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**The Roots of Partisan Effect:
Party Support and Cabinet Support under the
Coalition Governments in Japan in the 1990s**

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Coalition Governments in Japan in the 1990s**

by

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I dedicate this dissertation to my parents, Tasuku and Takako Iida, for their unconditional support and encouragement throughout my doctoral program.

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Supervisor: Brian E. Roberts

This dissertation examines the determinants of the effect of partisanship on support for a parliamentary government. In doing so, I address a set of related questions, using Japan as an example. I begin with a descriptive question: Is the effect of partisanship on the job approval of the administration changing over time? To answer this question, using the 1960 - 2001 time series data, I demonstrate the changing impact of the job approval rate of the cabinets over this period.

Then I turn to explanations for the change and ask: Why does the effect change over time? I hypothesize that supporters of newly established parties in the government are less likely to be influenced by their partisanship when evaluating the cabinet's performance. Partisanship, defined here as a predisposition to support a particular political party, grows with the cumulative effect of political experience and learning. There is, however, less opportunity for newly established political parties to have such loyal supporters.

My second hypothesis holds that supporters of ruling parties to which the prime minister does not belong are less likely to make partisan judgments in appraising the cabinet's performance. Party identification extends to the government in which the party participates, the partisan effect on the appraisal of the government's performance emerges. The party affiliation of the prime minister influences to what extent people associate the government with the party.

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Chapter 1

Introduction

The popularity of a government among citizens is obviously one of the most important political variables in democratic societies. As popularity declines, a government loses its legitimacy and finally becomes a “lame duck,” or even dissolved, if in a parliamentary system. While the economy is crucial for a government’s survival, public support for ruling political parties is also helpful for the government to keep its popularity. Republicans are, for example, the most loyal block of voters that the Bush administration has.

As the economy naturally fluctuates, and as there is no guarantee that politicians can always manipulate the economy for their purposes, voters who are emotionally attached to government parties play an important role in bringing stability to the government’s job approval rate. The impact of partisanship on the evaluation of the government’s performance, however, may not be constant over time, especially when the number of partisan voters declines, as in most industrialized societies.

This dissertation examines the determinants of the partisan effect on

support for a parliamentary government. In doing so, I address a set of related questions, using Japan as an example. I begin with a descriptive question: Is the effect of partisanship on the government's job approval changing over time? To answer this question, I demonstrate the changing impact of the job approval rate of the cabinets over this period using the 1960 - 2001 time series data.

Then I turn to explanations for the change and ask: Why does the effect change over time? I hypothesize that supporters of newly established parties in the government are less likely to be influenced by their partisanship when evaluating the performance of the cabinet. Partisanship, defined here as a predisposition to support a particular political party, grows with the cumulative effect of political experience and learning. There is, however, less opportunity for newly established political parties to have such loyal supporters. This hypothesis is proposed as an empirical implication of a theoretical model, and tested in an EITM (Empirical Implications of Theoretical Models) framework.

My second hypothesis holds that supporters of ruling parties to which the prime minister does not belong are less likely to make partisan judgments in appraising the cabinet's performance. Party identification, defined here as an affective attachment to a particular party, extends to the government in which the party participates, the partisan effect on appraisals of the government's performance emerges. The party affiliation of the prime minister influences to what extent people will associate a government with the party.

An understanding of the dynamics of the partisan effect on popularity of a government will increase our knowledge regarding the nature of what makes

Japanese government legitimate. It will also contribute to the field of political behavior by suggesting possible sources of the partisan effect.

1.1 Research Questions

The theoretical focus of this dissertation is on the determinants of the partisan effect on government support. The job approval rate significantly determines the fate of the administration in democratic polities. In parliamentary systems, popularity influences cabinet duration (Martin 2000; Masuyama 2001, 2002),¹ while in presidential systems, it affects a president's legislative success (Ostrom and Simon 1985; Rivers and Rose 1985; Brace and Hincley 1992; Canes-Wrone and de Marchi 2002) and reelection (Rice 1984; Abramowitz 1988; Holbrook 2001).

Government popularity among citizens can be explained by several factors, such as economic conditions (Pissarides 1980; Frey and Schneider 1980; Inoguchi 1980; Norpoth and Yantek 1983; MacKuen 1983; Norpoth 1987; MacKuen, Erikson and Stimson 1992; Nadeau et al. 1999), political events (MacKuen 1983; Norpoth 1987), and partisanship of voters (Frey and Schneider 1980; Inoguchi 1980; Hibbs, Rivers and Vasilatos 1982; Bond and Fleisher 2001). Since economic conditions are the most influential variables, administrations have an incentive to manipulate the economy (Nordhaus 1975; MacRae 1977; Hibbs 1977; Alesina 1987; Rogoff and Subert 1988; Alesina 1992;

¹Although numerous researchers have attempted to explain cabinet duration in parliamentary systems (e.g. King et al. (1990) and Warwick and Easton (1992)), there are surprisingly few studies focusing on the effect of cabinet popularity on its duration.

Kohno and Nishizawa 1990) and the electorate's perceptions of the economy (Hetherington 1996), but these attempts do not necessarily work consistently, and popularity fluctuates with economic conditions, which are always changing.

Partisanship or party identification, on the other hand, can provide a more reliable base for government popularity. Partisanship is a stable psychological attachment to a political party, and plays a prominent role in shaping attitudes toward political objects (Campbell et al. 1960; Lodge and Hamill 1986; Sniderman, Brody and Tetlock 1991). "Revisionists" have challenged the traditional Michigan framework, in which party identification is the most fundamental variable in explaining other political attitudes (Campbell et al. 1960). Some emphasize reciprocal effects of specific political attitudes on party identification (Jackson 1975; Page and Jones 1979; Franklin and Jackson 1983) while others describe party identification as "a running tally of retrospective evaluations of party promises and performance" (Fiorina 1981, p.86). It is still evident, however, that partisan loyalties have pervasive effects on perceptions of the political world (Bartels 2002).

This implies that the electorate's enduring psychological predisposition from which the partisan effect on other political attitudes emerges is independent of any rational evaluation of the economy. In this sense, partisan loyalty is uniquely important in forming people's attitudes toward a government, helping the government enjoy stable popularity even in an economic depression.

Although the functional benefits of partisanship have been well-discussed, there are few empirical analyses of the roots of its effect. At best, scholars have studied *who* relies on party cues more heavily than others in political decision making (Sniderman, Brody and Tetlock 1991; Schaffner and Streb 2002; Bullock 2006). Such studies provide valuable clues, but are static and descriptive in nature, leaving a question of *why* the partisan effect increases or decreases.

Scholars have repeatedly emphasized that partisanship has substantial influence over other political attitudes and behaviors because of its stability. Therefore, given plenty of evidence that partisanship has been significantly unstable both aggregately and individually in most industrialized democracies (Franklin and Jackson 1983; Dalton, Flanagan and Beck 1984; MacKuen, Erikson and Stimson 1989; Clarke and Suzuki 1994; Dalton 1996; Clarke and Stewart 1998), a dynamic change in the partisan effect can be reasonably expected.

Despite its unique significance described above, the effect of partisanship on the evaluation of a government's performance has not been well-examined, and is typically assumed to be constant over time (Frey and Schneider 1980; Inoguchi 1980; Hibbs, Rivers and Vasilatos 1982; Bond and Fleisher 2001).

1.2 Theory and Hypotheses

In an effort to understand the determinants of the partisan effect, I derive two basic hypotheses about the effect's origins from the literature. Attachment

to a political party grows with the cumulative effect of experience (Campbell et al. 1960; Converse 1964; Lodge and Hamill 1986). This effect may be considered a “running tally” of rational evaluations (Fiorina 1981), or the product of reference group socialization and habituation (Converse 1969; Gerber and Green 1998), but recurring interest in the same party strengthens a sense of partisan identity (Brader and Tucker 2001). Once voters acquire partisanship, they tend to be loyal and patient even when sometimes facing “betrayal” by the party. Thus, partisanship plays a unique role as a bias in political attitude formation, distinguished from a rational evaluation.

Such a process of the development implies that the duration of a party is a necessary condition for partisanship to grow, simply because voters need enough time to learn about the party. Voters will have more difficulty in forming a psychological attachment to a party that is newly established than one that has existed for a long time, even if they like the new party’s platform and show a supportive attitude toward it. Like independents, supporters of the new parties have not yet obtained strong partisanship as a emotional attachment to the party, therefore they tend to rely more heavily on rational rather than emotional evaluations. In addition, partisanship of existing parties can be eroded by the establishment of new parties that provide voters with new alternatives. Thus I expect that the partisan effect is weaker among supporters of a new party.

Second, for partisanship to be influential in political decision making, voters must associate a party with other political objects, such as a candidate,

president, or government. Even if one has a strong partisan identity, he will not appraise other political objects more positively than independent voters unless the political objects are related (at least partially) to the party label in his mind. For example, when he considers his party's control of a government, his positive emotion toward the party will help him positively evaluate the government's performance. Thus, I expect the partisan effect to be most powerful when a party's supporters have a strong sense that the party "owns" the other political object under evaluation.

I use Japan as a case that provides a unique opportunity to test the hypotheses. In doing so, I modify the hypotheses to fit the Japanese context. Examining these hypotheses also allows us to answer one of the most important questions in Japanese politics: How could a one-party dominant regime endure for almost forty years in democracy?² Such a long duration of the LDP government would be impossible without the partisan effect on government support.

After the Liberal Democratic Party (LDP) was formed in 1955 as a merger between Japan's two conservative parties, the Liberal Party and the Japan Democratic Party, Japanese citizens experienced a one-party dominant regime under the LDP government until 1993. During this period, the electorate's partisanship was the most powerful factor in explaining Japanese political attitudes and behaviors (Miyake 1985, 1998), and the government enjoyed popularity backed by LDP supporters who were loyal even when facing al-

²This question is explored especially by Pempel (1990) who focuses on the LDP's strategy to mobilize citizens.

most habitual corruption by politicians they support(Inoguchi 1980; Nishizawa 2001).

Given this situation in Japan, I argue based on the first hypothesis that the LDP could remain in power for such a long time because the political environment in post-war Japan allowed citizens the opportunity to develop strong partisanship toward the LDP, through ideological competition among parties, and through Japan's economic success under the LDP government. Japan's post-war party politics were characterized by the opposition between two political ideologies, liberal democracy, represented by the LDP, and socialism, promoted by the Japan Socialist Party (JSP). The choice between these parties meant a choice between regimes, implying that the LDP was the only acceptable alternative for those who supported the liberal democratic regime. Thus partisanship toward the LDP grew among citizens, as liberal democracy developed in post-war Japan, while LDP support was associated with support for the government as long as the political system was liberal democratic.

The economic growth which began in the 1960s under the LDP government also contributed to the LDP's one-party dominant regime by enhancing the partisan effect on cabinet support. It allowed the LDP to attract more voters who were not ideologically committed to any issues, and to become a "catch-all party." In the course of economic growth, the LDP successfully established its reputation among voters as the only party capable of governing, while the JSP and other opposition parties were expected by voters to play only a minor role in checking the LDP. The reliability of the LDP as a ruling

party helped citizens to acquire psychological attachment with the party, as well as enhancing the tie between the LDP and the government in their mind.

The second hypothesis also helped us explain the duration of the LDP government, suggesting that the lack of prime minister's personality strengthened the relative influence of party support on cabinet support. Until the late 1980s, Japanese TV news programs had been descriptive, neutral, or objective in the sense that newscasters, especially those of Japan's sole public broadcaster, NHK (*Nippon Hoso Kyoukai*), merely reported facts based on information released by the government (Krauss 2000). Voters had few ways to receive information on politicians' personalities including the prime minister's, and therefore rarely took this information into consideration when making political judgments. The party labels, especially that of the LDP, were much more important than prime minister's personality.

Moreover, Japanese prime ministers were expected to implement policies with a consensus of the party members, especially faction leaders, giving voters an impression that a cabinet is not controlled by the prime minister, but by the party. This circumstance made voters refer to their likability of the party more heavily than that of the prime minister when evaluating the cabinet's performance. As long as the cabinet was "endorsed" by the LDP that had loyal supporters over the course of history, it could expect consistent public support despite a series of scandals and economic depression.

In the general election of 1993, however, the LDP lost its majority status in the House of Representatives, and eight opposition parties including, the

newly established Japan New Party (JNP, *Nihon Shintou*), Japan Renewal Party (JRP, *Shinseitou*), and New Party *Sakigake* (*Shinto Sakigake*), formed a coalition government following the election. Since then, coalition politics have been typical in Japan. Comparing the coalition governments of the 1990s to the LDP government may help us examine the change in the partisan effect on government support corresponding to the change in political environment.

Based on the first hypothesis, I expect that supporters of the new parties are less likely to be influenced by their partisanship when evaluating the performance of the cabinet, even if their party participates in the government coalition. This also implies that as the proportion of new party supporters within a body of ruling party supporters increases, the effect of party support on cabinet support decreases. Unlike the LDP, these new parties had no supporters who were strongly attached. Given their short history, they naturally could not have provided citizens with enough opportunity to learn about them.

Although these new parties shared liberal democratic values with the LDP, ideology was no longer important for voters in the 1990s after the collapse of the Soviet Union. De-ideologized voters were likely to change their party support, or “float” between parties. Although the floating voters helped the parties take power, there was no guarantee that they were a firm support base as the LDP supporters had been for the LDP government. Popularity of these parties was mainly due to their reformist attitudes. Therefore, the coalition government could not benefit from party support in maintaining popularity if evaluated only upon their achievement of political reform.

Referring to the second hypothesis, I expect that the supporters of the ruling parties to which the prime minister does not belong are less likely to make partisan judgments in appraising the cabinet's performance. The party affiliation of the prime minister influences the extent to which people associate the government with the party they support. In other words, partisanship is more influential among supporters of the party to which the prime minister belongs than among those of other parties.

Although the prime ministers' personalities became more available to voters through the TV news programs that provided stories focusing on individual politicians after the late 1980s (Krauss 2000), the coalition governments had raised the question of voter identification with the prime minister. There was only one prime minister, while the coalition government consisted of multiple parties. This situation made it difficult for voters to associate their party with the cabinet when the prime minister did not belong to the party.

1.3 Data and Methods

This dissertation examines the determinants of the effect of party support on cabinet support in Japan, and is organized as follows. Chapter 2 overviews the relationship between party support and cabinet support from the 1960s to the 1990s. By reviewing relevant literature on Japanese politics and examining some statistics, I show that it is reasonable to expect a changing impact of party support on cabinet support over time.

Chapter 3 examines the effect of government party support on cabinet

support to provide a basis for analyses on the changing effect in later chapters. More specifically, I investigate how cabinet support, party support, and the economy influence each other, using a vector autoregressive (VAR) methodology (Freeman, Williams and Lin 1989; Simms 1980) with the Granger causality analysis and the impulse response functions.

In Chapter 4,³ I investigate the changing effect of party support on cabinet support, conducting a time series analysis of data drawn from monthly polls taken by Jiji Press, 1960-2001.

First, Using the idea of EITM (Empirical Implications of Theoretical Models) (Granato and Scioli 2004; National Science Foundation 2002) to combine both formal theory and statistical analysis, I constructs a theoretical model of cabinet support, and draws an empirical implication about the changing effect of party support on cabinet support. In the model, I show the mechanism by which partisan loyalty is transformed into the effect of party support on cabinet support, using the AR(1) process as an “analogue” of partisan loyalty or persistence of party support. The implication is that when the persistence of support rates for existing parties is stronger than that of support rates for new parties, the effect of party support on cabinet support decreases as the proportion of new party supporters who support the cabinet within a body of all cabinet supporters increases. I illustrate this idea with time series data drawn from the monthly polls conducted by Jiji Pres.

Second, I empirically demonstrates the changing effect of party support

³An earlier version of this chapter was written in Japanese, and published as Iida (2005).

on cabinet support over time, using ARFIMA (autoregressive fractionally integrated moving average) modeling (Box-Steffensmeier and Smith 1998; Lebo, Walker and Clarke 2000; Box-Steffensmeier and Tomlison 2000; Clarke and Lebo 2003) as well as time varying parameter techniques such as the Legendre polynomial model (Lin 1999) and a Bayesian change point model (Western and Kleykamp 2004). The dependent variable is the support rate for the cabinets, and the independent variables are the support rate for the ruling parties, the consumer price index,⁴ and the “honeymoon” dummies.

The results show that the effect of party support on cabinet support declined under the Hosokawa government, which was the first non-LDP coalition government in 38 years. While this tendency remained under the Murayama coalition government, the partisan effect returned just after Hashimoto, the LDP leader, assumed the prime minister’s seat.

In Chapter 5,⁵ I test two hypotheses to explain this change in the effect of party support on cabinet support in the 1990s, using panel data from the Japan Election Study II (JESII), 1993-1996.⁶ I propose two models, one static and one dynamic. In the static model, the dependent variable is voters’ evaluation of the cabinet’s performance in general, and the independent variables are age; education; sex; voters’ evaluations of the cabinet’s performance in po-

⁴CPI is available on the website of the Japanese Statistics Bureau at <http://www.stat.go.jp/data/cpi/200107/zuhyou/a002hh.xls>

⁵An earlier version of this chapter was written in Japanese, and published as Iida (2006).

⁶The JES II was conducted by Ikuo Kabashima, Joji Watanuki, Ichiro Miyake, Yoshiaki Kobayashi, and Ken’ichi Ikeda. This was a seven wave panel study, begun before the House of Representatives election in 1993, after the House of Councilors Election in July 1995, and before/after the House of Representatives election in 1996.

litical and economic issues; and party support which is measured as dummies (the reference category is “independent”). In the dynamic model, the dependent variable is the change in the evaluation of the cabinet’s performance in general between two time points, and the independent variables are the change in evaluations of the cabinet’s performance in political and economic issues; and the change in party support, which is measured as dummies (the reference category is voters who remain “independent” between two time points).

The results suggest that the effect of party support on cabinet support dropped under the Murayama administration because the supporters of the LDP, to which the prime minister did not belong, supported the Murayama cabinet less strongly. Although the supporters of the JSP with which the prime minister was affiliated tended to support the cabinet, their proportion within the body of all government party supporters was not large. The results also imply that the effect returned under the Hashimoto administration because the prime minister was the LDP party leader, and a large body of LDP supporters strongly supported the cabinet.

Finally, Chapter 6 summarizes the overall findings of this dissertation, discusses their broader implications and generalizability to other democratic countries, and suggests a future research agenda. It also discusses the unique relationship between party support and cabinet support under the recent Koizumi administration.

Chapter 2

Party Support and Cabinet Support in Japan

This chapter overviews the relationship between party support and cabinet support in post-war Japan. Through a review of literature, I show that it is reasonable to expect a changing impact of party support on cabinet support over time. More specifically, I explore why Japanese voters' supportive attitude toward the LDP was strongly associated with support for a cabinet, and why the LDP supporters had a reason to support the LDP government. I, then, look at why that association became weaker.

The basic argument here is that LDP support was tightly associated with cabinet support in Japanese people's minds under the LDP's one party dominant regime, the "so-called 1955 party system," for two reasons, ideological origins of partisanship, and voters' perception of the LDP's ability to govern. The changing political environment, such as economic development and the resolution of the Cold War, however, altered the relationship. This

chapter is also intended to provide a context for the statistical analysis of Japanese data in the following chapters.

2.1 A Tie between the LDP Support and Cabinet Support

After World War II, Japan was rebuilt as a liberal democratic state under the direction of the Supreme Commander of the Allied Powers (SCAP) established by the United States. The liberal democracy was, however, not necessarily the only realistic alternative in the people's mind at that time. Communists were admired by a number of citizens and most intellectuals for their most principled resistance to the war.¹ The Japan Socialist Party (JSP/*Shakaitou*), on the other hand, won a plurality in the House of Representatives as a result of the first general election of 1947. Its leader, Tetsu Katayama, was even elected prime minister in a progressive coalition government, although the government collapsed soon after because of the leftist rebellion within the party.

The United States first allowed the progressive groups to grow, aiming at purging the militaristic and imperial legacies of pre-war Japan. When

¹For example, John W. Dower emphasizes the Communists' considerable status in Japan during the early post-war period, stating: "When Tokuda Kyūichi and several hundred other Communists were released from prison, they became celebrities and instant heroes in a society whose old heroes had all suddenly been toppled. Similarly, Nosaka Sanzō's arrival in January 1946 after a long journey from China attracted a great crowd. He, too, received a hero's welcome; even conservatives, it was said, joined in. Within a few months Nosaka was elected to the Diet in the first general election held under occupation auspices. Defeat gave such Communist leaders charisma, imbuing them with an aura of integrity and political acuity. By the same token, defeat helped establish Marxism and the Communist Party itself as sources of clear, secular, universal principles that transcended the disastrous, particularistic values of the imperial state." (Dower 1999, p.236)

realizing the need to confront the communist threat in East Asia, however, the SCAP finally began to oppress the leftist movements that were opposed to the rearmament of the country, and helped the conservative camps to create a new military force.² Corresponding to a change in the American occupation policy known as “the reverse course,”³ conservatives of the Liberal party (*Jiyuutou*) and the Democratic Party (*Minshutou*) attempted to modify the achievements of post-war reforms including the Constitution, especially its Article 9 that prohibited the use of military force.

As a reaction, the progressives and organized labour conducted aggressive protests around the country, and the JSP was reunified. The JSP aimed to protect the Constitution and oppose against rearmament as well as the military alliance between the United States and Japan symbolized by the security treaty signed in 1951 (Masumi 1983). This finally lead to a counter-reaction from the conservative camp under the strong influence of the traditional commercial and financial communities (*Zaikai*) as a merger of two conservative parties into the Liberal Democratic Party (LDP, *Jiyuu Minshutou/Jimintou*) in 1955.

²The military force was founded as the National Police Reserve (*Keisatsu Yobitai*) in 1950 when the Korean War started, then was renamed the National Safety Forces (*Hoantai*) in 1952, and finally became the Self-Defence Force (*Jieitai*) in 1954.

³It is called “reverse,” compared to the progressive social reforms early in the Occupation.

2.1.1 Ideological Origins of Party Support

Since then, the opposition between the LDP and the JSP had formed “The 1955 party system.”⁴ Under the party system, political parties represented different political ideologies or regimes. The LDP, backed by the United States, had a realistic orientation of liberal democracy that was compatible with Japanese traditional values, including the Emperor system while the JSP and the JCP, influenced by the Soviet Union, aimed at establishing a socialist regime.⁵ Naturally, a pattern of voters’ party support followed the ideological cleavage in the sense that liberal democrats were likely to support the LDP, and socialists and communists tended to favor the JSP and the JCP.

Because of the ideological roots of party support, voters’ support rarely changed between the LDP and the JSP. Voters might stop supporting the LDP for one reason or another, but they were unlikely to become the JSP supporters because of the different ideology. Kohno (2001) shows that correlations between support rates for the LDP and the JSP are generally statistically insignificant under the 1955 party system, as shown in Table 2.1. This suggests

⁴“The 1955 Party System” is the most influential and frequently used concept to explain post-war Japanese politics. According to Yamaguchi (1985), it is most commonly characterized as the ideological opposition between conservative and progressive parties over the Constitution and “the Treaty of Mutual Cooperation and Security.”

⁵Although the JSP and the JCP did not receive orders from the Communist Party of the Soviet Union, some of their members were under its influence. While the JSP belonged to the anti-communist Socialist International, there was an enduring tension within the party between the leftists who were sympathetic to communism and the idea of Marxist revolution, and rightists who were moderate social democrats. The JCP pursued its own direction, independent of communists abroad, but always cared about their reactions. For example, when facing the Cominform’s criticism against the JCP’s willingness to compromise with the SCAP, the JCP decided to start a desperate armed struggle for revolution after a hard fight among its members in 1950(Scalapino 1967).

that a decrease in the LDP support rate did not lead to an increase in the JSP support rate, which indicates that the JSP was not an acceptable choice for the liberal democrats, while the LDP was not a possible alternative for the socialists.

On the other hand, correlations between the support rate for either party and the proportion of independent voters are substantively negative, as also shown in Table 2.1. This implies that a decrease in the proportion of LDP and JSP supporters lead to an increase in the proportion of independent voters. In other words, someone who stopped supporting the LDP or JSP was likely to become politically independent, rather than joining opposing party.

Table 2.1 Correlations between Independent, LDP Support, and JSP Support (Pearson Coefficient)

Period	Independent - LDP	Independent - JSP	LDP - JSP
June 1960-May 1963	-.346*	-.534**	.024
June 1963-May 1966	-.426**	-.214	-.406*
June 1966-May 1969	-.605**	-.627**	.298
June 1969-May 1972	-.766**	.331*	-.447**
June 1972-May 1975	-.658**	-.662**	.338*
June 1975-May 1978	-.560**	-.377*	-.273
June 1978-May 1981	-.680**	-.348*	.009
June 1981-May 1984	-.649**	-.542**	.327
June 1984-May 1987	-.462**	-.300	-.325
June 1987-May 1990	-.356*	-.511**	-.466**
June 1990-May 1993	-.732**	-.053	-.347

** $p \leq .01$, * $p \leq .05$; two tailed test.

Source: Kohno (2001), Table 2-3

Data: Monthly support rates for the LDP and JSP, and the proportion of independent voters, 1960-1993, drawn from monthly polls of the Jiji press.

Under the 1955 party system, the ideological opposition between political parties was obvious to most citizens. A number of surveys show that Japanese citizens did not have much difficulty placing political parties on the ideological spectrum from “conservative” to “progressive.” According to Miyake (1985), 87 percent of voters placed political parties on a left-right ideology scale in the same order, as part of the Japanese National Election Survey of 1967 conducted by the University of Michigan. Miyake (1985) also found that most voters voted for a party whose perceived ideological position was closest to theirs.

As described above, Japan’s party system had its origin in the cleavage characterized by the opposition between two political ideologies. There was no other option than the LDP for those who supported the liberal democratic regime. The defeat of the LDP government directly meant a regime change from a liberal democracy to a socialist regime that the liberal democrats could not accept. Thus, the LDP supporters were almost forced to approve of the LDP government’s job performance, even when they found problems with it.

2.1.2 LDP as the Only Party That Has an Ability to Govern

While ideology had remained important during the entire period of the LDP’s one party dominant regime(Kabashima and Takenaka 1996), there was another factor that associated LDP support with cabinet support in people’s minds. Although the LDP maintained the conservative platform, insisting

on a “self-made” constitution, and ideologically in opposition to the JSP and other progressive groups, the LDP began to put more emphasis on economic development than on ideological issues. They had learned a lesson from bitter and violent conflicts inside and outside the Diet over the Treaty of Mutual Cooperation and Security between the United States and Japan in 1960.

Under the leadership of the LDP government headed by Prime Minister Hayato Ikeda, Japan experienced rapid economic growth, which allowed the LDP to attract more voters who were not ideologically committed to any issues, and to become a “catch-all party.” The JSP, on the other hand, stubbornly remained an ideological party, even accepting “the dictatorship of the proletariat” in its party platform (“*Nihon ni okeru Shakaishugi eno Michi*”: The Road to Socialism in Japan) in 1966.

As a result, the LDP became perceived by most voters as the only party that was capable of governing the country, due to its realistic view and economic policy success. For example, analyzing voters’ free responses to the survey question of party images asked in the JABISS survey of 1976⁶ and the JES survey of 1983,⁷ Miyake (1988) found that voters’ positive images about the LDP mostly came from its administrative and governing ability. These images included “ability to govern,” “reliability,” “policy and ideology suitable for the Japanese,” “comprehension,” and “foreign policy competence.” On the

⁶“JABISS” is based on the names of the binational group of five scholars who wrote *The Japanese Voter* (1991, Yale University Press): J for Japan and Joji Watanuki, A for America, B for Bradley Richardson, I for Ichiro Miyake, S for Scott Flanagan, and S for Shinsaku Kohei.

⁷Japan Election Studies

other hand, voters are skeptical about the JSP's competence as a government party, having negative images about it, including "no ability to govern," "no reliability," and "no executive ability."

The JSP and other opposition parties were expected by voters not to take power, but to play only a minor role in checking the LDP government. Showing that the LDP's superiority to all opposition parties, measured by a difference in the number of seats in the House of Representatives, lowered voters' support for the LDP in elections during the 1980s, Inoguchi (1983) concluded that voters wanted the LDP government to continue, but not to become very powerful. Furthermore, Kabashima (1998) calls such voters "buffer players" in the sense that they have incentives to both reward and punish the LDP to ensure its public responsiveness.

The JSP and other opposition parties seemed to accept this situation. Without proposing any realistic alternatives, the opposition parties behaved as if they were only interested in "opposition for opposition's sake," although they were more supportive of the cabinet bills than people thought. Knowledge of policy-making was accumulated only inside the LDP and the bureaucracy. The LDP politicians usually asked for the help of bureaucrats in policy making without hiring their own policy staffs, while the bureaucrats often used LDP politicians to influence legislature.⁸

⁸In 1993, as a part of political reform under the non-LDP coalition government, the position of a staff member in charge of policy-making paid for by the government was established to enhance politicians' policy-making ability.

2.2 The Change in the Relationship

As we have seen so far, the LDP support was strongly related to cabinet support during the 1955 party system because of voters' perception that only the LDP represented liberal democratic values, and had the ability to govern the country. After the 1980s, however, the relationship was gradually altered by the changing political environments surrounding the LDP and Japan.

2.2.1 The Collapse of Socialism

In the 1980s, as it became obvious that a liberal democracy guaranteed a better standard of living for people than a socialist regime, most Japanese voters began to consider socialism a failed political system. Ironically, this made the JSP more acceptable to voters because socialism was not realistic enough to be a threat to the well-established Japanese liberal democratic regime any more. The JSP achieved a victory in the 1989 House of Councillors election where they emphasized opposition to the LDP government's attempt to introduce the consumption tax, and showed itself as a party for women, with many female candidates.

According to Kabashima (1992), who analyzed the *Meisuikyo* election survey,⁹ 6.3 percent of the "strong" LDP supporters voted for the JSP in 1989, while none of them did so in the House of Representatives election of 1986. Also, 23.0 percent of the "weak" LDP supporters voted for the JSP in 1989,

⁹*Meisuikyo* is an abbreviation for *Akarui Senkyo Suishin Kyoukai* (the Association for Promoting Fair Elections).

whereas only 2.7 percent of them did so in 1986. Moreover, the proportion of independent voters who casted votes for the JSP increased from 8 percent in 1986 to 40 percent in 1989.

This was not an exceptional phenomena exclusive to 1989, but part of the declining trend in the association between ideology and party support. Tanaka (1996) showed that a correlation between voters' ideology and pattern of party support had declined since 1976, as shown in Figure 2.1. The correlations are higher when there is a stronger tendency for conservatives to support the LDP and for progressives to support the JSP and the JCP. The correlation was very high in the 1970s (around .75), but declined drastically in the mid-1980s (to about .60), and finally reached as low of .46 in 1987.

While the JSP remained an ideological party, the JSP supporters become more moderate by the late 1980s. Analysing data from the Jiji opinion polls, Miyake (2001) showed that the proportion of the JSP supporters who thought Japan should be in the liberal camp rather than the communist camp increased from 27 percent in 1970 to 54 percent in 1989, whereas the LDP supporters consistently thought that Japan should belong to the liberal camp (82 percent in 1970 and 89 percent in 1989). Miyake (2001) also showed that the proportion of the JSP supporters who liked the United States increased from 18 percent in 1970 to 41 percent in 1990.

The decline in the ideology also contributed to the rise of independent voters starting in the 1970s. The independent voters are less ideological, younger, and more politically dissatisfied than partisan voters (Kabashima

Figure 2.1 Correlations between Ideology and Party Support: 1972-93



Source: Tanaka (1996), Figure 13

Data: The *Meisuijkyo* election survey, 1972-1993

1998). Few of them are, however, always politically independent. Kabashima (1998) showed that a proportion of voters who had no party support in all seven-waves of the JESII (1993-96) was only 2.4 percent, while those who had no party support at least once were about half of all voters. Miyake (1998) called them “sporadic voters” who became politically independent as “temporal refugees,” not directly changing their support from party to party. The existence of these less ideological floating voters brought instability to cabinet popularity rate, eroding the traditional partisan base of cabinet support.

The influence of ideology in Japanese political scene declined even more after the collapse of the Soviet Union in 1991. Even voters who held liberal democratic values could safely vote for the JSP because of the drop in the socialism significance. A liberal democratic regime was so self-evident that voters could expect the regime to continue even if they stopped supporting the LDP (Tanaka 1996). This also made it possible for new parties to emerge in the early 1990s.

2.2.2 The Establishment of New Parties

The largest factor that changed the relationship between party support and cabinet support was the establishment of new parties in 1993, which provided the moderate supporters with new alternatives.¹⁰ In the wake of a series of political corruption scandals which finally forced Prime Minister Noboru Takeshita to resign in 1989, the LDP received harsh criticism and pressure to

¹⁰I referred to Kusano (1999), Curtis (1999), and Reed (2003) to make a brief description of the political situation after 1993 in Japan.

reform from citizens and opposition parties. The LDP cabinet, however, was not successful in satisfying public demand for clean government, and failed twice to pass political reform legislation in October 1992 and June 1993.

The delay triggered a reformist rebellion within the LDP. Morihiro Hosokawa, who was a former member of the House of Councillors and Kumamoto Prefecture governor, left the LDP to form the Japan New Party (JNP, *Nihon Shintou*) in May 1992. The Renewal Party (RP, *Shinseitou*) was founded in June 1993 by LDP faction leader Tsutomu Hata and his colleague Ichirou Ozawa, along with 42 other LDP politicians who proposed a number of political reforms, including electoral system reform by the introduction of single member districts. Another reformist group within the LDP, consisting of 10 relatively liberal and novice members, and headed by Masayoshi Takemura, established The New Party *Sakigake* (*Shintou Sakigake*) in June 1993. These three parties joined the other opposition parties to pass a no-confidence motion, and denied the LDP's majority status in a subsequent election in July.

After the House of Representatives election of July 1993, eight opposition parties, including the three newly established parties, formed the first non-LDP coalition government in almost 40 years. The coalition government headed by the JSP's Hosokawa began with the highest popularity rating ever recorded (71.9 percent), due to the voters' expectation that it would do "something different." (Reed 2003)

With such voters' strong demand, some type of political reform was virtually inevitable, because no party wanted to enter the next election as the

party that had killed reform (Reed and Thies 2001). The way of enacting political reform was, however, controversial even inside the coalition. The JSP wanted a new electoral system to contain a proportional representation bloc, which made a multi-party system seem to survive, while most other members of the coalition aimed at establishing a two-party system by introducing single member districts. The bills were finally passed in January 1994 after a compromise in reducing the number of seats from proportional representation. This favored the LDP and hurt the preference of the JSP. By defending their farming support base, the JSP also isolated themselves from other parties inside the coalition on the issue of rice import liberalization.

When Prime Minister Hosokawa proposed a new tax, named the “national welfare tax” (*kokumin fukushi zei*), the opposition between the JSP, which had long been opposing to the consumption tax, and other parties, especially the RP - *Koumei* alliance, became clear inside the coalition. Therefore, it was natural that the JSP (as well as *Sakigake* that also had been in a bad relationship with the RP - *Koumei* alliance) was excluded from a new coalition formed after the unexpected resignation of Prime Minister Hosokawa in April 1994.

The new coalition government, headed by Hata of the RP, was a minority government, and survived for only about two months. After the resignation of Hata, who thought that no-confidence motion was unavoidable, the LDP and the JSP formed a coalition. The LDP was so hungry for power that they accepted the JSP’s demands that the new prime minister be Tomiichi Mu-

rayama, the JSP leader, and that the LDP protect the Constitution. *Sakigake* also joined the coalition to play the role of a bridge between the traditional enemies.

While the JSP continued to change their traditional policies concerning the Self Defence Force, and the Treaty of Mutual Cooperation and Security between the United States and Japan in order to preserve a coalition with the LDP, the opposition parties began to look for ways to form a new party, expecting a general election under single-member districts. In December 1994, the RP, *Koumei*, DSP, and the JNP merged into the New Frontier Party (NFP, *Shinshintou*).

Despite difficulty maintaining the unity of the parties with different backgrounds and policy preferences, the NFP exceeded expectations in the 1995 House of Councillors election with a 20 seat gain and the largest share of the proportional representation vote. While the LDP enjoyed a gain in a few seats, the JSP suffered a huge loss, which led to inside criticism for being a coalition partner with the LDP, and caused some members to leave the party. In January 1996, Prime Minister Murayama resigned and gave premiership to the LDP leader, Ryuutarou Hashimoto, followed by the name change of the JSP to the Social Democratic Party (SDP, *Shakai Minshutou*).

In October 1996, the House election saw no clear winner. The LDP gained 28 seats, but still did not recover a majority, whereas the SDP, *Sakigake*, and the NFP lost seats. The Democratic Party (DP, *Minshutou*), established by Yukio Hatoyama and Naoto Kan from *Sakigake* in September 1996,

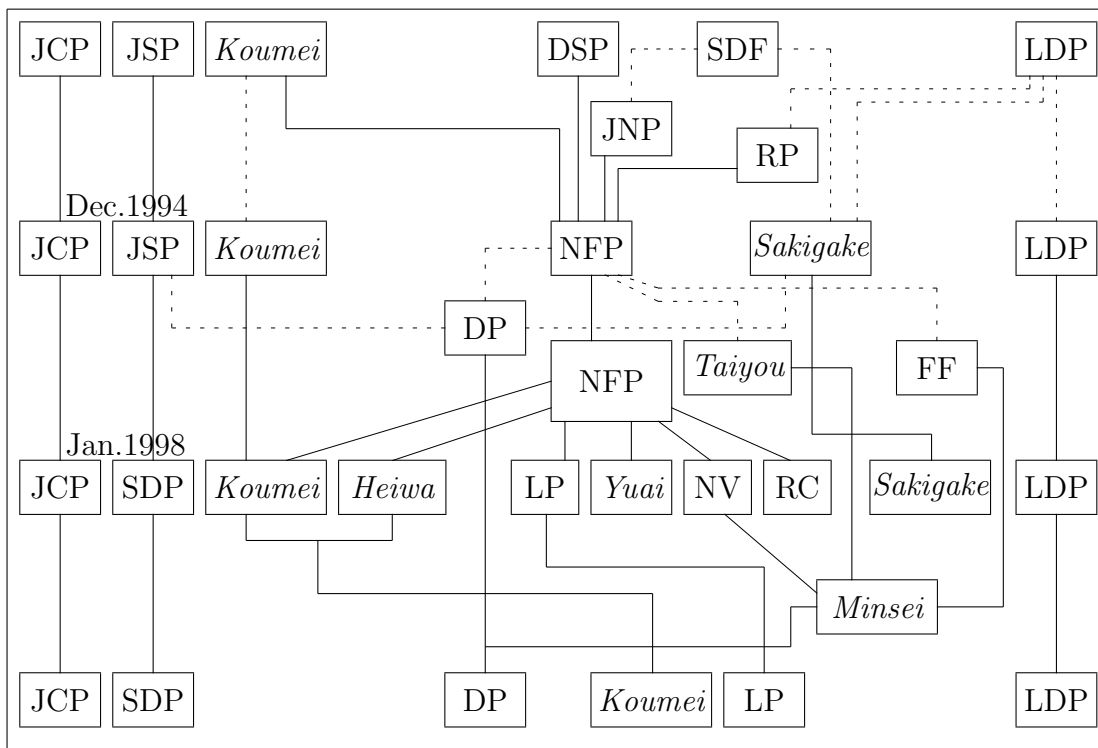
became the third largest party with 52 seats, but failed to get their “new party boom” (Reed 2003).

The LDP, however, finally achieved a majority by picking up defectors from the NFP and other parties after the election. The NFP had no way to prevent the members, including even core members, from defecting. Moreover, even Hata, the former Prime Minister and partner of Ozawa, left the NFP, and formed his own party, named the Sun Party (*Taiyoutou*), at the end of 1996. Facing a growing criticism from novice members for his unaccountability and top-down decision making style, Ozawa finally decided to desolve the NFP, and reorganized his group as the Liberal Party (LP, *Jiyuutou*). Other groups within the NFP also formed their own parties, such as *Koumei*, The New Party Peace (*Shintou Heiwa*), The New Party Friendship (*Shintou Yuuai*), The National Voice (*Kokumin no Koe*), and the Reformist Club (*Kaikaku Kurabu*). Most members of these parties, with the exception of *Koumei*, finally joined the DP through *Minseitou*.

Figure 2.2 shows the party realignment in the 1990s described above. For this period, there existed more than twenty parties, including some which do not appear in the figure. In short, the political environment surrounding Japanese voters changed dramatically after July 1993.

Citizens generally welcomed the new parties’ eagerness for reforms, and did not see them in the context of the traditional “left - right” opposition between parties. Using a factor analysis method for mapping party ideological positions, as perceived by voters, Miyake (1998) showed that voters recog-

Figure 2.2 Party Realignment in the 1990s



Source: Kusano (1999, p.14)

List of abbreviations

LDP: Liberal Democratic Party (*Jiyuu Minshutou/Jimintou*), DP: The Democratic Party (*Minshutou*), NFP: The New Frontier Party (*Shinshintou*), *Koumei*: The Clean Government Party (*Koumeitou*), *Sakigake*: The New Party Harbinger (*Shintou Sakigake*), LP: Liberal Party (*Jiyuutou*), SDP: Social Democratic Party (*Shakai Minshutou*), JCP: Japan Communist Party (*Nihon Kyousantou*), JSP: Japan Socialist Party (*Nihon Shakaitou*), JNP: Japan New Party (*Nihon Shintou*), RP: The Renewal Party (*Shinseitou*), DSP: Democratic Socialist Party (*Minshatou*), SDF: Social Democratic Federation (*Shaminren*), *Taiyou*: The Sun Party (*Taiyoutou*), FF: From Five, *Heiwa*: The New Party Peace (*Shintou Heiwa*), *Yuuai*: The New Party Friendship (*Shintou Yuuai*), NV: The National Voice (*Kokumin no Koe*), RC: The Reformist Club (*Kaikaku Kurabu*), *Minsei*: *Minseitou*.

nized the opposition between new parties and existing parties over the issues of “political system reform” and “change of administration.” In the same manner, Tanaka (1996) pointed out that the opposition between progressives and conservatives existed in voters’ minds in 1976 and 1981, but disappeared in 1995.

The new parties also differed from existing opposition parties in voters’ perception of their governing ability. As their leaders were experienced politicians from the LDP, these parties naturally shared moderate and less ideological mainstream values with the LDP, while the JSP and the JCP obviously had their own strong political ideologies. At the same time, the Democratic Socialist Party (DSP, *Minshu Shakaitou*, *Minshatou*) was backed by conservative labor unions, and *Koumeitou* (The Clean Government Party) was rooted in a Buddhist group. Voters expected the new parties to have more ability to govern than other traditional opposition parties, including the JSP.

According to Kabashima (1998), the proportion of voters who referred to the LDP as a party that has the ability to govern dropped from 53.6 percent in 1983 to 36.8 percent in 1995, while the proportion of voters who held confidence in opposition parties’ governing ability increased from 12.4 percent to 32.9 percent (the NFP: 21.1 percent, the JSP: 6.4 percent, *Sakigake*: 1.7 percent, the JCP: 0.8 percent, and other parties: 2.9 percent).

The fact that these new parties were perceived by voters to have the ability to govern brought instability to the relationship between party support and cabinet support. As discussed earlier, the LDP government could enjoy

a loyal support from LDP supporters because the LDP was the only party that was perceived by voters to have the ability to govern. As the new parties had to compete with the LDP, however, their government did not benefit from favorable public view.

2.2.3 The Rise of the New TV News Shows

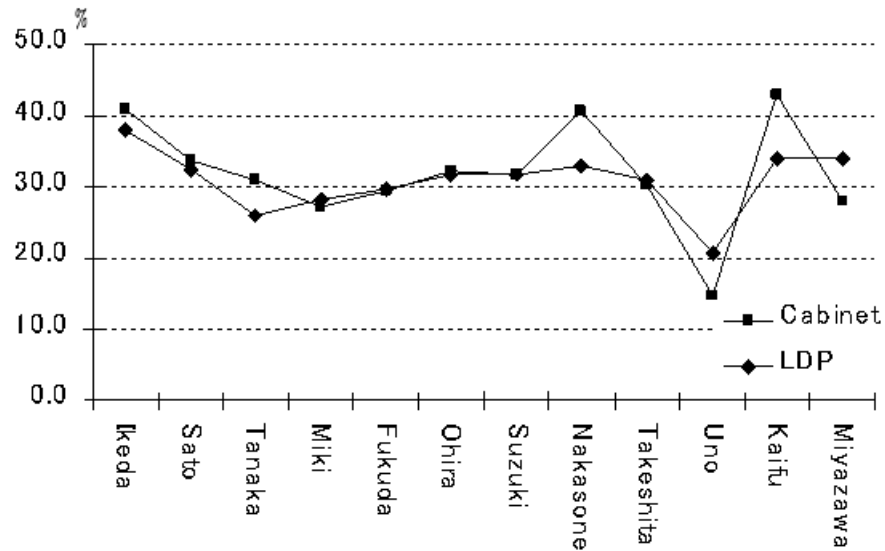
After the 1980s, voter's attitudes toward the prime minister began to affect their support for the government when TV news shows, in which newscasters focused on individual politicians and sometimes criticized them, achieved popularity among citizens. TV news programs in Japan had been descriptive, neutral, or objective in the sense that newscasters merely reported facts based on information released by the government without their interpretation, which contributed to conserving the LDP's one party regime (Krauss 2002).

Voters had few ways to receive information on the personalities of politicians, including the prime minister, and therefore rarely took them into consideration when casting a vote. Party labels, especially that of the LDP, were much more important than candidate personalities when making political decisions, at least, for ordinary citizens.¹¹ The influence of the party label on voting behavior, however, declined after TV news programs started to provide stories focusing on individual politicians, especially in election times. As Krauss (2002) showed, the gap between LDP popularity and cabinet popularity

¹¹Although a *Kouenkai*, or a politician's individual support group, has been said to be powerful in elections, a majority of people do not belong to any such group (Kabashima 1988).

was prominent after the Nakasone administration, which is called “presidentialization of the prime minister’ role” (Figure 2.3).

Figure 2.3 Presidentialization of the Prime Minister?



Data: Monthly support rates for the LDP and cabinet, 1960-1993, drawn from monthly polls of the Jiji press.

While prime ministers had been expected to implement policies with a consensus of the party members, “presidentialized” prime ministers, such as Yasuhiro Nakasone and Jun’ichiro Koizumi, sometimes directly appealed to the public to overcome opposition from inside the party. Thus, cabinets headed by such prime minister were perceived by voters to be so different from the LDP that voters did not associate the party with the prime minister in evaluating his cabinet.

2.3 Japanese Politics after the non-LDP Coalition Government

Since returning to power with Murayama-headed SP in June 1994, the LDP has assumed the most important part of the coalition governments, but its coalition partner has changed several times, and the LDP's majority government has not yet been established. After the general election of 1996, the LDP experienced minority status in the House of Representatives due to its seat loss and the secession of the SP and *Sakigake* from the coalition. Even worse, a defeat in the House of Councillors election of July 1998 prompted Prime Minister Hashimoto to resign.

The LDP's Keizou Obuchi, who assumed premiership from Hashimoto, soon after began to approach potential coalition partners, the Liberal Party (LP) and *Koumeitou*, to form a majority government. A coalition agreement was achieved with the Liberal Party headed by Ichirou Ozawa in January 1999, and then with *Koumeitou* in October 1999. The members of the LP, however, did not necessarily welcome *Koumeitou* to the administration, being afraid of losing their influence on policy-making processes, and finally decided to dissolve the agreement in April 2000.

In his effort to deal with the aftermath of the LP's secession, Obuchi suffered a stroke, slipped into a coma, and was soon replaced by Yoshirou Mori. The Mori administration had two coalition partners, *Koumeitou* and the Conservative Party (*Hoshutou*), which consisted of the former LP members.

The coalition framework has remained the same since the Mori administration except that the Conservative Party merged into the LDP.

Although the LDP-led coalition governments in this period were influenced by their coalition partners,¹² the LDP's infamous faction politics were still evident to citizens, especially in the process of selecting a prime minister. Obuchi was criticized by the media for being selected from the same faction as Hashimoto, who resigned to take the blame for defeat in the 1996 general election. Mori was believed to be chosen in a secret meeting of five of the LDP's veteran politicians. These cases gave citizens an impression that factions' interests were more influential than the public opinion, even inside the coalition.

2.4 Discussion: 1993 as a Change Point?

As seen from the description so far, it is likely that any change in the political psychology of Japanese citizens happened in the early 1990s. The collapse of the LDP's one-party dominant regime, triggered by the general election of 1993, not only caused but also reflected the change. The question is, however, what makes the early 1990s different from other periods of change in Japanese post-war political history—for instance, the 1970s. As in the early 1990s, political scandals and corruptions lead to the defeat of the LDP in elections, and triggered the establishment of a new party in the 1970s (Cox and Rosenbluth

¹²For example, the LP urged the government to establish “Senior Vice-Minister” positions in 1999, while *Koumei* was the strong force behind the Shopping Coupons System in 1999.

1995).

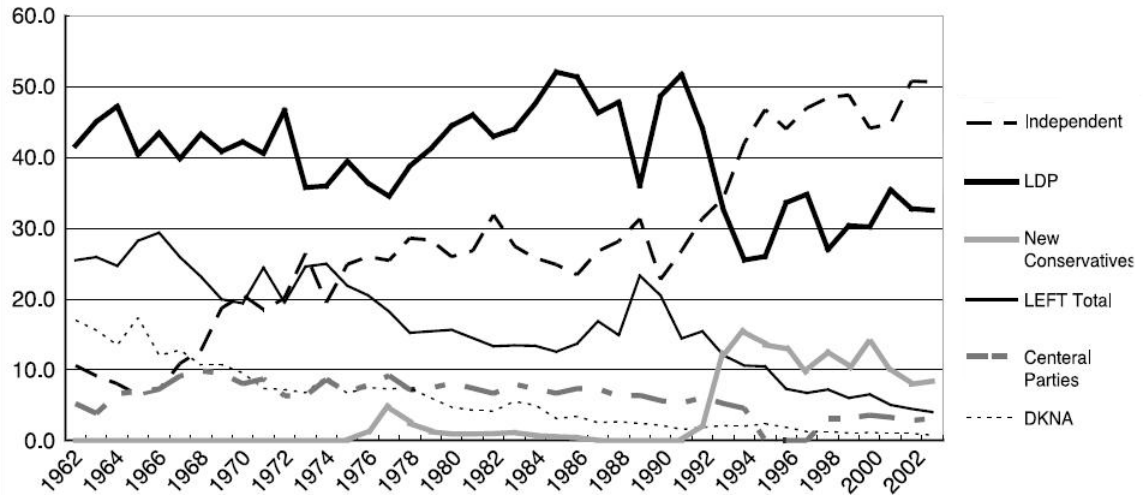
The 1970s was called the “age of transition” or “close balance between the ‘conservatives’ and ‘progressives’ ” (*hokaku hakuchuu*), as symbolized by a narrow seven seat margin between the LDP and opposition parties in the House of Councillors election of 1974. After the election, Prime Minister Kakuei Tanaka was almost forced to resign, under harsh criticism from citizens and the media for his political corruption. Even worse, as a reaction to the Lockheed bribery scandals for which Tanaka was arrested in 1976, some members of the LDP formed the “New Liberal Club” (NLC, *Shin-Jiyuu Kurabu*), claiming the “renewal of conservative politics.” The LDP and NLC formed the first coalition government after the 1955 party system was established.

NLC in the 1970s and new parties in the 1990s, such as JNP and NFP, shared some characteristics. First, they were established by former LDP politicians who pursued political reform. Therefore, they also had more realistic and feasible policies than traditional opposition or left-wing parties. Finally, this brought them a victory in an election, and allowed them to be part of the administration.

Despite these similarities, however, the 1970s did not see a fundamental change. As suggested in this chapter, the biggest reason was probably that voters’ partisanship was still strong enough at that time that new parties were not influential. In the 1970s, most voters were partisan, while almost half of them were politically independent in the 1990s, as seen in Figure 2.4. Voters had an incentive to only temporally punish the LDP, but did not want to let

other political parties than the LDP to rule.

Figure 2.4 Changes in Partisanship in Japan, 1962-2002



Source: Tanaka and Martin (2003), Figure 1.

Data: The *Yomiuri Shimbun* Public Opinion Polls.

“New Conservatives” identify themselves as supporters of one of the following parties: New Liberal Club from 1976 to 1988, Japan New Party (*Nippon Shintou*), New Party *Sakigake*, Renewal Party (*Shinseitou*), New Frontier Party (*Shinshintou*), or Democratic Party of Japan (*Minshutou*). Those partisans identifying with one of the “Central Parties” support either the Democratic Socialist Party (*Minshatou*) or *Koumeitou*. “Left Parties” refer to supporters of the Japan Communist Party, Japan Socialist Party, or Social Citizens League (*Shaminren*) depending on years.

2.5 Conclusion

This chapter overviewed the relationship between LDP support and cabinet support under the 1955 party system, and suggested the possibility that the relationship became weaker due to changes took place in the late 1980s. The

LDP government enjoyed a loyal support from its supporters, thanks to the ideological opposition between parties. Because the LDP was the only party that endorsed a liberal democratic regime, liberal democrats had no choice but to support the LDP government as well as the LDP. As the socialist threat lost its reality, however, the liberal democrats became less ardent in backing the LDP government, having an incentive to punish the government.

The LDP government also benefited in terms of maintaining power from voters' perception that only the LDP was able to govern the country. The rapid economic development under the LDP made the party look attractive to voters from different backgrounds, and these voters supported the LDP and its government. In fact, the LDP and its government were associated with each other so strongly in voters' minds that the supporting the LDP and supporting the government had almost the same meaning. Thus, LDP support and cabinet support covaried over time. The establishment of new parties, however, threatened the position of the LDP as the only party that was able to govern the country. Voters also perceived the new parties to have a potential to govern well because the party leaders were experienced conservative and moderate politicians. The "government party" was not necessarily the LDP for the voters any more.

Another reason voters began to distinguish between the LDP and the government was that the personality of the prime minister became more salient to them due to the change in how the mass media reported political news. Previously, the media coverage of politics tended to be objective and neutral, in

the sense that they merely reported official information. In the 1980s, however, the media began to focus on individual politicians, including the prime minister, with their own interpretation. This also weakened the association between the LDP and the government headed by the prime minister.

All of these suggest that there was likely to be a significant change in voters' mind in the early 1990s. Party support lost its significance as a reference for voters to make political decisions, and as a base for cabinet support. Before I take a deep look at the changing relationship, the next chapter examines the relationship between party support, cabinet support, and the economy over time as a preliminary analysis.

Chapter 3

The Effect of Party Support on Cabinet Support

This chapter examines the effect of government party support on cabinet support to provide a basis for analyses of the changing effect in later chapters. More specifically, I investigate how cabinet support, party support, and the economy influence each other.

Cabinet support has been studied mainly in the context of retrospective evaluation of the cabinet's performance in Japan. Inoguchi (1980) examines the relationship between cabinet support and the state of the economy, taking government monetary policy into consideration for each period after World War II. Nishizawa (2001) correlates the movement of cabinet support over time with voters' perception of the economy. Not only aggregate data, but also survey data, find the effect of retrospective evaluation of cabinet performance in various policy areas on cabinet support (Hirano 1993).

On the other hand, party support has been considered another impor-

tant variable in explaining cabinet support level among citizens. Many studies have assumed that party support is a base for cabinet support (Inoguchi 1980; Nishizawa 2001; Krauss 2002).¹ This assumption reflects the fact that the LDP was more salient than the cabinet as a single ruler that made the country prosperous for almost forty years as described in Chapter 2. That is, citizens developed trust in the LDP's ability to govern, and referred to it in evaluating the cabinet's performance.

3.1 Data

I analyze data compiled by the *Jiji* Press. Early each month, a representative sample of Japanese is interviewed in person and asked which party they currently support and whether they support the current prime minister's cabinet. The methodology and question wording have remained unchanged through this entire period. I study the period from June 1960 to March 2001, for a total of 490 monthly observations.

Other variables included in the analysis are government party support and Consumer Price Index (CPI). Government party support rate is calculated by summing up support rates for all political parties in government. Before August 1993, government support rate was the same as LDP support. CPI is the ratio of the consumer price index to that of the year before. The idea is that, if consumer price index goes up significantly over the previous year, then it is more likely to have a negative effect on cabinet support. In Inoguchi

¹Burden (2005), however, claims the unidirectional influence of cabinet support on party support.

(1980), this variable generally shows an anticipated negative effect on cabinet support, but the significance of its effect seems to depend highly upon model specifications. This is the only economic variable in my model simply because there is no monthly income variable (usually measured by GDP). However, in Inoguchi (1980), yearly data indicated the income variable played a less important role than the price variable in explaining cabinet support. His research showed that the income variable was no longer significant if the price variable was added to the model.

Table 3.1 and Figure 3.1 show cabinet support and government party support over this period. Comparing the two time-series, it is obvious that cabinet support fluctuates more than party support over time. Moreover, the discrepancy between cabinet support and party support tends to be larger after the 1980s.

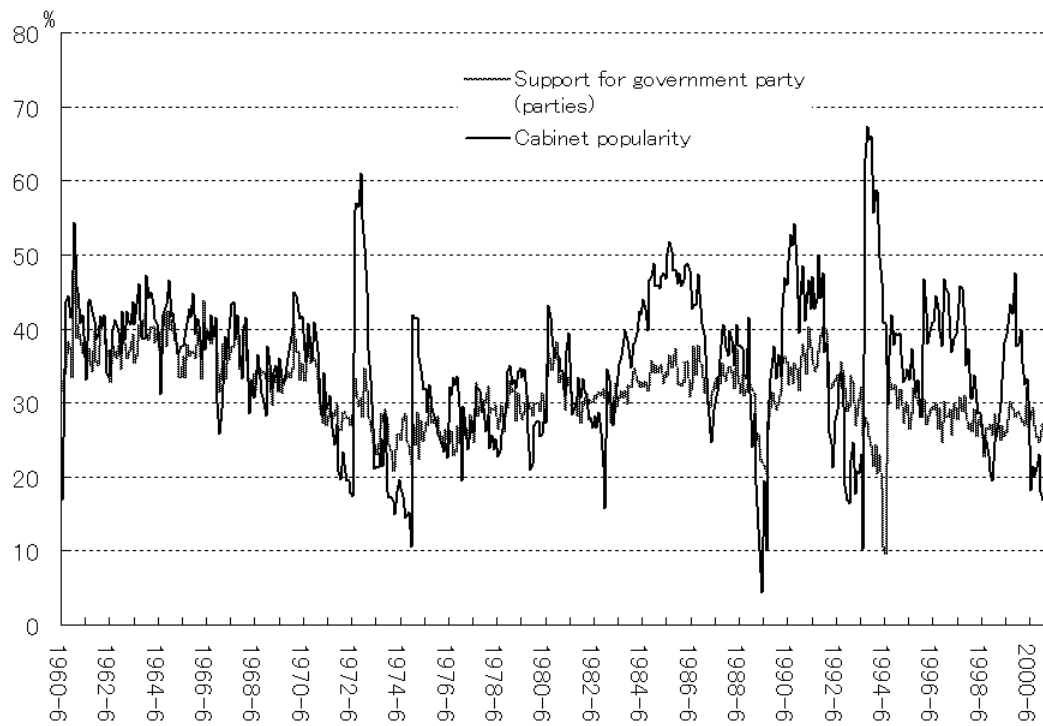
Table 3.1 Summary Statistics for Political and Economic Variables, June 1960-March 2001

Variable	N	Mean	Std Dev	Minimum	Maximum
Cabinet Support	490	35.01	9.99	4.40	67.40
Gov. Party Support	490	31.50	4.95	9.60	52.90
CPI	490	66.38	30.05	18.50	102.20

Source: Jiji Public Opinion Polls, 1960-2001.

The rest of the chapter verifies stationarity of each time-series by the Augmented Dickey-Fuller test, and then analyzes the multivariate relationship using vector autoregression (VAR).

Figure 3.1 Party Support and Cabinet Popularity in Japan, 1960-2001



3.2 ADF Tests

In essence, the Dickey-Fuller test for determining whether a time series is integrated involves the regression of first differences of the series on its lagged levels. If the series is stationary, the regression coefficient associated with the lagged levels will be negative and significant. The ADF test includes a number of lags of the first differences on the right-hand side of the regression equation and is appropriate if the resulting coefficients are significant (Engle and Granger 1987). Critical values for these tests are greater than normal, due to nonstandard distributions, and are reported by MacKinnon (1991).

The data-dependent general-to-specific criterion is used to choose the optimum lag structure for the error process of the Dickey-Fuller equation as advocated by Ng and Perron (1995) and Perron (1997). Under this process, the specific order is chosen out of the general order (I considered here 17 lags based on the Schwert's rule of thumb: $m = \text{Int}\{12(T/100)^{\frac{1}{4}}\}$) on the basis of the standard t -tests of significance for the lag terms.

Table 3.2 Augmented Dickey Fuller Tests for a Unit Root

Regression: $\Delta z_t = \alpha_0 + \alpha_1 t + \alpha_2 z_{t-1} + \sum_{i=1}^m \beta_i \Delta z_{t-i} + \epsilon_t$		
	ADF	Lag order(m)
Cabinet Support	-5.816*	3
Gov. Party Support	-4.680*	2
CPI	-.832	14

An asterisk indicates significance (rejection of the unit root null) at the 5 per cent level.

The results in Table 3.2 suggest that the series of cabinet support and government party support are stationary, while CPI is nonstationary. Therefore, I take the first difference of CPI.

3.3 The VAR Model

I examine the relationship between the variables using Vector Autoregression (VAR) methodology. VAR (Freeman, Williams and Lin 1989; Simms 1980) helps to evaluate the causal directions of the relationships between cabinet support, government party support, and CPI. I select VAR (instead of other causal modeling alternatives, such as three-stage least squares) because I want to examine the determinants of cabinet support without making the variables *a priori* exogenous.

VAR is a multivariate extension of the Granger (1969) approach to causal inference. Each dependent variable is regressed on lagged values of itself and other dependent variables in the system. VAR provides an excellent control for history, by taking into account several lags of all of the endogenous variables in the system.

I determine lag lengths empirically using methods based on Simms (1980). Table 3.3 shows the process. The likelihood ratios (LR) are calculated to test if there is a difference in log-likelihood between the pair of different lag specifications (up to 20 lags). The first look at the results suggests that appropriate lag length is 8, 10, 12, or 14. Calculating the likelihood ratios for all possible pairs of the candidates, I finally find that the appropriate lag

length is 14.

Table 3.3 Likelihood Ratio Tests for Lag Order

Pair for Comparison	LR	Pair for Comparison	LR
Lag = 1 vs. Lag = 2	75.739*	Lag = 16 vs. Lag = 17	12.141
Lag = 2 vs. Lag = 3	19.181*	Lag = 17 vs. Lag = 18	4.286
Lag = 3 vs. Lag = 4	14.518	Lag = 18 vs. Lag = 19	11.303
Lag = 4 vs. Lag = 5	20.992*	Lag = 19 vs. Lag = 20	3.412
Lag = 5 vs. Lag = 6	35.214*		
Lag = 6 vs. Lag = 7	24.493*	Lag = 3 vs. Lag = 8	116.933*
Lag = 7 vs. Lag = 8	21.109*	Lag = 3 vs. Lag = 10	164.695*
Lag = 8 vs. Lag = 9	12.647	Lag = 3 vs. Lag = 12	307.384*
Lag = 9 vs. Lag = 10	37.127*	Lag = 3 vs. Lag = 14	336.239*
Lag = 10 vs. Lag = 11	15.973	Lag = 8 vs. Lag = 10	49.244*
Lag = 11 vs. Lag = 12	127.121*	Lag = 8 vs. Lag = 12	192.533*
Lag = 12 vs. Lag = 13	10.694	Lag = 8 vs. Lag = 14	222.924*
Lag = 13 vs. Lag = 14	21.445*	Lag = 10 vs. Lag = 12	142.904*
Lag = 14 vs. Lag = 15	11.285	Lag = 10 vs. Lag = 14	174.339*
Lag = 15 vs. Lag = 16	7.608	Lag = 12 vs. Lag = 14	31.875*

An asterisk indicates significance (rejection of no difference) at the 5 percent level.

$LR = (T - k)(\log|D_R| - \log|D_U|) \sim \chi^2(q)$, where D_R is the matrix of cross products of residuals when the model is restricted; D_U is the same matrix for the unrestricted model; k is the total number of regression coefficients estimated divided by the number of equations; q is the number of restrictions.

VAR evaluates relationships by conducting joint hypothesis tests for the blocks of lags associated with each variable. In sum, the VAR model is essentially a series of regression equations where each endogenous variable in the system is set equal to lagged values of itself and all of the other variables in the system. The trivariate VAR(14) model equation, for example, has the

form

$$\begin{aligned}
\begin{pmatrix} y_{1t} \\ y_{2t} \\ y_{3t} \end{pmatrix} &= \begin{pmatrix} c_1 \\ c_2 \\ c_3 \end{pmatrix} + \begin{pmatrix} \pi_{11}^1 & \pi_{12}^1 & \pi_{13}^1 \\ \pi_{21}^1 & \pi_{22}^1 & \pi_{23}^1 \\ \pi_{31}^1 & \pi_{32}^1 & \pi_{33}^1 \end{pmatrix} \begin{pmatrix} y_{1t-1} \\ y_{2t-1} \\ y_{3t-1} \end{pmatrix} \\
&+ \begin{pmatrix} \pi_{11}^2 & \pi_{12}^2 & \pi_{13}^2 \\ \pi_{21}^2 & \pi_{22}^2 & \pi_{23}^2 \\ \pi_{31}^2 & \pi_{32}^2 & \pi_{33}^2 \end{pmatrix} \begin{pmatrix} y_{1t-2} \\ y_{2t-2} \\ y_{3t-2} \end{pmatrix} \\
&\dots + \begin{pmatrix} \pi_{11}^{14} & \pi_{12}^{14} & \pi_{13}^{14} \\ \pi_{21}^{14} & \pi_{22}^{14} & \pi_{23}^{14} \\ \pi_{31}^{14} & \pi_{32}^{14} & \pi_{33}^{14} \end{pmatrix} \begin{pmatrix} y_{1t-14} \\ y_{2t-14} \\ y_{3t-14} \end{pmatrix} + \begin{pmatrix} \varepsilon_{1t} \\ \varepsilon_{2t} \\ \varepsilon_{3t} \end{pmatrix} \quad (3.1)
\end{aligned}$$

where $cov(\varepsilon_{1t}, \varepsilon_{2s}) = \sigma_{12}$ for $t = s$; $cov(\varepsilon_{1t}, \varepsilon_{2s}) = 0$ otherwise. The VAR model has many parameters, and they may be difficult to interpret due to complex interactions and feedback between the variables in the model. As a result, the dynamic properties of a VAR are often summarized using various types of structural analysis. The two main types of structural analysis summaries are Granger causality tests and impulse response functions.

3.3.1 Granger Causality and Impulse Response Functions

First, to examine the causal relationships between the variables, I perform Granger tests (Freeman 1983; Freeman, Williams and Lin 1989). There are two main interests. The first is a test of whether cabinet support Granger causes government party support, and the second is a test of whether government party support Granger causes cabinet support. For the first Granger test, if the null is rejected, we infer that cabinet support Granger causes government party support. Under the second Granger test, if the null is rejected, we infer that government party support Granger causes cabinet support.

Table 3.4 Direction of Granger Causality

Independent variable	Cabinet support	Gov. party support	CPI
Cabinet support	-	.962	.934
Gov party support	.001	-	.420
CPI	.000	.034	-

Note. Each variable was lagged 14 months. OLS estimates.
The numbers are block F-test p -values.

The results appear in Table 3.4. Each cell in the table represents an estimated equation. The p values associated with each equation appear in the cells of the table. The first test is for whether cabinet support has any effect on government party support. I estimate with a p value of .962 that it does not. Thus we can infer that exogenous shocks to cabinet support will not affect the movement of government party support over time.

I also test whether government party support affects the movement of cabinet support over time, and estimate with $p = .001$ that government party support does affect cabinet support. The statistical evidence demonstrates that cabinet support is Granger caused by government party support. While movement in government party support over time will cause shifts in cabinet support, shocks to cabinet support will leave government party support unchanged.

The orthogonal impulse response graphs supplement our interpretation of the table results. The orthogonal impulse response can be interpreted as the effects of the components of the standardized shock process η_t on the process y_t , in the triangular structural VAR(14) model

$$\mathbf{B}\mathbf{Y}_t = c + \Gamma_1\mathbf{Y}_{t-1} + \Gamma_{t-2} + \dots + \Gamma_{14}\mathbf{Y}_{t-14} + \eta_t$$

where

$$\mathbf{Y}_t = \begin{bmatrix} y_{1t} \\ y_{2t} \\ y_{3t} \end{bmatrix}$$

$$\mathbf{B} = \begin{bmatrix} 1 & 0 & 0 \\ -\beta_{21} & 1 & 0 \\ -\beta_{31} & -\beta_{32} & 1 \end{bmatrix}$$

and

$$\eta = \begin{bmatrix} \eta_{1t} \\ \eta_{2t} \\ \eta_{3t} \end{bmatrix} .$$

Figure 3.3.1 shows the impulse response functions along with asymptotic standard errors. Each figure shows the responses of Δy_t to the structural shocks. There is a positive, long-lived response in cabinet support when government party support increases by one standard deviation, while there is no response in government party support to cabinet support. Additionally, both cabinet support and government party support are responsive to CPI, but the influence seems weak.

Figure 3.2 Impulse response function from the VAR model
Cabinet support \rightarrow government party support

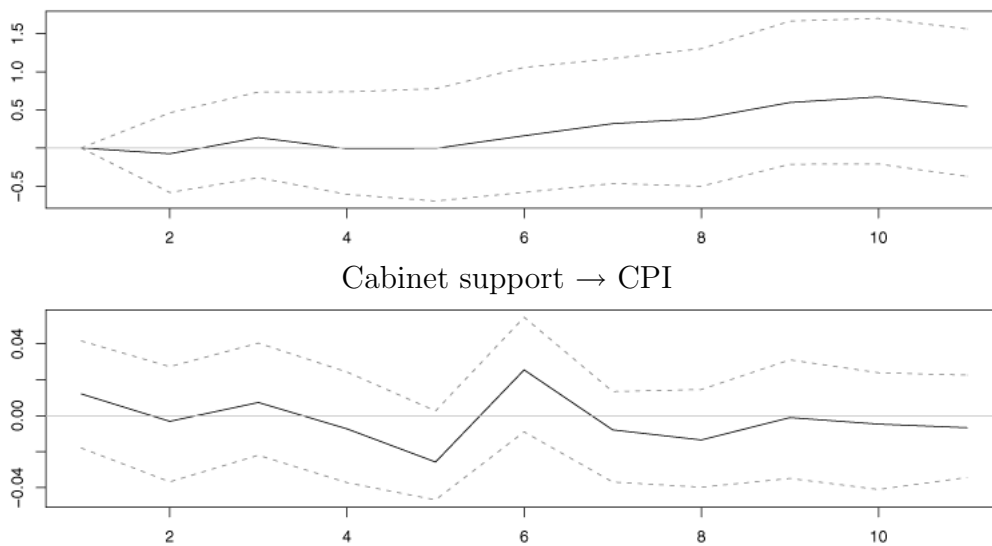
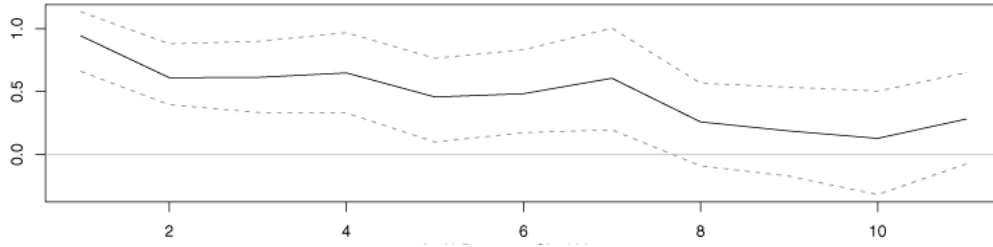


Figure 3.2 Impulse response function from the VAR model(continued)
 Government party support \rightarrow cabinet support



Government party support \rightarrow CPI

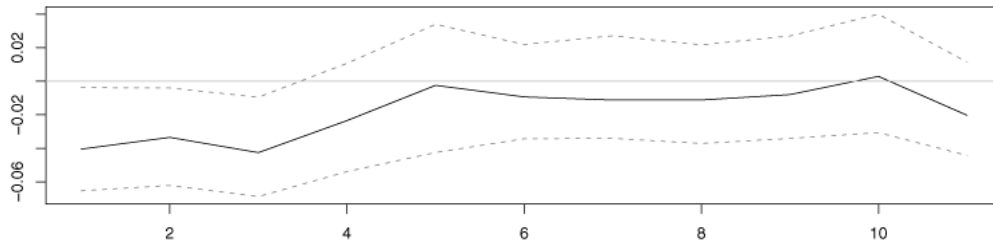
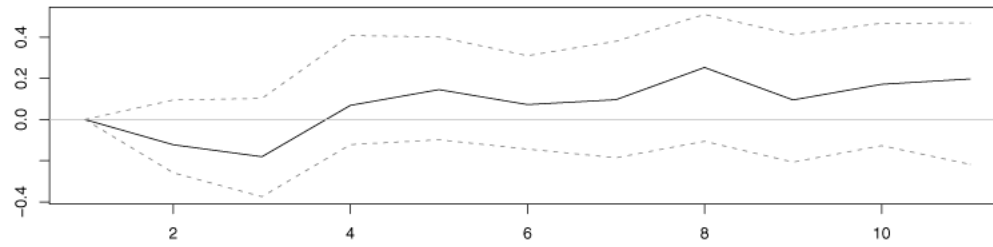
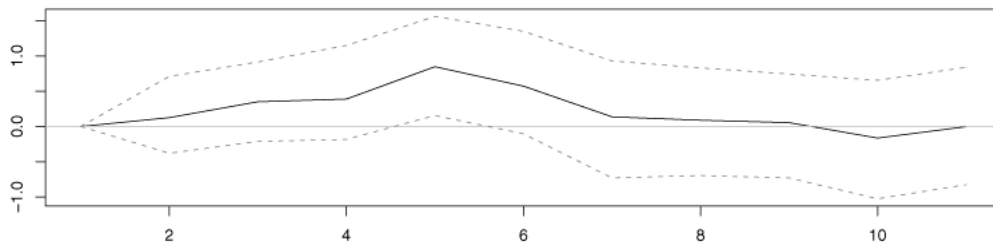


Figure 3.2 Impulse response function from the VAR model(continued)
 CPI \rightarrow cabinet support



CPI \rightarrow government party support



3.4 Conclusion

The results leave us with two implications. First, Japanese data confirm no causality from cabinet support to party support, while Clarke and Lebo (2003) have observed the effect of prime ministerial approval on government party support in Britain.² This discrepancy may be explained by political history, although approval of a cabinet's performance is conceptually different from that of prime ministerial approval. As I have shown, the 1955 party system can be characterized as the LDP's one-party dominant system. Under the system, people were impressed that the LDP had more power than the prime minister in affecting the administration, and the party was almost equivalent to the government, whereas administration change has been typical in Britain. In addition, prime ministerial terms have been so much shorter in Japan than in Britain that Japanese people have more difficulty recognizing the prime minister's influence over the administration.

Second, I can straightforwardly model cabinet support with a simple recursive system. Although this is consistent with Krauss (2002) and Inoguchi (1980), it is contradicted by Burden (2005)(unpublished manuscript) who claims that cabinet support influences LDP support in Japan. The possible reasons are technical ones. First, the periods included in the analyses are different. While the analysis in this chapter includes 1960-2001 data excluding the Koizumi administration (2001-2006), which seems to be very different

²Clarke and Lebo (2003) do not examine the effect of government party support on prime ministerial approval.

from other administrations, Burden examines data from 1960-2004 excluding the non-LDP coalition government period (from August 1993 to June 1994). Second, while this chapter's analysis focuses on "government party" support, Burden uses only LDP support. Third, while lag order in the VAR model is 14 in this chapter's analysis, it is 3 in Burden's analysis using Akaike's information criterion to determine lag order.

Chapter 4

The Changing Effect of Party Support on Cabinet Support

4.1 Introduction

This chapter examines the changing effect of party support on cabinet support over time. Previous studies using time series analysis approaches have suggested the strong effect of party support on cabinet support, indicating that Japanese voters strongly tend to show their support for a government in which their favorite party takes part. These time-series studies have ignored the changing impact of party support on cabinet support, assuming that the effect is constant over time. There are, however, enough reasons to suspect this assumption.

In this chapter, I examine two possibilities for the way on which the effect changed from 1961 to 2001 in Japan, using the ARFIMA (AutoRegressive Fractionally Integrated Moving Average) model and time-varying parameter

modeling. The next section articulates these possibilities, reviewing previous studies. Section 3 constructs a time-varying parameter model that can approximate the behavioral change implied in the possibilities. Section 4 estimates the model, using the 1960-2001 data on the Japanese electorate's political support for the cabinet. Section 5 draws conclusions from this data.

4.2 Possibilities of Instability

Party support, an equivalent concept to party identification in the United States,¹ has played a central role in the study of the Japanese voting behavior (Miyake 1985, 1998). This fact is also found in the time-series studies of cabinet support. Inoguchi (1980) showed that the LDP support rates had a statistically significant effect on cabinet support rates from 1960 to 1976 in his time-series model. Nishizawa (2001) confirmed the strong effect of LDP support on cabinet support for the period of August 1980 to July 1993, finding that the economic evaluation did not matter for partisan voters.

These findings may be good evidence that party support has a strong impact on cabinet support. It should be noted, however, that there is an

¹Miyake (1998) pointed out the danger of viewing party identification and party support in the same light, claiming that party identification could “not be applied to explain the situation in Japan in its pure form.” He, however, also accepted that the theoretical interpretation of party support was highly influenced by the studies of party identification in the United States, and that these two concepts empirically shared many characteristics such as universality, representativeness and stability. I believe that party identification and party support are comparable to each other. There has been, however, few study to show the empirical similarity and difference between party identification and party support (Nishizawa 1998). An exception is Mimura (2006) who examined the empirical difference in how voters form party identification and party support.

assumption in time-series analyses that the effect of an independent variable on a dependent variable is constant over the period of analysis. If this assumption does not hold true, or if the impact varies due to a change in social and political environment, our knowledge of party support will be in question.

In fact, there are two possibilities regarding the roots of changing effect of party support on cabinet support.

4.2.1 “Presidentialization” of the Prime Minister’s Role

First, the effect may change over time due to “presidentialization” of the prime minister’s role. This word makes students of Japanese politics think of prime minister Yasuhiro Nakasone (1982-1987). Elected as prime minister in November 1982, he characterized his top-down decision making style as “presidential prime minister.” As he had no firm supporting base within the LDP, he had always needed to draw strong support from the public in performing his strong leadership and in implementing policies. For that purpose, he tried to appeal to the public through the mass media, showing his tall figure even among the world leaders gathering at the G-7 meetings and his intimate relationship with Ronald Reagan. People’s enthusiastic support for Nakasone enabled him to be successful in tackling difficult tasks, including the privatization of state-owned companies such as the Japan National Railways (*Kokutetsu*) and the Japan Telegraph and Telephone Public Corporation (*Dendenkousha*).

Often compared with Nakasone is Prime Minister Jun’ichiro Koizumi (2001 - 2006). Known as a “lone wolf,” he unexpectedly got elected as leader

of the LDP through the “rebellion” of the lay members, without strong support from any factions within the LDP, then became prime minister in April 2001. His victory in competitions for party leadership and premiership was widely welcomed by the majority of the public; his enormous popularity was called the “Koizumi phenomena.” Showing his unique personality to the public through his speeches and populist performances outside and inside the Diet, he mobilized public support for the privatization of the Japan Post, which many conservative LDP politicians had strongly opposed.

As suggested by the styles of these two prime ministers, “presidential prime minister” in Japanese context typically stands for a prime minister who performs strong leadership in implementing his own policies through appeal to the general public. Because of his style of politics, he can be free from the influence of the public view toward his party. In other words, voters support his cabinet not because it is their favorite party’s cabinet, but because it is their favorite prime minister’s cabinet.

Krauss (Krauss 2002) claims that the phenomena of the “presidential prime minister” in Japan is not only due to the personality of individual prime ministers, but also to the change in the socio-political environment surrounding prime ministers. Showing that the gap between average cabinet support rate and average LDP support rate has been growing, he holds: “After Nakasone, the electorate’s support for individual prime ministers and cabinets became independent of support for a particular political party” (Krauss 2002, p.9), and calls this phenomena the “presidentialization of the prime minister’s role.”

This “presidentialization” was caused by the growing influence of TV on Japanese politics. Previously, the mass media tried to keep their neutrality and objectivity in reporting political news in Japan. Japan’s sole public broadcaster, NHK (*Nippon Hoso Kyokai*), is especially known for its dry, visually boring, and descriptive reporting. Its news programs tended to report the role of anonymous bureaucrats working for public interests more often than the role of politicians and prime minister in policy making processes, which contributed to the LDP’s one-party dominant regime for almost forty years.

Since the mid-1980s, however, a new type of news program has been influential in reforming the public attitude toward politics. Starting in October 1985, for example, a TV program, the News Station, emerged as a totally different tactic in reporting political news. On the News Station, politicians are described as individuals with their own personalities. As the News Station became popular, other news programs followed its way of reporting political news. Politicians, bureaucrats, and voters recognized the power of newscasters and commentators to influence even election outcomes. Since the mid 1980s, interpretative news reports have prevailed, and TV news programs have acquired strong impacts on the public opinion in Japan.²

This implies the possibility that the impact of party support on cabinet support became weaker after the mid-1980s when news programs began to report political news in a strategic frame. If this is true, the decline in the

²Taniguchi (2002) showed that voters who usually watch the News Station are more likely to have cynical views about politics (and less likely to participate in politics) than those who watch the NHK News 7.

influence of party support on cabinet support must be observed after the mid 1980s.

4.2.2 Instability of Support for New Parties

Secondly, the effect of party support on cabinet support may change over time due to instability of voters' support for new parties. After the LDP's one-party rule was ended in August 1993, as a result of the general election in July, Japanese voters experienced instable coalition governments as well as frequent emergence and dissolution of political parties. The pattern of coalitions changed seven times in ten years from the Hosokawa administration, in which all of the former opposition parties except the Japan Communist Party participated, to the second Koizumi cabinet, consisting of the LDP and *Koumei*. For the same period, there existed more than twenty parties that had their seats in the Diet. In short, the political environment surrounding Japanese voters changed dramatically after July 1993.

The frequent changes in the pattern of coalitions and the dissolution and emergence of political parties influenced the voters' political attitude. Analyzing the change in party support of Japanese voters in the seven-wave panel studies of the 1993-96 Japan Election Study II (JES II), Kabashima (1998) drew the conclusion that party support was more instable than expected. In addition, he casted a doubt on the central role of party support in explaining Japanese political attitudes, holding that it is problematic to treat party support as an "ultimate," exogenous, independent variable, like party

identification in the Michigan model.

Party support was destabilized by the emergence of new parties. The supporters of the new parties were much more likely to change their support than those of the old parties, as their psychological attachment to their adapted party had not grown yet. In addition, party support for the existing parties was also destabilized because voters had more alternatives.

These findings imply the possibility of a decline in the effect of party support on cabinet support. Under the LDP's one-party rule, "LDP support was a base of government support" (Inoguchi 1980) because of its stability. Voters' support for any new party, however, is likely to be less stable, and therefore too much significance should not be taken from this change. In other words, cabinet support under the coalition governments, including the new parties, after August 1993 had no firm "base" of party support, and did not change according to the frequent changes in voters' support for the new parties.

This possibility suggests that the effect of party support on cabinet support decreases for the period of the Hosokawa cabinet, in which most of the supporters of the cabinet were new party supporters, and that the effect returns after the Murayama cabinet, in which the LDP took over the administration.

It should be noted, however, that there is another possibility of a decline in the effect, which is due to a basic tenet of a coalition government: there is always only one party to which prime minister belongs. Considering voters' inclination to support a cabinet because of their adapted party

support, how much of the cabinet the party “owns” must be important. To measure the degree of “ownership” of the cabinet, it will matter whether or not prime minister belongs to the party. Therefore it is predictable that when the proportion of the supporters of prime minister’s party is large within a body of all government supporters, the effect of party support on cabinet support increases.

4.3 Illustration of the Idea

Given the possibility of parameter instability due to new parties, I utilize a framework of the Empirical Implications of Theoretical Models (EITM) to illustrate this idea with empirical data. This heuristic approach helps us understand how a pattern of the change looks like. The objective of EITM is to encourage political and social scientists to test empirical models that are directly connected to a formal model (Granato and Scioli 2004; Granato, Lo and Wong 2005). The motivation of EITM partly stems from the sentiment that “there is still far too much data analysis without formal theory - and far too much formal theory without data analysis” (Bartels and Brady 1993, 148).

Especially in the study of voting behavior, researchers have routinely tested verbal theories using a quantitative model. By employing this approach, however, difficulty arises in specifying the mechanism through which parameters are identified, and in determining whether their theories or claimed causal mechanisms are really verified.

Suppose, for example, the following model to be estimated:

$$\text{Cabinet Support} = \alpha + \beta (\text{Government Party Support})$$

where α is a constant, and β is a parameter indicating the effect of party support on cabinet support. In a quantitative analysis, the value of the parameter is estimated with data. If the estimate is statistically significant at the 5 percent level, it is concluded that the tested hypothesis is verified. The hypothesis states why the researcher expects the estimate to be statistically significant. However, the “reliance on statistically *significant* results means nothing when the researcher makes little attempt to identify the origin of the parameters in question” (Granato, Lo and Wong 2005). In other words, there are many other possibilities for the causal mechanism than what the hypothesis assumes. The statistically significant result merely tells us that party support influences cabinet support, but still leaves a question of why party support influences cabinet support.

The parameter should have identifiable origins that allow for the model to be falsifiable. Formal theory may overcome this problem because it forces clarity about assumptions and concepts, ensures logical consistency, and describes the underlying mechanisms that lead to outcomes. However, it can fail to incorporate empirical findings to provide a more accurate depiction of the specified relations, or it can simply be empirically untestable.

The EITM framework can provide a way to merge formal and empirical analyses in a feasible manner. First, the EITM researchers relate behavioral

and applied statistical concepts. For example, a behavioral concept, such as “learning,” can be linked to applied statistical concepts, such as persistence and measurement error, by the assumptions that current behavior depends on past behavior (which suggests AR processes), and that people learn with some errors (which suggests measurement error). Second, they link formal and applied statistical analogues. In this step, a formal model is created to identify parameters and obtain implications that are directly testable using a statistical model.

To establish the relationship between partisanship and cabinet support, I propose the following model in which an AR(1) process is an “applied statistical analogue” of voters’ loyalty to their party, or the strength of party support. In the linkage between partisan loyalty and the persistence of party support, I have defined the strength of partisanship as the parameter value associated with a past value ($t - 1$) of party support.

$$C_t = \alpha_0 + \alpha_1 C_{t-1} + \alpha_2 P_t + \alpha_3 E_t + u_{1t} \quad (4.1)$$

$$P_{o,t} = \beta_0 + \beta_1 P_{o,t-1} + \beta_2 C_t + u_{2t} \quad (4.2)$$

$$P_{n,t} = \gamma_0 + \gamma_1 P_{n,t-1} + \gamma_2 C_t + u_{3t} \quad (4.3)$$

$$P_t = P_{o,t} + P_{n,t} \quad (4.4)$$

$$\frac{P_{n,t}}{P_{o,t} + P_{n,t}} = x_t \quad (4.5)$$

where C is the support rate for a cabinet, P is the support rate for a government party, E is the rate of positive retrospective evaluation of the national

economy, P_o is the support rate for all “old” parties in government, and P_n is the support rate for all “new” parties in government.

Equation (4.1) describes cabinet support as a function of its past value, party support, and economic evaluation. Equations (4.2) and (4.3) imply that party support is a function of its past value and cabinet support. In these equations, parameters β_1 and γ_1 indicate how persistent party support is, or how dependent the present value is on the past value. A higher estimate suggests more persistent support, or the existence of more loyal supporters.

As seen in these three equations, it is assumed that there is simultaneity between cabinet support and party support. Equation (4.4) shows that government party support consists of support for new and old parties, and Equation (4.5) defines x_t as a proportion of a new party’s support rate to the sum of support rates for all government parties.

Substituting (4.2) and (4.3) into (4.1), we obtain:

$$\begin{aligned}
C_t &= \alpha_0 + \alpha_1 C_{t-1} + \alpha_2 \{(\beta_0 + \beta_1 P_{o,t-1} + \beta_2 C_t + u_{2t}) \\
&\quad + (\gamma_0 + \gamma_1 P_{n,t-1} + \gamma_2 C_t + u_{3t})\} + \alpha_3 E_t + u_{1t} \\
&= \alpha_0 + \alpha_1 C_{t-1} + \alpha_2 \beta_0 + \alpha_2 \beta_1 P_{o,t-1} + \alpha_2 \beta_2 C_t + \alpha_2 u_{2t} + \alpha_2 \gamma_0 + \alpha_2 \gamma_1 P_{n,t-1} \\
&\quad + \alpha_2 \gamma_2 C_t + \alpha_2 u_{3t} + \alpha_3 E_t + u_{1t} \\
&= \frac{\alpha_0 + \alpha_2 \beta_0 + \alpha_2 \gamma_0}{1 - \alpha_2 \beta_2 - \alpha_2 \gamma_2} + \frac{\alpha_1}{1 - \alpha_2 \beta_2 - \alpha_2 \gamma_2} C_{t-1} + \frac{\alpha_2 \beta_1}{1 - \alpha_2 \beta_2 - \alpha_2 \gamma_2} P_{o,t-1} \\
&\quad + \frac{\alpha_2 \gamma_1}{1 - \alpha_2 \beta_2 - \alpha_2 \gamma_2} P_{n,t-1} + \frac{\alpha_3}{1 - \alpha_2 \beta_2 - \alpha_2 \gamma_2} E_t \\
&\quad + \frac{u_{1t} + \alpha_2 u_{2t} + \alpha_2 u_{3t}}{1 - \alpha_2 \beta_2 - \alpha_2 \gamma_2} \tag{4.6}
\end{aligned}$$

From (4.4) and (4.5), we obtain:

$$\begin{aligned}\frac{P_{n,t-1}}{P_{o,t-1} + P_{n,t-1}} &= x_{t-1} \\ P_{n,t-1} &= (P_{o,t-1} + P_{n,t-1})x_{t-1} \\ P_{n,t-1} &= x_{t-1}P_{t-1}\end{aligned}\tag{4.7}$$

$$P_{o,t-1} = (1 - x_{t-1})P_{t-1}\tag{4.8}$$

Substituting (4.7) and (4.8) into (4.6), we obtain:

$$C_t = \Pi_1 + \Pi_2 C_{t-1} + \Pi_3 P_{t-1} + \Pi_4 E_t + w_t\tag{4.9}$$

where

$$\begin{aligned}\Pi_1 &= \frac{\alpha_0 + \alpha_2\beta_0 + \alpha_2\gamma_0}{1 - \alpha_2\beta_2 - \alpha_2\gamma_2} \\ \Pi_2 &= \frac{\alpha_1}{1 - \alpha_2\beta_2 - \alpha_2\gamma_2} \\ \Pi_3 &= \frac{\alpha_2\beta_1(1 - x_{t-1}) + \alpha_2\gamma_1x_{t-1}}{1 - \alpha_2\beta_2 - \alpha_2\gamma_2} \\ \Pi_4 &= \frac{\alpha_3}{1 - \alpha_2\beta_2 - \alpha_2\gamma_2} \\ w_t &= \frac{u_{1t} + \alpha_2u_{2t} + \alpha_2u_{3t}}{1 - \alpha_2\beta_2 - \alpha_2\gamma_2}\end{aligned}$$

Finally, the following empirical implications are derived.

Implication 1

If $\beta_1 > \gamma_1$ (the persistence of P_o is stronger than that of P_n), as x_{t-1} increases, the effect of P_{t-1} on C_t decreases.

In other words, when old party supporters are more loyal than new party

supporters, an increase in the proportion of new party supporters within a group of all government party supporters leads to a decrease in the effect of government party support on cabinet support. Although this claim may sound common-sensical, the model is valuable in showing exactly how the strength of party support is transformed into the effect of party support on cabinet support, and why the partisan effect increases or decreases.

Obviously, this implication is equivalent to the claim:

$$\frac{\partial \Pi_3}{\partial x_{t-1}} < 0. \quad (4.10)$$

Solving (4.10), we have:

$$\begin{aligned} \frac{-\alpha_2\beta_1 + \alpha_2\gamma_1}{1 - \alpha_2\beta_2 - \alpha_2\gamma_2} &< 0 \\ -\alpha_2\beta_1 + \alpha_2\gamma_1 &< 0 \end{aligned} \quad (4.11)$$

4.11 is always true when $\beta_1 > \gamma_1$, as proposed above.

Implication 2

If $\alpha_2 > 0$ (the effect of P_t on C_t is positive), as $(\beta_1 - \gamma_1)$ increases, the effect of P_{t-1} on C_t decreases.

Π_3 is also a function of $(\beta_1 - \gamma_1)$, which is a difference in the persistence of party support between new and old government party supporters. As the difference becomes larger, the effect becomes smaller, when party support has a positive effect on cabinet support. Namely,

$$\begin{aligned}
\frac{\partial \Pi_3}{\partial(\beta_1 - \gamma_2)} &< 0 \\
\frac{-\alpha_2 x_{t-1}}{1 - \alpha_2 \beta_2 - \alpha_2 \gamma_2} &< 0 \\
-\alpha_2 x_t &< 0.
\end{aligned} \tag{4.12}$$

4.12 holds true as long as the effect of P_t on C_t is positive ($\alpha_2 > 0$), which is very likely.

In short, the effect of party support on cabinet support changes over time, depending on the proportion of new party supporters in a group of all government party supporters (x_t), and the difference in the parameter values between new party support and old party support (β_1 and γ_1).

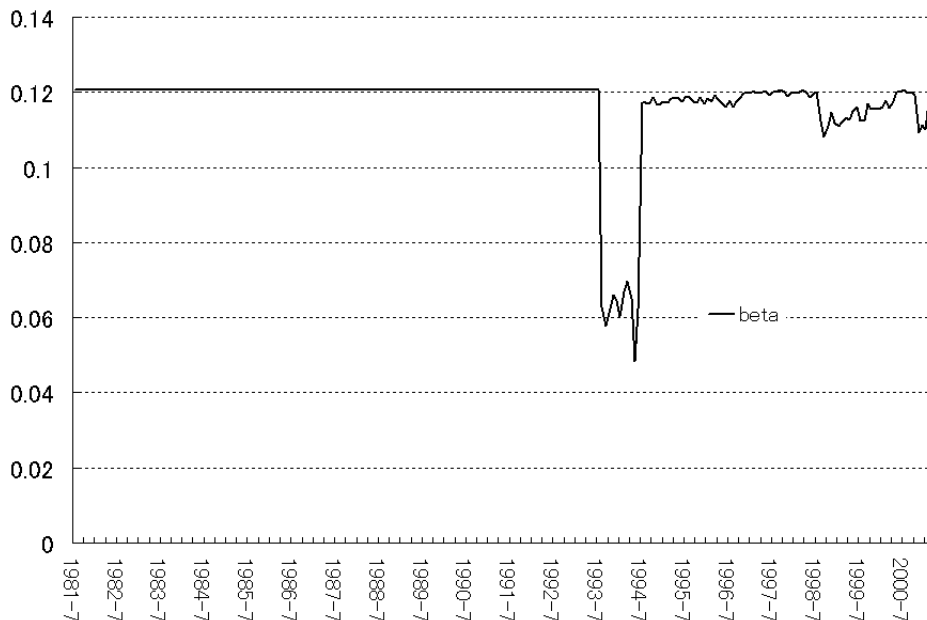
I estimate Equations (4.1), (4.2), and (4.3) using data from the Jiji public opinion poll from July 1981 to March 2001. The results are shown below.

$$\begin{aligned}
C_t &= -2.325 + .86C_{t-1} + .205P_t + .101E_t + u_{1t} \\
P_{o,t} &= 14.082 + .607P_{o,t-1} - .055C_t + u_{2t} \\
P_{n,t} &= -4.473 + .027P_{n,t-1} + .264C_t + u_{3t}
\end{aligned}$$

As expected, persistence of P_n (new party support rate) is weaker than that of P_o (old party support rate), which indicates that the supporters of new parties are less loyal than those of old parties. Figure 4.1 shows the time plot of the effect of party support on cabinet support as a function of x_t .

As shown in this figure, the effect of party support on cabinet support

Figure 4.1 Time Plot of the Effect of Party Support on Cabinet Support



suddenly dropped after August 1993 when the new parties joined a coalition government for the first time. This was because the coalition government formed in July 1993 was backed by the less loyal supporters of the new parties. Since then, it has changed according to the proportion of the new party support rate to all government party support rates.

4.4 Model

Given the illustration of a possible change pattern, how can the change in the effect of party support on cabinet support be examined more rigorously? In terms of time-series models shown in previous studies, the changing effect

means parameter instability for the period of analysis. Therefore, how the parameter changes over time should be examined. The model examined in this chapter is:

$$C_t = \beta_1 + \beta_2 P_t + \beta_3 E_t + \beta_4 H_t + u_t$$

where $t =$ July 1960, ..., March 2001, $C =$ cabinet support rate; $P =$ support rate for government parties (a sum of support rates for all government parties); $E =$ consumer price index (CPI: the average in 2000=100); and $H =$ a dummy variable indicating the month in which a cabinet started (1 for $t =$ July 1960, November 1964, July 1972, December 1974, January 1977, December 1978, July 1980, December 1982, November 1987, June 1989, August 1989, and November 1991, and 0 for otherwise).

This model is constructed based on knowledge from two different models that explain cabinet support in Japan, which appear in Inoguchi (1980) and Nishizawa (2001). First, P is the most important variable for explaining C . In both Inoguchi (1980) and Nishizawa (2001), this variable strongly showed its anticipated positive effect on cabinet support. Inoguchi (1980) claimed that LDP support is a basis which cabinet support is built upon or withdrawn from, and that cabinet support is influenced by personality and mood factors more than LDP support is. Support rate for government parties is equivalent to the support rate for the LDP before July 3, but it is the sum of support rates for all parties that participate in a coalition after August 1993.

Second, E is the ratio of the consumer price index to that of the year

before. The idea is that, if consumer price index goes up significantly over the previous year, then it is more likely to have a negative effect on cabinet support. In Inoguchi (1980), this variable generally shows an anticipated negative effect on cabinet support, but the significance of its effect seems to depend highly upon model specifications. This is the only economic variable in my model simply because there is no monthly income variable (usually measured by GDP). However, in Inoguchi (1980), yearly data indicated the income variable played a less important role than the price variable in explaining cabinet support. His research showed that the income variable was no longer significant if the price variable was added to the model.

Third, H is included as an independent variable to capture the so-called “honeymoon effect.” In Japanese politics, the tendency for the cabinet to have the highest popularity rate in its establishment has long been recognized. Inoguchi tried to capture this tendency by using the office tenure length in terms of month, assuming that the longer the tenure, the larger the depletion of power. However, he found that his tenure variable was not statistically significant in any model specification. On the other hand, Nishizawa (2001) was successful in capturing this phenomena by using a dummy variable that represented the first month of tenure of the cabinet, while he found no statistical significance of the second or later month dummies.

All political data are drawn from monthly polls of the Jiji Press. The data were collected from Jiji Press (1981), Jiji Press and Central Research Services (1992), and Prime Minister’s Office (1992-2002). CPI is available on

the website of the Japanese Statistics Bureau.³

4.5 Analysis

4.5.1 ARFIMA Filter

I use the ARFIMA (AutoRegressive Fractionally Integrated Moving Average) model to analyze the time series data. By ARFIMA modeling, I remove the self-explanatory part of the series. ARFIMA modeling allows time series to be fractionally integrated ($0 < I < 1$), while, in ARIMA (AutoRegressive Integrated Moving Average) modeling, researchers have to decide whether their data were generated by an $I = 0$ (stationary) or an $I = 1$ (nonstationary, i.e., unit-root) process. The ARFIMA model is more realistic than the ARIMA model in that it doesn't impose on the researcher the dichotomy between stationary and nonstationary time series. The detailed description and significance of the concept of fractional dynamics is given in Appendix I.

I estimate ARFIMA(p, d, q) using the modified profile likelihood (MPL). Table 4.1 presents the estimates of the univariate models. The ARFIMA model estimate is $(0, d, 3)$ with $d = 0.489$ for cabinet support, $(0, d, 0)$ with $d = .562$ for government party support, and $(4, d, 2)$ with $d = 1.353$ for CPI.⁴

³<http://www.stat.go.jp/data/cpi/200107/zuhyou/a002hh.xls>

⁴I use OX to estimate d . OX is part of the PcGive 9.0 package and is available from <http://www.nuff.ox.ac.uk/Users/Doornik/index.html> I start from levels and estimate all (p, d, q) models from $(0, d, 0)$ to $(4, d, 4)$ so that there are up to four AR and four MA components. In the OX routine, stationarity with $d \in (-5, 0.4999]$ is required for all time series. Therefore if d is very close to the upper bound, I need to take the first difference so that $d - 1 \in (-5, 0.4999]$. In this case, because the estimate is not d but $d - 1$, I need to add 1 to the estimate to obtain d . I estimate d by taking the first difference of government

Table 4.1 ARFIMA Model Estimates and t -ratios

	d (s.e.)	t -ratio for $d = 0$	t -ratio for $d = 1$	ARMA (p, q)
Cabinet support	0.489 (0.014)	34.929	-36.500	(0, 3)
Gov. party sup.	0.562 (0.037)	15.189	-11.838	(0, 0)
CPI	1.353 (0.038)	35.605	9.289	(4, 2)

The Schwarz Information Criterion (SIC) was used to select the best model from ARFIMA(0, d , 0) to ARFIMA(4, d , 4).

I transform the time series into the white noise residuals of their respective ARFIMA models to purge autocorrelation and ensure stationarity before examining the relationship among the series, then run an OLS regression for the multivariate model of cabinet support. Table 4.2 shows the result. By modeling the innovation series, I do not expect strong statistical significance results. In fact, CPI does not show any statistically significant effect on cabinet support (this is not necessarily surprising in Japanese politics). However, I find that both government party support and honeymoon effect have statistically significant effects on cabinet support. The cabinet support increases as government party support grows, and it benefits from people's favorable expectations for the new.

party support and CPI.

Table 4.2 OLS Estimates of the Equation for Cabinet Support

Dependent variable: Cabinet support		
Independent variables		Estimate
Constant	β_1	-.106 (-.451)
Government party support	β_2	.730 (8.394)*
CPI	β_3	-.162 (-.267)
Honeymoon	β_4	7.633 (6.188)*
N		489
R^2		.207

* $p \leq .01$; two tailed test.
t statistics in parentheses.

4.5.2 Moving Chow Test

To test the claim that the significance of LDP support changes over time, I first conduct a “moving Chow test” (Lin 1999) on the model. The Chow test is used to examine if a regression model has different intercept and slope coefficients across two sub-periods, while within each subperiod the parameters are assumed to be constant. (Chow 1960) The test statistic is

$$F = \frac{[S_3 - (S_1 + S_2)]/k}{(S_1 + S_2)/(N_1 + N_2 - 2k)}$$

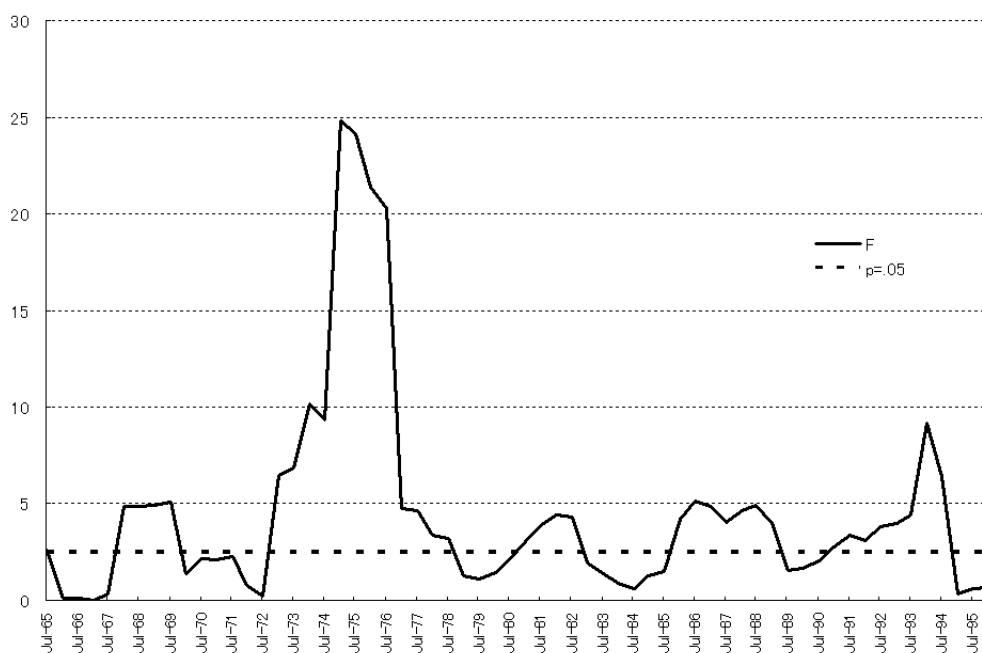
where k is the number of parameters in the regression model; N_1 and N_2 are the number of observations for the two subperiods; S_1 and S_2 are the sum of squared residuals for the two separate regressions estimated within each

subperiod: and S_3 is the sum of squared residuals for the pooled regression estimated for the entire period. The statistics follow the F distribution with degrees of freedom $(k, N_1 + N_2 - 2k)$. This time, a subperiod consists of 60 consecutive months. First, the period July 1960-June 1965 is compared with the period July 1965-June 1970. The dividing point is then shifted with a six month interval; December 1965/January 1966, June 1966/July 1966, December 1966/January 1967, and so on. By using this approach, I can examine the pattern of change over a continuous period.

Figure 4.2 shows the results of the moving Chow test. Months appearing below the X axis correspond to dividing points. If the F statistics for each dividing point are statistically significant (as shown above the dotted line), the parameter is not constant in two periods before and after the dividing point. Although most dividing points are statistically significant at the .05 level, there are two dividing points for which the values are especially high. One is a dividing point between a five year period from January 1970 to December 1974, and one from January 1975 to December 1979.

This dividing point corresponds to the resignation of prime minister Kakuei Tanaka due to criticisms against his acceptance of bribes, meaning that the mechanism of public support for a cabinet has drastically changed after Tanaka. Another is a dividing point between a period from January 1989 to December 1993, and one from January 1994 to December 1998, which is just after the collapse of the LDP's one-party rule and the emergence of the Hosokawa coalition government.

Figure 4.2 F Statistics for the Moving Chow Test



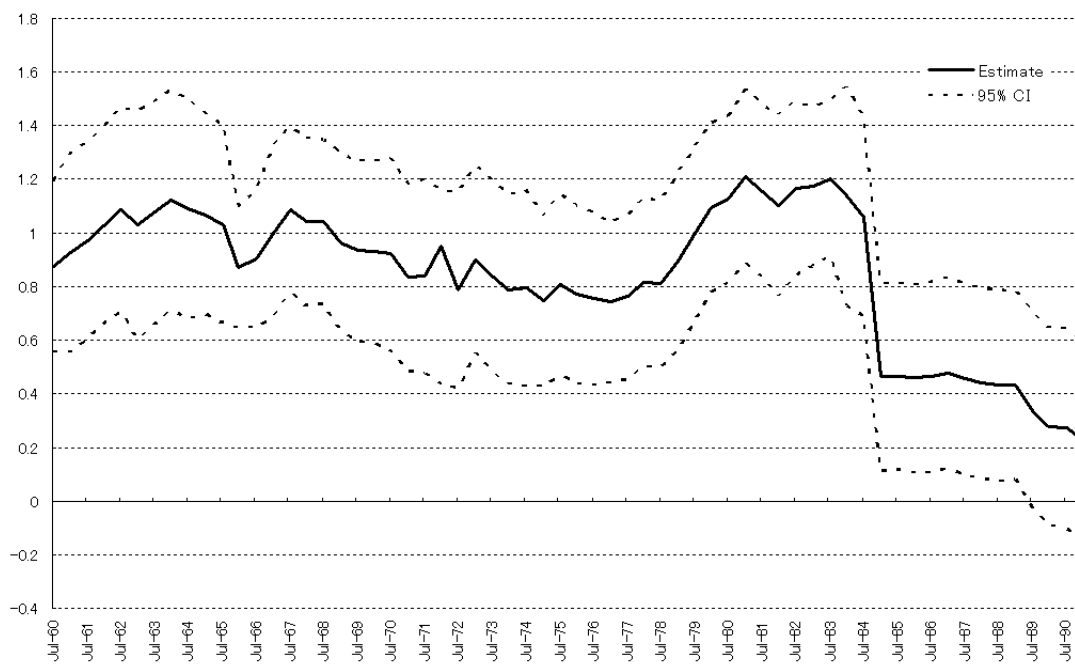
4.5.3 Moving Regression

The Chow test, however, tells us only structural stability, while parameter instability is our interest. To examine the stability of the effect of LDP support on cabinet support, I use a moving regression analysis (Brown, Durbin and Evans 1975; Lin 1999). A subperiod consists of 120 consecutive months. Shifting the subperiods with a six month interval, I estimate the regression model. Figure 4.3 shows the moving estimates of β_2 , a coefficient associated with LDP support, and the corresponding 95 percent confidence limits. As seen in this figure, LDP support has a statistically significant effect on cabinet support in every subperiod. However, the strength of the effect varies across subperiods. It, especially, drops in the 1990s, and becomes statistically insignificant for last three 120-month periods.

4.5.4 Time-Varying Parameter Regression

As I have seen so far, there is evidence of instability in the effect of LDP support on cabinet support. However, these tests are problematic in that their results depend highly on the number of months in each period, and show only a general pattern. In the moving regression, for example, the effect of party support on cabinet support looks to be decreasing, given that the last 120-month period provides the lowest value of the estimate. Other period length, however, may give a different pattern. To examine more strictly how the effect of government party support on cabinet support changes over time, I take advantage of time-varying parameter modeling.

Figure 4.3 Effect of LDP Support on Cabinet Support: Moving Regression Estimates



Time varying parameter models assume that a regression parameter suspected of instability is a function of time. Among classes of such models, following Lin (1999), I use the mutually orthogonal Legendre polynomial model.⁵ In this modeling, the coefficient associated with government party support in our model can be expressed by:

$$\beta_2(t) = \sum_{j=0}^n \beta_{2,j} P_j(z(t))$$

where z is rescaled time t and β_2 ($j = 1, 2, \dots, n$) are constants to be estimated. Each polynomial represents the pattern of possible change in a parameter. For example, the second order polynomial expresses the convex or concave pattern of the change in a parameter over time. The order of the polynomial can be determined by theory. However, since there has been no theory about the possibility of parameter instability before the mid 1980s, I rely on the empirical evidence already shown above. Looking at Figure 4.3, there seem to be three or four peaks in the time series of the estimates. Therefore, I estimate a fifth-order polynomial model. Technical details and the estimation procedures for this model are given in Appendix II.

Table 4.3 shows a fifth-order polynomial solution for β_2 . The zero-order polynomial $\beta_{2,0}$ and first-order polynomial $\beta_{2,1}$ show statistical significance at the .01 and .05 level, respectively, while the second-order polynomial $\beta_{2,2}$,

⁵There are many kinds of time varying parameter techniques. For example, Suzuki (1994) applies the Kalman filtering technique in examining the evolution of voter sophistication in Japan. Using the dynamic conditional correlation, (Engle 2002) examines the correlation between the Dow Jones Industrial Average and the NASDAQ composite for ten years of daily data.

Table 4.3 Time-Varying Parameter Regression Results

Dependent variable: Cabinet support		
Independent variables		Estimate
Constant	β_1	-.119 (-.508)
Government party support	$\beta_{2,0}$.851 (8.710)**
	$\beta_{2,1}$	-.328 (-2.114)*
	$\beta_{2,2}$	-.355 (-1.548)
	$\beta_{2,3}$.098 (.405)
	$\beta_{2,4}$.395 (1.548)
CPI	$\beta_{2,5}$.467 (1.623)
	β_3	.004 (.006)
Honeymoon	β_4	7.763 (6.241)**
N		489
R^2		.232

* $p \leq .05$, ** $p \leq .01$; two tailed test.

t statistics in parentheses.

forth-order polynomial $\beta_{2,4}$, and fifth-order polynomial $\beta_{2,5}$ are only marginally significant.

Because of parameter instability, however, the statistical significance of the effect of government support on cabinet support has to be examined throughout the historical period of interest. For a fifth-order Legendre polynomial solution, the estimated effect

$$\hat{\beta}_2(t) = \sum_{j=0}^5 \hat{\beta}_{2,j} P_j(z(t))$$

is a function of time and can be plotted to show the trajectory of the estimated effect over the course of history. The variance of the effect at any point of time is

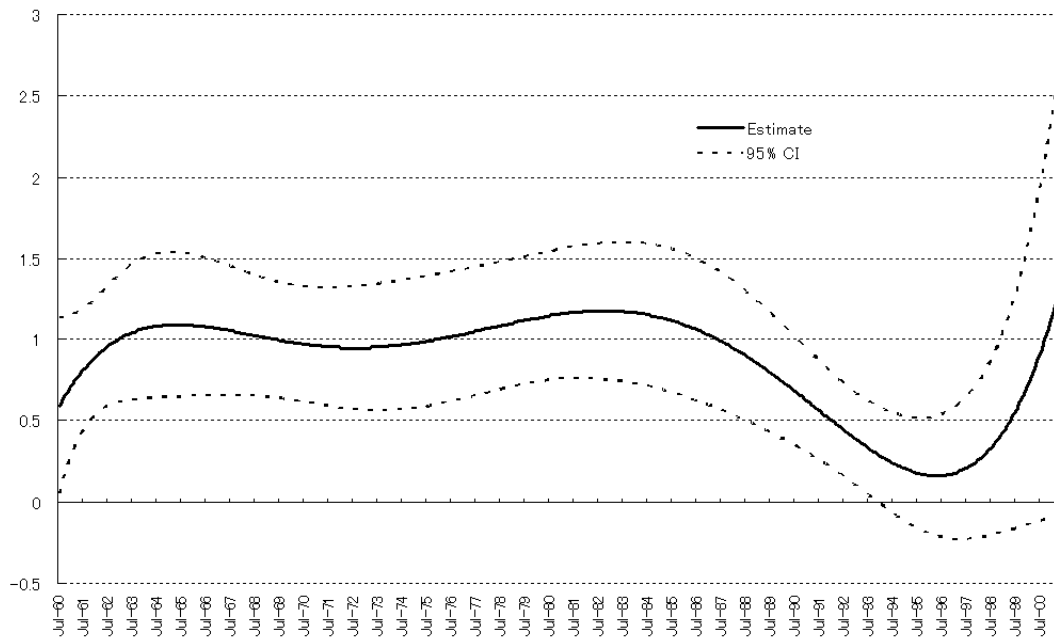
$$\hat{\beta}_2(t) = \sum_{j=0}^5 \hat{\beta}_{2,j} P_j(z(t)).$$

Figure 4.4 shows the time path and the 95 percent confidence limits of the effect of government support represented by the fifth-order solution. Beginning to decrease in the mid 1980s, the effect of government support on cabinet support loses its statistical significance from the end of 1993, hits the bottom in early or mid-1996, and is restored by early 2000.

4.5.5 Bayesian Change Point Model

So far I have examined the changing impact of party support on cabinet support over time using diagnostic approaches that allows the timing of change

Figure 4.4 Effect of Party Support on Cabinet Support: Time-Varying Parameter Regression Estimates (Fifth-Order Polynomial Estimates)



to be observed. However, searching for change points with diagnostics runs the risk of mistaking random variation or uncertainty for structural change.

A Bayesian change point model (Western and Kleykamp 2004) treats the change point in a time series as a parameter to be estimated. In this model, inference of the regression coefficients reflects prior uncertainty about the location of the change point. Inferences about regression coefficients, unconditional on the change point location, can be obtained by simulation methods.

The effects of causal variables change over time can be modeled with a dummy variable that takes the value of zero up to the time point marking the end of the first regime, and the value of one thereafter. Consider a regression model for the dependent variable, y_t , of the form

$$\hat{y} = \beta_0 + \beta_1 x_t + \beta_2 I_t(\theta) + \beta_3 I_t x_t \quad t = 1, \dots, T, \quad (4.13)$$

or equivalently in matrix notation,

$$\hat{\mathbf{y}} = \mathbf{X}_\theta \mathbf{B} \quad (4.14)$$

where the change point indicator $I_t(\theta) = 0$ for $t < \theta$ and $I_t(\theta) = 1$ for $t \geq \theta$, \mathbf{y} is a vector of observations on the dependent variable, the matrix \mathbf{B}_θ includes all regressors, and \mathbf{X} is a vector of regression coefficients.

\mathbf{X}_θ is a function of θ because different change points will yield different regressors. Assuming that \mathbf{y} conditionally follows a normal distribution, the contribution of an observation, y_t , to the likelihood of θ is

$$L_t(\theta|y_t) \propto \frac{1}{\sqrt{2\pi\sigma}} \exp \left[-\frac{(y_t - \hat{y}_t)^2}{2\sigma^2} \right], \quad (4.15)$$

where the likelihood depends on θ through the regression function in Eq. 4.14. For a given change point, say $\theta = k$, the likelihood evaluates to $L(\theta = k|\mathbf{y}) \propto \prod_t L(\theta = k|y_t)$. Here the error variance is written as σ^2 , but I shall work with the precision $\tau = \sigma^{-2}$.

A Bayesian approach makes inferences about the change point and the coefficients by specifying prior distributions for the parameters. The priors and the likelihood can be written as follows:

$$\begin{aligned} p(\tau) &= \textit{Gamma}(n_0, s_0) \\ p(\mathbf{B}) &= N(\mathbf{B}_0, \mathbf{V}_0) \\ p(\theta) &= (T-1)^{-1}, \quad \theta = 1, \dots, T-1 \\ p(\mathbf{y}|\mathbf{X}_\theta) &= N(\hat{\mathbf{y}}, \tau^{-1}) \end{aligned}$$

where $\textit{Gamma}(a, b)$ is a gamma distribution with shape parameter a and expectation a/b . The prior for θ is a discrete uniform distribution that allocates equal prior probability to each time point. A noninformative prior for τ sets n_0 and s_0 to small positive numbers, say .001. A noninformative prior for the coefficients sets $\mathbf{B}_0 = 0$ and \mathbf{V}_0 to a diagonal matrix with large prior variances, say 100.

In estimating this model, full conditional posterior distributions can be

used to form a Gibbs sampler for posterior simulation. The Gibbs sampler is a method for Bayesian estimation that simulates draws from the posterior distribution. To implement the Gibbs sampler, posterior distributions are specified for each parameter, conditional on all the other parameters in the model. Sampling from these full conditional posterior distributions ultimately yields draws from the unconditional posterior distribution (e.g., Gelman et al. (2003); Lancaster (2004)). Technical details for the Gibbs sampler are given in Appendix III.

In my analysis, compatible with Eq. 4.13, the shift in cabinet supporting regimes can be modeled at time t as

$$\begin{aligned}
C_t = & \alpha_0 + \alpha_1 P_t + \alpha_2 E_t + \alpha_3 H_t \\
& + \beta_0 I_t(\theta) + (\beta_1 P_t + \beta_2 E_t + \beta_3 H_t) I_t(\theta) + \varepsilon_t
\end{aligned} \tag{4.16}$$

where $t =$ July 1960, ..., March 2001, $C =$ cabinet support rate; $P =$ support rate for government parties (a sum of support rates for all government parties); $E =$ consumer price index (CPI: the average in 2000=100); $H =$ a dummy variable indicating the month in which a cabinet started; and the dummy variable $I_t(\theta) = 1$ for $t \geq \theta$ and $I_t(\theta) = 0$ for $t < \theta$. The error, ε_t , is assumed to follow a normal distribution.

Result is based on two parallel Gibbs chains of 10,000 iterations after a burn-in of 1000 iterations with a uniform prior on θ .⁶ Convergence diagnostics

⁶This means that I have no assumption on in which year is likely to be a change point, but I could hold another assumption based on my substantive knowledge on Japanese political history. For example, I could say, “a change point is more likely to exist from 1989 to 1994,”

and inspection of the trace plots(Figure 4.5) indicate adequate mixing over the parameter space.⁷

Table 4.4 Bayesian Change-point Estimates of the Equation for Cabinet Support

	Bayesian change point estimates		
	First Regime (1)	Second Regime (2)	Second regime net effects (1) + (2)
Change point (θ)	-	400.865(2.878)	-
Constant	-.028(.260)	-.606(.624)	-.634(.577)
Gov. party support	.965(.093)	-.922(.189)	.043(.159)
Honeymoon	10.612(1.372)	-10.410(2.712)	.202(2.319)
CPI	-.049(.624)	.381(1.546)	.332(1.391)

Standard errors in parentheses. Coefficients for the intercept are estimates of α_0 and β_0 in Eq. (4.16)

Table 4.4 shows the Bayesian estimates.⁸ Each Bayesian point estimate in this table corresponds to the mean of the posterior distribution of the associated parameter, but it could also be the median or mode. For instance, the table shows θ is 400.865 with SE = 2.878, but a year with the highest probability density is 398, as seen in “density of cp” in Figure 4.5.5. Here, $t = 398$, which corresponds to August 1993. It is one of beauties of Bayesian method that we can interpret a change point is most likely to exist at August 1993, while in the classical statistical approach, an estimate of θ is only tested putting more probabilities on these years.

⁷ \hat{R} for each estimator is 1.00 ($\hat{R} = 1$ at convergence)(Gelman et al. 2003).

⁸I use WinBUGS(Bayesian inference Using Gibbs Sampling) to estimate the Bayesian model with the Gibbs sampler. WinBUGS can be accessed from R and is available from <http://http://www.mrc-bsu.cam.ac.uk/bugs/>. R code for this model is reported in Appendix IV.

Figure 4.5 MCMC Trace Plots and Posterior Distributions

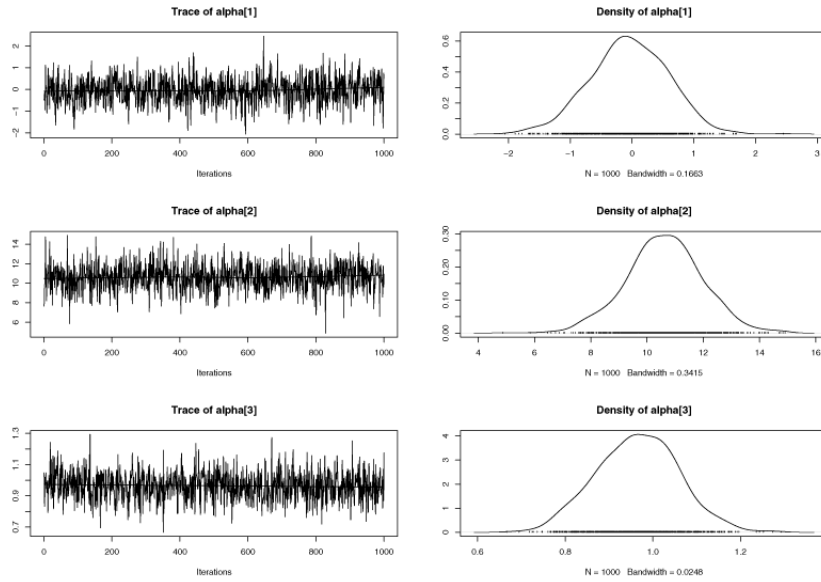


Figure 4.5 MCMC Trace Plots and Posterior Distributions (continued)

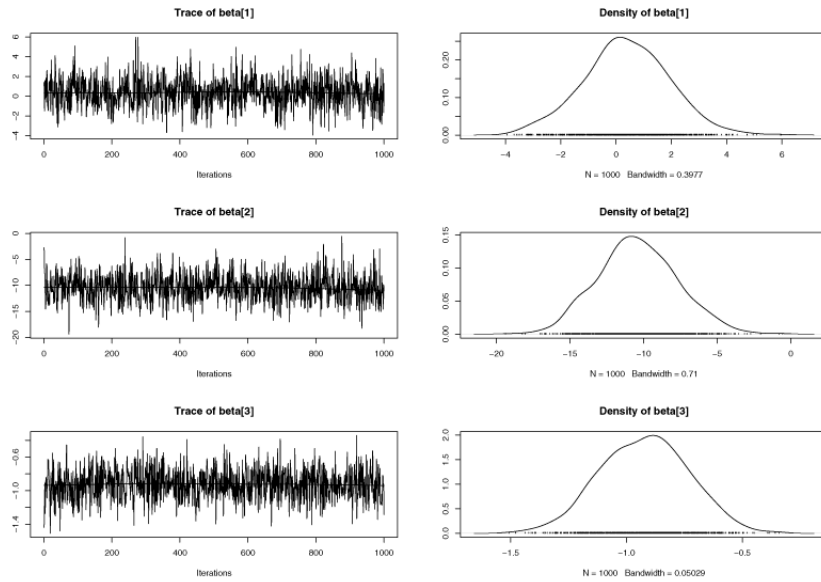


Figure 4.5 MCMC Trace Plots and Posterior Distributions (continued)

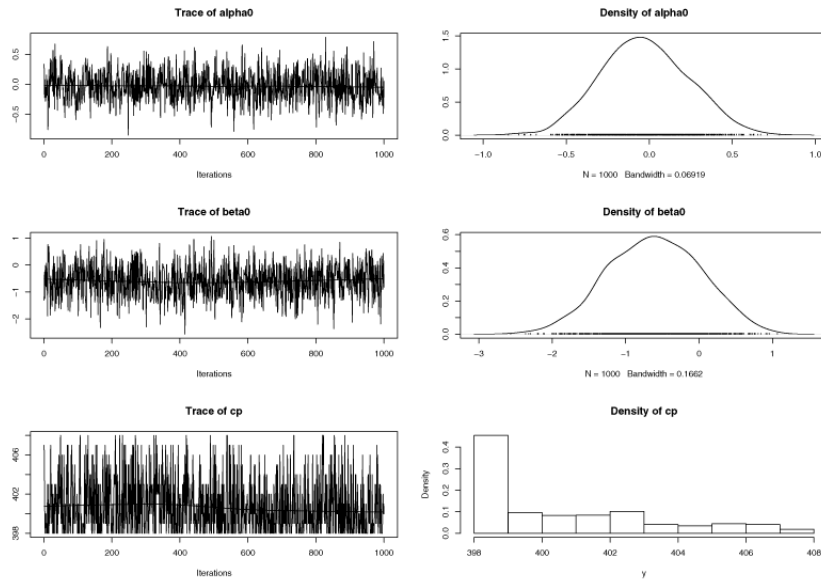
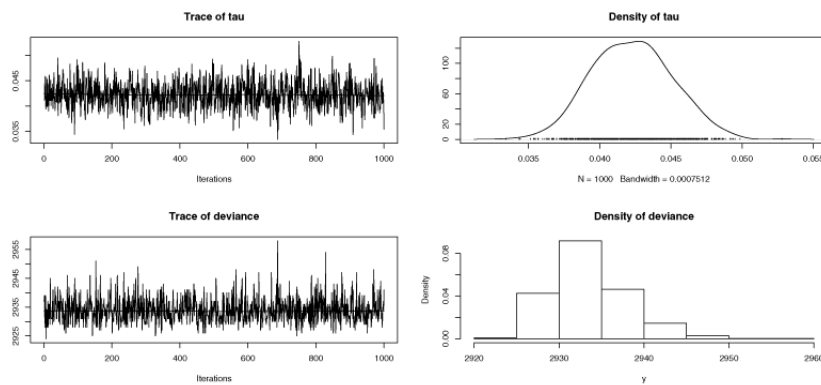


Figure 4.5 MCMC Trace Plots and Posterior Distributions (continued)



against some arbitrary value of θ (say, $\theta = 400 =$ October 1993).

The effect of government party support and honeymoon effect on cabinet support under the first regime is significantly different from zero (the 95 percent confidence interval is from 0.787 to 1.151 for government party support, and from 7.744 to 11.482 for honeymoon). Results for the second regime, however, show that the effects of government party support and honeymoon have moved in the negative direction. The final column of Table 4.4 shows the net effects of the predictors in the second regime. Posterior distributions of these net effects can be calculated directly from the Gibbs output. Summing iterates of coefficients from the first and second regimes produces draws from the posterior distribution of the net effects. The net effects suggest that the coefficients of government party support and honeymoon became insignificant after the early-1990s.

4.5.6 Discussion

How well do the results from analyses in this chapter fit with the possibility of instability described earlier? When it comes to the claim of the “presidentialization” that cabinet support became independent of party support after the mid 1980, there are two points to be discussed. First, a gradual drop in the effect after this period suggests the influence of the change in the Japanese media’s methods of reporting political news. Second, however, the decrease comes too late to be explained by Nakasone’s legacy. In other words, although there was a big gap between cabinet support rates and LDP support rates un-

der the Nakasone administration, LDP support still influenced cabinet support as strongly as under other administrations before Nakasone.

On the other hand, there is room for discussion about the claim of the “instability of support for new parties”; that weak public loyalty to new parties causes the decline in the effect of party support on cabinet support under a coalition government. First, the effect becomes statistically insignificant just after the establishment of the Hosokawa coalition government at the end of 1993, suggesting that there was a drastic drop in the effect due to the new parties that participated in the administration.

Under the Murayama coalition government in which the LDP returned to power, however, the effect still continued to decline despite the LDP supporters, most of whom were relatively loyal. It is not until early 1996 when the prime minister changed from Murayama, the Social Democratic Party leader, to Hashimoto, the LDP leader that the effect began to rise. As discussed in Section 3.2, this implies that the emergence of new parties is not the only cause of the parameter instability. There might still be a number of voters who cared whether a prime minister belongs to their party.

To explore this possibility, I calculate cabinet support rates among different party supporters under the Hosokawa, Murayama and Hashimoto administrations using survey data from the Japan Election Study II (JESII).⁹ As seen in Table 4.5, supporters of the Socialist Party and *Sakigake*, who con-

⁹The JES II was conducted by Ikuo Kabashima, Joji Watanuki, Ichiro Miyake, Yoshiaki Kobayashi, and Ken'ichi Ikeda. This was a seven wave panel study, begun before the House of Representatives election in 1993, after the House of Councilors Election in July 1995, and both before and after the House of Representatives election in 1996.

sisted of about forty percent of all government party supporters, are less likely to approve of the Hosokawa cabinet's job performance. Supporters of *Koumei*, the Democratic Socialist Party, and the Renewal Party, however, showed the same level of support for the cabinet as those of the Japan New Party to which the prime minister belonged. This indicates that whether a favorite party had the prime minister as a member did not matter under the Hosokawa cabinet. On the other hand, under the Murayama administration, supporters of the Socialist Party to which the prime minister belonged were much more likely to approve of the cabinet's job performance than the LDP and *Sakigake* supporters who consisted of about seventy percent of all government party supporters. This implies that the prime minister's party affiliation did matter for government party supporters in this case. Moreover, under the Hashimoto administration, supporters of the LDP, which took over the position of prime minister from the Socialist Party, were more likely to positively appraise the cabinet's job performance than were supporters of the Social Democratic Party and *Sakigake* supporters.

4.6 Conclusion

This chapter showed that the effect of party support on cabinet support changed over time, casting a doubt on the findings of previous studies that party support strongly and constantly influences cabinet support. Krauss (2002) claimed that since the mid-1980s, when interpretative news stories on politics began to prevail in the Japanese mass media, the personalities of

Table 4.5 Approval Rate for Three Coalition Cabinets, Sorted by Party Support

Hosokawa Cabinet (February 1994)						
	JSP	<i>Koumei</i>	DSP	RP	<i>Sakigake</i>	JNP
Approve*	67.7%	85.2	87.3	84.4	62.4	85.1
Disapprove	35.3	14.8	12.7	15.6	36.6	13.7
Don't know	0.0	0.0	0.0	0.0	1.0	1.2
N	215	81	55	122	101	161
%	29.3	11.0	7.5	16.6	13.7	21.9

Murayama Cabinet (March 1995)			
	LDP	JSP	<i>Sakigake</i>
Approve*	57.4%	67.4	52.0
Disapprove	42.0	32.6	46.7
Don't know	0.6	0.0	1.3
N	488	309	75
%	60.0	35.4	8.6

Hashimoto Cabinet (October 1996)			
	LDP	SDP	<i>Sakigake</i>
Good**	44.0%	23.9	31.6
Neutral	45.9	47.9	36.8
Bad	8.7	26.1	31.6
Don't know	1.3	2.1	0.0
N	815	188	19
%	79.7	18.4	1.9

* “Do you approve of the performance of the Hosokawa (Murayama) cabinet in general?” Answers “Highly approve” and “Approve to some extent” are combined into “Approve” in the tables while answers “Hardly approve” and “Do not approve at all” are combined into “Disapprove.” No neutral answer choice is provided.

** “What do you think of the performance of the Hashimoto cabinet in general so far?” Answers “Very good” and “Good” are combined into “Good” in the table while answers “Hardly good” and “Not good at all” are combined to “Bad.”

Source: JESII

prime ministers have had a strong influence on voters' attitudes toward the cabinet, and the resultant effects of party support on cabinet support had declined. I generally confirmed this tendency through the time-varying parameter analysis, but no decreasing trend was observed during the term of the most representative "presidential" prime minister in Japan Nakasone.

On the other hand, the pattern of a decline suggested by the "instability of support for new parties" was observed during the Hosokawa and Hata administrations. This was, however, not necessarily true during the Murayama and Hashimoto administrations. The existence of the new party did not explain a decline under the Murayama administration that included only *Sakigake*, the smallest new party. It also did not account for a increase under the Hashimoto administration, whose only difference from the Murayama administration was the party affiliation of prime minister. In this case, the more important factor in explaining the changing impact of party support on cabinet support was whether prime minister belonged to the party that had the biggest supporter group within a body of all government supporters.

Based on these findings, the following implications are proposed for further research in Japanese politics. First, as it is no longer valid to assume that the parameters associated with party support are stable over time under the coalition governments of the 1990s, researchers should not include the data from this time period when using usual time series analysis methods. Special treatment should be necessary if time-series models that are similar to those in Inoguchi (1980) and Nishizawa (2001) are examined for the period of the

coalition governments. Second, the findings confirm the claim of Kabashima (1998) that it is problematic to consider party support for the new parties as an ultimate independent variable in the model of Japanese political behavior. There should be a distinction between supportive attitudes toward new and existing parties in this type of analysis.

These findings, however, still leave unanswered the questions of why the effect of party support on cabinet support increases or decreases over time. Although this chapter suggested that the pattern of change could be consistent with two possibilities, the causal mechanism is still unclear. The next chapter examines the determinants of the effect of party support on cabinet support in detail, including the impact of the prime minister's party affiliation.

Appendix I: A Transfer Function Model Using Fractional Integration Technique

In analyzing time series data, Box and Jenkins ARIMA techniques (Box and Jenkins 1970) have been used to purge autocorrelation which researchers may suffer from when using familiar OLS regression procedures. However, ARIMA techniques are restrictive in that they require researchers to decide whether their data were generated by an $I = 0$ (stationary) or an $I = 1$ (nonstationary, i.e., unit-root) process. Based on this decision, researchers have to either difference their data (if they believe that it is nonstationary) or leave it in level form (if they believe that it is stationary). This decision has serious

analytic and theoretical consequences.

Theoretically, classifying a variable as stationary implies that its value at previous periods is forgotten at a consistent rate as it tends toward some long-term mean. But, classifying a variable as having a unit-root implies that it has the properties of a “random walk.” Such a series has “perfect memory” in the sense that its value at any time t is the same as its value at the previous period, $t - 1$, plus any shock incurred at time t .

Analytically, treating it as a unit-root process leads the researcher to transform it through the process of “first differencing,” i.e., generating a new series based on differences between the value of the series at consecutive time points. However, this transformation is significant because it prohibits the researcher from identifying any long-term relationships that might exist between the differenced variable and other variables in the model. On the other hand, leaving a variable in level form avoids this problem but can have negative consequences if the data generating process possesses some degree of long-memory. Especially, spurious regression -finding a significant relationship between variables when none truly exists- is a likely result when variables with some degree of persistence are left in level form.

The concept of fractional dynamics enables researchers to avoid this restrictive stationary versus nonstationary dichotomy (for political application, see Box-Steffensmeier and Smith (1998); Lebo, Walker and Clarke (2000); Box-Steffensmeier and Tomlison (2000), Clarke and Lebo (2003)). In this concept, researchers do not have to have the assumption that time series variables

must be either stationary process or random walks, and allow time series to be fractionally integrated ($0 < I < 1$). In ARIMA notation, the data generating process of series X can be written as follows:

$$\phi(L)(1 - L)^d X_t = \theta(L)\varepsilon_t \quad \text{and} \quad \varepsilon_t \sim N(0, \sigma^2)$$

where L is a backshift operator such that $L^k \varepsilon_t = \varepsilon_{t-k}$, $\phi(L)$ represents a stationary autoregressive process, $\theta(L)$ represents a stationary moving-average process, and the degree of integration of X is measured by the fractional differencing parameter, d .

Appendix II: Time-Varying Parameter Regression

For time-series regression

$$Y_t = \beta_1 + \beta_2 X_{2t} + \beta_k X_{kt} + u_t, \quad t = 1, 2, \dots, T$$

Lin (1999) uses a time-varying parameter, β_i , suggested in Hinich and Roll (1981), which can be specified as

$$\beta_i(t) = \sum_{j=0}^n \beta_{i,j} P_j(z(t))$$

where $P_j(z(t))$ are the Legendre polynomials (see Table 4.6; n is the

highest order of the polynomials; and $\beta_{i,j}$, ($j = 1, 2, \dots, n$) are fixed parameters. The reason for using the Legendre polynomials in this specification is that they are mutually orthogonal in the interval $[-1, 1]$ and therefore lack high collinearity. To ensure orthogonality, t , ($t = 1, 2, \dots, T$) has to be rescaled into $z(t) = [2(t - 1)/(T - 1)] - 1 \in [-1, 1]$. For example, from July 1960 to March 2003 (with $T = 489$),

$$z(t) = [2(t - 1)/(489 - 1)] - 1.$$

With β_i modelled as such $\beta_i X_{it}$, in the regression becomes

$$\beta_i X_{it} = \left[\sum_{j=0}^n \beta_{i,j} P(z) \right] X_{it} = \sum_{j=0}^n \beta_{i,j} [P(z) X_{it}]$$

Since $P(z) X_{it}$ can be evaluated with empirical data, the regression is still linear in the parameters ($\beta_{i,j}$) and hence can be estimated by usual methods.

Table 4.6 Legendre Orthogonal Polynomials

$P_0(z) = 1$
$P_1(z) = z$
$P_2(z) = (3z^2 - 1)/2$
$P_3(z) = (5z^3 - 3z)/2$
$P_4(z) = (35z^4 - 30z^2 + 3)/8$
$P_5(z) = (63z^5 - 70z^3 + 15z)/8$

Source: Calculated from Rodrigue's Formula:
 $P_n(z) = (-1)^n / 2^n n! (d^n / dz^n) \{ (1 - z^2)^n \}$.
 See Beyer (1984, p.372).

Appendix III: Gibbs Sampler

The Gibbs sampler begins by setting initial values of the change point, the precision, and the regression coefficient. The sampler randomly draws one of these parameters – written θ^* , τ^* , and \mathbf{B}^* – conditional on values for others:

1. Draw the precision τ^* from $Gamma(n_0 + n/2, s_0 + SS^*/2)$, where the current value of the sums of squares $SS^* = \sum e_t^*$, and $e_t^* = y_t - \mathbf{x}'_{\theta^*} \beta^*$.
2. Draw the vector of regression coefficients from the multivariate normal distribution $N(\mathbf{B}_1, \mathbf{V}_1)$ with mean vector $\mathbf{B}_1 = \mathbf{V}_1(\mathbf{V}_0 \mathbf{B}_0 + \tau^* \mathbf{X}'_{\theta^*} * \mathbf{y})$, and covariance matrix $\mathbf{V}_1 = (\mathbf{V}_0^{-1} + \tau^* \mathbf{X}'_{\theta^*} \mathbf{X}_{\theta^*})^{-1}$.
3. Draw the change point from the discrete distribution $p(\theta = t | \mathbf{y}) = L^*(\theta = t; \mathbf{y}) / \sum_t L^*(\theta = t; \mathbf{y})$, where the likelihood, $L_t(\theta | y_t) \propto \frac{1}{\sqrt{2\pi\sigma}} \exp \left[-\frac{(y_t - \hat{y}_t)^2}{2\sigma^2} \right]$, is evaluated at each time point $\theta = 1, \dots, T-1$ using current values of the parameters \mathbf{B}^* and τ^* .

The algorithm is termed a blocked Gibbs sampler, because step 2 updates the block of all coefficient under all the change points. The Gibbs sampler can also accommodate a more general model in which a regression with no change point is included a priori. For this covariate x_t , setting coefficients $\beta_2 = \beta_3 = 0$.

Appendix III: R Code for the Bayesian Change Point Analysis of Japanese Data

This R code was written based on one provided in Appendix of Western and Kleykamp (2004).

```
=====  
  
setwd("Your working folder")  
  
library(R2WinBUGS)  
  
y <- Dependent variable in matrix form  
x <- Independent variables in matrix form  
  
N <- NROW(y)  
  
p <- 3  
  
yr <- c(1:489)  
  
punif <- c(rep(1,489))  
  
T <- 489  
  
data <- list("N", "y", "x", "p", "yr", "punif", "T")  
  
in1 <- list(alpha = c(0,0,0), beta = c(0,0,0), alpha0 = 0, beta0=0, cp  
= 40, tau = 1)  
  
in2 <- list(alpha = c(1,1,1), beta = c(1,1,1), alpha0 = 1, beta0=1, cp  
= 80, tau = 1)  
  
inits <- list(in1,in2)  
  
parameters <- c("alpha", "beta", "alpha0", "beta0", "cp", "tau")  
  
result.sim <- bugs(data, inits, parameters, model.file="changepoint5.bug",
```

```

n.chains = 2, n.iter = 10000, n.burnin=1000, debug=FALSE, bugs.directory
= "c:/Program Files/WinBUGS14/", working.directory = NULL)

print(result.sim,digits=3)

result.mcmc <- as.mcmc(result.sim$sims.matrix)

postscript("mcmc.eps")

plot(result.mcmc)

dev.off()

rm(list = ls())

```

WinBugs Code for the Bayesian Change Point Analysis of Japanese Data(“changepoint5.bug” appearing in the R code)

This WinBugs code was written based on one provided in Appendix of Western and Kleykamp (2004).

```

=====

model
{
for(i in 1:N) {
  y[i] ~ dnorm(mu[i], tau)
  mu[i] <- alpha0 + inprod(alpha[],x[i,]) + beta0*J[i]
  + J[i]*inprod(beta[],x[i,])
}
}

```

```

    J[i] <- step(yr[i] - cp - 0.5)
  }
  for(i in 1:p) {
    alpha[i]  dnorm(0.0, 1.0E-6)
    beta[i]   dnorm(0.0, 1.0E-6)
  }
  for(i in 1:T) {
    priort[i] <- punif[i]/sum(punif[])
  }
  alpha0  dnorm(0.0, 1.0E-6)
  beta0   dnorm(0.0, 1.0E-6)
  cp      dcat(priort[])
  tau     dgamma(.001, 0.001)
}

```

Chapter 5

The Determinants of the Effect of Party Support on Cabinet Support

5.1 Introduction

This chapter examines the determinants of the effect of party support on cabinet support. While researchers have long suggested the strong influence of party support on voters' appraisal of the cabinet's job performance, Chapter 3 showed with time-varying parameter modeling that the influence was not constant over time, especially under the coalition governments of the 1990s. Why, then, was the parameter instability observed for this period? More generally, what were the determinants of the effect of party support on cabinet support? This chapter answers this question by testing two hypotheses with panel survey data drawn from Japan Election Study II, 1993-1996.

Section 2 specifies the question by theoretically considering the mean-

ing of the effect of party support on cabinet support. Section 3 proposes two hypotheses based on theoretical consideration. Section 4 illustrates the idea of one of these hypotheses using EITM (Empirical Implications of Theoretical Models) approach with empirical data. Section 5 tests these hypotheses, analyzing the survey data with two models, one static and one dynamic. Section 5 draws conclusions.

5.2 Questions

In the context of a time-series analysis, the effect of party support on cabinet support represents “sensitivity” of cabinet support rates to government party support rates. In other words, it tells us how much a cabinet support rate changes corresponding to the change in government support rates. So what determines the magnitude of the sensitivity?

5.2.1 Party Support as a Determinant of Cabinet Support

As a theoretical foundation of the hypotheses proposed in a later section, I first consider how a change in an individual level relates to one in an aggregate level in the context of party support and cabinet support. More specifically, the questions are: Why does party support influence cabinet support, and when does the influence change?

In Japanese politics, party support has been considered the most impor-

tant political attitude (Miyake 1985). Miyake (1998) explains party support by referring to the concept of party identification developed in the United States. Party identification is “the individual’s orientation to an important group-object in his environment” that works as “a perceptual screen” through which people interpret politics (Campbell et al. 1960, p.121). It is considered as an emotional attachment to a political party rather than a rational evaluation of it. The level of political knowledge of voters is generally very low (Converse 1964; Bennett 1989; Delli Carpini and Keeter 1996), and therefore voters heavily rely on party identification when casting a ballot. Such partisanship makes voters favor an administration in which their party takes part, sometimes regardless of its performance. In other words, even a cabinet that shows a poor performance can achieve popularity among partisans because of emotional attachment to their party.

To explain the effect of party support on cabinet support, there are two possible determinants. The first is the strength of voters’ emotional attachment to their party. If supporters of a government party tend to approve of the performance of a cabinet in which their party takes part, the degree of emotional attachment to their party should influence how much they support the cabinet. Therefore, the effect is lower among voters who have a weaker emotional attachment to their party.

Second, the “ownership” of a cabinet should be an important factor in determining the effect. The question is how strongly people associate their party with the cabinet. Given the emotional attachment to the party, the

effect of party support on cabinet support emerges when the “projection” of a party onto a cabinet is possible. In other words, as the party is perceived to be the same entity as the cabinet, voters feel the same emotional attachment to the party as to the cabinet. Therefore, the effect is lower among voters who have difficulty relating the party to the cabinet in their minds.

Theoretically, the change in the effect of party support on cabinet support on an individual level leads to a change on an aggregate level in the following way. First, if the government party has supporters who are loyal to their party and associate the cabinet with the party (like the LDP supporters under the “1955 party system”) cabinet support rates will be stable, anchored by party support. In this case, regardless of events such as the failure in public policy, or political scandals, cabinet support rates will not fluctuate very much as long as the party support rates are stable. On the other hand, if voters decide whether to support the cabinet based only on their rational evaluation of the cabinet’s job performance, the cabinet support rates will fluctuate very much, influenced by these events. In addition, if LDP support has great significance in forming other political attitudes, those who stop supporting the LDP are likely to lower their cabinet support level as well.

Therefore, when a change in the LDP support rates leads to a cabinet support rate change, the effect of LDP support on cabinet support emerges at an aggregate level. In this sense, the support rates of the LDP cabinets under the “1955 party system” had a “firm” base of voters’ LDP support.

Moreover, the number of supporters with a strong emotional attachment

to a party is important. Although the LDP cabinet had a firm party support base, in the sense that the LDP supporters consistently support the cabinet; if there were not many such supporters, the effect would have been smaller. Defining the proportion of government supporters within a body of all voters as the “size” of the cabinet support’s base, the LDP-lead cabinets had a “large” base of voter support for the LDP.

Using these concepts, I argue that when cabinet support has a “firm” and “large” base of party support, or when there are many government party supporters who approve of the cabinet’s job performance, based on an emotional attachment to the party, the effect of party support on cabinet support should be large. On the contrary, when cabinet support has only a “soft” and “small” base of party support, or when there are a few government supporters who have an emotional attachment to the party, the effect should be small. In other words, a “firm” base corresponds to a supporter’s strong emotional attachment to the party, and a “large” base refers to a number of supporters who relate the cabinet to the party in their mind.

5.3 Hypotheses

This section proposes two testable hypotheses based on theoretical considerations of the effect of party support on cabinet support discussed in the last section.

5.3.1 Instability of support for new parties

Partisanship grows as a product of political experience and learning (Campbell et al. 1960). Participation in political processes, especially elections, helps people form political preferences, which can eventually grow into partisanship. By knowing what a party has done, voters can set their expectations for the party's future behavior. Through these expectations, they can acquire loyalty that is resistant to the parties' temporary failures.

New parties, however, cannot have such loyal voters with strong partisanship. In fact, Kabashima (1998) and Miyake (1983) showed that voters' support for the Renewal Party, the Japan New Party, and *Sakigake*, which emerged onto the Japanese political scene in the early 1990s, was unstable and easily changeable. The influence of new party support on political perception and candidate evaluation was weak, and party labels did not play an important role in helping voters form their political attitudes (Watanuki and Miyake 1997).

The decline in the effect of party support can also be observed in voters' appraisal of the cabinet's job performance. Like independent voters, supporters of the new parties had not obtained strong partisanship as an emotional attachment to the party yet, and therefore tended to rely more heavily on rational rather than emotional judgements. In this sense, "support for new parties" has no significance, and the support rates for the new parties are not strongly related to the cabinet support rates.

5.3.2 Discrepancy between Party and Cabinet in the Public Mind

Under the 1955 party system, in which the LDP had been only a ruling party and the number of political parties were almost fixed, voters could perceive that the government was equivalent to the LDP. As a result, support for the LDP was directly converted to cabinet support. Under coalition governments that consisted of multiple parties, however, this relationship was rarely established. Voters had more difficulty forming a perception that their favorite party is equivalent to the cabinet under a coalition government than under the LDP's one-party rule. When the party is not associated with the cabinet, even if voters are strongly emotionally attached to the party, they do not favor the cabinet more than independent voters do.

Such discrepancy between party and cabinet in voters' minds stems from the degree to which the cabinet's policies reflect the ideas of the party, and how much the party executes leadership in the cabinet. One consideration is whether the prime minister belongs to the party. The party affiliation of prime minister can be an important "cue" for the general public to know who owns the cabinet. Supporters of a government party to which the prime minister belongs are more likely to evaluate the cabinet's performance based on their emotional attachment to the party. Thus, the more supporters of a ruling party who associate the party with the cabinet, the stronger the relationship between the ruling party support rate and the cabinet support rate.

5.3.3 Explanation of the Change in the Effect of Party Support on Cabinet Support in the 1990s, Based on these Hypotheses

Using these two hypotheses, I then explain the change in the effect of party support on cabinet support in the 1990s. First, the effect declined drastically late in 1993 because the new party supporters had not obtained emotional attachment to their party yet. Although the supporters of the existing parties joining the Hosokawa coalition government might show their partisanship when appraising the cabinet, they were not enough the supporters to compensate the lesser loyalty of new parties' supporters. In other words, the effect declined as there was a "small" and "soft" base of party support.

This decline continued in the Murayama cabinet as the LDP supporters distinguished between their party and the cabinet due to prime minister who belonged to the JSP. Supporters of the JSP, on the other hand, tended to positively evaluate the cabinet, but the number was still small. The effect declined because there was a "hard" but "small" base of party support in the Murayama administration.

Finally, the recovery in the effect under the Hashimoto administration could be explained by LDP leader Hashimoto's rise to premiership. Both the strong emotional attachment to the LDP and the large proportion of LDP supporters among the ruling parties' supporters gave the cabinet a "hard" and "large" base of party support.

5.4 Analysis

This section examine two models using panel data from Japan Election Study II (JESII). The first model is static, and designed to explore how party support influences the appraisal of the cabinet’s job performance under each administration. The second model is dynamic and designed to verify how the changes in party support and cabinet support are related, taking advantage of the JESII panel data.

5.4.1 The Effect of Party Support on Cabinet Support

In the static model, the dependent variable is the appraisal of the cabinet’s general job performance. The JESII asked respondents about their evaluation of the cabinet’s job performance on a 5 point scale for the Miyazawa and Hashimoto cabinets, and on a 4 point scale for the Hosokawa and Murayama cabinets, with higher values indicating higher evaluations. There are conceptually six kinds of independent variables. The first three are controls of social status -sex, age, and education. Sex is coded 0 for male and 1 for female, education is scored according to a 4 point scale from 1 for “high school, former elementary school, or former senior elementary school”¹ to 4 for “college or graduate school.”

As variables capturing a voters’ rational evaluation of the cabinet’s job performance, I include the appraisals of the cabinet’s job performance in handling of political reform issues and the economy. Measured by slightly different

¹The “former” schools are those existing in the old school system before 1945.

wordings and in different contexts in each wave of the panel study (such as “administrative reform” and “political reform” for political issues, and “deregulation” and “yen appreciation” for economic issues), these variables are scored on a scale ranging from 1 to 5 (the Miyazawa and Hashimoto cabinets), or 1 to 4 (the Hosokawa and Murayama cabinets), with higher values denoting higher evaluations. I, however, do not use these variables themselves, because there is a possibility that the general and specific appraisals of the cabinet’s job performance influence each other. In other words, voters may not be able to distinguish between specific and general evaluations, and those who approve of the cabinet’s overall performance may be biased toward positive evaluations of the cabinet’s job performance in specific issues. If I ignore such simultaneity, the OLS estimator is no longer consistent.

To deal with this problem, I use political satisfaction and perception of the economy as instrumental variables for the evaluations of political and economic issues, respectively. Because no question addressing perception of the economy is available in the survey conducted in February 1994 during the Hosokawa administration, I use the variable in the survey conducted in August 1993.

Finally, the independent variable of interest is party support, which is a dummy variable for each party supporter group. “LDP support,” for example, is coded 1 for LDP supporters, and 0 for otherwise. Because the reference category is “independent voters,” I can see how positively or negatively partisans appraised the cabinet’s general job performance compared to independents.

Table 5.1: Determinants of Cabinet Support: Static Model

	Miyazawa (Jul. 1993)		Hosokawa (Feb. 1994)	
	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
Constant	-.373	.199	-.035	.936
Sex	.059	.077	-.082	.008
Age	.003	.010	.004	.001
Education	-.007	.728	.027	.102
Political Evaluation	.743	.000	.888	.000
Economic Evaluation	.477	.000	.095	.640
Party Support				
LDP	.155	.001	-.192	.000
JSP	-.097	.099	-.010	.856
<i>Koumei</i>	-.167	.041	.320	.000
DSP	-.018	.872	.161	.079
JCP	-.286	.004	-.419	.000
SDL	-.095	.556	.162	.012
RP	-.067	.446	-.028	.689
<i>Sakigake</i>	-.203	.247	.285	.000
JNP	-.113	.189	.192	.573
<i>N</i>		1725		1562
<i>Adj - R</i> ²		.175		.175

	Murayama (Jul. 1995)		Hashimoto (Oct. 1996)	
	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
Constant	-.194	.326	.428	.119
Sex	-.001	.986	-.078	.035
Age	.004	.001	.002	.117
Education	-.016	.311	-.009	.643
Political Evaluation	.766	.000	.673	.000
Economic Evaluation	.400	.000	.319	.001
Party Support				
LDP	.112	.002	.390	.000
NFP	-.336	.000	-.214	.001
JSP(SDP)	.300	.000	.013	.852
<i>Sakigake</i>	.151	.108	.104	.570

JCP	-.366	.000	-.573	.000
DP	-	-	.026	.744
<i>N</i>		1848		1696
<i>Adj - R²</i>		.220		.231

Table 5.1 shows the OLS estimation results for each administration. First, for the Miyazawa administration, age, appraisals of the political and economic performance, LDP support, *Koumei* support, and JCP support have a statistically significant effect on cabinet support at the 5 percent level. This indicates that there was a tendency to support the cabinet for older voters and those who positively evaluate the cabinet's political and economic job performance. Controlling for these evaluations of the cabinet's performance, the LDP supporters were still more likely, and *Koumei* and JCP supporters were less likely to positively appraise the performance. No effect of party support was observed among the JSP, DSP, SDL, RP, and *Sakigake* supporters. These opposition party supporters appraised the cabinet's general job performance based mainly on an evaluation of the cabinet's political and economic job performance, without any partisan bias. This pattern in the effect of party support could reflect the difference among new and existing party supporters in their loyalty to their parties. Thus, the Miyazawa administration had a relatively "hard" base of LDP support.

Second, sex, age, appraisal of the cabinet's political and economic job performance, and support for the LDP, *Koumei*, the JCP, the SDL, and *Sakigake* show a statistically significant effect on support for the Hosokawa cabinet

at the 5 percent level. Contrasting with the case of the Miyazawa administration, young and female voters tended to positively evaluate the general job performance of the Hosokawa cabinet. While the appraisal of the cabinet's political and economic job performance mattered, voters did not care about the economy in evaluating the cabinet's general job performance. This suggests that unlike other cabinets, the Hosokawa cabinet was supported only for its political reform effort.

Controlling for the specific job evaluations, party support had an influence on cabinet support among supporters of the LDP, *Koumei*, and the JCP who were considered relatively loyal to their party. Only the *Sakigake* supporters were not likely to positively evaluate the cabinet. Although the JNP and the RP played a central role in the administration, their supporters based their evaluations of the cabinet job performance on a rational ground. The Hosokawa administration had a "small" base of support, as the proportion of *Koumei* and *Sakigake* supporters was only 24.7 percent among all government party supporters.

Third, age, appraisal of the cabinet's political and economic job performance, support for the LDP, the NFP, the JSP, and the JCP show a statistically significant effect on support for the Murayama cabinet at the 5 percent level. Older voters tended to positively evaluate the cabinet's job performance, and both political and economic job performance of the cabinet mattered for voters. Support for The LDP and the JCP was also a powerful predictor of cabinet support although they showed opposite trends. It is especially notable

that NFP supporters were less likely to support the coalition government of the LDP, the JSP, and *Sakigake* than were independents, given that most new party supporters did not rely on partisanship when evaluating the Miyazawa and Hosokawa administrations. This may suggest that the label of the new party was established three years after their emergence when the new party partisanship began to work as a “perceptual screen” through which voters saw politics.

It is also notable that support for the JSP was related to a positive attitude toward the Murayama cabinet, while JSP supporters did not base their evaluation on a partisan ground for the Miyazawa administration, or even the Hosokawa administration that the JSP joined. This implies that the JSP leader, Murayama’s assumption of premiership made JSP supporters happy enough to be generous in their evaluations. LDP support was, however, not as important in predicting cabinet support under the Murayama administration as it was under the other administrations in which the LDP took part. The proportion of JSP supporters to all government party supporters was only 18.4 percent, indicating that the Murayama cabinet had a “large” but “soft” base of party support.

Finally, age, appraisals of the cabinet economic and political performance, support for the LDP, the RP, and the JCP have a statistically significant effect on support for the Hashimoto administration at the 5 percent level. Again, the LDP and JCP supporters showed strong but opposite attitudes toward the Hashimoto cabinet’s performance. When including the results from

the former three cabinets, the supporters for these two parties were relatively strong partisans. The RP supporters also showed that their partisanship was comparable with that of the existing party supporters, as they negatively evaluated the Hashimoto cabinet as well as the Murayama cabinet. Contrasting with the case of the Murayama cabinet, the SDP (JSP) supporters were no longer generous evaluators, without their partisan bias in evaluating the cabinet's job performance. Party affiliation of the prime minister really mattered for the DSP (JSP) supporters.

5.4.2 Discussion

From what I have found so far, I draw the following inferences on the change in the effect of party support on cabinet support in the 1990s. First, as the analysis of the determinants of cabinet support under the Miyazawa and Hosokawa administrations demonstrated, voters' support for two newly established parties, the JNP and the RP, that played a central role in establishing the first coalition government in the 1990s, had no impact on cabinet support. In other words, the cabinet could not expect any favor from these supporters. *Sakigake* supporters tended to positively evaluate the Hosokawa cabinet's performance, but the number of them was probably not large enough to enhance the relationship between government party support and cabinet support. The analysis also revealed that the performance of the Hosokawa cabinet was evaluated only through its political reform agendas, and benefited from the partisanship of the supporters of small parties such as *Koumei*, the SDL, and *Sakigake*. Thus,

the effect of party support on cabinet support declined under the Hosokawa administration.

Second, I compared the determinants of cabinet support under the Murayama and Hashimoto administrations, and found that the party affiliation of the prime minister mattered for both LDP and JSP supporters. While JSP supporters did not tend to show support for the Hosokawa and Hashimoto administrations that the JSP joined, they did favor the Murayama administration, whose prime minister belonged to the JSP. LDP supporters also positively evaluated the cabinet in which the prime minister was their leader. Thus, the effect of party support on cabinet support was restored due to the assumption of premiership by the leader of the party whose supporters comprised the majority of all government party supporters.

5.4.3 The Effect of Party Support Change on Cabinet Support Change

In the analysis of the determinants of cabinet support, I found that there was much variation in the effect of party support on cabinet support across supporter groups. The static model, however, does not tell us how the change in party support is related to the change in cabinet support. In time-series analysis, there is an assumption on an individual level that one attitude change leads to another attitude change, which is testable only with panel data. Taking advantage of the JESII panel data, this section examines the dynamic relationship between party support and cabinet support on an individual level.

In the dynamic model, the dependent variable is the change in the evaluation of the cabinet's general job performance, to which value is assigned by subtracting past evaluation values from current ones. For example, respondents who appraise the cabinet's job performance most negatively at a past time and most positively at a current time is given "3" ($4 - 1$) on a 4-point scale. Larger shifts toward the value of the positive end lead to higher values.

The independent variables are the changes in the evaluations of the cabinet's political and economic job performance, and the changes in party support. The evaluation of the cabinet's political and economic job performance is denoted in the same way for the general job evaluation. The change in party support is a dummy variable which captures the pattern of change across three types of party support, such as "government party support to opposition party support," "opposition party support to opposition party" (actually no change), and "independent to government party support." As the reference category is "independent to independent," I examine how respondents who changed their party support alter their evaluation of the cabinet's job performance in a comparison with consistent independents over two time periods. Moreover, in Model 2, I further categorize the changes in party support with an existing/new party dichotomy; for example, "new government party support to existing opposition party support."

Although the JESII is panel data, wording of certain questions and variable measurement varies from wave to wave. The variables for the evaluation of the cabinet's job performance, for example, are coded from 1 to 5 including

a neutral category, for the Miyazawa and Hashimoto administrations, but 1 to 4, not including a neutral category, for the Hosokawa and Murayama administrations. Because of this coding difference, a simple subtraction is impossible for the variables that are coded on different scales. It is, however, not justifiable to assume that some categories on a 4-point scale are equivalent to a neutral category on a 5-point scale. Therefore, only the change in voters' attitudes between the Hosokawa and Murayama administrations that have the same coding scheme and are chronologically next to each other are examined in the dynamic model.

I make the following theoretical predictions: First, when there is no change in party support (in the sense that voters consistently support for one of ruling or opposition parties), there will be no resultant change in the evaluation of the cabinet's job performance. Second, a change from either ruling party support or independent identification to opposition party support will have a negative effect on the evaluation. Third, a change from either opposition party support or independent identification to ruling party support will have a positive effect on the evaluation.

In addition, the "instability of new party support" hypothesis expects a support change from one new party to another to have a less impact on the evaluation than a support change from one existing party to another. This prediction is, however, empirically ambiguous, because the effect of support for the RP is significant, as seen in Table 5.1.

It should also be noted that the subcategory "existing party support

to existing party support” within the category “government party support to government party support” indicates consistent support for the JSP (SDP). If the party affiliation of the prime minister matters, the effect of party support on cabinet support will be strengthened by the assumption by the JSP leader Murayama’s assumption to premiership among these supporters. Moreover, the category “existing party support to existing party support” within “opposition party support to government party support” indicates consistent support for the LDP (because the LDP was an opposition party under the Hosokawa administration, and a ruling party under the Murayama administration). This change is expected to have a positive effect on the change in the evaluation of the cabinet’s job performance.

Table 5.3: Determinants of Cabinet Support: Dynamic Models (Hosokawa, Feb. 1994 → Murayama, Jul. 1995)

	Model 1		Model 2	
	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value
Constant	.730	.000	.686	.000
Δ Political Evaluation	.215	.151	.228	.128
Δ Economic Evaluation	.400	.000	.319	.001
Δ Party Support				
Gov. Party → Gov. Party	-.022	.816		
New Party → New Party			-.305	.157
Existing Party → Existing Party			.057	.587
New Party → Existing Party			.103	.483
Existing Party → New Party			-.272	.461
Gov. Party → Op. Party	-.698	.000		
New Party → New Party			-.548	.000
Existing Party → Existing Party			.169	.546
New Party → Existing Party			-.787	.173

Existing Party → New Party			-0.827	.000
Op. Party → Gov. Party	.300	.001		
New Party → New Party			-	-
Existing Party → Existing Party			.315	.000
New Party → Existing Party			-	-
Existing Party → New Party			-0.524	.204
Op. Party → Op. Party	-0.045	.818		
New Party → New Party			-	-
Existing Party → Existing Party			.211	.301
New Party → Existing Party			-	-
Existing Party → New Party			-0.236	.207
Gov. Party → Independent	-0.165	.124		
New Party → Independent			-0.159	.234
Existing Party → Independent			-0.169	.193
Op. Party → Independent	.045	.726		
New Party → Independent			-	-
Existing Party → Independent			.045	.723
Independent → Gov. Party	.087	.452		
Independent → New Party			-0.275	.352
Independent → Existing Party			.130	.274
Independent → Op. Party	-0.459	.002		
Independent → New Party			-0.415	.005
Independent → Existing Party			-1.046	.028
<i>N</i>	1054		1054	
<i>Adj - R²</i>	.194		.208	

Table 5.3 shows the OLS estimation results of the dynamic model. In Model 1, the changes from “government party support to opposition party support,” from “opposition party support to government party support,” and from “independent to opposition party support” had a statistically significant and expected effect on the evaluation of the cabinet’s job performance.

In Model 2, the change from “new party support to new party support”

within the category “government party support to opposition party support” had a statistically significant negative effect, which suggests that supporters of the JNP, the RP, or *Sakigake* in the Hosokawa administration appraised the Murayama administration less positively by becoming supporters of the NFP.² The change from “existing party support to new party support” in the same category also showed a negative impact, which indicates that supporters of the JSP, the DSP, the JCP, and the SDL in the Hosokawa administration lowered their evaluation of the Murayama cabinet after becoming NFP supporters. The change from “existing party support to existing party support” within the category of “opposition party support to ruling party support” had a statistically significant and positive effect at the 5 percent level, which suggests that voters who continued to support the LDP evaluated the performance of the Hosokawa cabinet better than that of the Murayama cabinet.

Finally, the significant negative effect of the changes from “independent to new party support” and from “independent to existing party support” within the category of “independent to opposition party support” indicates that independents lowered their evaluations of the cabinet’s job performance by becoming NFP or JCP supporters.

What is surprising is the strong partisanship of NFP supporters. Support for the NFP had more significant meaning than that for the other newly established parties, such as the JNP, the RP, and *Sakigake*. In other words, the partisanship of NFP supporters was strong enough to be a “perceptual screen”

²The NFP was established by a merger of several parties including the JNP, the RP, and *Sakigake*.

through which voters saw the cabinet. It is also notable that voters who consistently supported the SDP for these two periods, or those who became JSP supporters during the Murayama administration did not raise their evaluations of the cabinet's job performance, although the effect of JSP support on cabinet support actually increased as seen in Table 5.1. This was probably due to independent voters who evaluated the cabinet under the Murayama administration less positively than under the Hosokawa administration.

5.5 Conclusion

I summarize the findings in this chapter as follows:

1. The effect of party support on cabinet support declined under the Hosokawa administration because the supporters of the JNP and the RP did not base their evaluations of the cabinet's job performance on their affective attachment to their parties (from a comparison between the Miyazawa and Hosokawa administrations in Table 5.1). Among the existing party supporters, *Koumei* supporters evaluated the Hosokawa cabinet's job performance more positively, but their proportion was not large enough to keep the effect.
2. The effect of party support on cabinet support dropped under the Murayama administration because the LDP supporters, who had no prime minister in the cabinet, did not strongly support the Murayama cabinet (from an analysis in Table 5.1). In addition, although the JSP support-

ers, who had the prime minister, tended to support the cabinet, their proportion among all government party supporters was not large.

3. The effect was restored under the Hashimoto administration because the prime minister was the LDP party leader, and a large body of the LDP supporters strongly supported the cabinet (from an analysis of the Hashimoto administration in Table 5.1).
4. Partisan effect of the newly established parties in 1993 was weak, but that of the NFP, established three years later, was as strong as that of the existing parties (from an analysis in Table 5.3).

I examined the determinants of the effect of party support on other political attitudes from a theoretical view-point, and came to the following conclusions. First, when voters have a clear image of a political party, and when the party exists long enough for the voters to form an affective attachment to it, the effect of party support on cabinet support is strengthened. Second, as the extent to which voters associate the party with another political actor, such as a cabinet, increases, party support becomes more influential. Although these arguments cannot be simply generalized for other political attitudes than cabinet support, this study can be a guideline for further studies.

Chapter 6

Conclusion

Political observers have written countless books on why the LDP managed to stay in power for so long despite its corrupted nature. In this dissertation, I examined the mechanism of cabinet support in Japanese people's minds, and explored when and why it changed.

Chapter 2 showed that the logic of cabinet support had changed since the 1955 party system collapsed in the early 1990s. Under the 1955 party system, people's support for the LDP was closely tied with support for the cabinet because of ideology and trust in the LDP's ability to govern. After the collapse of the Soviet Union, however, the influence of ideology on citizens' political attitudes declined, while new conservative parties provided people with new realistic alternatives to the LDP. These changes in citizens' mind finally lead to the end of the LDP's one-party dominant regime in 1993.

Using the VAR approach, Chapter 3 examined the effect of party support on cabinet support to provide a basis for analyses of the changing effect in later chapters. More specifically, it investigated how cabinet support, party

support, and the economy influence each other, and found that Japanese data confirmed no causality from cabinet support to party support while party support did affect cabinet support.

Chapter 4 investigated the changing effect of party support on cabinet support, conducting a time series analysis of data drawn from monthly polls taken by Jiji Press, 1960-2001. First, using the idea of EITM (Empirical Implications of Theoretical Models) to combine both formal theory and statistical analysis, I constructed a theoretical model of cabinet support, and drew an empirical implication about the changing effect of party support on cabinet support. In the model, I showed the mechanism by which partisan loyalty was transformed into the effect of party support on cabinet support, using the AR(1) process as an “analogue” of partisan loyalty or persistence of party support. The implication was that when the persistence of support rates for existing parties is stronger than that of support rates for new parties, the effect of party support on cabinet support decreases as the proportion of new party supporters who support the cabinet within a body of all cabinet supporters increases. I illustrated this idea with time series data drawn from the monthly polls conducted by Jiji Pres.

Second, I empirically demonstrated the changing effect of party support on cabinet support over time, using ARFIMA (autoregressive fractionally integrated moving average) modeling as well as time varying parameter techniques such as the Legendre polynomial model and a Bayesian change point model.

The results showed that as expected, the effect of party support on cabinet support declined under the Hosokawa government, which was the first non-LDP coalition government in 38 years. While this tendency remained under the Murayama coalition government, the partisan effect returned just after Hashimoto, the LDP leader, assumed the prime minister's seat. The Bayesian change point analysis also suggested that any change in the political psychology of Japanese citizens to support the cabinet happened in the early 1990s.

In Chapter 5, I tested two hypotheses to explain this change in the effect of party support on cabinet support in the 1990s, using panel data from the Japan Election Study II (JESII) , 1993-1996. I proposed two models, one static and one dynamic. The results suggested that the effect of party support on cabinet support dropped under the Murayama administration because the supporters of the LDP, to which the prime minister did not belong, supported the Murayama cabinet less strongly. Although the supporters of the JSP with which the prime minister was affiliated tended to support the cabinet, their proportion within the body of all government party supporters was not large. The results also implied that the effect returned under the Hashimoto administration because the prime minister was the LDP party leader, and a large body of LDP supporters strongly supported the cabinet.

Overall, my research implied that the effect of party support declined gradually due to a long time change in political environment and citizens' mind, and the emergence of new parties in the 1990s accelerated the decline,

and finally lead to a new regime under which citizens think of politics differently. Under the post-1993 regime, there was no one powerful variable to explain cabinet support.

This naturally raised a question: what are the determinants of cabinet support under the post-1955 party system? Party support is not a fundamental political variable anymore. Rather, party support may be influenced by the popularity of prime minister who is said to be “presidentialized” these days. Appendix IV explores the question, but finds nothing interesting. Probably, we are still in transition toward the new regime.

Finally, the theory developed in this dissertation can be extended to other democratic countries. The model of cabinet support explains how the strength of support for each party within a coalition relates to the effect of party support on cabinet support. It implies that a party whose supporters have low loyalty to their party may weaken the effect of party support on cabinet support by joining the coalition. Also, my research empirically showed that the supporters of a party within a coalition to which a prime minister does not belong have weaker emotional attachment to the cabinet. These things lead to a prediction that the more parties a coalition consists of, the weaker and more unstable the effect of party support on cabinet support is. More generally, the coalition may suffer unstable popularity due to the number of parties joining it. This hypothesis is testable, and testing it for other parliamentary democracies will be on a future research agenda.

Appendix IV: An Analysis of Cabinet Support under the Koizumi Administration

Jun'ichiro Koizumi was elected as the LDP leader in April 2001, promising the public that he would "destroy the LDP." As promised, he tried to abolish the special interests that traditionally associated the LDP politicians with their support base industries. The privatization of the postal office was his long-cherished issue, and was strongly opposed by the LDP politicians who had received support from the postal office-related workers and industries. After the House of Councillors' rejection of the privatization bill, he dissolved the House of Representatives, expecting the public's support for the bill in a general election. In the election of September 2005, he harshly criticized his former colleagues, and even sent challengers (called "assassins" by the mass media) to their districts.

As this example indicates, he did not expect support for his administration from the LDP's traditional support base, nor did he rely on partisan supporters who had been loyal to the LDP even during scandals. Rather, he expected the general public to support him in keeping the legitimacy of his government. In other words, he did not hesitate to oppose the old LDP politicians and the party itself if necessary.

These strategies might have some rationality, given that partisanship became even weaker especially after the 1990s. Although Koizumi's style was unique, it seems to represent the relationship between cabinet support and

party support after the early 1990s. Given increasing trends in independent voters and mass media's focus on prime minister's personality after the early 1990s, I expect that party support does not work as a base for cabinet support in the 2000s, and that cabinet support, based on popularity of a prime minister among citizens, has an impact on party support.

6.0.1 The VAR Model

As in the previous chapters, I start with analyzing data compiled by the *Jiji* Press, using the VAR model, and then move to an analysis using the instantaneous model with ARFIMA. I study the period from May 2001 to September 2006, for a total of 65 monthly observations.

Variables included in the analysis are cabinet support, government party support, Consumer Price Index (CPI), and unemployment rate. Government party support rate is calculated by summing up support rates for all political parties in government. CPI is the ratio of the consumer price index to that of the year before. Unemployment rate is newly added in analysis as another economic variable.

Table 3.1 and Figure 3.1 show cabinet support and government party support over this period. Comparing the two time-series, it is obvious that cabinet support is always higher than party support for this period.

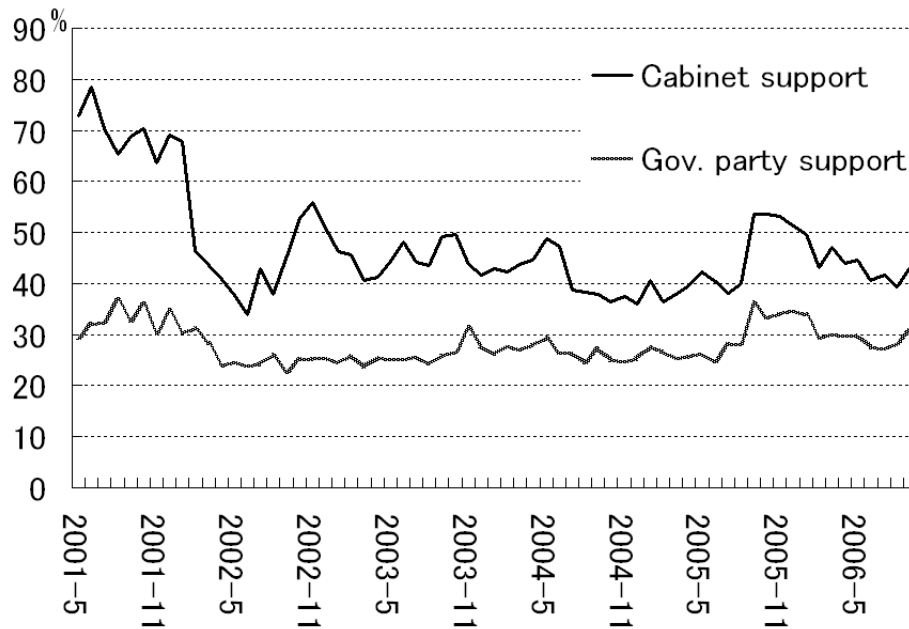
Before examining the VAR model, I test stationarity of the time series. Table 6.2 shows the results of the ADF test. The data-dependent general-to-specific criterion is used to choose the optimum lag structure of the error

Table 6.1 Summary Statistics for Political and Economic Variables, May 2001-September 2006

Variable	N	Mean	Std Dev	Minimum	Maximum
Cabinet Support	65	47.18	10.35	34.00	78.40
Gov. Party Support	65	28.05	3.52	22.60	36.90
CPI	65	100.4	0.47	99.70	101.8
Unemployment	65	4.86	0.49	4.00	5.80

Source: Jiji Public Opinion Polls, 2001-2006.

Figure 6.1 Party Support and Cabinet Popularity in Japan, 2001-2006



Source: Jiji Public Opinion Polls, 2001-2006.

process of the Dickey-Fuller equation. Under this process, the specific order is chosen out of the general order (I considered here 10 lags based on the Schwert's rule of thumb: $m = \text{Int}\{12(T/100)^{\frac{1}{4}}\}$) on the basis of the standard t -tests of significance of the lag terms.

Table 6.2 Augmented Dickey Fuller Tests for a Unit Root

Regression: $\Delta z_t = \alpha_0 + \alpha_1 t + \alpha_2 z_{t-1} + \sum_{i=1}^m \beta_i \Delta z_{t-i} + \epsilon_t$

	ADF	Lag order(m)
Cabinet Support	-3.184	5
Gov. Party Support	-2.503	2
CPI	-1.417	9
Unemployment	-3.213	9

An asterisk indicates significance (rejection of the unit root null) at the 5 per cent level.

The results suggest that all series are nonstationary. Therefore, I take the first difference of them.

I determine lag lengths in a VAR empirically using methods based on Simms (1980). Table 6.3 shows the process. The likelihood ratios(LR) are calculated to test if there is a difference in log-likelihood between the pair of different lag specifications (up to 10 lags). The first look at the results suggests that appropriate lag length is 3, 5, or 9. Calculating the likelihood ratios for all possible pairs of the candidates, I finally find that the appropriate lag length is 5.

The results of Granger causality test appear in Table 6.4. Each cell in the table represents an estimated equation. The p values associated with

Table 6.3 Likelihood Ratio Tests for Lag Order

Pair for Comparison	LR
Lag = 1 vs. Lag = 2	37.066*
Lag = 2 vs. Lag = 3	33.793*
Lag = 3 vs. Lag = 4	17.656
Lag = 4 vs. Lag = 5	35.267*
Lag = 5 vs. Lag = 6	19.776
Lag = 6 vs. Lag = 7	12.010
Lag = 7 vs. Lag = 8	19.353
Lag = 8 vs. Lag = 9	24.240*
Lag = 9 vs. Lag = 10	18.079
Lag = 3 vs. Lag = 5	51.452*
Lag = 3 vs. Lag = 9	97.100
Lag = 5 vs. Lag = 9	64.358

An asterisk indicates significance (rejection of no difference) at the 5 percent level.

$LR = (T - k)(\log|D_R| - \log|D_U|) \sim \chi^2(q)$, where D_R is the matrix of cross products of residuals when the model is restricted; D_U is the same matrix for the unrestricted model; k is the total number of regression coefficients estimated divided by the number of equations; q is the number of restrictions.

each equation appear in the cells of the table. Surprisingly, cabinet support and party support do not Granger cause each other. p -value associated with the effect of cabinet support on party support is, however, smaller than one associated with the reverse effect. Granger causality is found only between CPI and unemployment rate.

Table 6.4 Direction of Granger Causality

Independent variable	Cab. support	Gov. party support	CPI	Unemp
Cab. support	-	.299	.266	.102
Gov party sup	.816	-	.134	.950
CPI	.358	.398	-	.000
Unemp	.124	.091	.024	-

Note. Each variable was lagged 5 months. OLS estimates.

The numbers are block F-test p -values.

Figure 3.3.1 shows the impulse response functions along with asymptotic standard errors. Although it dies down soon, the effect of party support on cabinet support is observed.

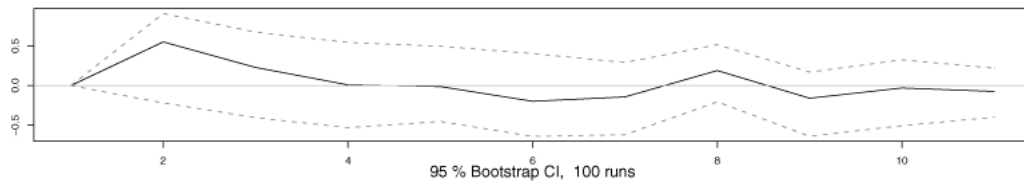
6.1 Instantaneous Model

6.1.1 ARFIMA Filter

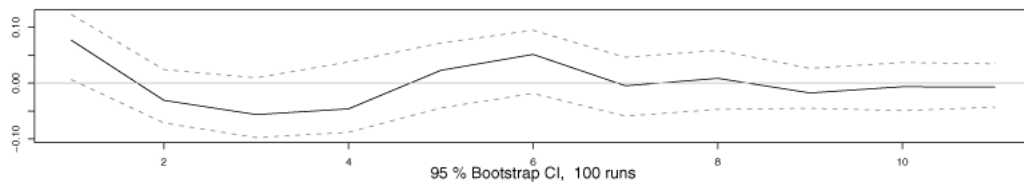
I use the ARFIMA (AutoRegressive Fractionally Integrated Moving Average) model to analyze the instantaneous model. By ARFIMA modeling, I remove the self-explanatory part of the series.

I estimate ARFIMA(p, d, q) using the modified profile likelihood (MPL).

Figure 6.2 Impulse response function from the VAR model
Cabinet support \rightarrow government party support



Cabinet support \rightarrow CPI



Cabinet support \rightarrow unemployment

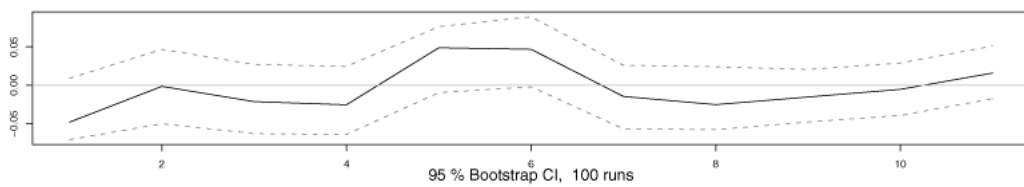
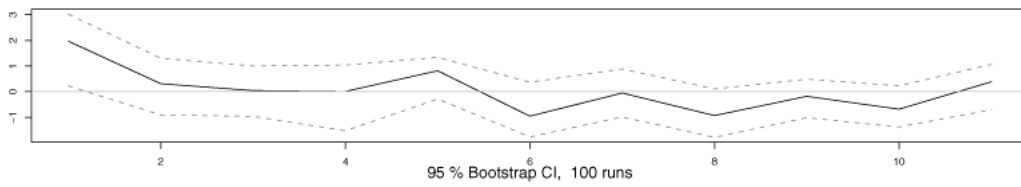
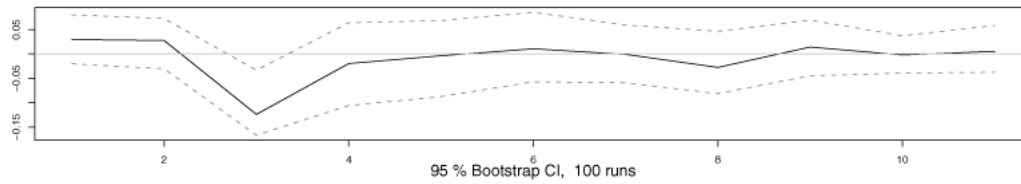


Figure 6.2 Impulse response function from the VAR model(continued)
Government party support \rightarrow cabinet support



Government party support \rightarrow CPI



Government party support \rightarrow unemployment

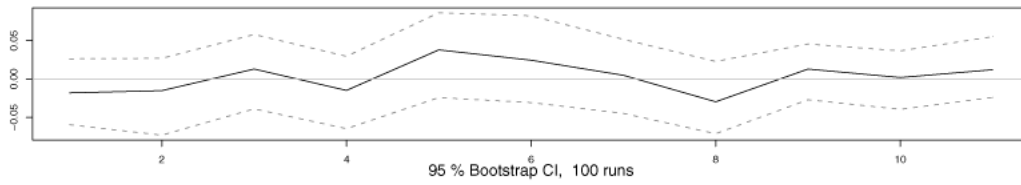
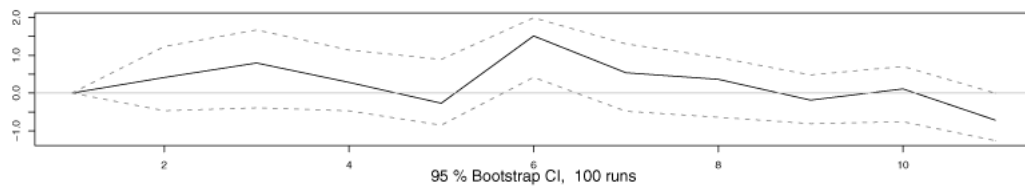
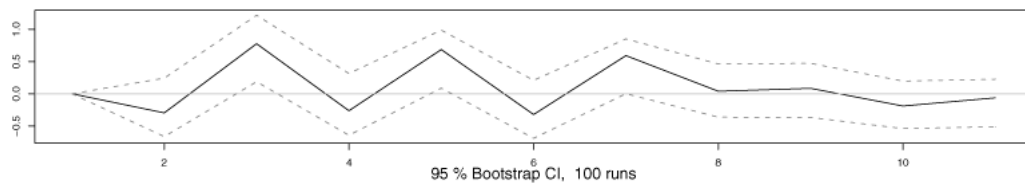


Figure 6.2 Impulse response function from the VAR model(continued)
CPI → cabinet support



CPI → government party support



CPI → unemployment

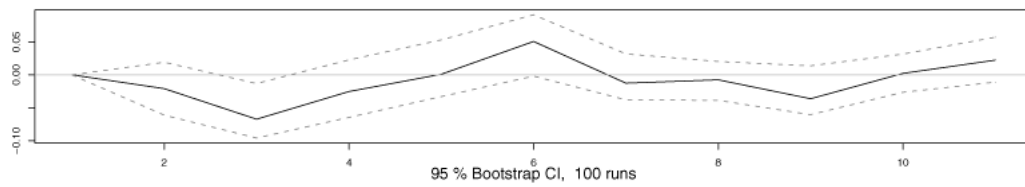
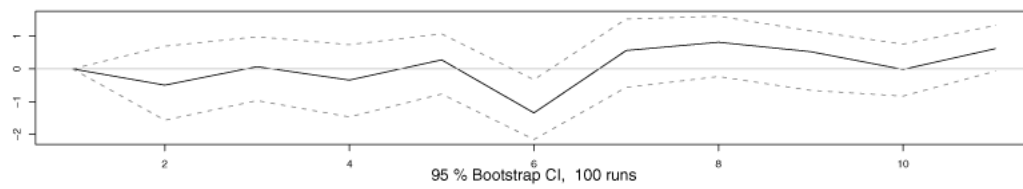
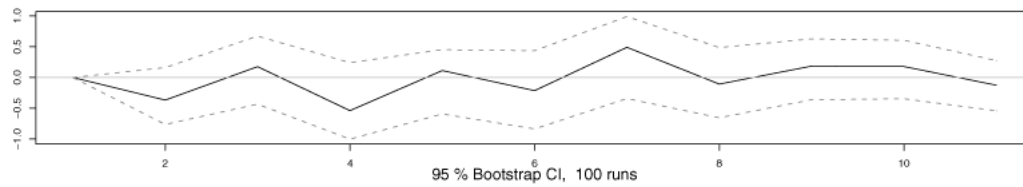


Figure 6.2 Impulse response function from the VAR model(continued)
Unemployment → cabinet support



Unemployment → government party support



Unemployment → CPI

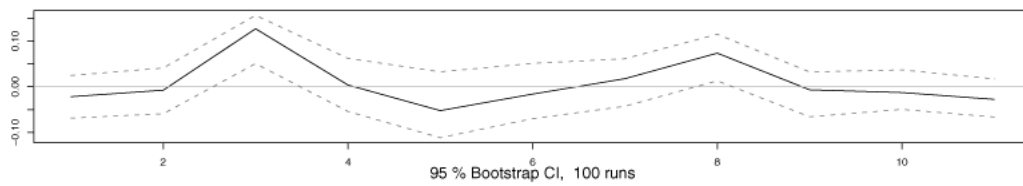


Table 6.5 presents the estimates of the univariate models. The ARFIMA model estimate is $(0, d, 0)$ with $d = .936$ for cabinet support, $(1, d, 0)$ with $d = 1.025$ for government party support, $(0, d, 0)$ with $d = .861$ for CPI, and $(0, d, 0)$ with $d = .771$ for unemployment rate.¹ All time-series are nonstationary, which is consistent with the results of the ADF test.

Table 6.5 ARFIMA Model Estimates and t -ratios

	d (s.e.)	t -ratio for $d = 0$	t -ratio for $d = 1$	ARMA (p, q)
Cabinet support	.936 (.108)	8.636	-.589	(0, 0)
Gov. party sup	1.025 (.170)	6.023	.146	(1, 0)
CPI	.861 (.121)	7.088	-1.149	(0, 0)
Unemployment	.771 (.098)	7.838	-2.33	(0, 0)

The Schwarz Information Criterion (SIC) was used to select the best model from ARFIMA(0, d , 0) to ARFIMA(4, d , 4).

I transform the time series into the white noise residuals of their respective ARFIMA models to purge autocorrelation and ensure stationarity before examining the relationship among the series, then run an OLS regression for the multivariate model of cabinet support.

¹I use OX to estimate d . OX is part of the PcGive 9.0 package and is available from <http://www.nuff.ox.ac.uk/Users/Doornik/index.html> I start from levels and estimate all (p, d, q) models from $(0, d, 0)$ to $(4, d, 4)$ so that there are up to four AR and four MA components. In the OX routine, stationarity with $d \in (-5, 0.4999]$ is required for all time series. Therefore if d is very close to the upper bound, I need to take the first difference so that $d - 1 \in (-5, 0.4999]$. In this case, because the estimate is not d but $d - 1$, I need to add 1 to the estimate to obtain d . I estimate d by taking the first difference of all time series.

In addition to these time-series variables, I include some event dummy variables, which are considered important in explaining cabinet support under the Koizumi administration. The dummies account for honeymoon, four national elections (the House of Representatives elections in 2003 and 2005, and the House of Councillors elections in 2001 and 2004), Koizumi's visit to the Yasukuni shrine, the resignation of Minister of Foreign Affairs, Makiko Tanaka, Koizumi's visit to North Korea, and the special legislation to send troops to Iraq. Descriptions for each event dummy are as follows.

Yasukuni: Prime minister's visit to the Yasukuni Shrine, which worships Japanese soldiers dieing in wars including WWII leaders, has been controversial since Takeo Miki's visit in the early 1980s because of negative reactions from East Asian countries, such as China and Korea. Koizumi promised to visit the shrine in the LDP's party leader election, and accomplished his promise in August 2001. I expect this event to have a negative impact on cabinet support.

Tanaka: Makiko Tanaka, a daughter of former Prime Minister Kakuei Tanaka, was popular among citizens, and helped Koizumi to win the party leader election. Koizumi rewarded her by appointing her to Minister of Foreign Affairs, but lost trust in her for her handling the ministry administration. Tanaka finally resigned in February 2002. I expect this event to influence cabinet support negatively.

North Korea: In September 2002, Koizumi visited Kim Jong-Il in North Ko-

rea, and urged him to admit that North Korea had kidnapped Japanese citizens for over twenty years. I expect this event to be positively influential on cabinet support.

Iraq: Upon a request from the U.S. President George W. Bush, Koizumi hoped to send the Self Defense Force to help American troops in Iraq, though Article 9 of Japanese Constitution is interpreted to prohibit him to do so. A bill for special legislation was passed to allow the Japanese troops to support Americans in non-combat situations in July 2003. I expect this event to have a negative impact on cabinet support

Table 6.6 shows the result. I find that government party support, honeymoon, elections in 2001 and 2003, Yasukuni, Tanaka, and North Korea have statistically significant effects on cabinet support. Cabinet support increases as government party support grows, and it benefits from people's favorable expectations for the new cabinet and Koizumi's visit to North Korea, while cabinet support dropped due to the elections of 2001 and 2003, Koizumi's visit to the Yasukuni shrine, and the resignation of Tanaka. Only election dummy that has a positive impact on cabinet support is the House of Representatives election of 2005, in which Koizumi asked people to support for his privatization bill, although it is not statistically significant at the 5 percent level.

The results from the VAR and instantaneous models provide only weak evidence that the relationship between cabinet support and party support had a unique characteristic under the Koizumi administration. The VAR model suggests that the influence of cabinet support on party support is stronger than

Table 6.6 OLS Estimates of the Equation for Cabinet Support

Dependent variable: Cabinet support		
Independent variables	Estimate	<i>p</i> -value
Constant	-.04	.92
Government party support	.96	.00
CPI	-1.34	.44
Unemployment	-1.43	.47
Honeymoon	2.59	.44
Yasukuni	-9.21	.01
Tanaka	-20.64	.00
North Korea	9.61	.00
Iraq	-5.20	.12
Election01	-9.73	.00
Election03	-11.55	.00
Election04	-5.11	.13
Election05	6.11	.11
<i>N</i>		64
<i>Adj</i> - <i>R</i> ²		.584

the reverse effect, but neither effect was statistically significant. In addition, the instantaneous model shows that party support has a statistically significant impact on cabinet support under the Koizumi administration as well as for other periods before Koizumi.

Such continuity in voters' psychology has also been confirmed in some analyses of the general elections of 2005. After the election, it was frequently said that Koizumi was successful in getting support from less sophisticated and educated independent voters by appealing them through the mass media. Yamada (2006) denies these commonsensical "populist" explanations, arguing that the amount of political information and media exposure did not matter. Shinada (2006) claims that Koizumi still relied on the LDP's traditional partisan voters, although admitting that he was popular among independent voters. Mori (2006) is also skeptical about the possibility that Koizumi caused a realignment of party support base.

Nevertheless, some symptoms of change are noticeable. First, the prime minister's personality seems to become more influential. The events related to the prime minister's initiative, such as his visits to the Yasukuni Shrine and North Korea, have significant impact on his own cabinet popularity. Moreover, Koizumi's claim for the privatization of the postal office was powerful enough to make the effect of election dummy reversed from negative to positive in the general election of 2005.

Second, the effect of cabinet support on party support becomes stronger than the reverse, as seen in the VAR analysis result. Although both of these

effects are still statistically insignificant, they may be in transition to a cabinet support-lead relationship.

Third, in opposition to the trends suggested above, partisanship may be growing especially among Democratic supporters. The analysis in Chapter 5 shows that partisanship matters for the NFP voters in evaluating the cabinet's performance, while it does not for other new party supporters. The NFP and other new parties are different in their duration. The Democratic Party has already existed long enough to have voters psychologically attached to the party. This could be also caused by a consolidation of single member districts in House of Representatives elections, which have been used since 1996. The DP candidate may be considered as an realistic alternative to the LDP candidate in each district.

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