

Congressional Influence on Defense Policy (1993-2012)

By

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Abstract

Defense policy has two fronts to deal with: one for external threats and the other for its domestic foundations. Traditionally, defense policy has been developed to protect the United States from the threats from the outside and this part of defense policy is controlled by the executive branch. However, its institutional and organizational foundations are based on its citizens, industries and economy. This part of defense policy has been influenced by Congress, the representatives of citizens. Specifically, the defense budget is a key area that can be controlled by Congress.

In this thesis, I analyzed the Congressional influence on defense policy using three factors such as party unity, accuracy of vote prediction based on ideology, and cost of amendment. I attempt to consider an amendment as the unit of the analysis and examine the effect of the factors on passage of amendment. I also compare the authorization process and the appropriation process. As the result of the analysis, I find that the authorization process is quite different from the appropriation process even though these two processes are dealing with the same subject – defense budget. The authorization process is more policy oriented while the appropriation process is more budget related. Amendments in authorization bills are more predictable than those in appropriation bills. In the authorization process, majority party unity and accuracy of vote prediction by ideology have positive effects on passage of amendment, and cost of amendment has negative effect on it. In appropriations, all three factors do not show statistical significance and it is necessary to analyze amendments case by case.

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Chapter1 Introduction

"We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America."

- U.S. Constitution.

1. Double fronts of Defense Policy

Defense policy has two fronts to deal with; it primarily functions to deal with foreign threats, but in order to function well, it should be supported by the public and needs to be based upon domestic foundations such as popular support and economic capabilities (Huntington, 1961; Janowitz, 1974; Hays et.al., 1997).

The preamble of the U.S. Constitution spells out six purposes and goals that the United States of America should pursue as a nation. Common defense is one of them, which means to secure “the American people as a whole” from threats (Huntington, 1961). Considering the fact that there are other goals that primarily concern domestic issues such as a “more perfect union, justice, domestic tranquility, general welfare, liberty and posterity”, it can be concluded that the threats that are dealt by *providing common defense* should come from not inside of the U.S. but outside of the U.S.

In order to provide common defense against the external threats, the U.S. government searches for the source of threats, develops the strategies to deal with these threats and uses its military forces to execute these strategies (Kaufman et.al., 1985; Hays et.al., 1997) . These tasks are purely the jobs of professional soldiers and they are responsible for developing their own ways to fight against threats (Huntington, 1961; Sarkesian, 1999). Moreover, the professional

soldiers do not need to negotiate with their principals while dealing with external threats ¹. The only thing they need is the logic that can persuade their principals such as citizens, the President, and members of Congress (Huntington, 1961; Sarkesian, 1999). This is the core of military professionalism.

Nonetheless, when it comes to building up the foundation of defense policy, the story is quite different from dealing with foreign threats (Kaufman et.al., 1985; Ripley et.al., 1992; Hays et.al., 1997; Rundquist and Carsey, 2002). The foundation of defense policy comes from inside of the United States. First of all, most of the military organizations consist of U.S. citizens. Second, the defense budget that operates the military comes from the federal budget that is paid by the citizens. Third, most weapons that the military uses are made in the U.S and U.S. industries. Last, the agency that is responsible for defense policy is overseen and controlled by the representatives of the U.S. public – the U.S. Congress. Building up the foundations of defense policy are purely political tasks that require promoting public support; making contracts with industries; and mostly persuading the Congress and the President (Ripley et.al., 1988; 1992). These are the core tasks of civil-military relations.

Consequently, in order to understand defense policy comprehensively, it is not sufficient merely to look at the execution of military strategies. We must analyze the inner dynamics of civil- military relations -- the relationship between defense policy and the domestic foundations of it.

2. Statement of Problem : Why Congress and Defense Policy

If this is the case, how can we analyze defense policy in the framework of civil-military relations? If we approach civil-military relations broadly, we can draw three major relationships

¹ Sun Tzu, *Art of War*. Chapter I; Carl Von Clausewitz, *On War*, Book I. This does not mean military strategies are not influenced by public or representatives of people. It means that the logic on which strategies are based are more important than any other factors because military affairs are a problem of death and life.

between military and civilian authority depending on how we define either military or civilian authority (Huntington, 1961; Janowitz, 1973): First, the relationship between society as a whole and its military members; second, the relationship between political authority and military agency (Herspering, 2005); third, the relationship between the representatives of the public and military agency who is in charge of military affairs (Nielson, 2009). In the U.S., the first relationship can be visualized as the relations between the U.S. public and military as a whole; the second relationship could be the one between the President and the department of defense; the third relationship can be considered as the relationship between Congress and military organizations, including the Department of Defense and subordinate military services.

In the first relationship, the main issues have been how the public perceives their military and how public opinions affect defense policy and military strategies (Burnstein et.al., 1978; Hartley et.al., 1992; Groeling et.al., 2008) However, the effect of public opinion on defense is inclined to be indirect rather than direct, because there are various mechanisms that transmit public opinions to the military organizations (Burnstein et.al., 1978; Hartley et.al. 1992). Consequently, in order to understand the effect of public opinion on defense policy in detail, it is necessary to scrutinize these mechanisms that link the public to the military organizations.

There are two main institutions that perform these mechanisms: the Presidency and Congress (Hays et.at., 1997). In the organizational aspect, the Presidency has executive power over all the military organizations; the President can appoint the high profile military officials such as the Secretary of Defense and the chairman of the Joint Chiefs of Staff (Moe, 1999). Moreover, considering the fact that the President is the commander - in - chief of all the military, the Presidency is at the top in aspect of military strategies, and the relationship between the

Presidency and military can be the proper level of analysis for strategic issues (Deering et.al., 1989).²

However, the President- military is not the proper level of analysis for defense policy as a whole. Some other issues that are closely related to the public or constituents – such as military procurement, Military Base Realignment And Closure etc. – have been checked and affected by Congress (Deering et.al., 1989;Hays et.al.,1997). Moreover, even in strategic issues, Congress exercises authority by requesting executive branches to attend hearings and report the causes and consequences of related issues (Ripley et.al., 1992; Hartley et.al., 1992). Consequently, in order to understand the inner dynamics in the process of developing defense policy and civil-military relations, it is necessary to consider Congress as an influential actor in defense issues.

3. **Research Question**

The research topic of this thesis is the Congressional influence on defense policy. In order to analyze this topic theoretically, it is required to define the core concepts that are included in the title itself. There is a pair of major issues in the title – Congressional influences, and defense policy.

In terms of Congressional influence, Congress has a number of means to influence policies of the Executive branches such as hearings, making a law, or performing some sort of means for governmental oversight (Shipan, 2007; McCubbins et.al., 1984). Among these, the most significant and prominent means of Congressional influence on policies of executive branches is voting behaviors of each legislator that determine the fate of legislation, and these behaviors define Congress's fundamental role of *making law* for government (Krehbiel, 1998).

² Due to the professionalism in military affair, the President has a control over both strategic and structural issues in military affairs. But being compared to strategic issues, the structural issues are more inclined to be overseen by Congress, due to the fact that Congress has the power of purse to authorize budget for dealing with structural issues.

Defense policy also consists of various parts such as strategies which include threat analysis and tentative ways to deal with those threats, various programs to support and execute these strategies, procurement plan for supplying necessary equipment to do these tasks, and budgets for executing defense policy(Huntington, 1961, Hays et.al., 1997). Considering the fact that all items that are related to defense policy are included and described explicitly in the annual budgets of each year, it is possible to analyze defense policy by scrutinizing annual defense budgets, item by item. Moreover, due to the fact that most parts of defense policy such as strategy and technologies might be classified even to members of Congress, it can be said that defense budget is the only item on which Congress has clear influence (Deering et.al 1989; Lindsay et.al., 1992).

Considering the fact that the focus of research is congressional influence on defense policy, the research question of this thesis is *In the Congress, which factor will determine the result of a vote that is related to the defense budget?*. In this thesis, in order to answer this question, votes on legislation that is related to the defense budget will be analyzed, and all of them are annual defense authorization and appropriation bills and related amendments.

4. Plan of the Chapters

In the following chapter, I describe how previous theories and research approached the voting behaviors of members of Congress on the defense budget bills. From the literature review, I draw some possible contributions that this thesis can make to the literature.

In chapter III, I describe the data that I use and the methodology that I apply to analyze the data. I apply a logistic model for analyzing the data which covers annual defense budget authorization and appropriation bills of the period from 1993 to 2012.

In chapter IV and V, I analyze the result of the model, draw significant implications, and address the problems and limitations of this research.

Chapter 2 Literature Review

The research topic of this thesis is congressional influence on defense policies. Before getting into the topic, it is required to investigate how previous studies have approached this topic. Congressional influence on defense policies has been studied with the following three perspectives: defense policy as a federal policy; Congress as a political institution; and Inter-branch relations between the legislative branch and the executive branch.

1. Defense Policy as a Federal Policy

As I mentioned in the first chapter, defense policy deals with two fronts -- one for external threats, the other for its domestic foundations. Along these two fronts, scholars have divided defense policies into three categories: strategic policy, crisis policy and structural policy (Huntington, 1961).³ Strategic policy and crisis policy primarily deal with the external threats while structural policy deals with the domestic foundations (Ripley, 1980).

According to Huntington, structural policy issues are related to personnel, organizations and equipment procurement (Huntington, 1961; Kaufman et.al., 1985; Hays et.al., 1997). Generally, Congress makes the final decision on each policy agenda of structural defense policy through the formal legislative process, even though policies are initiated by the Department of Defense and its services (Ripley, 1980). Previous studies focused on how Congress exercised its

2. The difference between strategic policy and crisis policy is unclear due to the fact that these two sub areas of defense policy deal with same aspect of defense policy (Huntington, 1961). One possible way to distinguish one from the other is to focus on the phase each of them is related to. Strategic policy is more about to develop strategies on the basis of expectation on future contingency while crisis policy is about how to deal on-going crisis with strategies which were developed in advance.

budgetary authority over the defense budgets and the connections between budgets and constituencies. (Rundquist et.al, 1996; 1999; 2002; Thorpe, 2011)

On the other hand, strategic policy pursues specific programs or deals with special situations. Those programs and situations are initiated by external threats such as changes of the international security environment (Huntington, 1961; Ripley, 1980, Hays et.al. 1997). Additionally, crisis policy is about how to deal with the crises which occur with unexpected time and space (Ripley, 1980; 1988). Scholars have focused on the presidential use of force in the event of international crisis (Baker, 2001; Hetherington, 2003; Groeloin, 2008). Most studies attempted to analyze the impact of presidential use of force on public opinion or the effect of changes in public opinion during the prolonged period of crisis on the following changes of military strategies, including use of force (Baker, 2001;Hetherington, 2003; Groeloin, 2008).

Because strategic and crisis policies require the agencies, who have responsibility on policies, to react with professional skills and knowledge within a relatively short time, the president and the Department of Defense have the authority to initiate actions, even though Congress has the final decision power (Ripley, 1980). Considering the fact that these policy areas are classified for professional soldiers, these have been not the subjects of negotiation or bargaining in Congress but the one of explaining that is required to gain support from Congress (Huntington, 1961, Hays et.al. 1997). Congress also has been inclined to defer to the executive branch's initiatives on military strategies in defense policy.

On presidential and executive branches' strong initiatives in strategic issues, Deering comments that it is difficult for Congress to influence the execution of defense policy, especially strategic issues, due to the fact that execution of defense policy is entirely up to professional

soldiers and their organizations (Deering et.al, 1989). As a consequence, he argues that the only areas in defense policy that Congress can assert its influence are budget related areas such as program authorization and budget authorization (Deering et.al, 1989).

Hays et.al.(1997) argue that the influence of Congress has been increased in the defense policy decision making process because defense policy is related to the federal budget process. Referring to the fact that a budget can be effective after passing the process of authorization and appropriations, they argue that it is necessary to analyze how military-related actors, such as Congress, the Department of Defense, and each service, interact with Congress during the processes of authorization and appropriation (Hays et al., 1997). Some scholars attempted to analyze how public opinion influences the scale of the defense budget (Hartley et. al, 1992, Rundquist et.al.,1999; 2002).

Rundquist and Carsey attempted to apply the distributive politics theory to defense spending, while arguing that it is problematic to understand defense spending as simply a public good for the national security (Rundquist and Carsey, 2002). They developed a model that includes party, committee, ideology, benefit to constituencies, and universalism as independent variables. Then, they applied it to defense spending from 1963 to 1995. They concluded that defense spending can be accurately examined and predicted using distributive politics theories, and defense spending is a target area that most members of Congress desire to exert their influence on (Rundquist and Carsey, 2002).

In addition to that, there are other studies that analyze how Congress affected certain defense procurement programs such as missile defense and SDI (Strategic Defense Initiatives) (Lindsay, 1990; Rundquist and Carsey, 2002). While doing these projects, most scholars analyze

how each member of Congress votes for the specific programs and which facts determine their voting behaviors (Lindsay, 1990; Higgs, 1988; Twight, 1989).⁴

Some defense specialists attempted to analyze defense budgets in the aspect of connectedness with national economic status (Choshroy, 2011; Lindsay and Ripley, 1992). They found that the budget of RDT&E (Research, Development, Test and Evaluation) has been in hiding from detailed scrutiny largely because it is politically safe for members of Congress to support research, while defense procurement programs have been screened by public and Congressional scrutiny (Choshroy, 2011; Lindsay and Ripley, 1992).

As the result of literature review on defense policy, I can conclude that the most significant area of defense policy that Congress can exercise its authority over is structural defense policy, specifically the defense budget. Moreover, it is necessary to analyze the budget items which include RDT&E as well as procurement programs by which legislators can benefit their constituencies.

2. Congress as a Political Institution

Institutionally, Congress has authority and power to approve the federal policies which are pursued by the executive branch. Considering the fact that defense policy is one of the federal policy areas and it is affected by congressional influence, it is necessary to understand how Congress makes decisions to use its authority. This issue has been studied and analyzed within the framework of the political institutions of American government (Deering et.al., 1997;

⁴ In *Congress and Defense Policy*, Barry S. Rundquist et.al used Prime Contractor Award as measurement of defense budget in order to find the specific amount of budget that benefitted the certain states or district (Rundquist and Carsey, 2002).

Poole and Rosenthal, 1991; Krehbiel, 1998; Rundquist and Carsey, 2002; Cox and McCubbins, 2005).

The studies on Congress have approached Congressional decision making with three perspectives: committee based, party based and chamber based. These three perspectives differ from each other depending on how principals in Congress control Congressional Committees (Deering et.al., 1997). Committee oriented perspective assumes that committees have sufficient autonomous authority to pursue their goal without significant interference from chambers or parties and each committee leads legislative affairs of its jurisdiction with strong initiatives by following members' preferences. The majority party oriented perspective assumes that committees are mere agents who just follow the directives or decisions from the majority party. The chamber oriented perspective assumes that committees are inclined to comply with what each chamber's majority coalition wants, rather than do what the majority party wants when the majority party cohesion is weak.

Distributive politics theory is one example of how these three perspectives can be applied into a specific area – Congressional budget process. Distributive politics theory offers the framework to understand how each legislator acts in Congress in order to give budgetary benefit to his constituency. This theory is based on the assumption that legislators are inclined to “organize Congress and [then], create and implement policies so that they can better direct benefits to their constituencies, to get reelected” (Rundquist and Carsey, 2002).⁵ All three perspectives prove this assumption (Rundquist and Carsey, 2002).

⁵ Rundquist and Carsey attempted to bring the distributive politics theory to defense policy. By criticizing the previous literature that had considered defense policy as a policy area that is too important for distributive politics to affect, he argues that it is necessary to analyze defense policy – especially procurement programs — with perspective of distributive politics (Rundquist and Carsey, 2002).

In order to predict voting in Congress, Krehbiel developed a spatial theory on the basis of the assumption that the median voter has the pivotal power to determine whether a bill passes (Krehbiel, 1998). He assumes that each legislator has his own preference that can be converted into a position in a uni-dimensional policy space, and argues that it is possible to predict the possibility of a gridlock by finding the median voter and the position of a policy on the uni-dimensional space (Krehbiel, 1998). After applying this theory to Congressional voting behavior, he suggests partisanship, ideology, constituencies and committee as possible significant factors that determine legislators' preferences. (Krehbiel,1998).

Cox and McCubbin examines the power of the majority party with the concept of agenda setting power (2005). They assumed that each committee has the authority to choose the positions of policy agendas on its jurisdictional policy area, and concluded that the majority party can exert the delegated agenda power by designating its party members to the influential offices of each committee (Cox and McCubbin, 2005).

Poole and Rosenthal further developed median voter theorem into multi-dimensional spatial models. After analyzing the results of all roll call votes since 1789 using multi-dimensional spatial models, they argued that, even though it is possible to use various dimensions, most roll call vote results can be explained by party loyalty and ideology. They considered the ideology as the primary factor that determines the voting behavior of each member of Congress (Poole and Rosenthal, 1991). In addition to that, they further expected that if other specific dimensions are applied for short term predictions, it will be possible to explain voting behaviors and voting results in the US Congress (Poole and Rosenthal, 1991).

According to the literature review on Congress as a political institution, it can be concluded that committee, party and majority coalitions in Congress are principle actors in Congress. Moreover, spatial theory suggests that vote results can be predicted mostly by ideology or party loyalty. But it is still unclear how these theories can be applied into Congressional budget process on a practical level.

3. Federal Budget Process

In the United States, in order for the federal government to pursue a certain program or policy, it is necessary to obtain Congressional approval on the federal budget. The budget process consists of two different tasks - authorization and appropriation (OMB, 2008).

Authorization means the process by which the executive branch obtains the authority from the Congress in order to pursue a certain program or policy (OMB, 2008). Through authorization, the executive branch can have an authority to include the approved programs in the annual budget proposal. Essentially, the authorization is centered on approving or disapproving a program and policy, rather than determining a certain budget for the program (OMB, 2008).

The other task in the budget process is appropriation. Appropriation is the process to settle the annual budget – how much money will be spent for the programs and policies during a certain year (OMB, 2008). Appropriation is the task of each chamber's Appropriation Committee and its subcommittees. Through the appropriation process, each agency and department obtains the authority to draw money for pursuing the programs and policies in the appropriation bill.

An annual budget process begins with the preparation of a presidential federal budget proposal (US Congress, 2007). When the proposal is completed, the White House sends this to the Congress. Once the presidential proposal arrives in the Congress, committees of both chambers review, modify, and amend the presidential proposal with the cooperation of the

federal executive agencies (US Congress, 2007). After that, each committee releases an authorization bill and sends the bill to the Office of Congressional Budget for developing an annual budget resolution (US Congress, 2007).

Under the guidance of an annual budget resolution, each chamber's appropriation committee allocates the total budget to its subcommittees to review, modify, and amend budget ceilings and related programs (US Congress, 2007). After completing the subcommittee's review and modification, each subcommittee sends the result to the appropriation committee. The appropriation committee finalizes the appropriation bill and sends it to the floor in order to consider amending the bill with all members of the chamber (US Congress, 2007).

Studies on the federal budget process are dealing with two aspects: the institutional aspect that defines the budget processes and the process and its products (Deering et.al, 1997; Sinclair, 2005). Studies on the institutional aspect of the budget process focused on who has the initiative in the budget process and how to define the relationship between the three major actors: House Appropriation Committee, House Speaker and the President (Gordon, 2008).

Moreover, most studies on the budget process and products closely connect to distributive politics. Crespin et.al attempted to analyze all floor roll call votes of the 100th -107th Congress appropriation bills and concluded that it is necessary to consider particular issue positions, rather than just focusing on ideological factors of liberal and conservative (Crespin et. al, 2010). This study confirms that the appropriation process can be analyzed with the viewpoint of distributive politics and suggests examining the Congressional budget process with a different framework.

On the other hand, there are a few studies focusing on the interactions between the executive branch (the U.S. President) and the legislative branch (U.S. Congress) in the federal

budget process (Sinclair, 2005; Gordon, 2008). Kernell et.al focuses on the interaction between specific agencies which are in charge of budget process -- OMB (the Office of Management and Budget) for the executive branch and CBO (the Congressional Budgetary Office)⁶ for the legislative branch (Kernell et.al, 1999).⁷

So far, I have discussed federal budget process and how scholars have approached studying this process. The federal budget process is the process of determining the annual budget for the federal government, and executive and legislative branch interactions with each other to achieve their goals. Moreover, appropriations can be affected by institutional changes in the Congress and external situations. When scrutinizing the process rather than the results, we can also discover how each member of the Congress acts to secure the budget as it is related to their constituency.

⁶ Due to the fact that most studies on the budget process have been focused on the congressional phase -- especially on the appropriation process, the roles and influence of CBO have been overlooked. However, the very start of the congressional phase of budget process is the submission of the presidential budget proposal and CBO's first evaluation on the presidential budget proposal; it is meaningful to examine how different the CBO's first evaluation is from the presidential budget proposal.

⁷ Their studies are different from each other, depending on which indicators they chose among three estimates such as 'early baseline estimates of both of the agencies', 'the president budget proposal and CBO's evaluation on it', and 'the final budget approved by Congress'. Arguing that it is necessary to be cautious on choosing indicators, Samuel Kernell and Erik J Engstrom (Kernell et.al, 1999) analyzed the difference of budget estimates between OMB and CBO by using the presidential budget proposal and CBO's evaluation of it.

4. Factors and hypotheses

From the results of the literature review on related theories, I drew five possible factors that can explain the vote results on amendments to annual defense authorization and appropriation bills – partisanship (majority status), ideology, scale of budget items, and categories of budget items.⁸

According to the literature review, there are three significant factors that influence the decision making process in U.S. Congress: partisanship, ideology, and influence of committees. Among them, partisanship and ideology are factors that determine a vote of each legislator – yea or nay, while influence of committees is mostly related to the process (drafting stage) or the product of process (the bill).

With the frameworks of partisanship and ideology, it is possible to predict each legislator choice on a roll call vote – yea or nay. If a legislator is compliant with his party, he might follow the choice of majority of his party members. On the other hand, if she mostly follows her ideology when voting in a roll call vote, she might choose the one which is ideologically closest between the related bill itself and an amendment to it. However, considering the fact that members of Congress vote for determining to pass or not to pass a legislative piece, it is not enough to predict each legislator's vote only – it is the game of '*passage*' or '*failure*' in the level of *a roll call vote on an amendment*, while voting behavior is a choice between nay and yea in the level of *individual legislators*. In House of Representatives in U.S. Congress, the rule of the game is the simple majority which means getting 218 yea votes. Consequently, it can be

⁸ I did not develop a hypothesis for categories on passage of amendments. I just examined the relationship between categories and the probability of passage.

concluded that these three factors can influence the passage of an amendment by affecting the result of a roll call vote – the number of yea votes in a roll call vote on an amendment.

1. Partisanship (Party politics)

If political parties matter in the legislative process, each legislator is likely to vote in compliance with his party. In this case, the degree of party unity in the vote is high in either negative or positive direction for the amendment. Consequently, if a political party matters or if a political party has an influence on its members in U.S. Congress, the degree of the party unity is high. Moreover, there are two parties in U.S. Congress – currently Democratic Party and Republican Party. It means that it is possible for both parties to have high level of party unity and it is necessary to consider both parties' party unity for analyzing the effect of partisanship.

Considering the fact that most times in the history of U.S. Congress there have been only two parties, it is possible for me to call these two parties as the majority party which has seats more than 218 and the minority party which has the seats left. It is natural that, if the majority party has a high degree of party unity, the majority party can control the result of a roll call vote due to the fact that the majority party has more than simple majority seats. When the majority party determines to pass a piece of legislations, the members of the majority party are likely to act together in positive direction for an amendment. On the other hand, when the majority party determine not to pass a measure, the members of the majority party are likely to act together in the negative direction for an amendment. Moreover, considering the fact that the gap between majority and minority is not big enough, there is a possibility that the minority party can affect the result of a roll call votes even though the minority party cannot determine the result of a roll call vote by itself. When the majority party does not act together in a roll call vote, the minority

party can control the result of a roll call vote by acting together. Consequently, it can be said that the result of a roll call vote is determined partly by the minority party, even though the majority party has seats more than the simple majority (over 218 seats in House).

Considering the fact that any legislator in House can suggest an amendment and the passage of an amendment is determined by either a roll call vote or voice vote in which all members of Congress participate in, it can be said that the amendment process is not controlled by the committee in charge. However, the committee has professional information on its jurisdiction and it can offer related legislative information to the parties. Moreover, it can further recommend or persuade to act into a certain direction. Assuming that the draft of a bill is the product of the committee and the committee has the professional influence on the jurisdiction of the bill, the committee is likely to act against amendments that possibly harm the original intention of the committee and recommend the majority party not to pass amendments.

Hypothesis 1: As members of the majority party act together, an amendment is less likely to pass.

Hypothesis 2: As members of the minority party act together, an amendment is more likely to pass.⁹

⁹The minority party's influence on passage of an amendment is conditional on the majority party's party unity.

- 1) Minority party unity can affect when majority party is on the same side.
- 2) Minority party unity can affect when majority party is split.
- 3) Minority party unity will not affect when majority party is not on the same side.

2. Vote based on Ideology

Ideology is another significant factor that determines each legislator's voting behavior. Institutionally, amendment process is the process in which legislators choose one of the two legislative pieces – a bill and its amendment. When a legislator chooses one of them, he will choose the one that is more preferable to the other. If the ideology is the main factor that he consider when making decision, he will choose the one that is closer than the other in aspect of ideology. Consequently, it is possible to predict a legislator's vote by analyzing the relative ideological preference between a bill and its amendment. It also means that the prediction of voting behavior of each legislator is the consequence of calculation about relative ideological distances from the legislator to two legislations – a bill and an amendment.

Assuming that ideology is the most significant factors that determine the voting in Congress, the sponsor of a bill might consider the possibility of passage that is calculated on the basis of the ideology when raising an amendment. If he intends to change a bill by passing the amendment, he might consider how many legislators are more satisfied with the ideological aspect of an amendment than that of the status quo bill. Assuming that legislators are inclined to keep their ideological position during their term in House, a sponsor can predict the probability of passage and he might raise an amendment that is expected to pass on the basis of his prediction. Consequently, more legislators vote with their ideological preference, the more accurate the vote prediction is. Moreover, the more accurate the vote prediction is, the more probable an amendment is to pass.

Hypothesis 3: as prediction of vote via ideology is more accurate, an amendment is more likely to pass.

3. Cost of Amendment

Considering the fact that the authorization and appropriation process is dealing with federal budgets, amendments in these processes contains the adjustments of budget amounts. These adjustments can be called the cost of amendment because this is the change of budget caused by amendments. According to the committee based theory, a committee has professional information in its jurisdiction and legislators who are not members of the committee are inclined to rely on the committee's information when they make decisions on issues that are related to the committee's jurisdiction.

Assuming that a bill is a product of a committee in a certain jurisdiction, the committee is likely to act negatively to amendments. Moreover, the larger the cost of amendment, the more the committee will be against to the amendment because a large cost of amendment means a large change of the original bill. Consequently, as the cost of amendment increase, an amendment is less likely to pass.

Hypothesis 4: as the cost of amendment increase, an amendment is less likely to pass.

Chapter 3 Method and Data

1. Scope and the Unit of analysis

The period that this thesis covers is from 1993 to 2012 and, by administration, it covers from the first Clinton administration to the current (Obama) administration. . I analyzed both defense authorization bills and appropriations bills of this period in order to examine the influence of Congress on defense policy. The unit of analysis of this thesis is each amendment to the defense authorization bill and defense appropriations bill in each year during the given period. I found 227 amendments for authorization and 112 amendments for appropriation¹⁰.

This period can be defined with the concept of military transformation¹¹. During the first Clinton administration, the literature of military transformation was formed. In the second term of President Clinton, this concept evolved into specific programs for realizing its vision. During Bush administration, the U.S. was in a war while the concept of military transformation was being pursued. There might be compromise between reality and vision during Bush administration. Now, Obama administration prepares another shift from ‘a state of war’ to ‘a period of peace and preparation’.

I gathered the data for this thesis primarily from the Congressional record¹² and roll call vote record¹³ gathered by the Library of Congress. I used the vote result of each roll call vote on

¹⁰ I counted all roll call votes on amendments to annual defense authorization and appropriation bills. I did not include roll call votes on final passage of the bills.

¹¹ This paragraph was written on the basis of basic knowledge on military transformation. The literature of military transformation is highly debatable and enormous in contents. It encompasses wide range of defense policy from organizational management, operational adjustment and developing high-technology. I just address the period of the military transformation because whole literature review on military transformation is beyond the boundaries of this thesis.

¹² <http://thomas.loc.gov/home/LegislativeData.php?&n=Record>

¹³ <http://thomas.loc.gov/home/rollcallvotes.html>

every amendment, and analyzed the contents of each amendment for categorizing each amendment into proper budget categories.

In addition to the actual data about roll call votes, I also consider the prediction of roll call votes as another subject to analyze. For this, I chose ideology as the primarily factor to predict votes of each legislator. Poole and Rosenthal have collected all the record of roll call votes in the US Congress, and predicted legislators' votes in accordance with various factors such as ideology, social justice, etc. By comparing actual data and predictions, they have offered analysis on which factor determine votes of each legislator. For analyzing vote prediction, I used the result of vote predictions based on legislators' ideology and each individual legislator's vote record in each roll call vote. I gathered the data from the website of Poole and Rosenthal.¹⁴

2. Dependent variables

The primary dependent variable is the result of each roll call vote on an amendment to the defense authorization bills and appropriations bills of the given years. I considered the dependent variable as a dummy variable. The dependent variable can be measured in accordance with the result of a roll call vote – whether or not each amendment was passed. I coded the result as “1” if an amendment was passed and as “0” if an amendment was not passed in the House.¹⁵

When I focus on the passage of an amendment, the number of failed amendments is twice as large as that of passed ones (passed: 121, failed: 206; see table 1). In authorization bills, the number of failed amendments is almost the same as that of passed ones (passed: 109, failed: 106;

¹⁴ <http://voteview.com/dwnominate.asp>

¹⁵ For examining the effect of ‘accuracy of vote prediction based on ideology’ on passage of amendments, I determined to do a pilot test and consider as the dependent variable for the pilot test ‘difference of vote result between estimation based on ideology and the actual vote result (pass or failure)’. If the estimated results are the same as the actual results, I coded that as ‘1’ and otherwise I coded the amendments as ‘0’. (the result is on appendix.)

see table 1). However, in appropriation bills, the failed amendments are five times larger than the passed ones (passed: 15, failed: 97; see table 1). I estimate that this difference between authorization bills and appropriation bills comes from the difference of attributes of two different budget processes – authorization and appropriations.

<Table 1: Pass or Fail>

Authorization & appropriation		Authorization		Appropriation	
Pass	Fail	Pass	Fail	Pass	Fail
121	206	106	109	15	97
N= 327		N=215		N=112	

2. Independent variables

I considered four variables as the independent variables that explain the changes of the dependent variable.

(1) Party status/ Party Unity

One of the traditional factors that affect voting behavior of members of Congress has been party unity. When a party has a relatively strong influence on its members, they are likely to vote in accordance with the intent of their party leadership. In order to measure the party loyalty or party unity, I used Rice Cohesion Score.¹⁶ which means the difference between Nay and Yea in one party (Carey, 2009). In addition to that, I considered the effect of party status, either majority or minority.

$$RICE_{party\ i} = \left| \frac{AYES_{party\ i} - NAYS_{party\ i}}{Total\ Votes\ party\ i} \right|$$

Equation 1. RICE Cohesion Score¹⁷

¹⁶ The title of RICE score came after the name of a scholar, Stuart Rice

¹⁷ I needed to describe the effect of Nay because the result of a roll call vote is either pass or non-pass. If majority party members got together to vote against an amendment, the result of the roll call vote might be determined by

Another variable that reflects partisanship is the party membership of sponsors of amendments. I coded that ‘1’ for Democrat and ‘0’ for Republican.

Party status

During the period from 1993 to 2012, the Republican Party had the majority status except for the 103rd Congress and the 111th Congress. When checking the difference between the majority party and the minority party, there have been larger differences when the Democratic Party was the majority party.

<Table 2: Majority and Minority>

	103 rd	104th	105 th	106 th	107th	108th	109th	110th	111 th	112th
Republican	176	230	228	223	221	229	232	233	178	242
Democrat	258	204	206	211	211	205	201	202	256	193
R-D	-82	26	22	12	10	24	31	31	-78	49

Note: this table was produced on the basis of the beginning of each Congress; Bold & Italic means Majority status.

Source: <http://thomas.loc.gov/home/LegislativeData.php?&n=Record>

Party unity (Rice No.)

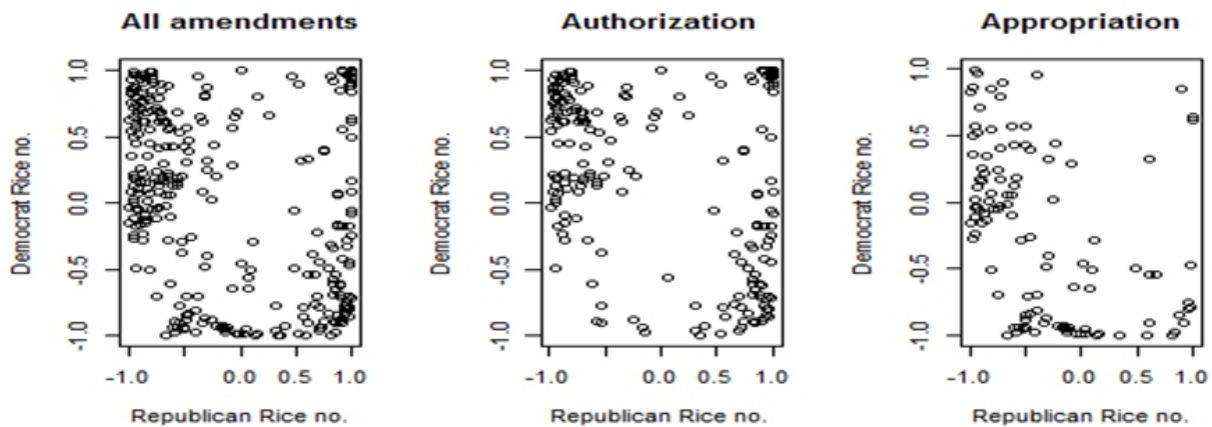
In authorization bills, most observations show high degree of party unity (See the center graph of figure 1). It means that most legislators were inclined to vote in compliance with their party. Moreover, when considering the fact that most observations are located in the top- left and the bottom-right part of the graph, it can be said that members of each party were likely to vote

how many Nays were in the roll call vote. Consequently, in addition to taking absolute value of Rice No., I consistently subtract the number of Nay from the number of Yea and took real value of calculation in order to describe the effect of Nay in Rice No..

in opposite direction to each other. In appropriation bills, most observations are located in the middle of graph — between -0.5 and 0.5 (see the right graph of figure 1). It means that most legislators were inclined to vote not in compliance with their party in appropriation bills.

There are some amendments in which legislators of both parties voted in the same direction. (See both the center and the right graphs of figure 1. The observations in the top right part and bottom left party are amendments that both parties voted in the same direction¹⁸.) In these amendments, they voted favorably for the amendments to authorization bills while voted negatively for the amendment to appropriation bills (see the top right part and the bottom left part of each graph). Additionally, when each legislator did not vote in compliance with their parties, they were inclined to vote negatively for amendment to appropriations bills while they were inclined to vote positively for amendment to authorization bills (see the observations between ‘-.5’ and ‘.5’ of the both graphs)

<Figure 1: Rice no. (Dem vs. Rep.)>



¹⁸ The observations in the top right part of each graph means that both parties voted positively to an amendment while the observations in the bottom left of each graph means that both parties voted negatively to an amendment.

(2) Ideology: Accuracy of Vote Prediction based on Ideology

According to Keith Poole and Howard Rosenthal, the ideology of each member of Congress is the most influential factor that determines voting behaviors of members of Congress (Poole and Rosenthal, 1991). They argue that it is possible to predict the votes of each legislator with their ideological position (Poole and Rosenthal, 1991). If ideology is the most influential fact that that determines each legislator's votes, legislators might choose the ideologically preferable one between the status quo bill and an amendment to it. Moreover, assuming that choice between 'Yae' and 'Nay' are based on the relative distance from a legislator's ideological position to both the status quo bill and an amendment, it is possible to locate the midpoint which is apart with same distance from both the status quo and an amendment. If a legislator is closer to an amendment than its midpoint, he might vote 'Yae' for the amendment. Otherwise - if a legislator more away from an amendment than its midpoint, she might vote 'Nay' for the amendment. Consequently, it is possible to estimate the passage of votes by counting the number of 'Yae'.

Nonetheless, the unit of analysis of this thesis is not each member of Congress but each amendment to defense budget bills. While their theory is suitable for predicting individual votes made by each member of Congress, it is not proper to predict the passage of amendments. For example, there might be some roll call votes in which legislators do not vote in accordance with their ideology. Moreover, not voting with their ideology can change the actual result of roll call vote. In these cases, it is not proper to explain why the result changed and whether or not legislators vote 'in accordance with ideology' only with midpoints and their ideological positions.

To answer these questions – why the result changed and whether or not legislators vote 'in accordance with ideology', it is necessary to develop an index that reflects whether or not

legislators vote in accordance with ideology. In order to properly reflect the effect of the ideology of each amendment on passage of amendments, I operationalized the effect of ideology as the percentage of votes not predicted by ideology – accuracy of vote prediction based on ideology. The closer is the predicted result to the actual result, the more precisely does the vote result reflect the ideological aspect of each member of Congress. The variable was measured as the percentage of ‘total number of wrong predicted votes’ to ‘total number of votes’. By using this index, it is possible to measure how many legislators vote with their ideology and to examine the effect of voting with their ideology on the passage of amendments.

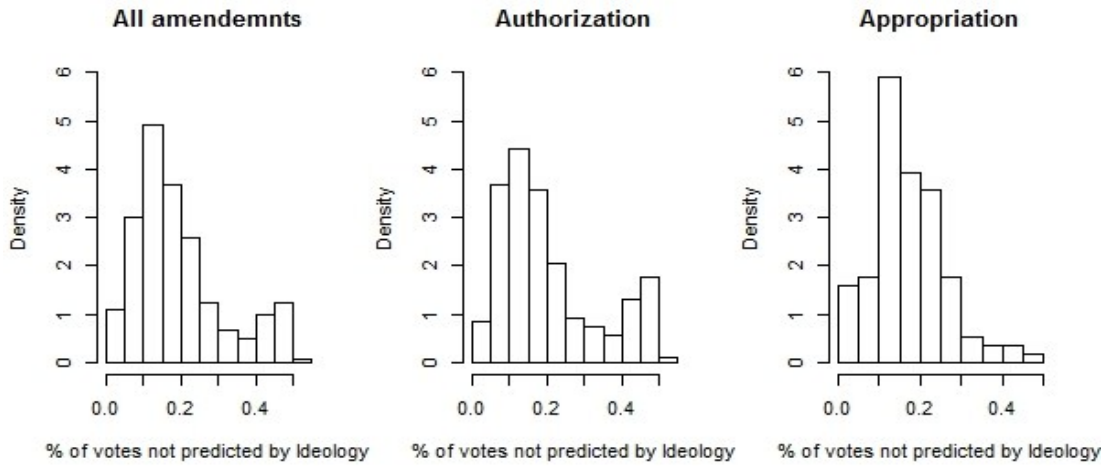
The % of votes not predicted by ideology of each amendment was measured through five steps. First, I extracted each roll call vote’s ideology midpoint from Poole and Rosenthal’s data base and each legislator’s ideology position that was estimated by DW NOMINATE¹⁹ number. Second, I estimated the vote of each legislator by comparing his or her ideology position to the ideology midpoint of each roll call vote. Third, I compared the estimated result of each legislator and the actual one that the legislator voted. If the estimated and actual results are the same, I coded “1”. Otherwise, I coded “0”. Fourth, I counted the number of amendments that were coded as “0” and divided the result by the total number of House members. The product of this process is the % of votes not predicted by ideology.

<Table 3: % of Votes not Predicted by Ideology (>0.2)>

	All amendments (n=327)	Authorization (n=215)	Appropriation (n=112)
% of Votes not Predicted by Ideology (> 0.2)	132	88	44

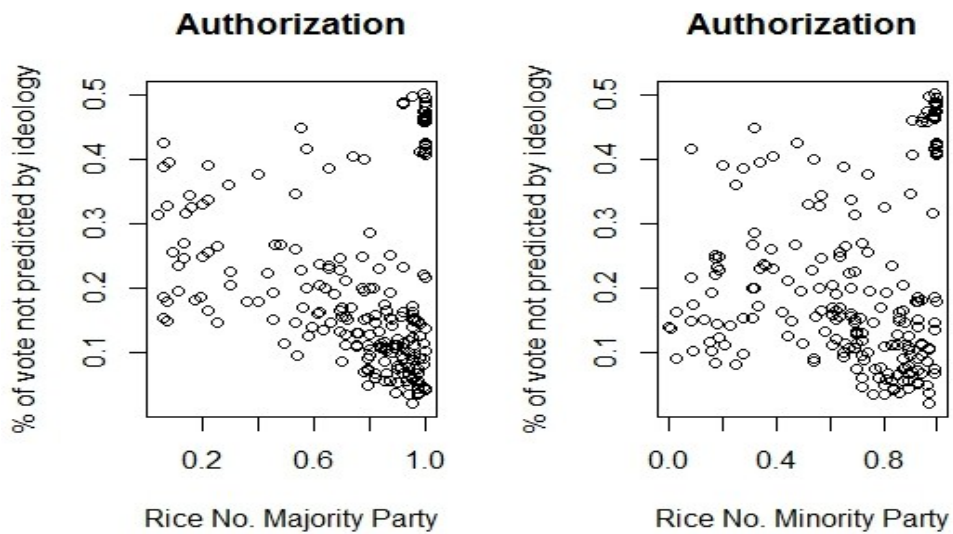
¹⁹ <http://voteview.com/dwnominate.asp>

<Figure 2: % of votes not predicted by ideology>

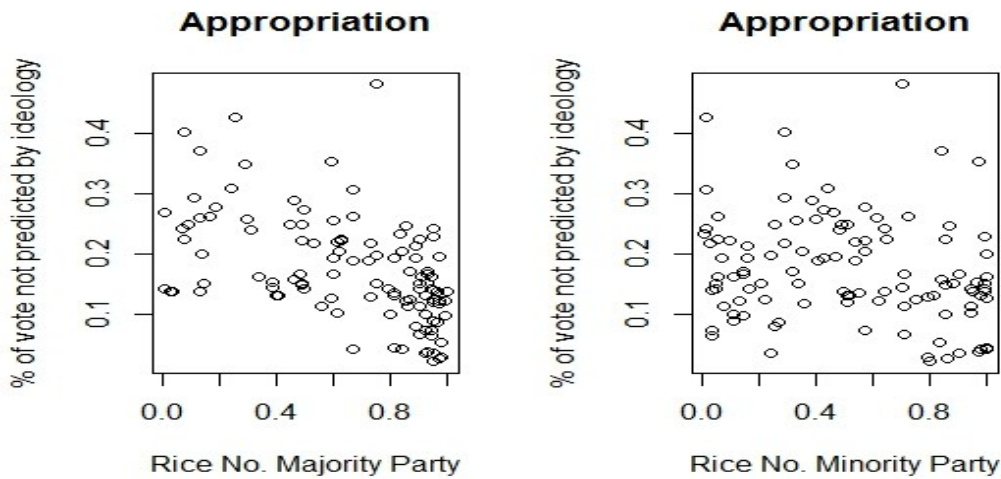


There are 132 amendments that have a larger difference than 20% (Table 2 & figure 3). Considering the fact that Poole and Rosenthal argued that 85% of voting behaviors have been explained by ideology of each legislator (Poole and Rosenthal, 1991), it can be said that their estimation does not fit the results of more than 40% of all observations in this research.

<Figure 3: % of votes not predicted by Ideology and party unity in Authorization bills >



<Figure 4: % of votes not predicted by Ideology and party unity in appropriation bills >



(3) Budget Item of each Amendment

As I already described, defense authorization bill and appropriation bill deal with the Federal budget— money. In most previous studies, procurement programs and its budget have been the focus (Lindsay, 1990; Higgs, 1988; Twight, 1989, Rundquist, 2002). The reason why procurement programs have been recognized as a core of interest is that this is the very area of budget that a member of Congress can make a difference for her political intent (Rundquist, 2002). Moreover, other budget items such as the budget for maintenance and operation have not been under the influence of Congress due to the fact that the budget required to spend to maintain the military organizations for their basic mission.

In addition to that, a recent study showed that some significant programs, such as *Missile Defense System Program* or *Joint Strike Fighter Program*, have been included in RDT&E²⁰ phase. The study also argues that some programs have stayed in the phase of RDT&E

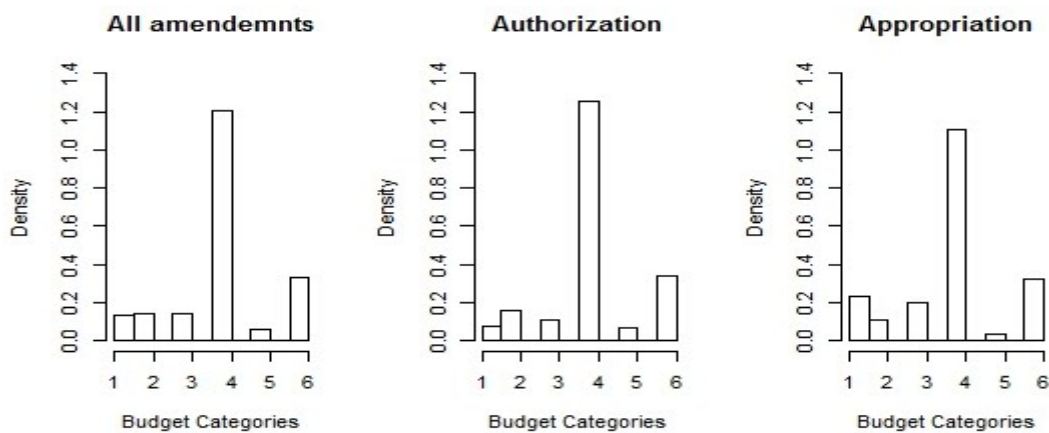
²⁰ I used the same categories that have been used by DoD. An example of defense budget can be found at this URL. http://comptroller.defense.gov/defbudget/fy2012/fy2012_r1.pdf.

intentionally to escape from intense budget screening along with the budget process. Considering this fact, it is necessary to scrutinize the budget items that are included in RDT&E phase.

Moreover, due to the fact that this thesis is an analysis on amendments to annual defense authorization and appropriation bills, it is required to scrutinize the contents of the budget item and to examine the relationship between the contents of the budget item that are related to an amendment and the amendment itself.

To measure this variable, I considered this variable as an categorical variable and I coded the contents of each amendment in accordance with budget categories that have been used in the defense budget request form; “1” for basic, applied, and advance technology in RDT&E phase “2” for system development, test and evaluation; “3” for procurement; ; “4” for general operation and maintenance²¹ ; “5” for military constructions and BRAC (Base Realignment and Closure); “6” for general items that are related to whole budget.

<Figure 5. Distribution of amendments by budget categories>



Note: 1: basic, applied, advanced technology, 2: system development and evaluation, 3: procurement
4: operations and maintenance, 5: military construction, 6: etc

²¹ I included the budget item ‘Personnel’ in ‘Operations and Maintenance’, because basically the budget for personnel is

When I checked the category of budget items that each amendment dealt with, most of the amendments are included in the category of ‘Operation and Maintenance’ (Category IV). It was followed by ‘General items’ (Category VI) and others. In percentages, the appropriation bills have more amendments that were related to procurement and RDT&E than the authorization bills have.

<Table 4. Categories>

	All amendments (n=327)	Authorization (n=215)	Appropriation (n=112)
Category 1	21	8	13
Category 2	23	17	6
Category 3	23	12	11
Category 4	197	135	62
Category 5	9	7	2
Category 6	54	36	18

Note : 1: basic, applied, advanced technology, 2: system development and evaluation, 3: procurement
4: operations and maintenance, 5: military construction, 6: etc

(4) Cost of Amendments (Amount of budget change)

Speaking of the amount of budget changes presented in amendments, there are 185 amendments that did not contain the amount of budget changes (See table 5). Most of them are the amendments in authorization bills, and these amendments contained contents about the redefinitions of terms, special requests to the Department of Defense or the President, or changes of rules and regulations that were dealing with sensitive budget items²².

When analyzing the standard deviations and the distributions of the budget changes, the amounts are so dispersed that it is meaningless to set the average amount and possible boundaries of the expected budget changes.

²² <http://thomas.loc.gov/home/LegislativeData.php?&n=Record>

<Table 5. Summary of amendments by amount of budget changes>

	All amendments (n=327)	Authorization (n=215)	Appropriation (n=112)
Amount=0	185	159	26
Min.	0	0	260
Median	0	0	22,020
Mean	725,400	197,000	1,738,000
Max	35,200,000	12,000,000	35,200,000
SD	3,411,390	940,904	5,558,581

Note: the unit is 1,000

Chapter 4 Data Analysis

1. Examination of Models

To examine how each independent variable affected the passage of an amendment, I develop logistic regression models. I considered two different models: one for the variables that are related to the traditional factors such as ideology, partisanship, and committee power; the other for the categories of budget items. (See table 6&7). According to the result, authorization process is more predictable than appropriation process. In authorization process, majority party unity, accuracy of vote prediction based on ideology and cost of amendment show statistical significances while, in appropriation process, only majority party unity shows a statistical significance of ‘0.1’.

<Table 6: Result of Logistic Models: Authorization bills only>

	Model1	Model 2	
	Prob. Pass.	Prob. Pass.	
A. Majority Party unity	3.917 (1.73×10^{-5})***		
B. Minority Party Unity	1.027 (0.1560)		
C. Accuracy of Vote Prediction based on ideology	1.081 (4.37×10^{-5})***		
D. Dollar amount	-4.649×10^{-6} (0.00311)**		
E. Categories		II	14.55 (848.37)
		III	14.96 (848.37)
		IV	16.85 (848.37)
		V	15.65 (848.37)
		VI	17.14 (848.37)
Const.	-0.5892 (0.2249)**	-16.57 (848.37)	
Obs.	227	227	

Note: ***>0.001, **>0.01, *>0.05

<Table 7: Result of Logistic Models: Appropriation bills only>

	Modell (A)	Model 2	
	Prob. Pass.	Prob. Pass.	
A. Majority Party unity	2.175 (0.0769)		
B. Minority Party Unity	1.46 (0.15362)		
C. Accuracy of Vote Prediction based on ideology	5.368 (0.14307)		
D. Dollar amount	-9.666×10^{-7} (0.39046)		
E. Categories		II	16.9 (1809)
		III	16.2 (1809)
		IV	19.2 (1809)
		V	-7.83×10^{-10} (4954)
		VI	16.9 (1809)
Const.	-2.02 (0.4661)***	-18.75 (1809)	
Obs.	112	112	

Note: *** >0.000, **>0.001, *>0.05

2. Party Unity / Party Status

Hypothesis 1: As members of the majority party act together, an amendment is less likely to pass.

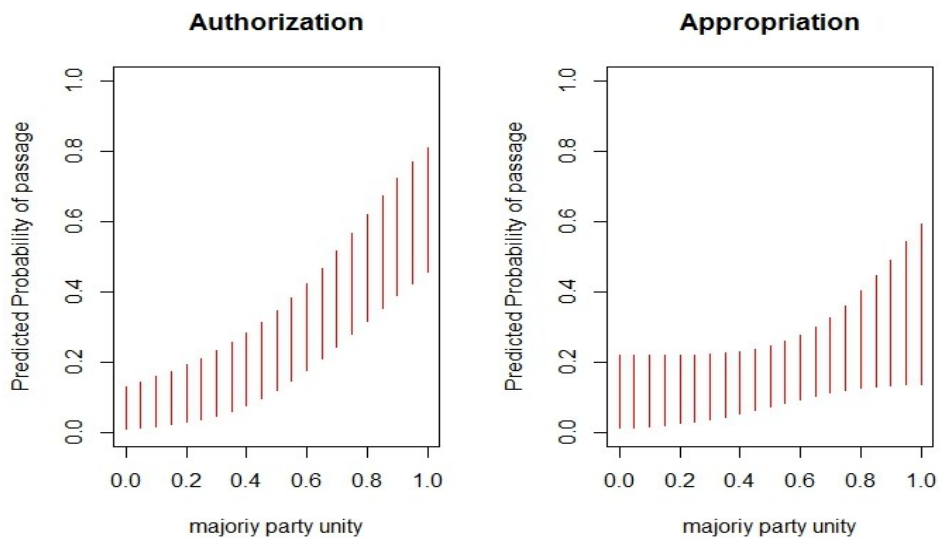
Hypothesis 2: As members of the minority party act together, an amendment is more likely to pass.

Considering the theory of party politics, the most significant factor that can affect the passage of an amendment is whether the majority party unifies and how strong the majority party acts together. After finding each Congress's majority party and calculating the Rice Cohesion Score of the majority party, I obtained a positive relationship between the majority party's unification and the probability of passage of each amendment (See figure 6.)

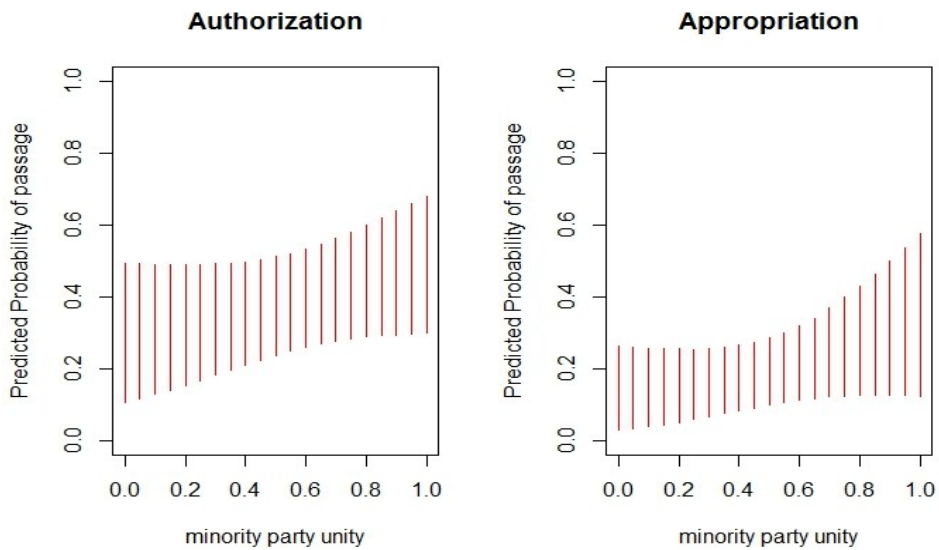
Minority party unity also shows positive effect on the probability of passage but the effect is not strong enough when compared to majority party unity. (see Figure 6). I speculated that the effect of minority is conditional on the majority party unity. In addition to that, when the difference between majority party members and minority party members is not large enough, minority party can be more influential. In most cases, a majority party should be unified more than 85% for guaranteeing the passage of an amendment (See table 1.)

Moreover, compared to authorization bills, appropriation bills have larger error boundaries. I speculated that this difference came from the relative low level of party unification in the positive direction in appropriation bills²³. Considering the fact that the minority party's slope of curve in appropriation process is stiffer than that of authorization process, it can be concluded that minority party unity's effect in appropriation process is stronger than that in authorization process (see bottom of figure 6).

<Figure 6: Majority and Minority party unity(Rice no.) and probability of passage>



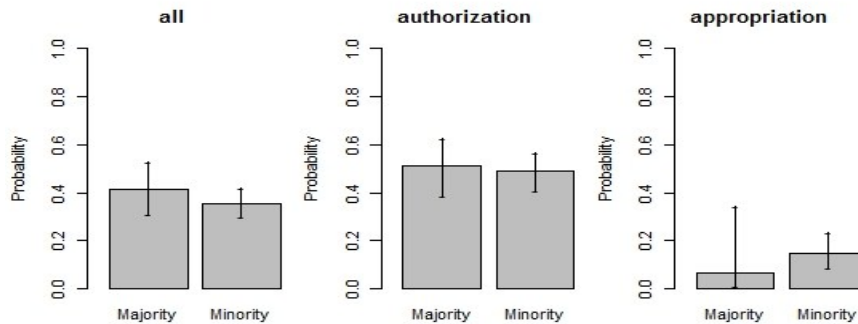
²³ It can be thought that this symptom was also caused by the relative fewer amendments in appropriation bills that were passed with the high level of majority party unification. There was only one amendment that was passed with majority Rice no. "1".



Note: model = glm(result of roll call vote ~ majority party Rice no, family = binomial, model= 'logit')

In addition to the majority party unity, I also considered the party membership of amendments' sponsors as a control variable. When I developed a separate logistics model and examined it, I found no significant effect and no probabilistic significance between sponsors' party membership and the probability of passage of an amendment (See figure 7; compare majority party "1" to minority party "0").

<Figure 7: Party membership of sponsors and probability of passage>



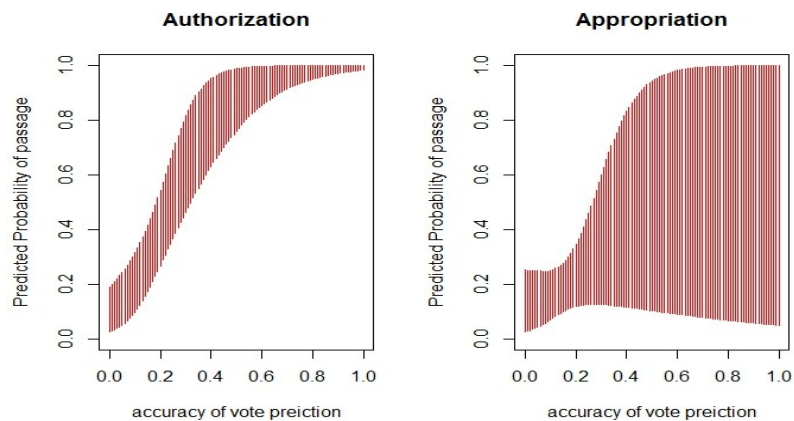
Note: Model=glm(result of roll call vote ~ Sponsor's party status, family=binomial, model= "logit")

3. Accuracy of Vote Prediction based on Ideology

According to Poole and Rosenthal's argument, more than 85% of all roll call votes have been explained by the legislators' ideology. So, if ideology is the primary factor that influences the voting behaviors of each legislator, each legislator is likely to vote on the basis of his or her ideology, regardless of the possibility of passage of an amendment. However, as I mentioned before, roll call votes that were related to defense budget have not been voted for in accordance with each legislator's ideology, in relation to the overall roll call votes cast based on ideology (See table.3 and Figure 2)

In order to examine the explanatory power of ideology on predicting the result of roll call votes on amendments in annual defense authorization and appropriations process, I tested the effect of accuracy of vote prediction based on ideology on the passage of amendments with a logistic model in order to examine the effect of 'accuracy of vote prediction based on ideology' on probability of passage (See Figure 9).

<Figure 9: % of votes not predicted by ideology and probability of passage>



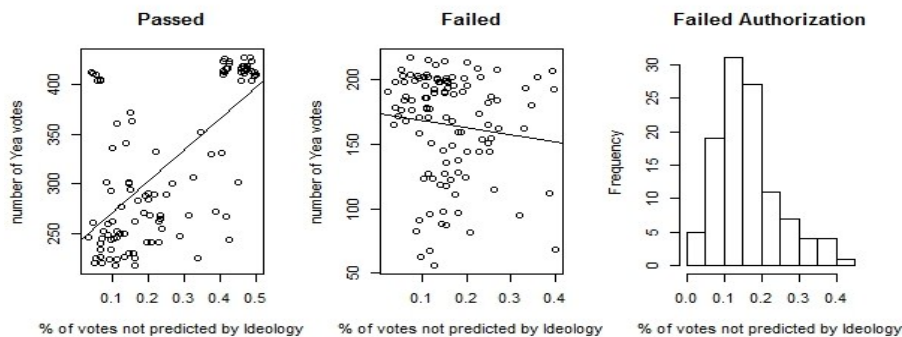
Note: Ideology of amendment means the % of votes not predicted by ideology of each amendment.

In authorization bills, amendments are less likely to pass as ‘accuracy of vote prediction based on ideology’ increases²⁴, while the amendments in appropriation bills do not show a clear relationship between two variables. Moreover, the error boundaries also fluctuated significantly. I also speculated that ‘no clear relationship’ was caused by relatively narrow difference between nays and yeas of the results.

In order to trace the origins of these relatively wide error boundaries, I attempted to divide both appropriation bills and authorization bills into the passed amendments and the failed amendments, and checked the distribution of % of votes not predicted by ideology along the number of Yeas (See figure 10 & 11). Additionally, I examined the relationship between number of yea and accuracy of vote prediction based on ideology.

In cases of passed amendments to authorization bills, there is a clear linear relationship between the number of Yeas and ideological difference ($\Pr(>|t|)>0$). Moreover, a large proportion of observations are located in both top right and bottom left, which generates a positive linear relationship. In the case of failed amendments, most observations are located in the top left and there is no clear linear relationship ($\Pr(>|t|)=0.226$) (See figure 10).

<Figure 10: % of votes not predicted by ideology of each Amendment in Authorization bills>

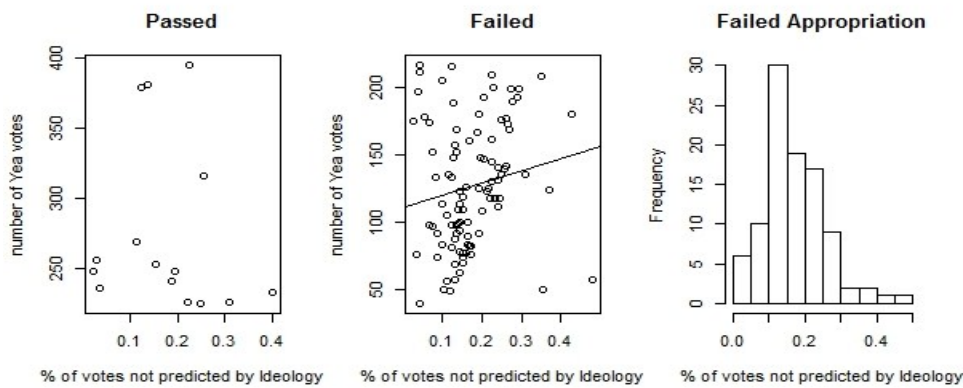


²⁴ In accuracy of vote prediction based on ideology, 0 means most accurate and 1 means least accurate.

When legislators vote in accordance with their ideology, it is difficult to predict whether or not an amendment passes, due to the fact most amendments congregate within the space between 150 and 300 Yea votes. However, when legislators do not vote in accordance with their ideology, the amendments are more likely to pass with more than 400 Yea votes.

In cases of passed amendments to appropriation bills, most are widely dispersed along the X axis and they are located at the adjacency of the X axis. Only in cases of failed amendments is there a possible positive linear relationship with the coefficient of 92.70 ($\Pr(>|t|)=0.101$).

<Figure 11: % of votes not predicted by ideology of each amendment in Appropriation bills>



4. Amount of budget : committee based theory

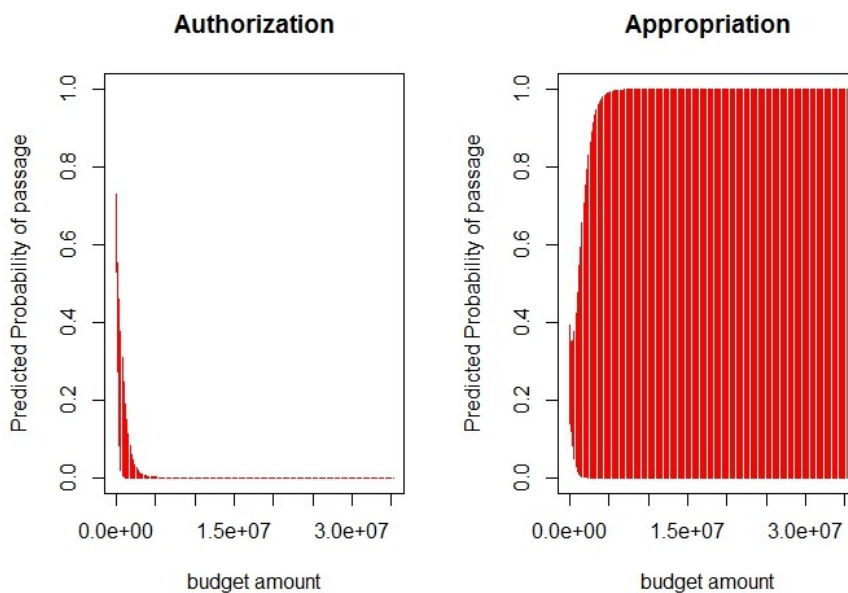
According to the informative and distributive politics theories of Congress, each committee has access to valuable information related to its jurisdiction that the committee can use to exercise influence on the decision making process, by offering information that can work positively for committee members. In addition to that, legislators are inclined to make enormous efforts to get the committee membership that can be beneficial for their constituencies in order to be re-elected.

H4. As the change of dollar amount by an amendment is larger, the amendment is less likely to be passed.

As I described above, 50% of amendments to authorization bills passed and only 10% of amendments to appropriation bills passed. In cases of amendments to appropriation bills, the hypothesis 3-1 can be considered correct. When I examined both hypotheses with a logistic model, the result proved that amendments to authorization bills are less likely to pass, as the amount of budget increases. However, the model did not offer meaningful predictions for amendments to appropriation bills, since the error gap is too wide (See Figure 13).

Consequently, it can be concluded that the committee influence is partly proven in amendments to defense budget related bills, and it is necessary to analyze the effect of budget amounts on each related program, especially in appropriation bills.

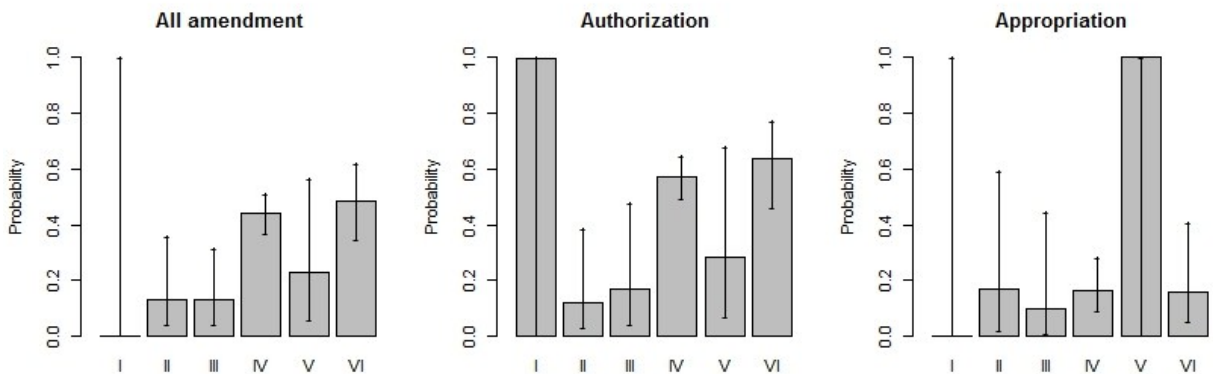
<Figure 12: Dollar amount of budget in Amendments and possibility of passage>



5. Categories

According to the distributive politics theory of Congress, legislators attempt to bring as much benefit as possible to their constituencies. I estimated that there might be a relationship between categories and passage of amendments. In order to find possible relationships, I developed a logistic model and examined it.

<Figure 13: Categories of budget included in Amendments and probability of passage>



In amendments to authorization bills, category I (Basic Research), IV (Operation and Maintenance), and VI (General Items) have relatively high levels of passage. But considering the confidence interval, only category IV can be considered as a significant one. In amendments to appropriation bills, category V (Military Construction) has a relatively high level of passage. Moreover, category IV is the one that can be considered significant when considering the confidence intervals. Figure 13 shows the difference between the authorization process and appropriation process in defense budget bills. In the authorization process, legislators are more lenient to pass an amendment that contains relatively small scale research programs that can benefit their constituencies. In the appropriation process, it is hard for an amendment to be

passed because the process does not add items to annual budget plans, but adjusts the amount of money based on the budget ceiling. Category V in the appropriation process is the only one with high probability of passage, and the amendments in this category are about postponing or delaying the planed BRAC programs.

Consequently, amendments are not the proper level of analysis of budget categories, except for the research which is focused on a specific budget category. A program or a legislator who comes from the districts that are benefitted by the program might be the proper unit of analysis. Moreover, the result supports that two different budget processes need to be analyzed separately due to the fact that their functions and roles are quite different from each other.

Chapter 5 Discussion and limits of analysis

1. Summary and Interpretation of Findings

According to the findings, majority party unity is the influential factors that determine the result of vote for amendments to defense budget bills – both authorization bills and appropriation bills. In the case of authorization bills, the major party unity has stable influence on vote results in the matter of statistical significance (<0.025), while they show relative wide error boundaries in appropriation bills. Consequently, it can be concluded that it is necessary to scrutinize the causes of error boundaries, especially in appropriations bills, even though majority party unity can explain most of the votes for amendments to the defense budget bill.

In authorization bills, accuracy of vote prediction based on ideology also has a negative effect on passage of amendments. It means that House representatives are inclined to vote favorably for amendments in authorization process rather than vote in accordance with their ideologies. In appropriation process, this independent variable – accuracy of vote prediction based on ideology – does not show statistical significance.

On the other hand, the amount of budget and categories of budget items do not show statistically significant effects on the passage of amendments, except for the effect of the amount of the budget on amendments to authorization bills. I speculated that this result was caused by the fact that most amendments in authorization bills does not deal with actual amounts but the concept and the purpose of the budget that defines the bills. Moreover, legislators made efforts to include a relatively small amount of budget, which is large enough for one district, in order to benefit their constituencies at the end of the amendment process. These small budgets were

inclined to pass because they were not prominent in scale. However, even in authorization bills, the effect is not strong enough to determine the passage of amendments.

Moreover, the authorization process and appropriation are quite different from each other, even though both of them are dealing with the Congressional budget. First, the amount of money is different. Amendments in appropriation bills deal with larger amounts of money compared to authorization. Second, Amendments in appropriation deal with the budget amount primarily, but those in authorization bills include some strategic issues, such as how to perceive China and how to define the programs and the purpose of it. Third, most amendments in appropriation bills are about reducing the budget or transferring the budget from one program to another, while those of authorizations also include increase of budgets.

2. Suggestions for Future studies

One of the limitations in this thesis is the fact that it did not reflect the connection between members of Congress and their constituencies sufficiently. Considering the fact that distributive politics theory offers the most valid explanation for behavior of members of Congress, it might be critical limitation.

However, it is worth considering the fact that the focus of this thesis is not the drafting process but the amendment process. According to the distributive politics theory, a member of Congress is inclined to pursue the membership of the committee that is most closely related to her district or state. The process that the membership of a committee has influence on is the drafting process of a bill. In this thesis, the membership of related committees, such as House Armed Service Committee, does not have a critical influence, because I analyzed the amendment process, where the membership has little effect.

Moreover I analyzed not the voting behavior of each member of Congress, but the results of the roll call vote for each amendment. In the amendment process, if the budget item is closely related to her district or state, the member of Congress will cast a vote with a consideration of the interest that her constituency has. However, the result of the roll call vote is not likely to be determined by one member of Congress and it is scarcely that one budget item has a critical impact national wide.

Nonetheless, considering the fact that connection with constituency is a significant and influential factor in the drafting process and for estimating each member of Congress's voting behavior, it is necessary to apply this factor for specific program analyses and studies on committees.

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Appendix

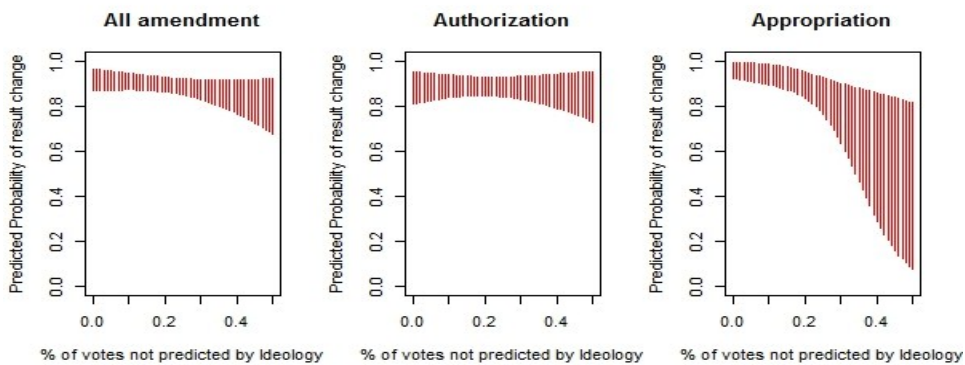
Result of the Pilot Test (See p. 22)

In order to examine the explanatory power of ideology, I compared the estimated passage of amendments to the actual results. The results were not the same in 34 amendments out of 327 roll call votes. In order to explain the change of result (from pass to fail or from fail to pass), I determined to further examine the effect of accuracy of vote prediction based on ideology on the change of the result – from pass to fail or from fail to pass.

When I examined this hypothesis with a logistic model, ‘Accuracy of vote prediction based on ideology’ did not make significant differences on the result in authorization bills. However, the result showed a possibility that ‘accuracy of vote prediction based on ideology’ can make a difference in appropriation, even though the error boundaries are too wide (see the

right graph in Figure 8). The result shows that as legislators do not vote in accordance with their ideologies, the possibility of change of passage increase.

<Figure 8: ideology difference and probability of result change>



Note: Ideology of amendment is the %of votes not predicted by ideology. “0” in Y axis means that the result was changed and “1” means vice versa.

Considering the fact that the error boundary is too wide in appropriation process, it can be concluded that the estimated passage of amendments is not guaranteed. I speculated that unpredictability of the result is caused by the fact that most amendments in appropriation bills, which have an % of votes not predicted by ideology over 0.3, were determined with narrow vote margins.²⁵ This result also comes from the fact that ideology itself is not the factor that estimates the passage of amendments but the one that measures each legislator’s voting behavior.

However, assuming that the rule that determines the passage of an amendment is the simple majority rule, it is possible that there are some cases where ‘not voting in accordance with ideology’ has made a difference in the number of Yea-Nay votes, even though it did not change

²⁵ See figure 11. There are 7 observations that have an ideology difference over 0.3, and 4 out of them were located within the boundaries between 150 yea votes and 250 yea votes.

the passage of an amendment. As a result, I determined to examine the effect of vote prediction on passage of amendment.