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**The source of Japanese opposition to increasing defense
commitments: The influence of electoral systems**

Nagahisa, Toshio, Ph.D.

University of California, Los Angeles, 1994

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UNIVERSITY OF CALIFORNIA

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The Source of Japanese Opposition to
Increasing Defense Commitments:
The Influence of Electoral Systems

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Political Science

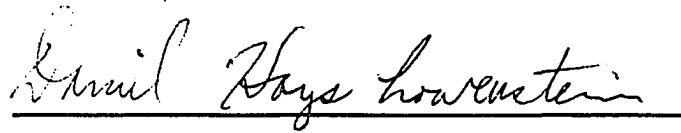
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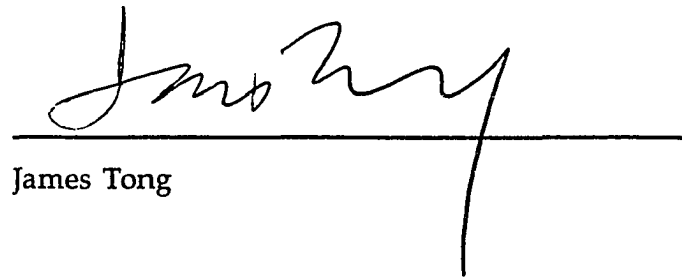
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1994

To my parents and Shutaro, and those who have supported me

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ABSTRACT OF THE DISSERTATION

The Source of Japanese Opposition to
Increasing Defense Commitments:
The Influence of Electoral Systems

by

Toshio Nagahisa

Doctor of Philosophy in Political Science

University of California, Los Angeles, 1994

Professor Frances McCall Rosenbluth, Co-chair

Professor Thomas Schwartz, Co-chair

The purpose of this study is to propose a theoretical explanation for the puzzle that Japan's defense commitment has remained low and inactive since the end of WWII, even though external strategic conditions and public preferences have shifted. Furthermore, through theoretical and empirical analyses, conducted with game theory and statistics, I will test my explanation as well.

Although there are many explanations for Japan's defense policymaking, they do not give us satisfactory answers to the puzzle, because they overlook the mechanism that directs the behavior of Dietmembers from

the Liberal Democratic Party (LDP), who together have been most influential in forming defense policy. I argue that the electoral system—a single non-transferable voting (SNTV) system under a multi-member district (MMD)—nullifies the incentives for LDP Dietmembers to support defense expansion. LDP Dietmembers cannot easily support defense expansion under this electoral system, because doing so endangers their political status, whatever their personal preferences for defense expansion. More specifically, the legislators become indifferent to the national interest—including national security—because they have to devote themselves to providing pork-barrel programs to their personally loyal voters.

The theoretical comparison of SNTV under MMD with other electoral systems concludes that the electoral system is a sufficient condition but not a necessary condition to nullify the incentives of the legislators to expand defense. On the other hand, the empirical analysis discloses that the electoral system is a necessary condition as well. In other words, the legislators under SNTV with MMD necessarily cannot support defense expansion at the least. Since Representatives from the LDP chosen under this electoral system have final authority in the process of policymaking and a veto power over the Councillors, Japan cannot have increased defense commitments, even when necessity demands it. This is my answer to the puzzle of Japan's defense policy.

The aim of this study is to propose a theoretical explanation for the puzzle that Japan's defense commitment has been low and inactive, even though external and/or domestic factors indicate that Japan should have increased it, or, at least, that it should have fluctuated. Furthermore, through theoretical and empirical analyses, I will test my explanation as well.

Solving the puzzle is important both academically and practically. Although there are many studies about the making of Japan's defense policy, they do not fully solve this puzzle. Despite this theoretical lack, Japan is expected to become a main actor in international security as well as in the world economy in the near future. A new theory of Japan's defense policy

would supplement previous research and would help us to predict and to control the course Japan will take.

What Is the Question?

Recently, three leading Japanese politicians, Ichirō Ozawa, Ryūtarō Hashimoto, and Michio Watanabe published books about their large-scale plans for the future of Japan, in which they discuss security issues. Interestingly, all of them emphasize that Japan should increase its commitments in security efforts. Ozawa (1993, pp. 102-137), Secretary General of *Shinseitō*,¹ argues that Japan should reorganize the Self-Defense Forces (SDF), so that the SDF can actively participate in peacekeeping (and making) operations of the United Nations for its own security as well as that of others. For this goal, he stresses the necessity of a revision of the Constitution. Hashimoto (1993, pp. 101-108), former Secretary General of the Liberal Democratic Party (LDP),² is supportive of the idea of his political enemy, Ozawa, although his expression is prudent. Watanabe (1994, pp. 72-83), former Vice Prime Minister,³ goes one step further, suggesting that Japan should become a permanent member of the Security Council of the United Nations in order to take an initiative in UN activities.

¹ Ozawa held many important posts in the LDP, such as Secretary General, and in the Cabinet.

² Hashimoto experienced Chair of the Policy Research Affairs Council and Secretary General of the LDP as well as several ministers in the Cabinet.

³ Watanabe is a faction leader in the LDP, who experienced many important posts in the LDP and the Cabinet.

These assertions by politicians may be a response to criticism from abroad that regards Japan as a free-rider on the security contributions of other countries, especially of the United States. In 1988, the U.S. Congress passed a resolution demanding that Japan spend three percent of its gross national product on defense. Patricia Schroeder, Representative from Colorado, recommended a "defense protection fee" on all Japanese imports, to cover some of the cost of the American ships and planes that guard Japan. U.S. public opinion also maintains that Japan should act fairly in security issues as well as in the economic ones (Fallows, 1989, pp. 17-18).

However, before these criticisms appeared, support for increasing the Japanese defense commitment existed among the power-holders in Japan. Participants in the LDP from the Japan Democratic Party or *Nihon minshutô*, including former *Kaishintô* members such as Hitoshi Ashida and Yasuhiro Nakasone, were strong advocates of the reestablishment of an independent Japanese military force. Ichirô Hatoyama, Prime Minister from 1954-1955, attempted in 1955 to amend the Constitution in order to allow the rearmament of Japan. Nobusuke Kishi, Prime Minister from 1957 to 1960, considered that revision of the U.S.-Japanese security treaty was necessary in order to establish Japan's increased independence (Ôtake, 1983a, pp. 75-98). Even Shigeru Yoshida, a leader of the Liberal Party or *Jiyûtô* and Prime Minister from 1946 to 1954, who adopted the so-called "Yoshida doctrine" by which Japan began free-riding on the U.S. security efforts and concentrating on economic development, stated that Japan should stop relying on other countries for its own national security (Ozawa, 1993, pp. 109-110). These ideas,

some of which seem more radical than those by contemporary politicians, have survived within the LDP, which has maintained power since 1955.⁴ According to Hashimoto (1993, p. 106), no single LDP legislator considers that Japan should keep free-riding on other countries for its security.

A question arises: Why have Japanese defense commitments, even by political leaders, been low or inactive since the end of WWII? Although Japanese defense expenditure became the third largest in the world in 1988 (from eighth largest in 1985), this happened because of the increase in the value of Japanese currency toward U.S. dollars. In real terms, defense expenditure of Japan ranks twentieth and as a percentage of GNP is lower than that of any European country (Fallows, 1989, pp. 17-18). If the LDP legislators want to increase defense commitments, they should be able to do so, because the party has been in power for the most period after WWII. Do they really want to increase these commitments? Does anything interfere with their commitments?

Previous Explanations

There are many explanations of this issue. Specialists in international relations claim that Japan has not needed to expand its defense efforts because the United States has protected Japan; additionally, the security climate in the Far East has not demanded an increased commitment from Japan. However,

⁴The LDP was out of power between July 1993 and June 1994.

if this is the case, Japan should increase its defense efforts when the United States cannot afford to protect Japan or requires Japan to do more.⁵ Furthermore, the security climate in the Far East is as changeable as that in other regions. As the security climate has changed, the other Asian U.S. allies, whose defense commitments are larger than that of Japan, have altered their defense postures. Why does only Japan always maintain a negative attitude toward the expansion of defense? Another argument by specialists in international relations is that Japan has already departed the territorial game in which states attempt to establish independence through struggles against one another but instead plays the trade game in which states trade with one another in order to maximize their commercial profit. In the latter game, military power is not necessary because attacking other states may damage their profit.⁶ Nonetheless, this argument is not persuasive, because the game is possible only when either all the other states play the same game or somebody protects Japan. Otherwise, Japan would be victimized by a territorial game player. We would have to conclude that Japan had "irrationally" chosen to be a sheep among wolves, which violates an assumption in the system-level analysis.

In order to explain the "irrationality" of Japan, Japanologists often refer to the peculiarities of the country. Some say that the public fear of military resurgence is strong enough to deter legislators inclined to promote defense

⁵ Details about previous explanations will be discussed in Chapter 2. Examples include Friedman and LeBard (1991), Brzesinski (1991), Harrison and Prestwitz Jr. (1990), Iklé and Nakanishi (1990), MacEachron (1982), and Colbert (1975).

⁶ Rosecrance (1986) is the main advocate of this argument.

expansion.⁷ The legislators must listen to voters' preferences, because they cannot win an election without voters' support. However, people who oppose defense expansion in Japan do not outnumber those in other countries whose defense commitment is much larger than that of Japan. If public opinion does matter, the defense commitment of the other countries should be smaller than that of Japan. Why does public opinion or an anti-military norm work only in Japan? Why doesn't it work in the other countries? We need to answer these questions. Other Japanologists argue that bureaucratic politics nullifies the power to expand defense. Because nobody wants to take an initiative in policymaking, Japan cannot behave rationally as regards external and domestic demands.⁸ Yet, if nobody takes an initiative in forming public policy, Japan of necessity could have no policy at all. In fact, other Japan watchers describe serious struggles for the initiative among political actors in the policymaking process.⁹ Another domestic explanation is that the bureaucratic institutions and the Constitution lessen the power for defense expansion in the policymaking process.¹⁰ However, this view is not problem free, either. Although the SDF officers may have no greater power than the other bureaucrats, the latter are not always against defense expansion. The bureaucrats might support a policy of expansion if they regard it as beneficial for themselves and the nation. Moreover, the bureaucrats formally cannot enact a policy the legislators prohibit, because the legislators

⁷ Examples include Berger (1993), Bobrow (1989) and Katzenstein and Okawara (1993).

⁸ Examples are van Wolferen (1990) and Pyle (1989).

⁹ See Ôtake (1983a, 1983b, 1984a and 1984b).

¹⁰ Examples include Holland (1988) and Katzenstein and Okawara (1993)

are the supreme decision making authority of the state. The Constitution may be taken to prohibit increased defense efforts because it declares that the Japanese people forever renounce war as a sovereign national right and the threat or use of force as means of settling international disputes; Japan cannot maintain land, sea and air forces. Nonetheless, the Constitution may be interpreted in many different ways. The government considers that Japan may have self-defense forces, although some opposition parties do not accept this interpretation.¹¹ Japan can increase defense efforts consistently with the government's interpretation, which is subject to change. The question on Japan's defense policy still remains unsolved.

Electoral Systems That Make Differences

The hypothesis I propose is that the electoral system adopted for the House of Representatives in Japan nullifies the incentive of the legislators to champion defense expansion. Consequently, Japan cannot increase its defense commitments despite external and domestic demands.

Every game has its own rules. If the rules change, the game will change because the players will behave differently. Suppose that all soccer players were allowed to use their hands, the game would then resemble rugby. If *Sumô* wrestling allowed the wrestlers to touch the ground, it would be like

¹¹ For details, see *Bôei hando bukku* [Defense Handbook] (1992, pp. 484-505). The Social Democratic Party of Japan (SDPJ), whose previous name was the Japan Socialist Party (JSP), finally approved the SDF in 1994.

free-style wrestling. An electoral system is a rule for candidates as well as for voters. If it altered, they must behave differently and arrive at different outcomes.

Japan has adhered to the single non-transferable voting (SNTV) system under a multi-member district (MMD) for the House of Representatives, which no other country except Taiwan has adopted. The unique character of the electoral system can force the legislators to behave differently from those of other countries.

More specifically, by SNTV under MMD, a voter can cast only one vote for one candidate in an electoral district where there are plural winners. Votes once cast for one candidate are not transferable to others even when the former has already enough votes to win. For a political party, gaining more than one winner from almost every district is necessary to occupy an absolute majority of the House. Only the LDP has fielded plural candidates in almost every district, because there are enough possible LDP supporters to send all the LDP candidates to the Diet. However, a problem is that one candidate may receive more than enough votes to win, while the others may not receive enough. The candidates need coordination to share the votes optimally.

According to Masayoshi Takemura (1994, p. 14), the leader of *Shintô sakigake*,¹² the LDP candidates organize *kôenkai* consisting of their personal supporters to solve the coordination problem. In this process, they provide pork-barrel programs to differentiate themselves from the other LDP candidates. Advocating the LDP party platform does not increase personal

¹² Takemura is a former LDP member.

support because all the LDP candidates do this. The voters choose for whom they will vote according to how many pork-barrel programs the candidates offer them. The candidates compete with one another to gain enough votes to make them winners. Making *kôenkai* is the way for the LDP candidates to divide LDP supporters efficiently.

However, a side effect of *kôenkai* making seriously affects policymaking in the state. The legislators become indifferent to what they should do for the nation and the world because they are too busy in providing pork-barrel programs to their *kôenkai* members. If they stop providing pork-barrel programs, they would not be elected again. They continually spend their energy for these efforts so that their heads at last become "empty" (Takemura, 1994, p. 15). Watanabe (1994, pp. 51-52) asserts that Japan should replace this system with the first-past-the-post system (FPTP), where only one candidate can win. In his view, legislators cannot work for policies which benefit the nation as a whole in areas, such as defense and diplomacy, under SNTV and MMD. Ozawa (1993, pp. 68-80) also argues that FPTP should replace SNTV under MMD in order to reactivate competition among the political parties over national policy affairs, including national security. These authors attribute the parties' unwillingness to work for national defense to the unique electoral system of Japan. My hypothesis is thus not quite original but stems from the empirical intuitions of the politicians.

While many political scientists are looking for an answer in other places for the puzzle in Japan's defense policy, the politicians have discovered that the electoral system affects their behaviors toward defense issues. This is

like a situation in which patients know their disease better than their doctors. Of course, we should not swallow this assertion without question. The electoral system may in fact not regulate the behavior of the legislators. Even if it does, other electoral systems may also produce the same effects. What political scientists should do is to examine whether the politicians are right and, if they are, to establish a theory explaining the mechanism rigorously. This is what I shall attempt in this study.

Outline of the Study

This study consists of eight chapters including the introduction and conclusion.

Chapter 2 reviews previous research that explains the formation of Japan's defense policy after WWII. This can be divided into two types: system-level analysis and domestic-level analysis. The former includes realism, the collective goods theory and the trading state theory, which in common maintain that external factors determine Japan's defense policy, and consider the state as a rational unitary actor. The latter elucidates Japan's defense policy from the viewpoints of norms, bureaucratic politics, and institutions. Among these explanations, the institutional one is most persuasive. However, it raises many questions as well.

Chapter 3 clarifies who formulates Japan's defense policy. Before arguing about the effects of the electoral system, we have to deal with a more

basic question: Who governs? If, as some argue, bureaucrats are decisive in the process of policymaking, an explanation based on the electoral system would be useless. Among three models analyzed, the power elite model, the pluralist model and the institutional model, I support the last, because we can find pluralistic aspects among the political actors which are not anarchic but regulated by frameworks of political institutions, as the model argues. I conclude that voters' interests direct the motivations and behavior of the legislators who as a whole can control the bureaucrats in the process of policymaking.

In Chapter 4, using game theory as an analytical tool, I examine the mechanism of SNTV under MMD in order to find problems the electoral system creates among voters, candidates and political parties, and then explain how the electoral system motivates the LDP Dietmembers' unwillingness to champion defense expansion.

Using game theory again, Chapter 5 theoretically compares SNTV under MMD with seven other electoral systems adopted in modern democracies. We cannot say that the electoral system matters if other electoral systems can produce the same outcomes from the same inputs. In other words, the electoral system cannot be regarded as a necessary condition for the LDP Dietmembers' neglect of defense expansion unless other electoral systems work differently. The analysis concludes that SNTV under MMD is one of two systems that almost always disturb the incentives for defense expansion.

In Chapter 6, I will conduct hypothesis tests through a statistical analysis of the behaviors of the LDP legislators. If empirical data show that other electoral systems render the legislators unwilling to support defense expansion, then we cannot consider SNTV under MMD a necessary condition for this unwillingness. On the other hand, if there are data which indicate that the legislators champion defense expansion under this system, we should not recognize the system as a sufficient condition, either. Furthermore, if the theory is correct, we should observe a similar unwillingness by the legislators to support other goods besides national defense which are unlikely to be pork-barrel items. The results of the tests support the hypothesis that the electoral system is a necessary and sufficient condition for the unwillingness to support defense and also allow the applicability of the theory to the other public goods.

Chapter 7 discusses the possibility of changes in Japan's defense policy. There are several factors that may diminish the effects of SNTV under MMD. First, an electoral system is changeable because it is a dependent variable of various factors. If the system changes, then the outcomes will change. Second, the increasing cost of providing pork-barrel programs, created by demographic change, may promote competition among the legislators for the public interest, including an increased defense commitment. Third, diffusion of civilian technology to military use might motivate the legislators to support defense expansion. Fourth, the opposition party may drive the LDP legislators to change their attitudes toward defense issues. Finally, Japan may quickly change its defense policy under the pressure of an extreme situation.

In the final chapter, I conclude that SNTV under MMD nullifies the incentives of the LDP legislators to support defense expansion. The electoral system is empirically a necessary condition for this unwillingness, although not in theory, while the system is a sufficient condition for the unwillingness both empirically and theoretically. Furthermore, SNTV under MMD also makes legislators unwilling to support public goods which cannot become pork-barrel items. The intuition of the politicians seems correct.

Summary

Although Japan has been the world's second largest economy for many years, its security efforts have been far less than those of countries having much smaller economies. It is natural to ask "Why so?" The more money one has, the more one must spend to protect the money. In fact, the LDP legislators are not against increasing Japan's defense efforts. Many political scientists have been unable to answer this simple question. On the other hand, the politicians know that the electoral system, SNTV under MMD, nullifies their incentives to support defense expansion as well as other public goods useless as pork-barrel items for their supporters. As a result, Japan cannot increase and change its defense efforts. This study proposes a theoretical explanation of the mechanism by which this happens and tests the hypothesis with social scientific methods.

Previous Explanations

Chapter 2

The many studies about the making of Japan's defense policy after WWII can be divided into two types according to their level of analysis: the system-level and the domestic-level analyses. The system-level analysis maintains that external factors determine Japan's defense policy, and considers a state as a rational unitary actor, while the domestic-level analysis contends that domestic factors are the main determinants of policy. Each of the approaches contains different variants. The system-level analysis includes realism, the collective goods theory and the trading state theory. The domestic level analysis elucidates Japan's defense policy from the viewpoints of norms, bureaucratic politics and institutions. Although the institutional explanation seems most persuasive among these explanations, it still leaves many problems to be solved.

In this chapter, I will introduce and examine these previous explanations in order to clarify their problems.

System Level Analysis

Realism

Realism assumes that the most important actors in world politics are states, that states maximize their interests defined in terms of power, and that states are rational actors, who calculate the costs and benefits of various alternatives while selecting the best course of action (Keohane, 1986a, p. 7). Realism then postulates that the outcomes in international relations—the results of conflicts, diplomatic or military, among states—will be determined by the overall distribution of power (Keohane, 1986b, p. 183). Kenneth Waltz (1979) has developed a rigorous, deductive system theory of international relations, i.e., structural realism. According to him, international system structures, determined not by all actors but by major ones, provide constraints and incentives against which nation-states can act only at a high cost (Waltz, 1979, Ch. 5). Structural realism identifies international system structures as the principal determinant of states' behavior.

Realists commonly argue that the distribution of power among states or the international structure that appeared after WWII mandated that Japan

maintains a minimal defense responsibility.¹ After the end of WWII, the United States and the Soviet Union became superpowers, leading the liberal and communist worlds, respectively. In the Far East, the United States regarded protecting Japan as being essential for its global strategy because Japan, located at the North-West edge of the Pacific Ocean, could be a bulwark and a bridgehead against the communist powers in the region—the Soviet Union, China, North Korea, and North Vietnam. On the other hand, Japan—a loser in WWII—without enough economic capability to establish a new defense system welcomed and enjoyed the U.S. security umbrella, while devoting itself to economic reconstruction. Maintaining a minimal defense responsibility for Japan was a fate determined by the results of WWII.

However, the realists do not share a common view about Japan's defense policy in the future. Some argue that Japan will soon increase its defense commitments, while others still think that it will maintain a minimal defense responsibility.

The former includes George Friedman and Meredith LeBard (1991), who write that Japan will develop new defense systems including even nuclear weapons in order to defend its national interests, such as sea-lanes among suppliers of natural resources, markets and its own territories.² They advance three reasons for the future change in Japan's defense policy. First, the United States lost its strategic rationale to defend Japan with the collapse of the Soviet

¹ Those listed in Notes 2 and 3 adopt this approach.

² Waltz (1993), Brzezinski (1991), Harrison and Prestowitz (1990), and MacEachron (1982), have similar arguments.

Union in 1991. Second, Japan has turned burdensome for the United States owing to the increasing U.S. trade deficit vis-à-vis Japan since the 1980s. The United States has also lost a motive to protect Japan economically because defending Japan's economic interests impairs the U.S. economy. Finally, Japan, no longer a defeated state but the second largest economy in the world, can develop an independent defense capability if the U.S. security umbrella becomes unavailable. In short, the distribution of power among states or the international structure has changed owing to the disappearance of the Soviet Union and the increase of Japan's economic capability, which together will drive Japan to enhance its defense commitments.

Many realists evaluate the changes in the distribution of power among states or in the international structure more conservatively than Friedman and LeBard.³ The "conservative" realists argue that the Cold War clearly divided Europe between West and East but this split was only one of many in Asia. Therefore, the end of the Cold War created much less incentive for Japan to change its defense policy than it did for European countries such as Germany. If Japan increases its defense commitments, it will be more moderate than Friedman and LeBard predict.

The discrepancy between the two types of realists is observational rather than logical. Both of them theorize that if the post-WWII power map changes, then Japan will change its defense commitments. The difference is that one thinks

³ Examples are Baker and Frost (1992), Pyle (1992), Inoguchi (1991), Funabashi (1991), Holbrook (1991), Mochizuki (1990, 1991), Rapkin(1990), Kosaka (1989), Iklé and Nakanishi (1990), and Bobrow (1984).

the change is large enough to alter Japan's policy, while the other regards the change as being too small. It might be too early to conclude which of them is right; it is after all not very long since the Soviet collapse. Looking at the fact that Japan has not changed its defense policy, the "radical" realists would argue that there is a time lag for a policy change. The "conservative" realists would reply that lack of change in Japan's defense policy indicates little change in the Far East strategic balance. They may continue criticizing each other until Japan and the United States fall into war or the other main power in the region, the People's Republic of China, disappears from the world.

What realists need is not mutual criticism but a thorough examination of the relations between the distribution of power among states or the international structure and the defense policies of the states in the Far East since the end of WWII. The collapse of the Soviet Union has not been the only major change. U.S. and Soviet presence and involvement in the region have not been static. China has grown as a great military and economic power. Japan has been the second largest economy in the world for many years. If the realist logic is correct, there must have been changes in the defense policies of the Far Eastern states, along with changes in the power distribution or in the structure. Otherwise, the realist theory cannot hold.

If realism is correct, one of the following must be true.

H2-1: There are changes in the distribution of power or in the international structure and corresponding changes in policy.

H2-2: There are no changes in the distribution of power or in the international structure and no changes in policy.

What we can find from the data is that **H2-1** holds for the other U.S. allies but not for Japan. As Figures 2-1 and 2-2 show, the strategic balance between the United States and the Soviet Union has changed in favor of the latter since the end of WWII, especially in the 1970s after the U.S. army withdrew from Vietnam and the Soviets deployed SS-20 IRBMs and Backfire bombers in Eastern Siberia. Faced with this change, the other U.S. allies⁴ commonly increased their defense commitments,⁵ while Japan kept an extremely low and inactive posture,⁶ as Figures 2-3 depicts. This implies that the change in the strategic balance in the Far East commonly influenced the other countries but not Japan.

Some realists may regard the change as structurally too small to change Japan's defense policy. However, this assertion cannot explain why the other states changed their policies. Why do all the states except Japan respond to the "small" change? Unless there is proof that Japan has been discriminatively well-protected by the United States, we must assume either that Japan may not be

⁴ Taiwan is a former U.S. ally.

⁵ I assume that changes in defense expenditure express changes in defense policy. Although changes in defense capability could be a better indicator, I do not use it because the complicated categorization of arms makes the comparison difficult.

⁶ It is true that Japan's defense expenditure has been constantly increasing, but its growth has been caused by constant economic development. This does not mean a shift in Japan's defense policy, because such a shift would cause a sudden increase in expenditure for new defense investment. Furthermore, prices of weapons and payment for soldiers are much higher than those of the other countries so that the net level of the expenditure must be discounted.

interested in maximizing its power, or that it may calculate the costs and benefits with different criteria.

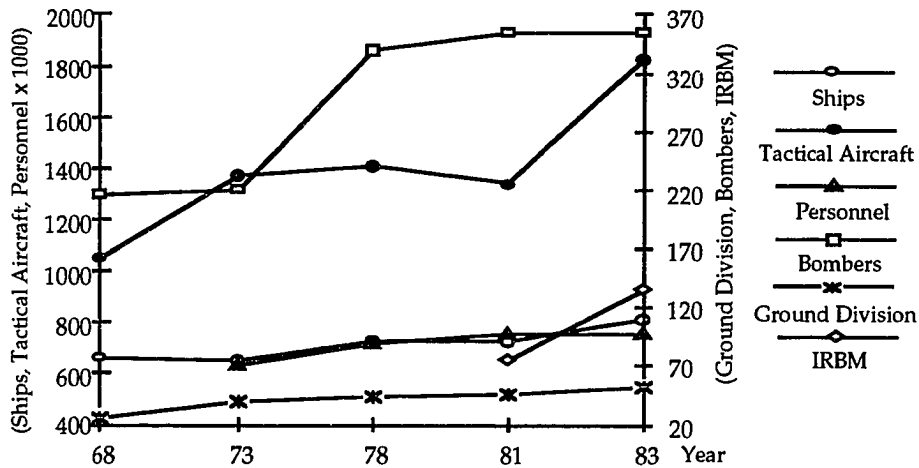


Figure 2-1: Major Soviet Far East Forces

Source: Preston (1984, pp. 547-551)

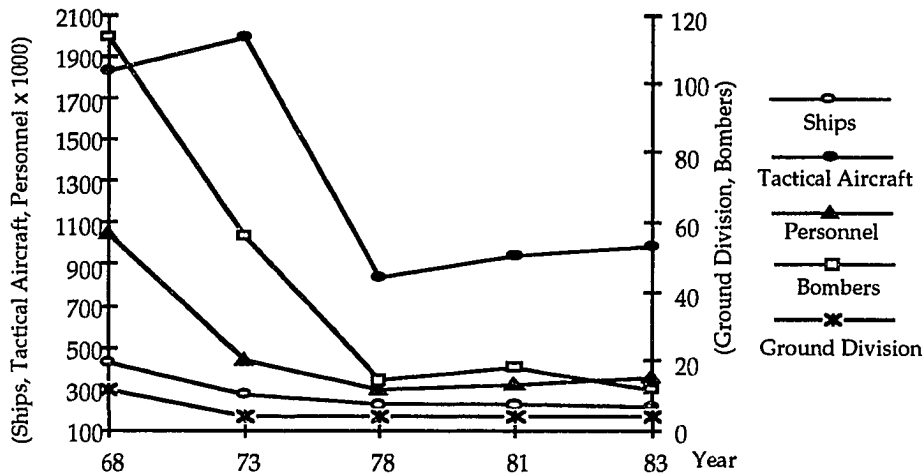


Figure 2-2: Major U.S. PACOM Forces

Source: Preston (1984, pp. 547-551)

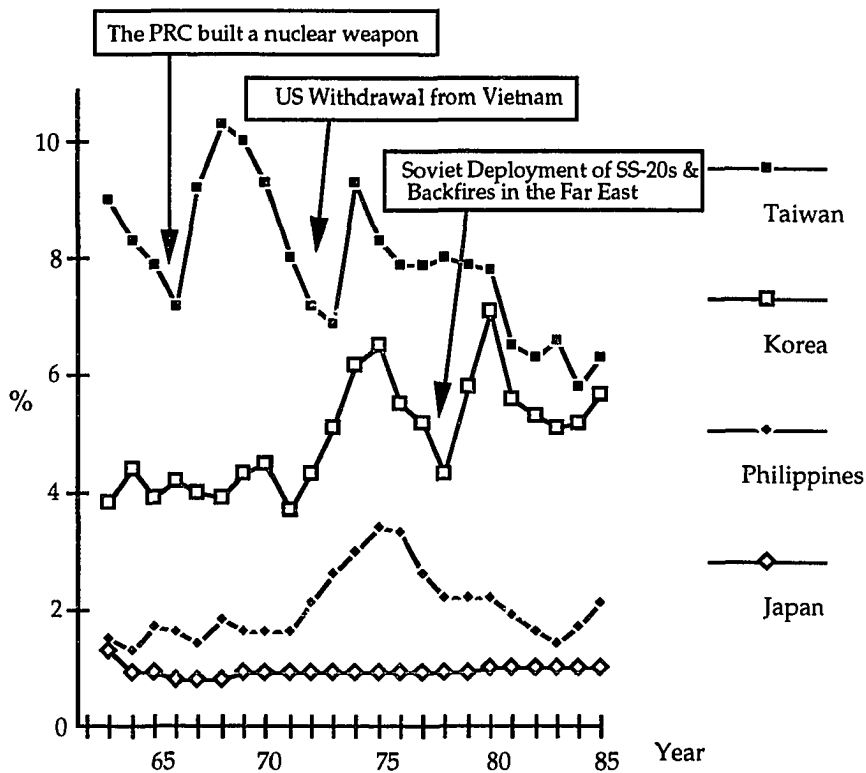


Figure 2-3: Comparison of Defense Expenditures as a Percentage of GNP(GDP)

Source: *The Military Balance*, various years.

Collective Goods Theory

The collective goods theory does not pay attention to the international structure or the distribution of power but considers that states are unitary actors who behave rationally in world politics according to a calculation of the costs and benefits of given alternatives. Then, the collective goods theory attempts to explain the imbalance among the costs allies pay for their collective security. In the collective goods theory, the goal of states is not necessarily maximizing their

power but maximizing a gap between the benefit they receive from collective security and the costs they have to pay for this benefit.

Mancur Olson, Jr. and Richard Zeckhauser (1966) write that even if it is axiomatic that defense burden-sharing among members of alliances is the prerequisite of collective security, the burden is in fact disproportionately distributed among allies. They argue that a collective good for any kind of organization must be available equally to all members in the group, if it is available to any one of them. A military alliance provides a collective good in which all the members share regardless of their contributions so that the members do not have any incentives to provide "optimal" amounts of such goods. Small members in particular tend to free ride, not bearing their proportionate share of the burden.

The argument of Olson and Zeckhauser implies that Japan has contributed less to U.S.-Japanese collective security than the United States, because Japan has been a junior partner in the U.S.-Japan security alliance.⁷ This view is a little different from realism. Realists simply argue that Japan does not need to expand its own defense commitments owing to the U.S. security umbrella. On the other hand, the collective goods theory argues that Japan further minimizes its burden of collective security as long as it allies with a larger state, whatever the international system. Hence, Japanese defense efforts have been low and inactive for its economic and technological capability, while the United States has been almost unilaterally providing Japan with a security umbrella. Even if the

⁷ Many realists introduced before explicitly and implicitly adopt the collective goods theory.

international structure or the distribution of power among states has changed, Japan might not pay an "optimal" share of the burden for collective security. Japan may increase its responsibility for collective security if necessary but it will not exceed a sub-optimal level.

The collective goods theory supplements the point realism misses. However, it still cannot explain the differences between the behavior of Japan and that of the other U.S. allies.

If the collective goods theory is the case, then the following must be true.

H2-3: The burdens that the other U.S. allies in the Far East share for collective security are proportionally smaller than their relative economic size in the region.⁸

H2-4: When the United States loses its relative capability toward threats or intention to provide its allies with collective security, then the allies will increase their defense efforts.

H2-3 must be true because the smaller the power of members, if collective goods theory is correct, the more they tend to free-ride. The other allies must pay less than their relative economic capability in the region, while Japan should pay more. **H2-4** must be true because if nobody provides the collective good, the allies have each to maintain a defense power large enough to defend themselves. The allies can minimize their burden because there is a senior partner who takes

⁸ The U.S. allies in the Far East do not have mutual security treaties. However, since they practically contribute to the security of each other, we can consider that the U.S. allies are in a state of collective security.

"over-optimal" responsibility. In other words, the contribution of the U.S. allies must be in inverse proportion to that of the United States, even if the U.S. allies' contribution is proportionately smaller for their capability than that of the United States.

The data suggest that H2-3 is more or less true for U.S. allies except for Japan.⁹ As indicated in Figure 2-4,¹⁰ Japan does not share an adequate burden of collective security for its economic size. Although the GNP of Japan is more than 85 percent of the aggregated GNP of the four countries, Japan spends less than 60 percent of the aggregated defense expenditure and maintains less than 20 percent of the total soldiers in the four countries. Since prices of weapons and payment for soldiers are much higher than those of the other countries, the defense expenditure may be less substantial than the numbers *per se* express. On the other hand, the data without Japan, shown in Figure 2-5,¹¹ suggest that a country whose economic capability is larger bears a greater burden than those with a smaller economic capability, although Taiwan contributed more than expected.¹²

Moreover, H2-4 does not hold for Japan, either, although it does for the other countries. Recall Figure 2-3. When the United States withdrew its military from Vietnam, the other Far Eastern countries commonly increased their defense commitments. When the Soviet Union deployed SS-20s and Backfires to cover

9 Taiwan is a former U.S. ally. The United States and Taiwan no longer had diplomatic relations after the United States recognized the People's Republic of China in 1972. However, they seem to share a common security interest against the communist powers.

10 Although the figure is based on the data for 1985, the situations in other years are almost identical.

11 Although the figure is based on the data in 1985, the situations in other years are almost identical.

12 This may be because that Taiwan was no longer a U.S. ally after 1972.

Korea as well as Japan, Korea increased defense spending but Japan did not. Only Japan kept almost the same defense posture, facing the changes in its supply of the collective good. The collective goods theory leaves Japan as an anomaly.

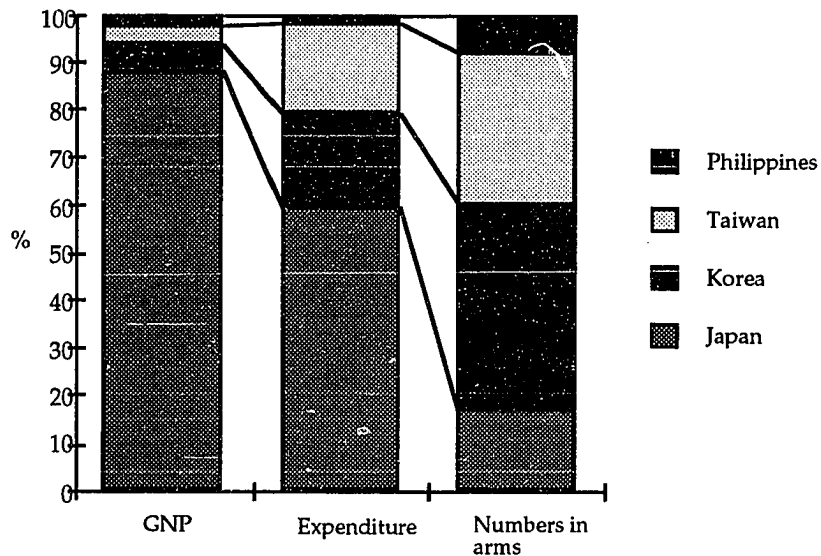


Figure 2-4: Comparison of GNP, Defense Expenditure and Soldiers of the Far Eastern Countries in 1985

Source: *The Military Balance* (1986-1987, 1989-1990).

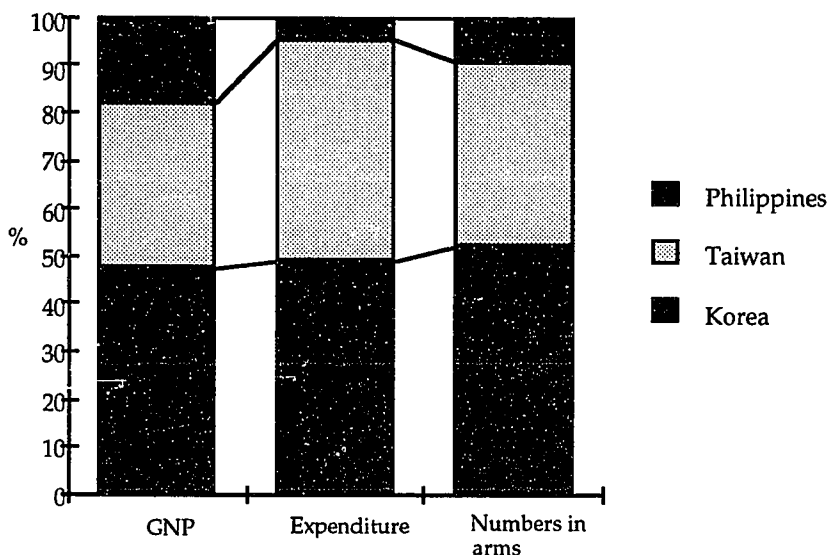


Figure 2-5: Comparison of GNP, Defense Expenditure and Soldiers of the Far Eastern Countries without Japan in 1985

Source: *The Military Balance* (1986-1987, 1989-1990).

Trading State Theory

Richard Rosecrance (1986) offers a new analysis of states that do not pay much attention to their own defense. He contrasts two conceptions of how states can achieve their national interests in foreign relations: the military-political and the trade-commercial worlds. Each of these conceptions has its own logic and dynamics. In the military-political world, states attempt to establish independence in a struggle against others, often using military might—"the territorial game." In the trade-commercial world, states trade with each other in order to maximize their commercial profit—"the trade game." States in the

latter world—trading states—give up independence, preferring to be dependent on each other, i.e., interdependent. He asserts that Japan has been playing the trade game, so that Japan minimizes its defense commitments.

For most of modern history, the territorial game has been dominant. After WWII, however, the world was poised between these two modes of power achievement. The reason for the shift, Rosecrance explains, is that an increase in the costs of the territorial game reduced the usefulness of the game to a point lower than that of the trade game, while the utility of the trade game did not exceed that of the territorial game before the war—at least many states regarded it so.

Why did the cost of the territorial game increase? Rosecrance offers three reasons. First, owing to the development of advanced weapons, the cost of producing weapons has become very expensive. Until the mid-nineteenth century, the cost of uniforms and food for troops and horses were the main expense of war and a populous power could be strong without well-developed industry. Nonetheless, as weapons were further developed, industrial strength became an important factor in determining the winner in a war. When tanks and airplanes were introduced in WWI, the cost of producing weapons became extremely high, because the state had to invest large funds in the heavy industry. After WWII, the cost of producing weapons increased even more. Second, the increase in the production cost of weapons raises political costs. State funds which could be used for civilian development are spent for military expenditure. The more the cost of weapons increases, the fewer the funds available for civilian development. The public complains that increases in military costs sacrifice

civilian development and may come to believe that the state is wasting their taxes. The state has to spend a great deal of energy as well as money to convince the public to agree with their playing the territorial game. Third, managing acquired territory has become very costly. It was easy for states to control territory where nationalism was not well developed. A winner can easily take advantage of the people and assets of a loser. Yet, the longer the winner occupies the loser state, the stronger the nationalism of the loser grows. After WWII, nationalism among developing countries became extremely strong. In such a situation, a winner state is forced to spend huge amounts to control a loser. Rosecrance concludes that the defeated states in WWII, Japan and Germany, learned well the costs and benefits of making war so that they now play a more profitable game—the trade game.

Rosecrance's dualistic approach elucidates the source of Japan's nonchalance about defense more convincingly than the previous two explanations. Japan has devoted itself only to economic development and the enlargement of trade networks, as if it were not interested in security issues at all.

Nevertheless, the trading state theory suffers from a serious problem. If Japan is to play only the trade game, other countries must also play only the trade game. Playing only the trade game is possible only among states who also play the same game. Japan cannot keep playing the trade game with a state which regards attacking Japan or impairing Japan's national interests as more profitable than trading with Japan. A trade game player among territorial game players is like a sheep among wolves. Japan must be a wolf, too, if other states are wolves. On the other hand, if other states play only the trade game as well,

then Japan can play the trade game. A sheep can survive among sheep. That is, the trade game is an "evolutionary unstable" strategy¹³ vis-à-vis the territorial game, which a rational player should not adopt.

If the trading state theory is correct, either of the following must be true.

H2-5: There is a norm or mutual understanding among all players that the trade game is more profitable than the territorial game.

H2-6: Trade game players have sheep dogs to protect themselves.

H2-7: Trade game players play the territorial game, too.

It is obvious that **H2-5** does not hold. There is no shared norm or mutual understanding that the trade game is more profitable than the territorial game. Probably the large democratic states may mutually accept the profitability of the trade game.¹⁴ However, many countries still exist within the territorial game domain, believing that checking other states is more profitable than trading. The behaviors of those states directly and indirectly affect Japan's national interests as well as that of others. For example, the Iran-Iraq war and the Iraq's attack on Kuwait damaged the Japanese economy which depends heavily on oil imports from the countries of the Middle East. Japan's neighbors in the Far East such as North and South Korea are still struggling with the Cold War. Although China and Russia now maintain good relations with each other, they are still potential threats with massive military capabilities.

¹³ An evolutionary unstable strategy by definition does not guarantee survival of those who adopt it under conditions of natural selection where many adopt various strategies. An evolutionary stable strategy by definition guarantees survival to those who take it.

¹⁴ Mueller (1989, pp. 219, 222) supports this idea.

H2-6 also does not hold. The United States has been a sheep dog for Japan and some Asian states. Yet the power of the U.S. security umbrella has declined against increasing threats from the communist powers, as argued before. If a sheep dog loses the power to defend a sheep, a sheep cannot survive. Thus, the other Far Eastern U.S. allies commonly increased their defense commitments according to the relative decline of the U.S. security capability. They transformed themselves into wolves from sheep, when the sheep-dog went out of sight. That is, **H2-7** holds for the other U.S. allies. Yet, the same is not true for Japan, because the decline of the U.S. security capability did not influence Japan's defense policy. Japan remains a sheep among wolves without a reliable sheep-dog. Japan's behavior looks "irrational" for other states who believe that defending their territory and national interests from external threats is an essential task.

Japan's irrationality leads us to the conclusion that the system level of analysis cannot explain Japan's defense policy since it assumes the rationality of states' behavior. Rationality has many variations because it is no more than the logical consequence that stems from given values that may not be commonly shared. What some call rationality might be irrational for others. In this sense, all states are rational (or irrational). Yet, as long as system-level analysis assumes that all states share the identical rationality, it must explain Japan's behavior within the constraints of this assumption. If system-level analysis cannot treat Japan as rational in its sense, we have to rely on domestic-level analysis that seeks the sources of "irrationality" in domestic factors. The trading state theory may work better if supplemented by domestic level analysis.

Domestic Level Analysis

The Anti-military Norm

The most popular approach among the domestic-level analyses attributes Japan's defense policy to the anti-military norm born in Japan after WWII. The experience of war taught Japanese people that militarism can produce only disastrous consequences. Anti-militarism, which rejects any external demands for more defense commitments, became a common value among the Japanese people.

Thomas U. Berger (1993) is one of the most recent and outstanding advocates of this argument. He writes that there is a culture of anti-militarism in Japan, which is the most striking feature of contemporary Japanese politics and is rooted in the collective Japanese memory of the militarist takeover in the 1930s and the subsequent disastrous decision to go to war with the United States. This particular view of the military has become institutionalized in the Japanese political system and supported by the public and large segments of Japan's political and economic elites as well. He maintains that Germany, another defeated country in WWII, does not have such anti-militarism because the German military establishment was a secondary evil that served as a tool of nationalism but was not the primary cause of it and the ensuing catastrophe. On the other hand, it was the military institution that led Japan to militarism. Consequently, in Japan the military institution itself became the primary target of criticism after the war. His conclusion is that this anti-militarism has been and will be opposed to Japan's increasing its defense commitments.

There are many supportive data for this explanation. David Bobrow (1989), for example, has examined Japanese public opinion on international affairs and concludes that public attitudes since WWII have favored a passive to an active stance, an alliance with the United States to a policy of equidistant between the United States and the Soviet Union, political dependence to independence, and minimal to extensive military spending. Moreover, according to Bobrow, the public has supported economic strength, peaceful diplomacy, a low-key consensus approach, and Article 9 of the Constitution, neglecting Japan's own defense capability and the menace of external threats. In short, the overwhelming majority of Japanese since the end of WWII have been incredulous about any dramatic departure from the status quo.¹⁵

The anti-militarism norm commonly shared among the Japanese people might be a source of the unique feature in Japan's defense policy which looks irrational to other nations. However, the anti-militarism explanation possesses weaknesses which emerge when we closely analyze public opinion data in comparison with those of other countries.

If anti-militarism in fact deters Japan from increasing defense commitments, then the following must be true.

H2-8: People who oppose defense expansion are always more numerous than those who support it.

H2-9: Anti-militarism is more popular in Japan than in other countries.

¹⁵ See also Risse-Kappen (1991).

H2-8 must be true because if those who support defense expansion outnumber those who oppose it, then Japan should have more substantial defense commitments. **H2-9** must be also true, because if the anti-militarism norm is the source of negative posture toward defense commitments, the norm must be more popular in Japan than in countries which have more substantial defense commitments. If anti-militarism is less popular in Japan than in the other countries, then Japan should have more substantial defense commitments.

The data below do not entirely support the anti-military norm explanation. As Figure 2-6 illustrates, those who favor increasing defense expenditure sometimes exceed those opposed, although supporters of the status quo are always the greatest. It is still possible to say that the power of the status quo keeps the level of Japan's defense commitment at a minimum.¹⁶ That is, **H2-8** may hold. However, as Figures 2-7 expresses, a situation in which support for the status quo is the prevailing opinion equally exists in the United Kingdom, which holds much larger defense commitments. Rather surprisingly, people who want to decrease expenditure are almost always most numerous in the United States, as Figure 2-8 shows. Furthermore, opponents of defense spending in these two countries outnumber those in Japan. If popular anti-militarism universally determines defense policy, the defense commitments of the United States and the United Kingdom should not be far different from that of Japan. How can the

¹⁶ Twenty percent of the public who support defense expansion could be 40 percent of LDP supporters, perhaps constituting a large enough number to change Japan's defense policy. On the other hand, the number of status quo supporters cannot be a sufficient condition for the negative posture in Japan's defense policy. Japan often maintains a policy supported by only a small number of people. Examples include a rice price. The government keeps the price higher than it could be under a free market system, while most people prefer cheaper rices.

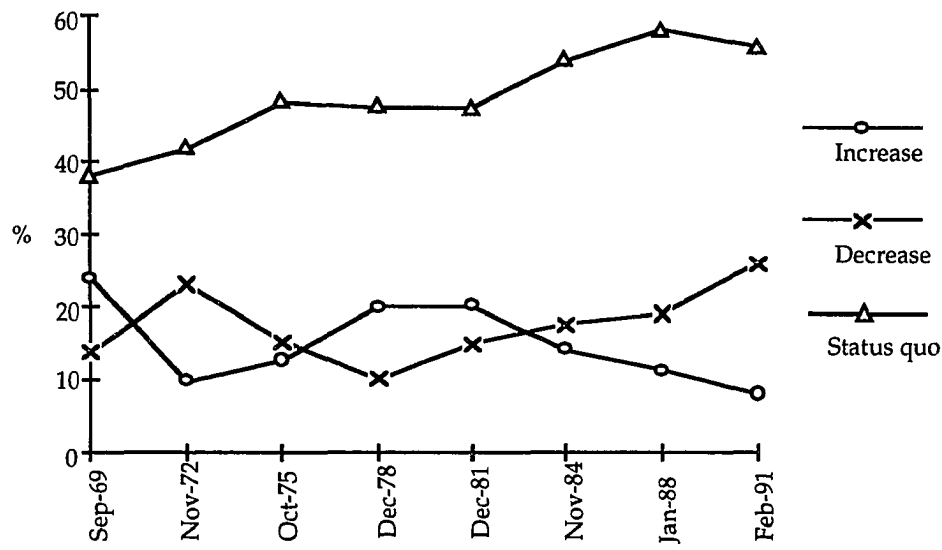


Figure 2-6: Public Opinion about Defense Expenditure in Japan

Source: *Yoron-chōsa nenkan* (Public Opinion Yearbook), various years.

anti-military norm theory explain the puzzle that Japan and the other countries produce different outcomes from almost identical inputs? Possible answers are (1) the other countries must absorb the demand for defense expansion, neglecting other demands, (2) the other countries can determine defense policy without influence from public preferences, (3) Japan cannot absorb the demand for defense expansion; but, unlike other countries, has to cling to alternative demands, and (4) Japan could determine its defense policy without influence from public preferences but behaves as if the policy were determined by these preferences (5) Japan faces different external factors (or the other countries face different external factors). Here, we can eliminate the last answer, because we already know that Japan does not alter its defense policy under changing

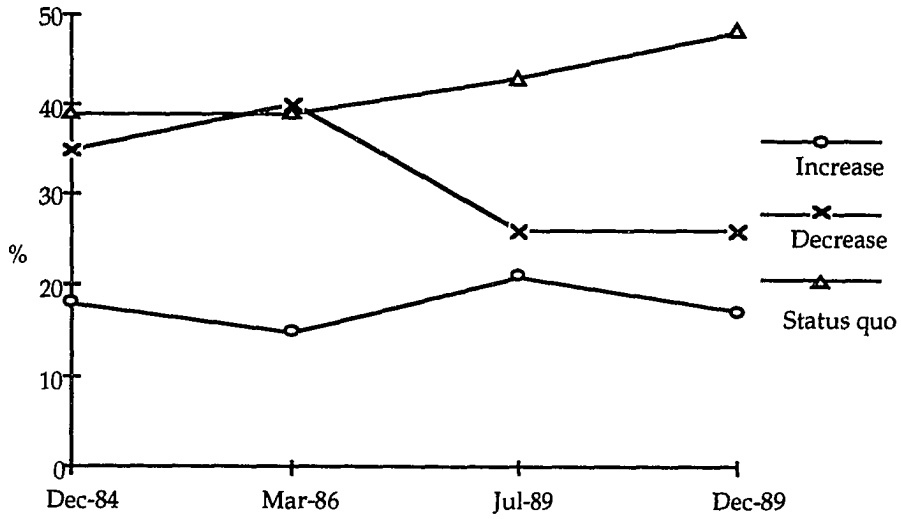


Figure 2-7: Public Opinion about Defense Expenditure in the United Kingdom

Source: *Index to International Public Opinion*, various years.

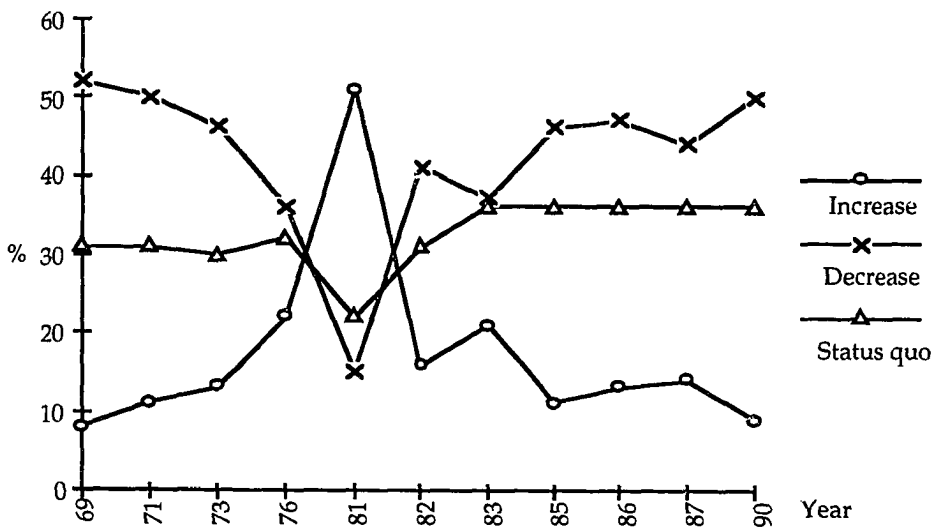


Figure 2-8: Public Opinion about Defense Expenditure in the United States

Source: *Index to International Public Opinion*, various years.

circumstances.¹⁷ From our review of the norm explanation, we cannot deny that anti-militarism works only in Japan. However, if this is the case, we need to explain why this is the case. We need to analyze how public preferences are processed in policymaking both in Japan and in the other countries.

Bureaucratic Politics

Many scholars adopt the bureaucratic politics model—the third model in Graham Allison's work *Essence of Decision* (1971)—in order to explain Japan's defense policy.¹⁸ Allison writes that leaders of the government do not form a monolithic group but fragmented. Each individual in the government is a player in a competitive political game, bargaining along regularized circuits among players positioned hierarchically within the government. The players, focusing not on a single strategic issue but on various intra-national problems, act for no consistent set of strategic objectives but rather according to diverse national, organizational and personal goals. They together reach state decisions not according to a single rational preference choice but by the pulling and pushing among those various goals. State behavior is the result of these bargaining games, and thus sometimes appears unsound to outsiders.

There are two types of analysis which apply the bureaucratic politics model to explanation of Japan's defense policy. The first argues that immobility

¹⁷ The analysis of the influence by the external factors does not include the United Kingdom and the United States, because they are located in different geographical regions. What I analyzed is the Far Eastern countries. Although there is no good public opinion data in the countries, it is plausible that many people do not favor defense expansion.

¹⁸ See Allison (1971, especially Ch. 5).

or lack of leadership in the bargaining process of the government hinders any change in Japan's defense policy. The second shows us the inside of the political process, where opponents of defense expansion are always strong enough to keep the defense commitment at a minimum.

The first type includes Karel van Wolferen (1990) who maintains that there is no political center to take responsibility for policymaking, so that Japan hardly changes its policies. According to him, the policymaking entity is ruled through highly informal structures of governance and bureaucratic authority, which dovetail with *jinmyaku* [personal network] relations and transactions among clusters of the elite. There is no participation of voters in the policymaking process. In the policymaking entity, however, no person or group holds a mandate to make binding decisions for all of Japan's institutions as part of a national effort. Thus, Japan cannot drive itself toward a certain direction of national policy because the policymakers cannot arrive at any final decision through their political games. In defense policy, this is the case, too. This immobility in the political process of the government and the Diet nullifies the external and public demands for defense expansion.¹⁹

Hideo Ôtake (1983a, 1983b, 1984a, 1984b) represents the second type, who examine details in the political process of defense policy making. He describes the process as a struggle among the Ministry of Finance (MOF), the Ministry of International Trade and Industry (MITI), the Self-Defense Agency (SDA) and corresponding Dietmembers and pressure groups in the business world. He

¹⁹ Pyle (1989) has a similar argument.

argues that the MITI and a part of the business world hoped for the development of military industry soon after WWII, because military industry could be an engine of trade expansion; the MOF and another part of business world opposed the overestimation of importance of military industry, seeking instead efficient use of the limited national budget and regretting the overwhelming investment in military industry that led to economic crisis and Japan's entry into the war. The SDA, stressing utility of modern weapons, urged their import from the United States. Serious struggles among those groups in the making of national budget as well as over defense policy finally ended with MOF's victory. This outcome has suppressed the power of the interest groups who support defense expansion (Ôtake, 1984a). When, after the late 1970s, U.S. pressure requiring increase of Japan's defense efforts became conspicuous, most of the groups above recognized the necessity of responding to the pressure for various reasons including economic, political and strategic. Nevertheless, they hardly increased defense commitments because they had to struggle with interests of their own which conflicted with the defense interest. Moreover, the groups whose prime interest is defense expansion are far smaller than those regarding the interest as secondary (Ôtake, 1983b, especially Chs. 23-25).

The first type of analysis is strongly supported by the so-called "Japan bashers" but problematic academically. First, it misunderstands what is immobile. Japan's defense policy is in truth static, but the political process may not be. As Ôtake demonstrates, there are dynamic political battles for the

initiative among the policymakers, often visible to the public.²⁰ There is no reason to infer that if the outcome does not change, the political process is static as well. Second, there is no rationale for the view that the public does not influence the policymaking. Bureaucrats may not be influenced very much by the public. Nonetheless, Dietmembers are not free from the preferences of voters because they have to win elections. The public participate in the policymaking through involvement of Dietmembers in the political process. Third, it is false that lack of leadership causes immobility in national policies. Theoretically, no leader is necessary for policy changes. If the preferences of the policymakers change, the result may change without any change in the relations among the policymakers. Finally and foremost, the first type of analysis is tautological. If the fact that no policymaker takes an initiative for policy changes is the reason for maintenance of Japan's negative attitudes toward defense expansion, what we want to know is a reason that drives the policymakers to behave so. The first type does not provide an answer to this question. It merely explains immobility by immobility.

The second type is more rigorous and persuasive than the first. It shows us dynamics of political games among the policymakers. It recognizes that policymakers work for the interests of voters and pressure groups as well as for their own. Moreover, it follows a logic of policy change: if there is a change in the preferences of the policymakers or their power relations, then the outcomes of the games may change. Simultaneously, it traces the process through which the

²⁰ See Ôtake (1983a, 1983b, 1984a, 1984b).

policymakers are prevented from changing policies in accord with external and domestic demands.

Nonetheless, this approach does not focus on establishing a general law probably underlying defense policy, external situations and public demands. Rather, it tends to fall into a description of the political process for each case. Thus, one cannot easily comprehend why defense expansion "always" fails, even if one can hunt out the details of each case. Other states probably have a similar situation in which some policymakers support defense expansion but others do not, or some support defense expansion as a prime interest and others do as secondary. The question is why other states can expand their defense commitments more easily than Japan, when this is externally necessary. The second type does not pay attention to a mechanism that always produces nearly identical outcomes, although we cannot know a priori whether such a mechanism really exists. The political processes consist of games among political actors, but the games the second type illustrates are too rich in detail to clarify the general nexus among the variables.

Institutions

Finally we arrive at an analysis of institutions which may form a framework that rules political games among the policymakers. Japan has unique institutions, including laws and political structure. These institutions may always bring a victory to a specific type of actor in the policymaking process. In other words, the institutions may mechanically weaken the power of supporters of defense expansion.

The most obvious institution that seems to prohibit defense expansion is Article 9 of the Constitution. It declared that the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes; Japan will not maintain land, sea and air forces. Harrison M. Holland (1988, p. 13) writes that Article 9 has set the tone and direction for Japanese security and has been an important constraint in building the Self-Defense Forces (SDF). Owing to the Constitution, supporters of defense expansion might have difficulty in gaining political legitimacy in struggling with their opponents.

Nonetheless, Article 9 does not constrain all types of defense expansion because various interpretations of the article are possible. Leftists including the Japan Socialist Party (JSP)²¹ and the Japan Communist Party (JCP) have claimed that Japan cannot maintain any military capability.²² On the other hand, the government, the rightists, and the centrists such as the Liberal Democratic Party (LDP) and the Democratic Socialist Party (DSP) follow the judgment of the supreme court in 1959 that Japan has the right to defend its own territories as a sovereign state and that the Constitution allows Japan to maintain a defense capability.²³ That is, although Japan cannot be a military giant like the United States possessing such strategic weapons as ICBMs and strategic bombers whose

21 The JSP officially changed its English name to the Social Democratic Party of Japan (SDPJ). However, I use the traditional name to avoid confusion with the Democratic Socialist Party (the DSP).

22 See *Bôei hando bukku* [Defense Handbook] (1992, pp. 484-505) for the interpretation of the article by each political party. The JSP officially admitted the SDF in August, 1994.

23 *Bôei hando bukku* [Defense Handbook] (1992, pp. 403-469) for the interpretation of the article by the Government and the Court.

purpose is mainly to attack foreign territories, it can maintain arms to defend itself against possible attack. Japan's power may change according to the evolution of technology and the military capability of other countries.²⁴ Japan can very flexibly increase its defense commitment within the sphere the Constitution defines. Furthermore, the article itself and its interpretation can be regarded as dependent variables of the political games among the policymakers. The fact that Japan maintains the article unchanged and so flexibly interprets it is a result of the political games and a part of Japan's defense policy. The question remains why Japan maintains the article and does not increase its defense efforts under the flexible interpretation. We need to find another constraint for defense expansion.

Peter J. Katzenstein and Nobuo Okawara (1993) maintain that the structure of the government in which Japan's defense policy is formulated, together with the anti-military norm impede the expansion of defense commitments. In the government, a number of institutional procedures besiege the military and sharply demarcate its access to the centers of political power. Japan's security policy is formulated and implemented largely through political negotiations among the Ministries of Foreign Affairs (MOFA), the MOF and the MITI, and the SDA. The MITI, the MOF and the MOFA constitute the core on economic security questions, while the MOF, the MOFA and the SDA play a central role on questions of military security (Katzenstein and Okawara, 1993, pp. 92-95). Here, in inter-ministerial coordination processes, the SDA lacks

²⁴ It is difficult to categorize arms as strategic or tactical because even fighters can attack foreign territories. Thus, there is a dispute among the political parties over the categorization of arms.

institutional autonomy. The MOF, the MITI and the MOFA have placed their officials, temporarily assigned, inside the SDA to intervene in its process of defense policy making. Those ministries always occupy at least four among eleven top posts and many in the lower echelons of the SDA. The officials sent from the other ministries usually have no prior working experience in the SDA. This makes it substantially impossible for them to be inculcated with the perspectives of the professional military. Furthermore, the uniformed officers in the SDA are subordinate to civilian personnel. The administrative hierarchy for military operation is under the control of the civilian administration, which in turn answers to the director of the SDA. The political and economic elites have endorsed this arrangement because they retain a profound distrust of the professional military.²⁵ These unique inter-ministerial and civilian-military arrangements bias Japan's defense policy against increasing defense commitments (Katzenstein and Okawara, 1993, pp. 95-97).

Katzenstein and Okawara would be right if only the SDA and uniformed officers supported defense expansion, but this is not always true. They tricked themselves with false assumptions. First, other ministries may champion a defense beef-up if they regard it as promoting their interests. For example, as Ôtake demonstrates, the MITI supported the development of military industry after the Korean War, because exporting weapons might increase its status (Ôtake, 1984a). The MOFA and the MITI, under pressure from the United States in the late 1970s, recognized that Japan should increase its defense commitment,

²⁵ Bôei Kenkyûkai (1988) has details about personnel problems in the SDA and the SDF.

because keeping better relations with the United States was one of their strategic ends (Ôtake, 1983b, Chs. 23-25). The MOF also possibly supports developing military industry if its bureaucrats consider that so doing enhances the national economy. Interests of the ministries are changeable, so that defense policy can change even if the SDA and the uniformed officers are weaker than the other ministries.

Second and more importantly, Katzenstein and Okawara ignore the role of Dietmembers. It might well be true that bureaucrats remained dominant in the political process soon after WWII because the newly born political parties lacked administrative know-how. The fact that the General Headquarters (GHQ), the supreme authority during the U.S. occupation of Japan, used bureaucrats to carry out its policies may have given them a strong position in the political process (Muramatsu, 1981, pp. 7-24, 137-206). However, it is the Diet that the new constitution gave authority as the paramount power of Japan. The majority party, or coalition of parties which occupied a majority in the Diet, organizes the cabinet and manages the government bureaucracy.²⁶ Thus, political parties compete with one another to gain support from voters and from interest groups. Bureaucrats, who had enjoyed autonomy from the Diet before WWII,²⁷ are now subordinate to decisions made among political parties in the Diet. No policy is possible without the endorsement of the Diet. We need to analyze how and why

26 A minority party or a minority coalition can organize the government under some circumstances.

27 The government and bureaucrats were responsible only to the Emperor, not to the Diet, before WWII. Since the Emperor was not directly involved in politics, the government bureaucracy could be regarded as having the supreme authority in Japan. For the political institutions before WWII, see Takashi Momose (1990).

the Diet, the paramount authority for national policies, forces Japan to keep defense commitments at a minimum.

Kent Calder (1988, Ch. 10) attributes Japan's defense policy to the electoral system and to the structural weakness of prodefense forces. He argues that LDP legislators, who have occupied a majority in the Diet and, thus, have organized the government,²⁸ must compete with one another under the single non-transferable voting (SNTV) system with a multi-member district (MMD)—the electoral system for the House of Representatives. Through this competition, the legislators need to gain personal supporters rather than just party support. To achieve this, they have developed so-called *kôenkai*, i.e., personal supporter groups. *Kôenkai* often consist of many small businessmen, especially public works contractors, who continually demand pork-barrel benefits as a quid pro quo for continued cooperation and thus force the Dietmembers to press the MOF for national budgets oriented heavily toward such distributive allocations (Calder, 1988, p. 421). In this process, if many and strong prodefense interest groups exist, Japan would have to increase defense commitments. However, such interest groups have remained relatively small and weak since the end of WWII. Military forces were dismantled and the personnel of the SDF are maintained only at a level of about 250,000. Few Japanese corporations rely heavily on defense procurements for sales or profitability,²⁹ although this was not the case

28 A coalition government was formed by *Shinseitô*, *Nihonshintô*, *Shintô sakigake*, the Japan Socialist Party, the Clean Government Party, the Democratic Socialist Party and *Shaminren* in 1993. The LDP became an opposition party for the first time in its history.

29 The Mitsubishi Heavy Industries, the largest defense contractor, relied on defense procurements only for between 10 and 20 percent of sales. Most other defense contractors were much less dependent. See Calder (1988, pp. 421-422).

during and shortly after the Korean War. Consequently, the Dietmembers have no incentive to support defense expansion. Even if they think that external necessity requires Japan to increase its defense commitment, they cannot carry out the policy because doing so would reduce a budget for more important interest groups without whose supports they cannot win an election (Calder, 1988, pp. 421-426).

Calder's argument solves many problems that other explanations cannot. It can explain why external demands for defense expansion do not much influence on Japan's defense policy—the question that the system level analysis cannot answer. It also explains why public opinion does not promote changes in policy—the question that the norm explanation cannot solve. It offers a general law that always creates the identical outcomes—the problem of the bureaucratic politics approach. Finally, it focuses on Dietmembers who together constitute the supreme authority for policymaking in Japan—the point the other institutional approaches miss. Calder's argument is the most persuasive among the explanations I have examined in this chapter.

However, there are some points we should further analyze. First, when *kôenkai* members prefer defense expansion, even if they are not prodefense interest groups, how will the Dietmembers (candidates) behave in the policymaking process? This situation is quite feasible because defense is a public good in which everyone can be interested. Second, how will the Dietmembers deal with floating voters who may have the casting vote in an election. For many districts, the candidates cannot win only by gaining votes from their *kôenkai* members, so that they need to absorb floating votes to win. Do the candidates

need to support defense expansion if floating voters prefer it? Third, substantial defense expansion may be difficult because of the resource allocation problem it generates with the interests that the candidates have to support to maintain their *kôenkai*. What about defense expansion without such a problem? Finally, don't other electoral systems produce the same outcomes from the same input? Defense expansion might be difficult under any electoral system with small and weak prodefense interest groups. Do all other states have large and strong prodefense forces? We should compare SNTV under MMD with other electoral systems to learn whether the system works differently from the other systems under the same conditions. Although Calder's explanation gives us a persuasive solution for the puzzle of Japan's defense policy, it still contains many questions that we have to answer.

Summary

There are two levels of analysis to explain Japan's defense policy: the system-level and the domestic-level. The first includes realism, the collective goods theory and the trading state theory, while the latter consists of explanations by norms, bureaucratic politics, and institutions. All the explanations offer unsatisfactory answers to the question why Japan's defense commitment has been low and inactive. Realism, advocating the view that changes in the distribution of power among states or in the international structure direct defense policies of states, cannot explain the fact that Japan's

defense commitment has been extremely low and inactive in comparison with those of the other U.S. allies which often show common zigzags according to changes in the strategic balance in the Far East. The collective goods theory is similarly problematic. Japan's security contribution is less contributing the benefits it receives and its economic capability than those of the Far Eastern U.S. allies smaller than Japan. Moreover, only Japan does not respond to changes in the supply of the collective good. The trading states theory does not solve Japan's question, either. Japan always plays only the trade game even when other states play the territorial game, where there is no guarantee of survival for a trade game player. The anti-military norm explanation hypothesizes that strong anti-militarism deters Japan from behaving as external factors require. However, anti-militarism in Japan is not outstandingly strong in comparison with that of other states. Why does it work only in Japan? The explanation by bureaucratic politics, too, fails to solve the puzzle because it cannot explain why the opponents of defense expansion always win although it illustrates how they won in each policymaking process. Institutions can be frameworks that select a certain winner. However, regulation by the Constitution is too flexible to maintain the defense policy unchanged. The weak status of the SDA in the policy making process does not force Japan to minimize its defense commitment. On the other hand, the electoral system that Japan has maintained for the House of Representatives seems to nullify the incentives of Dietmembers, who together hold the supreme authority for policymaking, to increase defense commitments, where prodefense interest groups are small and weak. This approach is more persuasive than the others because it can solve the problems that the others

cannot. However, it still leaves many questions unsolved. We need to analyze further the mechanism of the electoral system that may impede defense spending in Japan.

The Policymaking Process

Chapter 3

Among the previous studies examined in Chapter 2, the explanation by the electoral system is the most persuasive because it proposes a framework that may constrain incentives of Dietmembers, who together hold the supreme authority in the making of defense policy, to expand defense. Before examining whether or not the electoral system indeed affects defense expansion, we have to deal with a more basic question: Who governs? Although many specialists in Japanese politics discuss this topic, there is no agreement among them. If, as some argue, bureaucrats are decisive in the process of policymaking, explanation by the electoral system would be useless. The purpose of this chapter is to examine how public policy is

conducted in Japan, namely, who plays what role in the process of policymaking.

Scholars have proposed various models for the process, which can be roughly categorized into three types: the power elite, pluralist and institutional models. The power elite model maintains that political power in Japan is largely vested in and exercised by a triumvirate of the bureaucracy, the Liberal Democratic Party (LDP) and big business. Among the elite, bureaucrats play a pivotal role in policymaking. The pluralist model contends that the policymaking process involves not only the power elite but also other actors such as interest groups. It views a policy as the outcome of struggles and bargaining among actors with various interests. Recognizing pluralistic aspects in the process of policymaking, the institutional model argues that political institutions regulate incentives and behavior, and thus, roles of the actors in the process. Policies are not outcomes of anarchic struggles but of those ruled by the frameworks the political institutions form. I support the last model because it is more logically constructed and empirically persuasive than the others. I conclude that interests of voters direct the behavior of Dietmembers who are more influential than bureaucrats in the process of policymaking. This is the case in making defense policy, too.

Japan's Models

Power Elite Model

The main proposition of the power elite model is that having extraordinarily strong and fairly autonomous power in comparative and historical terms, bureaucrats play a pivotal, if not decisive, role in formulation and implementation of public policy in Japan. T. J. Pempel (1984, p. 78), a pioneer of this model, writes that

[w]hat is most striking about the case of Japan is that, for most of its history, the political weight of the civil service has been extremely high and broadly comprehensive. Bureaucratic influence has typically been greater than that of other political actors, including Parliament, parties, and interest groups.

Chalmers Johnson (1982, pp. 20-21) maintains that "the elite bureaucracy of Japan makes most major decisions, drafts virtually all legislation, controls the national budget, and is the source of all major policy innovations in the system," although pressure groups and political claimants can influence bureaucrats. For him, politicians are "reigning" in Japan but those who are "ruling" the state are bureaucrats (Johnson, 1990, p. 80; 1985, p. 60). The Japanese bureaucracy is "probably the most powerful of that in any contemporary capitalist democracy" but the Diet is "one of the weakest parliaments among all the advanced industrial democracies"(Johnson, 1985, pp. 60-61). This model became classic for studies of Japanese politics and is

supported by many scholars.¹ The most recent and persistent advocate of this model is Karel van Wolferen (1986, 1989, 1990), who writes in his best seller—*The Enigma of Japanese Power*—that legislators "merely rubber-stamp what the bureaucrats put under their noses"(van Wolferen, 1989, p. 145).

Eiichi Katahara (1990, Ch. 2) neatly categorizes the various sources of the power of Japanese bureaucrats into five: the historical legacy, superiority of bureaucrats in policy expertise, ministerial regulations, talent of bureaucrats and frequent shuffling of the Cabinet.

First, the strong status of bureaucrats before WWII remained after the end of war. With administrative powers centralized in the Meiji revolutionary leaders who established "bureaucratic absolutism," Japan's bureaucratic leaders shaped and steered the course of the state by forcibly promoting modernization and industrialization under the banner of *fukoku kyōhei* [make the country richer and strengthen the military] (Inoguchi, 1983, Chs. 1 & 3). As "officials of the Emperor," the Japanese bureaucrats "kept government as 'transcendental' of partisan politics as possible," yet were "intimately involved in most aspects of policy formation" (Pempel, 1984, pp. 79-80).² "The Japanese state had the national bureaucracy at its core, while electoral and parliamentary politics remained at the periphery. Unlike Britain, the United States, and even France at this time, Japan's civil service was not subject to major checks from the electoral and parliamentary sphere" (Pempel, 1984, pp. 79). The power of bureaucrats remained strong after WWII

¹ Examples include Haley (1991), Keehn (1990), Wilson (1989), Koh (1989), Rix (1988), Dore (1986), Richardson and Flanagan (1984).

² See also Hackett (1968, pp. 65-97).

because the General Headquarters (GHQ) kept most ministries unscathed and relied on bureaucrats to implement the occupation reforms aimed at "democratization" and "demilitarization." Furthermore, the policy shift of the American authority under the onset of the Cold War from "democratization" to "political stability" and "economic recovery" strengthened the power of bureaucrats (Johnson, 1982, Ch. 2).³

Second, bureaucrats were superior to legislators in policy expertise, control of information and experience in administration, which in turn crucially affect most governmental decisions and actions in substantive terms. Although they lost autonomy after the end of WWII, it is unquestionable that bureaucrats, who had been administering policy before the war and throughout the period of U.S. occupation, knew far better how to govern the country. Therefore, political parties in the Diet have to depend entirely on bureaucrats for policymaking. In other words, the Diet, which consists of the political parties, has the supreme authority in Japan, but in practice, these parties have less power in policymaking than bureaucrats. To prove this, Pempel (1974, 1978) points out the fact that bills passed by the Diet are mostly drafted by bureaucrats but not by legislators (See Figure 3-1).

Third, bureaucratic power also stems from the authority to issue ordinances and administrative guidance. Pempel (1974, p. 656) states that bureaucrats largely take advantage of ministerial regulations to implement policy and concludes that serious political policymaking in Japan takes place outside of the Diet, under the increasing control of a democratically

³ See also Pempel (1987, pp. 157-187).

irresponsible bureaucracy. Johnson (1982) made this view the "conventional wisdom" through his analysis of the Ministry of International Trade and Industry (MITI), where he concludes that the MITI plays a crucial role in guiding Japan's economic and industrial development through industrial policy and regulation.⁴

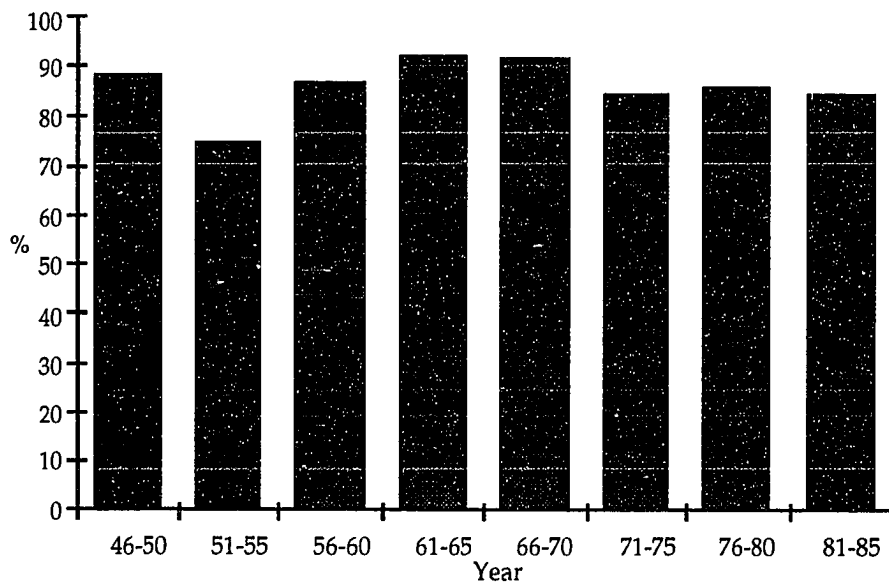


Figure 3-1: Percentage of Ministerial Statutes among Total Statutes

Source: Satô and Matsuzaki (1986, pp. 277-279).

Note: The figure indicates an average of each five years.

Fourth, the Japanese bureaucracy consists of the "best and brightest" or the "cream of the crop," in each recruiting year, i.e., graduates from the University of Tokyo, the University of Kyoto and the other highest ranking

⁴ See also Okimoto (1988).

universities. According to B. C. Koh (1989, p. 86), although "the phenomenon of *Tôdai* [the University of Tokyo] dominant in the higher civil-service examination appears to be less pronounced in the postwar period than it was during the earlier era," "*Tôdai* has never ceased to be the single largest supplier of successful candidates in the higher examinations." Furthermore, the University of Kyoto or *Kyôdai* has retained its position as the second largest single supplier of senior bureaucrats in the postwar period (See Figure 3-2). Pempel (1984, p. 101) sees that these bureaucrats "have a strong sense of service and duty; they are intimately involved with the mission of their agency, and with what they see to be the needs of the country."

Finally, the frequent shuffles of Cabinet ministers propel bureaucrats into the main role in policymaking. Since Cabinet ministers change once every year,⁵ it is almost impossible for a minister to put forth and carry through proposals or initiatives, so that policy initiatives in most cases come from the bureaucracy. That is, only the bureaucracy can maintain policy objectives and initiate policy proposals. Alan Rix (1988, p. 72) argues that

[t]he ultimate contribution of the bureaucracy to the state, ... comes from its impact on policy objectives, in defining new agendas, problems and challenges... the maintenance and consistency of objectives and methods over time is a task for the implementers and the managers of the policy process, not the political leaders, despite the longevity of LDP's rule.

⁵ There were 35 shuffles of Cabinet ministers from 1955 to 1985.

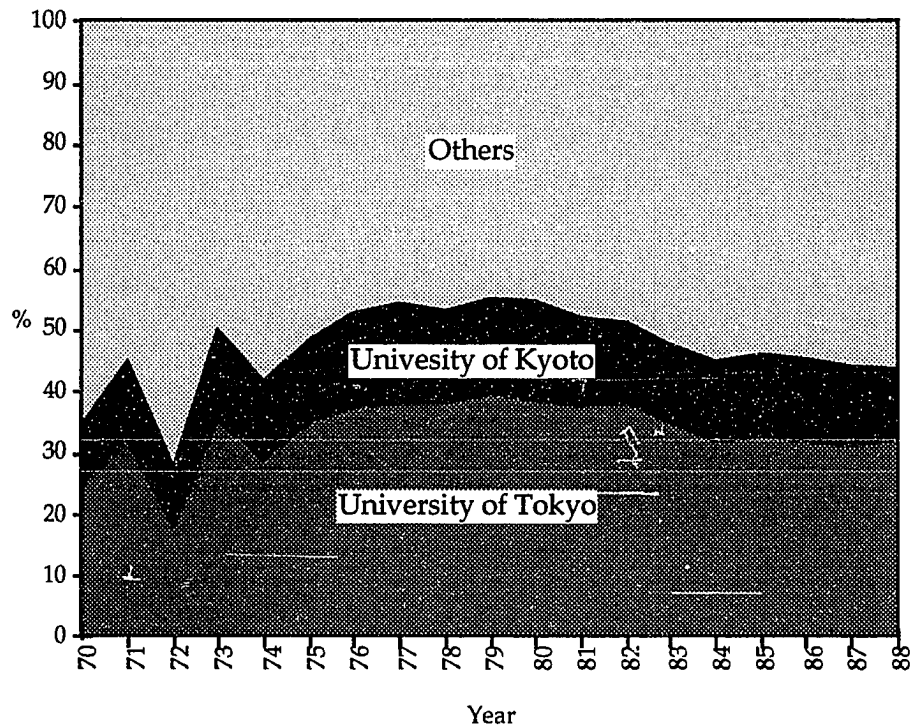


Figure 3-2: Successful Candidates in Higher Civil-Service Examinations, by University Background

Source: Koh (1989, p. 87).

Note: The sharp decline in 1972 is an aberration triggered by an unusual situation. The fact that no students were admitted to the University of Tokyo in 1968 due to disruption caused by campus unrest led to a sharp decline in the number of its graduates in 1972.

Although the power elite model is very popular among scholars as well as among the general public,⁶ it does not describe the process of policymaking perfectly. If the power elite model were correct, we should see

⁶ According to *Yomiuri shimbun* (June 5, 1994), 46.3 percent of the people believe that bureaucrats take the initiative in policymaking, while 16.7 percent think that legislators do.

no serious struggles among the other political actors because they cannot have any incentives to compete with each other in order to obtain a favorite policy outcome, where bureaucrats autonomously dominate the policymaking process. However, we see, in daily news, serious vertical and horizontal bargaining and struggles among legislators, interest groups and voters. Legislators struggle in the Diet for achievement of their favorite public policies and often spend an entire term of the Diet on only several issues. Voters and interest groups hustle and compete with one another in choosing and in asking favors from legislators. Why do they behave that way? They might fight with one another to obtain marginal benefits or benevolent treatment from the bureaucrats. However, it is also plausible that they struggle with one another because they can more substantially influence policy. The power elite model cannot explain very well these pluralistic political phenomena.

Pluralist model

Some pluralist models are introduced as attempts at solving the problem that the power elite model cannot answer.

Michio Muramatsu and Ellis S. Krauss (1987, 1988) offer us the concept of "patterned pluralism,"⁷ admitting that (1) influence is widely distributed, (2) multiple points of access to policymaking exist, and (3) interest groups are relatively autonomous from the state and compete against one another.

⁷ Satô and Matsuzaki (1986, p. 170) call this model "Shikirareta tagen shugi" or "compartmentalized pluralism."

Focusing interactions among interest groups and subgroups in the bureaucracy and the LDP, they conclude that these groups make alliances to pursue their shared interests, and the power balance among such alliances determines the outcome. Yet "In patterned pluralism the government and its bureaucracy are strong, but the boundaries between the state and society have become blurred by the integration of social groups into the government and by the intermediation of political parties between social-interest groups and the government" (Krauss and Muramatsu, 1988, p. 209). Furthermore, interest groups are also in relatively constant alliances with the same parties and bureaucratic agencies so that lobbying and coalitions are not open-ended but patterned. In short, "patterned pluralism" represents struggles among relatively fixed alliances each of which consists of social groups, politicians and bureaucrats sharing the same interests, which differs from the classic pluralist model, where policy making is merely the outcome of an open-ended equilibrium between competing pressure groups' lobbying activities on a relatively weak government.

Takashi Inoguchi (1983) proposes another pluralist model, "bureaucratic-inclusionary pluralism" or "*Kanryô shudô taishû hōkatsu gata tagen shugi*," which is very close to the patterned pluralism model. He characterizes the process of Japanese policymaking by the following three features: (1) the bureaucracy composes a center around which the state and society are organized; (2) the system is mass-inclusionary in the sense that bureaucracy attempts to incorporate social interests within itself and accommodate public demands through a coalition of bureaucratic divisions

and corresponding social-economic or regional sub-units; (3) the system is pluralistic in the sense that strong fluidity and dynamism appear on each specific issue area in the formation of coalitions among social interests and corresponding social-economic-regional subunits.

Both models commonly acknowledge existence of pluralistic aspects in the process of policymaking. This view is natural and sound. Within ministries, political parties, and interest groups, there are sub-groups which hold exclusive interests. Since political issues often concern several of the groups, conflicts must occur among them and this drives them to compete and bargain with one another. Even if, as the power elite model contends, bureaucrats were only the policymakers, they could not escape from such struggles.

In Japan today, there are 13 ministries, together with nine agencies having similar status to the ministries (See Figure 3-3). Interests of some of these, such as those of the Ministry of Education, may be relatively independent of others. However, political issues are often covered by some ministries, which have their own exclusive interests, so that the ministries must often fall into serious conflict over them.⁸ There are also subgroups who have various interests in the LDP. The party has an inner-organization called the Policy Affairs Research Council (PARC), *Seimu chōsa kai*, which is made up of many divisions and committees that deal with political issues

⁸ A good example is so-called the VAN war—the conflict between the Ministry of International Trade and Industry and the Ministry of Posts and Tele-communications for the Value-added networks (VAN). See Muramatsu and Krauss (1987, p. 545) and Kawakita (1985).

relevant to the administering of the government (See Figure 3-4).⁹ Through participation in PARC divisions for some years, LDP Dietmembers can be

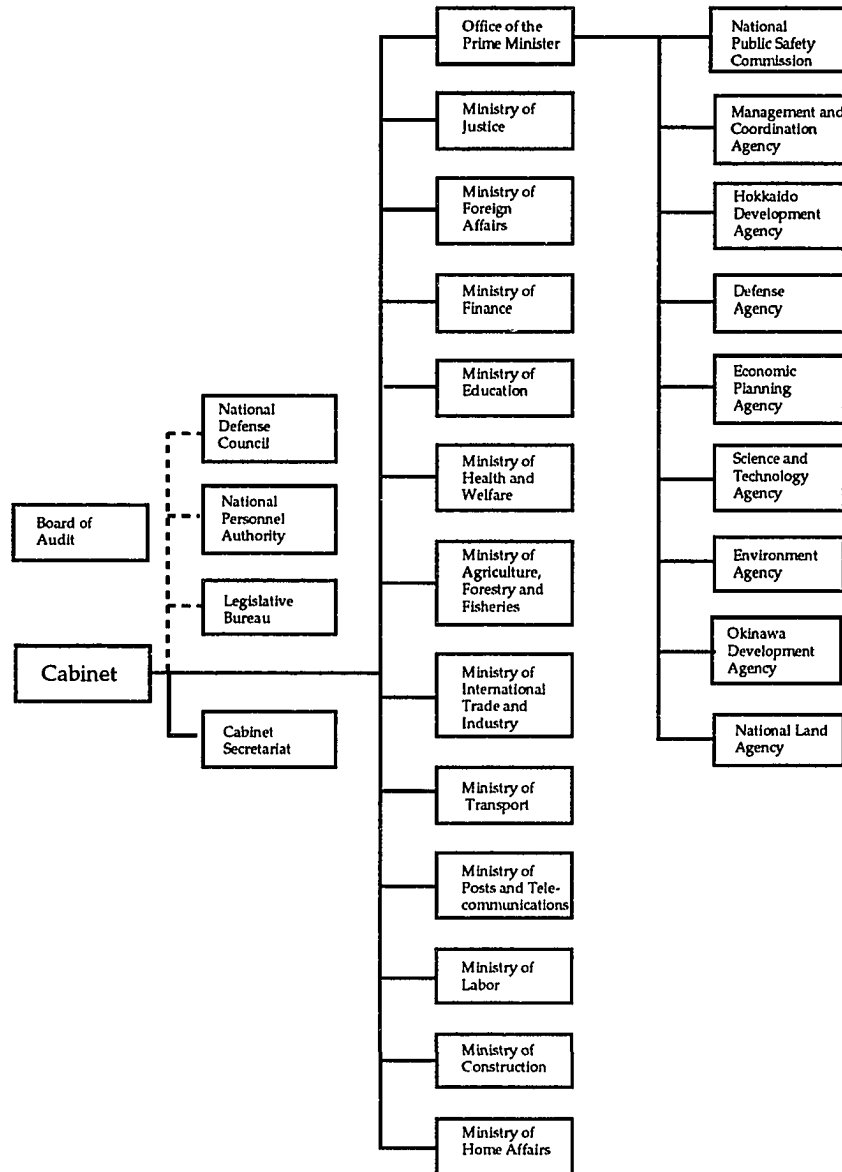


Figure 3-3: Cabinet of Japan

⁹ See Inoguchi and Iwai (1987, pp. 136-137) and Satô and Matsuzaki (1986, pp. 248-251.)

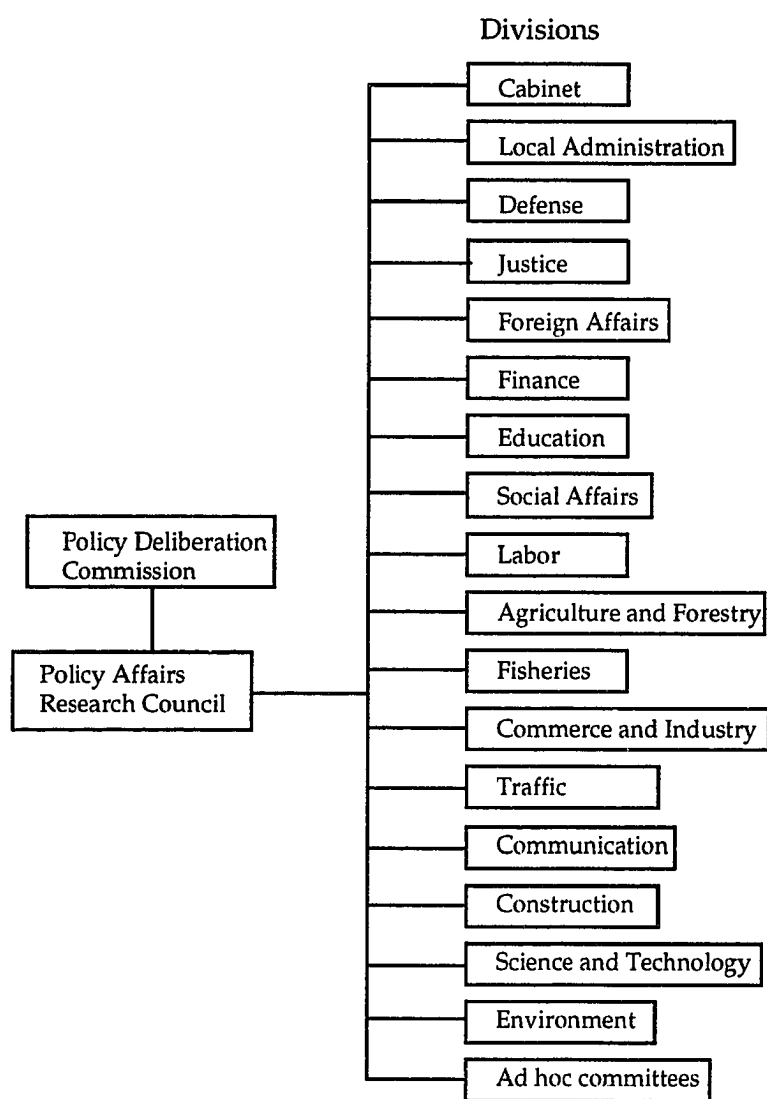


Figure 3-4: Policy Affairs Research Council (PARC) in the LDP

astutely familiar with the field in which the divisions specialize. Those Dietmen called *zoku* [policy tribes] organize certain interest groups in the Diet according to their specialties. In addition, we cannot ignore *habatsu* [factions]

in the LDP, which are united by shared values and personal networks knit through shared experience. *Habatsu* today are interest groups which seek political funds and posts in the cabinet. These *zoku* and *habatsu* pursue their own interests in the policymaking process.¹⁰ Interest groups are of course not monolithic, either. The Federation of Economic Organizations—*Keidanren*—and the Chamber of Commerce and Industry—*Nisshô*—are loose federations of various kinds of firms and groups. When there is friction between industries, the federations cannot force anything on them.¹¹ In no phase of the policymaking process, there is a monolithic political actor who can always make decision autonomously.

In terms of the power of legislators, however, the views of the two models are slightly different. The patterned pluralism model evaluates the power of legislators as greater than the bureaucratic-inclusionary pluralism model.

The patterned pluralism model stresses that the role of LDP politicians in policymaking has been noticeably rising in recent years, resulting in the convergence of the policymaking roles of bureaucrats and LDP politicians. There are roughly three reasons for this. First, bureaucrats need to obtain support, approval and endorsement from LDP Dietmembers in the process of policymaking. Bureaucrats indeed draft cabinet bills but "it is the LDP that decides which bills are to be taken up, which are to be modified and how, and which are to be introduced into the Diet" (Muramatsu and Krauss, 1984, pp.

¹⁰ For *Habatsu* politics, see Asahi shimbun seiji bu (1968), Yamamoto (1985), Baerwald (1986, pp. 43-96) and Curtis (1988, Ch. 3).

¹¹ For conflicts among the pressure groups, see Muramatsu, Ito and Tsujitani (1986, pp. 105-169).

143). Second, increasing involvement of *zoku* in the process of policymaking has been shifting the power relationship between bureaucrats and legislators (Muramatsu and Krauss, 1984, pp. 126-146). Close consultation takes place between the responsible bureaucrats and *zoku* right from the earliest stages of legislative and budgetary drafting (Muramatsu and Krauss, 1984, p. 27). In short, LDP Dietmembers, who together have held dominant power in the Diet, have gained enough policy expertise to exercise their given rights toward bureaucrats in the policymaking process.

The bureaucratic-inclusionary pluralism model also recognizes the rising of legislators' power. Inoguchi and Iwai (1987, Ch. 1) argue that although previous LDP Dietmembers have been passive toward policymaking by the bureaucracy, *zoku* actively involves itself in the process of policymaking. Besides the fact that LDP Dietmembers increased their capability, the power of bureaucrats itself has been unilaterally declining. Owing to the low growth of Japanese economy, the bureaucracy faces difficulty in using public finance as a weapon. After the first oil shock in 1973, the growth of the national budget declined. This fact limited activities of the bureaucracy which had enjoyed a free hand in making public policies with a plenty of public finance. Ministries started struggling with one another for distribution of the resources. Consequently, legislators have to arbitrate among the ministries to solve the resource allocation problem. In addition, Inoguchi and Iwai (1987, p. 22) argue that industrial policies implemented by ministries per se have promoted the power of interest groups. Under the national goal—"Catch up and take over Europe and America"—the

bureaucracy favoring industrial policy has been strengthening and protecting industries in the private sector. After the 1970s, when the Japanese economy became a world power, this bureaucracy lost its goal and failed to create a new goal, while firms in the private sector, gaining power, started taking an initiative in policymaking through pressing their interests upon legislators.

Although Inoguchi and Iwai admit the significance of the legislators' power, they think the role of the bureaucracy as a pivot of policymaking is unchangeable. They divide the postwar period into three in terms of changes of features in the policymaking process. From 1930 to 1960, the bureaucratic initiative in policymaking was strengthened. From 1960 to the middle of the 1980s, the bureaucratic initiative enhanced its capability to incorporate social interests within itself and accommodate public demands. After the middle of the 1980s, the bureaucracy stopped increasing its power and ceded a "part" of its role to legislators (Inoguchi and Iwai, 1987, p. 35). For Inoguchi and Iwai, the bureaucracy always plays the leading part, while legislators can play a supporting or peripheral part at best. Thus, they call their model "bureaucratic-inclusionary pluralism."

It seems that the pluralist models express the process of Japanese policymaking better than the power elite model because they can comprehend the pluralistic aspects of the process, including legislators' involvement in it. The pluralist models, nevertheless, still leave us an important question: Why are bureaucrats more authoritative than or at least as powerful as legislators?

Satô and Matsuzaki (1986, p. 168) criticize Inoguchi, holding that the bureaucracy cannot keep superiority in governing the society over legislators

who have legitimacy as representatives of the electorate. According to them, only two types of relationship can exist between bureaucrats and politicians: (1) clear superiority of politicians over the bureaucracy and (2) an ambiguous power relation between them. They, then, conclude that the relationship between the two in Japan is the latter type. Yet, we still have a question: Why is it the case that legislators, who have the highest legitimacy in governing the society, cannot control the bureaucracy which does not have such legitimacy? How can the relation be ambiguous? Bureaucrats might have more information or policy expertise than legislators, but they need endorsement from legislators as Muramatsu and Krauss themselves argue. This situation is not unique at all but universal.

Given the two conflicting situations that legislators rubber-stamp policy made by bureaucrats and that legislators intervene in bureaucratic policymaking, the pluralist models consider that there has been a power shift between the two actors, in which legislators have gained power as much as bureaucrats. This explanation, however, violates the official power relation between the two because it views bureaucrats as superior to or as authoritative as legislators. Another answer may be simpler and more natural: Legislators merely exercise their given rights. When legislators favor policy the bureaucrats have made, the former endorse it as if they were rubber-stamping it. But, when the legislators do not favor a policy, they force the bureaucrats to change it. This is exactly the same as the relationship between an attorney and a client. An attorney is a specialist on law but a client can make the final decision or even change attorneys. Unless bureaucrats

have weapons to force legislators, the former alone cannot implement any policies. The fact that bureaucrats, who have more policy expertise than legislators, mostly draft the bills passed in the Diet cannot prove that bureaucrats have more power than or equal power to legislators in policymaking. However, if we consider that legislators are superior to the bureaucracy as the Constitution declares, we can easily explain both their apparent rubber-stamping and their active involvement in policymaking. In short, although the two pluralist models clarify existence of struggles among the actors in policymaking, they fail to provide a framework or rules that define the relationship among the actors.

Institutional Model

Hans H. Baerwald (1986) and Gerald L. Curtis (1988) emphasize the superiority of legislators over bureaucrats, although admitting the important role of bureaucrats in the process of policymaking.¹² Baerwald (1986, p.154) argues that "In the last forty years, the Diet has been the final, formal arbiter of official legislation, whether it be a domestic law or an international treaty. Its supremacy has not been challenged by any other political institution in Japan." Curtis (1988, p. 243) also maintains that

[p]olitical change in Japan over these past several decades has not come about by bureaucratic fiat or by the imposition of an elite consensus on a submissive public. Rather it has been largely the

¹² Some advocates of the power elite model have come to stress legislators' constraint over bureaucrats. Examples include Pempel (1982, p. 311; 1992a, 1992b), Fukui (1984, p. 432; 1987).

product of the responsiveness of the political system to shifting public demands, a responsiveness that in turn has been produced by the LDP's determination to return electoral majorities and retain political power.

J. Mark Ramseyer and Frances McCall Rosenbluth (1993) have perhaps most systematically illustrated the power relations among the participants in the process of policymaking in Japan. According to them, political institutions provide political actors with principal-agent relationships—the rules of the game among political players—in every phase of the process of policymaking as follows.

First, the Japanese electoral system defines the relationship between voters and legislators. In Japan, voters have only one non-transferable vote (SNTV) under a multi-member district (MMD) in choosing Dietmembers in the Lower House.¹³ Owing to this electoral system, the LDP, which has consistently controlled the Lower House since its formation in 1955, must field plural candidates in almost every district to obtain a majority in the House.¹⁴ This requirement to control the House provides LDP candidates with a serious coordination problem. If any one LDP candidate gains significantly more votes than the others, the latter cannot go to the Diet even when the total LDP votes are large enough to make all the candidates winners. To even out the LDP votes, the party takes advantage of its control

¹³ In January 1994, Japan adopted a new electoral system for the Lower House: a combination of the first-past-the-post (FPTP) and the party list proportional representation (PR) system, which has not been put into practice, yet.

¹⁴ Mathematically, any party which attempts to gain a majority in the House must field on average more than two candidates in every district.

over the government to build its candidates' personal support networks. "LDP candidates foster these networks through a combination of government-dispensed 'pork,' cash, and in-kind gifts, as well as bureaucratic intervention services," such as construction of highways and bridges, or promoting profitable contracts (Ramseyer and Rosenbluth, 1992, p. 8). In short, owing to the electoral system, voters and interest groups take advantage of LDP Dietmembers to obtain pro-business policies which benefit their private interests. In turn, LDP Dietmembers can maintain their political status through providing their supporters with such pork-barrels.

Second, similar principal-agent relationships exist between LDP backbenchers and LDP party leaders. For reelection, LDP Dietmembers have to credibly show that the policies they promised their constituencies will be enacted or continue. Yet, the pork-barrels that they can provide to their voters are limited so that they face a resource allocation problem. Thus, they make or join pressure groups, namely factions in the LDP, out of self-interest, through which they select and empower leaders who mitigate the coordination problem. Faction leaders help backbenchers win party endorsement, promotion in the party, and access to funding, by which the latter can improve their reelection chances. Backbenchers support their leaders in the prime ministerial race to promote the leaders' ability to perform the services for them; This also pleases the leaders who desire to be at the top of Japanese politics. Here, backbenchers buy benefits from leaders with their support just as voters buy benefits from LDP Dietmembers with their votes.

Third, bureaucrats are agents of LDP party leaders. Party leaders use bureaucrats as if bureaucrats were their own private staff to plan and to draft policy programs. This is possible because LDP leaders have several ways to keep bureaucrats responsive. For example, LDP leaders can refuse to pass any bills made by bureaucrats and overturn any regulatory measures adopted by ministries. Through occupation of the tops of ministries, they can aid or refuse promotion to bureaucrats. The party leaders can also require elite bureaucrats to post a large portion of their lifetime earnings as bonds, which the bureaucrats can receive according to their performance during their tenure at the ministry. For bureaucrats, working for and satisfying the LDP party leaders are to their own benefit, while disturbing LDP party leaders is detrimental. To summarize, with many weapons at hand toward bureaucrats, party leaders control bureaucrats in the process of policymaking.

On the basis of these arguments, it seems reasonable to conclude that voters are sovereign, as the Constitution declares. Legislators and bureaucrats neither reign nor rule. Voters sell votes to legislators to buy their interests. Struggling with one another, legislators drive bureaucrats to make concrete plans and bills for policy programs that satisfy themselves and the voters. In each phase of the process of policymaking, political actors manipulate their weapons against other actors to obtain the goals which are allowed by institutional regulations. Yet, voters who can choose legislators who can control bureaucrats are the origin of the process of policymaking.

We can depict the relations among the actors as Figure 3-5. The power elite model has concluded that bureaucrats are decisive in the process of

policymaking because it sees only the left bottom part of the figure, where bureaucrats make plans and bills for policy. The pluralist model argues that

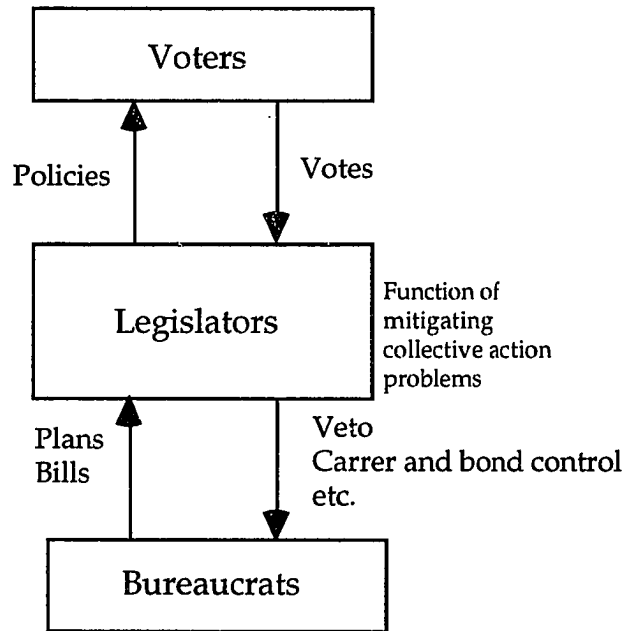


Figure 3-5: Process of Policymaking in Japan

the Japanese political process is more pluralistic because it focuses on the role that legislators play in mitigating coordination problems among themselves. However, if one analyzes the institutions that regulate the relationships among political actors, we can see a panoramic view of the process of policymaking, where voters and legislators play a significant role. Otherwise, we cannot explain why voters call on legislators in pursuing their interests and why legislators can be involved in the process of policymaking. Japan is

not unique at all in the sense that democracy is working. If at all unique, this must stem from the political institutions that differ from those adopted in other modern democracies.

Process of Defense Policymaking

I have discussed the relationship among political actors in general to discover functions of each actor in the process of policymaking. The next question must be more specific: How do the actors produce defense policies of Japan?

According to the Self-Defense Agency (SDA),¹⁵ any defense policies must follow the Basis of National Defense Policy (BNDP) or *Kokubô no kihon hôshin* approved by *Kokubô kaigi* or the National Defense Council (NDC)¹⁶ and the Cabinet in 1957.¹⁷ This basis consists of one goal—defense of the sovereignty of democratic Japan—and four different strategies for the goal: (1) international cooperation and support of the United Nations, (2)

¹⁵ The SDF belongs to the SDA.

¹⁶ The NDC consists of the Prime Minister as chair, the Vice-Prime Minister, the Foreign Minister, the Minister of Finance, the Director General of Defense Agency, and the Director General of the Economic Planning Agency. The Chief Cabinet Secretary, the Minister of MITI and the Director General of Science and Technology Agency always participate in the NDC. See Bôei gakkai (1980, p. 111). In 1986, the NDC was replaced by *Anzen hoshô kaigi* or the Security Council of Japan (SCJ), whose role is identical with that of the NDC. The JSC consists of the Prime Minister as chair, the Foreign Minister, the Minister of Finance, the Chief Cabinet Secretary, the Chairman of National Public Safety Commission, the Director General of Defense Agency, the Director General of Economic Planning Agency, and other ministers and the Chair of the Joint Staff Council, when necessary. See *Gendai yôgo no kiso-chishiki* (1987, p. 102).

¹⁷ See Bôei chô [The SDA], ed., *Nihon no bôei [Defense of Japan]*, any year, for the BNDP, the NDPO and the MTDP.

promotion of public welfare and patriotism, (3) gradual establishment of efficient defense capability, and (4) cooperation with the United States against external threats until the United Nations can remove such threats. Following this basis, Japan holds two principal security programs: the U.S.-Japan Security Treaty¹⁸ and the National Defense Program Outline (NDPO) or *Bôei keikaku no taikô*.¹⁹ The U.S.-Japan Security Treaty promotes cooperation between the two countries in various fields, such as exchange of information, joint operations and technological cooperation, for the security of the Far East as well as Japan. The NDPO provides a set of guidelines for development of defense capability (See Table 3-1). The Mid-Term Defense Program (MTDP) produced according to the NDPO is a five year plan for the defense build-up, which more concretely presents what Japan should produce and abandon for the development of defense capability (See Table 3-2). Yet it is the annual defense budget that finally allocates funds to pursue the MTDP.

We can divide the defense policies into two types in terms of level of policymaking. The first ones are those which need to pass the Diet. The U.S.-Japan Security Treaty and other international treaties must be approved in the Diet because international treaties are not valid without ratification by the Diet. Defense related laws that define responsibility, competence and organization of the SDA and the SDF, such as the law for the SDF or *Jieitai hô* and the law for establishment of the SDA or *Bôei chô setchi hô*—together

¹⁸ This is formally called "The Treaty of Mutual Cooperation and Security between Japan and the United States," which was concluded in 1951.

¹⁹ The NDPO was approved by the NDC and the Cabinet in 1976. The First to the Fourth Defense Build-up Programs had played the almost same role before 1976.

Table 3-1: National Defense Program Outline

Classification		Outline	
GSDF	Authorized number of SDF personnel		180,000
	Basic Units	Units deployed regionally in peacetime	12 Divisions 2 Combined Brigades
		Mobile Operation Units	1 Armed Division 1 Artillery Brgd 1 Airborne Brgd 1 Training Brgd 1 Helicopter Brgd
		Low-Altitude Surface-to-Air Missile Units	8 Anti-Aircraft Artillery Groups
MSDF	Basic Units	Anti-Submarine Surface-Ship Units (for mobile operation) Anti-Submarine Surface-Ship Units (Regional District Units) Submarine Units Minesweeping Units Land-Based Anti-Submarine Aircraft Units	4 Escort Flotillas 10 Divisions 6 Divisions 2 Minesweeper Flotillas 16 Squadrons
	Main Equipment	Anti-Submarine Surface Ships Submarines Operational Aircraft	60 Ships (Approx.) 16 Submarines 220 Aircraft (Approx.)
ASDF	Basic Units	Aircraft Control and Warning Units Interceptor Units Support Fighter Units Air Reconnaissance Units Air Transport Units Early Transport Units High-Altitude Surface-to-Air Missile Units	28 Groups 10 Squadrons 3 Squadrons 1 Squadron 3 Squadrons 1 Squadron 6 Groups
	Main Equipment	Operational Aircraft	430 Aircraft (Approx.)

Source: *Nihon no bōei* [Defense of Japan] (1986, p. 94).

Note: This list is based upon the equipment structure that the SDF possesses, or is scheduled to possess, at the time of the drafting of this National Defense Program Outline.

Table 3-2: Mid-Term Defense Program (1986-1990)

	Item	Quantity
GSDF	Tank (Including a new type)	246
	Artillery	277
	Armored Personnel Carrier	310
	Surface-to-Ship Guided Missile	54 launchers
	Anti-Tank Helicopter (AH-1S)	43
	Transport Helicopter (CH-47)	24
	Equipment and Material for Improvement of Surface-to-Air Guided Missile (HAWK)	4 groups and educational unit
MSDF	Escort Ship	9
	Submarine	5
	Others	21
	Total of Ships to be Constructed (Total Tonnage)	35 (about 6900 tons)
	Combat Aircraft	128
ASDF	P-3C	50
	Anti-Submarine Helicopter (including new type to be mounted on vessels)	66
	Minesweeping Helicopter (MH-53E)	12
	Combat Aircraft	87
ASDF	F-15	63
	C-130H	7
	CH-47	12
	E-2C	5
	Medium-Level Jet Trainer (T-4)	93
	Surface-to-Air Guided Missile (Patriot)	5 groups

Source: *Nihon nō boei* [Defense of Japan] (1986, pp. 337-338).

Notes: The tonnage of the construction of self-defense ships of the MSDF may change as a result of the study on upgrading the capability of the anti-air missile system of the escort ships. The number of combat aircraft to be procured for the ASDF may change as a result of the study of the successor to the support fighter (F-1).

called "*Bōei ni hō*"——need approval by the Diet, too, because they are laws that only the Diet can enact.²⁰ The annual national defense budget also needs approval by the Diet because it is a part of national budget that the Diet must finally determine. On the other hand, other defense policies, including the

²⁰ *Bōei ni hō* were made in 1954.

BNDP, the NDPO and the MTDP, do not need Diet approval. The SDA and the SDF can make and implement those policies with approval only by Cabinet and the Security Council of Japan (SCJ), which replaced the NDC in 1986, because the defense related laws so allow. In other words, through its authority for ratification and law making, the Diet can manipulate the government in making policies. Furthermore, as already discussed, the legislators can manipulate bureaucrats in making defense policies, using their weapons against bureaucrats. Yet, most important, the LDP can control the process of defense policymaking because the party has controlled the government and the Diet, who in turn work to satisfy their principals——voters and interest groups.

Figure 3-6 roughly illustrates the process of defense policymaking. The private sector, i.e., voters and interest groups, the LDP, and other ministries initiate defense policy. Then, the SDA becomes the main body for policymaking. After the SDA makes policy, then the SCJ and the Cabinet will approve it unless it is budget-related. If it is, the SDA must negotiate with the Ministry of Finance (MOF) to gain funding for the policy before it goes to the SCJ and the Cabinet. After approval by the SCJ and the Cabinet, the policy goes to the Diet for enactment as a law.

In every phase of the process, there are struggles and negotiations among the actors. Voters, LDP Dietmembers and bureaucrats have their own group interests. Furthermore, every voter has his/her own exclusive interests and so does every LDP Dietmember and bureaucrat. However, those struggles and negotiations are regulated under the principal-agent relations knit

among the actors where voters and interest groups reside as principals and bureaucrats as agents. The LDP Dietmembers struggle with one another to satisfy the interests of their supporters, and bureaucrats do the same for their principals, i.e., LDP Dietmembers. In short, the defense policies, which are made through pluralistic struggles among the actors, reflect—directly or indirectly—the interests of voters and conflict among these interests.

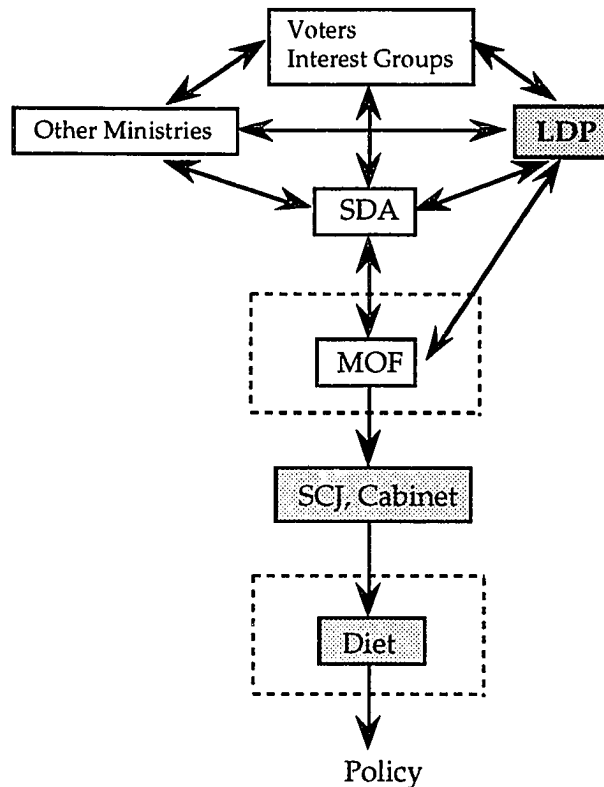


Figure 3-6: Process of Defense Policymaking

Note: The dark areas are occupied by the LDP legislators

Summary

There are roughly three models to explain the process of policymaking in Japan: the power elite, pluralist and institutional models. The power elite model considers bureaucrats as playing a pivotal role in formulation and implementation of public policy as if they were monarchs. Although many support this model, it cannot explain the pluralistic aspects and the influence of legislators observed in the process. The pluralistic model argues that public policy is a product of struggles and negotiations among bureaucrats, legislators (especially LDP Dietmembers) and voters. However, it does not clearly provide a framework that regulates relations among the actors. Finally, the institutional model contends that principal-agent relations created by political institutions regulate incentives and behaviors among political actors in the process of policymaking. That is, agents—bureaucrats for legislators and legislators for voters—work to satisfy their principals—legislators for bureaucrats and voters for legislators. Although policy may not directly reflect the interests of voters because of conflicts among these interests, they can be regarded as the most important source of the policy outcome.

Defense policy is made through the same policymaking process. The SDA, with other ministries, drafts bills and carries out policies for the security of Japan but it is the LDP that can control the policymaking process. With their political weapons against bureaucrats, LDP Dietmembers, while struggling against one another, drive the ministries to create policies optimal

for LDP Dietmembers. However, LDP Dietmembers are not free from the preferences of their principal, i.e., the voters, about national defense. That is, defense policy must reflect interests of voters at least indirectly.

As discussed in Chapter 3, the supreme authority for the making of Japan's defense policy since the end of WWII has been the Diet. No policy can be adopted without the endorsement of the Liberal Democratic Party (LDP) in the Diet and as the outcome of an earlier negotiation process among the policymaking actors, because the LDP has been the decisive power in the Diet since 1955.¹ If at least the LDP Dietmembers in the House of Representatives, who together have a veto power toward the Councillors, are always negative toward defense expansion, Japan can hardly

¹ The LDP, formed in 1955, kept power until 1993. A coalition government was formed by *Shinseitō*, *Nihonshintō*, *Shintō sakigake*, the Japan Socialist Party (JSP), the Clean Government Party (CGP), the Democratic Socialist Party (DSP) and *Shaminren* in 1993. The LDP became an opposition party for the first time in its history. In June, 1994, the LDP came back to the power with the JSP and *Shintō sakigake*.

increase its defense commitments regardless of external and domestic demands.² This situation seems at first glance improbable because the Dietmembers are supposed to pursue national and/or their voters' interests for survival but it may be possible owing to the single non-transferable voting (SNTV) system under a multi-member district (MMD) that Japan almost uniquely holds for choosing Representatives.³ In this chapter, I will discuss problems the electoral system creates among voters, candidates, and political parties, and the effects these problems produce on the behavior of the LDP Dietmembers in the policymaking process. Then, I will set forward a theory to elaborate the hypothesis, using game theoretic explanations.

The Electoral System and Its Problems

The electoral system that Japan maintains for the House of Representatives is SNTV under MMD, together more commonly known in Japan as *chû senkyo ku sei* [the medium constituency system]. The electoral system, which was adopted with universal manhood suffrage in 1925, experienced six elections from 1928 to 1942 before the end of WWII and 18 elections from 1947 to 1993, while the election in 1946 exceptionally used *dai senkyo ku sei* [the large constituency system], i.e., SNTV under a larger

² Any bills submitted to the Diet have to pass both the House of Representatives and the House of Councillors.

³ Taiwan holds the same electoral system.

MMD. SNTV under MMD has monopolized 24 among the 40 Lower House elections in the Japanese history.⁴

Although the electoral system was adopted before the war, it could not then have great influence on the national policymaking because the Diet in prewar Japan did not have the supreme authority in the decision making of the state. The government, including the army and the navy, was independent of the Diet and responsible only to the Emperor and could neglect the authority of the Diet. The electoral system could motivate the behavior of the powerless Dietmembers but did not influence national policy very much. The electoral system began to matter after the war when the bureaucracy became subordinate to the Diet.

By SNTV under MMD, a voter can cast only one vote for one candidate in an electoral district where there are plural winners. Votes once cast for one candidate are not transferable to others even when the former has already gained more than enough votes to win, unlike under the single transferable voting (STV) system that allows transfer of votes among candidates in such a situation. For a political party, gaining more than one winner from each district is necessary to occupy a majority in the House by itself since there are plural winners in every district.⁵ In other words, even a party which gained a single winner in every district cannot obtain as many as a half of the seats in the House. Mathematically, winning two Dietmembers in every district on

⁴ For the history of electoral systems in Japan, see Kamijō (1988). Japan adopted a new electoral system—a combination of the first-past-the-post (SNTV under the single member district system) and the party list proportional representation system—in January 1994, but this has yet been put into practice.

⁵ The Amami district, where there is only one seat, is the only exception.

the average is the minimum requirement for a party to administer the government without a coalition.⁶

SNTV under MMD generates some particular and serious problems among the participants in an election.

First, voters have a possibility of wasting their votes. A voter may vote for his/her most favored candidate from his/her most favored party because he/she can vote for only one candidate and cannot see the other voters' behavior.⁷ This sincere voting behavior may smash the chance for the voters to obtain the best outcome in the election, namely, gaining plural winners, including the most favored candidate from the most favored party. When votes go unevenly to the candidates owing to personal differences among them, then some of them may not receive enough votes to win, even if the total votes the party gained are large enough to send all of them to the Diet. In fact, the personal attractiveness of the candidates varies and there are many cases where voters reached a sub-optimal outcome.

Second, the electoral system creates serious battles among candidates from the same party. Running from a party which has huge support does not guarantee a victory because votes may unevenly scatter over candidates from the same party. Attractiveness of the party is not enough for the candidates to maximize their votes. The candidates have to entice the party's supporters through their personal attractiveness in order to differentiate themselves

⁶ Under certain conditions, a minority party or coalition can form the cabinet, although unstable.

⁷ As discussed later, strategic voting does not work well under the secret ballot system.

from their colleagues for winning, as a result of which they consume extra funds, time and energy.⁸

Third, a party wastes resources over the struggles among the candidates, which might be unnecessary under other electoral systems. If the candidates do not need to compete with one another, they can work together and the party can intensively use its political funds for the party's platform. Moreover, the party as well as the voters can reach a sub-optimal outcome. The best outcome for the party is victory of all candidates the party fields. Yet, the sincere voting can produce a sub-optimal outcome for the party, even if the party gained enough votes to reach the best outcome. What the party needs is to find a mechanism that provides all the candidates with optimal number votes. If the party can devise such a mechanism, voters would not waste their votes; the candidates would not need to compete with one another; the party could avoid sub-optimal outcomes.

The problems above have affected the LDP more than the other parties, because only the LDP has been able to field plural candidates in every district. No other party has potential supporters large enough to attain plural winners in every district, although they can do so in some specific constituencies.⁹

The LDP must have recognized the necessity to invent a mechanism to allocate optimal votes among its candidates but it seems not to have arrived at a perfect solution. The party may be able to control the allocation of votes

⁸ For expenses of LDP candidates, see Ramseyer and Rosenbluth (1993, p. 27), Sasago (1989, p. 39), Fujita (1980, p. 117), and Iwai (1990).

⁹ District magnitudes range from two to six members except in the Amami Islands. Fielding two candidates for the LDP is the most usual situation. There are some districts especially metropolitan ones where the Japan Socialist Party (JSP) fields two or more candidates.

by instructing LDP supporters for whom they should vote, according to some ready-made criteria such as street or telephone numbers. However, the secret ballot gives voters an incentive to defect. The voters may vote for their most favored candidates even if they are instructed to vote for other candidates, unless the party has coercive power toward the voters or the voters enjoy strong mutual trust. If one can see that the other voters behave as instructed, then he/she must vote as instructed, too, because so doing makes both his/her most favored candidate and the other LDP candidates winners. Yet, if one cannot see the others' behavior, he/she may vote for his/her most favored candidate because he/she may think that so doing at least promotes the candidate's victory but instructed voting harms this when the other voters cheat. As long as such mutual suspicion exists, strategic voting does not work very well.

Game theory can more clearly depict the collective action problem. Suppose **A** and **B** are LDP voters whose most favored candidates are **L_a** and **L_b**, respectively, where at least one of them can win and all of them can win if votes are optimally allocated. That is, sincere voting will cause uneven allocation of votes among the candidates, by which only one of them can win, although who can win is unknowable a priori. Under this situation, **A** and **B** were instructed to vote for their second favorite candidates, i.e., **L_b** for **A** and **L_a** for **B**. For **A** and **B**, victories of both **L_a** and **L_b** are the best outcome because their most favored candidates can go to the Diet and their most favored party gained two seats. Yet, their second favored outcomes are different. **A** prefers **L_a**'s victory to **L_b**'s if only one of them can win, while **B** favors the opposite

situation. The worst outcome for them is that only their most favored candidates lose. The situation in which either of the candidates may win will be the second worst outcome for both of the voters because the possibility of victory still remains for their most favored candidates, which is worse than the second best but better than the worst.

Game 4-1 is the simultaneous game among two voters, where either of them has two strategies—cooperation and defection—and cannot observe the other's behavior. In this game, mutual cooperation produces the best outcome for both; unilateral defection produces the second best payoff for a defector but the worst for a cooperator; mutual defection brings the third best to both of them. Interestingly, there are two Nash equilibria in this game: mutual cooperation—Pareto optimal—and mutual defection—Pareto sub-optimal. This implies that if one of the voters believes that the other will defect, then the former will also defect, although both of them will be better off with mutual cooperation. The mixed strategy, which offsets the difference between the payoffs of cooperation and of defection, is 1/2 cooperation (defection) for both voters, which suggests that they might defect once in two times to avoid the worst situation.

On the other hand, as Game 4-2 illustrates, where the voters can see the other's behavior and the follower thus has four strategies, we can find only one Nash equilibrium—mutual cooperation—and that is Pareto optimal. The follower will vote as instructed if the initial voter cooperates, because so doing produces the best outcome. The initial voter will vote as instructed as well, because he/she can predict the follower will vote rationally

as instructed after observing his/her behavior. Therefore, they have no intention to defect and can reach the best outcome through mutual cooperation. The problem, however, is that Game 4-2 is not available owing to the secret ballot. That is, only Game 4-1 is available in reality, where players possibly fall to the Pareto sub-optimal outcome through mutual defection.

Game 4-1: Strategic Voting under SNTV and MMD
(When Voters Cannot See Others)

		B	
		Cooperate	Defect
A	Cooperate	4 , 4	1 , 3
	Defect	3 , 1	2 , 2

Game 4-2: Strategic Voting under SNTV and MMD
(When Voters Can See Others)

		B			
		cc'	cd'	dc'	dd'
A	C	4,4	4,4	1,3	1,3
	D	3,1	2,2	3,1	2,2

Note:

C: Cooperate. **D**: Defect.

cc': cooperate always.

cd': cooperate when **A** cooperates but defects otherwise.

dc': defect when **A** cooperates but defect otherwise.

dd': defect always.

Survival Strategy for LDP Candidates

Under the dilemma the electoral system generates, LDP candidates organize a loyal voter group called *kôenkai*, based on some specific industrial and business fields, as a means of collecting votes in personal competitions with other LDP candidates. The candidates have considerable influence on policymaking in those fields in which they specialized through occupying seats in divisions and committees of these areas in the Diet and in the Policy Affairs Research Council (PARC) of the LDP. *Kôenkai* also consists of loyal voters in specific geographical regions of their electoral districts with whom the candidates usually have a consanguineous background. In short, *kôenkai* is a voter set from which LDP candidates receive votes in compensation for their efforts to pursue the voters' interests in the fields or regions the candidates can best influence policymaking.

According to J. Mark Ramseyer and Frances McCall Rosenbluth (1993, Chs. 2 & 5) organizing *kôenkai* helps the candidates to share LDP votes efficiently because the LDP and its candidates can control the competition among the candidates for expansion of *kôenkai*. First, the candidates by themselves can separate various kinds of voters. "LDP members from the same district typically distribute themselves across different division and committee affiliations so as to prevent needless competition for the same constituents. Every Dietmember from an agricultural district might want to be on the Agricultural Division [in the PARC], for example, but Dietmembers also seek access to a unique set of policy favors that their LDP competitors do

not have" (Ramseyer and Rosenbluth, p. 33). Moreover, LDP party control also avoids overlap of interests of different *kôenkai* by distributing them effective property rights over aspects of policymaking through cabinet posts and PARC assignments. For example, the LDP would not assign a candidate a post which would mainly influence the interests of *kôenkai* members of other LDP candidates running from the same district.

Having *kôenkai*, nonetheless, does not ensure victory for the candidates because the votes of solid supporters are often not large enough for the candidates to win. Thus, the candidates still have to compete with one another to absorb floating voters or *fudôhyô*, sympathetic to the LDP but not to specific LDP candidates, into their *kôenkai* by providing for the voters' needs.¹⁰ For reelection, the candidates have to retain the floating voters as well as their loyal supporters during the term between elections.¹¹ Otherwise, opposing LDP candidates would steal the floating voters.

In order to gain floating votes efficiently, the candidates must know voters' criteria for choosing candidates. Although voters must have various criteria, we can generally state that they vote for a candidate who maximizes their interests, supposing they are rational. If there are two candidates, voters will vote for the one who supports the voters' interest rather than the one

¹⁰ The number of floating votes is not insignificant because many LDP sympathizers do not belong to any specific interest groups. For influence of *fudôhyô*, see Curtis (1971, Ch. 4), Miyake (1989), Arai (1990) and Kobayashi (1991).

¹¹ The full term between elections is four years. However, the actual term was usually much shorter because the Diet was often dissolved. There were 13 elections between 1955 to 1990, which makes the term 2.7 years on average. The shorter the term, the more seriously the candidates must attend to the needs of the voters. For the struggles among the LDP candidates, see Ichikawa (1990), Iwai (1990), Ishikawa and Hirose (1989), Inoguchi and Iwai (1987), and Satô and Matsuzaki (1986).

who does not. If two or more candidates support the interests, then the voters will vote for the one who supports the interests more than any of the others. When voters have plural interests, voters will vote for a candidate who maximizes their most important interest rather than for the one who maximizes their secondary interest. If two or more candidates maximize voters' most important interests, then the voters will vote for the one who maximizes their secondary interests as well. The best candidate for voters is a maximizer of all their interests.

What kind of interest is most important for voters? Mancur Olson Jr. (1965) offers an interesting hint. He argues that small groups can provide themselves with collective goods without relying on coercion or any positive inducements apart from the collective good itself, "because in small groups each of the members, at least one of them, will find that his personal gain from having the collective good exceeds the total cost of providing some amount of that collective good" (Olson, 1965, p. 33-34). On the other hand, "in a large group in which no single individual's contribution makes a perceptible difference to the group as a whole, or the burden or benefit of any single member of the group, it is certain that a collective good will not be provided unless there is coercion or some outside inducements that will lead the members of the large group to act in their common interest" (Olson, 1965, p. 44). This argument suggests that voters prefer candidates who work for exclusive interests of the voters, i.e., pork barrels, to those who work for more public interests. Voters have only a single ballot to choose their representatives so that they must want to use their limited resource

efficiently. They may feel that using the resource for collective goods available to the smaller community they belong to is more beneficial than using it for the collective good available to the larger community, because the utility each of them can gain from attempting to provide the former collective good is larger than from the latter. In other words, voters have incentives to use their limited resource for their exclusive interests rather than for their less exclusive, i.e., more public, interests. Exclusive interests are more important for a voter than public interests.¹²

We can see many examples of how people use their limited assets in their lives. You have a salary if you work. You first use it for yourself and for your family, the smallest community you belong to. Then, you may use the income for some social communities, such as a labor union, a religious group and a residential community. Finally, you might make a donation to organizations working for the public welfare. If your salary is not very high, you may use it only for yourself and your family. If you have a plenty of money, you may spend some on the other groups. However, the preference order will not change.

Voters must strictly choose a candidate according to their preference, because they have only one ballot, while a salary can be split into segments for different uses. Here, the candidates who pursue public interests of the voters do better than those who do not support any of their interests at all but do worse than those supporting the exclusive interests of the voters, while those

¹² There are other accounts of the criteria of voters' behavior. Voters may vote according to their cultural background rather than as the result of a rational calculation of cost and benefit. See Richardson (1974).

who work for all the interests are the best for the voters if the candidates can afford to do so. Voters' preference order among candidates will be

- C1: One who supports both their exclusive and public interests,
- C2: One who supports their exclusive interests only,
- C3: One who supports their public interest only,
- C4: One who does not support any of their interests.

Thus, the loyal voters will always vote for their candidate in order to gain better payoffs for their exclusive interests, whatever their preferences about public interests, because other candidates do not support their exclusive interests.¹³ In other words, their candidate is C1 or C2, while the others are C3 or C4. On the other hand, the floating voters will vote for one of the given alternatives according to the preference order.¹⁴

Knowing the voters' preferences, the candidates first will support the exclusive interests of the loyal voters in *kôenkai* to maintain the loyal voters. Yet, they may not support the public interests of *kôenkai* because so doing does not change the number of the loyal voters. Then, they also have to support the interests of the floating voters to win. The dominant strategy for the candidates to gain the floating votes is supporting both the exclusive and

¹³ Supporting exclusive interests of loyal voters of other LDP candidates is unreasonable because the voters would vote for their original candidates who are more familiar with these interests and more influential in promoting them.

¹⁴ To be precise, I may need to consider the preference of the floating voters about the exclusive interests of the loyal voters, but I omit this because it does not affect my argument very much. They may split according to this preference when all the candidates support their exclusive interests or when no one supports them.

the public interests of the floating voters.¹⁵ More specifically, if a subsidy to some business, for example, is an exclusive interest for a loyal voter group of one candidate, he/she has to support this policy. Then, he/she also has to make an effort to satisfy the public interests of the floating voters as well as their various prime interests, which may include offering jobs, participation in their private ceremonies and so on.¹⁶ If all the candidates adopt the dominant strategy, then they may be able to gain enough votes to win. Otherwise, those who do not adopt the dominant strategy will lose, presenting votes to their colleagues.¹⁷ There is still a possibility that some who adopt the dominant strategy can lose, because unchangeable attributes of the candidates, such as personal appearance, may still unevenly split the votes. However, in order to win an election under SNTV with MMD, LDP candidates have to support the exclusive interests of their loyal voters at least and both the exclusive and public interests of floating voters. Only adopting the dominant strategy provides LDP candidates with the possibility to be Dietmembers.

¹⁵ I may need to consider the cost of providing the exclusive interest of the floating voters. Presumably, the more the district is modernized, the higher the cost will be, because people enjoying higher living standards would have higher and various—thus, more costly—desires. Moreover, political activities in urban areas may be more costly than in rural areas. Under these circumstances, the candidates may not be able to satisfy the exclusive interests of the floating voters. In other words, the candidates' attitudes toward the public interest may tend to play an important role in voters' decisions. This will be discussed in Ch. 7.

¹⁶ For *kōenkai* activities, see Ramseyer and Rosenbluth (1993, p. 24), Curtis (1971, Ch. 5).

¹⁷ Ideally, voters will choose from the LDP candidates with equal probability, if the attributes of the candidates are identical. This is like the probability that a thrown die shows that each number is equal. In practice, a candidate first reached voters can take the latter, if all the candidates hold the same strategy.

Hypothesis and Theory

My hypothesis to solve the puzzle—Japan's defense policy has been low and inactive regardless of external and domestic demands—is that *the electoral system of Japan impedes the incentives for LDP Dietmembers (candidates) to support defense expansion*. This is a logical consequence from the analysis of the electoral system, SNTV under MMD.

As discussed above, a LDP candidate must champion the exclusive interests of loyal voters in *kôenkai* and both the exclusive and public interests of floating voters in order to survive in an election under SNTV with MMD. National security issues may be an exclusive interest for military industry workers, rightists and veterans. Therefore, if the candidate has those people in his/her *kôenkai*, he/she has to support defense expansion. On the other hand, national security is one of the largest public goods for all the voters beyond the district. When the floating voters prefer defense expansion as their public interest, then the candidate has to support it. Then, we can find three situations under which the candidates may have to support defense expansion.

S4-1: *Kôenkai* members favor defense expansion as their exclusive interest and floating voters favor it as a public interest.

S4-2: *Kôenkai* members favor defense expansion as their exclusive interest but floating voters do not even favor it as public interest.

S4-3: *Kôenkai* members do not support defense expansion as their exclusive interest but floating voters do so as their public interest.

Among the three situations, however, only **S4-1** and **S4-3** can guarantee a victory for the candidate supporting defense expansion. Under **S4-1**, there is no conflict between the preferences of *kôenkai* members and floating voters. *Kôenkai* members will vote for the candidate who supports their exclusive interests. Floating voters will also vote for the candidate who supports their public interests as long as he/she supports their exclusive interests as well. Under **S4-3**, *kôenkai* members will still vote for the candidate as long as he/she supports *kôenkai* members' exclusive interests regardless of his/her attitudes toward public interests. Floating voters again will vote for the candidate who supports their exclusive and public interests. However, under **S4-2**, floating voters may not vote for the candidate who does not support their public interests, even if the candidate supports their exclusive interests, because the other candidate from the same party who supports both interests can absorb the floating voters. Unless *kôenkai* members are large enough to offset the floating voters, he/she may lose in an election. In reality, there seems to be no district in Japan where loyal voters whose exclusive interest is defense expansion are enough to win (Calder, pp. 420-426).¹⁸

When a LDP candidate adopts a strategy in terms of defense issues, he/she must consider the preference of floating voters about the issue. If the

¹⁸ This is a historical legacy. The military industry in Japan was eliminated by the United States after the end of WWII. However, it is also true that the Korean War redeveloped the industry for a short term. See Ôtake (1984a).

floating voters do not favor defense expansion, the candidate cannot support it, because he/she may lose if he/she supports it and the other LDP candidates do not. Similarly, if floating voters prefer defense expansion, then the candidate has to support it because if he/she does not support it and the others support it, the former will lose. In short, all the LDP candidates have to adopt the strategy that supports defense expansion when floating voters prefer it, even if the candidates do not prefer to do so. On the other hand, if floating voters do not favor defense expansion, then the candidates cannot support the policy regardless of his preference over defense expansion. The preference of floating voters determines the attitudes of the candidates toward national defense.

Nonetheless, even if all the voters prefer defense expansion, the candidates cannot easily support it when there is a resource allocation problem among the interests of the voters.¹⁹ Resources, such as the government budget, time, and the energy of the candidates, are limited, resulting in a conflict among these interests. The candidates have to use these resources efficiently for survival. The most efficient use of the resources is removing efforts at interests that least affect supports from voters. Among the two kinds of interests, exclusive and public interests, the latter is less important for voters, as discussed before. That is, giving up public interests is better for voters than abandoning exclusive interests. The candidates may not seriously support public interests of *kôenkai* members from the beginning

¹⁹ If there is no resource allocation problem, increasing the defense commitment is possible. Indeed, the Self-Defense Forces (SDF) increased joint exercises with the US military after the late 1970s. Peacekeeping operations by the SDF were admitted in 1991.

because so doing does not increase their votes. What they can eliminate is, thus, the public interests of floating voters. Since national defense is a public interest for floating voters, the candidates will cancel supporting defense expansion from their strategies, although they still may be able to "voice" the necessity for defense expansion without substantial effort. If all the LDP candidates do this—the second best preference for the floating voters—they do not lose votes, because the floating voters still will not find any differences among them. The candidate who holds loyal supporters with defense expansion as an exclusive interest cannot survive under this situation because he/she cannot cancel supporting defense expansion. He/she thus has to stop providing for exclusive interests of floating voters, and then all the floating voters will move to other candidates who support their exclusive interests. On the other hand, reducing the defense commitment is easy. If the floating voters prefer it, all the candidates support this because doing so is their dominant strategy. Moreover, reducing the defense commitment does not generate a serious resource allocation conflict. Reducing the commitment may require time and energy from the candidates but does not demand any outlay of national budget. Here, again the candidate who holds prodefense loyal supporters cannot win, because he/she cannot adopt the dominant strategy.

In sum, for the LDP Dietmembers, defense expansion is mechanically difficult under the electoral system, while reducing the defense commitment is easier. When voters do not prefer defense expansion, the candidates, of course, cannot champion it regardless of external demands and the latter's

preference. Moreover, even when both the voters and the candidates favor defense expansion, the candidates cannot easily work for it because defense expansion will cause a resource allocation problem among interests of the voters, where defense expansion is less important than the others for the voters and for the survival of the candidates. The electoral system impedes the incentives for LDP Dietmembers, the candidates, to support defense expansion.

Application of Game Theory

I would like to illustrate the struggles among LDP candidates through game theory, which can give us a more rigorous understanding than the preceding informal exposition of the process by which the electoral system disturbs initiatives of the candidates to promote defense expansion.

Assume the following conditions, which are very plausible in real elections.

(1) There are two LDP candidates, **L_a** and **L_b**, in a district where there can be two or more winners.

(2) **L_a** has a loyal voter group **A** whose exclusive interest is **a**, and **L_b** also has a loyal voter group **B** whose exclusive interest is **b**.²⁰ The sizes of **A** and **B** are equal.

²⁰ **L_a** and **L_b** may consist of some subgroups. **a** and **b** also may consist of some different interests.

(3) There are floating voters, **F**, sympathetic to the LDP, who do not share a common exclusive interest. **F**'s exclusive interests are altogether expressed as **f**.

(4) **F** is indifferent to **a** and **b**.²¹

(5) **L_a** always supports **a** but not **b**, and **L_b** always supports **b** but not **a**.²² Both **L_a** and **L_b** may support **f** and/or **d**, defense expansion—a public interest for all the voters.

(6) **a ≠ b ≠ f ≠ d**

(7) No candidates from the opposition parties support **a**, **b**, **f** and **d**.²³

(8) The voters will vote for any candidate who most satisfies their interests. When **L_a** and **L_b** adopt the same strategy (policy), they equally share the votes.²⁴

(9) **A**, **B**, and **F** will not abstain.²⁵

²¹ **f** may conflict with **a** and **b**. However, **F**'s attitude toward the candidates is assumed not to change according to the attitudes of the candidates toward **a** and **b**.

²² Theoretically, **L_a** and **L_b** can support **b** and **a**, respectively. However, as I mentioned before, supporting the exclusive interest of a loyal voter group of other candidates is unreasonable because voters would support their original candidates who are more familiar with and better able to promote their interest.

²³ This condition may be too strict. But even if the opposition parties support these interests, the voters may prefer to vote for LDP candidates because the LDP is decisively powerful in the Diet.

²⁴ In reality, the votes would not split equally. However, adopting the same strategy is a minimum condition for the candidates to share the votes equally.

²⁵ This condition may be too strict. **A** and **B** may not vote for the opposition parties or abstain because **L_a** and **L_b** necessarily support **a** and **b**, respectively. **F** might abstain when the candidates cannot satisfy **F** at all.

(10) L_a and L_b can win by getting all the votes from their loyal voter groups and half of F —the minimum number of votes to win are $A+F/2$ and $B+F/2$.²⁶

(11) There is no cooperation for getting votes from F between L_a and L_b .

(12) There are no relations of entailment among a , b , and f .

Game 4-3 is a game between L_a and L_b in normal form, when the preferences of the voters about defense expansion are as follows: (1) A , B and F favor d , (2) F and either A or B favor d , (3) A and B do not but F favors d ,—the common aspect among (1), (2) and (3) is that F favors d regardless of the preferences of A and B . In this game, there is only one Nash equilibrium, located at the intersection of the dominant strategies for both L_a and L_b , $ab'fd$ and $a'bfd$, respectively, where both L_a and L_b support defense expansion.²⁷ This means that L_a and L_b have to support defense expansion to win the election, when there is no resource allocation problem among the interests of the voters. On the other hand, when $ab'fd$ and $a'bfd$ are not available—when supporting three interests results in conflict—then, $ab'fd'$ and

²⁶ In the real world, of course, the minimum votes for winning are determined by the relative size of A , B and F among all the voters.

²⁷ As mentioned before, the prime mark adds negative meaning to the original mark. The strategies are named after the combinations of interests the candidates may support. That is, $ab'fd$ means supporting a , f and d , but not b . Moreover, I refer by equilibrium to a Nash equilibrium. Since there is only one Nash equilibrium for these games, I do not consider other types of equilibrium.

Game 4-3: Strategies under SNTV and MMD
 (When Floating Voters Prefer Defense Expansion)

$L_a \backslash L_b$	$a'bfd$	$a'bfd'$	$a'bf'd$	$a'bf'd'$
$ab'fd$	$A+F/2, B+F/2$	$A+F, B$	$A+F, B$	$A+F, B$
$ab'fd'$	$A, B+F$	$A+F/2, B+F/2$	$A+F, B$	$A+F, B$
$ab'f'd$	$A, B+F$	$A, B+F$	$A+F/2, B+F/2$	$A+F, B$
$ab'f'd'$	$A, B+F$	$A, B+F$	$A, B+F$	$A+F/2, B+F/2$

Note: The prime mark ['] adds negative meaning to the original marks.

For example, a' is not $-a$.

The strategies are named after the combinations of interests the candidates may support.

For example, $ab'cd$ is the strategy to support a , f and d , but not b .

This game holds when preferences are as follows.

$A: ad \succ ad' \succ a'd \succ a'd'$
 $B: bd \succ bd' \succ b'd \succ b'd'$
 $F: fd \succ fd' \succ f'd \succ f'd'$

$A: ad \succ ad' \succ a'd \succ a'd'$
 $B: bd' \succ bd \succ b'd' \succ b'd$
 $F: fd \succ fd' \succ f'd \succ f'd'$

$A: ad' \succ ad \succ a'd' \succ a'd$
 $B: bd \succ bd' \succ b'd \succ b'd'$
 $F: fd \succ fd' \succ f'd \succ f'd'$

$A: ad' \succ ad \succ a'd' \succ a'd$
 $B: bd' \succ bd \succ b'd' \succ b'd$
 $F: fd \succ fd' \succ f'd \succ f'd'$

$a'bfd'$ will be the dominant strategies. That is, whatever their own and their voters' preference about d , the candidates will fail to support d when there is a resource allocation problem. If one adopts d rather than f , F will move to the other candidate even if F prefers d , because the marginal utility of the exclusive interest for F is larger than that of the public interest. Furthermore, if $ab'fd'$ and $a'bfd'$ are not available—if supporting two interests leads conflict—then L_a and L_b will adopt $ab'f'd'$ and $a'bf'd'$, the only remaining strategies that support d' . In sum, if F favors defense expansion, both L_a and

L_b have to champion defense expansion when there is no resource allocation problem among the interests of the voters, while both **L_a** and **L_b** cannot do so when there is a resource allocation problem among the interests.

Game 4-4 illustrates a game between **L_a** and **L_b**, when preferences of the voters about defense policy are as follows: (1) **A** and **B** prefer **d** but **F** does not, (2) either **A** or **B** supports **d** but **F** does not, and (3) none of the voters supports **d**—the common situation among (1), (2) and (3) is that **F** does not prefer defense expansion. In this game, there is only one Nash equilibrium, located at the intersection of **ab'fd'** and **a'bfd'**, the dominant strategies for both **L_a** and **L_b**, respectively. This suggests that even if **ab'fd** and **a'bfd** are available—even if supporting three interests does not lead to conflict—**L_a** and **L_b** cannot adopt these strategies because they may lose by doing so. When supporting two interests is not an available alternative then they adopt **ab'f'd'** and **a'bf'd'**. In this game, regardless of the preferences of **A** and **B**, if **F** does not prefer defense expansion, the candidates cannot support it at all.

From the games above we can draw the conclusion that floating voters are decisive for the candidates in formulating a strategy on defense issues. When floating voters prefer defense expansion, then the game will be Game 4-3, where supporting defense expansion is possible only when there is no conflict among the voters' interests. When floating voters do not prefer defense expansion, the game will be Game 4-4, where defense expansion is always impossible. Supporting defense expansion attracts candidates only when floating voters prefer it and there is no conflict of interests.

Game 4-4: Strategies under SNTV and MMD
 (When Floating Voters Do not Prefer Defense Expansion)

$L_a \backslash L_b$	$a'bfd$	$a'bfd'$	$a'bf'd$	$a'bf'd'$
$ab'fd$	$A+F/2, B+F/2$	$A, B+F$	$A+F, B$	$A+F, B$
$ab'fd'$	$A+F, B$	$A+F/2, B+F/2$	$A+F, B$	$A+F, B$
$ab'f'd$	$A, B+F$	$A, B+F$	$A+F/2, B+F/2$	$A, B+F$
$ab'f'd'$	$A, B+F$	$A, B+F$	$A+F, B$	$A+F/2, B+F/2$

Note: This game holds when preferences are as follows.

$A: ad > ad' > a'd > a'd'$
 $B: bd > bd' > b'd > b'd'$
 $F: fd > fd' > f'd > f'd'$

$A: ad > ad' > a'd > a'd'$
 $B: bd' > bd > b'd' > b'd$
 $F: fd' > fd > f'd' > f'd$

$A: ad' > ad > a'd' > a'd$
 $B: bd > bd' > b'd > b'd'$
 $F: fd' > fd > f'd' > f'd$

$A: ad' > ad > a'd' > a'd$
 $B: bd' > bd > b'd' > b'd$
 $F: fd > fd' > f'd > f'd'$

Even if there is a loyal voter group the prime interest of which is defense expansion, the results are similar to those of Games 4-3 and 4-4.²⁸

Suppose that a part of A , A_d holds d as its prime interest, while the other part of A , A_a supports a as its prime interest. The struggle between L_a and L_b will be like Game 4-5, when F prefers d regardless of the preference of B . In this game, a Nash equilibrium exists at the intersection between $ab'fd$ and $a'bfd$, where both L_a and L_b support defense expansion. If $ab'fd$ and $a'bfd$ are not available for L_a and L_b because of a conflict of interests, then L_a

²⁸ As I mentioned before, if voters whose prime interest is defense expansion constitute a majority in an electoral district or all the candidates can have this type of voter as their loyal voters, then the candidates can go to the Diet by supporting defense expansion. However, this situation is unlikely.

will lose because the equilibrium will move to the intersection between **ab'fd** and **a'bfd'**, where **La** cannot gain enough votes for victory. Then, defense expansion is impossible, because the sole winner, **Lb**, does not support it.

Game 4-5: Strategies under SNTV and MMD with Prodefense Loyal Groups
(When Floating Voters Prefer Defense Expansion)

La \ Lb	a'bfd	a'bfd'	a'bfd	a'bfd'
ab'fd	A+F/2, B+F/2	A+F, B	A+F, B	A+F, B
ab'fd'	A, B+F	A, B+F	A+F/2, B+F/2	A+F, B

Note: This game holds when preferences are as follows.

Aa: a>a' Ad: d>d'
B: bd>bd'>b'd>b'd'
F: fd>fd'>f'd>f'd'

Aa: a>a' Ad: d>d'
B: bd'>bd>b'd'>b'd
F: fd>fd'>f'd>f'd'

On the other hand, whatever the preference of **B** about **d**, when **F** does not favor **d**, defense expansion is impossible, because the equilibrium is the intersection between **ab'fd** and **a'bfd'**, where, as Game 4-6 illustrates, **La** always loses. That is, if **Lb** adopts his/her dominant strategy, which does not support **d**, there is no strategy for **La** to win. If **ab'fd** and **a'bfd'** are not available for **La** and **Lb** because of a conflict of interests, then the equilibrium will move toward the intersection between **ab'fd** and **a'bfd'**, where again only **Lb** will win. There is no possibility for a candidate who adopts **d** to go to the Diet.

In sum, floating voters are also decisive in these games for the possibility of defense expansion. When floating voters prefer defense expansion, then the game among the candidates will be Game 4-5, where defense expansion is possible only when there is no conflict of interests. When floating voters do not prefer defense expansion, the game will be Game 4-6, where defense expansion is always impossible because a candidate who supports the policy will necessarily lose, while one who does not can survive. Supporting defense expansion entices the candidates only when floating voters prefer it and there is no conflict of interests. When floating voters do not prefer defense expansion, only the candidate not supporting defense expansion can go to the Diet.

Game 4-6: Strategies under SNTV and MMD with Prodefense Loyal Groups (When Floating Voters Do not Support Defense Expansion)

$L_a \backslash L_b$	$a'bfd$	$a'bfd'$	$a'bf'd$	$a'bf'd'$
$ab'fd$	$A+F/2, B+F/2$	$A, B+F$	$A+F, B$	$A+F, B$
$ab'f'd$	$A, B+F$	$A, B+F$	$A+F/2, B+F/2$	$A, B+F$

Note: This game holds when preferences are as follows.

Aa: $a > a'$ **Ad:** $d > d'$ **Aa:** $a > a'$ **Ad:** $d > d'$
B: $bd > bd' > b'd > b'd'$ **B:** $bd' > bd > b'd' > b'd$
C: $cd' > cd > c'd' > c'd$ **C:** $cd' > cd > c'd' > c'd$

The theory, I have argued, predicts the relations between the strategies for LDP candidates and preferences of the LDP supporters under SNTV and MMD shown in Table 4-1. The candidates who have voters of Types II, IV, VI,

Table 4-1: SNTV under MMD and Strategies of LDP Dietmembers

	If: Preference Order		Then: Strategy	
			Conflict	No Conflict
I	A: ad>ad'a'd>a'd'		d'	d
	B: bd>bd'b'd>b'd'			
	F: fd>fd'f'd>f'd'			
II	A: ad>ad'a'd>a'd'		d'	d'
	B: bd>bd'bd>bd'			
	F: fd>fd'f'd>f'd'			
III	A: ad>ad'a'd>a'd'	A: ad'>ad'a'd'>a'd'	d'	d
	B: bd>bd'b'd>b'd'	B: bd>bd'b'd>b'd'		
	F: fd>fd'f'd>f'd'	F: fd'>fd'f'd>f'd'		
IV	A: ad>ad'a'd>a'd'	A: ad'>ad'a'd'>a'd'	d'	d'
	B: bd>bd'b'd>b'd'	B: bd>bd'b'd>b'd'		
	F: fd>fd'f'd>f'd'	F: fd'>fd'f'd>f'd'		
V	A: ad'>ad'a'd'>a'd'		d'	d
	B: bd'>bd'b'd'>b'd'			
	F: fd'>fd'f'd'>f'd'			
VI	A: ad'>ad'a'd'>a'd'		d'	d'
	B: bd'>bd'b'd'>b'd'			
	F: fd'>fd'f'd'>f'd'			
VII	Aa: a>a', Aa: d>d'		d'	d
	B: bd>bd'b'd>b'd'			
	F: fd>fd'			
VIII	Aa: a>a', Aa: d>d'		d'	d'
	B: bd>bd'b'd>b'd'			
	F: fd'>fd'			
IX	Aa: a>a', Aa: d>d'		d'	d
	B: bd'>bd'b'd'>b'd'			
	F: fd'>fd'			
X	Aa: a>a', Aa: d>d'		d'	d'
	B: bd'>cd>b'd'>bc'd'			
	F: fd'>fd'			

VIII, and X in their districts can never support defense expansion even if there is no conflict of interests. On the other hand, the candidates who have voters of Types I, III, V, VII and IX in their districts have to support defense expansion when no conflict of interests exists but cannot do so when a conflict does exist. More simply, when the floating voters do not favor

defense expansion, the candidates cannot work for it. When they favor the policy and no conflict of interests exists, the candidates must support it. Defense expansion usually involves a conflict with other interests because it generates a resource allocation problem. Thus, theoretically no LDP Dietmember can substantially support defense expansion, even though they can "voice" support. When no LDP Dietmember supports defense expansion, then Japan cannot expand its defense commitment. If Japan can expand a defense commitment, it must be in a field without a resource allocation problem.

Summary

SNTV under MMD produces some specific problems among the participants in an election. Any party needs to gain plural winners in one district to become the government party by itself. The LDP, the only party that holds enough potential supporters to gain plural winners in every district, may lose the chance to obtain the best outcome for themselves—victories of all the LDP candidates running in the same district—because the voters' sincere voting behaviors allow their votes to go unevenly to the candidates. Since running from the LDP does not guarantee victory, LDP candidates have to compete with one another through their personal attractiveness in each district in order to gain enough votes to win from the LDP supporters. They have to spend extra time, energy and funds in this competition. The LDP has

to invent some mechanism to divide LDP votes among the candidates optimally to avoid unnecessary competition and a sub-optimal situation where some of the candidates lose even if the total votes to the LDP are large enough to send all its candidates to the Diet.

In this competition among their own colleagues, the LDP candidates organize loyal voter groups called *kôenkai* based on some specific industry, business and regional interest groups, through which the candidates gain votes in return for championing the interests of the groups. If the candidates occupy influential posts in policymaking, they can gain more votes than otherwise.

Organizing *kôenkai* helps the LDP candidates to avoid uneven allocation of votes among the candidates. This is true because the candidates can choose different specialties from those of their colleagues. Furthermore, the LDP can control the personal attractiveness of the candidates to the interest groups—power in the fields the groups are interested in—through distributing to the candidates cabinet posts and PARC assignments.

Yet, this solution is not perfect because candidates usually cannot win only with votes from the loyal voters. They need to compete with one another to obtain floating voters sympathetic to the LDP. The dominant strategy for the candidates to gain enough floating votes is to support both the exclusive and public interests of the floating voters. If they adopt this strategy, they will never have the floating votes stolen by their colleagues. National defense is one of the biggest public interests for all the voters beyond the district level, although it is the exclusive interest for only some of the voters.

Thus, the candidates have to support defense expansion, if the floating voters prefer the policy. If the voters do not, the candidates cannot support the policy.

Nevertheless, when a resource allocation problem exists among the interests, the candidates cannot support all the interests and thus have to eliminate efforts at one or some of the interests efficiently to minimize their loss of votes. Since public interests are less important than exclusive interests for the voters, the candidates would cancel support for public interests first. If all the candidates remove supporting the public interests from their strategy, then they would not lose any votes because the floating voters still would not find any difference among the candidates. This implies that when a resource allocation problem exists among the interests, the candidates cannot support defense expansion—the public interest—even if the floating voters prefer defense expansion.

In short, under SNTV and MMD, the LDP candidates can support defense expansion for their political survival only when floating voters support it and there is no resource allocation problem among the interests the candidates have to support. Defense expansion usually generates a resource allocation conflict so that the candidates hardly ever can champion defense expansion even if the floating voters prefer the policy. The electoral system of Japan impedes the incentives for LDP Dietmembers (candidates) to support defense expansion.

Comparison with Other Systems

Chapter 5

In Chapter 4, I have analyzed why and how the single non-transferable voting (SNTV) system under the multi-member district (MMD) impedes candidates from the Liberal Democratic Party (LDP) from support for defense expansion. However, a question still remains: "Given that other factors are equal, do electoral systems really make a difference?" The electoral system cannot be regarded as a necessary condition for LDP Dietmembers' neglect of defense expansion unless other electoral systems can produce different outcomes from the same inputs. Therefore, we need to analyze other electoral systems as well. Theoretically, we can create as many electoral systems as we like. We can assume various criteria for winning, such as a necessary number of votes. We can change the magnitude and the number of

constituencies, the transferability of votes, and the number of ballots. The number of electoral systems is limitless. In this chapter, I shall deal only with some typical electoral systems adopted in 20th century democracies, because it is physically impossible to analyze all theoretically possible electoral systems. It is sufficient to compare these typical electoral systems in order to determine why Japan's defense policy differs from those of other countries. Then, again using game theory as an analytical tool, I shall deduce the feasible postures of LDP Dietmembers toward defense expansion under the different electoral systems, given the same conditions assumed in my analysis of SNTV under MMD (This may weaken this analysis because the different electoral systems might endogenously change the number and characters of the political parties). The conclusion is that SNTV under MMD is one of two systems that almost always disturb defense expansion.

Other Electoral Systems

Martin Harrop and William Miller (1987) categorize the electoral systems used in modern democracies in the fashion depicted in Figure 5-1. They first divide the various electoral systems into majoritarian and proportional types. The main difference between the two types is that the former recognizes the candidate (or candidates in a MMD) with the largest number of votes as winning, while the latter awards seats in proportion to the number of votes cast for different lists or groups of candidates in a MMD.

The voters who supported losers under the majoritarian type gain no representation, while usually almost all voters under the proportional type can more or less gain representation.

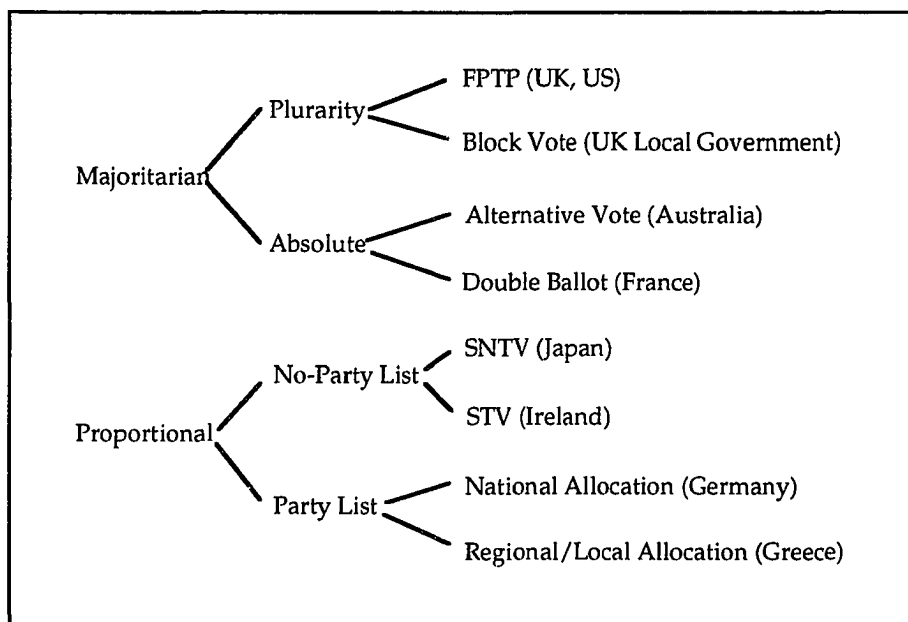


Figure 5-1: Categorization of Electoral Systems

Source: Harrop and Miller (1987, p. 50)

Note: Although they categorize the systems as above, countries have occasionally changed their systems from one to another. Furthermore, the countries do not necessarily have only the systems indicated but often combine several systems.

Then, the authors differentiate each of these into two sub-types: absolute majority and plurality majority systems for the majoritarian type, and no-party list proportional representation (PR) and party list PR for the proportional type. Candidates under the absolute majority type need to get an absolute majority for winning but those under the plurality rule need not—that is, a plurality is sufficient. Under the party list PR, each political party

or group of candidates makes a list of candidates so that a voter casts a ballot for his/her favorite party or his/her favorite candidate from the list.¹ On the other hand, under the no-party list PR, there is no such a list; a voter simply casts a ballot(s) for his/her favorite candidate(s).

Finally, Harrop and Miller separate the four different sub-types into eight more specific systems. The plurality type includes the first-past-the-post (FPTP) and the block vote systems, while the absolute majority type comprises the alternative vote and the double ballot systems. The no-party list type consists of the limited ballot system, i.e., SNTV under MMD,² and the single transferable voting (STV) system, while the party-list type contains the national allocation and the regional/local allocation systems.

FPTP is equivalent to SNTV under the single member district (SMD) system, where only the candidate having the most votes is elected. This system is used in the United Kingdom and most of the former British colonies, including Canada, India, New Zealand, South Africa and the United States. The block vote system, often used in British local government elections, allows each voter to have exactly as many ballots as seats exist in MMD.³

Under the alternative vote system, used in Australia, voters can list their candidates in order of preference. If no candidate gains more than half

¹ The open list system allows voters to vote for candidates to determine the order of winners in the party lists, while the closed list system does not. There are more complicated variations, such as the flexible and free list systems.

² To be precise, the limited ballot system means that a voter has fewer ballots than the number of seats. However, only SNTV under MMD exists in reality.

³ Usually three winners in British local government elections.

the first preference votes, the candidate with the fewest first preference votes is eliminated and his/her votes are reallocated according to his/her voters' second preference. This process will be repeated until one candidate gains more than half the votes. France often uses the double ballot system, where a candidate wins on the first ballot only when he/she gains over half the votes; otherwise a second ballot is held. Then, the leading candidate in the second ballot is elected whether or not he/she has a clear majority.

The limited ballot system is equivalent to SNTV under MMD, used in Japan and Taiwan, where voters can cast only one ballot to choose plural winners in one district. STV allows plural winners in one district as well as the limited ballot system, which has been adopted in Ireland, Malta, Tasmania and Australia for the upper house of parliament. Under this system, voters can list the candidates in their electoral district in order of preference. During the count, votes are transferred to second and third preference candidates, when either the voters' first preference has more votes than needed to win (e.g., as calculated by the Droop quota)⁴ or when the bottom candidate is eliminated.

The party list PR sets a rule, such as the largest remainder rule or the d'Hondt rule,⁵ by which parties can gain seats according to their votes. The more members per constituency, the more can accurately members be

⁴ The Droop quota is $\lceil \text{votes}/(\text{seats}+1) \rceil + 1$.

⁵ Seats are allocated to parties according to the share of votes. However, since the exact quota for each party will contain a fraction, some seats will not be allocated to any parties. Under such a situation, the largest remainder rule allocates the remaining seats to the parties in order of the size of their fraction. The d'Hondt rule divides votes by integers starting from one. Then, seats are allocated to the parties in order of the size of the quotients. See Brams (1976, Ch. 6) for details and problems in each rule.

allocated in proportion to votes. The national allocation and the regional allocation systems are methods to solve disproportionality resulting from a small number of representatives per constituency. Although both reserve a pool of seats, the former allocates the seats at the national level, while the latter allocates them at the regional level so as to achieve a proportional result overall. However, the difference between the two systems is not very important for the argument about strategies of political parties or candidates toward voters' interests. Rather, the size of the constituency—whether a single huge national constituency or many smaller constituencies—causes differences in the attitudes of the political parties or candidates as I shall discuss later.

In the remainder of this chapter, I shall simulate possible strategies of candidates toward defense expansion under FPTP, the block vote, the double ballot, the alternative ballot, the STV and the two types of party-list PR, i.e., a single huge national constituency and many smaller constituencies, in order to clarify how the other systems work differently from the Japanese system under given conditions.

Majority Systems

First-Past-The-Post

The struggles among candidates under FPTP would be very different from those under SNTV with MMD, even if the other conditions are equal.

As a result, LDP candidates can have more policy options than under SNTV with MMD. That is, the candidates could champion defense expansion without fear of losing an election under FPTP.

First, LDP candidates do not need to compete with one another in the same district under FPTP, unless there is a primary in the district to choose a candidate from the party,⁶ because the LDP would not field plural candidates in a district with only one seat. Foes of the LDP candidates would be those from the opposition parties, such as the Japan Socialist Party (JSP),⁷ the Clean Government Party (CGP), the Democratic Socialist Party (DSP), and the Japan Communist Party (JCP).

Second, the LDP candidate would necessarily win through absorbing all LDP supporters in the district,⁸ who are usually a larger group than the loyal voters for any of the opposition parties.⁹ This is more likely to occur when each of the opposition parties fields a candidate.¹⁰ In order to maximize votes, the candidates from the opposition parties have to support both the exclusive

⁶ If the candidates are nominated in primaries, as in the U.S.A., they have to compete with one another. Such a competition would produce the same results under SNTV and MMD because they have to gain personal votes to win, where the dominant strategy is to support both private and public interests of the voters. For primaries in the U.S.A., see Mayhew (1974) and Arnold (1990).

⁷ The JSP officially changed its English name to the Social Democratic Party of Japan (SDPJ). However, I use the traditional name to avoid confusion with the Democratic Socialist Party (the DSP).

⁸ Richardson (1974) writes that cultural factors drive the voters to choose candidates on the basis of candidate rather than party. If this is the case, the LDP supporters would be expected to vote for the candidate whose personality most appealed to them, even if was not the LDP candidate. However, according to empirical analysis by Rochon (1981), when only one candidate runs from the same party, the voters choose candidates on the basis of party.

⁹ This is the assumption also used in the analysis of SNTV and MMD. In the real world, too, the LDP supporters are larger than those for each of the opposition parties in almost every electoral district. See the electoral results of each election for the House of Representatives.

¹⁰ Under FPTP, small parties may form a coalition to beat the largest party. Finally, only two or three parties may remain in the long run. See Duverger (1963).

and public interests of the floating voters, who are not loyal to any party, as well as the exclusive interests of their loyal voters.¹¹ If all the candidates from the opposition parties adopt the dominant strategy, they will share the floating votes. The greater the number of the candidates from the opposition parties, the smaller will be the floating votes available to share. Consequently, the total of the loyal and the floating votes each candidate from the opposition party gains can hardly become large enough to beat the LDP candidate.

Third, the LDP candidate would have to adopt a strategy which can maintain his/her loyal voters but need not adopt the dominant strategy, since he/she could win without absorbing the floating votes. That is, as long as the candidate champions the exclusive interests of the LDP loyal voters, he/she can win, whatever public interest—thus defense expansion—he/she promotes.

Finally, the LDP loyal voters would vote for the LDP candidate even when he/she does not support either the exclusive or public interests of the voters. The opposition parties will hardly support the exclusive interests of the LDP supporters because their loyal voters often have interests that conflict with the exclusive interests of the LDP supporters—the opposition parties impair the exclusive interests of the LDP supporters. Moreover, the more or less radical ideologies of the opposition parties drive the LDP supporters, who

¹¹ Every voter has two types of interests, exclusive (private) and public interests. The dominant strategy that maximizes votes for candidates is to support the exclusive interests of their loyal voters and both exclusive and public interests of floating voters. See Ch. 4.

are rather conservative, to be averse to them.¹² In other words, the LDP candidate's belonging to the LDP per se can promote the private and/or public interests of the LDP supporters. Consequently, LDP supporters might vote for the LDP candidate simply because he/she runs from the LDP. This suggests that the LDP candidate might be able to champion any public interests, including defense expansion, even when there is a resource allocation problem between the exclusive interests of the loyal voters and the public interests.

Games 5-1 and 5-2 (the 4 x 4 x 4 games) depict the struggles among candidates under FPTP. Although the real game could be among five or more candidates, since there are at least five major parties, I have simplified it to a game among three candidates.¹³ This game can represent the more complicated games.

Assume the following feasible conditions.

(1) There are three candidates: the LDP candidate, L_a , and the candidates from the opposition parties, O_b and O_c .

(2) A is the set of LDP loyal supporters, whose exclusive interest is a . O_b and O_c have loyal supporters B and C , whose exclusive interests are b and c , respectively. F is a set of floating voters whose exclusive interests are represented as f .

¹² The JSP contains social democrats and more radical socialists. The DSP is a set of social democrats. The JCP consists of communists as the name indicates.

¹³ According to Duverger (1963), FPTP favors the two-party system. If this is the case, I should formulate a two-person game rather than a three-person game.

(3) $A > B, A > C, A > F. A \geq B + C$ or $A < B + C. A \geq B + F$ or $A < B + F. A \geq C + F$ or $A < C + F. A \geq B + C + F$ or $A < B + C + F.$

(4) There is no coalition among L_a, O_b and O_c .¹⁴

(5) L_a, O_b and O_c always support the exclusive interests (and/or the ideologies) of their loyal supporters but not of the loyal supporters for the other candidates.¹⁵ L_a, O_b and O_c may support f and/or defense expansion d .

(6) $a \neq b \neq c \neq f \neq d$

(7) The voters will vote for either candidate according to their preference orders (i.e., there is no strategic voting).¹⁶ When the candidates adopt the same strategy (policy), they share the votes equally.¹⁷

(8) The voters' preference order among candidates is as follows: first, one who supports both their exclusive and public interests, second, one who supports only their exclusive interests, third, one who supports only their public interests, and lastly, one who does not support any of their interests.

¹⁴ Under FPTP small parties might form a coalition to beat the largest party. Yet, the situation in which three parties remain is very feasible.

¹⁵ Theoretically, the candidates can support the exclusive interests of the loyal voter groups of the other candidates. However, this is very unlikely because the exclusive interests of the loyal voter groups are usually contradictory.

¹⁶ This assumption is too strict. In the real world, voters sometimes vote strategically. For example, if one's most favored candidate has no chance to win, he/she may vote for his/her second favorite instead. There are too many cases of strategic voting to analyze here. To avoid confusion, I assume the voters vote sincerely.

¹⁷ Ideally, voters will choose from the candidates with equal probability, if attributes of the candidates are identical. This is like the probability that a thrown die shows the same number on each face. In practice, a candidate who first reaches voters can win them all, if all the candidates follow the same strategy.

(9) The voters will not abstain.¹⁸

(10) There are no relations of entailment among **a**, **b**, **c** and **f**.

In both games, the dominant strategy for each candidate is to support the exclusive interest of the loyal voters, and the exclusive and the public interests of the floating voters. In Game 5-1, where the floating voters prefer **d**, all the candidates have to support **d** in adopting their dominant strategies, while they cannot in Game 5-2, where the floating voters do not favor **d**. Nash equilibria are the intersections of the dominant strategies: the intersection of **ab'c'fd**, **a'bc'fd** and **a'b'cfd** in Game 5-1 and that of **ab'c'fd'**, **a'bc'fd'** and **a'b'cfd'** in Game 5-2, where **L_a**, **O_b** and **O_c** gain $\mathbf{A+F/3}$, $\mathbf{B+F/3}$, and $\mathbf{C+F/3}$, respectively.¹⁹ Then, the only winner is **L_a**, the LDP candidate, because $\mathbf{A+F/3}$ is larger than either $\mathbf{B+F/3}$ or $\mathbf{C+F/3}$, i.e., **A** is larger than either **B** or **C**.

Although adopting the dominant strategy is the best course for the LDP candidate, he/she may win by adopting any of the sub-dominant strategies—the dark areas in Games 5-1 and 5-2—because **A** is often larger than either $\mathbf{B+F/2}$ or $\mathbf{C+F/2}$. This might be more likely in the real election than in the games above because more candidates would run to obtain a share of **F**. If

¹⁸ This condition may be too strict. Yet, to avoid complexity I put this assumption.

¹⁹ As mentioned, the prime mark ['] adds negative meaning to the original marks. For example, **a'** is **not-a**. The strategies are named after the combinations of interests the candidates may support. For example, **ab'c'fd** is the strategy to support **a**, **f** and **d** but not **b** and **c**.

there are n candidates and all of them adopt their dominant strategies except the LDP candidate, the share of F for each candidate from the opposition parties will be $F/(n-1)$. The larger n , the smaller $F/(n-1)$. n in the real election could be more than three, although it could be smaller than three as well; the share for each of the candidates from the opposition parties in the real election could be smaller than the share when n is three, as assumed in Games 5-1 and 5-2. Thus, the chance for the LDP candidate to win by adopting a sub-dominant strategy will be higher than in these games.²⁰ This suggests that the LDP candidate can adopt the strategies that champion defense expansion d — $ab'c'f'd$ in Game 5-1 and $ab'c'fd$ or $ab'c'f'd$ in Game 5-2— as long as he/she supports the exclusive interest of the LDP loyal voters, regardless of the voters' preferences about d . This situation is very different from that under SNTV with MMD where the LDP candidates can champion defense expansion only when the floating voters prefer it, and the candidates can afford to support the exclusive interests of both the LDP loyal voters and the floating voters.

Furthermore, as discussed above, the LDP supporters would vote for the LDP candidate, even if he/she does not explicitly champion their exclusive interests, thinking that increasing the number of LDP seats would be better than otherwise, since the opposition parties do not support their exclusive interests and ideology. That is, supporting a for the LDP candidate

²⁰ If, as Duverger argues (1963), FPTP favors the two-party system, the chance for the LDP candidate to win by adopting a sub-dominant strategy will be lower than in the games because the opposition candidate would take all F .

would simply mean belonging to the LDP. This suggests that the LDP candidate might be able to spend all his/her energy for public interests without losing.

Game 5-1: Strategies under FPTP
(When Floating Voters Prefer Defense Expansion)

0c		a'b'c'fd				0c		a'b'c'fd'			
La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'	La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'		
ab'c'fd	A:F/3 B:F/3 C:F/3	A:F/2 B C:F/2	A:F/2 B C:F/2	A:F/2 B C:F/2	ab'c'fd	A:F/2 B+F/2 C	A+F B C	A+F B C	A+F B C		
ab'c'fd'	A B:F/2 C:F/2	A B C+F	A B C+F	A B C+F	ab'c'fd'	A B+F C	A+F/3 B+F/3 C+F/3	A+F/2 B C+F/2	A+F/2 B C+F/2		
ab'c'fd	A B:F/2 C:F/2	A B C+F	A B C+F	A B C+F	ab'c'fd	A B+F C	A B+F/2 C+F/2	A B C+F	A B C+F		
ab'c'fd'	A B:F/2 C:F/2	A B C+F	A B C+F	A B C+F	ab'c'fd'	A B+F C	A B+F/2 C+F/2	A B C+F	A B C+F		
0c		a'b'c'fd				0c		a'b'c'fd'			
La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'	La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'		
ab'c'fd	A:F/2 B:F/2 C	A+F B C	A+F B C	A+F B C	ab'c'fd	A:F/2 B+F/2 C	A+F B C	A+F B C	A+F B C		
ab'c'fd'	A B+F C	A+F/2 B+F/2 C	A+F B C	A+F B C	ab'c'fd'	A B+F C	A+F/2 B+F/2 C	A+F B C	A+F B C		
ab'c'fd	A B+F C	A B+F Z: C	A+F/3 B+F/3 C+F/3	A+F/2 B C+F/2	ab'c'fd	A B+F C	A B+F C	A+F/2 B+F/2 C	A+F B C		
ab'c'fd'	A B+F C	A B+F C	A B+F/2 C+F/2	A B C+F	ab'c'fd'	A B+F C	A B+F C	A B+F C	A+F/3 B+F/3 C+F/3		

Note: This game holds when **F** prefers **d** to **d'** regardless of the preference of the other voters about **d**.

The prime mark ['] adds negative meaning to the original marks. For example, **a'** is **not-a**.

The strategies are named after the combinations of interests the candidates may support. For example, **ab'c'fd** is the strategy to support **a**, **f** and **d** but not **b** and **c**.

Game 5-2: Strategies under FPTP
 (When Floating Voters Do not Prefer Defense Expansion)

Oc		a'b'c'fd				Oc		a'b'c'fd'			
La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'	La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'		
ab'c'fd	A+F/3 B+F/3 C+F/3	A B+F C	A+F/2 B C+F/2	A+F/2 B C+F/2	ab'c'fd	A B C+F	A B+F/2 C+F/2	A B C+F	A B C+F		
ab'c'fd'	A+F B C	A+F/2 B+F/2 C	A+F B C	A+F B C	ab'c'fd'	A+F/2 B C+F/2	A+F/3 B+F/3 C+F/3	A+F/2 B C+F/2	A+F/2 B C+F/2		
ab'c'fd	A B+F/2 C+F/2	A B+F C	A B C+F	A B C+F	ab'c'fd	A B C+F	A B+F/2 C+F/2	A B C+F	A B C+F		
ab'c'fd'	A B+F/2 C+F/2	A B+F C	A B C+F	A B C+F	ab'c'fd'	A B C+F	A B+F/2 C+F/2	A B C+F	A B C+F		
Oc		a'b'c'fd				Oc		a'b'c'fd'			
La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'	La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'		
ab'c'fd	A+F/2 B+F/2 C	A B+F C	A+F B C	A+F B C	ab'c'fd	A+F/2 B+F/2 C	A B+F C	A+F B C	A+F B C		
ab'c'fd'	A+F B C	A+F/2 B+F/2 C	A+F B C	A+F B C	ab'c'fd'	A+F B C	A+F/2 B+F/2 C	A+F B C	A+F B C		
ab'c'fd	A B+F C	A B+F C	A+F/3 B+F/3 C+F/3	A B+F C	ab'c'fd	A B+F C	A B+F C	A B C+F	A B+F/2 C+F/2		
ab'c'fd'	A B+F C	A B+F C	A+F B C	A+F/2 B+F/2 C	ab'c'fd'	A B+F C	A B+F C	A+F/2 B C+F/2	A+F/3 B+F/3 C+F/3		

Note: This game holds when **F** prefers **d'** to **d** regardless of the preference of the other voters about **d**.

Block Vote

The block vote system is FPTP used in a MMD with each voter having one vote for each seat that is to be filled. This system would produce almost the same struggles among candidates and give LDP candidates the same policy

options as FPTP. That is, LDP candidates can work for defense expansion without fear of losing an election.

Under the block vote system, the LDP and the opposition parties would field candidates according to the magnitude of each district. However, the candidates from the same party do not need to compete with one another because gaining votes from their loyal voters, who have as many ballots as the candidates, does not prevent their colleagues from receiving the support of the same group. If a voter casts one vote for his/her favorite candidate from one party and his/her other ballots for the candidates from other parties, the other parties might gain enough seats to disturb the activities of the party to which his/her favorite candidate belongs. Therefore, the voters would always vote for candidates from the same party. A good example that expresses voters' behavior of this kind is the result of an election held in a district for the Greater London Council in 1970, shown in Table 5-1. All the candidates from the Conservatives, who have more loyal voters than the other parties, won, gaining almost the same number of votes. In Japan, all the LDP candidates would win, because the LDP loyal supporters are larger in general than those for either of the opposition parties.

In order to beat the LDP candidates, the candidates from the opposition parties have to absorb floating voters by supporting the voters' exclusive and public interests. Yet, if all the opposition parties adopt the same strategy, they have to share the floating votes, as they do under FPTP. As a result, the candidates from the opposition parties are hardly likely to beat the LDP candidates. Since the LDP candidates do not need to worry about the floating

voters, they can promote any public goods they wish, as long as they support the exclusive interests of their loyal voters. Some of the LDP candidates might be able to devote themselves entirely to public interests, because as long as one of them supports the exclusive interests of the loyal voters, the voters would vote for the other candidates from the LDP, too. If one of the LDP candidates supports the exclusive and the public interests of the floating voters, the other LDP candidates might also gain the floating votes without supporting their interests. Furthermore, all the LDP candidates might win just by belonging to the LDP as discussed in the analysis of FPTP.

Table 5-1: Electoral Results under Block Vote
(Waltham Forest, 1970, Greater London Council)

	Conservative Candidates: C1, C2, C3	Labour Candidates: A1, A2, A3	Liberal Candidates: I1, I2, I3
Votes	C1: 31190	A1: 28847	I1: 2472
	C2: 30833	A2: 28645	I2: 2433
	C3: 30780	A3: 28207	I3: 2117
Total	92803	85699	7042
Seats	3	0	0

Source: Lakeman (1974, p. 38)

Games 5-1 and 5-2 describe the struggles among the candidates under the block vote system as well. Suppose there are three parties L_a , O_b and O_c , i.e., the LDP and two opposition parties, and each party fields plural candidates. The votes each party can gain are exactly same as the votes each candidate from L_a , O_b and O_c can gain. Whatever policy options the candidates from L_a choose, they would win because the state of affairs $A > B + F/2$ or $C + F/2$ —more generally $A > B + F/(n-1)$ or $C + F/(n-1)$, when n

parties field candidates—is very likely.²¹ That is, the candidates from the LDP can support defense expansion **d** even if the loyal supporters and the floating voters do not prefer it. Furthermore, if one of the LDP candidates adopts the dominant strategy, **ab'c'fd** in Game 5-1 and **ab'c'fd** in Game 5-2, then the other LDP candidates might gain $\frac{A+F}{3}$, the maximum number of votes, through adopting the sub-dominant strategies that champion **d**. Here again, the exclusive interest of the loyal voters may not necessarily consist of their substantial interests, but belonging to the LDP could be sufficient. That is, the LDP candidates would be able to work for **d** even more easily under the block vote system than under FPTP.

Double Ballot

The double ballot system would provide LDP candidates with fewer policy options than FPTP and the block vote but with a greater possibility to support public interests than SNTV under MMD.

The struggles among candidates under the double ballot system would be very close to those under FPTP. The only difference is that if any candidate cannot gain more than half the votes at the first ballot, then the candidates who gained the necessary votes for running in the second ballot have to compete again. The one who then gains most votes will be the winner.

Recall the argument in the analysis of FPTP. The LDP candidate might gain more votes than that of any opposition party regardless of his/her

²¹ The opposition parties may form a coalition to beat the LDP candidates in the long run, as discussed.

strategy, since the loyal votes for the LDP might be larger than the votes for any of the opposition parties. Consequently, the LDP candidate can champion **d** even if the voters do not prefer it. This would also be true under the double ballot system, if the LDP loyal voters are more than half the total voters. Games 5-1 and 5-2 depict the first ballot under the double ballot system. If $A > B + C + F$, then the LDP candidates can win through taking any of the policy options. However, the number of the LDP loyal voters in most districts may not be more than half.²² Therefore, we have to analyze the situation where the LDP candidate cannot win on the first ballot.

When the LDP loyal supporters are less than half the total voters, there are two possible situations. The first situation is when the LDP loyal supporters plus the floating voters that the LDP candidate can gain by adopting the dominant strategy are over half the total votes, i.e., when $A > B + C + F/3$ ²³ in Games 5-1 and 5-2. Under this situation the candidate might choose the dominant strategy because he/she can avoid an unnecessary second ballot, although he/she might win in the second ballot. If the dominant strategy is to support **d**, then the LDP candidate would support it. Yet, he/she cannot do so when there is a resource allocation problem among the interests he/she has to support. On the other hand, if the dominant strategy does not include supporting **d**, then the candidate cannot support it. This situation is exactly same as that under SNTV and MMD.

²² The LDP obtained aggregately over 40% of votes but less than 50% in every election for the House of Representatives. This suggests that the LDP supporters are not more than half voters in all the districts. See the electoral results of each election.

²³ The original expression is $A + F/3 > B + C + 2(F/3)$.

The other feasible situation is that the LDP loyal supporters plus the floating voters that the LDP candidate can gain are less than half the total votes, i.e., when $A < B + C + F / 3$.²⁴ Under this situation, the LDP candidate and the other candidates who gained the necessary votes for the second ballot have to compete with one another again. The features of the second ballot will be as follows. First, the voters for the losers in the first ballot will vote according to how much the remaining candidates can satisfy them. Second, those who voted for the winners in the first ballot would also vote for the same candidates at the second ballot.²⁵ Third, since the loyal voters for the LDP are larger than the other loyal voters of the other parties, the possibility that the LDP candidate can beat the other candidates is higher than the opposite even if he/she does not adopt the dominant strategy. That is, the results under the second ballot would be same as those under FPTP.

Games 5-3 and 5-4 illustrate the second ballot more clearly. Suppose there are three candidates, the loyal voters and the floating voters, as in Games 5-1 and 5-2. On the first ballot, Candidate O_c lost since he/she could not gain the necessary votes to run in the second ballot. Therefore, C , the loyal voters for O_c , and a part of the floating voters who voted for O_c on the first ballot would vote for either L_a or O_b on the second ballot, according to their preferences. As assumed in all the games, exclusive interests are more important than public interests for all voters. L_a and O_b would attempt to include C 's exclusive interest within a and b as much as a and b allow in

²⁴ The original expression is $A + F / 3 < B + C + 2(F / 3)$.

²⁵ The voters may vote strategically in the real world. However, they are assumed to vote sincerely here to avoid complexity.

order to attract **C**. Hence, the choice between **a** and **b** will be a more important issue for **C** than that between **d** and **d'**. Then, there would be four possible preference orders for **C**: **ad>ad'>bd>bd'**, **ad'>ad>bd'>bd**, **bd>bd'>ad>ad'**, **bd'>bd>ad'>ad**. For **F**, the floating voters, **f** or **f'** is more important than **d** or **d'** so that they have two possible preference orders: **fd>fd'>f'd>f'd'**, **fd'>fd>f'd'>f'd**. In order to know the results of the second ballot, we should analyze all the games where Voters **A** and **B** vote for **La** and **Ob**, respectively, and **C** and **F** vote for either of the candidates according to their possible preferences.

Game 5-3 depicts the game when **F** prefers **d** to **d'** and **C** prefers **a** to **b** regardless of **C**'s preference about **d**. In this game, the dominant strategies for **La** and **Ob** are **ab'c'fd** and **a'bc'fd**, respectively, both of which include **d** so that both candidates have to support **d**, although **La** will be the only winner. However, if **A+C>B+F**, then **La** does not need to adopt the dominant strategy for winning. This implies that **La** can champion **d** in this game, even if there is a resource allocation problem among the interests that **La** has to support.

Game 5-4 is the game when **F** favors **d'** over **d** while the other conditions are same as those in Game 5-3. Here, the dominant strategies are **ab'c'fd'** for **La** and **a'bc'fd'** for **Ob**, neither of which includes **d**, so that candidates cannot support **d**. Again, however, if **A+C>B+F**, then **La** can adopt any of the sub-dominant strategies for winning, which may include championing **d**.

Game 5-3: Strategies under Double Ballot
(When $a > b$ for C and $d > d'$ for F)

$La \setminus Ob$	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'
ab'c'fd	$A+C+F/2$ $B-F/2$	$A+C+F$ B	$A+C+F$ B	$A+C+F$ B
ab'c'fd'	$A+C$ $B+F$	$A+C+F/2$ $B+F/2$	$A+C+F$ B	$A+C+F$ B
ab'c'fd	$A+C$ $B+F$	$A+C$ $B+F$	$A+C+F/2$ $B+F/2$	$A+C+F$ B
ab'c'fd'	$A+C$ $B+F$	$A+C$ $B+F$	$A+C$ $B+F$	$A+C+F/2$ $B+F/2$

Note: $C: a > b, F: d > d'$

Game 5-4: Strategies under Double Ballot
(When $a > b$ for C and $d < d'$ for F)

$La \setminus Ob$	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'
ab'c'fd	$A+C+F/2$ $B+F/2$	$A+C$ $B-F$	$A+C+F$ B	$A+C+F$ B
ab'c'fd'	$A+C+F$ B	$A+C+F/2$ $B-F/2$	$A+C+F$ B	$A+C+F$ B
ab'c'fd	$A+C$ $B+F$	$A+C$ $B-F$	$A+C+F/2$ $B+F/2$	$A+C$ $B-F$
ab'c'fd'	$A+C$ $B+F$	$A+C$ $B-F$	$A+C+F$ B	$A+C+F/2$ $B+F/2$

Note: $C: a > b, F: d < d'$

A question is: how likely is $A+C > B+F$? Although there is no fixed answer for this question, $A+C > B+F$ is more feasible than $A+C < B+F$. First, $A > B$ so that if $C \geq F$, then $A+C > B+F$ holds. Even if $C < F$, the possibility of $A+C > B+F$ still remains.²⁶ Second, $C \geq F$ is more feasible than $C < F$ because F must often be shared by other candidates when there are more than two candidates in the

²⁶ Of course, the possibility of $A+C \geq B+F$ also remains.

second ballot.²⁷ In Games 5-3 and 5-4, **O_b** can gain all **F** if **L_a** does not adopt his/her dominant strategy because the candidates at the second ballot are only **L_a** and **O_b**. However, when there are candidates besides **L_a** and **O_b**, **O_b** has to share **F** with the others who would adopt their dominant strategies, even if **L_a** does not adopt his/her dominant strategy. That is, the votes that **O_b** can gain will be $\frac{B+F}{(n-1)}$, where **n** is the number of candidates in the second ballot. The most likely situation, therefore, is $A+C > \frac{B+F}{(n-1)}$, by which **L_a** can win through adopting any of the sub-dominant strategies so that supporting **d** would be possible regardless of voters' preferences.

Games 5-5 and 5-6, which illustrate the struggles between **L_a** and **O_b** when **C** favors **b** over **a**, produce different results from those of the previous games.

In Game 5-5, where **F** prefers **d** to **d'**, **L_a** and **O_b** have to support **d** because their dominant strategies contain **d**. Here, if $\frac{A+F}{2} > \frac{B+C+F}{2}$, i.e., $A > B+C$, holds, then **L_a** will win by supporting **d**. However, if there is a resource allocation problem among the interests, the candidate may not champion **d** because **A** that **L_a** can gain by adopting a sub-dominant strategy is smaller than $B+C+F$ that **O_b** can gain by adopting his/her dominant strategy. On the other hand, if $A < B+C$, **O_b** can win by supporting **d**. Moreover, if $A+F < B+C$, **O_b** can win by supporting **d** even when there is a resource allocation problem. Although in this case the LDP candidate would not be a

²⁷ Here again the candidates from the opposition parties might in the long run form a coalition to beat the LDP candidate.

winner, promoting **d** is possible if the candidate from the opposition party wants to do so.

Game 5-5: Strategies under Double Ballot
(When $a < b$ for **C** and $d > d'$ for **F**)

L_a \ O_b	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'
ab'c'fd	H: $A+F/2$ V: $B+C+F/2$	H: $A+F$ V: $B+C$	H: $A+F$ V: $B+C$	H: $A+F$ V: $B+C$
ab'c'fd'	H: A V: $B+C+F$	H: $A+F/2$ V: $B+C+F/2$	H: $A+F$ V: $B+C$	H: $A+F$ V: $B+C$
ab'c'fd	H: A V: $B+C+F$	H: A V: $B+C+F$	H: $A+F/2$ V: $B+C+F/2$	H: $A+F$ V: $B+C$
ab'c'fd'	H: A V: $B+C+F$	H: A V: $B+C+F$	H: A V: $B+C+F$	H: $A+F/2$ V: $B+C+F/2$

Note: **C**: $a < b$, **F**: $d > d'$

In Game 5-6, where **F** favors **d'** over **d**, if $A+F/2 > B+C+F/2$, i.e., $A > B+C$, then **L_a** can win by adopting the dominant strategy. However, **L_a** cannot support **d** because **L_a**'s dominant strategy does not include **d**. If he/she adopts a sub-dominant strategy, then **L_a** will necessarily lose because he/she can gain only **A** while **O_b** can gain $B+C+F$ by adopting **O_b**'s dominant strategy. If $A+F/2 < B+C+F/2$, i. e., $A < B+C$, **O_b** will be a winner if **O_b** adopts the dominant strategy, which does not champion **d**. Yet, **O_b** may be able to support **d** if he/she wants to do so and $A+F < B+C$.

In the games, it is important to examine the likelihood of $A+F < B+C$. Although there is no fixed answer, $A+F < B+C$ is as likely as $A+F > B+C$, because the difference between **A** and **B** might be offset by the difference between **C** and **F**. Moreover, when **n** candidates run in the second ballot, the chance for **O_b** to win is higher than when the only two candidates run, because $A+F / (n -$

1) $B+C$ is likelier than $A+F < B+C$. In any case, the possibility that O_b wins by supporting d remains.

Game 5-6: Strategies under Double Ballot
(When $a < b$ for C and $d < d'$ for F)

$L_a \backslash O_b$	$a'bc'd$	$a'bc'd'$	$a'bc'fd$	$a'bc'fd'$
$ab'c'fd$	H: $A+F/2$ V: $B+C+F/2$	H: A V: $B+C+F$	H: $A+F$ V: $B+C$	H: $A+F$ V: $B+C$
$ab'c'fd'$	H: $A+F$ V: $B+C$	H: $A+F/2$ V: $B+C+F/2$	H: $A+F$ V: $B+C$	H: $A+F$ V: $B+C$
$ab'c'fd$	H: A V: $B+C+F$	H: A V: $B+C+F$	H: $A+F/2$ V: $B+C+F/2$	H: A V: $B+C+F$
$ab'c'fd'$	H: A V: $B+C+F$	H: A V: $B+C+F$	H: $A+F$ V: $B+C$	H: $A+F/2$ V: $B+C+F/2$

Note: $C: a < b, F: d < d'$

In sum, the double ballot system can produce many different outcomes and imposes stricter conditions for candidates to promote defense expansion than do FPTP and the block vote system. However, there is a larger possibility for the candidates to support defense expansion than under SNTV and MMD.

Alternative Vote

The alternative vote system would produce the same results as the double ballot because of similarities in the basic features of the two systems. The only substantial difference is that under the alternative vote system, the voters indicate on their original and only ballot paper for whom they would vote if their preferred candidates lose. That is, the voters cast their second ballot at the same time as their first. If anyone gains a clear majority of the

votes as the most favored, then he/she is elected. If, however, nobody has a clear majority, the votes for the candidate who is lowest on the poll are transferred to whichever of the remaining candidates the voters have marked as their next preference. This process is exactly same as that of the second ballot system, unless they are strategic.²⁸ As discussed above, under the second ballot system the possibility remains that a candidate can win by supporting public interests even if the dominant strategy does not include this policy and a resource allocation problem exists among voters' interests. This would also be true under the alternative vote system. That is, the alternative vote system can provide the candidates with more policy options, thus a greater possibility of supporting defense expansion, than SNTV under MMD.

Proportional Systems

Single Transferable Voting

The difference between STV and SNTV under MMD as a system is small, but the results they produce would be very different. Under both systems political parties have to field plural candidates in districts with multiple winners in order to occupy a majority in the national assembly. The difference is that each voter under STV indicates his/her second (and third)

²⁸ Since there would be so many strategies for voters, I shall not discuss the results of strategic voting. The possibility of strategic voting may weaken my argument.

as well as first favorite candidate, who can receive his/her votes when the first choice gains more than the necessary votes to win or polls last among all the candidates, while a voter under SNTV casts only one ballot for his/her favorite candidate, which can be never transferred to other candidates. The transferability of votes under STV can reduce the fury of the struggles among the candidates running from the same party in the same district so that LDP candidates would have more policy options than those under SNTV with MMD. That is, supporting defense expansion is more likely under STV than under SNTV with MMD.

Under STV, the struggles among LDP candidates to gain first-place votes might resemble those under SNTV with MMD. The LDP would field plural candidates in one district if the sum of LDP loyal voters and floating voters sympathetic to the LDP is large enough to give all the candidates more than enough votes for victory.²⁹ The voters under STV would prefer candidates according to how much they can satisfy their interests so that candidates would support both the exclusive and public interests of the voters, i.e., the dominant strategy that maximizes votes. If all the candidates adopt the dominant strategy, then they may become winners by almost equally sharing the LDP votes. This game could be just an equivalent of the games under SNTV with MMD.

However, under STV, not all the LDP candidates may need to adopt the dominant strategy. The LDP voters would indicate other LDP candidate as their second preference because the more LDP seats in the Diet, the greater the

²⁹ This is the assumption for every game.

possibility of realization of the LDP voters' interests. This voting behavior is same as that under the block vote system, where voters cast all their ballots for the candidates running from the same party, as discussed previously. In this situation, even if one candidate could not gain a winning quota from the first preferences, he/she can absorb votes from other LDP candidates who have already received enough votes. Then, the transferred votes combined with the original votes for the candidate not adopting the dominant strategy would become large enough to make him/her a winner. Moreover, even if all the candidates adopt sub-dominant strategies, all of them can win because whatever their strategies they can optimally arrange the LDP votes to secure the best outcome. This implies that the candidates can support defense expansion even if there is a resource allocation problem among the interests of the voters and even if no LDP voter prefers the policy.

Games 5-7 and 5-8 express the struggles between two LDP candidates in one district under STV. In the games, L_a and L_b are the LDP candidates and A and B are their loyal voters, respectively. F is a set of the floating voters sympathetic to the LDP. a , b and f represent the exclusive interests of A , B and F , respectively, while d is defense expansion. The winning quota is $A+F/2$ or $B+F/2$. The dominant strategy for both candidates in the games is to support the exclusive interest of the loyal voters and the exclusive and the public interests of the LDP floating voters. An equilibrium in Game 5-7 is the intersection between $ab'fd$ and $a'bfd$, where both candidates support d . An equilibrium in Game 5-8 is the intersection between $ab'fd'$ and $a'bfd'$, where none of them supports d . However, both candidates do not need to adopt the

dominant strategies. If L_b adopts the dominant strategy and L_a adopts either of the sub-dominant strategies, L_a can gain only A while L_b can gain $B+F$ for the first run. Yet, $F/2$ would be transferred from L_b to L_a to make L_a a winner (the votes in parentheses will be transferred in the games), because $B+F/2$ is enough for L_b to be a winner. If L_a adopts the dominant strategy and L_b does not, then the excess votes for L_a would be transferred to L_b to make L_b a winner, too. If both of them do not adopt the dominant strategy, then they can either equally share the votes or the votes of the one who gains more can be transferred to the other. That is, both of them can win by adopting any strategies (all the gray areas are combinations of the winning strategies in the games).

Game 5-7: Strategies under STV
(When Floating Voters Prefer Defense Expansion)

$L_a \backslash L_b$	a'bfd	a'bfd'	a'bfd	a'bfd'
a'bfd	$A+F/2$ $B+F/2$	$A-F-(F/2)$ $B+(F/2)$	$A-F-(F/2)$ $B+(F/2)$	$A-F-(F/2)$ $B+(F/2)$
a'bfd'	$A-(F/2)$ $B+F-(F/2)$	$A-F/2$ $B+F/2$	$A-F-(F/2)$ $B+(F/2)$	$A-F-(F/2)$ $B+(F/2)$
a'bfd	$A+(F/2)$ $B+F-(F/2)$	$A+(F/2)$ $B+F-(F/2)$	$A+F/2$ $B+F/2$	$A-F-(F/2)$ $B+(F/2)$
a'bfd'	$A-(F/2)$ $B+F-(F/2)$	$A-(F/2)$ $B+F-(F/2)$	$A-(F/2)$ $B+F-(F/2)$	$A+F/2$ $B+F/2$

Note: This game holds when $F: d > d'$
The votes in parentheses will be transferred.

Game 5-8: Strategies under STV
 (When Floating Voters Do not Prefer Defense
 Expansion)

La\Lb	a'bfd	a'bfd'	a'bf'd	a'bf'd'
ab'fd	R+F/2 B+F/2	R+(F/2) B+F-(F/2)	R+F-(F/2) B+(F/2)	R+F-(F/2) B+(F/2)
ab'fd'	R+F-(F/2) B+(F/2)	R+F/2 B+F/2	R+F-(F/2) B+(F/2)	R+F-(F/2) B+(F/2)
ab'f'd	R+(F/2) B+F-(F/2)	R+(F/2) B+F-(F/2)	R+F/2 B+F/2	R+(F/2) B+F-(F/2)
ab'f'd'	R+(F/2) B+F-(F/2)	R+(F/2) B+F-(F/2)	R+F-(F/2) B+(F/2)	R+F/2 B+F/2

Note: This game holds when $F: d < d'$
 The votes in parentheses will be transferred.

To summarize, as long as the LDP loyal voters and LDP sympathizers indicate two (or more) LDP candidates as their first and second (and third...) favorite candidates, the candidates can adopt any policy including d , even if there exists a resource allocation problem among the voters' interests.

Party List Proportional Representation

The party list PR system would supply fewer options to the candidates than the other electoral systems examined above. Under the subsystem which has only one huge national constituency³⁰—I will call this "the large constituency PR" —the parties (or the candidates) have to be sensitive toward the public interests of the voters so that all parties must champion the public interests voters prefer but cannot support those the voters oppose. On

³⁰ This system is used in, for example, Israel, the Netherlands and Japan for the House of Councilors.

the other hand, under the subsystem which has small local constituencies³¹—
—I will call this "the small constituency PR" —the parties (or the candidates) have to take care of the exclusive interests of the voters to maximize the number of winners. The parties (or the candidates) have to behave as if they were fighting under SNTV and MMD.

Under the large constituency PR, the number of voters is too large for the parties to take care of their various exclusive interests so that the parties instead base competition on public interests held by the various kinds of voter. If the voters favor some public interest, then the parties have to support it. If not, the parties cannot support it. On the other hand, under the small constituency PR, the parties can more easily take care of the voters' exclusive interests because variation among interest groups is more limited in these smaller areas.³² Consequently, the parties tend to support the exclusive interests of the voters when there is a resource allocation problem among the interests they are required to support to maximize their number of seats.

Another important factor that may affect the strategies of candidates under the Party List PR system is who determines the winners in each party's list.

³¹ This system is used in, for example, Germany, Sweden and the newly adopted party list PR constituencies for the House of Representatives of Japan.

³² If the number of local constituencies is small (such as two or three), the effects the system creates would be close to those the large constituency would produce.

There are roughly two different systems that determine winners from the party lists.³³ The closed list system does not give the voters any personal choice within the party list.³⁴ In any given electoral district, each party nominates as many candidates as seats to be filled. The party indicates the way it ranks the candidates to be elected, by the order of their names on the ballot. According to the number of votes the party gains, the candidates are declared elected in this order. The voters cannot influence the order. On the other hand, the open list system gives the voters a choice among the candidates.³⁵ Each voter can vote for his/her favorite party and/or candidates in the party. The votes that each candidate gains personally can change the order of winners. That is, voters' preferences may determine which candidates are elected from each party's list. In the first system, there is no personal struggle among the candidates from the same party in order to gain votes because it is the party that determines the order of the list. If there is no personal struggle among the candidates to gain votes, they do not need to support the exclusive interests of the voters. The candidates have relatively substantial policy options, as under FPTP. However, there may be personal struggles in the second system, which drive the candidates to cling to the exclusive interests of the voters. We can imagine that the candidates under the open list system cannot easily support the public interests of the voters.

³³ To be precise, there are other forms, such as the flexible list used in Belgium and the free list system used in Luxembourg and Switzerland, which are somewhat complicated. To avoid confusion, I deal with the two typical forms—the closed list and the open list systems.

³⁴ Examples include Israel and Japan.

³⁵ Examples include Finland.

Now, we have four possible combinations of party list PR systems: the large constituency PR with a closed list, the small constituency PR with a closed list, the large constituency PR with an open list, and the small constituency PR with an open list. Yet, neither the closed list nor open list actually makes a difference for the parties (or the candidates) in adopting a strategy. As I shall discuss below, under both systems the parties have to maximize their votes in order to maximize their number of seats, unlike FPTP and the block vote system where maximizing votes is not required to reach the best outcome. That is, the parties or the candidates always have to adopt their dominant strategies under the party list PR systems. The following discussion analyzes the policy options for the four different combinations present to the parties.

Under the first combination—the large constituency PR with a closed list—the preferences of floating voters about a public interest would determine whether Dietmembers work for it. Under this system, struggles occur among the parties because voters vote for parties, not candidates. Games 5-9 and 5-10 illustrate the struggles among three parties, with payoff structures exactly the same as under FPTP. Since it is hard to support the various exclusive interests of the voters under one national constituency, supporting **f**—the exclusive interest of the floating voters—may not be an available option. That is, only the gray areas are available in these games. Moreover, the meaning of supporting **a**, **b** and **c** in the games will be supporting the largest number of common interests of loyal voters of each party. Thus, the dominant strategies for the parties are supporting the

common interests of their loyal voters and the public interests of the floating voters. Nash equilibria are the intersection among $\mathbf{ab'c'fd}$, $\mathbf{a'bc'fd}$ and $\mathbf{a'b'cfd}$ in Game 5-9 where the floating voters prefer \mathbf{d} and that among $\mathbf{ab'c'fd}$, $\mathbf{a'bc'fd}$ and $\mathbf{a'b'cfd}$ in Game 5-10 where the floating voters do not prefer \mathbf{d} . In both games, the parties cannot adopt a sub-dominant strategy, because the payoffs gained from a sub-dominant strategy, \mathbf{A} for $\mathbf{L_a}$ for example—which is smaller by $\mathbf{F/3}$ than the payoff to be gained from the dominant strategy—surely reduces the number of seats the parties could gain. In short, all the parties have to support \mathbf{d} if the floating voters prefer it, otherwise they cannot. If there is a resource allocation problem among the interests, all the parties cancel supporting \mathbf{d} in Game 5-9. However, if the loyal voters support defense expansion, the parties can still support \mathbf{d} . This is feasible because \mathbf{a} , \mathbf{b} and \mathbf{c} are the most common, thus, a public interest of the loyal voters.

Under the combination of the small constituency PR with a closed list, the struggles among the parties would be a little different from those under the first one, because supporting the exclusive interest of the floating voters may be feasible. In other words, all the areas are available in Games 5-9 and 5-10. Therefore, the dominant strategy for each party is supporting the exclusive interest of its loyal voters and the exclusive and public interests of the floating voters. A Nash equilibrium in Game 5-9, where the floating voters prefer \mathbf{d} , is the intersection among $\mathbf{ab'c'fd}$, $\mathbf{a'bc'fd}$ and $\mathbf{a'b'cfd}$, which means that all the parties support \mathbf{d} if there is no resource allocation problem. If there is a

resource allocation problem, neither party would support the policy. Under FPTP, which has the same payoff structure, the largest party L_a (the LDP),

Game 5-9: Strategies under Party List PR with Closed List
(When Floating Voters Prefer Defense Expansion)

O_c	$a'b'c'd$				O_c	$a'b'c'd'$			
$L_a \setminus O_b$	$a'b'c'd$	$a'bc'fd'$	$a'bc'fd$	$a'bc'fd'$	$L_a \setminus O_b$	$a'b'c'd$	$a'bc'fd'$	$a'bc'fd$	$a'bc'fd'$
$ab'c'fd$	$A+F/3$ $B+F/3$ $C+F/3$	$A+F/2$ B $C+F/2$	$A+F/2$ B $C+F/2$	$A+F/2$ B $C+F/2$	$ab'c'fd$	$A+F/2$ $B+F/2$ $Z: C$	$A+F$ B C	$A+F$ B C	$A+F$ B C
$ab'c'fd'$	A $B+F/2$ $C+F/2$	A B $C+F$	A B $C+F$	A B $C+F$	$ab'c'fd'$	A $B+F$ C	$A+F/3$ $B+F/3$ $C+F/3$	$A+F/2$ B $C+F/2$	$A+F/2$ B $C+F/2$
$ab'c'fd$	A $B+F/2$ $C+F/2$	A B $C+F$	A B $C+F$	A B $C+F$	$ab'c'fd$	A $B+F$ C	A $B+F/2$ $C+F/2$	A B $C+F$	A B $C+F$
$ab'c'fd'$	A $B+F/2$ $C+F/2$	A B $C+F$	A B $C+F$	A B $C+F$	$ab'c'fd'$	A $B+F$ C	A $B+F/2$ $C+F/2$	A B $C+F$	A B $C+F$
O_c	$a'b'c'd$				O_c	$a'b'c'd'$			
$L_a \setminus O_b$	$a'b'c'd$	$a'bc'fd'$	$a'bc'fd$	$a'bc'fd'$	$L_a \setminus O_b$	$a'b'c'd$	$a'bc'fd'$	$a'bc'fd$	$a'bc'fd'$
$ab'c'fd$	$A+F/2$ $B+F/2$ C	$A+F$ B C	$A+F$ B C	$A+F$ B $Z: C$	$ab'c'fd$	$A+F/2$ $B+F/2$ C	$A+F$ B C	$A+F$ B C	$A+F$ B C
$ab'c'fd'$	A $B+F$ C	$A+F/2$ $B+F/2$ C	$A+F$ B C	$A+F$ B C	$ab'c'fd'$	A $B+F$ C	$A+F/2$ $B+F/2$ C	$A+F$ B C	$A+F$ B C
$ab'c'fd$	A $B+F$ C	A $B+F$ C	$A+F/3$ $B+F/3$ $C+F/3$	$A+F/2$ B $C+F/2$	$ab'c'fd$	A $B+F$ C	A $B+F$ C	$A+F/2$ $B+F/2$ C	$A+F$ B C
$ab'c'fd'$	A $B+F$ C	A $B+F$ C	A $B+F/2$ $C+F/2$	A B $C+F$	$ab'c'fd'$	A $B+F$ C	A $B+F$ C	A $B+F$ C	$A+F/3$ $B+F/3$ $C+F/3$

Note: This game holds when F prefers d to d' regardless of the preference of the other voters.

could take a sub-dominant strategy because gaining more votes than rival parties is enough for winning. Nonetheless, it cannot do so under the proportional system because adopting a sub-dominant strategy would

necessarily reduce the number of seats it can gain. In Game 5-10, where the floating voters do not prefer **d**, a Nash equilibrium is the intersection of **ab'c'fd'**, **a'bc'fd'** and **a'b'cfd'**, which suggests that promoting **d** is impossible even if the parties want to do so. In short, the small constituency system would produce the same outcome that SNTV under MMD would produce, although there are no personal struggles among the candidates.

Game 5-10: Strategies under Party List PR with Closed List
(When Floating Voters Do not Prefer Defense Expansion)

Oc	a'b'cfd				Oc	a'b'cfd'			
La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'	La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'
ab'c'fd	A+F/3 B+F/3 C+F/3	A B+F C	A+F/2 B C+F/2	A+F/2 B+F C+F/2	ab'c'fd	A B C+F	A B+F/2 C+F/2	A B C+F	A B C+F
ab'c'fd'	A+F B C	A+F/2 B+F/2 C	A+F B C	A+F B C	ab'c'fd'	A+F/2 B C+F/2	A+F/3 B+F/3 C+F/3	A+F/2 B C+F/2	A+F/2 B C+F/2
ab'c'fd	A B+F/2 C+F/2	A B+F C	A B C+F	A B C+F	ab'c'fd	A B C+F	A B+F/2 C+F/2	A B C+F	A B C+F
ab'c'fd'	A B+F/2 C+F/2	A B+F C	A B C+F	A B C+F	ab'c'fd'	A B C+F	A B+F/2 C+F/2	A B C+F	A B C+F
Oc	a'b'cfd				Oc	a'b'cfd'			
La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'	La\Ob	a'bc'fd	a'bc'fd'	a'bc'fd	a'bc'fd'
ab'c'fd	A+F/2 B+F/2 C	A B+F C	A+F B C	A+F B C	ab'c'fd	A+F/2 B+F/2 C	A B+F C	A+F B C	A+F B C
ab'c'fd'	A+F B C	A+F/2 B+F/2 C	A+F B C	A+F B C	ab'c'fd'	A+F B C	A+F/2 B+F/2 C	A+F B C	A+F B C
ab'c'fd	A B+F C	A B+F C	A+F/3 B+F/3 C+F/3	A B+F C	ab'c'fd	A B+F C	A B+F C	A B C+F	A B+F/2 C+F/2
ab'c'fd'	A B+F C	A B+F C	A+F B C	A+F/2 B+F/2 C	ab'c'fd'	A B+F C	A B+F C	A+F/2 B C+F/2	A+F/3 B+F/3 C+F/3

Note: This game holds when **F** prefers **d'** to **d** regardless of the preference of the other voters.

Although the combination of the large constituency PR with an open list system generates personal struggles among candidates from the same parties, candidates have to pay more attention to public interests rather than the exclusive interests of floating voters since it is hard to support the latter in a huge constituency. This boils down to the fact that the candidates can support public interests the floating voters prefer but cannot support those the voters do not.

The struggles among the candidates would be like those of Games 5-11 and 5-12, where there are two LDP candidates, L_a and L_b , each with loyal voters A and B having exclusive interests a and b , respectively.³⁶ The payoff structures in the games are exactly the same as those under SNTV with MMD. This is so because an open list system such as SNTV under MMD requires candidates from the same party to compete with one another, compelling them to adopt strategies that maximize their personal votes. On the other hand, the strategies that the candidates can actually adopt are more limited than under SNTV with MMD—more specifically, they cannot support f because the constituency is too large to do so. That is, only the gray areas are available in these games. Furthermore, the loyal voter group that each candidate can hold in a huge constituency must share relatively large interests rather than small exclusive interests. Then, the dominant strategies for the candidates will be supporting the interests of their loyal voters and the public interests of the floating voters— $ab'f'd$ and $a'b'f'd$ in Game 5-11

³⁶ Of course, there will be more candidates in the real election. However, two-person games are sufficient to express the relations among the candidates.

where the floating voters prefer **d**, and **ab'f'd'** and **a'bf'd'** in Game 5-12 where the floating voters do not favor **d**. This suggests that the candidates have to support **d** if the floating voters support it and that they cannot do so otherwise. When there is a resource allocation problem in Game 5-11, the candidates have to cancel supporting **d**. Yet, they do not need to do so, if their loyal voters prefer defense expansion as their common interest.

Game 5-11: Strategies under Party List PR with Open List
(When Floating Voters Prefer Defense Expansion)

La\Lb	a'bfd	a'bfd'	a'bf'd	a'bf'd'
ab'fd	A+F/2 B+F/2	A+F B	A+F B	A+F B
ab'fd'	A B+F	A+F/2 B+F/2	A+F B	A+F B
ab'f'd	A B+F	A B+F	A+F/2 B+F/2	A+F B
ab'f'd'	A B+F	A B+F	A B+F	A+F/2 B+F/2

Note: This game holds when **F: d > d'**.

Game 5-12: Strategies under Party List PR with Open List
(When Floating Voters Do not Prefer Defense Expansion)

La\Lb	a'bfd	a'bfd'	a'bf'd	a'bf'd'
ab'fd	A+F/2 B+F/2	A B+F	A+F B	A+F B
ab'fd'	A+F B	A+F/2 B+F/2	A+F B	A+F B
ab'f'd	A B+F	A B+F	A+F/2 B+F/2	A B+F
ab'f'd'	A B+F	A B+F	A+F B	A+F/2 B+F/2

Note: This game holds when **F: d < d'**.

Under the small constituency PR with an open list system, the games are equivalent to those under SNTV with MMD. Since candidates from the same party have to compete with one another and the smaller constituencies allow support for the exclusive interests of floating voters, the dominant strategy for every candidate is to support the exclusive interests of his/her loyal voter group and both the exclusive and public interests of the floating voters. Then, if the floating voters favor some public interests and there is no resource allocation problem, supporting these public interests is possible. Otherwise, public interests are hard for the candidates to support.

Under this system, all the areas that are available are shown in Games 5-11 and 5-12. In Game 5-11, where the floating voters prefer **d**, a Nash equilibrium is the intersection of the dominant strategies, **ab'fd** and **a'bfd**, for **L_a** and **L_b**, respectively. This implies that the candidates have to support **d** if they want to win. Yet, when a resource allocation problem occurs among the interests the candidates have to support, their dominant strategies will move to **ab'fd'** and **a'bfd'**, respectively, by which neither candidate can champion **d**. In Game 5-12, where the floating voters do not favor **d**, the dominant strategies, **ab'fd'** and **a'bfd'**, create a Nash equilibrium in which candidates cannot support **d** at all. These outcomes are equivalent to those under SNTV with MMD.

To summarize the analysis of the party list PR, promoting defense expansion is inevitable when the large constituency system is adopted and the floating voters prefer this policy. Even if there is a resource allocation problem, it is possible as long as the loyal voters commonly prefer it. It is

impossible when the large constituency system is adopted and the floating voters do not prefer this policy. If the small constituency system is adopted, defense expansion is possible only when there is no resource allocation problem among the interests that the candidates have to support. Otherwise, it is impossible just as it is under SNTV under MMD.

Summary

In general, we can see two important factors that determine whether LDP candidates can support public interests in an electoral system. First, the necessity of maximizing votes can change the strategies the candidates can adopt. If maximization of votes is necessary for winning, the candidates have to adopt a dominant strategy more sensitive toward voters' exclusive interests than toward public interests. On the other hand, if maximization of votes is not necessary, they may be able to adopt a sub-dominant strategy that puts a higher priority on public interests. Second, the size of constituencies limits the strategies of the candidates. A smaller constituency allows the candidates to champion both the exclusive and public interests of voters, while under a larger constituency the candidates can hardly support their exclusive interests of small interest groups even if they have to be sensitive toward the exclusive interests.

Table 5-2 categorizes the electoral systems analyzed, including SNTV under MMD, according to these two determinants. We find that the

candidates or the parties have to maximize their votes only under SNTV with MMD and the large and the small constituency systems. Given that the LDP has the largest number of supporters, the candidates running from the LDP under FPTP and the block vote system do not need to maximize their votes, i.e., do not need to absorb floating votes, because they already have enough votes to win. Although the double ballot system and the alternative vote system require the candidate to gain over half the votes at the first ballot (or first preference) to win, he/she might easily win at the second ballot even if he/she does not make an effort to maximize votes. Under STV, where the LDP may field plural candidates, some candidates at least do not need to maximize votes because they may receive votes from other candidates of the same party who gained more than the quota necessary for winning. This suggests that the candidates or the parties under FPTP, the block vote, the alternative vote and STV can easily support public interests, if they think it necessary. On the other hand, under the party list PR, the candidates or the parties have to maximize votes to maximize the party's number of seats. SNTV under MMD also requires the candidates to maximize votes, because the LDP candidates have to play a non-cooperative zero-sum game where one's gains are the others' losses, even when the total votes are enough to make them all winners. This implies that the candidates under the party list PR and SNTV under MMD have to put a higher priority on the exclusive interests of voters even if they believe supporting some of the public interests is necessary as a national policy.

However, the second factor eliminates the large constituency party list PR from the set of the systems that always interfere with the candidates' or parties' support for public interests. The constituency is too huge to attend to the voters' exclusive interests. In other words, the candidates' dominant strategy for maximizing votes is to support the voters' public interests. Thus, if voters prefer a public interest, then the candidates or the parties have to support it, although if the voters do not, the candidates cannot do so. On the other hand, SNTV under MMD and the small constituency party list PR allow the candidates or parties to adopt strategies to support the voters' exclusive interests. Thus, if there is a resource allocation problem among the interests that the candidates and the parties have to support, supporting the public interests is eliminated from their strategy. The conclusion from the comparative analysis of the electoral systems is that SNTV under MMD is one of only two systems that always undermine the promotion of voters' public interests, defense expansion, among them. Of course, this conclusion is no more than a logical deduction under the conditions I assumed.

Table 5-2: Comparison of Electoral Systems

<u>Systems\Factors</u>	<u>Maximization</u>	<u>Constituency</u>
FPTP	no	small
Block Vote	no	small
Double Ballot	no	small
Alternative Vote	no	small
SNTV	yes	small
STV	no	small
Large Constituency PR	yes	large
Small Constituency PR	yes	small

Empirical Test of the Hypothesis

Chapter 6

The analyses in Chapters 4 and 5 theoretically support the view that the single non-transferable voting (SNTV) system under a multi-member district (MMD) is a sufficient condition to nullify the incentives of legislators to champion defense expansion. SNTV under MMD and the party list proportional representation (PR) system under a small constituency always motivate legislators to be reluctant to expand defense, while the other systems do not so. In other words, if legislators are always found to be averse toward defense expansion, they must be elected through SNTV under MMD or the party list PR under a small constituency.

A hypothesis test should also be conducted through empirical analysis. If some empirical data show that the other electoral systems make legislators

unwilling to support defense expansion, then we have to consider that SNTV under MMD is not a necessary condition for the legislators' unwillingness. On the other hand, if there are data which indicate that legislators champion defense expansion under SNTV and MMD, we should not recognize the system as a sufficient condition, either. Furthermore, if my theory is correct, we have to observe an unwillingness of legislators to champion other public goods as much as national defense. If there is no similarity in their attitudes toward these goods, the theory must be reconsidered.

In this chapter, I will examine empirical data. The results of the tests suggest that SNTV under MMD among the existing electoral systems is a sufficient and necessary condition for legislators' unwillingness to support defense expansion and that the theory works for the other public interests, although the tests are limited and the results are not perfectly clear.

What Should Be Examined?

To test the hypothesis that SNTV under MMD nullifies the incentives for Dietmembers from the Liberal Democratic Party (LDP) to support defense expansion, we need to examine whether or not the following are true.

H6-1: Other electoral systems make legislators reluctant to champion defense expansion.

H6-2: SNTV under MMD motivates legislators to support defense expansion.

H6-3: SNTV under MMD nullifies the incentives of legislators to support other public goods as much as national defense.

If **H6-1** is observed, then SNTV under MMD is not a necessary condition for legislators to be averse to defense expansion. If **H6-2** is observed, the electoral system is not a sufficient condition, either. If we find that **H6-3** holds, we can consider that my theory is correct and applicable to other public policies.

To test **H6-1**, we need to examine other electoral systems theoretically and empirically. In Chapter 5, I have theoretically examined the mechanism of seven major electoral systems adopted in modern democracies. The conclusion is that six among the systems possibly motivate legislators to support defense expansion, while the party list PR system under a small constituency does not allow them to support defense expansion. This suggests that SNTV under MMD is not a necessary condition for legislators to be reluctant toward defense expansion.

Empirical examination of the electoral systems is technically difficult, because there are no data about the attitude of every single legislator toward defense expansion in Japan. Without the data, we cannot perfectly examine the empirical influence of electoral systems. Although the legislators may reveal through their speeches their attitudes toward defense issues, there is no such record for every single legislator. Moreover, their speeches do not show what they really did. Had there been a roll-call vote for defense issues, it

would have been useful. However, LDP decisions are usually made in negotiation within the LDP and among the other policymaking actors, which are not open to public scrutiny. When bills come to the Diet, all LDP Dietmembers with a few exceptional cases express the same attitude toward the bills. What I will do alternatively is to examine (1) the commitment of LDP Councillors on defense issues, who are free from the constraints of SNTV under MMD and (2) the defense commitment of various states without this electoral system.

The Diet of Japan consists of two houses: the House of Representatives (the Lower House) and the House of Councillors (the Upper House). The electoral system for choosing Councillors differs from SNTV under MMD adopted for choosing Representatives. 152 among the 252 members forming the Upper House are chosen through SNTV under a larger MMD, i.e., every prefecture, than for the Representatives. Although the number of seats in the MMDs ranges from two to eight: 26 two-member, 15 four-member, four six-member and two eight-member districts, in practice the candidates vie for half of the seats in each election, because the Upper House holds an election every three years for a half of its seats. Another half will be up for replacement in the next election held three years later. Therefore, we can consider that there are 26 single-member (FPTP) districts, where candidates can theoretically work for defense expansion without a great fear of losing. The remaining 100 members were chosen by SNTV under the national constituency until 1983 and now are chosen by the party list PR with a closed list rule in the national constituency. Therefore, by analyzing the Councillors,

we can observe the effects of FPTP and the national constituency on the behavior of legislators.

Furthermore, the commitment of legislators to defense issues can be a good, although not perfect, proxy for their attitudes toward defense issues. If, as I argue, legislators under SNTV with MMD suffer in an election by working for defense expansion, they will avoid making deep commitments on defense issues. Rather, they will spend more energy on other issues by which they can provide pork-barrel items to voters. If the floating voters prefer to decrease defense efforts, the legislators must do so because it is the dominant strategy and harms their legislators less than supporting defense expansion. However, they also place great importance on pork-barrel programs because providing these is more important than supporting the public interest. On the other hand, those under other electoral systems do not need to adopt their dominant strategy. They can work for the public interest as well as for the exclusive interests of the voters without fear of losing. Thus, if my theory is correct, the commitment of the Councillors free from SNTV and MMD in defense issues must be as large as those on other issues and be larger than those of the Representatives in defense issues. If the commitment of the Councillors is smaller than that on other issues or as small as that of the Representatives, we cannot conclude that my theory holds.¹

¹ We may be able to analyze a winning ratio of legislators. If my argument is correct, the legislators involved in defense issues are less likely to win than the others under SNTV with MMD. However, this analysis may not show clear results because knowing their dominant strategy a priori, they would not adopt a sub-dominant strategy, although some irrationally would do so.

Nonetheless, the examination of the Councillors does not perfectly clarify whether SNTV under MMD is a necessary condition for legislators' unwillingness to expansion of defense, because it compares SNTV under MMD only with FPTP and with the national constituency system but not with the other existing electoral systems. Thus, we need Analysis (2). SNTV under MMD has been used only in Japan and Taiwan. If the other countries maintain low and inactive defense commitment under changing external and domestic conditions, then we cannot regard SNTV under MMD as a necessary condition for lack of legislators' commitment to defense expansion. Yet this test is also of limited use if there is a higher authority above the national assembly, since the authority may determine the policy whatever the legislators support. Therefore, we need to pay attention to the political systems of the states as well as to their electoral systems. Furthermore, there may be other factors that determine defense efforts. If we find a country whose defense efforts are as small as those of Japan, we should analyze it to discover the factors responsible.

To test **H₆₋₂**, we need to examine (1) the commitment of the Representatives in defense issues and (2) data from Taiwan. (1) will be examined to see how seriously the LDP Dietmembers work for defense issues. If my theory is correct, their commitment to defense issues must be smaller than that to other issues and that of the Councillors in defense issues. If the commitment of the Representatives to defense issues is as large as that to other issues and that of the Councillors, we have to conclude that my hypothesis and theory are wrong. (2) is also important since Taiwan is the

only state besides Japan that uses SNTV under MMD and also has a dominant party, *Kuomintang* (KMT). If my hypothesis is correct, Taiwan must behave as Japan does in defense issues. If Taiwan shows a different posture toward defense, we have to conclude that SNTV under MMD is not a sufficient condition, either, and to detect a factor that so drives Taiwan.

Finally, I shall examine the degree of commitment of the Dietmembers in other public policy issues in order to test **H6-3**, with the same methods used for defense issues. If my theory is correct, SNTV under MMD must nullify the incentives of the LDP Dietmembers to support goods which benefit voters broadly but do not exclusively. Otherwise, reconsideration of my theory is necessary.

Test for Necessary Condition

Analysis of PARC

In order to know the commitment of the LDP Dietmembers in defense issues, we can examine their involvement in the Defense Division in the Policy Affairs Research Council (PARC) of the LDP. Since the division is the place where LDP posture toward defense is discussed and determined, their involvement in the division clearly expresses their commitment to defense issues. More specifically, the number of the Dietmembers and the length of their tenure in the division and their competitiveness to enter the division can measure the degree of their involvement in defense issues.

Then, if **H6-1** is true, we must observe the following.

H_{6-1-a}: The number of the Councillors from FPTP and the national constituency involved in the Defense Division is smaller than those involved in the other divisions.

H_{6-1-b}: The average tenure of the Councillors from FPTP and the national constituency in the Defense Division is shorter than that in the other divisions.

H_{6-1-c}: The average tenure of the Councillors from FPTP and the national constituency in the Defense Division is equal to that of the Representatives.

H_{6-1-d}: Entering the Defense Division is less competitive for the Councillors than entering the other divisions.

For the examination of **H_{6-1-a}**, I have gathered t-intervals for the average of the total numbers of the Dietmembers involved in each PARC division except the Defense Division from 1961 to 1990.² As Table 6-1 illustrates, the number of Councillors from the national constituency in the Defense Division is larger than the upper bound. Yet, the number of those elected from FPTP districts in the division is smaller than the lower bound. This suggests that **H_{6-1-a}** is plausible for FPTP but not for the national constituency.

I have made two kinds of t-tests for **H_{6-1-b}**: **H₀** versus **H_a** and **H₀** versus **H_b**, where **H₀**, the null hypothesis, is that the average tenure of individual

² There are 17 divisions. LDP members may belong to no more than four divisions.

Table 6-1: t-Intervals for the Average Numbers of LDP Dietmembers in PARC Divisions (1961-1990)

	Lower Bound	Upper Bound	Defense Division
Lower	229.44345	315.12798	276
Upper	118.05478	161.94522	120
Up. SNTV	55.434591	78.565409	49
Up. FPTP	31.675603	53.038683	28
Up. Nation	27.361442	37.352844	43

Source: *Jiyū minshu tō seimu chōsakai meibo* [List of the Members in the Policy Research Affairs Council of the Liberal Democratic Party], various months.

Note: With 95% confidence.

The Science and Technology and the Environment divisions are excluded, because they were organized later than the others.

Councillors in the Defense Division is equal to that in the other divisions, H_a is that the former is shorter than the latter, and H_b is that the former is lengthier than the latter. Table 6-2 illustrates the result of the tests. For those from the national constituency, H_{6-1-b} is not very plausible, because H_0 is rejected versus H_a only for the Social Affairs Division. However, for those from FPTP, H_0 is rejected versus H_a in nine other divisions. Since the number of rejections is as many as that among the Representatives (11) and among the Councillors from SNTV (five), we have to conclude that H_{6-1-b} is as plausible for FPTP as for SNTV under MMD. In other words, the Councillors from the national constituency stay in the Defense Division as long as in the other divisions except in the Social Affairs Division, while those from FPTP stay less time in the Defense Division than in the many other divisions, as do those from SNTV under MMD.

Table 6-2: t-Tests for Tenure of LDP Dietmembers in PARC Divisions (1961-1990)

Lower	vs. H_a	P.	vs. H_b	P.	d.f.	Upper	vs. H_a	P.	vs. H_b	P.	d.f.
Cabinet	F	0.782	F	0.218	516	Cabinet	F	0.2434	F	0.7566	235
Local	F	0.0943	F	0.9057	506	Local	F	0.2964	F	0.7036	260
Justice	F	0.3164	F	0.6836	458	Justice	F	0.9373	F	0.0627	249
Diplomacy	R	0.0422	F	0.9578	476	Diplomacy	F	0.2193	F	0.7807	227
Finance	R	0.0001	F	0.9999	530	Finance	F	0.0503	F	0.9497	270
Education	R	0.0001	F	0.9999	499	Education	R	0.0123	F	0.9877	257
Social	R	0.0001	F	0.9999	558	Social	R	0.0001	F	0.9999	254
Labor	R	0.0031	F	0.9969	501	Labor	R	0.0266	F	0.9734	203
A & F	R	0.0001	F	0.9999	683	A & F	R	0.0001	F	0.9999	339
Fisheries	R	0.0001	F	0.9999	517	Fisheries	R	0.0344	F	0.9656	250
C & I	R	0.0001	F	0.9999	619	C & I	R	0.0037	F	0.9963	315
Transportation	R	0.0001	F	0.9999	547	Transportation	R	0.0074	F	0.9926	246
Communication	R	0.0001	F	0.9999	529	Communication	R	0.0003	F	0.9997	209
Construction	R	0.0001	F	0.9999	709	Construction	R	0.0046	F	0.9954	298
S & T*	F	0.6696	F	0.3304	308	S & T*	F	0.6551	F	0.3449	143
Environment*	F	0.9714	R	0.0286	332	Environment*	F	0.9875	R	0.0125	167
Up. SNTV	vs. H_a	P.	vs. H_b	P.	d.f.	Up. FPTP	vs. H_a	P.	vs. H_b	P.	d.f.
Cabinet	F	0.3607	F	0.6393	96	Cabinet	F	0.4584	F	0.5416	53
Local	F	0.1308	F	0.8692	121	Local	F	0.0624	F	0.9376	68
Justice	F	0.6124	F	0.3876	116	Justice	F	0.5514	F	0.4486	63
Diplomacy	F	0.3941	F	0.6059	96	Diplomacy	F	0.0837	F	0.9163	54
Finance	F	0.0938	F	0.9062	115	Finance	R	0.0355	F	0.9645	63
Education	F	0.2168	F	0.7832	108	Education	R	0.0106	F	0.9894	66
Social	R	0.0035	F	0.9965	108	Social	R	0.0138	F	0.9862	60
Labor	F	0.2481	F	0.7519	86	Labor	F	0.0834	F	0.9166	46
A & F	R	0.0006	F	0.9994	154	A & F	R	0.0001	F	0.9999	115
Fisheries	F	0.3222	F	0.6778	113	Fisheries	R	0.005	F	0.995	71
C & I	R	0.0023	F	0.9977	152	C & I	R	0.0078	F	0.9922	81
Transportation	F	0.0931	F	0.9069	106	Transportation	R	0.0273	F	0.9727	69
Communication	R	0.0232	F	0.9768	96	Communication	R	0.0002	F	0.9998	52
Construction	R	0.0299	F	0.9701	129	Construction	R	0.0042	F	0.9958	96
S & T*	F	0.3703	F	0.6297	52	S & T*	F	0.4785	F	0.5215	41
Environment*	F	0.6848	F	0.3152	62	Environment*	F	0.979	R	0.021	38
Up. Nation	vs. H_a	P.	vs. H_b	P.	d.f.						
Cabinet	F	0.2529	F	0.7471	82						
Local	F	0.942	F	0.058	70						
Justice	F	0.9285	F	0.0715	67						
Diplomacy	F	0.4292	F	0.5708	74						
Finance	F	0.5178	F	0.4822	91						
Education	F	0.08	F	0.92	79						
Social	R	0.0111	F	0.9889	82						
Labor	F	0.0842	F	0.9158	69						
A & F	F	0.252	F	0.748	72						
Fisheries	F	0.1912	F	0.8088	64						
C & I	F	0.5549	F	0.4451	79						
Transportation	F	0.0694	F	0.9306	69						
Communication	F	0.0511	F	0.9489	57						
Construction	F	0.1718	F	0.8282	72						
S & T*	F	0.8679	F	0.1321	48						
Environment*	F	0.0564	F	0.9436	62						

Note:

H₀: $\mu(\text{Defense}) - \mu(\text{Others}) = 0$

H_a: $\mu(\text{Defense}) - \mu(\text{Others}) < 0$

H_b: $\mu(\text{Defense}) - \mu(\text{Others}) > 0$

Alpha=0.0500

A & F: Agriculture and Forestry

C & I: Commerce and Industry

S & T: Science and Technology

The analysis of S & T and Environment is based on the data from 1972 to 1990.

Source: Jiyū minshu tō seimu chōsakai meibo [List of the Members in the Policy Research Affairs Council of the Liberal Democratic Party], various months.

Table 6-3 is the results of t-tests made for H_{0-1-c} : H_0 verses H_a and H_0 versus H_b , where H_0 is that the average tenure of individual Representatives in the Defense Division is equal to that of the Councillors, H_a is that the former is shorter than the latter, and H_b is that the former is lengthier than the latter. The results suggest that those from the national constituency tend to stay in the Defense Division for longer time than those of the Lower House, because H_0 is rejected versus H_a only for the test between the two.

Table 6-3: t-Tests for Tenure of LDP Dietmebers in the Defense Division (1961-1990)

	H_0 vs. H_a	P.	H_0 vs. H_b	P.	d.f.
Lower vs. Upper All	F	0.0963	F	0.9037	394
Lower vs. Upper SNTV	F	0.6101	F	0.3899	323
Lower vs. Upper FPTP	F	0.614	F	0.386	302
Lower vs. Upper Nation	R	0.0023	F	0.9977	317

Source: *Jiyū minshu tō seimu chōsakai meibo* [List of the Members in the Policy Research Affairs Council of the Liberal Democratic Party], various months.

Note: Alpha=0.0500.

H_0 : $\mu(\text{Lower}) - \mu(\text{Others}) = 0$, H_a : $\mu(\text{Lower}) - \mu(\text{Others}) < 0$,

H_b : $\mu(\text{Lower}) - \mu(\text{Others}) > 0$

However, if we compare the three different types of the Councillors with one another, we can recognize that those from FPTP stay in the Defense Division longer than those from SNTV under MMD but less than those from the national constituency. As Table 6-4 illustrates, H_0 is rejected versus H_a for

the test between SNTV and the national constituency, while it is not rejected between FPTP and the national constituency. **H6-1-c** is least plausible for the national constituency among the three systems and it is less plausible for FPTP than for SNTV under MMD.

Table 6-4: t-Tests for Tenure of Upper House Members in the Defense Division (1961-1990)

	H₀ vs. H_a	P.	H₀ vs. H_b	P.	d.f.
Upper SNTV vs Upper FPTP	F	0.5283	F	0.4717	75
Upper SNTV vs. Upper Nation	R	0.0193	F	0.9807	90
Upper FPTP vs. Upper Nation	F	0.0536	F	0.9464	69

Source: *Jiyū minshu tō seimu chōsakai meibo* [List of the Members in the Policy Research Affairs Council of the Liberal Democratic Party], various months.

Note: Alpha=0.0500

H₀: $\mu(\text{SNTV or FPTP}) - \mu(\text{FPTP or Nation}) = 0$, **H_a**: $\mu(\text{SNTV or FPTP}) - \mu(\text{FPTP or Nation}) < 0$, **H_b**: $\mu(\text{SNTV or FPTP}) - \mu(\text{FPTP or Nation}) > 0$

An examination of **H6-1-d** has not been made because the data for the Councillors are not available or probably do not exist, although I have gathered that for the Representatives as I will show later. I cannot tell whether or not entering the Defense Division is less competitive for the Councillors than entering the other divisions.

The analyses of **H6-1-a**, **H6-1-b**, **H6-1-c** have produced mixed results to clarify the correctness of my theory. The number of those from FPTP involved in the Defense Division is as small as those from the Lower House and the Councillors from SNTV under MMD. Their tenure in the Defense Division is shorter than those in many of the other divisions. On the other

hand, they stay in the Defense Division a little longer than Councillors from SNTV under MMD. The clear result is that those from the national constituency are involved in the Defense Division as much as in the other divisions and more than the other Dietmembers.

A question is why does FPTP produce mixed results? According to the theoretical analysis in Chapter 5, FPTP does not drive legislators to be reluctant to champion defense expansion. There are only two possibilities for this gap: (1) the theoretical analysis is wrong or (2) the character of FPTP in this specific case differs from that in the theoretical analysis. I adopt the latter, because plural candidates run from the LDP even under FPTP owing to struggles among *Habatsu* [political factions]. Since plural candidates run from the party for an election of the House of Representatives, almost every Representative depends on a different internal group, *Habatsu*, in the LDP for support in campaigning. Every *Habatsu*, on the other hand, wants to increase its power to take the initiative in the party by increasing its own members belonging to the Diet.³ In a FPTP election for the Upper House, *Habatsu* compete with one another to gain endorsement for their candidates. Since FPTP allows only one winner in each district, the LDP does not endorse plural candidates in one district. Here, *Habatsu* which gain an endorsed candidate are winners in the struggle. However, *Habatsu* which lost in this struggle can still win if their candidate gains more votes in the real election than the candidate endorsed by the LDP. Therefore, *Habatsu* often field their original

³ See Ramseyer and Rosenbluth (1993, Ch. 4, pp. 59-79), for the relations between *Habatsu* and candidates.

candidates without party endorsement—for example, although not clear, this seems to have happened in eight among the 26 FPTP districts in 1989.⁴ This situation makes FPTP like SNTV under MMD. Although there is only one winner under FPTP, the dominant strategy for winning for the candidates from the same party, like that under SNTV with MMD, is supporting the exclusive interests of voters when there is a resource allocation problem. FPTP for the House of Councillors has the same characters as SNTV under MMD so that the effects of FPTP become similar to those of SNTV under MMD.⁵

The conclusion I draw from the analysis of the PARC is that (1) the national constituency does not make legislators unwilling to support defense expansion, (2) FPTP may not either, if no other candidates run from the same party. This still allows the possibility for SNTV under MMD to be a necessary condition for the unwillingness of legislators to favor defense expansion, although conditionally so.

Defense Efforts of Other States

To compare the defense commitment of various states, I will analyze the defense expenditures as a percentage of GNP (or GDP).⁶ Defense expenditure must differ according to the economic capability of each country.

⁴ In the eight districts, at least one powerful conservative candidate without LDP endorsement ran besides the LDP candidate.

⁵ Primaries in the U.S.A. are good examples of this case.

⁶ Whether GNP or GDP is used depends on availability of the data. The source I use for this analysis, *The Military Balance*, uses GDP for most countries.

However, the ratio of defense expenditures can show us the seriousness, by use of the same measure, of the various countries toward defense issues.

Then, if **H6-1** is true, we shall be able to observe the following.

H6-1-e: The average of the annual defense expenditure/GNP (GDP) of the other countries are as low as that of Japan.

H6-1-r: The maximum of the annual defense expenditure/GNP (GDP) of the other countries are as low as that of that of Japan.

H6-1-g: The minimum of the annual defense expenditure/GNP (GDP) of the other countries are as low as that of Japan.

For all the above, I have gathered t-intervals of the data gained from 120 countries free from SNTV under MMD. As Table 6-5 shows, the data of Japan are below the lower bound in every comparison. This means that the average, the maximum and the minimum of the annual defense expenditure of Japan in GNP (GDP) are far lower than the average of those of the other

Table 6-5: t-Intervals of the Defense Expenditures as a Percentage of GNP (GDP) and Japan (1965-1987)

	Lower Bound	Upper Bound	Japan	Position among 122
Average	3.7653141	5.2620067	0.93913043	117
Maximum	6.1321012	9.2875709	1.3	118
Minimum	2.2288988	3.2235602	0.8	111

Source: *The Military Balance*, various years.

Note: With 95% confidence. The number for the position includes Taiwan and Japan. The source uses GDP for most countries.

countries. That is, **H6-1-e**, **H6-1-f**, and **H6-1-g** are implausible. The results make it hard to deny that SNTV under MMD is a necessary condition for legislators to be reluctant to champion defense expansion.

However, as I mentioned before, I have to put a proviso on the conclusion. Many countries have different political systems, in some of which legislators do not have the authority to make defense policy. Under such a system, even if their electoral systems induce the legislators not to support defense expansion, the country can still increase its defense commitment. To be precise, we have to clarify who has the authority in the defense policymaking in all the countries and to eliminate from the analysis those where the legislators cannot decisively influence policy. Then, we should categorize the remaining countries according to their electoral systems to compare them with the case of Japan. However, this may not be worth doing, because Japan is located almost at the very bottom in every measure of defense efforts. Whatever the political and electoral systems, they may not make the legislators as reluctant to defense expansion as does SNTV under MMD. This seems to contradict the result in Chapter 5, where I concluded that the small constituency party list PR can also nullify the incentives of legislators to support defense expansion. In fact, SNTV with MMD has not been practically tested against the small constituency party list PR, because no country adopts the latter system alone. In other words, legislators elected under the small constituency party list PR are not large enough to be decisive. If there is a country only with the system, it should like Japan show smaller

defense efforts than the others. To summarize, SNTV with MMD seems a necessary condition within existing electoral systems that nullifies the incentives of legislators to promote defense expansion.

Test for Sufficient Condition

Analysis of the PARC

As explained in the test for necessary condition, I examined the involvement of LDP Dietmembers in the Defense Division of the PARC to determine their commitment in defense issues.

If **H6-2** is true, we have to observe the following.

H6-2-a: The Representatives involved in the Defense Division are larger than or as large as those involved in the other divisions.

H6-2-b: The average tenure of the Representatives in the Defense Division is longer than or as long as those in the other divisions.

H6-2-c: The average tenure of the Representatives in the Defense Division is longer than or as long as that of the Councillors involved in the division.

H6-2-d: For the Representatives, entering the Defense Division is more competitive than or as competitive as entering the other divisions.

For **H_{6-2-a}** (see Table 6-1) the number of the Representatives involved in the Defense Division is within the t-intervals of the number of those who are involved in the other divisions. This suggests that **H_{6-2-a}** is plausible.

However, Table 6-2 suggests that **H_{6-2-b}** is implausible, because **H₀** is rejected versus **H_a** in 11 cases, while it is rejected versus **H_b** only in one. The average tenure of the Representatives in the Defense Division is shorter than those in 11 among 17 divisions, as long as those of 5 divisions and longer than that of only one division.

Table 6-3, on the other hand, implies that **H_{6-2-c}** is implausible between the Representatives and the Councillors from the national constituency because **H₀** is rejected versus **H_a** between them. Yet, it is plausible between the former and the Councillors from the other systems, because the tests fail to reject **H₀** versus **H_a**. The tenure of the Representatives in the Defense Division is shorter than that of the Councillors from the national constituency and as long as that of the Councillors from SNTV under MMD and FPTP.

For **H_{6-2-d}**, I made two kinds of t-tests: **H₀** versus **H_a** and **H₀** versus **H_b**, where **H₀** is that the average competition to enter the Defense Division is equal to that for entry into other divisions, **H_a** is that the former is lower than the latter, **H_b** is that the former is higher than the later. See Table 6-6. The tests suggest that **H_{6-2-d}** is likely toward some divisions, but it is not toward others. The results are mixed, as follows. First, the competition to enter the Defense Division is lower than those of eight divisions, including Finance, Education, Social Affairs, Agriculture and Forestry, Commerce and Industry,

Transportation, and Communication, and Construction. The competition is as high as those of two divisions, namely Local Administration and Fisheries. Finally, the competition is higher than those of six divisions, including the Cabinet, Justice, Diplomacy, Labor, Science and Technology and Environment.

Table 6-6: t-Tests for Competitiveness to Enter the PARC Divisions (1961-1990)

	vs. H_a	P.	vs. H_b	P.	d.f.
Cabinet	F	1	R	0	46
Local	F	0.7357	F	0.2643	46
Justice	F	1	R	0	46
Diplomacy	F	1	R	0	46
Finance	R	0.0129	F	0.9871	46
Education	R	0	F	1	46
Social Affairs	R	0.0082	F	0.9918	46
Labor	F	1	R	0	46
Agriculture & Forestry	R	0	F	1	46
Fisheries	F	0.2583	F	0.7417	46
Commerce & Industry	R	0	F	1	46
Transportation	R	0	F	1	46
Communication	R	0.0003	F	0.9997	46
Construction	R	0	F	1	46
Science & Technology	F	1	R	0	38
Environment	F	0.9999	R	0.0001	38

Source: Inoguchi and Iwai (1987), pp.136-137.

Note: Alpha=0.0500.

H₀: $\mu(\text{Defense}) - \mu(\text{Others}) = 0$, **H_a**: $\mu(\text{Defense}) - \mu(\text{Others}) < 0$,

H_b: $\mu(\text{Defense}) - \mu(\text{Others}) > 0$

The data on the Science and Technology and the Environment Divisions are from 1972 to 1990.

Probability 1 means extremely close to 1. Probability 0 means extremely close to 0.

Although the above analysis of the PARC seems to have produced unclear results, we can conclude that H6-2 is implausible. It is true that the number of the Dietmembers involved in the Defense Division is as large as those involved in the other divisions. However, they stay in the Defense Division much less than in many other divisions, such as Construction, Agriculture, Commerce and Industry, where they can easily find pork-barrel items for their supporters. Furthermore, although the competition to enter the Defense Division is higher than that to enter divisions such as the Cabinet, Justice, and Environment, which deal with goods which are at least as public as national defense, it is lower than that to enter the divisions where the legislators can easily find pork-barrel items. These facts lead us to think that the Dietmembers are unwilling to be involved in the divisions, including Defense, where few pork-barrel items exist, but the LDP allocates them to the unpopular divisions to lessen their concentration in the divisions where there are many pork-barrel items. The analysis of the PARC seems to hold that SNTV under MMD is a sufficient condition that nullifies the incentives to support defense expansion.

Study of Taiwan

Taiwan is the only other state adopting SNTV with MMD besides Japan. Moreover, the KMT has been a dominant power like the LDP in Japan. If Taiwan shows a deeper defense commitment than Japan, we may be able to consider that SNTV under MMD induces legislators to support defense expansion.

Figure 6-1 illustrates changes of Taiwan's defense expenditure as ratio of GNP. It is obvious that Taiwan's defense efforts are always larger than that of Japan. Taiwan's defense expenditures also correspond with changes in the security climate of the Far East. Furthermore, as Table 6-7 shows, the average of Taiwan's defense expenditure ratio in GNP is beyond the upper bound of the expected mean among those of 120 countries without SNTV under MMD. It is also true in terms of the maximums and the minimums of the ratio. These facts together support **H6-2**: SNTV under MMD motivates legislators to support defense expansion.

However, this conclusion may not be correct, because the political system of Taiwan is quite different from that of Japan. First, Taiwan maintains a presidential system by which the president can play a significant role in making defense policy. Moreover, the emergency measures imposed from 1949 until 1987, including the proclamation of martial law, have helped the president to gain decisive power over the national assembly. Second, permanent Representatives, who were elected in 1947 from mainland China and in 1969 from Taiwan and whose political status is guaranteed until death, occupy a majority—223 (216 from mainland China and seven from Taiwan) among 312—in the national assembly of Taiwan. Furthermore, 22 legislators represent overseas Chinese, who are chosen by the President. Those Representatives can support defense expansion whatever the electoral system. Finally, Taiwan has been in a state of near-war with the People's Republic of China, a fact that might have increased the number of people

who consider defense issues their exclusive interest. The electoral system for the assembly cannot under these conditions impede defense expansion.

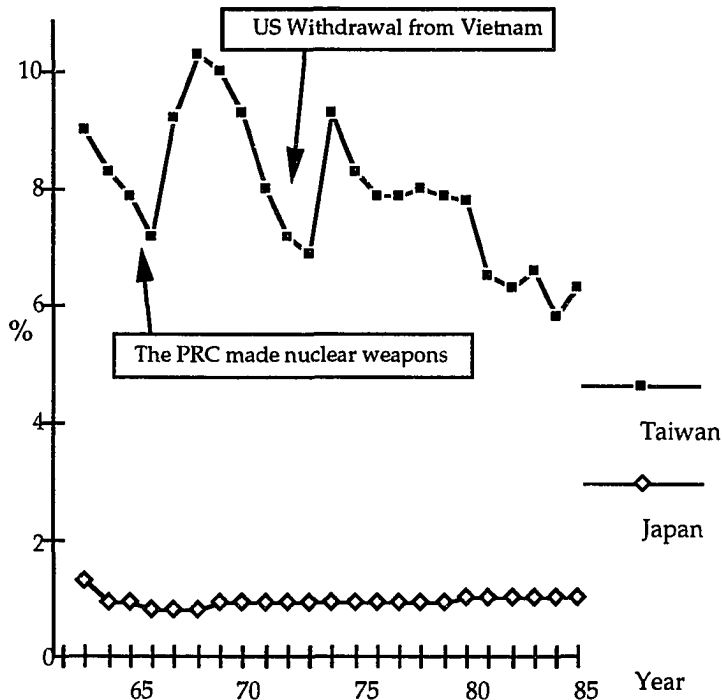


Figure 6-1: Comparison of Defense Expenditures as a Percentage of GNP (GDP) between Japan and Taiwan

Source: *The Military Balance*, various years.

Table 6-7: t-Intervals of the Defense Expenditures as a Percentage of GNP (GDP) and Taiwan (1965-1987)

	Lower Bound	Upper Bound	Taiwan	Position among 122
Average	3.7653141	5.2620067	7.840909091	15
Maximum	6.1321012	9.2875709	10	22
Minimum	2.2288988	3.2235602	5.8	12

Source: *The Military Balance*, various years.

Note: With 95% confidence. The number of positions includes Taiwan and Japan.

In terms of providing other public interests, on the other hand, which do not concern the permanent members and are controlled by the legislators rather than the president, we may be able to see the effects of SNTV under MMD. In fact, according to Hung-mao Tien (1989, pp. 142-143) and Shelley Elizabeth Rigger (1994), legislators under SNTV and MMD have to provide massive pork-barrel items to voters in order to win an election. We can also test the influence of the electoral system on the attitudes of the legislators by analyzing the involvement of KMT legislators in a number of different public interests, in the same fashion as I did for that of LDP legislators. Yet, there might be no data available for this, unlike the case of the LDP. Further research is necessary and expected.

Since the analysis of Taiwan is not perfect, we cannot declare that SNTV under MMD is a sufficient condition for legislators to be reluctant to expand defense. Nonetheless, the possibility that it is sufficient remains.

Does It Work for Other Public Goods?

My theory, presented in Chapters 4 and 5, must be applicable to other public goods as much as to national defense. The theory depends on the difficulty for the legislators to utilize national defense for pork-barrel items but not on the other attributes of defense issues. Thus, if the theory is correct, the legislators under SNTV and MMD must hesitate to support public

interests which are useless as pork-barrels, while they would not under the other electoral systems.

To discover attitudes of LDP legislators toward other public interests, we can analyze the degree of their involvement in the PARC divisions as we did for defense issues. The involvement of the Representatives and the Councillors from SNTV under MMD in the divisions where few pork-barrel items exist must be smaller than in those where many exist. Furthermore, the other Councillors should not make a big difference in their attitudes toward each division.

More specifically the following must be true.

H6-3-a: The number of legislators under SNTV with MMD involved in the former type (few pork-barrel items exist) divisions is smaller than those involved in the latter type (many pork-barrel items exist), while that under the other electoral systems is not.

H6-3-b: The average tenure of those from SNTV with MMD in the former type divisions is shorter than that in the latter type, while the tenure of those from the other electoral systems does not differ according to the divisions.

H6-3-c: The average tenure of those from SNTV with MMD in the former type is shorter than that of those from the other electoral systems.

H6-3-d: Entering the former type is less competitive than entering the latter type divisions for those under SNTV with MMD.

Which divisions have more pork-barrel items and which have less? It is obvious that there are many voters who have exclusive interests in agriculture, commerce and industry, and construction, because the public policy, such as constructing bridges and roads and providing subsidies, directly affect workers in those fields. On the other hand, voters cannot find direct interests in issues such as cabinet affairs, justice, local administration and environment. These issues may broadly benefit voters but will be unlikely to generate exclusive interests for the voters. Here, I tentatively define the divisions for the Cabinet, justice, local administration and environment as the former type and those for agriculture and forestry, commerce and industry, and construction as the latter type. The other divisions are considered as located between the two, because the characters of the issues are ambiguous.

Table 6-8 illustrates the lower and the upper bounds of t-intervals of the number of the legislators involved in the PARC divisions. The Representatives who involved in Local, Justice, Diplomacy, Education and Labor are less than the lower bound, while those involved in the Agriculture and Forestry, Commerce and Industry, and Construction go beyond the upper bound. The results about the Councillors from SNTV with MMD and from FPTP are as follows: those who involved in Defense, the Cabinet, Diplomacy, Labor, and Communication are below the lower bound, while those involved in Agriculture and Forestry, Commerce and Industry, and Construction are beyond the upper bound. To the contrary, the Councillors from the national constituency involved in Defense, the Cabinet, Finance, Education, Social

Table 6-8: t-Intervals for LDP Dietmembers involved in the PARC Divisions (1961-1990)

	Lower	Upper	Up. SNTV	Up. FPTP	Up. Nation
Lower Bound	232.93346	118.18352	54.805359	31.316569	28.20515
Upper Bound	312.13321	159.14981	76.794641	51.483431	37.928183
Defense	276	120	49	28	43
Cabinet	242	117	49	27	41
Local	232	142	74	42	29
Justice	184	131	69	37	26
Diplomacy	202	109	49	28	33
Finance	256	152	68	37	50
Education	225	139	61	40	38
Social Affairs	284	136	61	34	41
Labor	227	85	39	20	28
A & F	409	221	107	89	31
Fisheries	243	132	66	45	23
C & I	345	197	105	55	38
Transportation	273	128	59	43	28
Communication	255	91	49	26	16
Construction	435	180	82	70	31
S & T*	117	80	30	30	23
Environment*	141	104	40	27	37

Source: *Jiyū minshu tō seimu chōsakai meibo* [List of the Members in the Policy Research Affairs Council of the Liberal Democratic Party], various months.

Note: With 95% confidence. The bold numbers are below the lower bounds, while the italic ones are beyond the upper bounds. The Science and Technology, and the Environment divisions are just for reference. They are organized later than the others so that the numbers are necessarily lower than those of the others.

Affairs, Fisheries, and Commerce and Industry overreach the upper bound, while those involved in Justice, Labor, Transportation and Communications are below than the lower bound. Although the results are not very clear, we can at least say that, in terms of the Representatives and the Councillors from SNTV with MMD and FPTP, those who involved in the divisions where there are few pork-barrel items are fewer than those involved in the

divisions where there are many, while there is no such phenomenon for the Councillors from the national constituency.

For examination of **H_{6-3-b}**, Table 6-2 clearly shows how much the divisions with few pork-barrel items are unattractive to the legislators from SNTV under MMD and from FPTP. In terms of the Representatives, **H₀** is rejected versus **H_a** in the tests between the Defense Divisions and many of the divisions which have substantial pork-barrel items, while **H₀** is rejected only in the test with the Social Affairs Division for the Councillors from the national constituency. In other words, the tenure of the Representatives in the divisions with many pork-barrel items is lengthier than that of those involved in the Defense Division, while the tenure of those in the divisions where there are few pork-barrel items is as short as that of those in the Defense Division. This is also true for the legislators from the Upper House elected under SNTV with MMD and FPTP. Contrastively, there is no such a tendency for the Councillors from the national constituency.

Table 6-9 uses the results of the t-tests to compare the tenure of the different types of legislators in the PARC divisions. The null hypothesis, **H₀**, is that the average tenure of the Representatives is equal to that of the other legislators in the same division. A rival hypothesis, **H_a**, is that the former is shorter than the latter. Another rival hypothesis, **H_b**, is that the former is longer than the latter.

The results are supportive of my theory. In the test of **H₀** versus **H_a** between the Representatives and the Councillors from the national constituency, **H₀** is rejected in Defense, the Cabinet, Social Affairs, Labor,

Table 6-9: t-Tests for Tenure of LDP Legislators in Each PARC Division (1961-1990)

Ho vs. Ha												
Lower	Up.	P.	d.f.	Up. SNTV	P.	d.f.	Up. FPTP	P.	d.f.	Up. Nation	P.	d.f.
Defense	F	0.0963	394	F	0.6101	323	F	0.614	302	R	0.0023	317
Cabinet	R	0.0028	357	F	0.2627	289	F	0.4229	267	R	0.0001	281
Local	F	0.1954	372	F	0.3967	304	F	0.0749	272	F	0.7226	259
Justice	F	0.8167	313	F	0.807	251	F	0.7452	219	F	0.5861	208
Diplomacy	F	0.2553	309	F	0.807	249	F	0.2517	228	F	0.0543	233
Finance	F	0.8975	406	F	0.9807	322	F	0.5732	291	F	0.6193	304
Education	F	0.8294	362	F	0.9963	284	F	0.4739	263	F	0.1026	261
Social	R	0.0165	418	F	0.4334	343	F	0.3371	316	R	0.0003	323
Labor	F	0.0793	310	F	0.7995	264	F	0.3185	245	R	0.0018	253
A & F	F	0.996	628	F	0.9995	514	F	0.6962	496	F	0.9453	438
Fisheries	F	0.8301	373	F	0.9986	307	F	0.2134	286	F	0.1672	264
C & I	F	0.9834	540	F	0.973	448	F	0.7942	398	F	0.8963	381
Transportation	F	0.5199	399	F	0.9613	330	F	0.3866	314	F	0.0501	299
Communication	R	0.0147	344	F	0.5615	302	R	0.0036	279	R	0.0072	269
Construction	F	0.9984	613	F	0.9999	515	F	0.9265	503	F	0.5676	464
S & T	R	0.0097	195	F	0.0744	145	R	0.0327	145	F	0.0767	138
Environment	F	0.0789	243	F	0.1266	179	F	0.7447	166	R	0.0154	176
Ho vs. Hb												
Lower	Up.	P.	d.f.	Up. SNTV	P.	d.f.	Up. FPTP	P.	d.f.	Up. Nation	P.	d.f.
Defense	F	0.9037	394	F	0.3899	323	F	0.386	302	F	0.9977	317
Cabinet	F	0.9972	357	F	0.7373	289	F	0.5771	267	F	0.9999	281
Local	F	0.8046	372	F	0.6033	304	F	0.9251	272	F	0.2774	259
Justice	F	0.1833	313	F	0.193	251	F	0.2548	219	F	0.4139	208
Diplomacy	F	0.7447	309	F	0.193	249	F	0.7483	228	F	0.9457	233
Finance	F	0.1025	406	R	0.0193	322	F	0.4268	291	F	0.3807	304
Education	F	0.1706	362	R	0.0037	284	F	0.5261	263	F	0.8974	261
Social	F	0.9835	418	F	0.5666	343	F	0.6629	316	F	0.9997	323
Labor	F	0.9207	310	F	0.2005	264	F	0.6815	245	F	0.9982	253
A & F	R	0.004	628	R	0.0005	514	F	0.3038	496	F	0.0547	438
Fisheries	F	0.1699	373	R	0.0014	307	F	0.7866	286	F	0.8328	264
C & I	R	0.0166	540	R	0.027	448	F	0.2058	398	F	0.1037	381
Transportation	F	0.4801	399	R	0.0387	330	F	0.6134	314	F	0.9499	299
Communication	F	0.9853	344	F	0.4385	302	F	0.9964	279	F	0.9928	269
Construction	R	0.0016	613	R	0.0001	515	F	0.0735	503	F	0.4324	464
S & T	F	0.9903	195	F	0.9256	145	F	0.9673	145	F	0.9233	138
Environment	F	0.9211	243	F	0.8734	179	F	0.2553	166	F	0.9846	176

Source: *Jiyū minshu tō seimu chōsakai meibo* [List of the Members in the Policy Research Affairs Council of the Liberal Democratic Party], various months.

Note: Alpha=0.0500

Ho: $\mu(\text{Lower}) - \mu(\text{Others}) = 0$, Ha: $\mu(\text{Lower}) - \mu(\text{Others}) < 0$,

Hb: $\mu(\text{Lower}) - \mu(\text{Others}) > 0$

Transportation and Environment. In other words, the tenure of the former in the divisions is shorter than that of the latter. In the same test between the Representatives and the Councillors from FPTP, the average tenure of the former is shorter than those of the latter in the Communication and the Science and Technology divisions. On the other hand, H_0 is not rejected against H_b in all divisions in the tests between the Representatives and the Councillors from FPTP and the national constituency. In other words, the Representatives stay in the divisions with little pork-barrels less than the Councillors from FPTP and the national constituency, while the former stay in the divisions with more pork-barrel items as long as the latter.

The comparison of competition to enter each PARC division most clearly expresses the unwillingness of the Representatives to make a commitment to divisions where few pork-barrel items exist. Table 6-6 compares competition to enter the Defense Division with that to enter the other divisions. Entering the Cabinet, Justice, Diplomacy, Labor, Science and Technology, and Environment divisions is easier than entering the Defense Division, because H_0 is rejected versus H_b in the tests for the divisions. On the other hand, the other divisions, including Agriculture and Forestry, Commerce and Industry, and Construction is much more difficult for the legislators to enter than the Defense Division because H_0 is rejected versus H_a in the tests.

The analysis of applicability of my theory to other public interests has produced some confusing results. However, in general, the results tell us that SNTV under MMD nullifies the incentives of LDP legislators to make deep

commitments to interests as public as national defense. The greatest difference between my theory and the observed data is that the Councillors chosen from FPTP often behave similarly to those from the SNTV with MMD and the Representatives. As argued before, this may be because the LDP often fields plural candidates—although only one is authorized—even in the FPTP districts. If plural candidates run in the same district under FPTP, the competition among them will be exactly same as that under SNTV with MMD. To determine the real effects of FPTP, Japan is not a good test case.

Summary

In this chapter I have made three kinds of empirical tests: (1) a test of SNTV under MMD as a necessary condition to nullify the incentives to support defense expansion, (2) a test of the system as a sufficient condition and (3) a test for applicability of my theory to other public policies. The results of the tests in general are supportive of my theory. Other electoral systems adopted in the other countries do not seem to nullify the incentives of legislators. SNTV under MMD does not seem to motivate legislators to champion defense expansion. Furthermore, the electoral system makes legislators unwilling to make a deep commitment to other interests whose attributes are close to those of defense issues. The results of the empirical tests suggest that SNTV under MMD is a necessary and sufficient condition that makes legislators less interested in defense spending, although the tests are

limited and the theoretical tests negate the possibility of its being a necessary condition.

Possibility of Change

Chapter 7

Chapters 4 and 5 together suggest that Japan can hardly increase defense commitment even though increasing external threats and public opinion to demand it. Yet, change is not impossible because several factors may diminish or even eliminate the effects of the single non-transferable voting (SNTV) system under a multi-member district (MMD). First, Japan can replace SNTV under MMD with any of several others which may not impede defense expansion. This actually happened in January 1994 under the Hosokawa administration. Japan now has a new electoral system for choosing Representatives in the Lower House. Second, the increasing cost of providing private goods, i.e., pork-barrels, created by demographic change, may lead Dietmembers to struggle with each other by providing voters with

public goods. Third, diffusion of civilian technology to military use may drive some voters to consider defense expansion as a private interest, which Dietmembers in turn have to support intensively. Fourth, a change in strategy of the opposition parties might motivate Dietmembers from the Liberal Democratic Party (LDP) (or from a ruling party) to support public interests, including defense expansion. Finally, under an extreme situation—such as a real attack on Japanese territory—Japan may quickly change its defense policy. Such an attack will seriously damage the private assets of voters so that they will regard defense expansion as a private interest. Although the factors which may change Japan's defense policy have either not existed at all or have been marginal in impact, recent changes in the factors seem likely to alter Japan's defense posture in the future. Yet, in order to avoid confusion, I would like to stress that other electoral systems would allow Japan to expand defense without such conditional changes.

Electoral Reform

As discussed in Chapter 5, Japan may be able to increase its defense commitment more easily under other electoral systems than under SNTV and MMD. An electoral system is changeable because it is a dependent variable of various factors. In fact, in January 1994, Japan adopted a new electoral system for the House of Representatives—a combination of the first-past-the-post (FPTP) and party list proportional representation (PR),

which has not yet been put into practice. Although it is very important and attractive to analyze reform as a dependent variable, I deal it as an independent variable for defense policy, because the new electoral system can change incentives and behaviors of Dietmembers in the process of policymaking.

In 1993, Japan experienced one of the biggest political changes after the end of WWII. After the election in July, *Nihon shintô* or the Japan New Party (JNP) and new political parties split from the LDP just before the election, i.e., *Shinseitô* and *Shintô sakigake*, organized a coalition government with the four previous opposition parties, i.e., the Japan Socialist Party (JSP),¹ the Clean Government Party (CGP), the Democratic Socialist Party (DSP) and the Social Democratic Federation (SDF). This was possible because the LDP could not gain over half the seats in the House of Representatives and the other parties rejected a coalition with the LDP. This is the first time the LDP became an opposition party since its organization in 1955.

One of the most important tasks that the coalition government achieved is an electoral reform. In January 29, 1994, the Diet finally adopted a new electoral system after long struggles over details.² The new electoral system is a combination of FPTP and the party list PR, which divides the

¹ As mentioned in other chapters, the JSP officially changed its English name to the Social Democratic Party of Japan (SDPJ). Yet, I use the old name to avoid confusion with the DSP.

² Although all the parties including the ruling parties and the LDP supported the electoral reform, they could not reach an agreement on details. The House of Representatives passed the electoral reform bill in November, 1993, but the House of Councillors did not. After rejection by the House of Councillors, a meeting of representatives from both houses finally agreed to pass the bill with some changes. This electoral system will be put into practice after districts are determined.

electorate in two different ways: 300 single member districts (FPTP districts), where a candidate who gained the most votes is declared the winner, and 11 multi-member districts (party list PR districts), where political parties can gain seats according to votes they received. Every voter has two ballots: one to choose a Representative from the single member district and the other to vote for his/her favorite party from the multi-member district—voters cannot choose a candidate in the party list. In all 500 Representatives, including 300 from the single member districts and 200 from the multi-member districts, will constitute the Lower House.

Although the boundaries of the single member districts have not been determined, one seat will be distributed to every prefecture and the other seats will be allocated according to the population of each prefecture. Table 7-1 compares the existing seats each prefecture had under the previous system with the expected seats it may gain after the reform. The multi-member districts consist of 11 sets of prefectures. The magnitude of each district will be determined according to population, as Table 7-2 illustrates.

The analysis of FPTP and the party list PR in Chapter 5 theoretically suggests that the new electoral system may produce two conflicting behaviors among Dietmember candidates.

Under FPTP, LDP candidates do not need to persist in supporting private interests of floating voters. Since LDP supporters are larger than any other votes in most districts, a LDP candidate running alone in a single member district can win through supporting the private interests of the LDP loyal supporters. If the candidate prefers defense expansion, a public interest

for both loyal and floating voters, he/she can support it. Moreover, since the opposition parties often do not please the LDP supporters, the LDP candidate may be able to win without supporting the exclusive interests of the loyal supporters. That is, if LDP candidates consider that Japan should increase its defense commitment, they can work for it without losing the election.

Table 7-1: Comparison of Seats for Prefectures before and after the Reform of Electoral System

Prefecture	Existing Seats	Expected Seats	Prefecture	Existing Seats	Expected Seats
Hokkaido	23	13	Shiga	5	3
Aomori	7	4	Kyoto	10	6
Iwate	7	4	Osaka	28	19
Miyagi	8	6	Hyogo	19	12
Akita	7	3	Nara	5	4
Yamagata	7	4	Wakayama	5	3
Fukushima	12	5	Tottori	4	2
Ibaragi	12	7	Shimane	5	3
Tochigi	10	5	Okayama	10	5
Gunma	10	5	Hiroshima	13	7
Saitama	20	14	Yamaguchi	9	4
Chiba	19	12	Tokushima	5	3
Tokyo	43	25	Kagawa	6	3
Kanagawa	22	17	Ehime	9	4
Niigata	13	6	Kochi	5	3
Toyama	6	3	Fukuoka	20	11
Ishikawa	5	3	Saga	5	3
Fukui	4	3	Nagasaki	9	4
Yamanashi	5	3	Kumamoto	9	5
Nagano	12	5	Oita	6	4
Gifu	9	5	Miyazaki	5	3
Shizuoka	14	9	Kagoshima	9	5
Aichi	22	15	Okinawa	5	3
Mie	8	5	TOTAL	511	300

Source: *Yomiuri shimbun*, January 29, 1994.

Table 7-2: Expected Magnitudes in Party List PR Districts

District	Prefectures in District	Expected Seats
Hokkaido	Hokkaido	9
Tohoku	Aomori, Iwate, Miyagi Akita, Yamagata, Fukushima	16
Kita-kanto	Ibaragi, Tochigi, Gunma, Saitama	21
Tokyo	Tokyo	19
Minami-kanto	Chiba, Kanagawa, Yamanashi	23
Hokuriku-Shinetsu	Niigata, Toyama, Ishikawa Fukui, Nagano	13
Tokai	Gifu, Shizuoka, Aichi, Mie	23
Kinki	Shiga, Kyoto, Osaka, Hyogo Nara, Wakayama	33
Chugoku	Tottori, Shimane, Okayama Hiroshima, Yamaguchi	13
Shikoku	Tokushima, Kagawa, Ehime, Kochi	7
Kyushu	Fukuoka, Saga, Nagasaki, Kumamoto Oita, Miyazaki, Kagoshima, Okinawa	23
TOTAL		200

Source: *Yomiuri shimbun*, January 29, 1994.

As discussed in Chapter 5, the party list PR system may induce political parties to support the voters' exclusive interests. Every political party would attempt to gain as many votes as possible because maximization of votes maximizes seats. The dominant strategy to maximize votes is to support the exclusive and public interests of voters. When a resource allocation problem occurs, the dominant strategy will turn to support for the exclusive interests. Taking this strategy may be impossible under a huge national constituency, because it is physically hard to take care of the various conflicting exclusive interests of voters in the district. Thus, political parties would compete with each other for the more common interests of voters. If voters preferring

defense expansion exceed those opposed, the parties can support the policy, although the parties cannot otherwise. However, the party list PR system Japan has adopted is not a national constituency system. Under the new system, the candidates can support the exclusive interests of voters. Hence, they cannot work for defense expansion even if the voters support the policy, when there is a resource allocation problem. As a result, a conflict might occur between candidates under FPTP, who can be responsible to external threats and public opinion, and those—actually parties—under the party list PR, who cannot be so.

The real situation might possibly make the behavior of Dietmembers different from the theoretical prediction above, because conditions are a little different from those in the theoretical analysis. The new parties, i.e., the JNP and *Shinseitô* and *Shintô sakigake* split from the LDP, each of which is smaller than the LDP, may form a coalition or merge into one party together with some parts of the other parties, such as the DSP and rightists in the JSP, in order to win an election under FPTP. Or, the LDP may make a coalition with some of them. For voters, the difference between the LDP and the new parties is not very clear, because all of the parties are liberal but more conservative than the socialist and communist parties and religiously neutral. Furthermore, many members within the new parties have experienced in governing so that they are credible for voters as much as LDP candidates. The new parties are potentially so-called "catch-all" parties, like the LDP. This implies that struggles between candidates from the LDP and the new parties under FPTP would resemble those among LDP candidates under

SNTV and MMD.³ Previous LDP supporters would choose either of the candidates who satisfies them more; the candidates in turn would put importance on supporting the exclusive interests of voters rather than public interests. Consequently, candidates under FPTP may not be able to support defense expansion so easily. This situation might continue until the small parties merge into two or three parties, in which voters can see clear difference.

On the other hand, candidates under the party list PR may become more sensitive toward the public interests of voters than toward their private interests. This is likely because each district might be too large for parties to take care of the various private interests of voters. Most party list PR districts extend over several prefectures. The population of each district is equivalent to that of many countries in Europe.⁴ Supporting various private interests of voters are very costly and technically hard so that parties might find that supporting the public interests of voters is a more effective means for winning. That is, although the new reform adopted a small constituency PR system, behavior of the parties would resemble that under a large constituency PR system. This suggests that parties would support defense expansion if many voters prefer it.

A summary of the possible outcomes under the new system is as follows. Since the differences between the LDP and the new conservative

³ We can often see that struggles among candidates in an election for choosing a governor or a mayor, which are carried out under FPTP, resemble those under SNTV and MMD. This is because the candidates often have very similar attributes.

⁴ For example, the population of the Tokyo district is larger than those of Portugal, Austria, Belgium, Denmark, Finland, Ireland, Norway, Sweden and Switzerland.

parties are not very clear, candidates from the parties may not be able to work for the public interests of voters but will have to in the main champion the private interests of voters, as if they were still fighting under SNTV and MMD. On the other hand, political parties might support public interests, if the voters prefer it and the PR districts are large enough to nullify the incentives of the parties to support the private interests of voters.⁵ Although the results are not clearly predictable, it is possible to say that the new electoral system will increase the possibility for Japan to be more responsible to external and public demands for defense expansion because more members of a ruling party would have motivation to champion public interests under the new system than under the previous system.

Demographic Change

Demographic change is another factor that may alter Japan's defense posture, because by increasing the cost of supporting private interests it may turn Dietmembers to work for the public interests more seriously.

The rapid economic growth of postwar Japan has dramatically increased the population living in urban areas. Yoshiaki Kobayashi (1991, pp. 13-14) categorized 130 electoral districts into seven types according to level of

⁵ Under MMD, a small party may gain seats by supporting the exclusive interests of voters living in limited areas. However, such a party may not be able by itself to gain a majority in the Diet alone because it may remain a local party not supported in other districts. It, however, may be able to join a winning coalition.

urbanization. As Figure 7-1 depicts, while 80 percent of all electoral districts were rural in 1960, the number decreased to only 21.5 percent in 1980. That is, many districts were rapidly urbanized during this period.

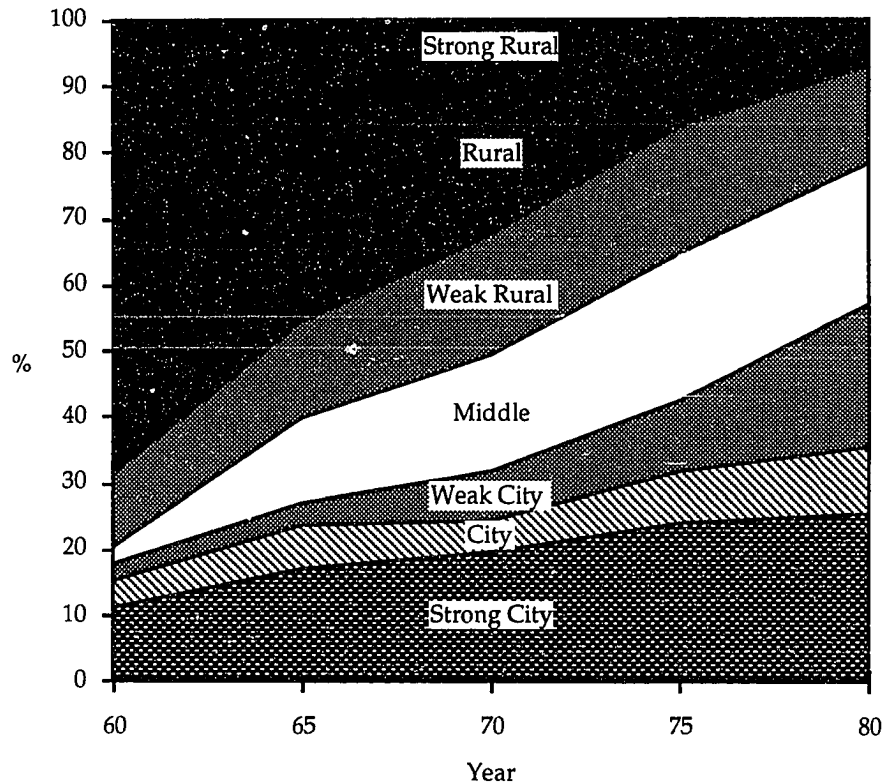


Figure 7-1: Urbanization of Districts

Source: Kobayashi (1991, p. 14)

Urbanization promotes mobility of populations. Children leave businesses and farms their parents have held for new industries and businesses. New industries and business do not necessarily employ local people but transfer employees without considering the locality of employees.

As Figure 7-2 illustrates, the mobility of the population dramatically increased as the Japanese economy grew after 1960. After 1970, the ratio of movers decreased owing to saturation of population in urban areas,⁶ commuters to other cities (Commuters A) and to other prefectures (Commuters B) are still increasing.

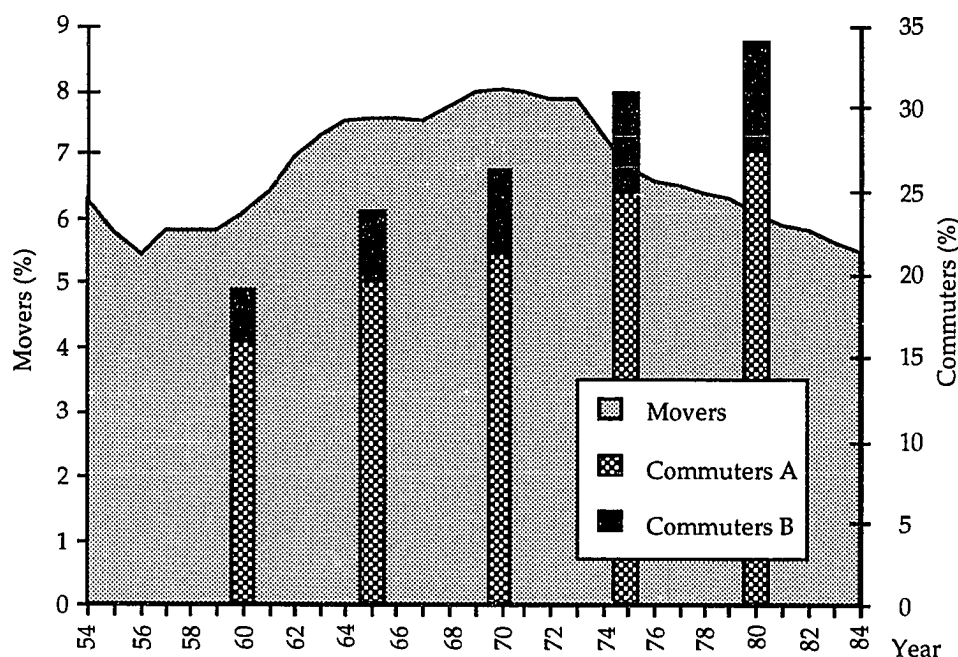


Figure 7-2: Growth of Movers and Inter-district Commuters

Source: *Kokusei chōsashū taisai: Jinkō tōkei sōran* [Population Statistics of Japan: Summary of National Censuses and Other Surveys, 1872-1984](1985, p. 872, p. 897)

Note: Commuters A=those who work out of their living cities or counties. Commuters B=those who work out of their living prefectures.

⁶ See *Kokusei chōsa shū taisai: Jinkō tōkei sōran* [Population Statistics of Japan: Summary of National Censuses and Other Surveys, 1872-1984](1985, pp. 26-38).

Furthermore, urbanization has increased white-collar workers. Figure 7-3 indicates the share of workers in three categories: Category 1 (agriculture, forestry, hunting and fishery), Category 2 (mining, construction and manufacture) and Category 3 (retail, wholesale, financial and insurance business, real estate, transportation, communication, utility services, other services and government officials). Although the figure does not directly illustrate this, it implies an increase of white-collar workers because Category 3 workers are mostly white-collar workers, while the workers in the other categories are not.

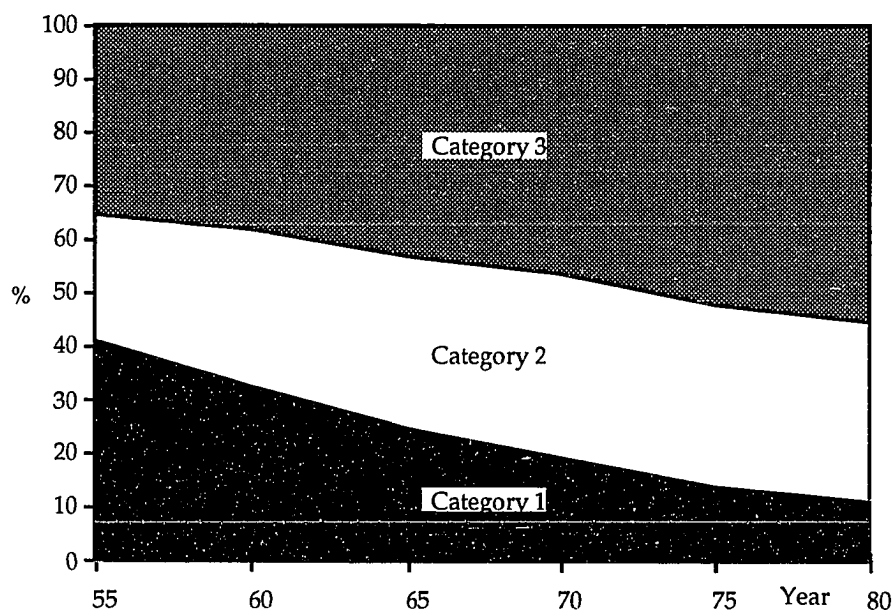


Figure 7-3: Share of Workers in Three Categories

Source: *Kokusei chōsashū taisei: Jinkō tōkei sōran* [Population Statistics of Japan: Summary of National Censuses and Other Surveys, 1872-1984](1985, pp. 484-485)

These demographic shifts may increase the cost of supporting the private interests of voters and make it difficult for Dietmembers to maintain personal support organizations. First, since voters do not stay in one district for long, the cost for keeping the same number of personal supporters would be higher than before. In other words, in order to keep the same number of loyal supporters, Dietmembers have to gain new supporters to offset those who leave the districts, through providing private goods, which is more costly than keeping the same supporters.⁷ Second, inter-district commuters may benefit by supporting politicians representing districts where they work as well as where they live. Dietmembers have to work for interests which cover many districts, because exclusive goods available only in their districts do not fully satisfy the inter-district commuters. Third, according to Robert H. Bates (1981, p.129), office workers' income is less strictly tied to the income of the firm unlike farmers or small firm owners who are residual claimants on their output. Interests of white-collar employees are diffused and tied up in their role as consumers, while those of farmers and proprietors are dominated by their role as producers.⁸ It is harder for politicians to cover the various exclusive interests of white-collar workers than to support the relatively unified interests of farmers or small firm owners. Dietmembers from districts with huge white-collar workers have to support interests the workers commonly share.

⁷ Ramseyer and Rosenbluth (1992, p. 39) argue that "because of such factors as high land prices, urban voters are less likely to own their own homes; hence they move more frequently. As a result, winning personal votes is more continuous and therefore more costly for politicians."

⁸ See also Ramseyer and Rosenbluth (1992, p. 39).

Increased costs of providing private goods shift the strategy of Dietmembers in election campaign. As discussed in the analysis of the party list PR in Chapter 5, when the cost of private goods is too high to provide, candidates have to compete with one another by providing public goods. This is also true under SNTV and MMD. Although the dominant strategy for candidates for winning is to support the private and public interests of floating voters and to support private interests of loyal voters, candidates in urban districts would just support public interests, owing to the high cost of supporting private interests. Under the new electoral system, where candidates more easily take care of public interests, probability of supporting only public goods will be higher.

Ramseyer and Rosenbluth (1993) think the cost of private goods has already changed the strategy of the LDP. They see that owing to demographic changes, "the LDP increased the proportion of public goods in the Japanese budget in the mid-1970s" (p. 52). In fact, as they argue, allocations of less targetable programs, such as national health insurance, welfare pensions, and educational programs, as pork-barrels increased from 25 percent to more than 30 percent in the combined total of the general account and supplementary budget during 1970 to 1975. In the meantime, allocation for public works, including those paid through transfers to local governments, small business, and agriculture, which are easily identifiable as pork, declined from 41 percent in 1975 to 26 percent in 1987 (*Kuni no yosan*, various years).

The high cost of private goods must also change the attitudes of LDP Dietmembers toward defense issues, since defense is a public good for most

voters. If voters prefer defense expansion, then LDP candidates in urban districts have to support it. Then, the LDP or any party who seeks power must increase its defense commitment to the point that maximizes seats. In fact, this mechanism of change can explain the recent small increase of the Japanese defense commitment. As indicated in Figure 7-4, the growth ratio of defense spending in the national budget during the 1980s did not decline as much as those of others.⁹ Moreover, Japan in 1991 decided to send SDF soldiers for Peacekeeping Operations (PKO) abroad. Meanwhile, although

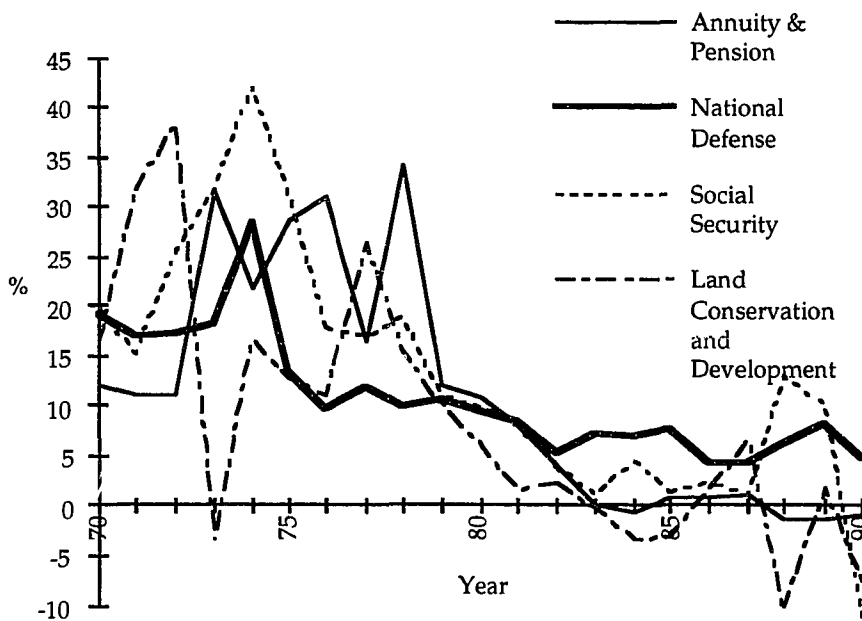


Figure 7-4: Growth Ratio of Expenditure

Source: *Zaisei tōkei [Budgetary Statistics]*, various years.

⁹ Although the growth ratio of the defense expenditure had been higher than the others', the share of the defense expenditure had been maintained at one percent in GNP, while the shares of the other expenditure had been much larger.

more than half the people prefer the status quo and those who prefer decreasing the defense expenditure often exceed those who prefer increasing it—this does not represent the preferences of LDP supporters—the number who support the PKO dramatically increased from 22 percent in January 1988, to 46 percent in February 1991 (*Yoron chōsa nenkan*, various years). It seems to me that the LDP has turned to pay more attention to defense issues than before to satisfy urban voters who were afraid of possible U.S. retaliation against the Japanese small contribution to the maintenance of international security.

Development of Technology

Exogenous factors may change voters' preferences. A good example is the diffusion of civilian technology to military use, which may motivate some interest groups to support defense expansion. It is obvious under SNTV and MMD that Dietmembers who hold such a group as loyal supporters will turn to promote a more active defense policy in the process of policymaking. Even under the new electoral system, they will do the same because the dominant strategy under any electoral system is supporting both the private and public interests of voters, although some systems do not require the dominant strategy to win an election.

In the history of science and technology, we have seen the "spin-off" of military technology to civilian use. Most of the top engineers and scientists

have worked in military industries on research and development of weapons.¹⁰ Military technology in general has been usually much more advanced than civilian technology because military weapons require more accuracy and durability than the civilian goods. Thus, many kinds of technology, invented and developed in military industry, have been applied to the civilian use later. It is true in many countries but the most obvious example is the Soviet Union. While the Soviet Union was one of the leading countries for weapon systems with a great number of top level engineers and scientists, ordinary Soviets could hardly enjoy most advanced technology in their lives (Ebata, 1992, p. 95).

However, today we can often see the opposite trend, i.e., "spin-on," by which military weapon systems adopt technology developed for civilian use. Thanks to the hard competition, civilian industry firms have become able to produce high-tech products whose quality is better than those developed for military use (Asahi shimbun keizai bu, 1989, pp. 257-259).¹¹ Consequently, the civilian high-tech products are now extensively used for military use as well. Examples are many. A charge-coupled device (CCD) for a handy-camcorder and a laser sensor for a compact disk (CD) player can be used as an "eye" for a guided missile. Communication systems among jet-fighters and among soldiers employ one mega-bite dynamic random access memories (DRAMs) developed for personal computers. Technology developed for the automated teller machine (ATM) system can manage the records of every single soldier

¹⁰ For the case of the semiconductor industry, for example, see Okimoto, Sugano and Weinstein (1984, Ch. 2).

¹¹ The author refers to an interview with Daniel Okimoto.

(Asahi shimbun keizai bu, 1989, pp. 8-10). Carbon fibers developed for tennis rackets, golf club shafts and fishing rods are useful for a body of an aircraft (Asahi shimbun keizai bu, 1989, pp. 80-81). According to Takeshi Abe of the Mitsubishi Electric Company, "there is no border for contemporary technology between civilian and military. All high-technology is for dual-use" (Asahi shimbun keizai bu, 1989, pp. 9-10).

Today, Japan is superior to the United States and other developed countries in some fields of technology. The Japanese share in the international market of integral circuits (ICs) exceeded that of the United States in 1986. More firms are involved in development of the most advanced DRAM in Japan than in the United States (Defense Science Board, 1987). 90 percent of CCDs are made in Japan (Asahi shimbun keizai bu, 1989, pp. 8-9). The "spin-on" of civilian technology to the military use means that most Japanese firms, which have been engaged only in the development of civilian technology, now manufacture military technology as well.

Having a dual-use technology, Japanese civilian high-tech firms now have the possibility to obtain another market in which they have not been seriously involved. Although worrying about excessive dependence on foreign products, the United States cannot stop importing cheap and good high-tech products for the military use because U.S. military firms are better off through importing those products than producing the products by themselves (Ebata, 1992, p. 99). In fact, the United States imports more Japanese high-tech products than Japan imports U.S. ones (Defense Science Board, 1987). As "spin-on" evolves, Japanese high-tech producers will benefit.

This will be true in the domestic market, too. Japan has been importing U.S. weapons and produced weapons under licenses from U.S. firms. Japan now can produce many weapons or parts without U.S. technology and licenses. For example, the Toshiba Corporation and the Self-Defense Agency (SDA) developed a carrying surface-to-air-missile (SAM) or a *keikô* SAM, whose quality is equivalent to a U.S. carrying SAM, i.e., a Stinger. The 100 percent domestic cruise surface to ship missile, SSM1, attracted U.S. officers when it was tested in California, in 1987. A FSX will be equipped with a newly developed Japanese radar and wings made with Japanese carbon technology, although the base of the FSX will be a U.S. F-16 (Asahi shimbun keizai bu, 1989, pp. 9-17). Furthermore, Japan successfully launched the first pure domestic large rocket, H-II, in February 1994, whose carrying capacity matches that of a U.S. Titan III. Although a H-II is for civilian use, it can become a inter-continental ballistic missile (ICBM) if it loads a bomb.

The emergence of this new market can change interests of Japanese civilian industry firms and workers. The size of Japanese military industry is not large. Although there are several big firms in the industry, such as the Mitsubishi Heavy Industry (MHI) and the Ishikawajima Harima Industry (IHI), the share of military business for these firms does not exceed more than 20 percent of their whole business (Calder, 1988, p. 421).¹² That is, voters who hold defense expansion as an exclusive interest have been small in

¹² The Mitsubishi Heavy Industries (MHI) relied on defense procurements for 13.7 percent of its total sales in fiscal 1985. Only two of the other top ten defense contractors obtained more than 10 percent of their sales from defense. Calder (1988, pp. 421-422). See also Yamaichi shōken keizai kenkyū jo (1987, p. 300).

number. On the other hand, producers of high-tech products in civilian industry are massive. Semi-conductors, CCDs, and other high-tech products are products of Toshiba, NEC, Matsushita, Sony and etc. Moreover, these big firms depend on many small-to-medium size enterprises (SMEs) located in various areas, as Figure 7-5 depicts. This implies that the new market would benefit not only big firms but also many SMEs, too. If workers and owners of the SMEs consider defense expansion as their exclusive interests, it could be a great inducement for legislators to change their behavior in the process of

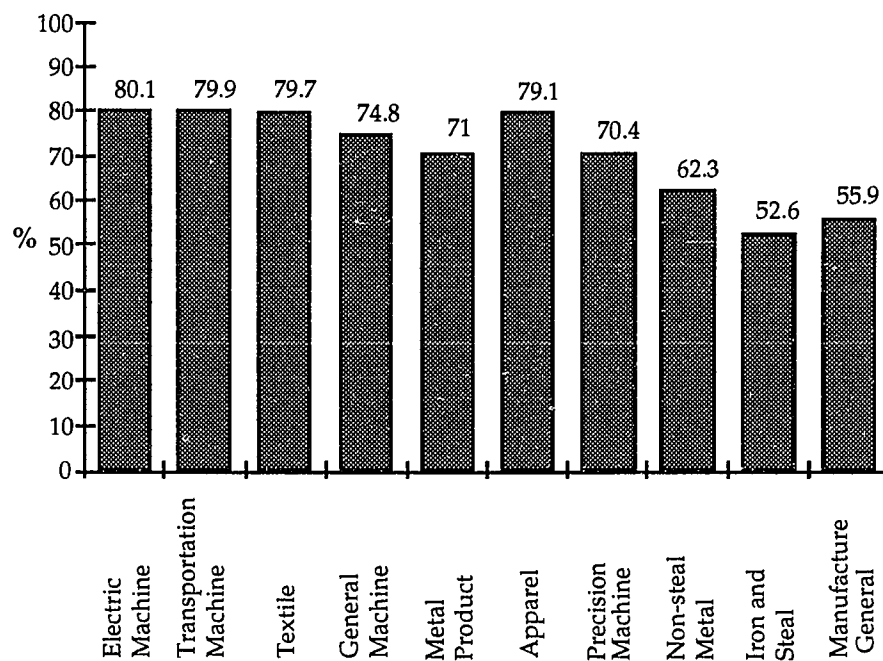


Figure 7-5: Subcontract Enterprises among SMEs in 1987

Source: *Chūshō kigyō hakusho [Whitepaper of Small-Medium Size Enterprises]* (1992, p. 253).

policy making under SNTV and MMD, where they have to support exclusive interests of voters for winning, and even under the new electoral system, where the dominant strategy for legislators is supporting the private and public interests of voters, although it may be unnecessary for winning.

The fact that the growth rate of defense expenditure did not decline as much as other expenditures in the 1980s might reflect the fact that those who consider defense expansion as their exclusive interest are increasing. Although their power seems so far not large, once the civilian market shrinks for some reasons or gets saturated, they might start pressing toward legislators to expand the defense capability, as they have been doing in other fields.

Change in the Opposition Parties

Most of the opposition parties have been reluctant to increase defense commitments. The JSP had questioned the propriety of the Self-Defense Forces (SDF), while advocating the disarmament of Japan, until they came to power with the LDP in 1994.¹³ Although the CGP approves of the SDF as legal, it retains negative attitudes toward increasing defense commitments. The JCP is the main body which asserts the need to dismantle the SDF. It is only the DSP among the opposition parties that maintains the necessity of more substantial defense commitments.¹⁴ If these parties opposing defense

¹³ The JSP had been advocating "unarmed neutrality" until the 1980s. See Ishibashi (1980) and *Bôei hando bukku* (1992).

¹⁴ For posture of each party toward defense, see *Bôei hando bukku*, various years.

expansion for some reasons alter their attitudes, Japan could have and will be able to change its defense policy.

Although the LDP enjoyed a monopoly of power since 1955 until 1993, national policymaking has not been always free from the influence of the opposition parties. The LDP has proposed numbers of bills and amendments to the Diet under cooperation with the opposition parties. As Figure 7-6 illustrates, the bills and the amendments passed only by the LDP have not exceeded 20 percent since 1967, while half of those have been supported by all the parties on average. This suggests that when the LDP and the government want to pass bills or amendments in the Diet, they discuss the issues with the opposition parties to absorb the demands of the latter. The LDP makes concessions to the opposition parties in the process of policymaking.

A question is: Why does the LDP, which can pass any bills and amendments alone, often cooperate with the opposition parties?

The reason often referred to is that the LDP needs to avoid sabotage by the opposition parties in the Diet. There are some tactics of sabotage for the opposition parties to resist the dominant party. Examples include refusal of discussion, *Gyûho senjyutsu* [cow-walking or snail's pace tactics], by which Dietmembers take extremely slow voting actions, and *Gijyô senkyo* [occupation of the floor], by which opposition parties blockade the floor of the Diet Hall.¹⁵ These tactics of physical resistance by the opposition parties as well as other moderate forms resistance have been allowed in the Diet as the

¹⁵ Other tactics include *tsurushi*, *makura*, *shitsumon zeme*, etc. See Iwai (1988, pp. 125).

right of a minority which has no possibility to assume power (Iwai, 1988. p. 126).

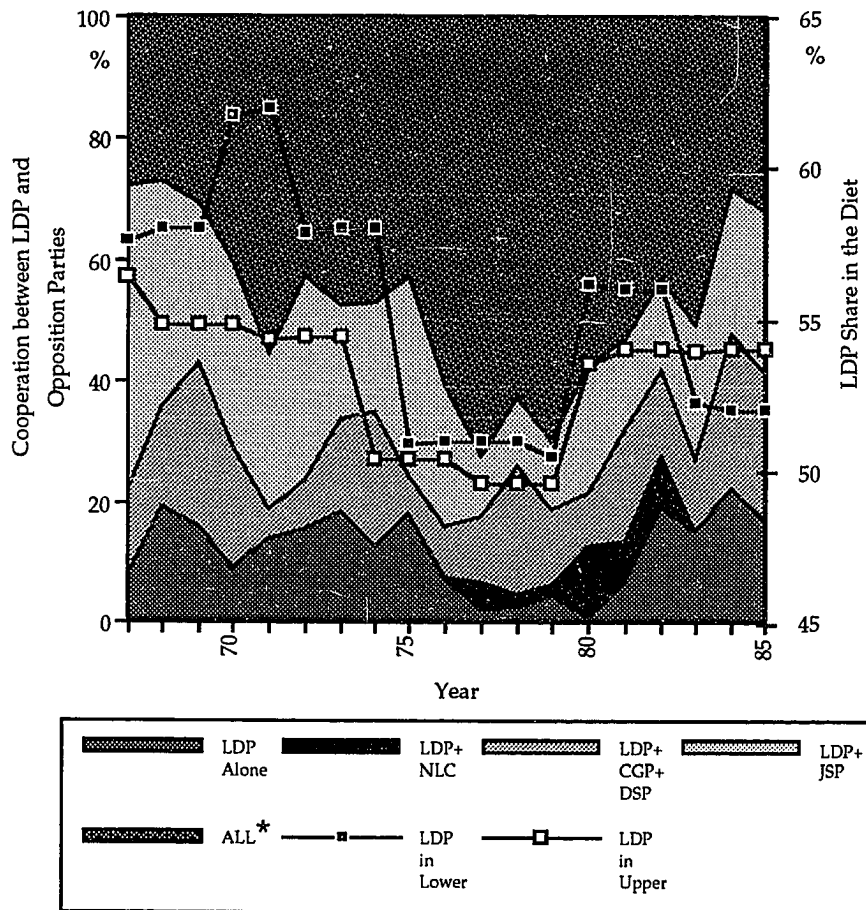


Figure 7-6: Bills and Amendments Passed and Supporting Parties, and LDP Seats in the Diet.

Source: Satô and Matsuzaki (1986, p. 289, pp. 356-364).

Note: The areas express cooperation. The lines express LDP seats.

The cases supported by the LDP and the JCP alone are excluded, which happened five times, once in 1971, 1972, 1973, 1975 and 1981.

* Including three cases in which the JSP stood alone in 1985

Tomoaki Iwai (1988, pp. 126-128) maintains that four factors limit the disposable time for policymaking in the Diet. First, since the effects of policy will fade as time passes, policy must be made and carried out within the period in which it is effective.¹⁶ Second, a bill must be passed within one term of the Diet because it will automatically lapse if the process of passing the bill is incomplete. Third, elections can physically limit the disposable time for policymaking because Dietmembers have to spend plenty of time on election campaigns. Moreover, elections may hasten a ruling party to enact its policy if it will effectively increase its supporters. Finally, the "unanimity rule" of Japanese society as culture requires more time for deliberation and thus actually shortens the disposable time (Iwai, p. 132). The resistance by the opposition parties under the limited disposable time for deliberation might draw some concessions from the LDP, which wants to pass its proposals as soon as possible.¹⁷

Ramseyer and Rosenbluth (1992, p.30) maintain that LDP concessions the opposition parties can gain by resistance are minimal because (1) "the length of Diet sessions, hours of Diet deliberation, and filibuster rules are governed by legislation rather than the Constitution; the LDP could rid itself of the delay problem without much difficulty," (2) "the LDP violates the 'unanimity norm' frequently, particularly when it has a large majority."¹⁸ They argue then that changes of LDP policy programs occur because of

¹⁶ See also Sone (1984, pp. 83-119).

¹⁷ See also Mochizuki (1982).

¹⁸ Iwai (1988, pp. 96-97) also admits that influence of resistance by the opposition parties is minimal.

electoral calculation. Since LDP voters, especially urban voters and floating voters, swing their votes to opposition parties when they get angry (Kobayashi, 1991), the LDP sometimes alter its policies according to the level of sympathy that opposition parties receive. The concession will be settled at the point where the number of votes the LDP can keep would at least guarantee LDP's majority in the Diet.

The data roughly support the argument of Ramseyer and Rosenbluth. If Ramseyer and Rosenbluth are right, when the LDP have plenty of seats in the Diet, the LDP must tend to pass its proposals without concession to the opposition parties because the LDP needs to worry about flow of potential LDP voters to the opposition parties less seriously than when the LDP is weaker. As LDP power declines, then LDP cooperation with the opposition parties must increase. We can find this expected relation in Figure 7-6, although dimly. LDP cooperation with the opposition parties had been increasing as LDP seats had been decreasing since 1972. After 1976 when the initial LDP seats did not exceed half of the Lower House,¹⁹ the ratio of LDP cooperation with the opposition parties was extremely high. After 1980 when the initial LDP seats regained over a half of seats in the Lower House, the cooperation decreased.

The relation implies that if the opposition parties support some interests of a part of potential LDP supporters, i.e., floating voters and urban voters, the LDP might make a concession to the opposition parties, even if the

¹⁹ Although the initial LDP candidates did not exceed more than half the seats in the House in the elections in 1976 and 1979, the LDP gained a majority by authorizing conservative independent winners for both cases.

interests are unfavorable to many loyal LDP supporters. An example is the establishment of the Environmental Agency and nationwide anti-pollution laws in 1970, which could disturb the exclusive interests of small and big firms. By doing so, the LDP could hold back potential movers from the LDP to the opposition parties (Ramseyer and Rosenbluth, 1992, pp. 46-48).²⁰ Theoretically, if the opposition parties support defense expansion in order to absorb a part of the LDP supporters, the incentive of LDP Dietmembers to increase defense commitment could become substantial. In reality, this has not yet happened. However, if the opposition parties attempt to absorb urban voters sensitive to public goods, thus possibly to defense expansion, for their own survival, the LDP or a ruling party might also support the policy in order to stop the flow. This will be more likely in the future, because Dietmembers have to take care of public interest more seriously under the new electoral system with increasing urban voters than under SNTV and MMD.

Under Emergency

Japanese territory has never been attacked by any external power since the end of WWII, although Japan has been facing threats from the North and West. If there is an actual attack on Japan or if the threats grow extremely strong, Japan may expand its defense capability quickly. Such a large impact

²⁰ See also Upham (1987, pp. 28-77).

can raise the priority of national defense among voters, and thus among Dietmembers.

External threats may cause anxiety about national defense among voters. Unless the threats substantially damage voters' exclusive interests, national defense remains a public good. However, if the threats impair the voters' exclusive interests or perhaps do so with very high probability, then national defense can be a private interest as well as a public interest for all voters. In this situation, Dietmembers must work for expansion of national defense even under SNTV and MMD where they have to work intensively for private interests of voters as well as under the new electoral system where the candidates can more easily support public interests. This is because protecting private and public interests of the voters is the dominant strategy under any electoral system.

In fact, a real attack can easily change public preference over military action. Examples may include the Japanese surprise attack of Pearl Harbor in 1941. Before the attack, most American people were reluctant to be involved in war with Japan so that the U.S. government could not initiate war. Robert J. C. Butow (1961, p. 336) writes that the concern of President Roosevelt in dealing with Japan was how to maneuver Japan into the position of firing the first shot. After the Pearl Harbor attack, the United States could invest massive resources in the war because of huge public support.

The recent dispute about North Korean nuclear capability has rapidly increased defense concerns among the Japanese. The public opinion poll indicates that 71.4 percent of answers feel a nuclear threat from North Korea

and 60.2 percent agree to economic sanctions against North Korea (Yomiuri Shimbun, April 21, 1994). As discussed, such a rise of public anxiety about national defense does not lead Japan's defense expansion under SNTV and MMD, because the threat has not damaged the private goods of voters. Thus defense expansion remains as a public good that Dietmembers will neglect in an election. Under the new electoral system, the huge public anxiety will more easily beef up Japan's defense capability, because Dietmembers can champion a public interest with less fear of losing. Yet, if the threat turns to a substantial attack for some reasons, Japan will quickly increase its defense posture under any electoral system, including SNTV and MMD, because national defense will become a private interest for all the voters.

Summary

Although there must probably be many factors for changes of Japan's defense policy, here I have introduced four among them: an electoral reform, demographic change, development of technology, and an emergency. These factors change the conditions that allow SNTV under MMD—or the electoral system itself—to nullify incentive of Dietmembers to support defense expansion. A new electoral system would motivate Dietmembers to work for a public good more seriously. Increase of urban white-collar workers changes the pro-business and pro-producer strategy of candidates to one that rates public goods more highly. Diffusion of civilian technology to military

use makes defense expansion a private interest of many civilian industries. A military attack of Japanese territory can also privatize national defense for voters. Yet, I would like to stress that Japan could expand defense without the above changes under other electoral systems.

Since the end of WWII, we have seen huge demographic change and rapid development of technology. These changes might have not been enough for Japan to increase its defense expansion except marginally. However, we can predict that Japan will abandon its low key defense posture in the future because defense expansion will be private interests for more groups and the public interest will become more seriously considered under the new electoral system than before. Japan will be able to change its defense policy in a way more responsive to changes in external and domestic circumstances.²¹

²¹ Of course, this does not mean that Japan will turn to be a militant state seeking establishment of hegemony in Asia or in the world.

Japan's defense commitment has been low and inactive since the end of WWII even though external strategic conditions and public preferences have shifted. Previous studies do not give us satisfactory answers to this puzzle, because they overlook the mechanism that directs the behavior of Dietmembers from the Liberal Democratic Party (LDP), who together are most influential in forming defense policy. I argue that it is the electoral system—the single non-transferable voting (SNTV) system under a multi-member district (MMD)—that nullifies the incentives for LDP Dietmembers to support defense expansion. LDP Dietmembers cannot easily support defense expansion under this electoral system, because doing so endangers their political status, whatever their preference for defense expansion. What Japan

can at most do is to increase its defense commitment in the fields that do not generate a resource allocation problem. My conclusion is that Japan could not make a substantial change in its defense policy because of the electoral system. Since, in 1994, Japan replaced this electoral system with another—a combination of the first-past-the-post (FPTP) and the party list proportional representation (PR) system—it may become more responsive toward external threats and public preference in the future.

What Was Examined and Tested

What I examined in this study is various but it has all aimed to test the hypothesis that SNTV under MMD nullifies the incentives of the LDP Dietmembers to support defense expansion. First, I clarified the problems of the previous explanations about why Japan's defense efforts have been low and inactive since the end of WWII. None of the previous research can fully explain the puzzle in Japan's defense policy. Second, I analyzed models of Japanese politics to determine who plays a key role in the process of policymaking. The conclusion is that the LDP legislators, who together have maintained power, are most influential in the process of policymaking, but they behave according to the preferences of voters within the framework of the electoral system. Third, I theorized a mechanism in which SNTV under MMD drives legislators unwilling to champion defense expansion. SNTV under MMD drives legislators to support pork-barrel interests for their

supporters. They do not support interests that more broadly benefit voters, including defense efforts, because doing so endangers their political status in elections. Fourth, I theoretically examined other electoral systems to test whether they work as does SNTV under MMD. Theoretically, SNTV under MMD is one of two electoral systems that disturbs the incentives of the legislators. Then, I tested whether SNTV and MMD can have other results and whether the other electoral systems produce the same results as SNTV and MMD, through the analysis of empirical data. The empirical tests suggest that SNTV under MMD works in general as the theory expects, although some mixed results are found. Finally, I pointed out some theoretically possible factors that can diminish the effects of SNTV under MMD: an electoral reform, a demographic change, diffusion of civilian technology to military use, the strategy of the opposition parties, and an extreme crisis.

The final results of the study are as follows.

- (1) In theory, SNTV under MMD is not a necessary condition to nullify the incentives of the legislators to support defense expansion.
- (2) Only SNTV under MMD nullifies the incentives among existing electoral systems adopted by itself, i.e., not in combination with others. The system is a necessary condition in practice.
- (3) In theory and practice, SNTV under MMD is a sufficient condition to nullify the incentives.

In more conventional expression, the legislators under SNTV with MMD necessarily cannot support defense expansion. If there are legislators who never can support increased defense efforts, they are chosen from the SNTV with MMD. Since the Representatives from the LDP have final authority in the process of policymaking and a veto power over the Councillors, Japan cannot increase defense commitments, even faced with necessity.

What Should Be Done Next

Although this study has tested the hypothesis in many ways, much still remains to be examined.

First, we can research the behavior of specific LDP legislators, who have been involved in the Defense Division of the Policy Affairs Research Council (PARC), in electoral campaigning. I assumed that if the legislators are unwilling to support defense expansion, then their involvement in the division must be small. However, other factors might be able to produce the same effect. And legislators might be able to work for defense expansion without deep involvement in the division. Since Japan adopted a new electoral system, it is no longer possible to make a field survey of the effect of SNTV under MMD. Yet we can interview the legislators about their strategies under the old system and see how differently they behave under the new system.

Second, we should investigate more deeply the effects of SNTV under MMD on other public policies. As discussed, the theory about the effects of SNTV under MMD can be applied to other public goods. If the theory is correct, the legislators are indifferent to public goods which are hard to make into pork-barrel items. Chapter 6 analyzed the involvement of the legislators in the other PARC divisions and found that they have not made deep commitments in specific fields, such as justice, local administration, diplomacy and environment. However, I did not analyze the public policies they carried out in the fields. We have to examine whether or not Japan's commitments in these fields are low and inactive in a way similar to defense issues.

Third, although a demographic change can theoretically diminish the effects of SNTV under MMD, as discussed in Chapter 7, this hypothesis has not been rigorously tested. If it is true, the involvement of the LDP legislators in the PARC divisions dealing with little pork-barrel items must have been increasing as time passed. Furthermore, Japan's commitments in those fields must have been increasing, too. In terms of security issues, after the middle 1980s, Japan's efforts seem to be increasing although very slightly. This tendency must also appear in the other public goods.

In the empirical tests in Chapter 6, the effects of FPTP were a little different from those expected theoretically. FPTP adopted for the Upper House show similar effects to those of SNTV under MMD. I assumed that this is because that the LDP unofficially fields plural candidates in the same district owing to intra-party struggles. The party cannot prevent candidates

without party endorsement from running, but it can absorb them if they win. If plural candidates run in the same district, they behave as if they were under SNTV and MMD. To test this hypothesis, we have to analyze the other states adopting FPTP, where no plural candidates run from the same party. If the theory is correct, the candidates under FPTP in the other states must behave differently from those in Japan.

Finally, study of Taiwan is necessary. Although Taiwan is the only other state besides Japan that adopts SNTV under MMD, its defense efforts are much larger than those of Japan, as discussed in Chapter 6. I assumed that this stems from the fact that Taiwan has a presidential system and a majority of the legislators are free from SNTV under MMD. Under this situation, the effects of the electoral system may not appear in the result of policymaking. However, we must see the effects in the electoral campaigning of the candidates running from *Kuomintang* (KMT) in the SNTV under MMD districts. If the theory is correct, the candidates must compete with each other through providing personal services and pork-barrel items as the LDP candidates do in Japan.

Coming Changes with the New Electoral System

In the end of January 1994, the Diet decided to adopt a new electoral system, a combination of FPTP and the party list PR for the House of Representatives. Among 500 seats, the FPTP districts occupy 300 seats and the

11 party list PR districts gain 200 seats. Theoretically, the new electoral system does not impede the legislators from support of public interests unlikely to be pork-barrels for voters, as discussed in Chapters 5 and 7. Interestingly, we can already see the effects of the new electoral system.

The Hosokawa government decided to open the rice market in December 1993. By this decision, Japan allowed "minimum access" to imports of between four percent and eight percent of domestic rice consumption during a six-year grace period under GATT's tariff scheme. Rice issues have been one of the largest pork-barrel items for the LDP legislators to maintain rice producers in their *Kôenkai*. Importing foreign rice would damage the producers who have been protected by the government but benefit consumers who have been sacrificed. The Hosokawa government is a coalition of smaller parties than the LDP so that they may not or cannot field plural candidates in every district. However, if they want to keep power, they must field plural candidates in almost every district as did the LDP. By this policy change, the legislators would lose in an election under SNTV and MMD but can win under the new system. I think that the government decided to open the market with the expectation that they could change the electoral system, soon—they actually did so within two months.

In terms of security issues, too, we can see some effects of the new system. The government, consisting of the LDP, the JSP and *Shintô sakigake*, decided to send the Self-Defense Forces (SDF) to Zaire to rescue refugees from Rwanda in August 1994. This decision was far quicker than the decision to send the SDF to Cambodia and to the Prussian Gulf, which was achieved

before the new electoral system was adopted. This suggests that the legislators do not seriously feel that working for increased security commitments decreases their support.

Matters are all in transition. Japan has not yet experienced an election under the new system. The behavior of the legislators may be the effects of their hallucinations about the new electoral system rather than the real effects of the system. Thus, we cannot arrive at a conclusion yet. We should wait until the new system is put into practice and empirical tests can be conducted before arriving at a firm conclusion about the new system.

Summary

From this study of SNTV under MMD, I have concluded that SNTV under MMD nullifies the incentives of the LDP legislators to support defense expansion. The other electoral systems contemporary with it do not produce the same outcome. This is the reason why Japan has maintained a low and inactive defense posture even under external and internal demands.

The theoretical and empirical tests carried out in this study did not refute the hypothesis. However, we can test the hypothesis in other ways, which may be anticipated for the next. Among them, most exciting is to see how Japan changes its defense policy and other public policies after the new electoral system is put into practice. If our hypothesis on the effects of SNTV under MMD is correct, Japan will be more responsive toward the necessity of

security efforts in a way similar to the other countries. In other words, Japan will become what Ichirô Ozawa (1993) calls a "normal" state.

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