state are elected presidents.

Indeed, many European countries have presidential heads of state and the number of presidential heads of state has been increasing over the past decades due to the series of democratization in the former Communist countries. According to Amorim Neto and Strøm (2006, 622), about three-fourths of the independent European countries (32 out of 46) have elected presidents as head of state in 2000. They also report that in about two-thirds of the independent European states in which the heads of state are elected presidents, the presidents are elected by popular vote.\(^1\) When a popularly elected president coexists with a cabinet which is dependent on the confidence of the parliament to stay in office, we call this regime *semi-presidential*.\(^2\) Thus, “semi-presidentialism is now the most prevalent system of government in Europe” (Amorim Neto and Strøm 2006, 623).

The inherent tensions brought about by the separate electoral origins of the two agents of the people – president and parliament – have not evaded scholarly attention. Since Duverger’s (1980) seminal article, a great deal of research has been devoted to showing how these regimes work in contrast to pure parliamentary regimes.\(^3\) Much progress has been made in our understanding of the impact of popu-

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\(^1\) Only 10 out of 46 independent European states have monarchs as heads of state (Amorim Neto and Strøm 2006).

\(^2\) It is Duverger’s article (1980) that first introduced semi-presidentialism as an academic concept in English. Duverger’s (1980) concept of semi-presidentialism contains another element such that “[The president of the republic] possesses quite considerable powers.” This element has generated a lot of criticisms and debates over the concept of semi-presidentialism because of its ambiguity (Bahro et al. 1998; Elgie 1999). We here adopt Elgie’s reformulation of the definition of semi-presidentialism, which excludes the controversial second element (1999, 13).

\(^3\) The proliferation of semi-presidentialism in the post-Communist countries also explains the
larly elected presidents on what is otherwise parliamentary decision-making process in the semi-presidential regimes (e.g., Shugart and Carey 1992; Baylis 1996; Protsyk 2005; Schleiter and Morgan-Jones 2005; Amorim Neto and Strøm 2006).

Our understanding of the impact of presidents on the government formation process, however, is still very limited. More often than not, previous works on semi-presidentialism either assume bilateral conflicts between the president and parliament (e.g., Shugart and Carey 1992; Protsyk 2005; Amorim Neto and Strøm 2006), or focus on the rather exceptional outcomes, such as the appointment of non-partisan cabinet ministers (e.g., Schleiter and Morgan-Jones 2005; Amorim Neto and Strøm 2006). Thus, the influence of presidential heads of state on the partisan characteristics of government-formation outcomes in a multiparty context has been largely unexplored, even in this research tradition.

Realizing our lack of understanding, my objective in this chapter is to investigate intensively the influence of the presidential heads of state over the various aspects of government formation bargaining process in the context of coalition politics in multiparty systems. In particular, I will focus in the following analysis on the two most important aspects of the outcomes of government formation bargaining processes: the appointment of the prime minister and the party composition of the coalition government.

If the formation of government is entirely a matter of parties in parliament, parties may freely negotiate with one another based on their ideological positions and

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increase in the literature on semi-presidentialism. Much research on semi-presidentialism has focused on the prospect of this particular regime type in a newly established democracy. See, for example, Stepan and Suleiman 1995 and Baylis 1996.

That is, the assembly as a whole is represented by a single player with a well-defined preference ordering in this literature.

As we shall see, the data set for the empirical analysis of this chapter consists solely of information on the government formation outcomes in the Western European democracies where the heads of state are elected president as in the previous chapter. This case selection does not mean that I assume the constitutional monarchs have no influence on the government formation bargaining process. The case selection is practically determined by the availability of the data. That is, we have no a priori measure of preferences of the constitutional monarchs. East European countries are excluded from the data set for the similar reason since the analysis of the ideological policy position of Easter European political parties are still in inception.
seat shares as suggested by most earlier coalition theories (e.g., Riker 1962; Leiserson 1968; Axelord 1970; de Swaan 1973). If this were to be the case, the presidential heads of state would have little room for manoeuvre in the government formation processes. In practice, however, such an open-ended situation is rather rare.

On the contrary, as we saw in the previous chapter, “the real world of coalition politics is a world of constraints” (Laver and Schofield 1990, 197) and various rules and norms govern the process. In general, a government formation process in European democracies usually follows well-defined stages. Repeating the observations of the previous chapter, the head of state – a monarch, a parliament-selected president, or a popularly elected president – initiates the process by nominating or appointing a Prime Minister designate (formateur) at the outset. Then the appointed formateur is given a mandate to lead a negotiation for putting together a potential governing coalition. If the formateur is successful, the formal process officially ends with the appointment of cabinet ministers by the head of state. If the formateur’s attempt to form a government fails, then the head of state either makes a new selection of formateur or calls an election.

As we can see, most European democracies prescribe an agenda-setting role in the government formation process to the head of state by entrusting him or her with the selection of the formateur. This is indeed the exact motivation of the model presented in the previous chapter. Also, most heads of state appoint the other cabinet ministers upon the request of the successful PM designate. Although most constitutions are silent about what would happen when the head of state refuses the latter’s request, it would be appropriate to interpret this as suggesting that the head of state is constitutionally entitled to have a say in this process.

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6 Strøm, Budge, and Laver (1994) provide an excellent survey on the institutional constraints on the coalition bargaining practices. Also see Laver and Schofield 1990. For an empirical assessment of neoinstitutional theories, see Martin and Stevenson 2001 and Warwick 1996.

7 The most comprehensive description of the process can be found in De Winter (1995).

8 The result of the negotiation usually requires the endorsement of other bodies of the coalition parties such as the party executive, the parliamentary party group, the national party convention, etc.
Based on these observations, I will analyze the whole government formation process as a two-stage bargaining process. At the first stage, a prime minister designate – the *formateur* – is appointed by the presidential head of state. At the second stage, a coalition government – which may consist of a single party – is appointed by the presidential head of state upon the request of the (successful) prime minister designate. The two stages of government formation bargaining process will be separately analyzed in the following empirical analysis.

In this setup, the two most important characteristics of the government-formation outcomes – the identity of the prime minister and the party composition of the coalition – constitute the dependent variables of the empirical models representing the two separated bargaining stages. Therefore, if we can show significant connections between these outcomes and the identity of the presidential head of state, it will be good evidence of the influence of the presidents on the government-formation process that has received little attention for a long time. Moreover, the separate estimation will enable us to track down the influence of presidential heads of state on the government formation outcomes through the process.

In so doing, I will compare the influences of the parliament-selected presidents and the popularly elected presidents. The analysis in the previous chapter suggested that the government-formation bargaining processes under two different types of presidential heads of state might be governed by different principles. By contrasting two different types of presidential heads of state along the stages of government-formation bargaining process, we will be able to see how they are different more clearly. I will also investigate further the effect of election timing on the balance of power between the president and parliament in this process, for the popularly elected presidents. Our investigation, as you shall see, sheds new light on our current understanding of the government-formation process in semi-presidential as well as in pure parliamentary regimes.

The rest of the chapter will proceed as follows. The following section will lay out the hypotheses to be tested and the reasoning behind it. The next Section 3.2 will explain in detail the econometric model, the data set, and the operationalization of
the key variables of interest. Section 3.3 will report the results of estimation. Finally, Section 3.4 will conclude the chapter with a discussion about the implications of the findings.

3.1 Hypotheses

In this section, I first lay out our strategy of empirical analysis including the hypotheses to be tested. I derive these hypotheses based on the role specified for the presidents in the government-formation bargaining process. It is important to bear in mind that these hypotheses are formulated for exploratory purposes. Thus, they serve primarily as a general guide for our empirical investigation. If our results confirm our predictions, this implies that our hypotheses have survived one test. If not, it will direct us where to look further.

As I noted above, I view the whole government formation process as a two-stage bargaining process. The two presumably disaggregated formation stages put the president into different positions of the bargaining process. At the first stage, the president is primarily a proposer who leaves a decision to accept or reject to the parliament. At the second stage, the proposer is the prime minister designate while the president is a veto player (to say the most) or one of the decision makers with some prerogatives (to say the least).

The advantages of being a proposer in a bargaining game have been well argued in the literature (see, e.g., Romer and Rosenthal 1978). The advantages mainly come from the ability of the proposer to exploit the bargaining environment where there are many alternatives that can be accepted by the opponent. Applied to the spatial noncooperative bargaining model of government formation, the same logic yields a prediction such that “the formateur party should be able to shape the coalition in important ways, including guaranteeing its own place in the government as well as biasing the ideological profile in its favor” (Martin and Stevenson 2001, 36; See also Austen-Smith and Banks 1988; Baron 1991).

Despite the importance of formateurs, the selection of formateurs has been rarely
studied in the literature, even though it is the head of state in practice who designates the formateur in most European democracies. In my framework, the president is a proposer of formateurs at the first stage. Then, I expect, based on the same insight, that the president can exploit this power to force the parliament to accept his or her preferred candidate. The outcome – the identity of prime minister designate (formateur) – might not be the best alternative for the president given the constraint, but it will likely reflect the president’s preference. Then I can establish the following expectation, based on the spatial theory:

**Hypothesis 1. (PM)** A party is less likely to be appointed Prime Minister, the more ideologically distant it is from the president.

As I noted earlier, most presidential heads of state had had long political career before they were elected to the presidency. Hence, they typically have a party affiliation and they have rarely changed their party affiliations during their political career. I call a party with which the president is affiliated a presidential party in this chapter. I suspect that a presidential party might enjoy some special favor in the formateur selection, in addition to its ideological proximity to the president, for various reasons. First of all, it is the party of the president’s former colleagues. Since they know each other well, the president faces less uncertainty compared with other alternatives. Also, the president is likely to be better informed of daily politics if his or her party holds the premiership. The president might also care about office-holding benefits for his or her former colleagues. Based on these reasons, we derive the following hypothesis:

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9Stevenson (1997), Warwick (1996), and Bäck and Dumont (2006) provide empirical analyses of the determinant of the formateur selection. None of them consider the role of head of state. In the formal theoretical literature, Morelli (1999) and Bloch and Rottier (2002) study the equilibrium formateur selection strategy for the head of state in a multiparty bargaining context. In Morelli (1999), however, the head of state is assumed to have identical policy preferences to the median parliamentary party. Diermeier and Merlo (2004) approach the puzzle of formateur selection somewhat differently by assessing the explanatory power of two well-known procedures: proportional selection and selection-in-order.

10I identified a presidential party based on the president’s formal affiliation, candidate nomination and public endorsement in the presidential election and previous political career path. I thank Acir Almeida for sharing data on presidential electoral support and endorsements. Based on his data, information on career prior to the presidency was further collected by the author to verify the coding. When I was not confident about the party affiliation of the president after I collected all the information above, I decided not to code the party affiliation for the president.
**Hypothesis 2. (PM)** A presidential party is more likely to be appointed Prime Minister than other parties.

After the appointment stage, the successful PM designate starts to negotiate with other parties to form a viable government. It is during this stage that most noncooperative theorists expect the privileged formateur to extract rents from the other parties. However, the formateur’s advantages can be significantly compromised if there is a veto player who can simply reject any offer that he or she dislikes. Of course, the veto player cannot bluntly insist that the formateur propose a government which the veto player likes most. He or she needs to consider the audience cost and the discounted value of future proposal as well. A stalemate might well occur if both are very patient. However, the status of the formateur is generally much more unstable than the presumed veto player in usual government-formation bargaining processes. If the formateur fails to win majority support for his or her proposal, then the process returns to the selection of formateur. The formateur will be less likely to be reappointed again. This implies that the formateur, once appointed, will make a proposal that can win the support of the veto player, since the right to make a proposal at the present stage is very valuable. It is hard to tell in a strict sense whether the president has the power to veto the request of PM designate. But the logic is similar for the case where the president has some prerogatives over the other parties. Hence, I derive the following hypotheses for the outcome of the second stage bargaining:

**Hypothesis 3. (Coalition)** A potential coalition is less likely to form, the more ideologically distant it is from the president.

**Hypothesis 4. (Coalition)** A potential coalition is more likely form if it includes the presidential party.

The four hypotheses laid out above constitute the basic relationships that we can expect from the formal roles and powers of the president in the government formation process. As we all know well, however, not all presidents are elected in the same way: some presidents are elected by popular vote and others are indirectly elected
by parliament. All else equal, we would expect that a popular mandate provides the
president with a stronger bargaining position than indirect election. Hence, I derive
the following hypothesis regarding the mode of presidential election:

**Hypothesis 5. (Mode of Election)** The relationships in HP 1 through HP 4 will
be stronger when the president is elected by popular vote than when the president is
indirectly elected by parliament.

When presidents are popularly elected, they might compete for political superi-
ority with the parliament. When the two agents of the electorate are in conflict, the
timing of the mandate may well break the balance. We would expect a popularly
elected president with a more recent mandate than parliament to have a stronger
bargaining position than the other case. With regard to the relative timing of the
elections, we derive the following hypothesis:

**Hypothesis 6. (Timing of Election)** The relationships in HP 1 through HP 4
will be stronger when the popularly elected president has a more recent mandate than
when the parliament does.

**3.2 Methods, Data, and Key Variables**

The two presumably disaggregated formation stages postulate somewhat different
bargaining environments. At the first stage, a prime minister designate (*formateur*)
is appointed by the president. At the second stage, a coalition government – which
may consist of a single party – is appointed by the president upon the request of the
(successful) prime minister designate. Thus, the outcome spaces are different and
the primary decision makers are also different.

The two bargaining stages, however, present *in essence* the same decision making
problems to the presumed proposer in each stage of government formation process
– the president at the first stage and the PM designate at the second stage. They
are required to choose one out of many alternatives – a party out of all parties in
a parliament (first stage) and a coalition out of all arithmetically possible coalitions
of which the PM designate is a member (second stage).
Since the alternative sets do not have any natural ordering and vary from one observation to the next, a conditional logit model is advised for such unordered multinomial choice problems. Even though the conditional logit model has become a standard tool for the empirical analyses of coalition formation outcomes since Martin and Stevenson (2001), we believe the logic and the interpretation of the estimates of the conditional logit models should be worth brief mentioning.\textsuperscript{11}

The logic of conditional logit model can be easily accessed under the random utility framework. Suppose a decision making problem where an individual $i \in N$ makes a choice $j$ out of $M_i$ alternatives – i.e., $j \in M_i$. Suppose that the true utility of the individual $i$ for the choice $j$ can be represented as follows:

$$U_{ij}^* = x_{ij} \beta_i + \epsilon_{ij}. \quad (1)$$

We further assume that $\beta_i = \beta$, for all $i \in N$, for identification purpose. That is, $i$ is a representative decision maker.

In equation (1), $x_{ij} \beta$ represents the nonstochastic, observable component of the utility and $\epsilon_{ij}$ reflects the random, unobservable part of the utility of the individual $i$ for an alternative $j$. The distinguishing feature of the conditional logit model is that the observable component of the utility are measured by the characteristics of the relationship between the individual and each specific alternative. Hence, $x_{ij}$ are called \textit{choice-specific}.\textsuperscript{12} In this framework, the actual “name” of particular alternative is meaningless, since the nonstochastic part of the utility are assumed to be completely characterized by its characteristics vector $x_{ij}$.\textsuperscript{13}

Under the random utility framework, if an individual $i$ makes choice $j$ in particular, we assume that the true utility associated with this particular alternative $U_{ij}$ is

\textsuperscript{11}For the econometric textbook descriptions of the model, see McFadden 1974a, Amemiya 1985, Greene 2000.

\textsuperscript{12}I adopt Greene’s (2000) terminology who use the term, multinomial logit model, for the case where the variables are measured as individual-specific. However, a multinomial model is often used to denote a general model of multinomial discrete choice problems which include individual-specific as well as choice-specific variables (e.g., Quinn, Martin, and Whitford 1999).

\textsuperscript{13}Amemiya is very explicit about this point (1985, pp. 298-299).
the maximum among the $m_i$ utilities ($m_i = |M_i|$). The derivations of probability of particular choice and the likelihood function follows a specification about the joint distribution for the disturbances.\footnote{McFadden (1974a) shows that if the $m_i$ disturbances $- (\epsilon_{i1}, \epsilon_{i2}, \cdots, \epsilon_{im_i})$ are independent and identically distributed with Weibull distribution, i.e., $F(\epsilon_{ij}) = \exp(-e^{-\epsilon_{ij}})$, then $\text{Prob}(i \text{ chooses } j) = e^{x_{ij}\beta} / \sum_{h=1}^{m_i} e^{x_{ih}\beta}$.}

Once we define the log-likelihood function $(\log L)$, we can compute the MLE of $\hat{\beta}$ as a solution to the equation $\partial \log L / \partial \beta = 0$. A positive $\beta_k$ ($k \leq K$, where $K$ is the dimensionality of $x_{ij}$) implies that if all other characteristics are the same, an alternative with a higher value on $x_k$ is more likely to be chosen than the alternatives which have a lower value on $x_k$.\footnote{A restrictive property of conditional logit model is that it imposes an assumption of the independence of irrelevant alternatives (IIA), which might be violated when the structural component is under-specified so that the unobserved attributes are not perceived as independent by decision makers (McFadden 1974a, 1974b). We follow the Martin and Stevenson’s (2001) suggestion, which also depends on the suggestion of Hausman and McFadden (1984). For all the estimations that follow, we reestimate the models after randomly dropping 10 percent of alternatives while keeping the choice that is actually made and then we apply the Hausman test. The idea is that if the model reflects the true data generating process, estimates from a full set of alternatives should be close to estimates obtained by randomly eliminating some nonchosen alternatives. We repeat the procedure fifty times. We report the average $p$-value (over the fifty repetitions) for rejecting the null hypothesis that the IIA assumption holds. All the estimates suggest that the IIA assumption is not problematic in our empirical analyses. We thank Lanny Martin and Randolph Stevenson for making the program performing this task publicly available at \url{http://garnet.acns.fsu.edu/~martin}.}

The two government formation stages are separately estimated through the conditional logit model specification in our empirical analysis. A conceptual advantage of the separate estimation is apparent. If we model government formation as a one-step process where the alternative set is the set of “all potential combination of parties that might form a government” as in Martin and Stevenson (2001, 38), we are implicitly assuming that the parliament as a whole is a single collective decision maker that maximizes its utility over the alternatives (Stevenson 1997, 172). This is a very holistic approach. By separating the stages, we can be more explicit about the rational behavior of the players in the bargaining process.\footnote{Note that without involving the presidential head of state in the bargaining process, separation does not support this claim in itself.} Moreover, we can track down the influence of a particular player – for example, the prime minister
designate and the president – on the outcomes through the process.\textsuperscript{17}

The data set includes information on all government formation decisions in seven West European democracies with presidential heads of state since 1945, for which manifesto analyses are available to place parties on a unidimensional ideological space (Budge et al. 2001). The seven countries in our data set include: Austria, Finland, France V (since 1958), Germany (since 1949),\textsuperscript{18} Iceland, Italy, and Portugal (since 1976). The data set excludes Greece and Ireland since the presidents of these two countries have little constitutional power to affect the government-formation process.\textsuperscript{19}

I count a new government whenever there is (1) a change in the party composition of government coalition; (2) a change in the prime minister; or (3) a general parliamentary election.\textsuperscript{20} With this counting rule, I initially count 204 governments

\textsuperscript{17}I also admit the limit of this approach: it does not provide a systematic view on the strategic interstage interactions of the primary players. This task requires a strategic estimation technique. I leave this for a future research project.

\textsuperscript{18}Some readers might question the agenda-setting role of the Federal President in the German government-formation process, since the Federal Presidents – who are entitled to nominate a candidate to the Bundestag according to the Basic Law – have normally made nominations after they have been informed by party leaders about their intentions to form a particular coalition. It is important to note that the President has no constitutional obligation to follow these instructions. I include Germany in the data set on this ground. Although the German Federal Presidents have yet made a decision opposing to the agreement made by the parliamentary parties, we should not infer the incapability of the president to affect outcomes from the nonoccurrence of such apparent disputes. It might well be the case that the decision made by the party leaders reflects their rational anticipation of the response from the president. Indeed, this is the particular phenomenon that we are trying to explore in this analysis.

\textsuperscript{19}The Constitutional Revision in 1986 contains detailed provisions that the Greek President should follow in the appointment of the Prime Minister designate. In Ireland, any member of Dáil or Seanad Éireann is entitled to propose a PM candidate. The German and Italian presidents are indirectly elected by parliament. All other countries elect their presidents by popular votes. However, some early post-war presidents in these countries were indirectly elected by parliament. Those presidents include: Karl Renner (Austria), Juho K. Paasikivi (Finland), and Sveinn Björnsson (Iceland).

\textsuperscript{20}The counting rule for government is identical to that for cabinet in Müller and Strom (2000, 12). Recall that I use government and cabinet interchangeably. Note that I do not use another commonly used criterion, “formal resignation of government” (Woldendorp et al. 2000, 10) to count a new government. In some countries, for example, Finland, it has been a “well-established habit” that the cabinet submits its resignation after the presidential election (Nousiainen 2000, 292). Therefore, if the hypothesis is true, when the newly elected president has no reason to seek an alternative government, the incumbent government will resume the office. If I use the “formal resignation” criterion, it may misleadingly reinforce the statistical relationship by producing multiple observations
for which manifesto analysis is available. I further exclude caretaker governments, technocratic governments,\(^{21}\) governments formed in a parliament where there is a single majority party, governments led by a nonpartisan prime minister, and governments where I cannot identify the party affiliation of the presidential head of state at the moment of formation. With these criteria of exclusion, we have 146 governments remaining in our data set for empirical analyses: 61 under the indirectly elected president and 85 under the popularly elected president. Table 3.1 reports the distribution of the initial 204 governments under two different types of presidential head of state.\(^{22}\) In order to see the general difference, I also include distribution of governments in constitutional monarchies on the corresponding categories.\(^{23}\)

<table>
<thead>
<tr>
<th>Type of Head of State</th>
<th>Excluded Governments</th>
<th>Governments in dataset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>caretaker</td>
<td>technocratic</td>
</tr>
<tr>
<td>President:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parliament-selected</td>
<td>n</td>
<td>9</td>
</tr>
<tr>
<td>(N = 86)</td>
<td>(\hat{\mu})</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>(\mu)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Popularly-elected</td>
<td>n</td>
<td>6</td>
</tr>
<tr>
<td>(N = 118)</td>
<td>(\hat{\mu})</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(\mu)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Total</td>
<td>n</td>
<td>15</td>
</tr>
<tr>
<td>(N = 204)</td>
<td>(\hat{\mu})</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>(\mu)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Hereditary Monarchs</td>
<td>n</td>
<td>7</td>
</tr>
<tr>
<td>(N = 203)</td>
<td>(\hat{\mu})</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(\mu)</td>
<td>(0.01)</td>
</tr>
</tbody>
</table>

Notes: \(n\) and \(\mu\) denote count and mean, respectively. Entries in parenthesis are the standard error of mean.

Several interesting differences show up from this simple comparison. In constitu-

\(^{21}\)The coding of caretaker and technocratic government follows Woldendorp, et al. 2000.

\(^{22}\)Note that the criteria of exclusion are not mutually exclusive. That is, a government could be technocratic government of expert with nonpartisan Prime Minister. Therefore, the row entries corresponding to \(n\) do not sum up to the total number of governments in the category.

\(^{23}\)The countries are: Belgium, Denmark, Luxembourg, the Netherlands, Norway, Spain, Sweden, and U.K.
tional monarchies, we find no record of nonpartisan Prime Minister, whereas we have 12 governments of nonpartisan Prime Minister with presidential heads of state. Also, all of the 6 technocratic governments are formed in the system with directly elected president. Considering the importance of cabinet participation in European democracies, this itself is very interesting characteristic difference across systems. Indeed, this difference is the main research subject of Amorim Neto and Strøm (2006). By excluding these governments and focusing on the governments with ‘presumably normal partisan’ characteristics, the approach of this empirical analysis can be said rather conservative in finding the presidential influence on the government formation outcomes.

For the 146 valid government formation opportunities, all parties that held at least 0.95 per cent of parliamentary seats are included in the data set. In the conditional logit model of PM appointment, the alternative set includes all parliamentary parties that satisfy the above size condition, and the dependent variable is prime minister, which takes a value of 1 if a party is the party of the prime minister in the ensuing government and 0 otherwise. In the following conditional logit model of coalition formation by the successful PM designate, the alternative set includes all potential coalition containing the party of the prime minister, and the dependent variable is actual government, which takes a value of 1 if a potential coalition is actually formed and 0 otherwise.

All the independent variables are constructed to capture the choice-specific characteristics associated with the primary decision makers in each bargaining stage. Therefore, the independent variables in the analysis of PM appointment measure

24 More exactly, their dependent variable is the proportion of nonpartisan cabinet ministers which include nonpartisan Prime Minister.

25 The exclusion of very small parties is due to the availability of manifesto analysis. When there is missing information for a small party, conditional logit estimation has to drop the whole observation. The trade-off is too costly. This is why we apply this condition. When the Partito Republicano Italiano [PRI] joined the Moro I cabinet in Dec. 1963, it had six out of 630 (0.95 %) members of the Chamber of Deputies, which is the smallest seat share among the government parties. Therefore, the data set does not exclude any government party.

26 Therefore, the number of alternatives for each formation opportunity $i$ is $2^{m_i - 1}$, where $m_i$ is the number of parliamentary parties and 1 indicates the party of the prime minister.
party-specific characteristics and those in the analysis of coalition formation measure (potential) coalition-specific characteristics. I tried to make the name of the variables as self-explanatory as possible. However, some explanations of the key independent variables are necessary.

At first, variables associated with the presidents are initially measured to construct other variables. Presidential party is a dummy variable indicating the party affiliation of the president. Two sets of president-type-specific variables are measured to capture the variation in bargaining power associated with the mode and timing of the presidential election. Parliament-selected is a dummy variable taking a value of 1 if the president is indirectly elected by parliament. As a complement, Popular election takes a value of 1 if the president is elected by popular vote. A dummy variable, Recent mandate, takes a value of 1 if the president was given a mandate by the people more recently than parliament when a new government formation is required. Its complement is Distant mandate.\(^{27}\) It should be worth noting that these president-type-specific variables may only be included in the model specification as a multiplicative term with other choice-specific variables. Otherwise, the variable is dropped from the estimation because it is constant across the alternatives in a given formation opportunity.\(^{28}\)

All ideological variables are constructed from individual party ideological positions based on the manifesto analyses. I assume a common unidimensional ideological space, in which individual party ideological positions take on a possible range of 0(L) to 1(R).\(^{29}\) The ideological position of a potential coalition is constructed as a weighted average of individual party ideological positions, where the weight is the adjusted parliamentary seat share according to the total sum of parliamentary seat shares of participating parties. Based on these measurements, Ideological distance

\(^{27}\)There are 29 (out of 85) government formation opportunities in which the popularly elected president has a more recent mandate that parliament in our data set.

\(^{28}\)This is a general property of conditional logit models utilizing choice-specific variables. For this reason, it is often called fixed-effects logit by economists. For the inclusion of individual-specific variables in conditional logit models, see Greene 2000, pp. 857-859.

\(^{29}\)Particularly, I compute the left-right position of an individual party using the formula provided by Kim and Fording (1998). Their measure takes on a possible range of 0 (R) to 100 (L). I reversed the order and rescaled it.
from presidential party is the absolute ideological distance between the presidential party and each parliamentary party for the first stage and between presidential party and potential coalition for the second stage. I use this variable as a proxy for the ideological distance from the president. That is, we are assuming that the president and his or her party share the same ideological positions. A number of independent variables are also included in our analysis to control for the known determinants of coalition formation outcomes in the literature. These variables will be described in the course of discussion.

3.3 Results

Table 3.2 reports the estimation results of the conditional logit model of PM appointment. First, Model 3.1 is estimated only with control variables. I believe the control variables in Model 3.1 represent our current understanding of PM appointment without explicit consideration of the influence of the presidents. First, Seat share shows a substantively large and statistically significant effect as expected (Warwick 1996, Diermeier and Merlo 2004). Second, Incumbent PM also appears to be a strong determinant of PM appointment. This variable indicates the identity of the Prime Minister in the outgoing government. I expect there to be a positive association because this party often has the power to shape the bargaining situation in a favorable way by strategically timing the termination (Stevenson 1997). The estimation result confirms our expectation. Third, the positive coefficient on Largest

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30 I admit that this is a very crude measure of the ideological position of the president. Indeed, it is very likely to be true that, in a popular election, the presidential candidate of a party might pursue a different policy agenda from that of his or her own party due to different electoral constituencies. It would be better if I had manifesto-like data for the presidential elections, but I am not aware of such analysis. Given this constraint, I believe this is the best available measure that I can use in our analysis. A defense also lies in the unitary-actor assumption, which is common practice in the theory of coalition politics.

31 All models reported in Tables 3.2 and 3.3 were estimated using Stata 9. The data set of potential coalitions was created with R 2.4. All data sets and program codes are available upon request.

32 Warwick (1996) and Bäck and Dumont (2006) expect the same direction but with different logic. Warwick (1996) argues that prior experience in government and good reputation as well as its status of the natural reversion point should help this party to succeed in forming a government. Bäck and Dumont (2006) point to the party’s privileged access to the head of state who has the power to appoint formateur. For multivariate analysis, see Warwick 1996 and Stevenson 1997. The data sets of the previous empirical analyses usually include constitutional monarchies as well as countries in our data set.
party suggests a special bias in favor of this particular party status in the PM appointment even after we control for the seat share effect, although the statistical association is rather weak (only at $p < .10$). Hence, the result indirectly supports Diermeier and Merlo’s (2004) finding that the formateur selection rule is likely to provide a disproportionate advantage to larger parties.

Table 3.2: Conditional Logit Analysis of PM Appointment

<table>
<thead>
<tr>
<th>Models:</th>
<th>3.1</th>
<th>3.2</th>
<th>3.3</th>
<th>3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seat share</strong></td>
<td>11.49</td>
<td>10.74</td>
<td>11.33</td>
<td>10.78</td>
</tr>
<tr>
<td></td>
<td>(5.04)</td>
<td>(4.76)</td>
<td>(4.93)</td>
<td>(4.59)</td>
</tr>
<tr>
<td><strong>Largest party</strong></td>
<td>0.53</td>
<td>0.64</td>
<td>0.57</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>(1.69)</td>
<td>(1.96)</td>
<td>(1.75)</td>
<td>(1.93)</td>
</tr>
<tr>
<td><strong>Incumbent PM</strong></td>
<td>1.02</td>
<td>0.98</td>
<td>0.92</td>
<td>0.96</td>
</tr>
<tr>
<td></td>
<td>(3.74)</td>
<td>(3.54)</td>
<td>(3.26)</td>
<td>(3.28)</td>
</tr>
<tr>
<td><strong>Median party</strong></td>
<td>-0.11</td>
<td>-0.16</td>
<td>-0.21</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>(-0.35)</td>
<td>(-0.51)</td>
<td>(-0.66)</td>
<td>(-0.30)</td>
</tr>
<tr>
<td><strong>Presidential party</strong></td>
<td>0.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.89)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parliament-selected ×</td>
<td></td>
<td>1.67</td>
<td>1.62</td>
<td></td>
</tr>
<tr>
<td>Presidential party</td>
<td>(2.27)</td>
<td>(2.16)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Popular election ×</td>
<td></td>
<td></td>
<td>-0.31</td>
<td></td>
</tr>
<tr>
<td>Presidential party</td>
<td></td>
<td></td>
<td>(-0.71)</td>
<td></td>
</tr>
<tr>
<td>Popular election × Distinct mandate ×</td>
<td></td>
<td></td>
<td>-0.14</td>
<td></td>
</tr>
<tr>
<td>Presidential party</td>
<td></td>
<td></td>
<td>(-0.27)</td>
<td></td>
</tr>
<tr>
<td>Popular election × Recent mandate ×</td>
<td></td>
<td></td>
<td>-0.62</td>
<td></td>
</tr>
<tr>
<td>Presidential party</td>
<td></td>
<td></td>
<td>(-0.76)</td>
<td></td>
</tr>
<tr>
<td>Ideological distance from presidential party</td>
<td>-1.17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-1.16)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parliament-selected ×</td>
<td></td>
<td>2.38</td>
<td>2.31</td>
<td></td>
</tr>
<tr>
<td>Ideological distance from presidential party</td>
<td></td>
<td>(0.90)</td>
<td>(0.87)</td>
<td></td>
</tr>
<tr>
<td>Popular election ×</td>
<td></td>
<td></td>
<td>-2.38</td>
<td></td>
</tr>
<tr>
<td>Ideological distance from presidential party</td>
<td></td>
<td>(-2.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Popular election × Distinct mandate ×</td>
<td></td>
<td></td>
<td>-1.52</td>
<td></td>
</tr>
<tr>
<td>Ideological distance from presidential party</td>
<td></td>
<td>(-1.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Popular election × Recent mandate ×</td>
<td></td>
<td></td>
<td>-5.42</td>
<td></td>
</tr>
<tr>
<td>Ideological distance from presidential party</td>
<td></td>
<td>(-2.32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-96.96</td>
<td>-93.47</td>
<td>-91.18</td>
<td>-88.42</td>
</tr>
<tr>
<td>Percent of Correct Prediction ($N$) †</td>
<td>78(114)</td>
<td>77(113)</td>
<td>79(116)</td>
<td>81(118)</td>
</tr>
<tr>
<td>Average $p$-value for rejecting IIA ‡</td>
<td>0.53</td>
<td>0.53</td>
<td>0.63</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Notes: Number of formation opportunities = 146; Number of parties = 897. Entries are unstandardized maximum likelihood coefficient estimates with $t$-ratio in parenthesis. Bold indicates statistical significance at the .05 level (one-tailed test). † Entries are percentage. Number of correct prediction (out of 146 government formation opportunities) is in parenthesis. ‡ A $p$-value < .05 indicates that we can reject IIA at .05 significance level.
Finally, the estimate of Median party status shows an unexpected result. We cannot reject the null hypothesis that the median status has no effect on the outcomes. In the previous literature, the median status has been repeatedly reported to have a positive effect on the probability of party being appointed prime minister.\textsuperscript{33} Since the sample space of our analysis is different from previous works, we are not sure what causes the difference at the present stage. However, this result raises some questions as to whether systems with presidential heads of state might have a different data generating processes than other systems.\textsuperscript{34} Overall, Model 3.1 predicts the correct outcome — i.e., the actual prime minister — with 78 percent accuracy (114 out of 146 cases).\textsuperscript{35}

In the following Models 3.2, 3.3, and 3.4, I successively add variables associated with presidential heads of state into the equation. First, I include two variables - Presidential Party and Ideological distance from presidential party - in Model 3.2, and then I proceed further by considering the variations related with the mode (Model 3.3) and timing (Model 3.4) of presidential elections. The increase in the log-likelihood in each step, although modest, suggests that these added variables explain some interesting variation in the data that has not been captured by the variables in the previous model. The log-likelihood ratio test comparing Model 3.1 and 3.4 shows that we can safely reject the null hypothesis that these variables jointly have no significant effect on the outcome.\textsuperscript{36} Overall, Model 3.4 improves the correct prediction rate of Model 3.1 by three percent. Although the margin is modest, considering the dominant effect of size, it seems somewhat impressive.\textsuperscript{37}

\textsuperscript{33}For multivariate analysis, see Warwick 1996 and Stevenson 1997. The data sets of the previous empirical analyses usually include constitutional monarchies as well as countries in our data set.

\textsuperscript{34}Another possibility is simply measurement error. However, when I estimated the same model with a data set consisting only of West European constitutional monarchies, median party status was estimated as a positive and significant determinant. The coefficient estimate was 0.5174 with t-ratio 1.97. The result of estimation is available from the author upon request.

\textsuperscript{35}Percent of correct prediction is calculated as follows: we first generate predicted probabilities for all parties in a given formation opportunity and predict that the party with the highest probability will be the PM. Then we can compare the prediction with the actual outcome in each formation opportunity.

\textsuperscript{36}The test statistic is 17.09, which has a $\chi^2$ distribution with six degrees of freedom. The $p$-value is 0.0090.

\textsuperscript{37}Note that we can predict outcomes with 77 percent accuracy (112 out of 146) by just guessing
The change of individual estimates clarifies how these variables associated with the president improve the goodness of fit of the models. It suggests that the influence of a presidential head of state works quite differently depending on the election-related characteristics of the president in this PM appointment bargaining stage. The estimates for the popularly-elected presidents largely confirm our expectation based on the proposer model applied to the spatial voting model (Hypothesis 1). In contrast, the results for the parliament-selected presidents suggest somewhat different mechanisms. They indicate that presidential parties have enjoyed favorable bias that cannot be fully accounted for by ideological proximity to the president (Hypothesis 2).

In Model 3.2, coefficients for both *Presidential party* and *Ideological distance from presidential party* cannot be estimated at any conventional level of statistical significance. Note that this model specification assumes no difference associated with the type of president. In Model 3.3, we allow the coefficients to vary depending on the mode of presidential elections by adding multiplicative variables. As a result, we can see that the presidential party is more likely to be appointed prime minister than other parties when the president is elected by parliament (Hypothesis 2). Thus, the result suggests that having a parliament-selected president as a member provides the party with significant advantages in the appointment of PM designate. Even if the presidential party is not the largest, it has a good chance of winning the premiership particularly when the margin of seat share between the largest parliamentary party and the presidential party is relatively small, according to the result. The ideological distance of a party from the president has an opposite sign to our expectation. However, the coefficient estimate is not statistically significance. Recall that our expectation of the variable *Presidential party* is associated with the connec-

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38In Table 3.2, the specification employs two separate dummy variables to denote one qualitative difference in president-specific characteristics. This does not cause the usual identification problem in the conditional logit model since the model does not have a constant term in its specification. Alternative specification is also possible; it just requires different interpretation. I adopt the present specification since it enables us to see the statistical significance of the relationship within each type of the president independently.
tion between the president and the party with which he or she is affiliated. Hence, the result indicates a relatively strong bond between the two beyond the scope of ideological proximity.

On the other hand, when the president is elected by popular vote, *Ideological distance from presidential party* does show a statistically significant negative effect. That is, the more ideologically distant a party from the directly elected president, the less likely it is to be appointed prime minister (Hypothesis 1). A further investigation provided by Model 3.4, which considers the relative timing of the popular presidential election versus the parliamentary election, reveals that the negative effect of ideological distance from presidential party mainly comes from the cases when the popularly-elected president can claim a more recent popular mandate than parliament at the time of the formation opportunity (Hypothesis 6).\(^{39}\)

Interestingly enough, however, it appears that being a presidential party is not a source of special bias for the prime minister appointment beyond that which is attributable to the ideological proximity to the popularly elected president regardless of the timing of the elections. We cannot be certain what explains the relative non-benefit of presidential party status with the present framework, since we are focusing on the successful PM designate. It might be that the popularly elected presidents have incentives to build a broader coalition beyond their own parties, or that it reflects the constraints imposed by the parliament. It is also possible that this is a result of rational calculation by the president in consideration of “audience cost” given the salience of the premiership. The answer requires more in-depth analysis. However, the fact that the presidential party often fails to become prime minister does not necessarily imply that the president has no influence on PM appointment. Indeed, the results suggest that popularly elected presidents are very effective in preventing a disfavored party from being Prime Minister, especially when they can claim a “fresher” mandate.

\(^{39}\)As a robustness check, I reestimated Model 3.4 on a data set excluding one country at a time, since a conventional fixed effects modeling technique to control for unmeasured unit specific effects is not allowed in the conditional logit models. The least significant case is when we exclude France V. from the data set. The coefficient estimate is -4.22 with p-value 0.069 (two-tailed test). Given the relatively small number of observations, we think this is a robust result.
In sum, we can conclude that we have found some modest evidence for the influence of the president on the Prime Minister appointment. Specifically, we find that when the president is popularly elected, the relative timing of presidential elections versus parliamentary elections does provide the president with some added power in the bargaining process. When the parliament election is more recent than the presidential election, we cannot find any such statistically significant evidence, although it points to the right direction. However, our expectation based on the bargaining power associated with the mode of presidential election (Hypothesis 5) does not seem correct. The result suggests that indirectly elected presidents also have relatively strong bargaining power but with a different mechanism. I will get back to this point after I discuss the results of the conditional logit model analysis of coalition formation. In the end, presidential parties have been successful in forming a government as a Prime Minister in 36 out of 61 cases (59 per cent) under indirectly elected presidents and in 34 out of 85 cases (40 per cent) under popularly elected presidents.

We now turn to the next stage of government formation process. What can we expect about the party composition of the coalition once we know the identity of Prime Minister? It is important to note that the data set of this analysis excludes all potential coalitions that do not contain the party of the Prime Minister. For this reason, we have to be careful about the interpretations of some estimates. For example, Presidential party in coalition is a dummy variable which takes a value of 1 if a potential coalition contains the presidential party in a formation opportunity. Therefore, if the presidential party is appointed Prime Minister, all potential coalitions in our data set have the same value on this variable. In this case, the observation has no effect on the estimation result. An observation can only affect the estimates when there is a variation in the variables. In this particular example, the coefficient represents the effect of having a presidential party in a coalition on the probability of this coalition becoming the actual government, conditional on that the presidential party not being the formateur.
### Table 3.3: Conditional Logit Analysis of Coalition Formation

<table>
<thead>
<tr>
<th>Models:</th>
<th>3.5</th>
<th>3.6</th>
<th>3.7</th>
<th>3.8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incumbent coalition</strong></td>
<td>2.46</td>
<td>2.28</td>
<td>2.27</td>
<td>2.30</td>
</tr>
<tr>
<td></td>
<td>(10.31)</td>
<td>(8.86)</td>
<td>(8.86)</td>
<td>(8.94)</td>
</tr>
<tr>
<td><strong>Largest party in coalition</strong></td>
<td>0.23</td>
<td>0.27</td>
<td>0.22</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>(0.53)</td>
<td>(0.57)</td>
<td>(0.48)</td>
<td>(0.72)</td>
</tr>
<tr>
<td><strong>Median party in coalition</strong></td>
<td>0.27</td>
<td>-0.39</td>
<td>-0.42</td>
<td>-0.49</td>
</tr>
<tr>
<td></td>
<td>(-0.90)</td>
<td>(-1.22)</td>
<td>(-1.31)</td>
<td>(-1.49)</td>
</tr>
<tr>
<td><strong>Minority coalition</strong></td>
<td>-1.52</td>
<td>-1.50</td>
<td>-1.51</td>
<td>-1.48</td>
</tr>
<tr>
<td></td>
<td>(-2.24)</td>
<td>(-2.04)</td>
<td>(-2.04)</td>
<td>(-1.97)</td>
</tr>
<tr>
<td><strong>Minimal winning coalition</strong></td>
<td>0.49</td>
<td>0.63</td>
<td>0.63</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>(1.61)</td>
<td>(1.99)</td>
<td>(1.97)</td>
<td>(2.07)</td>
</tr>
<tr>
<td><strong>Minimal connected winning coalition</strong></td>
<td>0.28</td>
<td>0.29</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>(0.83)</td>
<td>(0.85)</td>
<td>(0.85)</td>
<td>(0.86)</td>
</tr>
<tr>
<td><strong>Number of parties in coalition</strong></td>
<td>-0.76</td>
<td>-0.73</td>
<td>-0.74</td>
<td>-0.72</td>
</tr>
<tr>
<td></td>
<td>(-5.64)</td>
<td>(-5.41)</td>
<td>(-5.46)</td>
<td>(-5.31)</td>
</tr>
<tr>
<td><strong>Ideological division within opposition</strong></td>
<td>-1.09</td>
<td>-1.42</td>
<td>-1.33</td>
<td>-1.33</td>
</tr>
<tr>
<td></td>
<td>(-1.14)</td>
<td>(-1.40)</td>
<td>(-1.31)</td>
<td>(-1.28)</td>
</tr>
<tr>
<td><strong>Ideological distance from PM</strong></td>
<td>-3.97</td>
<td>-4.73</td>
<td>-5.49</td>
<td>-4.55</td>
</tr>
<tr>
<td></td>
<td>(-2.43)</td>
<td>(-2.04)</td>
<td>(-2.70)</td>
<td>(-2.11)</td>
</tr>
<tr>
<td><strong>Presidential party in coalition</strong></td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parliament-selected × Presidential party in coalition</strong></td>
<td>1.16</td>
<td>1.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.38)</td>
<td>(2.41)</td>
</tr>
<tr>
<td><strong>Popular election × Presidential party in coalition</strong></td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2.14)</td>
<td></td>
</tr>
<tr>
<td><strong>Popular election × Distant mandate × Presidential party in coalition</strong></td>
<td>0.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1.34)</td>
<td></td>
</tr>
<tr>
<td><strong>Popular election × Recent mandate × Presidential party in coalition</strong></td>
<td>1.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1.95)</td>
<td></td>
</tr>
<tr>
<td><strong>Ideological distance from presidential party</strong></td>
<td>-7.32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-4.22)</td>
<td></td>
</tr>
<tr>
<td><strong>Parliament-selected × Ideological distance from presidential party</strong></td>
<td></td>
<td>-16.40</td>
<td>-16.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-4.03)</td>
<td>(-4.08)</td>
</tr>
<tr>
<td><strong>Popular election × Ideological distance from presidential party</strong></td>
<td></td>
<td>-4.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-2.54)</td>
<td></td>
</tr>
<tr>
<td><strong>Popular election × Distant mandate × Ideological distance from presidential party</strong></td>
<td></td>
<td></td>
<td>-3.74</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-1.79)</td>
</tr>
<tr>
<td><strong>Popular election × Recent mandate × Ideological distance from presidential party</strong></td>
<td></td>
<td></td>
<td>-11.66</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(-2.22)</td>
</tr>
<tr>
<td><strong>Log likelihood</strong></td>
<td>-399.11</td>
<td>-376.11</td>
<td>-371.66</td>
<td>-369.16</td>
</tr>
<tr>
<td><strong>Percent of Correct Prediction (N)</strong></td>
<td>38(55)</td>
<td>42(61)</td>
<td>43(63)</td>
<td>44(64)</td>
</tr>
<tr>
<td><strong>Average p-value for rejecting IIA</strong></td>
<td>0.69</td>
<td>0.82</td>
<td>0.88</td>
<td>0.87</td>
</tr>
</tbody>
</table>

**Notes:** Number of formation opportunities = 146; Number of potential coalitions = 14556. Entries are unstandardized maximum likelihood coefficient estimates with t-ratio in parenthesis. Bold indicates statistical significance at the .05 level (one-tailed test). † Entries are percentage. Number of correct prediction (out of 146 government formation opportunities) is in parenthesis. ‡ A p-value < .05 indicates that we can reject IIA at .05 significance level.
Table 3.3 reports the results. As before, Model 3.5 is estimated with only control variables. I believe that they are representative of our current understanding of coalition formation outcomes conditioned on the identity of the prime minister.

According to the table, *Incumbent coalition* (Strøm, et. al. 1994; Lupia and Strom 1995; Strøm and Swindle 2002), *Minority coalition*, and *Number of parties in coalition* (Leiserson 1968) are all statistically significant with expected direction. The coefficients for *Minimal winning coalition* (Riker 1962) and *Minimal connected winning coalition* (Axelrod 1970) show the right direction but the relationships are statistically weak. The coefficient estimates for *Largest party in coalition*, *Median party in coalition*, *Ideological division within opposition* do not show the expected sign, although they are not statistically significant.

The most important control variable in this analysis is *Ideological distance from PM*, since we are concerned with the potential coalition selection stage by the successful Prime Minister designate. The estimate clearly shows highly significant negative impacts on the coalition formation, as expected. The result is also in agreement with the result of Martin and Stevenson (2001), which uses a different measurement for this feature.

Thus, the baseline Model 3.5 suggests that a potential coalition is more likely to form if it is the outgoing government; if it is a majority; if it includes a small number of parties; and most importantly, if it is ideologically close to the Prime Minister designate. These results largely confirm our expectations drawn from the previous literature. Overall, Model 3.5 predicts actual governments with 38 percent accuracy (55 out of 146 cases).

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40 In the table, *Incumbent coalition*, *Largest party in coalition*, *Median party in coalition*, *Minority coalition*, *Minimal winning coalition*, and *Minimal connected winning coalition* are all dummy variables indicating whether the potential coalition satisfies the respective properties implied by their names. *Number of parties in coalition* measures the number of participating parties in a potential coalition. *Ideological division within opposition* measures the absolute ideological distance between the most distant pair of parties outside of potential coalitions. Finally, *Ideological distance from PM* measures the absolute ideological distance between the PM designate and a potential coalition.

41 They measure “PM distance” as the distance of ideological positions between PM and the most distant partner within each potential coalition (45).
As before, I successively add the variables associated with the president into the equation in the following Models 3.6, 3.7 (mode of presidential election), and 3.8 (timing of popular election). Quite differently from the previous stage, the increase in the log-likelihood for each successive model is very substantial at this stage. The log-likelihood ratio test comparing Models 3.5 and 3.8 suggests that we can reject the null hypothesis with near certainty. Overall, Model 3.8 improves the correct prediction rate of Model 3.5 by six percent. Considering the huge number of potential coalitions in an average government formation opportunity, this appears to be quite impressive.

The individual coefficient estimates clarify the situation again. We can see that the two variables of primary interest – Presidential party in coalition and Ideological distance from presidential party – have substantively large and statistically significant impacts on the potential coalition formation in the expected direction consistently across the models. The results clearly suggest that a potential coalition is less likely to form when it is ideologically distant from the president (Hypothesis 3) and that a potential coalition is more likely to form when it includes the presidential party as a member (Hypothesis 4). What is more interesting in this table is that we cannot find a difference in the pattern of influence of the two different types of presidents – popularly elected and parliament-selected presidents. At this stage of coalition formation, the two presidents work in the same way, in contrast to the previous result.

With regard to relative bargaining power, the coefficients of Model 3.7 suggest that the parliament-selected presidents are more effective in blocking potential coalitions that they dislike than the popularly elected presidents. Therefore, our naïve expectation based on the power of the mandate given by the popular vote (Hypothesis 5) does not hold up. However, this should not be interpreted so as to suggest that the popular mandate does not make a difference. Once we control for the timing of the presidential election (Model 3.8), the difference between parliament-selected

\footnote{The test statistic shows a $\chi^2$ value of 59.89 with 6 degrees of freedom. The $p$-value is practically zero.}

\footnote{The difference is -11.51 with $t$-ratio -2.59.}
presidents and the popularly elected presidents goes away, particularly when the latter can claim a more recent mandate than parliament. Indeed, the weakest type can be found when the parliament is more recently elected than the popularly elected president. This is the same as the previous estimation results in Table 3.2 and thereby confirms our expectation that a popular mandate can make a difference in the relative bargaining power of the president (Hypothesis 6).

Comparing Model 3.5 and Model 3.8, we also find an interesting change in the coefficient for Minimal winning coalition. Once I include variables associated with the president, the coefficient estimate achieves a conventional significance level and stays robust in further variations. I think this change suggests some distortion induced by the president. That is, if we control for this distortion, the true impact of minimal winning criterion becomes clearer. A probable conjecture would be that the Prime Minister might need to include the presidential party in his proposal of government for approval - as suggested by our expectation and confirmed by the results - even though it will make the potential coalition lose minimal winning status. If this is the case and it happens frequently, then we would have this kind of result. However, this conjecture requires more scrutiny.

Perhaps, the most substantively important finding revealed by explicitly considering the role of the president would be the relationship between the two variables: Ideological distance from PM and Ideological distance from presidential party. As we can see in the table, both variables show statistically significant and substantively strong negative effects consistently across the models. The two negative coefficients imply that the ideological position of the actual government would be somewhere in the middle of the two powerful players when the PM and the president are of different parties. If we only know the ideological position of the Prime Minister designate, we can broadly predict that the resulting government will be centered around the Prime Minister designate. However, according to our result, if we know the two

\[ \text{For the variable, Presidential party in coalition, the difference is 0.65 (t = 0.63) and for Ideological distance from presidential party, 4.65 (t = 0.70).} \]

\[ \text{As before, I reestimated Model 3.8 on a data set excluding one country at a time. The results are robust. No noteworthy differences were found in these estimations. The estimation results are available upon request.} \]
ideological positions of PM and president, we can narrow down our prediction by adding direction.

In sum, these estimation results provide substantial evidence for the influence of presidents on the outcome of coalition formation by the successful Prime Minister designate. Specifically, we have found that a potential coalition is more likely to form when it includes the party of president and that a potential coalition ideologically distant from the president is less likely to form. Once again, parliament-selected presidents and popularly elected presidents with a more recent mandate than parliament exhibit larger impacts on the outcomes. However, even a popularly president with a relatively old mandate is shown to have substantial influence on the outcome by pulling the policy direction of the coalition in their favor.

3.4 Concluding Remarks

The role played by the presidential head of state in the government formation process in a multiparty parliamentary environment has received little attention in the literature, regardless of whether the president is elected by parliament or by popular vote. Building upon the previous literature on coalition politics, I have conducted an in-depth investigation on the influence of presidents on the two most important aspects of government-formation outcomes: the identity of the Prime Minister and the party composition of the coalition. In doing so, I have also focused on the variations of influence derived from the different modes of presidential election and the relative timing of popular elections.

The separate estimation on the outcomes of bargaining process provides substantial evidence for the influence of the presidential heads of state throughout the whole hypothetically disaggregated government formation bargaining processes. In both estimations, the models that explicitly include the variables associated with the presidential heads of state generate more accurate predictions of the actual outcomes than the models that do not.

With regard to the appointment of the prime minister, the estimation result
shows that there indeed exist disproportionate advantages to the larger parliamentary parties, confirming the findings of previous literature. Since these effects of the largest party status and the relevant seat share are so dominant, the increase in the explanatory power of the models that take into account the influence of the president is relatively modest, although still statistically significant. However, the first stage estimation highlights somewhat critical differences in the mechanisms of influence associated with different types of presidents.

The estimation result clearly shows that the party of parliament-selected president has a special bias in the appointment of prime minister that cannot be accounted for by the ideological proximity. The magnitude of coefficients of the model suggests that when the party of the parliament-selected president is the largest parliamentary party, it is almost always appointed prime minister. Even if it is not the largest, it has a good chance of winning the premiership particularly when the margin of seat share between the largest parliamentary party and the party of the president is relatively small. However, the result does not support the expectation that the ideological distance from the president is significantly related with the appointment of prime minister when the president is selected by parliament.

In contrast, the influence of the popularly-elected presidents appears to have an opposite pattern. The result shows that parties are less likely to be appointed prime minister, the more ideologically distant they are from the popularly-elected presidents. That is, it suggests that the popularly-elected presidents are very effective in avoiding an ideological opponent as the prime minister. However, the result also shows that we do not find statistical evidence of special bias for the party of president other than the ideological proximity. A further introduction of a variable measuring the relative timing of elections between the president and the parliament reveals that the influence mainly comes from the cases when the popularly elected presidents have a more recent mandate than parliament at the time of government-formation bargaining.

With regard to the formation of government coalition by the successful prime minister designate, the estimation result shows that the two different types of presi-
dents have strong and similar influence in determining the outcomes. For this stage of bargaining process, the increase in the predictive power of the later models that take into account the influence of the president is very substantial. Particularly, we find from both types of presidents that potential coalitions are more likely to form when they include the party of the president and that potential coalitions are less likely to form, the more ideologically distant they are from the president. We also find again that a more recent mandate for the president strengthens this empirical regularities.

It appears that the contrasting result regarding the appointment of prime minister might reflect the differences in the preferences of the presidents associated with the methods of their elections. The result suggest that the popularly-elected presidents are likely to have more policy-oriented preferences than the parliament-selected presidents. When the presidents are elected by parliament – or a similar national organization – where party influence is virtually absolute,\textsuperscript{46} the presidential candidates are often chosen from senior party members. Hence, they normally have longer political careers than their counterparts and they are likely to have built strong ties with their own parties that cannot be fully explained by the ideological proximities between them. Moreover, they have incentive to build a broader base of support within parliamentary parties given that their election normally requires an extraordinary majority. In contrast, when the presidents are elected by popular vote, their electoral constituency is not the members of parliamentary parties but the general public. Thus, they are likely to be much freer from the partisan concerns over the matters that are not directly related to the national policy making such as the distribution of office-related spoils than their counterpart.

As we know well, the appointment of prime minister attracts great attention by the observers. The potential cost of asserting preferences for the president would be much higher at this stage than the later stage of bargaining process. Thus, the constraints imposed on the presidents are very different. Severe constraints imply, on one hand, that we are less likely to observe the presidential influence on the outcomes

\textsuperscript{46}For example, the German Federal President is elected by an absolute majority of votes in the Bundesversammlung which consists of the members of the Bundestag and an equal number of delegates elected by the Land Parliaments.
of bargaining process. On the other hand, we can also expect that the differences in the preferences would be revealed more clearly under severe constraints. I believe this line of reasoning corresponds well to the differences of the influence with regard to the appointment of prime minister as well as the substantive and similar pattern of the influence with regard to the appointments of cabinet ministers other than the prime minister. However, this is just one conjecture out of many possible alternative explanation. Comprehensive understanding requires closer scrutiny. An in-depth comparative analysis on the presidential elections in the two political systems would be a good starting point.

Combined together, the findings suggest that we can enrich our understanding of the government-formation bargaining processes in these political systems and, thereby, produce better predictions for the actual outcomes by explicitly taking into account the roles and preferences of the presidents in these democratic political processes. In particular, the results provide strong empirical evidence that the presidents in these political systems have effectively induced preferred governments among potential alternatives. The result suggests that the parliament-selected presidents appears to have a much stronger influence in shaping the outcomes in their favor than they are commonly perceived to have. It also suggests that a more recent mandate for the president than the parliament makes substantial differences in the influence over the outcomes when the presidents are elected by popular vote.

As I repeatedly pointed out, the strong association between the parliament-selected presidents and the formation outcomes is a somewhat unexpected result. The expectation that the influence of the parliament-selected presidents would be weaker than that of the popularly-elected presidents has been consistently rejected throughout the analysis. Recall that the expectation is based on the popular mandate of the latter. However, it does not imply that the popular election of the president has no consequence on the bargaining process as we can see through the effect of the relative election timing between the president and the parliament in the political system where the presidents are elected by popular votes.

A close examination suggests somewhat dynamic relations between the presiden-
tial election and the formation of new government in these political systems. Given the nature of the political cycle, it appears that bargaining between parties to form a government takes place long before the incumbent government is terminated, in the countries with the parliament-selected presidents. One of the focal points is the presidential election. Vigorous presidential election campaigns are often conducted in these countries and a party nominee is eventually elected by some parliamentary majority. Most often, this majority is identical to the coalition that supported the incumbent government, but it is not necessarily true. But the parliamentary majority that elects the president has been virtually always successful in forming a new government when the incumbent government is terminated, and the principal beneficiary has often been the party of the president. For example, when Gustav Heinemann [SPD] was elected the German Federal President in May 1969, the government was a coalition of the Christian Democrats [CDU/CSU] and the Social Democrats [SPD]. Both parties in the coalition government nominated own presidential candidates in the election. Heineman was elected with the support of the opposition liberals [FDP] at the third round of voting which requires a simple majority of votes cast. After the general election in September, the coalition of the SDP and the FDP formed a government even though the CDU/CSU was the largest parliamentary group. As an another example, the first socialist Italian Prime Minister, Bettino Craxi, was appointed by also the first socialist President Allesandro Pertini in August 1983. His cabinet lasted almost 3 years – the second longest cabinet in Italian Post-War history.

The formation process under the popularly elected president also reveals a very interesting dynamism. Recall that we do not count “a formal resignation” as a courtesy to a newly elected president as a condition to count a new government if there is no change in the partisan composition. Therefore, in our analysis, whenever there is a government formation opportunity immediately after the parliamentary election, the president has a distant mandate. We know from the previous result that the influence of the president is weak in that case, even though we can still observe some influence on the cabinet composition. After a new president is elected, if the incumbent government is terminated and followed by a new government without an

\footnote{For example, it took 28 ballots for Giovanni Leone to be elected the sixth postwar President of Italy in 1972.}
election, we have seen that the resulting government is more closely aligned with the ideological preference of the president. Thus, the results imply a dynamic mechanism for the citizen control of government in this political regime.

As a final remark, I would like to point out that our analyses suggest an important implication for a normative aspect of democratic process: Identifiability, – the ability of voters to identify the likely governments that will form after the election (Strøm 1984) – a necessary condition for a prospective voter to use elections as an instrument to control the national policy directives (Powell 2000). We have seen that our ability to forecast the government formation outcomes can improve significantly by explicitly considering the variables associated with the president. If we can do this, so can the voters in these democracies.

Thus far, I have focused exclusively on the influence of presidential heads of state on the government formation bargaining process in European democracies. Unlike the governments in the presidential systems, governments in these political systems do not have a fixed term of office. That is, they can collapse at any moment during their term of office. Coalitions are not as cohesive as a single party. Unfolding political events might well change the preferences of the parties in government coalition. Therefore, a government in this environment remains in office based on a continuous process of bargaining and negotiation between parties in parliament. Thus, even the termination of government is also an outcome of bargaining process. In the next chapter, hence, I will examine the influence of the presidential heads of state in the government termination process in European democracies.
Chapter 4

The President in the Government Termination Process

In almost all European democracies, governments can stay in office only if they are not opposed by the parliament. In other words, governments can fall on any day when they lose the confidence of parliament. Indeed, many governments in European democracies have collapsed before they fulfill their full potential terms. This fact has led many scholars to study the duration and termination of governments and it has been one of the most important research topics in comparative political science.

Most earlier studies have focused on the structural attributes of the governments, party systems, institutional arrangements, or regime types as determinants of the stability of governments (e.g., Strøm 1985; Warwick 1979; Laver and Schofield 1990). More recent researchers have emphasized the destabilizing effects of external critical events (e.g., Browne et. al. 1986). These two empirical research traditions have been later synthesized by King, Alt, Burns, and Laver (1990), who propose a unified model of the duration of government incorporating both hazard rates and structural attributes.¹

Generally lacking in this research have been the interactions of the parties in government and parties in parliament upon the arrival of potentially critical events. This gap has been filled by the work of Lupia and Strøm (1995). Using a game-theoretic model, Lupia and Strøm (1995) show that the same exogenous shock – represented by a credible opinion poll revealing the electoral strengths of parties if an election were to take place immediately – may result in different outcomes depending on the strategic interactions among the parliamentary parties constrained by the legislative and electoral institutions.

Since Lupia and Strøm’s (1995) pioneering work, many scholars have studied

¹Excellent surveys on the study of government duration can be found in Warwick (1994) and Grofman and van Roozendaal (1997).
the effects of various institutional arrangements on the stability of the government by constraining the interactions of politically relevant players including the prime minister, a pivotal government partner, and parties in opposition (e.g., Huber 1996; Diermeier and Feddersen 1998; Baron 1998; Huber and McCarthy 2001; Strøm and Swindle 2002). For example, Huber (1996), Diermeier and Feddersen (1998) and Baron (1998) show how the ability of governments to tie their fate to a particular bill – the confidence vote procedure – may induce the cohesion of voting behavior in the ruling coalition and, hence, the stability of government. These studies have made great contributions to our understanding of the duration and termination of governments.

What has still been missing in this research tradition, however, is the role of the heads of state in the government termination process. In most previous theoretical and empirical literature on the study of government duration, the head of state has been assumed away, even when the head of state is an elected president. For example, many studies mentioned above implicitly or explicitly equate the defeat of government in the vote of confidence (or no confidence) to parliamentary dissolution. As will be shown shortly, this is not an appropriate assumption for the countries of our interest in this study.

The primary goal of this chapter is to explore, theoretically and empirically, the effect of presidents on the duration of government. In particular, the analysis focuses, as a potential expanlan of the government termination, on the relationship between pivotal government parties and presidents, which has been thus far ignored in the literature. As I will show in the following section, parliament-selected or popularly-elected presidents in European democracies have great discretionary power over the dissolution of parliament once the government loses the confidence of parliament. Then it should be natural to assume that these presidents will use the power at their disposal to choose their preferred outcomes among the alternatives. If parties are not myopic, then this anticipation should also affect the parties’ decisions whenever

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2For example, Lupia and Strøm (1995) explicitly assume that a failed vote of confidence is a necessary and sufficient condition for dissolution and new elections (654). As an opposite example, Diermeier and Feddersen (1998) assume that dissolution and election is not allowed after the defeat of government in their model of the legislative voting.
they vote on a major bill or a motion that can determine the fate of the government.

An exception to the neglect of the role of the president in the government termination process in the literature can be found in Strøm and Swindle (2002), who examine the relationships between various constitutional rules on the dissolution of parliament and the frequency of early elections in most West European democracies. In particular, they argue that when the head of state has unilateral dissolution power, early dissolution will be more common when the head of state is of a different party than the prime minister (Strøm and Swindle 2002, Hypothesis 6) and, hence, the incidence of dissolution in this country will differ from that in the countries where the head of state can only veto a proposal made by the Prime Minister (Hypothesis 4). However, the effects do not appear to be especially strong in their analysis.³

The following analysis is similar to theirs in the sense that we both assume that institutional arrangements affect the incidence of strategic parliamentary dissolution by providing different powers – e.g., veto or proposal power – with each player and that the anticipation of response from other player vested with different power is the driving force behind the empirical regularities that we expect to find.

Their primary interest, however, lies in identifying systematic institutional differences that may affect and constrain the ability of opportunistic politicians to engage in strategic timing decisions on the dissolution of parliament. Hence, their data set is very inclusive – from constitutional monarchies to semi-presidential regimes – and, more importantly, their analysis does not take into account the government termination accompanied by the reorganization of government power without an election. Therefore, in a strict sense, their analysis focuses on the termination of the parliament, not the government. By design, thus, their analysis can highlight effectively the differences in the practices of parliamentary dissolutions under different institutional rules, but their exclusion of specific type of the termination of government prevents us from fully assessing the strategic interactions that occur within the parties in coalition and the president on the verge of government termination.

³In fact, they are not statistically significant at the conventional .05 level in two-tailed tests.
In this chapter, I take both types of event – early election and non-electoral reorganization of government power – into account to explore the influence of the president in the government termination process while focusing exclusively on the Western European democracies that have elected presidents as a head of state. Therefore, their study and this chapter are complimentary. The analysis of this chapter provides strong evidence that the power of the president over the parliamentary dissolution – specifically the power to call or not to call an early election when the government loses the parliamentary confidence – may affect not only the incidence of early election but also that of non-electoral transfers of government power.

The chapter proceeds as follows. In the following section 4.1, I briefly survey the constitutional powers of the president in European democracies. In section 4.2, I derive theoretical hypotheses based on these findings. Section 4.3 provides the results of empirical tests on the hypotheses. The final section concludes the chapter with a brief discussion of the implications of these findings to the politics in the systems where the head of state is an elected president.

4.1 Dissolution Powers of Presidential Heads of State: Survey

Parliamentary dissolution is always a possibility whenever parties in parliament cast a vote that can determine the fate of the government. It can be tabled by the opposition (the vote of no confidence) or by the government (the vote of confidence). It can also be a vote on a major bill prepared by the government, e.g., the budget. On such an occasion, the government will usually step down after defeat, and either dissolution of parliament or a new government formation without election will follow. Thus, I begin the analysis with a brief survey of the dissolution powers of presidential heads of state in nine West European democracies.

Strøm and Swindle (2002) provide a categorized table reporting a survey of the dissolution powers of 20 democracies covering most of the West European countries except Greece and Portugal. The table effectively shows the great variation in the dissolution procedures of these 20 countries. But I find the table is too simple to depict the process in our countries of interest. Thus I compiled the constitutional
provisions regarding parliamentary dissolution in these countries. Table A4 in the Appendix 4 reports the results focusing on the role of the presidents in particular.⁴

Although Strøm and Swindle (2002) emphasize great variety in their discussion of dissolution powers, we find a rather important commonality in the table, after we restrict our attention to the nine countries with presidential heads of state. In most of the countries of interest, the presidents can block premature elections from occurring until the end of “the constitutional interelection period” (CIEP), even if parliamentary majorities want to go to the polls, which is quite contrary to our common conception. The exceptions are Austria, Greece, and Ireland. The Austrian Constitution allows an alternative way to dissolve parliament by providing the Nationalrat with the right to decide its own fate by simple majority voting. In Greece and Ireland, the president cannot refuse the request of the government to dissolve unless the government has lost the confidence of parliament.⁵ Given that the confidence of parliament requires majority support, we can conclude that, in all the nine countries under investigation, no single minority party⁶ – even if it holds the premiership – can force the president to call early elections, unless election is preferred by the president to any other options.⁷

Things are somewhat different if we focus on the initiative. We see great variation, indeed. Setting aside some time-related restrictions, however, we can still find that some countries can be grouped together. First, there is a group of countries in which the president can dissolve parliament even if it is opposed by a parliamentary majority. These countries constitute a majority group which includes Austria, Finland (before 1991), France V, Greece (before 1986), Iceland, Italy, and Portu-

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⁴Another excellent survey on dissolution powers can be found in Bergman et. al. (2003). The primary sources are English translations of constitutional documents provided by the International Constitutional Law project, available at <http://www.oefre.unibe.ch/law/icl/>.

⁵In Greece, the request should be made by the cabinet as a whole (Trantas et.al. 2003, 388), whereas the request can be made by the Prime Minister unilaterally in Ireland, even if the government is a coalition.

⁶This is also true for parties, or factions within a party, as long as it is minority.

⁷Strøm and Swindle (2002) call this ex post veto power. According to Bergman et. al. (2003), this is also true for the hereditary monarchs in most other West European democracies except Denmark and Sweden since 1975 (159 - 164).
gal. In the rest of the countries, the president cannot dissolve parliament with his or her own initiative. This group can be further classified into two subgroups. The first subgroup consists of countries in which the initiatives belong to the prime minister without qualification. Finland (since 1991) and Ireland constitute these cases. Germany and Greece comprise the remaining subgroup. On the one hand, the president can dissolve the parliament when the parliament is unable to elect a new government supported by a parliamentary majority. On the other hand, when there exists an incumbent government, which has been given the confidence of parliament, the government has the power to demand the dissolution of parliament, with quite different qualifications. Other than the case described above, dissolutions can only occur when the request has been made by the defeated Federal Chancellor in the vote of confidence in Germany; and when the request has been made by the cabinet as a whole, which has been given a vote of confidence in Greece.

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8I interpret that hearing is not equivalent to “approval.”

9According to Bergman et. al. (2003), the President of Finland can dissolve parliament with his or her own initiative even after the 1991 Amendment (160). It is not clear whether the President can call a new election without a proposal by the Prime Minister. It has never been tested since 1991.

10Based on this provision, dissolutions occurred twice in Greece, once in November 1989 and once in April 1990. Thus, Greece had three general elections – including the general election in June 1989, which provided reasons for the dissolution in November 1989 by yielding a hung parliament – in less than one year.

11Under these constraints, three early elections have occurred in the entire post war German history. The first dissolution occurred in 1972 after the failed confidence vote for W. Brandt. The second occurred in 1983 after the failed confidence vote for H. Kohl. The most recent dissolution in 2005 occurred after the failed confidence vote for G. Schröder. In all these cases, the defeat of the government was intended in that the government advised its parliamentary members not to vote for the government, and absolute majority of the full membership in the Bundestag is required to win the confidence vote. Except for the first instance in 1972, the government had a majority in the Bundestag. Even in 1972, the vote of confidence occurred after the the failure of a constructive vote of no-confidence motioned by then opposition CDU/CSU, and the cabinet members did not participate in the voting to ensure the defeat. In the first two instances, the president and the prime minister had the same party affiliation. Although they were from different parties in 2005, the president’s party (CDU) had a big majority lead in the opinion polls when he decided to allow the election. Thus, Schröder’s decision was very risky and unexpected. The results were very close, but the CDU/CSU won the plurality (Keesings, various issues).

12When the Mitsotakis single party (New Democracy [ND]) government lost its absolute majority due to the defection of its own members, Prime Minister Mitsotakis requested then President Karamanlis dissolve the parliament on September 9, 1993, while the opposition was preparing the motion of no confidence. Earlier on March 29, 1993, the Mitsotakis government survived a vote of no confidence tabled by the opposition Panhellenic Socialist Movement [PASOK]. The Greek Constitution prescribes that a new vote of no confidence cannot be submitted for 6 months unless
What conclusions can we draw from these descriptions on the president’s constitutional powers over the dissolution of parliament in these countries? We find that the president has great discretion over the fate of parliament once he or she finds that there is no clear majority supporting the incumbent government. Simply, it is neither the parliament nor the government that decides the fate of the parliament in the event of a government crisis, contrary to the assumptions that have been made in the literature for the countries under investigation. Indeed, we find that the president can call an early election with relative ease in many countries\(^\text{13}\) and he/she can also always refuse to dissolve the parliament, and thereby start a new government formation process without election, after the government ceases to enjoy parliamentary support.

However, it should be noted that the president’s decision is still constrained by the alternatives that he or she has at the moment. The president can solely determine neither the outcome of election nor the outcomes of renegotiating bargaining process. Particularly, I do not think that the president can dissolve the parliament and call a premature election without any sign of government crisis, even if the president is allowed to do so in some countries. The consequence of abusing this power can be found in the notorious French 1997 election in which the president’s party, Rally for the Republic (RPR), lost heavily and the opposition bloc headed by the Socialists (PS) won the majority.\(^\text{14}\) We can view this as a behavioral – not institutional – it is signed by a majority of all deputies – the exact number for the motion to succeed – once a motion of no confidence fails. President Karamanlis, who was also a founder of ND, duly called a premature election on the following day. According to Trantas et. al. (2003), the dissolution of parliament has practical importance since, only in this case, the incumbent government administers the election. However, the 1993 election resulted in a majority for PASOK (Trantas et. al. 2003, 388; Keesing’s).

\(^{13}\)What option has been left for the prime minister who has been defeated or expects a certain imminent defeat? He or she either has to tender resignation to the president or request to dissolve the parliament. If he or she chooses to resign, it might not be too hard to find a way to dissolve the parliament if the president wants to do so.

\(^{14}\)On April 21 1997, President J. Chirac dissolved the National Assembly, which had been elected in 1993, thus, one year ahead of the scheduled election. His party (RPR) and junior partner (UDF) had a considerable margin of majority – 470 out of 577 – in the National Assembly. President Chirac justified his action based on the necessity of cohesive parliamentary support for the government in the negotiations with other European countries. But the European issue was not placed in the foreground during the electoral campaign (Grunberg 2000, 120). Various explanations have been
tional but real – constraint imposed by the anticipated reaction from the voters to the president. However, all political parties still know that the president will invoke – or refuse to invoke – this power with little hesitation if proper reasons are given.

If this is true, then it should affect the parliamentary parties’ decision to terminate the government. Termination of the incumbent government cannot be the end of the story. If parties are rational, they will incorporate their anticipation about the aftermath of the termination every time they cast a vote in parliament that can potentially put the survival of government in danger. In virtually all previous theories on government termination, the aftermath of the termination of government has been treated as a decision made entirely by the legislative parties or an exogenously given reversion point (e.g., Lupia and Strøm 1995; Huber 1996; Baron 1998; Diermeier and Feddersen 1998; Diermeier and Merlo 2000; Huber and McCarthy 2001). The examination on the president’s constitutional power over dissolution clearly suggests that this is not quite a plausible assumption. Thus, in the next section, I will explicitly incorporate the role of the president into the process and examine the potential distortions in the outcomes made by the strategic consideration.

### 4.2 The Process of Government Termination

Based on the previous examination, I start by making an explicit assumption that the president can unilaterally decide to call – or not to call – an election after the government collapses before the parliament reaches the end of CIEP.\(^{16}\)

I assume first that any government party, denoted by \(c \in \mathcal{G}\), where \(\mathcal{G}\) is a government coalition, can defect at any time during the tenure of government. The defection can take any form, such as a government partner voting against a major

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15Strøm and Swindle (2000) are exceptional in that they focus on the decision process of calling an early election where the prime minister has sole proposal power and the head of state has an \textit{ex post} veto power over the decision.

16I admit that this assumption is only partially true for the countries where the president is not allowed to call elections with his or her own initiative.
bill or resigning from cabinet. The Prime Minister's submission of a formal resignation and/or proposal of the dissolution of parliament to the president, denoted by \( p \), is also considered as a defection. I also assume that any member’s defection from the government coalition provides a sufficient condition for a termination of government.\(^\text{17}\)

The decision-making structure that each government party faces is depicted in the following Figure 4.1, starting with the decision of any government party.\(^\text{18}\) If a government party, \( c \), decides not to defect, there is no change in the government, so the outcome is the Status Quo (SQ). After the defection is made, the president then decides whether to call an election. If the president, \( p \), decides to call, Election (\( E \)) is the outcome. If, on the other hand, the president decides not to call, the outcome entails non-electoral renegotiation to form a succeeding government, say, Replacement (\( R \)).\(^\text{19}\)

\[\text{A government party \( (c \in G) \)} \quad \text{defect} \quad \text{President \( (p) \)} \quad \text{do not call} \quad \text{call an election} \]

\[\text{Status Quo \( (SQ) \)} \quad \text{Replacement \( (R) \)} \quad \text{Election \( (E) \)} \]

**Figure 4.1: Government Termination Process with Presidents**

\(^\text{17}\)Therefore, I am implicitly assuming that there exist an opposition which always vote against the government and that the government is a minimal winning coalition.

\(^\text{18}\)I am assuming that the whole duration of government is divided into a number of discrete time intervals and that a single government party is randomly chosen to decide its own move at the beginning of each time interval.

\(^\text{19}\)For better understanding, we might interpret the outcomes as the ideological positions of the succeeding governments after the terminating events.
Suppose the preferences of a government party and the president over the outcomes are represented by a utility representation, \( u_i(\cdot) \), \( i \in \{c, p\} \). Then the following is the necessary condition for a government party to defect, i.e., a government termination occurs only if:

\[
\text{Either } u_c(R) > u_c(SQ) \text{ or } u_c(E) > u_c(SQ).
\]

In words, a government party either prefers replacement or election to the status quo government. Before going further, let us briefly discuss when this condition is likely to be met for each separate case.

First, \( u_c(R) > u_c(SQ) \): If all else equal, a government party would normally prefer to sustain the government because being in the government coalition entails an important control over agenda-setting power while renegotiation implies uncertainty that it might lose the privileges (e.g., Baron 1998; Diermeier and Feddersen 1998). However, we can think of several scenarios that can possibly make this relationship unstable. First, there might be a change in the policy preferences of any of the parties in the parliament. Leadership change in a party in government or opposition might well bring this about. In any case, it might well change a coalition member’s relative preference over the outside options. Also, some particular issue might become salient. For example, if abortion becomes a national issue, then the cost of maintaining a coalition between liberal and conservative parties will increase. In addition to these, there are certain party characteristics that make a party more likely to be included in every government, for example, median status or president’s party. These parties are very likely to have relatively lower opportunity costs. All these events, independently or collectively, can possibly disrupt the above preference ordering.

Second, \( u_c(E) > u_c(SQ) \): A public opinion poll taken during the duration of government might well bring about this change. Although not impossible, it is unlikely that a government party experiences this preference change shortly after an election. As we all know well, however, an election resets the life expectancy clock of the legislature in most European democracies\(^{20}\) while the incumbent government will

\(^{20}\)Sweden is an exception in that an extraordinary election does not replace the regularly scheduled
ultimately terminate when it reaches the end of the CIEP. Therefore, this preference ordering become increasingly more likely to occur as the regularly scheduled election approaches (Lupia and Strøm 1995; Diermeier and Stevenson 1999, 2000).

It is important to bear in mind that these preference changes may or may not occur to a party during the entire duration of the government. In this sense, we might interpret the change of preference as a random process (Browne et. al. 1986; King et. al. 1990). All the following analysis focuses on what would happen to the survival of government if a preference change ever occurs.

Quite obviously, if neither of the above two conditions are met for any of government parties (i.e., \( u_c(SQ) \geq \max\{u_c(R), u_c(E)\} \), for all \( c \in G \)), then there will be no government crisis or termination. On the other hand, if both of the conditions are met for any of the parties in government (i.e., \( \min\{u_c(R), u_c(E)\} > u_c(SQ) \), for any \( c \in G \)), the party \( c \) will defect under any circumstances. These cases are not of theoretical interest. Thus, we will focus on the remaining cases.

Then it is straightforward to derive the equilibrium outcomes for the remaining preference order combinations:

- **Status Quo** if \( u_c(R) > u_c(SQ) > u_c(E) \) and \( u_p(E) > u_p(R) \) or

- **Replacement** if \( u_c(R) > u_c(SQ) > u_c(E) \) and \( u_p(R) > u_p(E) \).

- **Election** if \( u_c(E) > u_c(SQ) > u_c(R) \) and \( u_p(E) > u_p(R) \).

Comparison of 1 and 3 reveals an interesting equilibrium behavior. If a government party prefers non-electoral renegotiation to the status quo but it does not want an election to take place immediately, replacement of government can only occur when the president also prefers that outcome to an election. In other words, the government party – which wants to bring about a transfer of government powers – refrains from defecting when it anticipates that the president’s likely reaction will be to call an election and it does not expect to gain much from the early election (1). On the other hand, if the party knows that the president will not call an
election, it can defect and bring down the incumbent government with assurance (3).

Likewise, if we compare 2 and 4, we can see that when a government party expects large electoral benefits from an immediate election but it anticipates that the president will not call an election and that a likely result of non-electoral renegotiation is its own exclusion from the resulting government, the government party will not defect (2). On the other hand, if the party knows that the president will call an election, it can easily defect and cash in the expected benefits from an early election (4).

Although the underlying logic is quite simple and straightforward, the analysis reveals quite consequential effects of the presidents’ dissolution powers on the survival of governments. The result suggests that one of the key factors that influences a party’s decision to defect and bring down the incumbent government is the preference alignment between the president and the party who experiences the preference change. If a party and the president share the same or similar preferences, the party is likely to defect – i.e., terminate the incumbent government – easily whenever it finds a more attractive alternative. If they have opposite preferences, then the party would have to consider the likely response from the president even if it wants to bring about a change.

Now I derive several hypotheses based on this intuition for the empirical analysis in the next section. Obviously the expectation is applicable to any party that can unilaterally bring down a government simply by its own defection.\(^{21}\) Note that we conventionally count a new government whenever there is a change in the partisan composition of government coalition. Hence, any government party would satisfy this condition. However, considering all government parties is not feasible. Therefore, I will focus on some key players and treat the unspecified preference changes of other players as occurring randomly.

To identify the key players, we can ask the following question: “To whom is the necessary condition to defect most likely to occur and under what conditions?” Ob-

\(^{21}\)I will hereby use the term *pivotal* to denote this characteristic.
viously, it is very hard to conceive that a certain characteristic makes a party expect systematic electoral benefits (relative to the status quo) than others. Therefore, I assume that “a positive electoral shock”\(^{22}\) is equally likely to occur any parliamentary party. Then we can focus on the remaining condition that a party prefers a replacement to the status quo. Assuming unidimensional policy competition among parties, the answer is rather simple: it is the parliamentary median.

If we take a look at the manifesto analysis (Budge et. al. 2001), we can find that, although party policy positions are constantly changing, the order is somewhat invariable. That is, we seldom observe the socialist party ideological position to the right of the liberals or the conservatives. Suppose there is a three-party system where the incumbent government is a coalition between the left party and the median party. Then it is quite probable that the coalition with the right is likely to be found more attractive to the median than to the left if there is some change in the policy positions of parties. Moreover, the median is unlikely to be excluded from the succeeding government. Thus, we should anticipate that the necessary condition for defection is likely to be met more frequently – or earlier in time – by the median than by the other parliamentary parties. Once we focus on the median status, then we can easily expect that the median is more likely to defect when it derives little value from the coalition that it currently enters than otherwise. Assuming Euclidean policy preferences for the parties, I formulate the following hypothesis under the *ceteris paribus* condition:

**Hypothesis 1.** *If the median party is a member of the government, a government is likely to terminate more quickly, the more ideologically distant it is from the median parliamentary party.*

Now we consider the relationship with the president. Recall that the analysis suggests that the preference discrepancy between the president and a (pivotal) government party is likely to prevent an opportunistic party from defecting in the anticipation of the reaction from the president. We can also plausibly expect that

\(^{22}\)By this I mean an event that makes a party prefers an immediate election to the status quo government, for example, a public opinion poll. That is, a positive electoral shock is an event that induces \(u_c(E) > u_c(SQ)\) for any \(c \in G\).
the preference discrepancy is likely to be *negatively* associated with the ideological distance between the two players.

For better representation of the idea of negative association, I depict Figure 4.2. In the figure, I assume again that the median is a member of the government and we denote the median by \( m \). To draw the figure I make the following assumptions. First, I assume that all outcomes can be represented by points on the unidimensional policy space.\(^{23}\) Second, I assume that two independent random processes govern the realizations of the two outcomes of defection. I use the term, *event*, to denote the realization of outcome on the ideological space.\(^{24}\) Third, I assume that the replacement outcome is fixed at a point closer to the government party’s ideal point than the status quo is.\(^{25}\)

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\(^{23}\)That is, I assume that all parties in government share the same expectations of the outcomes – i.e., the succeeding government, regardless of whether it is formed through non-electoral renegotiation or after an election – when they decide to defect and that each governmental outcome is represented by its ideological position.

\(^{24}\)The independence assumption implies that I am implicitly assuming that when parties bargain to form a government, the bargaining is purely based on the policy positions and the *current* parliamentary seat shares of the parliamentary parties. The principal difference in the negotiations of government formation with and without an intervening election lies in the different seat shares in the two situations. Therefore, I am assuming that it is not allowed to use unrealized seat share as a bargaining chip in the non-electoral renegotiation.

\(^{25}\)The same holds if we assume a fixed \( E \) and consider the event space for \( R \).
A. President \( (p) \) and the median \( (m) \) are ideologically distant:

B. President \( (p) \) and the median \( (m) \) are ideologically close:

\[ \begin{align*}
& m \text{ does not defect and } SQ \text{ is maintained when } E \text{ is here} \\
& m \text{ does not defect and } SQ \text{ is maintained when } E \text{ is here}
\end{align*} \]

Figure 4.2: Event Space for Election
(Assuming the Replacement Outcome – \( R \) – is Fixed)

In the two panels A and B, the ideological positions of \( m, R, \) and \( SQ \) are the same. The only difference between the two panels is the location of the president’s ideal point, \( p \). The ideological distance between the president and the median in panel A is farther than that in panel B. In panel A, if \( E \) is realized to the left of \( SQ \), the median will always defect. If \( E < R \), the president will not call an election after defection, still the median prefers the replacement government to the status quo. If \( R < E < SQ \), the president will call an election after defection, but the median still defect because it prefers an election to the status quo. However, when \( E \) is realized to the right of \( SQ \), within the intervals depicted in the figure,\(^{26}\) the median will not defect since it will provoke the president to call elections and the party will be worse off. The interval in panel B has the same meaning. If \( E \) occurs within this interval, \( m \) will not defect, but for all other region, \( m \) will defect. An important point is that the interval of A always contains the interval of B if all else equal.

\(^{26}\)The right ending point of the interval in panel A is not depicted. It should end at \( 2p - R \).
Based on this observation, I formulate the following weakening of the relationship proposed by the above hypothesis under the *ceteris paribus* condition:

**Hypothesis 2.** *If the median is a member of the government, a government is likely to last longer, the more ideologically distant the president is from the median parliamentary party.*

Although I assume in the above that a positive electoral shock is equally likely to occur for any parliamentary party, a difference in the ability of the parties to utilize the positive electoral shocks may still exist. In the earlier examination of dissolution powers, we found that the prime minister has the power to propose a dissolution to the president in some countries. Even if this power is not strictly prescribed, prime ministers can always tender a resignation and make a (non-binding) proposal to dissolve parliament to the president. These privileges certainly make the prime minister deserve our attention as a key player.

However, it does not seem plausible that we should expect the prime minister to have the same relationship between the duration of the government and ideological distance that we expect for the median party (Hypotheses 1). The status quo government must have been the best alternative that the prime minister could have achieved through the use of the formateur status.

This consideration leads us to look directly into the relationship between the president and the prime minister, particularly in the case when the prime minister’s party experiences a positive electoral shock. So, consider two situations: in both

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27 We have not formulated the potential influence of the president in the renegotiation bargaining in the present context. However, if we assume that the president might induce his or her preferred government through his or her constitutional power regarding government formation—for example, the selection of formateur—this might be another factor that leads us to expect the relationship in hypothesis 2. Suppose there exist two different governments in a crisis situation. In both cases, the incumbent government is a coalition between the left party and the median party. Also suppose that, due to a recent event such as the appearance of a new issue, the median party finds that the right party is a more attractive coalition partner. The difference is that the president is a member of the left party in the first case and a member of the median party in the second case. If the president can influence the renegotiation bargaining, then the median party in the first case will have a lower expected utility from the renegotiation bargaining than the median party in the second case who has the president on its side. That is, $u_c(R)$ might well be different in the two cases. Anyway, the expectation is the same.
the prime minister prefers an early election to the status quo but, in one case the president is on the prime minister's side and in the other case, the president is on the opposite side. In the first case, the prime minister will tender a resignation and propose an election with relative ease. In the latter case, the prime minister is likely to wait unless he or she expects that the president also prefers an election to non-electoral renegotiation. However, if the president and the prime minister are ideologically distant, it seems unlikely that both would expect large enough benefits from an early election. Moreover, even if non-electoral renegotiation is not particularly attractive to the president, the president is likely to wait, enduring a small loss today, for a better chance to call an election if the electoral prospect is not good enough or particularly bad. Hence, I have the following hypothesis:

**Hypothesis 3.** A government is likely to last longer, the more ideologically distant the president is from the prime minister’s party.

Now we consider the case where the president’s party is in the opposition. As I noted earlier, most presidents in our countries had had long political career before they were elected to the presidency. Hence, they typically had a party affiliation and they rarely changed their party affiliations during their political career. I call the party with which the president is affiliated the *presidential party* in this essay and I assume that the presidential shares the same preferences over the outcomes as the president. Note that now we are comparing the case where the presidential party is a member of government and the case where it is in the opposition. Thus, suppose all else – including the ideological configuration of parties – is the same. The principal

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28 However, it might well require sophisticated pre-crisis manipulation before that movement. No voter would like to observe the termination of government out of blue. Indeed, Smith (1996, 2003) argues that early election calling is likely to decrease popular support for the incumbent government. The underlying logic is as follows: If prospective voters are rational, they are likely to vote for a competent candidate. If the incumbent government is competent, it is likely to wait call elections to maximize its expected tenure. (Recall that a new election resets ‘the legislative clock’). Therefore, If voters observe the incumbent government calling an early election, they will discount their belief about the government’s competency and, hence, will be less likely to vote for the incumbent. Note that the loss induced by calling an early election is calculated from the level of (estimated) popular support at the time of calling an election. Although Smith’s theory is mainly based on the majoritarian system where the voters can easily attribute responsibility, the logic has a certain relevance in multiparty systems, as well.

29 All of our previous hypotheses do not depend on whether the presidential party is in the government or in opposition. The same expectation holds in both cases.
difference between the two cases is the president’s expected utility from replacement government. It is likely to be low in the first case and high in the second case. This implies that when the president is required to take an action due to the defection of a government party, he or she is more likely to call an election in the first case, since it requires a smaller electoral benefit for the president to call than the second case. Then parties in the government coalition are less likely to defect because it might provoke the president to call an election more easily. That is, from the perspective of the other government party, it requires a bigger electoral benefit to defect. On the other hand, in the second case, any party in the government is likely to defect with ease when it finds that the replacement government from non-electoral renegotiation (including a coalition with the presidential party) is more attractive. Still the president may call the election, but it is less likely than the first case. Hence, I have formulated the following hypothesis:

**Hypothesis 4.** A government is likely to terminate more quickly if the presidential party is in opposition than otherwise.

The final hypothesis focuses on a different observable implication. Recall that all the previous analysis is based on our explicit assumption that the president has discretionary power to decide whether to dissolve the parliament by calling an election or to initiate a new government-formation bargaining process without resorting to voters when the incumbent government terminates before the parliament fulfills its constitutionally allowed maximum term. Based on this assumption, the analysis suggest that the president will call an election when the president prefers election to non-electoral renegotiation and will avoid an election when the president does not expect electoral benefits. Moreover, the president will even endure a short-term loss — for example, his or her party being left out of the government — expecting a better chance to call an election. But at the end of the legislative term, the president has to call an election in anyway. We do not know what the probability distribution of electoral shocks for the president would look like. It is also probable that some presidents may not experience positive electoral benefits during the whole legislative term. Over the long run, however, if the president can use the institutional device as we suspect, we can expect the following regularity will emerge eventually:
Hypothesis 5. A presidential party is likely to perform better in early elections than in regularly scheduled elections.

The test of this hypothesis has an important bearing on the whole analysis. A conforming result will provide additional validity for the assumptions that we make for the analysis of government termination and, hence, for our results overall.

4.3 Empirics

In the previous section, I described our hypotheses regarding two different – but closely related – aspects of the government termination process: electoral performance and government duration. Accordingly, in this section, I conduct two sets of empirical analyses on the data set covering nine West European democracies in the post-war period. I follow this process in backward order. That is, first, I examine the statistical association of the electoral performance of government parties and the timing of elections. Second, I investigate the effects of ideological proximity between the president and pivotal government parties on government duration by using standard event history analysis techniques.

Although the two tests require different configurations of the data and analytical tools, both utilize the same concept of “an early election” as a mode of government termination. Thus, we believe, a brief explanation about how we define an early election – and some other related operationalization – is in order.

Defining an early election – and, as a complement, a regular election – is not an easy task, but very important theoretically. Since I use election as an independently sufficient condition for counting a new government, the existence of regular

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30In this study, I count a new government when any of the following terminating events occur: (1) an election, (2) a change in the partisan composition of the cabinet, (3) a change in the Prime Minister, and, finally, (4) a formal government resignation if it is not caused by the election of presidential head of state. This is a standard set of criteria in the study of government duration except the slight modification of condition (4) (Browne et. al. 1986; Strom 1985; King et. al. 1990; Woldendorp et. al. 2000). When a government tenders its resignation, it certainly could choose otherwise, but it decides to provide the president with the opportunity to determine the fate of parliament. Indeed, this constitutes exactly the situation that we are interested in. However, in some countries like Finland, it has been customary to submit the cabinet’s resignation after a presidential election (Nousiainen 2000, 292). I think this type of resignation should be differentiated
elections sets an important constraint on the analysis of government duration. That is, a government may not last longer than the respective constitutional interelection period (CIEP).

The empirical literature on government duration has used censoring mechanisms to resolve this issue since King et al. (1990). Since King et al.’s pioneer work, no one has disputed the necessity of censoring some observations in the study of government duration. However, the question of exactly what observations should be treated as censored still remains controversial. The fact that different censoring schemes are not inconsequential makes the choice even more difficult. There is no correct answer for this question and the right – more appropriately, lease damaging – choice depends on the research objective. For example, Diermeier and Stevenson (1999) censor only government terminations by elections at the very end of CIEP in their competing risk model for dissolution to analyze the effect of approaching mandatory elections on the dissolution hazard rate.

In this analysis, the theoretical expectation is most similar to Diermeier and Stevenson (1999). That is, I am assuming an increasing hazard function – equivalently, a decreasing value of preserving the current parliament – as an underlying dynamic and trying to find the effects of the hypothesized determinants on the duration of government against it. Therefore, ideally I do not want to censor any terminations by elections other than ones by regularly scheduled elections. However, some difficulties arise when I adopt this approach. First, no one in Ireland would conceive an election taking place one or two months prior to the scheduled date as from others for cross-national comparability. Also, I think this is a more conservative way to test our hypotheses. Hence, I impose this modification.

31 For the controversy on censoring, see Warwick and Easton (1992), Warwick (1994), Grofman and van Roozendaal (1997) and Diermeier and Stevenson (1999).

32 Warwick (1994) effectively shows the consequences of different censoring mechanisms on the coefficient estimates, hence, our inferences. In general, the more observations we censor, the stronger the estimates’ statistical significance (116 - 120).

33 We are not aware of any statistical tools for helping us to decide the appropriateness of particular censoring schemes in duration analysis. For the inappropriateness of the likelihood-ratio test, see Warwick and Easton (1992) and Warwick (1994).
an early election for opportunistic reasons (Mitchell 2000, 151). This suggests that there is a certain threshold beyond which the preventive role of the president’s power stops working. I am not sure what the threshold should be. Second, this will make a comparison to the previous literature very difficult. Most of previous works have used a one-year threshold since King et al. (1990). Since I already use a very restricted sample compared with the previous studies, when I have a different result from earlier studies, I cannot be sure what causes the difference. However, I still think the one-year interval from the end of the CIEP is problematic in an important aspect. It is likely to overestimate the effect when there is such an effect.

Therefore, I decide to take a practical approach. I define an early election if it occurs in the first nine-tenths of the constitutional interelection period (CIEP). I use this definition to divide the elections into two subsamples for electoral performance analysis and to differentiate government terminations by elections at the near end of the CIEP for the duration analysis, which will enhance comparability with previous

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34 As an another example, the British convention is that dissolutions in the last year of a governments term are not considered early (Bergman et. al. 2003, 167). Interestingly, both countries have a 5-year of the constitutional interelection period.

35 Precisely, King et. al. (1990) censor governments that lasted longer than 12 months prior to the end of the CIEP, regardless of the mode of terminations or the timing of formation. They justify their decision based on the kernel density estimation of cabinet duration which suggests a bump at that time interval. They believe these terminations should be treated differently from other terminations. Warwick (1994) provides a critique of this censoring scheme. For example, the censoring scheme is particularly problematic for a midterm government that formed more than a year after the previous election. If this is the case, the midterm government is not censored even though it is terminated by the regularly scheduled election. However, Warwick also uses a one-year threshold to differentiate statutory elections and others although the time factor is not an exclusive determinant (29).

36 Recall that the hypotheses expect a potential preventive role of the president’s discretionary power against the opportunistic incentive of the pivotal government parties when they represent different political forces. If there is no such effect, it will not show up no matter what time threshold we use in the analysis. Suppose otherwise. For example, suppose the CIEP is four years and that there exist two types of governments, one that consists of president and pivotal government party with homogeneous preferences – say, government A – and the other one with diverging preferences – say, government B. Suppose further that the true data generating process expects that government A expects to last 25 months and government B 38 months. If this is true and we use a one-year threshold, then the termination of government B will be treated as censored and this will certainly result in overestimation of the effects.

37 Thus, the time threshold corresponds to 3.6, 4.8, and 6 months when the CIEP is three, four, and five years, respectively. This definition is very similar to Bergman et. al. (2003). Strøm and Swindle (2002) use a 90-day interval to define an early election.
research. I will also provide estimation results for duration treating all terminations by elections as uncensored observations if the termination did not occur at the end of CIEP.

4.3.1 Electoral Performance and Early Elections

I begin the analysis by examining the statistical association of the electoral performances of government parties and the timing of elections. In most European democracies, the control of the government by the voters is ultimately maintained by legislative elections. Due to its important bearings on the working of democracy, the electoral effects of incumbency have attracted a great deal of scholarly attention (e.g., Rose and Mackie 1983; Strom 1990; Stevenson 1996). Researchers have often related the economic performance of the incumbent to its electoral fate (Lewis-Beck 1988; Powell and Whitten 1993; Duch and Stevenson 2007). The literature is very large and increasingly sophisticated. However, the potential distortion made by the timing of elections on this relationship has rarely been examined, particularly for systems where single party governments are not the norm.

Given that elections can occur at any time in most European democracies, this paucity of academic interest is rather surprising. We suspect this has to do with the ambiguity regarding who has the authority over parliamentary dissolution, and try to fill this gap by focusing on the nine European democracies where the president has discretionary power to call elections when the incumbent government collapses. However, a thorough analysis of this topic is beyond the scope of this paper. The primary purpose of doing this analysis is to provide validity for the assumption on which our hypotheses of government duration are built, although I think the results deserve further investigation on their own merit.

The data set used for this analysis includes information on all parliamentary elections held in our sample countries from 1948 to 1998.\footnote{The first \textit{democratic} election in each country in the post-war period is excluded for the obvious reason. The first election in our data set is the Italian parliamentary election in April 1948. The last one is the German parliamentary election in September 1998. The primary source of data is Mackie and Rose (1989). Data for the subsequent years have been compiled from \textit{Keesing's Contemporary}...} For the incumbent gov-
ernments, I restrict our attention to the governments at the moment of the decision to call elections. This implies that I do not count as incumbents the caretaker governments whose main task was to administer elections after the fall of the previous government. Initially, I count 116 elections. However, for some elections I cannot identify the party affiliation of the president. Also, in some elections, some parties in the outgoing government made electoral coalitions with opposition parties (e.g., the coalition of the PSI, junior partner in the outgoing government, and the PCI, the opposition, in the Italian 1948 election). I exclude these cases since I cannot reliably calculate electoral performance separately. After these exclusions, I have 100 elections remaining in the data set: 46 early and 54 regular elections as defined above.

For the electoral performance, I focus on the change in vote shares from the previous elections. The variable, Change of combined vote share, measures the change in the sum of vote shares (in percentage) of all government parties from the previous election. Change of vote share is similarly defined for individual parties. However, considering the relatively small number of cases, one big loss or gain might well swamp all the relationships of interest. Therefore, I also report the results for a

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39 I primarily rely on Woldendorp et. al. (2000) for government data, since I use the same definition of government. Various literature by country experts as well as *Keesing’s Contemporary Archive* were consulted to supplement and correct necessary information.

40 Mostly, the Presidents of Iceland.

41 Another case is the Democratic Alliance (AD) in the Portuguese 1983 election. In 1980 election, the PSD, the CDS, and the PPM formed the AD coalition and succeeded in forming a government. But they ran separately in 1983 election.

42 For the same reason, parties that run a joint list in some elections are excluded in the subsequent analysis.

43 The distribution of elections in terms of the proportion of time remaining until the end of CIEP is not affected by the exclusion of the 16 elections.

44 For the French Fifth Republic, I record the vote share in the first round of voting. One might argue that the change in the parliamentary seat share is a more appropriate measure. I do not disagree. Indeed, it all depends on how we conceptualize “winning” in these political systems. It is also possible that we focus on whether the incumbents—collectively or individually—succeed in staying in office. However, I disregard this consideration in that it heavily depends on the bargaining environments after elections. Therefore, I cannot guarantee cross-national comparability. For seat share, the results are consistent with those I report, but with greater $t$-values. I decide to report the result for vote share for better comparability with previous literature.
binary variable, *Vote Winner*, which takes a value of 1 if the government as a whole—or individual party—increases its vote share from the previous election.

The following Tables 4.1, 4.2, and 4.3 report the electoral performances of incumbent governments and individual parties in association with the timing of elections. It is important to keep in mind that the tables are not meant to represent a causal relationship between the calling of elections and electoral performances. It is hardly conceivable that the calling of an election ahead of its scheduled time increases the popular support for the incumbents.\footnote{Rather, it is more likely that the opposite relation holds, if there is any. Recall Smith’s (1996, 2003) argument in footnote 27.} The tables are drawn to highlight whether the respective characteristics—represented in the first columns—help the actors (e.g., incumbent government, prime minister’s party) exploit the benefits of the institutional device available to them in most European democracies. That is, we want to see whether they take the chance of calling an elections when they expect gain or wait for the future as long as they can when they expect loss.\footnote{I do not imply “political surfing” in this context. The same is true in the context of “political manipulation.” I do not control for the economic context in this part of analysis. That is, I disregard by whom and how the wave of popularity is made and assume randomness with regard to economic effects. If I take an example from Table 4.1, there is no reason to suspect that there exist systematic macro-economic differences between governments that include the presidential party and ones that exclude it. The debate between political surfing and manipulation is beyond the scope of this paper. I refer interested readers to Kayser (2005).} If the actors can use this device at their discretion as suggested in the previous literature, we will observe better electoral performances of them in early elections than in regular elections on average.

Table 4.1 reports the results for the electoral performance of incumbent governments as a whole. Consistent with most previous works (e.g., Mackie and Rose 1983; Müller and Strom 2000), incumbent governments lost 59 out of 100 elections and 2.3 per cent of votes from the previous elections on average. However, the table clearly shows that the incumbent governments have performed better in early elections than in regular elections. They lost about 0.6 per cent of votes from the previous elections when the election was called early whereas they lost 3.8 per cent of votes when the election was held at or near the end of the CIEP. In terms of winning and loss (*Vote Winner*), they won 24 out of 46 early elections and only 17 out of 54 regular
elections. The difference suggests some systematic advantages of calling premature elections for the incumbent governments.

### Table 4.1: Electoral Performance of Governments

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Early Election</th>
<th>Regular Election</th>
<th>t/[p]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Governments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>100</td>
<td>46</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Change of combined vote share (%)</td>
<td>μ</td>
<td>-2.315</td>
<td>-0.590</td>
<td>-3.785</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.653)</td>
<td>(0.901)</td>
<td>(0.894)</td>
</tr>
<tr>
<td>Vote Winner (0/1)</td>
<td></td>
<td>0.410</td>
<td>0.521</td>
<td>0.314</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.049)</td>
<td>(0.074)</td>
<td>(0.064)</td>
</tr>
</tbody>
</table>

| **Governments Including** |       |                |                  |       |
| the Presidential Party    |       |                |                  |       |
| n                         | 78    | 34             | 44               |       |
| Change of combined vote share (%) | &mu;   | -2.206         | 0.049            | -3.949 | 3.03 |
|                           |       | (0.710)        | (0.861)          | (0.999) |     |
| Vote Winner (0/1)         |       | 0.423          | 0.618            | 0.273  | 3.18 |
|                           |       | (0.056)        | (0.085)          | (0.070) |     |

| **Governments Excluding** |       |                |                  |       |
| the Presidential Party    |       |                |                  |       |
| n                         | 22    | 12             | 10               |       |
| Change of combined vote share (%) | &mu;   | -2.7           | -2.401           | -3.064 | 0.20 |
|                           |       | (1.609)        | (2.459)          | (2.096) |     |
| Vote Winner (0/1)         |       | 0.364          | 0.250            | 0.500  | -1.18|
|                           |       | (0.105)        | (0.131)          | (0.167) |     |

Note: An early election is defined as an election that takes place in the first nine-tenths of the respective constitutional interelection period (CIEP). The number of observations, sample mean, and proportion are denoted by n, &mu;, and p, respectively. Standard errors are in parentheses. Only governments at the moment of the decision to call an election are considered. Change of combined vote share measures the change in the sum of vote shares (in percentage) of all government parties from the previous election. Vote Winner takes a value of 1 if the government as a whole increases its vote share from the previous election. The t-statistics are for the difference of means and the p-values, shown in brackets, for the null hypothesis that the means are equal.

Before drawing any conclusions, I now divide the incumbent governments into two categories, one that includes the presidential party and the other that does not. Note the big difference in the number of observations for the two groups. The quite small number in the latter category makes it difficult to make any reliable statistical judgement. However, the pattern does suggest a big difference. Most of all, the incumbent governments lost more times in early elections (9 out of 12) than in regular elections (5 out of 10) when they did not include presidential party (Vote Winner).

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47 For the influence of the president on the government formation in West European democracies, see the previous chapter 3.
On the contrary, when the incumbent governments include president’s party, they have done electorally better in early elections than in regular elections in both aspects. That is, the direction is reversed. Thus, the incumbency advantage in early elections that we observe largely come from this group. The difference certainly suggests that not all incumbent governments benefit equally from the power to call premature elections. This provides more reasons to look into the electoral performance of individual parties.

Table 4.2 reports the results for the electoral performances of the individual government parties. All individual government parties constitutes the first category. If we compare the result with the previous aggregate result, we can infer that even the parties in the same government did not share the same electoral fate. Now the winning/loss status does not obtain a conventional level of statistical significance. Looking at the subcategory, if the government party is not the presidential party, there is no difference in terms of vote share across elections and the party is even more likely to lose in early elections (65.4 percent) than in regular elections (62.3 percent), although the difference is not statistically significant.

Now we look at the electoral performance of the Prime Minister’s party.48 We know that some countries in our sample allow the Prime Minister to propose the dissolution of parliament.49 Even if it is not allowed, the Prime Minister plays an important agenda-setting role in most countries. Therefore, it is natural to expect that the Prime Minister would be the primary beneficiary of early elections, given the finding above that not all government parties do equally well in early elections. The result roughly confirms this expectation. The Prime Minister’s party even won 0.1 percent more votes in early elections whereas they lost 2.3 percent of votes in regular elections. They increased their vote share in 22 out of 44 early elections while the comparable figure in regular elections is only 16 out of 53.

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48 In our present data set, the number of Prime Ministers’ parties (97) is less than the number of incumbent governments because of three nonpartisan prime ministers. Those Prime Ministers are G. Pompidou in the French 1962 election, R. Barre in the 1978 election and X. Zolotas in the Greek 1990 election.

49 Those countries are Finland since 1991, Germany, Greece, and Ireland
Table 4.2: Electoral Performance of Individual Parties

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Early Election</th>
<th>Regular Election</th>
<th>(t/[p])</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Government Parties</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>207</td>
<td>86</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td>(\hat{\mu}) (Change of vote share (%))</td>
<td>-0.989</td>
<td>-0.315</td>
<td>-1.468</td>
<td>1.69</td>
</tr>
<tr>
<td></td>
<td>(0.329)</td>
<td>(0.548)</td>
<td>(0.404)</td>
<td>[0.0920]</td>
</tr>
<tr>
<td>(\hat{p}) (Vote Winner (0/1))</td>
<td>0.382</td>
<td>0.430</td>
<td>0.347</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.054)</td>
<td>(0.043)</td>
<td>[0.2305]</td>
</tr>
<tr>
<td><strong>Government Party that is not</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the Presidential Party</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>129</td>
<td>52</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>(\hat{\mu}) (Change of vote share (%))</td>
<td>-0.955</td>
<td>-0.929</td>
<td>-0.972</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(0.378)</td>
<td>(0.670)</td>
<td>(0.447)</td>
<td>[0.9580]</td>
</tr>
<tr>
<td>(\hat{p}) (Vote Winner (0/1))</td>
<td>0.364</td>
<td>0.346</td>
<td>0.377</td>
<td>-0.35</td>
</tr>
<tr>
<td></td>
<td>(0.043)</td>
<td>(0.067)</td>
<td>(0.056)</td>
<td>[0.7261]</td>
</tr>
<tr>
<td><strong>Prime Minister’s Party</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>97</td>
<td>44</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>(\hat{\mu}) (Change of vote share (%))</td>
<td>-1.190</td>
<td>0.107</td>
<td>-2.266</td>
<td>1.96</td>
</tr>
<tr>
<td></td>
<td>(0.608)</td>
<td>(0.929)</td>
<td>(0.778)</td>
<td>[0.0534]</td>
</tr>
<tr>
<td>(\hat{p}) (Vote Winner (0/1))</td>
<td>0.392</td>
<td>0.500</td>
<td>0.302</td>
<td>1.99</td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
<td>(0.076)</td>
<td>(0.064)</td>
<td>[0.0492]</td>
</tr>
<tr>
<td><strong>Prime Minister’s Party is</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the Presidential Party</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>51</td>
<td>23</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>(\hat{\mu}) (Change of vote share (%))</td>
<td>-1.280</td>
<td>0.161</td>
<td>-2.464</td>
<td>1.57</td>
</tr>
<tr>
<td></td>
<td>(0.844)</td>
<td>(1.246)</td>
<td>(1.119)</td>
<td>[0.1236]</td>
</tr>
<tr>
<td>(\hat{p}) (Vote Winner (0/1))</td>
<td>0.392</td>
<td>0.522</td>
<td>0.286</td>
<td>1.72</td>
</tr>
<tr>
<td></td>
<td>(0.069)</td>
<td>(0.106)</td>
<td>(0.087)</td>
<td>[0.0929]</td>
</tr>
<tr>
<td><strong>Prime Minister’s Party is not</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the Presidential Party</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n)</td>
<td>46</td>
<td>21</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>(\hat{\mu}) (Change of vote share (%))</td>
<td>-1.090</td>
<td>0.048</td>
<td>-2.044</td>
<td>1.17</td>
</tr>
<tr>
<td></td>
<td>(0.884)</td>
<td>(1.421)</td>
<td>(1.096)</td>
<td>[0.2509]</td>
</tr>
<tr>
<td>(\hat{p}) (Vote Winner (0/1))</td>
<td>0.391</td>
<td>0.476</td>
<td>0.320</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>(0.073)</td>
<td>(0.112)</td>
<td>(0.095)</td>
<td>[0.2934]</td>
</tr>
</tbody>
</table>

Note: The sample space consists of 46 early elections and 54 regular elections in nine Western European democracies in the post-war period. An early election is defined as an election that takes place in the first nine-tenths of the respective constitutional interelection period (CIEP). The number of observations, sample mean, and proportion are denoted by \(n\), \(\hat{\mu}\), and \(\hat{p}\), respectively. Standard errors are in parentheses. Only governments at the moment of the decision to call an election are considered. Change of vote share measures the change in the vote share (in percentage) of the party from the previous election. Vote Winner takes a value of 1 if the party increases its vote share from the previous election. The \(t\)-statistics are for the difference of means and the \(p\)-values, shown in brackets, for the null hypothesis that the means are equal.

The relationship of the Prime Minister with the president divides this group into two roughly equal-sized subgroups. The comparison of the two groups finds no significant difference. They do relatively equally well in early elections and poorly in
regular elections. However, the relatively small difference in the electoral performances in terms of the timing of elections when the Prime Minister is not a member of the presidential party is not quite in agreement with our common understanding of these systems. Now we move on to Table 4.3, which reports the electoral performances of the presidential parties along the timing of elections.

The first row in Table 4.3 shows the results for all presidential parties. We can find quite a big difference in the electoral performances in terms of the timing of elections. Presidential parties won on average 1 percent more votes in early elections and lost 1.4 percent of votes in regular election. They increased their vote share in 28 out of 46 early elections, but only 18 out of 54 regular elections. We have not observed such difference in the previous tables. They have clearly performed better in early elections than in regular elections.

Below I provide the electoral performances of the presidential parties in four different categories. Out of 46 early elections, presidents’ parties were in government 34 times and in opposition 12 times. When they were in government, they were the party of the Prime Minister in 23 elections and as a junior partner in 11 elections. In all these different cases, they have made positive gains on average in early elections. Also, they have won more times than lost in early elections. Most of all, they have done electorally better in early elections than in regular elections for the corresponding categories.

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50 The mean comparison test results for the electoral performance within each category of elections are not reported in the table.

51 Recall the previous Table 4.2.

52 0.6 percent on average in 34 elections when they were in government. Within this category, 0.16 percent on average in 23 elections when they were also the Prime Minister and 1.6 percent on average in 11 elections when they were the junior partner.

53 All of the relevant $\hat{p}$'s are greater than 0.5.
Table 4.3: Electoral Performance of the Presidential Party

| Presidential Party | Total | Early Election | Regular Election | t/|p| |
|-------------------|-------|----------------|-----------------|---|---|
| Presidential Party |       |                |                 |   |   |
| Change of vote share (%) | \( \hat{\mu} \) | -0.290 | 1.034 | -1.419 | 2.34 |
|                      | (\( \hat{\mu} \)) | (0.540) | (0.729) | (0.755) | [0.0215] |
| Vote Winner (0/1) | \( \hat{p} \) | 0.460 | 0.609 | 0.333 | 2.83 |
|                      | (\( \hat{p} \)) | (0.050) | (0.073) | (0.065) | [0.0057] |

| Presidential Party in Government |       |                |                 |   |   |
| Change of vote share (%) | \( \hat{\mu} \) | -1.047 | 0.624 | -2.337 | 2.46 |
|                      | (\( \hat{\mu} \)) | (0.614) | (0.922) | (0.777) | [0.0166] |
| Vote Winner (0/1) | \( \hat{p} \) | 0.410 | 0.559 | 0.295 | 2.37 |
|                      | (\( \hat{p} \)) | (0.056) | (0.086) | (0.070) | [0.0205] |

| Presidential Party in Opposition |       |                |                 |   |   |
| Change of vote share (%) | \( \hat{\mu} \) | 2.391 | 2.201 | 2.620 | 0.21 |
|                      | (\( \hat{\mu} \)) | (0.948) | (0.975) | (1.792) | [0.8398] |
| Vote Winner (0/1) | \( \hat{p} \) | 0.636 | 0.750 | 0.500 | 1.18 |
|                      | (\( \hat{p} \)) | (0.105) | (0.131) | (0.167) | [0.2531] |

| Presidential Party is Not the Prime Minister's party |       |                |                 |   |   |
| Change of vote share (%) | \( \hat{\mu} \) | 0.740 | 1.909 | -0.294 | 1.79 |
|                      | (\( \hat{\mu} \)) | (0.640) | (0.745) | (0.978) | [0.0800] |
| Vote Winner (0/1) | \( \hat{p} \) | 0.531 | 0.696 | 0.384 | 2.25 |
|                      | (\( \hat{p} \)) | (0.072) | (0.098) | (0.097) | [0.0291] |

| Presidential Party is Not the Prime Minister's party but is in Government |       |                |                 |   |   |
| Change of vote share (%) | \( \hat{\mu} \) | -0.605 | 1.591 | -2.115 | 2.49 |
|                      | (\( \hat{\mu} \)) | (0.790) | (1.181) | (0.902) | [0.0213] |
| Vote Winner (0/1) | \( \hat{p} \) | 0.444 | 0.636 | 0.312 | 1.673 |
|                      | (\( \hat{p} \)) | (0.097) | (0.152) | (0.120) | [0.1092] |

Note: The sample space consists of 46 early elections and 54 regular elections in nine Western European democracies in the post war period. An early election is defined as an election that takes place in the first nine-tenths of the respective constitutional interelection period (CIEP). The number of observations, sample mean, and proportion are denoted by \( n \), \( \hat{\mu} \), and \( \hat{p} \), respectively. Standard errors are in parentheses. Only governments at the moment of the decision to call an election are considered. Change of vote share measures the change in the vote share (in percentage) of the party from the previous election. Vote Winner takes a value of 1 if the party increases its vote share from the previous election. The \( t \)-statistics are for the difference of the means and the \( p \)-values, shown in brackets, for the null hypothesis that the means are equal.

The only exception to this tendency is found when the presidential party is in the opposition. However, if we look at the result, we can see that it is exceptional not because the party performed poorly in early elections but because it performed
well in regular elections, although the number of relevant cases is very small. In 10 regular elections where the presidential party ran as the opposition, it obtained 2.6 more votes on average and 5 wins. This is a very interesting result in that, I believe, it suggests that the parties in government act strategically when the president is in opposition. Even though the president has the power to dissolve and call an early election in many of the countries in our data set, we know that the power is practically restricted to the case when there is a government crisis. Considering this behavioral constraint, one plausible explanation is that government parties do not give the president an opportunity to call an election earlier because they did not expect to gain electorally.\textsuperscript{54} This provides more reasons for us to look into the analysis of government duration.

In sum, the results provide strong support for Hypothesis 5: President’s parties have done better in early elections than in regular election. Additional results show that no other players have performed as well as the presidential party has in early elections. Although the electoral performance of Prime Minister’s party suggests some evidence that it is a beneficiary of this institutional device, the performance is not as good as we would normally expect, particularly compared with the performance of the president’s party. These results provide additional validity to the assumption that we make for the analysis of government duration.

4.3.2 Government Duration

In the analysis of government duration, the key variables of interest are designed to capture the ideological proximities between the president and pivotal government parties, suggested by the hypotheses. To estimate party ideological positions, I rely on the manifesto analysis provided by the Manifesto Research Group [MRG] (Budge et al. 2001).\textsuperscript{55} I use the ideological position of the presidential party as a proxy

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\textsuperscript{54} We are here assuming that the voters’ opinions are not moving very swiftly.

\textsuperscript{55} Particularly, we assume a unidimensional policy space and compute the left-right position of individual parties using the formula provided by Kim and Fording (1998). For convenience, I rescale the measure so that positions take on a possible range of 0 (L) to 10 (R).
for that of the president. Therefore, I cannot use information on governments in which I cannot identify the party affiliation of the president; in which the prime minister is nonpartisan; and in which there is no manifesto analysis available to estimate the party ideological positions. These governments are not included in the data set. I also exclude caretaker, technocratic, and, finally, non-invested governments where the investiture vote is required since I do not think that the same model governs the data generating process of these types of governments as well as others. Finally, the data set for the analysis of government duration consists of a total 196 governments in nine West European democracies from March 1946 to October 2002.

Any of the following events terminates a government: (1) an election, (2) a change in the partisan composition of the cabinet, (3) a change in the Prime Minister, and (4) a formal resignation if it is not caused by a presidential election. From our point of view, terminations by the last three events correspond to non-electoral renegotiation, i.e., Replacement. The dependent variable, Duration, measures the time interval from the date of investiture to the date of termination in months. In the set of 196 governments, Duration has a mean of 22.1 months with a standard deviation of 15.457.

In the following analysis, however, I further restrict the attention to a smaller set

---
56 I admit that this is a very crude measure of ideological position of the president. Indeed, it is very likely to be true that, in a popular election, the presidential candidate of a party might pursue a different policy agenda from that of his or her own party due to the different electoral constituency. It would be better if we had manifesto-like data on presidential elections. But I am not aware of such analysis. Given this constraint, I believe this is the best available measure that I can use in the analysis. A defense also lies in the unitary actor assumption, which is common practice in the theory of coalition politics.

57 For the counting rule of a new government, see footnote 29. The primary source of data is Woldendorp et. al. (2000), since the counting rule is most similar to theirs. Necessary corrections and modifications are made by the author through Keesing's and various available country case studies.

58 In our data set, Germany, Greece, Ireland, Italy, and Portugal require the investiture vote for the formation of new government.

59 March 1946 is the month in which the Pekkala cabinet in Finland was invested and September 2002 is the month in which the second Schröder cabinet in Germany terminated.

60 To make it clear, if the formal resignation due to the election of a new president results in a different party composition of the cabinet, it is a valid termination of government.
of governments. Recall that hypotheses 1 and 2 hinge on the property that the median party can bring down the government on its own by simply defecting. Although the median voter theorem (Black 1958) suggests that any government depends on the implicit or explicit support of the median party for its survival, strictly speaking, not all single defections by the median party can bring down the incumbent government. Therefore, I decide to focus on the environment on which the hypotheses are directly based. After that, I will also provide estimates based on the set of all governments as a robustness check. Thus, in the following analysis, I focus on a set of either (1) minority governments or (2) majority governments of which the median party is a member. I call this set of governments Pivotal Median Governments. This subset consists of 166 governments. Thus, I only lose 30 majority governments that do not include the median party. This small reduction indirectly implies that median status is a strategic advantage in the government formation bargaining. In our set of Pivotal Median Governments, Duration has a mean of 21.9 months with a standard deviation of 15.436.

The key explanatory variables are as follows: (1) Ideological Distance between Government and Median [Hypothesis 1]; (2) Ideological Distance between Median and President [Hypothesis 2]; (3) Ideological Distance between PM and President [Hypothesis 3]; and (4) President in Opposition [Hypothesis 4]. All ideological distances are measured as the absolute distance of ideological positions of the relevant players. The ideological position of government is computed as a weighted average of the ideological positions of participating parties. The weights are given by the parliamentary seat share controlled by the parties, with necessary adjustments representing the total sum of seat shares of the government parties made. President in Opposition is a dummy variable, which takes a value of 1 if the president is not a member of the government.

To control for the effects of other determinants suggested in the literature (e.g., King et. al. 1990; Warwick and Easton 1992; Warwick 1994; Grofman and van Roozendaal 1997; Diermeier and Stevenson 1999, etc.), the following set of variables

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61 Most minority governments in the data set include the median party as a member, although a few minority governments do not. Thus, I still partially rely on the median voter theorem.
are estimated together with the key explanatory variables: *Fragmentation* (Rae 1971) is an indicator of the bargaining complexity in terms of the number and size of parties in parliament. It is expected to have a negative effect on duration since bargaining complexity is likely to make the system more vulnerable to small perturbations. *Ideological Range* is a variable measuring the absolute distance of ideological positions of the most distant pair of parties in a parliament. Theoretically, it captures the attractiveness of outside options for a government party, with higher values of this variable likely to be negatively associated with attractiveness. Thus, I expect a positive sign for the coefficient estimate on this variable.

*Positive Resignation Rule* (De Winter 1995) is a binary variable which takes a value of 1 if a country requires an absolute majority of all members of parliament to pass a vote of no confidence rather than a majority of the votes cast, and 0 otherwise. In our data set, France V, Germany, Greece, and Portugal employ positive resignation rules. It is expected to have a positive effect on duration. *Minority* is a dummy variable taking a value of 1 if a government is minority. We expect a negative association. *Surplus Majority* is also a dummy variable taking a value of 1 if the government includes a member party whose vote does not affect the majority status of the government. Interestingly, this characteristic has rarely received attention in the study of government duration. Either minority status or minimal winning status alone, not both, has been tested in the literature. It is expected to have a negative effect.

*Number of Formation Attempts* is a discrete count variable indicating the number of attempts to form a government. It is another indirect measure of bargaining complexity and, hence, associated with a shorter duration of government. *Postelection* is a dummy variable, which takes a value of 1 if the government formed immediately after an election. It has been suggested to have a positive effect on the duration of government.

Table 4.4 reports summary statistics for the variables in the set of *Pivotal Median Governments*.  

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*It is constructed using the proportion – not percentage – of parliamentary seats controlled by parties in parliament. It varies in the data from 0.522 to 0.839.*

*We defer discussing our expectations regarding this variable until we discuss the estimation result since it is related to the time expectancy that each government faces when it enters governing.*
<table>
<thead>
<tr>
<th>Variables</th>
<th>N&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Mean/Sum&lt;sup&gt;b&lt;/sup&gt;</th>
<th>S.D.</th>
<th>Min</th>
<th>Median</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (months)</td>
<td>166</td>
<td>21.946</td>
<td>15.436</td>
<td>1</td>
<td>18</td>
<td>61</td>
</tr>
<tr>
<td>Austria</td>
<td>12</td>
<td>29.667</td>
<td>17.500</td>
<td>6</td>
<td>27.5</td>
<td>49</td>
</tr>
<tr>
<td>Finland</td>
<td>30</td>
<td>14.333</td>
<td>12.030</td>
<td>1</td>
<td>10</td>
<td>49</td>
</tr>
<tr>
<td>France V.</td>
<td>22</td>
<td>19.182</td>
<td>14.305</td>
<td>1</td>
<td>15.5</td>
<td>60</td>
</tr>
<tr>
<td>Germany</td>
<td>17</td>
<td>31.706</td>
<td>15.983</td>
<td>3</td>
<td>35</td>
<td>49</td>
</tr>
<tr>
<td>Greece</td>
<td>7</td>
<td>31.571</td>
<td>14.976</td>
<td>9</td>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td>Iceland</td>
<td>10</td>
<td>29.600</td>
<td>17.973</td>
<td>8</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td>Ireland</td>
<td>20</td>
<td>30.350</td>
<td>13.743</td>
<td>8</td>
<td>30.5</td>
<td>61</td>
</tr>
<tr>
<td>Italy</td>
<td>39</td>
<td>13.385</td>
<td>8.973</td>
<td>4</td>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>Portugal</td>
<td>9</td>
<td>27.778</td>
<td>17.326</td>
<td>8</td>
<td>21</td>
<td>51</td>
</tr>
<tr>
<td>Fragmentation</td>
<td>166</td>
<td>0.698</td>
<td>0.077</td>
<td>0.522</td>
<td>0.712</td>
<td>0.839</td>
</tr>
<tr>
<td>Ideological Range</td>
<td>166</td>
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<td>2.129</td>
<td>0.748</td>
<td>5.057</td>
<td>9.322</td>
</tr>
<tr>
<td>Positive Resignation Rule</td>
<td>166</td>
<td>0.472</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Minority</td>
<td>166</td>
<td>0.439</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Surplus Majority</td>
<td>166</td>
<td>0.472</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Number of Formation Attempts</td>
<td>166</td>
<td>1.319</td>
<td>0.817</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Postelection Government</td>
<td>166</td>
<td>0.501</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Note:** † A pivotal median government is either a minority or a majority government of which the median party is a member.  
<sup>a</sup> There are 41 cases in which a change of the president during the tenure of a single government provides multiple – two – observations.  
<sup>b</sup> Entries are the mean values for the continuous variables and the sum for the binary variables.

---

I estimate the model of government duration using the censored Weibull parametric specification.⁶⁴ According to the Weibull specification, the hazard rate – i.e., the rate at which governments terminate at some duration given that they reach

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⁶⁴In practice, I transformed the data set into a series of monthly observations so that I could utilize the technique of estimating time-varying covariates. In the model, a change of the president due to a presidential election during the duration of government brings an important change in the attributes of government durability. Therefore, it is a necessary step. Other standard parametric specifications were also estimated including exponential, lognormal, gompertz, and gamma distribution model. Cox-Snell residual tests and Akaike Information Criteria (AIC) were used to evaluate the models. All these tests suggested that a Weibull parameterization performed best. A Cox-proportional hazard model was also estimated. The estimates from the two models were very similar but with smaller estimates of standard error from the Weibull model. Thus, I report the results from the Weibull models (Box-Steffensmeier and Jones 1997, 1436). Schoenfeld residuals tests – individual and global – indicate that the proportional hazard assumption is not violated.
that duration – is parameterized as follows

\[ h(y^*_i) = \rho y_i^{\rho-1} e^{-x_i \beta \rho} \] 

(5)

and, then, the expected duration is

\[ E[y^*_i | x_i, \beta, \rho] = e^{x_i \beta} \Gamma(1 + \frac{1}{\rho}), \] 

(6)

where \( y^* \) is the assumed true duration (which may or may not be observable due to the CIEP), \( x_i \) is a vector of covariates, \( \beta \) is a vector of covariate-specific coefficients, \( \rho \) is a shape parameter of the Weibull distribution, and \( \Gamma \) is a gamma function.

Thus, I parameterize the model so that a positive estimate of \( \beta \) means that the associated covariate contributes to a longer duration of the government (see equation 6). Also, an estimate of \( \rho > 1 \) implies an increasing hazard rate over the duration of government – i.e., the longer the governments last, the more likely they terminate (see the equation 5). Note that the hazard rate also depends on the vector of covariates. I use the maximum-likelihood estimation technique to estimate the parameters of interest.\(^{65}\)

Table 4.5 reports the results. For Models 4.1 through 4.4, I censor the durations of governments terminated by regular elections as defined in the previous section.\(^{66}\) For model 4.5, only terminations by elections that occurred in the last month of the CIEP are censored. Also, Models 4.1, 4.2, 4.3, and 4.5 are estimated on the set of \textit{Pivotal Median Governments} and Model 4.4 is estimated on the set of all governments. This explains the difference in the numbers of governments and uncensored terminations at the bottom of the table.

\(^{65}\) The derivation of likelihood function is omitted since it is now a standard technique supported by many standard software packages. But I report the parameterization in the text because different software packages use different parameterizations as a default. I use Stata 9.0 to estimate the models.

\(^{66}\) These account for 45 censored observations. The other two cases are the termination brought about by the resignation of Papandreou due to illness in 1996 and the one brought about by the German reunification in 1990.
### Table 4.5: Censored Weibull Model of Government Duration

<table>
<thead>
<tr>
<th>Models:</th>
<th>4.1</th>
<th>4.2</th>
<th>4.3</th>
<th>4.4</th>
<th>4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fragmentation</strong></td>
<td><strong>-2.814</strong></td>
<td><strong>-2.464</strong></td>
<td>-1.677</td>
<td><strong>-2.141</strong></td>
<td><strong>-1.727</strong></td>
</tr>
<tr>
<td></td>
<td>(-2.54)</td>
<td>(-2.32)</td>
<td>(-1.42)</td>
<td>(-2.26)</td>
<td>(-1.79)</td>
</tr>
<tr>
<td><strong>Ideological Range</strong></td>
<td>0.109</td>
<td><strong>0.077</strong></td>
<td><strong>0.149</strong></td>
<td>0.060</td>
<td>0.043</td>
</tr>
<tr>
<td></td>
<td>(2.68)</td>
<td>(1.93)</td>
<td>(3.37)</td>
<td>(1.62)</td>
<td>(1.46)</td>
</tr>
<tr>
<td><strong>Positive Resignation Rule</strong></td>
<td>0.168</td>
<td><strong>0.273</strong></td>
<td>0.125</td>
<td>0.153</td>
<td>0.111</td>
</tr>
<tr>
<td></td>
<td>(1.09)</td>
<td>(1.79)</td>
<td>(0.88)</td>
<td>(1.11)</td>
<td></td>
</tr>
<tr>
<td><strong>Minority</strong></td>
<td><strong>-0.429</strong></td>
<td><strong>-0.306</strong></td>
<td>-0.058</td>
<td><strong>-0.392</strong></td>
<td><strong>-0.305</strong></td>
</tr>
<tr>
<td></td>
<td>(-2.54)</td>
<td>(-1.84)</td>
<td>(-0.33)</td>
<td>(-2.45)</td>
<td>(-2.00)</td>
</tr>
<tr>
<td><strong>Surplus Majority</strong></td>
<td><strong>-0.524</strong></td>
<td><strong>-0.541</strong></td>
<td>-0.209</td>
<td><strong>-0.460</strong></td>
<td><strong>-0.438</strong></td>
</tr>
<tr>
<td></td>
<td>(-2.96)</td>
<td>(-3.12)</td>
<td>(-1.13)</td>
<td>(-2.76)</td>
<td>(-2.78)</td>
</tr>
<tr>
<td><strong>Number of Formation Attempts</strong></td>
<td>-0.133</td>
<td>-0.131</td>
<td><strong>-0.147</strong></td>
<td>-0.096</td>
<td>-0.121</td>
</tr>
<tr>
<td></td>
<td>(-1.52)</td>
<td>(-1.52)</td>
<td>(-1.72)</td>
<td>(-1.16)</td>
<td>(-1.48)</td>
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<tr>
<td><strong>Postelection</strong></td>
<td><strong>0.400</strong></td>
<td><strong>0.417</strong></td>
<td><strong>0.267</strong></td>
<td><strong>0.448</strong></td>
<td><strong>0.517</strong></td>
</tr>
<tr>
<td></td>
<td>(2.94)</td>
<td>(3.18)</td>
<td>(2.09)</td>
<td>(3.54)</td>
<td>(4.26)</td>
</tr>
<tr>
<td><strong>Ideological Distance between:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government and Median</td>
<td><strong>-0.230</strong></td>
<td><strong>-0.302</strong></td>
<td>-0.400</td>
<td><strong>-0.268</strong></td>
<td><strong>-0.259</strong></td>
</tr>
<tr>
<td></td>
<td>(-3.00)</td>
<td>(-4.14)</td>
<td>(-5.45)</td>
<td>(-4.01)</td>
<td>(-3.76)</td>
</tr>
<tr>
<td>Median and President</td>
<td><strong>0.153</strong></td>
<td><strong>0.155</strong></td>
<td><strong>0.132</strong></td>
<td><strong>0.138</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.44)</td>
<td>(2.5)</td>
<td>(2.46)</td>
<td>(2.39)</td>
<td></td>
</tr>
<tr>
<td>PM and President</td>
<td><strong>0.075</strong></td>
<td>0.034</td>
<td>0.051</td>
<td><strong>0.082</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.67)</td>
<td>(0.80)</td>
<td>(1.42)</td>
<td>(1.95)</td>
<td></td>
</tr>
<tr>
<td>President in Opposition</td>
<td><strong>-0.415</strong></td>
<td><strong>-0.350</strong></td>
<td>-0.106</td>
<td><strong>-0.359</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-2.24)</td>
<td>(-1.92)</td>
<td>(-0.67)</td>
<td>(-2.05)</td>
<td></td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td><strong>5.069</strong></td>
<td><strong>4.821</strong></td>
<td><strong>3.852</strong></td>
<td><strong>4.642</strong></td>
<td><strong>4.369</strong></td>
</tr>
<tr>
<td></td>
<td>(6.87)</td>
<td>(6.87)</td>
<td>(4.1)</td>
<td>(7.4)</td>
<td>(6.86)</td>
</tr>
<tr>
<td><strong>ρ (ancillary, shape)</strong></td>
<td><strong>1.504</strong></td>
<td><strong>1.568</strong></td>
<td><strong>1.676</strong></td>
<td><strong>1.507</strong></td>
<td><strong>1.624</strong></td>
</tr>
<tr>
<td></td>
<td>(5.52)</td>
<td>(6.12)</td>
<td>(7.00)</td>
<td>(5.98)</td>
<td>(6.94)</td>
</tr>
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<td><strong>Country Indicators:</strong></td>
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<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Governments</td>
<td>PMG</td>
<td>PMG</td>
<td>PMG</td>
<td>All</td>
<td>PMG</td>
</tr>
<tr>
<td>Number of Governments</td>
<td>166</td>
<td>166</td>
<td>166</td>
<td>196</td>
<td>166</td>
</tr>
<tr>
<td>Number of (Unc.) Terminations</td>
<td>119</td>
<td>119</td>
<td>119</td>
<td>138</td>
<td>130</td>
</tr>
<tr>
<td>Time at Risk</td>
<td>3643</td>
<td>3643</td>
<td>3643</td>
<td>4327</td>
<td>3643</td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>-183.368</td>
<td>-177.838</td>
<td>-166.916</td>
<td>-214.058</td>
<td>-178.170</td>
</tr>
<tr>
<td>AIC</td>
<td>386.735</td>
<td>381.676</td>
<td>373.833</td>
<td>499.738</td>
<td>382.340</td>
</tr>
</tbody>
</table>

*Note: t-statistics are shown in the parentheses. Bold represents the statistical significance at the .05 level (one-tailed). The t-statistic for ˆρ reflects the difference from 1. Estimates from Model 1, 2, 3, and 5 are based on the subset of governments where the median parliamentary party is in the pivotal position. Model 4 is the result of estimation on all governments. Model 3 includes country specific dummy variables, which are not reported in the table.*

Model 4.1 is estimated without any of the variables associated with the president. Therefore, in some sense, it represents our current understanding of the duration of governments in our countries, although it includes one of our key variable, *Ideological*
Distance between Government and Median, which has received little attention in the study of government duration. The coefficient suggest a strong negative effect on the duration of government as we expect (Hypothesis 1). That is, when the median party derives little value from the incumbent government, a small shock in public opinion or ideal policy position configuration in parliament is likely to induce the preference change in the median. Then it is more likely to defect and the government is more likely to collapse quickly. The result confirms this intuition.

All other control variables show the expected relationship, although we find differences in the statistical significance level. The coefficient estimate of Positive Resignation Rule is not close to any conventional statistical significance level while that of Number of Formation Attempts is nearly significant. Both Minority and Surplus Majority show highly significant negative effects on duration. This implies that a minimal winning coalition is the most durable type of government if all else equal. On the other hand, the results imply that the relationship between the size and the duration of governments is not monotonic.

Postelection also shows a highly significant positive effect on the duration. In fact, when I first estimated the model, I introduced a variable, Time Left, measuring the months left until the next scheduled election to capture the effect of increasing hazards due to the existence of the regular elections. When this variable was estimated alone, it showed a statistically significant positive effect even with the present Weibull specification. That is, as the government approaches the regular election, it is more likely to terminate. However, when I estimated the model together with Postelection, Time Left lost its significance while Postelection remained statistically significant. This implies that there is something else that makes Postelection government more durable other than the longer time horizon and that the significant effect of Time Left when it is estimated alone captures that attribute.

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67 It might well be positively correlated with Warwick’s (1992, 1994) Ideological Diversity variables, but not necessarily. I were unable to reconstruct the measurements for the countries in the present data set.

68 Since I transformed the data set into a series of monthly observations for each government when I estimated the model, this variable has continuously decreasing values during the duration of a government.
while the Weibull model still captures the increasing hazards with its built-in specification as we can see in the table (the estimate on $\rho$, the ancillary shape parameter).

I suspect this might be related with pre-electoral coalitions (Golder 2006). That is, if a pre-electoral coalition wins a majority, then it will be likely to form a government after election. If this is the case, it will be more difficult for a small shock to change the preference in any of the members in the pre-electoral coalition, since a defection will likely cost its reputation as a reliable partner. I think this is one plausible conjecture requiring further examination. Overall, the estimates of Model 4.1 confirm most of our expectations. None of the coefficient estimates shows an opposite effect. Most of all, it indirectly suggests that our sample is not that different from the data sets used in the literature although I use several restrictions and different censoring schemes.

Model 4.2 is the main specification of interest. It includes all of the key explanatory variables. The log-likelihood test indicates that the increase in the log-likelihood is very unlikely to be explained by random process ($p = 0.0114$). That is, it increases the model fit significantly by capturing variation unexplained by the previous model 1.

The estimates of Model 4.2 suggest that Model 4.1 underestimates the effect of Ideological Distance between Government and Median. The magnitude and statistical significance both increase once we include the variables associated with presidents. This implies that the median is more likely to defect and bring down the government, when it is ideologically close to the president. But if the median is ideologically distant from the president, it is less likely to defect because it may provoke the president to call an election when the median does not expect great electoral benefit. It is also possible that the median prefers an immediate election but the president does not want to call elections. All these considerations are likely to keep the median in the coalition. Thus, the strategic non-action by the median under these circumstances results in a longer duration of the government. The estimate on Ideological Distance between Median and President supports this expectation (Hypothesis 2).
A similar effect can be found regarding the ideological distance between the Prime Minister and the President (Hypothesis 3), although the estimated effect is statistically not so strong ($p = 0.0475$, one-tailed). Our hypothesis is based on the intuition that, even though the prime minister proposes an election when he or she observes a sudden surge in electoral popularity, the president will not accept this proposal unless the president also expects rather large electoral gains, which are quite unlikely when they are ideologically distant. From the perspective of the president, even if he or she does not favor a potential replacement government, he or she may well wait, enduring a small loss today if the electoral prospect is particularly bad. Then this will also induce the strategic non-action by the Prime Minister.

However, the above do not convey the whole picture. The estimates also imply that when the presidential party is the median or the party of the Prime Minister, it can easily defect and terminate the incumbent government whenever it finds more attractive alternatives than the status quo. With the president on its side, the presidential party can be quite opportunistic.

These estimates confirm our expectation that the same shock – or preference change – can induce different consequences depending on the relationship between the president and the pivotal parties in the government coalition – represented by the median and the Prime Minister. We can also see that when the presidential party is not a member of government, the government is likely to collapse more quickly (Hypothesis 4). All the estimates of the key variables support our expectations in a statistically significant way.

With respect to the control variables, Positive Resignation Rule now appears to be a statistically significant determinant of the duration of government, although the relationship is somewhat weak ($p = 0.0365$, one-tailed). Number of Formation Attempts still does not show any change. All other variables maintain their significance. However, the magnitude of the coefficient estimate on Minority is greatly reduced. This suggests that a substantial part of the effect is absorbed into the newly introduced variables associated with the president. I suspect that it must have something to do with the minority government of the presidential party, but I am not
sure what the direction would be. Although interesting, I leave the investigation for future research.

The remaining Models 4.3 through 4.5 are mainly estimated to check for the robustness. First, Model 4.3 is estimated with country indicator variables with Finland as the baseline category.\textsuperscript{69} Necessarily, the time-invariant variable, \textit{Positive Resignation Rule} is dropped from the specification. As we know, the inclusion of fixed-effect variables has a consequence of eliminating cross-sectional variation from the estimation of the linear regression in time-series cross-sectional data set (Beck and Katz 2004). The same is true for all estimation models using the same type of data set. Thus, the estimates of Model 4.3 are based solely on the within-country variation. As a consequence, \textit{Fragmentation}, which has relatively small within-country variation, now loses its significance. That is, we can roughly understand that, if a variable loses statistical significance due to the inclusion of fixed effects, the variable’s estimated effect mainly comes from cross-sectional differences.

Similar drops of significance can be found in \textit{Minority}, \textit{Surplus Majority}, and \textit{Ideological Distance between PM and President}. The first two results suggest that some systems with shorter duration produce more minority or surplus majority governments rather than minimal winning coalition while other systems with longer duration produce more minimal winning coalition governments but that, within each system, there is no big systematic difference in the duration of governments associated with the type of governments, particularly for the case of minority governments. Similarly, the drop in the significance on \textit{Ideological Distance between PM and President} suggest that this effect is mainly dependent on the institutional arrangements across systems, as we suspect from the earlier analysis on the dissolution powers of presidents. On the other hand, the increase in the significance level of the variables, \textit{Ideological Range} and \textit{Number of Formation Attempts}, which finally obtains a rather weak significance level, suggests that the effects associated with these variables in fact reflect seasonal instability within each system. However, we cannot find such change in our key explanatory variables regarding hypotheses 1, 2, and 4 in the re-

\textsuperscript{69}The estimates on the country dummies are not reported in the table. The results suggest that governments in Austria and Germany last longer while government in Italy last shorter than those in Finland, if all else equal. The estimates are available upon request by the author.
results of model 3. Hence, they are robust.

Model 4.4 provides another robustness check. Note that the previous models were estimated on the set of *Pivotal Median Governments*, on which our hypothesis is directly based. Given the implications of the median voter theorem, we have reasonable doubt that the relationship we expect would apply to any government. Indeed, we do not find any meaningful difference in the estimates of the two variables associated with the relationships among the government, the median, and the president if we compare Models 4.2 and 4.4. Therefore, these relationships do not depending on the restrictions that we make on the sample space.

However, the other two variables now lose their statistical significance. The estimate of *Ideological Distance between PM and President* suggest that governments do not last longer as the ideological distance between the prime minister and the president grows in the set of all governments. Also, the estimate of *President in Opposition* suggest that a government that excludes the presidential party does not terminate earlier than a government that includes the president’s parties.\(^70\)

Finally, Model 4.5 is estimated on the set of *Pivotal Median Governments* while censoring only terminations by election occurring in the last month of the CIEP. As we expect, the strengthening of the censoring scheme weakens the effects of the other explanatory variables. Compared with the results of Model 4.2, *Ideological Range* and *Positive Resignation Rule* lose significance. The decrease in the magnitude of the estimate of *Fragmentation* is quite substantial. However, all of the estimates on the key explanatory variables show statistically significant relationships. Particularly, the estimate of the ideological distance between the prime minister and the president increases its significance level quite substantially. This implies that the preventive role of the president’s power over dissolution is working to the last month

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\(^70\) A close inspection of the newly added governments reveals interesting regularities. Recall that these are the majority governments that do not include the parliamentary median. In 9 out of 30 cases, the presidential party was the median. Five of nine were formed immediately after election. These five governments show particularly longer durations than others. Hence, the addition of these observations weakened the relationship dramatically. In the remaining 21 cases where the president is not the median, the duration of government seems largely dependent on the ideological distance between the median and the president.
of the CIEP, although we have just observed that this effect may not be robust to all variations.

All of the estimation results clearly support our hypotheses 1 and 2. Particularly, the ideological relationships among the government, the median, and the president survives various robustness checks. The estimated effects do not depend on the unknown country-specific fixed effects (Model 4.3), type of government (Model 4.4), or the censoring scheme (Model 4.5). Compared with this, however, the government status of the presidential party and the ideological relationship between prime minister and president do not seem to be quite robust. The results suggest that the effects, in some sense, depend on the unknown fixed effects and the type of government. However, the results do not completely refute the hypotheses, either. I believe an in-depth analysis will reveal a new aspect of strategic interplay in the government termination process that has not been captured in the present analysis.

Before moving on, it is natural to ask how big these effects are in substantive sense. The following Table 4.6 and Figure 4.3 show the effect of discrete and continuous variables, respectively, on the expected duration of governments while holding other discrete variables at their mode and continuous variables at their mean values. The estimates from Model 4.2 are used to calculate the expected durations. Thus, we remind the readers that some effects may not be robust.

<table>
<thead>
<tr>
<th>Change in Discrete Variables:</th>
<th>Expected Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong> (^\dagger)</td>
<td>41.3 [31.6, 53.3]</td>
</tr>
<tr>
<td><strong>Positive Resignation Rule</strong></td>
<td>0 → 1 54.5 [38.6, 74.2]</td>
</tr>
<tr>
<td><strong>Minority</strong></td>
<td>0 → 1 30.6 [21.8, 42.1]</td>
</tr>
<tr>
<td><strong>Surplus Majority</strong></td>
<td>0 → 1 24.3 [16.7, 34.0]</td>
</tr>
<tr>
<td><strong>Number of Formation Attempts</strong></td>
<td>1 → 2 36.3 [27.1, 47.6]</td>
</tr>
<tr>
<td></td>
<td>→ 7 21.6 [6.4, 53.8]</td>
</tr>
<tr>
<td><strong>Postelection</strong></td>
<td>1 → 0 27.2 [19.5, 37.1]</td>
</tr>
<tr>
<td><strong>President in Opposition</strong></td>
<td>0 → 1 27.6 [18.3, 40.0]</td>
</tr>
</tbody>
</table>

\(^\dagger\) All continuous variables are held at their mean values and all discrete variables are held at their mode, represented in bold, to calculate the expected duration of the baseline case. Expected duration is calculated as follows: \(E(y_i|x_i, \hat{\beta}, \hat{\rho}) = e^{x_i\hat{\beta}}\Gamma(1 + \frac{1}{\hat{\rho}})\), where \(\Gamma\) is the gamma function. We used 10000 simulated draws of parameter estimates of model 2 in table 6 to construct the reported expected duration and 95% confidence interval in brackets.
The baseline expectation is the predicted expected duration calculated from the mode values of discrete variables and the mean values of continuous variables using the estimates of Model 4.2. Sensitive readers might already notice that the expected duration is quite long compared with the actual duration (21.9 months) in Table 4.4. However, the expected duration is calculated by the estimates based on the hypothetical situation of no CIEP. Since we have a rather large number of governments that are terminated by regular elections in our data set, it is not surprising that the expected duration shows big differences from the actual durations.

In our data set, the majority of governments are from countries that do not adopt positive resignation rules. In general, they are minimal winning coalition governments that form immediately after the election on the first attempt. Also, they typically include the presidential party as a member. Their expected duration is 41.3 months (Baseline). The expected duration of a government in a country that adopt positive resignation rules is slightly longer (54.5 months.) The expected duration of a minority government is much reduced (30.6 months). If a government includes an unnecessary member to sustain the majority status, its expected duration is a mere 24.3 months. If a government forms on the second attempt after the failure of the first attempt, it has a 36.3 month expected duration. If it took seven attempts, its expected duration is merely 21.6 months. If a government forms following the breakdown of the postelection government, its expected duration is 27.2 months. If a government does not include the president’s party, its expected duration is 27.6 months.

Figure 4.3 shows the change in expected duration when we vary each continuous variable over some ranges. If we want to find out the relative magnitude of effects of the variables, it would be appropriate to use a comparable range. If we increase the value of Fragmentation by one standard deviation from its mean, the expected duration changes from 41.3 months to 33.8 months. Hence, the difference is 7.5 months. If we change the value of Ideological Range in the same way, the expected duration is 49.4 months (the difference is 8.1 months).

\footnote{See Table 4.4.}
Figure 4.3: Effects of Continuous Variables on Expected Duration
The corresponding changes in the value of *Ideological Distance between Government and Median*, *Median and President*, and *PM and President* yield the expected durations of 30.0, 51.4, and 46.9 months, respectively. Thus, the differences are 11.3 months for the distance between the government and the median; 10.3 months for the distance between the median and the president; and 5.6 months for the distance between the prime minister and the president. Therefore, the ideological relationships among the government, the median, and the president are important determinant of the duration of the government in a substantive sense as well.

### 4.4 Concluding Remarks

I have started this paper with the examination of the constitutional powers of the president over parliamentary dissolution in nine West European democracies. We have found that presidents have great discretion over the dissolution of parliament. More specifically, we have found that most presidents in our countries have constitutionally endowed powers to call or not to call premature elections once the incumbent government loses the confidence of parliament.

Based on these findings, I have derived several hypotheses associating the relationships of the government, the prime minister, the parliamentary median, and the president to the duration of the government and electoral performances. The intuition underlying our hypotheses is that when a random event induces a preference change in any of the parties in a government coalition, the actual decision of the party to defect or remain in the government depends on the party’s anticipation of the president’s response after the defection is made. If the party shares the same or similar preferences with the president, it can be very opportunistic; otherwise, such a situation is likely to induce strategic non-action by the party and, hence, the survival of government.

Empirical analysis on the duration of governments provide strong support for our expectations. Particularly, we have found the following regularities:

- *A government is likely to terminate more quickly, the more ideologically distant it is from the median parliamentary party.*
• A government is likely to last longer, the more ideologically distant the president is from the median parliamentary party.

The above two regularities have proven to be quite strong and robust to the variations that I impose on the set of governments, specifications, and censoring schemes.

On the other hand, empirical analysis on electoral performance reveals a very interesting regularity with regard to the president’s party. We have found:

• Presidents’ parties have performed better in early elections than in regularly scheduled elections.

We have not found such strong regularities with regard to any other conventionally believed beneficiary of the power to time elections, including the incumbent government and the prime minister.

I believe these findings have important bearings on politics. We all know that a termination of government is not an isolated phenomenon. Complicated policy bargaining within the government, which may or may not be observable to the outsiders, presumably precedes any crisis or termination of the government. A new government, regardless of whether it is based on a new election or non-electoral renegotiation, will follow the termination.

If the presidential party systematically benefits from the president’s power to strategically time the election as suggested by the above finding, it will use its increased power in parliament in the post-election government-formation negotiations. If the party can achieve (or maintain) the largest party status, it is very likely that the party will lead the government for another term of parliament until a new preference change occurs. Even if it is not the largest party, it has been suggested in the literature that electoral winners are likely to have better bargaining leverage (Warwick 1996).

Now consider policy bargaining within government. It would be conceivable that a constant series of bargains within the government occurs from the moment of the investiture. Some of the bargaining will eventually lead to the termination of government and others will be resolved within the government. Some parties will make
an advancement and others will make a necessary compromise. In this negotiation process, the threat of defecting would be the most powerful weapon (Huber 1996; Huber and McCarthy 2001). The analysis of this chapter suggests that not only can the president and his or her party advance their policy agenda effectively with a threat of defecting but also they can defend their preferred policy more successively against the threat of defecting. Therefore, the influence of the president on the policy making process might well be relevant throughout the whole tenure of the incumbent government in the political systems where the failure – or success – of the bargaining within parties in government coalition can always bring about a new parliamentary election, not only at the final moment, although we – as an outside analyst – do not always observe all the complicated interactions within parties in coalition.

I believe the analysis has provided sufficient reasons to suspect the influence of presidential heads of state in the politics of the political systems where the governments are responsible to parliament. It has received little scholarly attention. I believe that a proper and careful attention to the role of the president will lead us to a better and more comprehensible understanding of the politics in these political systems.
Appendix 4: Constitutional Powers of the Presidents over the Dissolution of the Parliament

The following table A4 reports the survey on the constitutional powers of the presidents in nine Western European democracies over the dissolution of parliament. English translations of constitutional documents are provided by International Constitutional Law project, available at <http://www.oefre.unibe.ch/law/icl/>.

Table A4: Constitutional Powers of the Presidents over the Dissolution of the Parliament in Nine Western European Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>CIEP (yrs.)</th>
<th>Dissolution Procedures in Constitution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>4</td>
<td>[Article 29.1] The Federal President can dissolve the House of Representatives, but he may avail himself of this prerogative only once for the same reason.</td>
</tr>
<tr>
<td>Finland</td>
<td>3/4b</td>
<td>[Section 26.1] The President of the Republic, in response to a reasoned proposal by the Prime Minister, and after having heard the parliamentary groups, and while the Parliament is in session, may order that extraordinary parliamentary elections shall be held.</td>
</tr>
<tr>
<td>France V.</td>
<td>5</td>
<td>[Article 12.1] The President of the Republic may, after consultation with the Prime Minister and the Presidents of the Assemblies, pronounce the dissolution of the National Assembly. [Article 12.3] No further dissolution may take place within a year following this election.</td>
</tr>
<tr>
<td>Germany</td>
<td>4</td>
<td>[Article 63.4] When no Chancellor candidate has been elected within the 14 days after the president’s nomination is rejected, a new ballot takes place without delay in which the person obtaining the largest number of votes is elected. Where the person elected has obtained the votes of the majority of the members of the House of Representatives, the President appoints him within seven days of the election. Where the person elected did not obtain such a majority, the President, within seven days, either appoints him or dissolves the House of Representatives. [Article 68.1] Where a motion of the Chancellor for a vote of confidence is not carried by the majority of the members of the House of Representatives, the President may, upon the proposal of the Chancellor, dissolve the House of Representatives within twenty one days. The right of dissolution lapses as soon as the House of Representatives elects another Chancellor with the majority of its members.</td>
</tr>
<tr>
<td>Greece</td>
<td>4</td>
<td>[Article 41.1] The President of the Republic may dissolve Parliament, if two Governments have resigned or defeated in the Parliament and its composition cannot achieve stability of government.</td>
</tr>
<tr>
<td>Country</td>
<td>CIEP (yrs.)</td>
<td>Dissolution Procedures in Constitution</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>--------------------------------------</td>
</tr>
</tbody>
</table>
| [Article 41.2] The President of the Republic shall dissolve the Parliament at the suggestion of a Government which has been given a vote of confidence, with a view to renewing its mandate in order to deal with a problem of extraordinary importance for the nation. The dissolution of the new Parliament for the same reason is prohibited.  
[Article 41.4] The Parliament elected following the dissolution of the previous one may not be dissolved before the expiry of one year from the commencement of its work. |
| Iceland$^c$ | 4 | [Article 24] The President of the Republic may dissolve Althingi. |
| Ireland | 5 | [Article 13 (2.1)] The House of Representatives shall be summoned and dissolved by the President on the advice of the Prime Minister.  
[Article 13 (2.2)] The President may in his absolute discretion refuse to dissolve the House of Representatives on the advice of a Prime Minister who has ceased to retain the support of a majority in the House of Representatives. |
| Italy | 5 | [Article 87.3] The President of the Republic calls parliamentary elections and sets the date of their first meeting.  
[Article 88.1] The president may dissolve one or both chambers after having consulted their speakers.  
[Article 88.1] The president may not exercise this power during the last six months of his term, provided this period does not coincide partly or entirely with the last six months of the term of chambers. |
| Portugal$^f$ | 4 | [Article 136.5] The President of the Republic may dissolve the Assembly of the Republic in compliance with the provisions of Article 175 and after having heard the parties represented in the Assembly and the Council of State.$^g$  
[Article 175.1] The Assembly of the Republic cannot be dissolved in the six months subsequent to its election, during the last half year of the term of office of the President of the Republic, or during a state of siege or emergency. |


**Note:**

- $^a$ In Austria, the House of Representatives can vote its own dissolution by simple law before expiry of a legislative period (Article 29.2).
- $^b$ Three years before 1955 amendment. Four years afterward.
- $^c$ Since 1991. Until 1991, the President had a discretionary power to dissolve the parliament on his or her own initiative.
- $^d$ The Greek constitution also prescribes that parliament shall be dissolved when it fails to elect a new President of the Republic within three rounds of voting (Article 32.4) or when it fails to approve a new Prime Minister after election (Article 37.3). The reported provision reflects the 1986 Amendments. In the 1975 Constitution, the President could dissolve Parliament with own initiative.
- $^e$ If the resolution by Althingi to remove the President from office is not approved in the plebiscite, Althingi shall be immediately dissolved and new elections called (Article 11).
- $^f$ The reported provision reflects the 1982 Amendments. Under the 1976 Constitution, the President could dissolve the Assembly if the Council of Revolution, which the President himself chaired, supported the action.
- $^g$ The Council of State is the political advisory body of the President.
Chapter 5

Conclusion

The goal of this study has been to examine the influence of the president on the politics of coalition in the political systems where the governments are politically responsible to the parliament. Specifically, in the preceding chapters, I have focused separately on the roles played by the presidents on the formation and on the termination processes of government coalitions in the minority parliament environments. Regarding these important democratic political processes, the prevalent assumption implicitly made in the previous literature has been that the formation and termination of a government coalition is entirely at the discretion of parliamentary parties and the presidential head of state has been perceived as a ceremonial figureheads. However, the findings of this study have shown that this assumption is not tenable. On the contrary, the preceding essays have provided strong evidence that we can explain and predict the outcomes of coalition politics better by explicitly incorporating the role of presidential heads of state into our analysis. In this final concluding chapter, I will review the most important of these findings and discuss their implications for our current and future research in the politics of coalition.

In Chapter 2, I presented a formal model of a government-formation bargaining game with a presidential head of state in a multiparty minority parliament environment. The model represents a political system where the government must have the support of a parliamentary majority in order to form and the presidential head of state chooses a party – *formateur* – to make a proposal for a prospective government on which voting for approval takes place within parliament. Thus, the model explicitly incorporates the strategic selection of the *formateur* by the president into the government formation bargaining process, which has been left unmodelled in the theoretical literature.

In the model, strategic interactions occur between the president and parliamentary parties mainly because it is the parliamentary party that actually determines
the exact terms of negotiation and the president is only allowed to affect the negotiation by the selection of the formateur. When the president appoints a formateur at the first round of bargaining, the other parliamentary parties’ voting strategies on the proposal of the first formateur depend on their anticipations about the president’s next move when it fails to win necessary support. This, in turn, affects the first formateur’s proposal strategy. Eventually, the president’s equilibrium selection strategy also depends on the parliamentary parties’ equilibrium proposal and voting strategies. Therefore, under certain conditions, the president may not induce a government to form that he or she would most prefer to have under nonstrategic environments.

The equilibrium analysis of the model shows that the equilibrium selection strategy by the president depends critically on the configuration of ideological policy positions of the president and the parliamentary parties as well as the degree to which the president cares about the distribution of transferable office-related benefits for her own party. Particularly, the analysis suggests that the president whose ideal policy position is closest to the median party may select one of the remaining extreme parties as the first formateur when the parameter representing the connection between the president and her own party is sufficiently small; that the president as a member of an extreme party, always selects her own party to be the first formateur; and that the presidential head of state never selects the most ideologically distant party to be the formateur at the first round of government-formation bargaining process.

Thus, the model produces a prediction such that as the president’s party is getting closer to the parliamentary median, the president and the prime minister are less likely to have the same party affiliation. In other words, the prediction suggests that we are more likely to observe that the more ideologically distant the president’s party is from the parliamentary median, the more likely the president’s party is to be appointed Prime Minister. Considering the traditional image of the presidents who are presumed to be moderate in a given political competition as the only figure that represents the whole nation, this prediction seems rather unintuitive.
The underlying logic behind this seemingly unintuitive expectation is based on the strategic advantages that the parliamentary median party enjoys in the bargaining environment that we consider. When it is recognized to make a proposal for a prospective government, the parliamentary median party can always find a party who is willing to approve the proposal by the median parliamentary party under the anticipation that a rejection would result in the exclusion of its own from the prospective government and, hence, make it worse off. Therefore, in equilibrium, the parliamentary median proposes its own ideal policy position to that of the prospective governments while keeping all the transferable benefits, when it is recognized as a formateur. On the other hand, if an extreme party is recognized as the first formateur, it needs to make a necessary concession in terms of policy and transferable benefits in order to get an approval.

In the model, the president is assumed to have preference over the policy that will be implemented by the prospective government and the allocation of transferable benefits for her own party. Moreover, the preference of the president is assumed to be different from that of the party with which she is affiliated. Hence, even if the parliamentary median is the ideologically closest party to the president, the ideological position of the prospective government proposed by the parliamentary median might not. Therefore, in this case, if the degree to which the president of the parliamentary median party cares about the distribution of transferable benefits for her own party is sufficiently low, appointing the first formateur from one of the remaining extreme parties might be a better response of the president to these proposal and voting strategies by parliamentary parties. This condition for not choosing the first formateur from her own party is hardly met when the president is a member of relatively extreme parties.

Accompanying empirical analysis on 146 governments of 7 Western European democracies with presidential heads of state provides partial support for this theoretical implication. The analysis provides only partial support in that the theoretical expectation is supported very well when the president is elected by popular vote, but not when the president is selected by parliament. That is, we find that when the president is elected by popular vote, the more ideologically distant the presiden-
tial party is from the median party, the more likely the president and the prime minister share the same party affiliation. But we should be cautious for the case of parliament-selected presidents as well. The result is not that we do not find evidence of influence systematically related with the parliament-selected presidents. Rather, the analysis provides support for another theoretical expectation that the party of the president is more likely to be appointed prime minister when the president is selected by parliament than when the president is elected by popular vote.

These findings suggest that the government-formation bargaining processes under two different types of presidential heads of state might be governed by different principles and that the theoretical model presented in Chapter 2 reflects well the process under the popularly elected presidents. Thus, a more thorough investigation is in order to understand better the mechanisms through which the presidential heads of state influences the government-formation bargaining process under different institutional arrangements.

The following Chapter 3 took up this task. In Chapter 3, I investigated intensively the influence of presidents on the two most important aspects of government-formation outcomes: the identity of the Prime Minister and the party composition of the government coalition. These two outcomes correspond conceptually well to the practices of government-formation bargaining processes in the countries of interest. I estimated separately the effects of the variables associated with the presidents on these two outcomes in a successive manner.

Largely, the estimation results in Chapter 3 provide support for our current understanding of the government-formation process in minority parliament environments based on the previous literature. However, the separate estimation on the outcomes of bargaining process provides substantial evidence for the influence of the president throughout the whole hypothetically disaggregated bargaining processes against these backgrounds. The models explicitly introducing variables associated with the presidents generate more accurate predictions of the actual outcomes in both estimations of the stages of the government-formation bargaining processes.
With regard to the appointment of the prime minister, the estimation result shows that there indeed exist disproportionate advantages to the larger parliamentary parties, confirming the findings of previous literature. Since these effects of the largest party status and the relevant seat share are so dominant, the increase in the predictive power of the later models that take into account the influence of the president is relatively modest, although still statistically significant. However, the first stage estimation highlights somewhat critical differences in the mechanisms of influence associated with different types of presidents.

The estimation result clearly suggests that there exists a special bias in favor of the party of the parliament-selected presidents regarding the appointment of the Prime Minister. The magnitude of coefficients of the model suggests that when the party of the parliament-selected president is the largest parliamentary party, it is almost always appointed prime minister. Even if it is not the largest, it has a good chance of winning the premiership particularly when the margin of seat share between the largest parliamentary party and the party of the president is relatively small. However, the result also suggests that the parliament-selected presidents are not very effective in keeping an ideologically distant party from being appointed prime minister.

In contrast, the influence of the popularly-elected presidents appears to have an opposite pattern. The result shows that parties are less likely to be appointed prime minister the more ideologically distant they are from the popularly-elected presidents. That is, it suggests that the popularly-elected presidents are very effective in avoiding an ideological opponent as the prime minister. However, the result also shows that we do not find statistical evidence of special bias for the party of the popularly-elected presidents other than the ideological closeness that we find from the party of the parliament-selected presidents. A further introduction of a variable measuring the relative timing of elections between the president and the parliament reveals that the influence mainly comes from the cases when the popularly elected presidents have a more recent mandate than parliament at the time of government-formation bargaining.
With regard to the formation of government coalition by the successful prime minister designate, the estimation result shows that the two different types of presidents have strong and similar influence in determining the outcomes. For this stage of the bargaining process, the increase in the predictive power of the later models that take into account the influence of the president is very substantial. Particularly, we find for both types of presidents that potential coalitions are more likely to form when they include the party of the president and that potential coalitions are less likely to form, the more ideologically distant they are from the president. We also find again that a more recent mandate for the president strengthens the empirical regularities.

My interpretation of the contrasting finding regarding the appointment of prime minister is that it might reflect the differences in the preferences of the presidents associated with the methods of their elections. The result suggest that the popularly-elected presidents are likely to have more policy-oriented preferences than the parliament-selected presidents. When the presidents are selected by parliament or similar national organization, the party influence is virtually absolute in the election of the president. In this type of election, the presidential candidates and the winner are often chosen from senior members of major political parties. Hence, they usually have longer political careers than the popularly elected presidents and they are likely to have built strong ties with their own parties that cannot be fully explained by the ideological proximities between them along the path of developing their political careers. Moreover, they have incentive to build a broader base of support within parliamentary parties given that their election normally requires an extraordinary majority. In contrast, when the presidents are elected by popular vote, their electoral constituency is not the members of parliamentary parties but the general public. Hence, we sometimes observe political outsiders being successful in the popular presidential elections. Thus, the popularly-elected presidents are likely to be much freer from the partisan concerns over the matters that are not directly related to the national policy making such as the distribution of office-related spoils than their counterpart than the parliament-selected presidents.

The appointment of Prime Minister attract great attention by the observers.
The potential cost of asserting preferences for the president would be much higher at this stage than the later stage of government formation bargaining process. Thus, the constraints imposed on the presidents are much more severe in the appointment of the Prime Minister than in the appointment of other cabinet ministers. Severe constraints imply, on one hand, that we are less likely to observe the presidential influence on the outcomes of bargaining process. On the other hand, we can also expect that the differences in the preferences would be revealed more clearly under this environment. Hence, we could find evidence of bias in favor of the party of the parliament-selected presidents even after we controlled for the ideological relationships. We could also find that the popularly-elected presidents have been very successful in preventing the appointment of the ideologically opposing prime minister but that the consequence is not necessarily the appointment of prime minister from the parties of their own. I believe this line of reasoning corresponds well to the differences of the influence with regard to the appointment of prime minister as well as the substantive and similar pattern of the influence with regard to the appointments of cabinet ministers other than the prime minister. However, I must admit that this interpretation suggests one plausible explanation. Comprehensive examination requires an in-depth comparative analysis on the presidential elections in the two political systems. I leave it for future research.

Overall, the findings of Chapter 3 suggest that we can enrich our understanding of the government-formation bargaining processes and, thereby, produce better predictions for the actual outcomes by explicitly taking into account the roles and preferences of the presidents in these democratic political processes. Particularly, the results provide strong empirical evidence that the presidents in these political systems have effectively induced preferred governments among potential alternatives. The results suggest that the parliament-selected presidents appears to have a much stronger influence in shaping the outcomes in their favor than they are commonly perceived to have. They also suggest that a more recent mandate for the president than the parliament makes substantial differences in the influence over the outcomes when the presidents are elected by popular vote.

In the next Chapter 4, I studied the influence of the presidents on the govern-
ment termination processes. In these political systems, a government can fall on any day when they lose the confidence of parliament. A coalition of parliamentary parties with diverse policy interests in minority parliament environments necessarily implies a constant bargaining during the entire term of office between the members of government coalition. The environments surrounding the incumbent government are changing constantly. The occurrence of events such as scandals or the rise of new issues might lead a member of government coalition to find an alternative government more attractive while making the others find it too costly to maintain the current agreement. When this happens, bargaining failure occurs and the incumbent government terminates. Indeed, many governments in these political systems have collapsed before they complete their full potential terms. This fact has led many scholars to study the duration and termination of governments. As in the study of government formation, however, the role of presidents in these democratic processes has received little attention in the previous literature, even though the practical procedural rules and conventions allow the presidents much room for manoeuvre.

Unlike the presidential systems, an early election is always a real possibility in these political systems whenever the incumbent government terminates before it fulfills its maximum constitutional interelection period. The starting point of my analysis in Chapter 4 is that the president in these political systems, regardless of whether he or she is selected by parliament or elected by popular vote, has discretionary power over the dissolution of parliament once the government loses the confidence of parliament. That is, any member party in a government coalition can terminate the incumbent government with its own initiative by simply withdrawing its support and voting against it in a no-confidence vote. However, it cannot solely determine the aftermath of the termination of government. The sequence of events necessarily involves the decision by the president to hold or not to hold a general parliamentary election upon the termination of incumbent government. This creates an environment in which strategic interactions occur between the president and the parliamentary parties.

In this environment, the anticipation of the parties in government coalitions on the likely reaction by the president is critical in their initial decision to defect from
the incumbent government. For instance, even if a party in a government coalition finds an alternative coalition more attractive than the incumbent government for various reasons such as an arise of a new issue or a corruption scandal of its coalition partner, it might still prefer the preservation of the incumbent government to an immediate election due to its poor records in the poll taken recently. In this case, the termination of the incumbent government can occur only when the party anticipate that the president would not call an election when the incumbent government loses the confidence vote in the parliament. That is, the government party will refrain from defecting when it anticipates that the president’s likely reaction will be calling an election and it does not expect to gain much from the early election, even if it prefers to bring about a transfer of government powers. On the other hand, if the party anticipates that the president will not call an election, it can defect and bring down the incumbent government with assurance.

Likewise, when a government party expects large electoral benefits from an immediate election but it anticipates that the president will not call an election and that a likely result of non-electoral renegotiation is its own exclusion from the resulting government, the government party will not defect. On the other hand, if the party anticipates that the president will call an election, it can easily defect and cash in the expected benefits from an early election.

This simple logic suggests that one of the key factors that influence a party’s decision to defect and bring down the incumbent government is the preference alignment between the president and the party who experiences the preference change. If a party and the president share the same or similar preferences, the party is likely to defect – i.e., terminate the incumbent government – easily whenever it finds a more attractive alternative. If they have opposite preferences, then the party would have to consider the likely response from the president even if it wants to bring about a change.

Based on this logic, I derive and test several hypotheses relating the configuration of preferences among the president, parliament, and government to the duration of the government and electoral performance. The estimation results on the dura-
tion of government confirm the expectations. Particularly, the result shows that a government is likely to terminate more quickly, the more ideologically distant it is from the median parliamentary party and that a government lasts longer, the more ideologically distant the president is from the median parliamentary party. These regularities have proven to be quite strong and robust to the variations that I impose on the set of governments, specifications, and censoring schemes.

These findings suggest that the presidents in these political systems have contributed to the maintenance of their preferred government by effectively inducing the strategic non-action by the members of government coalition who would defect and terminate the incumbent government otherwise based on their constitutional power to call an early election. The findings, on the other hand, also suggest that the party of the president, when it is a member of government coalition, can advance its political interest by defecting and terminating the incumbent government whenever it finds a more attractive alternative than the status quo. With the president on its side, the party of the president can be quite opportunistic.

In addition to the analysis of the duration of government, the empirical analysis of electoral performance in Chapter 4 reveals a very interesting regularity with regard to the party of the president. I have found that the party of the president has performed better in early elections than in regularly scheduled elections. Such strong regularity in favor of the party of the president in early elections cannot be found in any other conventionally conceived beneficiaries of the power to time elections in these political systems, such as the incumbent government as a whole or the party of prime minister. Thus, the finding provides additional validity for the assumption that I make regarding the institutional arrangements for the strategic use of election timing and, hence, for the entire results.

Moreover, the findings on the electoral performance of the party of the president suggest a very important clue to understand the dynamics of the coalition politics in these political systems. So far, I have analyzed the democratic processes of the formation and the termination of government coalitions separately. We all know that these are not isolated events. A termination of government is always followed by the
formation of a new government, regardless of whether it is based on a new election or non-electoral renegotiation. A government is at the risk of termination from the first day of office in these political systems. Therefore, it is quite obvious that these two events are closely related with each other.

We have seen in Chapter 2 that the influence of president on the appointment of the Prime Minister is relatively modest – although statistically significant, given the relatively large effects of the seat share and the largest parliamentary party status. We also know from the previous literature that electoral winners are more likely to be included in the government coalition (e.g., Warwick 1996). The present finding on the electoral performance of the party of the president imply that the estimated effect might not capture the whole influence of the president on the outcomes of the government-formation bargaining process. That is, at that stage of the analysis, the seat share and the largest party status of parliamentary parties have been treated as external to the variables associated with the president and the estimated coefficient on the latter variables reflect the partial effect after controlling for the other variables in the equation. Thus, if the party of the president has benefitted systematically from the president’s power to strategically time the election as suggested by the present finding, this indirect effect cannot be estimated separately by the previous specifications. Therefore, the present finding on the electoral performance of the party of the president leads us to believe that the real magnitude of the influence of the president might be quite plausibly bigger than the estimates of this study. Explicit incorporation of the dynamics of the coalition will shed new lights on our understanding of the politics of coalition in these political systems. I leave this important project for future research.

So far, I have reviewed the most important findings in the preceding chapters. These findings lead us to rethink the role of the presidents in the general politics in these political systems, along with their role in the government formation and termination processes. As I have pointed out repeatedly, the role and influence of the presidents in European democracies have received little attention. They have been perceived as weak and ceremonial figureheads. Indeed, it is the prime minister who runs the daily business of governing in these political systems and the president
hardly interrupts this ordinary political process. If we had observed open conflicts between the president and the cabinet led by the prime minister more often, our perception of the presidents in these political systems would have been much different from the present one. However, the findings of this study suggest that the absence of such conflict does not necessarily imply that the presidents in these political systems are powerless, nor that they are neutral arbiters.

In fact, the constitutions in these political systems provide the presidents with little power to affect daily politics without the support of the cabinet. Instead the European constitutions do, however, provide the presidents with important powers by which the presidents can shape the political competitions of their countries in a favorable way. Those are the presidents’ powers in the government formation and termination bargaining processes, which we have seen throughout this study. The findings of this study have consistently shown that the European presidents have used these constitutional powers effectively to induce parties to form and maintain a government coalition closely aligned to his or her own preference. When the presidents of European democracies have their preferred government in place, they would have little reason to be involved in daily politics run by the cabinets. Moreover, the governments in European democracies do not have a fixed term of office unlike those in the U.S. presidential system. Therefore, the anticipation of the response from the president should always be present at the consideration of parliamentary parties involved in the continuous bargaining process of routine policy making in these political systems, beyond the process of government formation and termination. Thus, the findings of this study suggest that the European presidents are important political players with reserved potential power that we cannot overlook for a more comprehensive understanding of the politics in these countries.

It should be worth noting that we should not overemphasize the power of the president, either. The constraint on the president is that the governments should be able to muster the support of a parliamentary majority in order to form and survive. If there exists a clear and solid parliamentary majority that opposes to the president, he or she cannot help but accept a government of the majority. Thus, the principle of checks and balance by the separation of powers is realized through
different mechanisms in these political systems.

In some of the political systems that we consider in this study, the presidents are elected by popular vote. We call this a semi-presidential system. A great deal of research has been devoted to the understanding of how these regimes work in contrast to the pure parliamentary regimes. Our understanding of the politics in semi-presidential systems, however, is still very limited. Most of all, many Western European semi-presidential countries have been still classified and studied as parliamentary systems in that they function like a parliamentary system. For instance, researchers of semi-presidential systems have often paid special attention to the power struggle between the president and the prime minister supported by the parliament, the so-called cohabitacional conflict. In so doing, researchers have often restricted their attention to the specific example of semi-presidential systems such as the French Fifth Republic, while leaving out of the analysis the countries that they do not observe open conflicts between the president and the prime minister. However, the cohabitacional conflict presupposes the existence of the parliamentary majority opposing to the president, which is an exceptional phenomenon even in France.

What the researchers have overlooked is that the presidents in semi-presidential systems have contributed to the formation and maintenance of their preferred governments by using their constitutional powers, as we have seen throughout this study. In most European democracies, important policy decisions are made and implemented by the governments based on the support of a parliamentary majority, regardless of whether the regime is semi-presidential or parliamentary. A fundamental difference between the two regime types is that the voters in semi-presidential regimes elect their presidents by popular vote. The connection between the president and the government as an outcome of the bargaining process that we have observed in this study, therefore, implies that the voters in semi-presidential systems have an alternative institutional arrangement to control the national decision making process. Without this connection, the popular election of the presidents has little bearing on the normative aspect of the democratic political processes. Thus, the findings of this study suggest that the politics of semi-presidential systems might be explained
more comprehensively by paying appropriate attention to the dynamic interactions between the president, the parliamentary parties, and their elections.

I hope that the preceding essays in this study arouse academic interest in the influence of presidents in the politics of the political systems where the governments are responsible to the parliament. This influence has been ignored in the previous literature. I believe that proper and careful attention to the role of the president in the democratic processes will shed new lights on our current understanding of the politics in these political systems.
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