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The Power Distribution between Allies, Alliance Politics and Alliance Duration

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ABSTRACT

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This dissertation is composed of three independent essays devoted to the study of the duration of military alliances. In Chapter 2, I investigate how the power distribution and the geographical distance between allies interact and affect alliance duration. I find that geographically remote and unequal alliances are more likely to endure than geographically close and unequal alliances. In Chapter 3, I examine how the economic dependence of weaker states on their major power allies and their capability change interact and affect alliance duration in asymmetric alliances. I find that alliances with minor powers whose capabilities increase and whose economic dependence is low tend to terminate earlier than those with minor powers whose economic dependence is high. In Chapter 4, I undertake a case study of the U.S.-South Korean alliance. I find that the U.S.-Korean military alliance is deeply embedded in the socioeconomic structure of Korean society generated by export-led growth and its economic dependence on the U.S, consequently making the U.S.-ROK alliance more resilient.
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Chapter 1

Introduction

This thesis is a study on the duration of military alliances. Why does alliance duration matter? In the field of International Relations, military alliances have been seen as one of the most important foreign policy tools that states can choose to ensure national security and maintain international peace. Several empirical studies demonstrate that defensive pact alliances serve these purposes (e.g. Leeds 2003; Johnson and Leeds 2011). Given these functions that military alliances perform, knowing about why some alliances last longer while some do not is important. If defensive alliances are effective at deterrence, and if policymakers are well-informed about how to maintain the ties with their alliance partners, this will make alliances more durable. Thus, more knowledge about alliance duration will help add to stability in foreign policy, and, as a consequence, reduce uncertainty in international relations. Given that uncertainty is an important underlying factor that causes military conflict in international relations (Fearon 1995), the study of alliance duration can ultimately contribute to promoting peace in international relations. In addition, forming and maintaining military alliances are costly. They involve coordinating policies among (potential) allies and sometimes making policy
concessions to alliance partners (Morrow 1991, Morrow 1994). In this regard, for foreign policymakers who want to form an alliance that will endure, knowledge about what type of alliance lasts longer and about what factors contribute to this end will help them to design a military alliance accordingly. That is, the study of alliance duration can help foreign policymakers to organize an military alliance effectively.

It is necessary to discuss briefly what is meant by alliance duration in this study. In many of the existing studies of alliance duration, the durability of an alliance has been seen as a proxy for reliability. Gaubatz’s study (1996) is a case in point. In his study, whether democratic alliances are more reliable than nondemocratic alliances is tested on the basis of their duration. This thesis approaches alliance duration with its focus on the aspect of (intra) alliance politics. Alliances are formed on the basis of common interests and conflicting interests as well. If potential allies’ interests are either fully harmonious or fully divergent, no alliances will be formed (Morrow 1991). This suggests that how allied states coordinate their divergent interests, bolster their common interests and even expand the scope of their interests— I refer to this as alliance politics—is instrumental in maintaining alliance ties (Snyder 1997). In this regard I intend to link alliance politics to alliance duration, positing that a longer duration of alliances is associated with alliance cohesion generated by well-managed alliance ties (Hosti, Hopmann & Sullivan 1973). Again, given that military alliances are important tools for accomplishing foreign
policy objectives, a better understanding of what factors cement or loosen the ties may shed light on how to manage alliance relationships.

Specifically, this thesis focuses on power distribution between allies as a factor that affects alliance duration. By the power distribution between allies, simply speaking, I mean whether allies are equal or unequal in power. The reason why I focus on power distribution between allies is that it determines the degree of autonomy concerns that allied states entertain. Here I define autonomy as the ability of a state to formulate its policy without external influence. I assume that if power distribution between allies is highly unequal in an alliance, the weaker side is concerned about the likely overwhelming influence of the stronger side. This means that a large power gap between allies can serve as a factor that destabilizes the sustenance of the alliance. However, this autonomy concern or the (unequal) power distribution between allies that generate this autonomy concern has been ignored in the capability aggregation approach, which purports that the major purpose of a military alliance is to combine capabilities, and thus that the value of an allied member is evaluated in terms of its capability contribution to the alliance. As Morrow (1991) points out, this capability aggregation approach has a weakness in explaining why asymmetric alliances are formed and how they are maintained, although this asymmetric type of alliances account for a great portion of the currently existing military alliances. In other words, if capability aggregation is a major purpose of alliances, this approach fails to provide adequate accounts
of why major powers form alliances with minor powers which make a marginal
contribution to the overall capabilities of the alliances. In particular, what I find
problematic in this capability aggregation approach is that this single-minded focus
on capability aggregation tends to shift our attention away from some other aspect
of alliance politics between allies, in particular, in the case of asymmetric alliances.
According to the capability aggregation approach, the main issue of alliance politics
should be how to manage the overall capabilities of the alliance and coordinate
their policy to that end. But in the case of asymmetric alliances, there is another
problem that tends to be ignored by the capability aggregation—the problem of
autonomy concern that the weaker state suffers from.

In this thesis, I introduce the notion of autonomy as a key underlying fac-
tor that affects a state’s decision on alliance policy. But it is important to note
that my definition of autonomy and my emphasis on autonomy are different from
those of Morrow’s. In Morrow’s security-autonomy tradeoff model(1991), auton-
omy means the ability of a state to change the status quo and this notion was
introduced primarily to explain why major powers form alliances with minor pow-
ers, emphasizing the benefits that major powers obtain in asymmetric alliances.
In this thesis, however, I apply the traditional meaning of autonomy—the ability of
a state to formulate policy without external influence—to emphasize the costs that
minor powers have to bear in asymmetric alliances. By focusing on the auton-
omy concern of minor powers, this thesis intends to explore how minor powers can
affect international politics in general and alliance behavior in particular. Thus, one contribution that this thesis has in mind is to expand the study on the role of minor powers in international politics (Rothstein 1968).

1.1 Plan of Dissertation

With this overall framework for this study, this dissertation is organized as follows:

In the second chapter, I explore how the distribution of power between allies and the geographical proximity between allies interact and affect alliance duration. The main thrust of my argument is that the power relationship between allies can aggravate or ameliorate autonomy concerns or even security concerns depending on the distance between allies. For example, in the case of an unequal alliance, the weaker side may feel more threatened by or be more concerned about the influence of its stronger ally if the stronger ally is geographically close. This suggests that in the case of unequal alliances, geographically remote alliances tend to last longer than geographically close ones. On the other hand, in the case of an equal alliance, this kind of autonomy or security concern can be relieved, and thus geographically close alliances, which are more effective at aggregating capabilities, tend to last longer than remote ones. Following this logic, I hypothesize that i) equal and geographically proximate alliances tend to last longer than unequal and geographically proximate alliances, and that ii) unequal and geographically remote
alliances tend to last longer than unequal and geographically proximate alliances. Using the duration model, I test these hypotheses against the data. I find strong support for the hypotheses when I use major power status (a binary measure) to capture power distribution between allies. By contrast, I find no support for the first hypothesis when I use capability ratios to capture power distribution between allies while I find support for the second hypothesis.

In the third chapter, I explore the question of what causes an asymmetric alliance to end. Specifically, this chapter examines how changes in the capabilities of the weaker ally in an asymmetric alliance can cause the alliance to end. Building on the existing theoretical and empirical findings that changes in capabilities contribute to the termination of alliances (Morrow 1991, Leeds & Savun 2007, Leeds, Mattes & Vogel 2009), this chapter makes an argument that the economic dependence of the weaker side on the stronger side can serve as a restraining force toward alliance termination. That is, an increase in the capabilities of the weaker state can enhance its ability to substitute self-defense for the existing military alliance but its economic dependence on the stronger ally discourage it from terminating the alliance because the weaker state is concerned that the weakened security ties can also inflict damage on economic ties. By contrast, a weaker ally that is not economically dependent on its stronger ally may seek to substitute arms for the existing alliance. Thus, I hypothesize i) that when there is an increase in the capabilities of the weaker ally, an alliance in which a weaker ally’s economic dependence
is high is less likely to terminate than an alliance in which a weaker ally’s economic
dependence is low and ii) that a weaker ally whose capability rises and its economic
dependence is low is likely to increase its military expenditure to substitute arms
for the alliance. The empirical results from duration analysis lend strong support
to the first hypothesis but no strong support to the second hypothesis.

The final, fourth chapter is a case-study of the U.S.-South Korea military al-
liance, which has continued more than 60 years since its inception in 1953. In this
chapter, I attempt to answer the following question: Granted that South Korea’s
military capabilities have grown strong enough to defend itself, why does the South
Korean government continue to rely on the U.S. security commitment? Along the
line of the argument advanced in the third chapter, in this chapter I investigate
whether the economic dependence of South Korea on the U.S. contributed to the
continuance of the alliance. To this end, this study explores how U.S. policy toward
Korea in the early 1960s, derived from U.S. security interests in Korea, contributed
to generating a pro-US economic forces that have since influenced the ROK gov-
ernments to maintain pro-U.S policy. Although the U.S. did not impose any export
promotion policy on the Korean government, U.S. stabilization program that pri-
oritized internal stability over economic development severely circumscribed South
Korea’s choice of development strategy. In this regard, the adoption of an export-
led growth strategy was the most viable alternative that the ROK government can
opt for. What matters is that the adoption of the export promotion strategy re-
sulted in a ruling coalition involving conservative elites and big businesses (or the chaebol) that benefit from friendly relations with the U.S. The fact that this EOI ruling coalition still wields overwhelming influence in South Korea implies that the influence of the U.S.-ROK alliance is deeply entrenched in the socio-economic structure of South Korea, making the U.S.-ROK alliance resilient.
Chapter 2

Capability Distribution between Allies, Geographical Proximity and Alliance Duration

2.1 Introduction

Alliances have been a major concern in the studies of international relations. Hence, there has been a substantial amount of literature on military alliances investigating why and how alliances are formed, maintained and dissolved. Among these questions on alliances, this study focuses the issue of alliance duration. There have been many studies on alliance duration (e.g. Morrow 1991, Gaubatz 1996, Reed 1997, Bennett 1997, Zorn 2000, Leeds & Savun 2007; Leeds, Mattes & Vogel 2009). I focus specifically on the theoretical argument advanced by Morrow (1991). Based on the security-autonomy trade-off model that emphasizes the nature of the trade of security for autonomy (or vice versa) between allies, Morrow argues that asymmetric alliances are likely to last longer than symmetric alliances, implying that alliances unequal in power are more durable than alliances equal in power because the former type of alliance “strikes a more stable bargain of interest” than the latter (Morrow 1991, 905).

This study intends to extend Morrow’s research with some theoretical modifi-
cation. Specifically, I argue that the effect of power distribution between allies on alliance duration can be conditional upon the distance between them because the geographical distance between allies may function as some factor that aggravates or mitigates autonomy concerns (i.e. concerns about the mounting influence of an alliance partner, especially of a stronger ally, on domestic and foreign policy of the weaker state) that allied states may have. The central arguments of this study are that geographically remote and unequal alliances are more likely to last longer than geographically close and unequal alliances and that geographically close and equal alliances are more likely to last longer than geographically close and unequal alliances. To test these arguments, this study uses the Correlates of War (COW) data and the Alliance Treaty Obligations and Provision (ATOP) data, covering all allied dyads from 1816-2002.

The results from the Cox proportional hazard model lend moderate support to the hypotheses presented in this study. I find that geographically distant and unequal allied dyads last longer than geographically close and unequal dyads Also I find that equal and geographically close allied dyads tend to last longer than equal and geographically distant dyads. However, the empirical findings are mixed regarding which type of allied dyad, an unequal or an equal dyad, lasts longer when allied dyads are geographically close. The findings are divergent depending on which measure I use to capture the effect of power distribution between allies. I find strong support for the hypothesis that equal and geographically close dyads
last longer than unequal and geographically close dyads when I use a binary mea-
ure from the COW major power status to operationalize the power distribution
between allies. However, when I use capability ratios between allied dyads from
the COW Composite Index of National Capabilities to that end, I find no support
for the hypothesis. Overall, the empirical findings, however, exhibit the distinct
effect of the power distribution between allies on the pattern of alliance duration
depending on the distance between allies. While equal alliances tend to live longer
when the allied states are geographically close, unequal alliances tend to live longer
when the allied states are geographically remote.

The remainder of this paper is organized as follows: In the next section I review
prior studies on alliance duration with a focus on Morrow’s argument. In the third
section, I elaborate on my theoretical arguments. In the fourth section, I provide
the research design. In the fifth section, I present the results from the duration
analysis. In the final section, I conclude with a summary of the findings in this
study and with several suggestions for future research.

2.2 What Makes Alliances Endure?

The major interest of this study is in how the power distribution between allies and
the geographical proximity between them affect the duration of alliances. Before
proceeding to this inquiry, it is necessary to look at prior studies to see what
theoretical claims have been advanced and empirically what factors have been found to exert significant effects on alliance duration.

In a 1991 article, Morrow offers a security-autonomy trade-off model as an alternative to the realist view, which contends that alliances are formed to aggregate capabilities against a threat (e.g. Walt 1984). However, this realist view fails to provide an adequate account of why strong states form alliances with weak states (he calls this type of alliance an asymmetric alliance because each ally gains different benefits by forming an alliance) that are not expected to contribute to the aggregated capabilities of the alliance. The security-autonomy trade-off model is intended to explain this puzzle. His central claim is that this type of alliance, which he terms as an asymmetric alliance, is formed and maintained because it can provide a different kind of benefits to allied members as opposed to a symmetric alliance, which provides the same type of benefits—either security or autonomy— for the allied members. More precisely, asymmetric alliances offer a different kind of benefits to its allied members: The stronger side gains additional autonomy while the weaker side gains additional security.

Then, what does his autonomy-security trade-off model imply as to the duration of alliances? Unlike the realist view seeing the presence of threat as the main cause of the persistence of alliances, Morrow’s security-autonomy tradeoff

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1Morrow (1991, 908-9) defines security as the ability to maintain the status quo while he defines autonomy as the ability to change the status quo.
model focuses on the distribution of capabilities between allies bearing on alliance duration. Morrow argues that asymmetric alliances are likely to last longer than symmetric alliances. This argument is opposite to what the realist can derive from the capability aggregation approach. For example, Walt argues that asymmetric alliances are less likely to endure longer than symmetric ones because a weaker side’s little contribution to the alliance in terms of capabilities leads the weak state to question the commitment of the strong side to defend if attacked. That is, the fear of the weaker side to be abandoned by its stronger ally may facilitate the breakup of the alliance (Walt 1997, 160). Morrow argues otherwise. The logic behind his argument goes as follows: Symmetric alliances are likely to dissolve when the capabilities of one of the alliance members change because an alliance member with increased capabilities may want to terminate the alliance treaty, and instead seek to increase military spending for self-defense rather than relying on the alliance. Put another way, symmetric alliances are sensitive to changes in military capabilities. However, for Morrow, that logic does not necessarily hold for asymmetric alliances. A weaker state’s increased military capabilities, for example, may not affect its evaluation of the alliance because such an increase in capabilities is less likely to alter the nature of the trade significantly between the asymmetric allies. Therefore, this asymmetric relationship between allies, which is complementary in nature, makes the alliance ties more robust and resultingly makes this type of alliance last longer than that of symmetric alliance does (Morrow 1991, 918).

So far, I have looked at major theoretical claims advanced by Morrow. Then, what are the major empirical findings on alliance duration and which theoretical claims raised above are substantiated by empirical evidence? Morrow (1991) tests his argument that asymmetric alliances last longer than symmetric alliance by using the COW Alliance Data between 1815-1965. His unit of analysis is an alliance, and to operationalize asymmetric and symmetric alliances he classifies nations into three groups: superpower\(^2\), major and minor. An alliance including one superpower or major power is coded as asymmetric, while the alliance composed of only one type of power is coded as symmetric.\(^3\) His probit analysis shows moderate support for the hypothesis that asymmetric alliances last longer than symmetric alliances. In a one-tailed test, its p-value is .04.\(^4\)

Gaubatz (1996) tests his argument on the durability of democratic alliances. He also uses the COW Alliance Data from 1816 to 1965, and tests the hypothesis using both alliances and alliance-year dyads as the units of analysis. In addition, one model uses all alliance types as the dependent variable and the other takes

\(^2\)The United States, and the Soviet Union in the post-World War period are coded as superpowers.

\(^3\)There are cases where there are more than one major powers with other minor powers. He says that in those cases, the case was classified on a case-by-case basis(Morrow 1991, 921).

\(^4\)Given this, it can be argued that his hypothesis is marginally supported because in a two-tailed test, the hypothesis is statistically significant only at the .1 level.
only defense pacts into account. The results show that regardless of the unit of analysis democracies are found to last longer than mixed or non-democracy dyads. In particular, what is interesting in his findings in relation to this study is that both major-major power dyads and major-minor power dyads do not last longer than minor-minor dyads when the dependent variable is all alliances. However, this relationship changes when he takes only defense pacts into account. Both major-major dyads and major-minor dyads last longer than minor-minor dyads when only defense pacts are used as the dependent variable. This suggests that defense pact alliances including a major power tend to last longer than otherwise. Reed(1997) replicates Gaubatz’s analysis by extending the time span of the data from 1965 to 1993 and by applying discrete-time event history analysis capable of allowing for variation in the covariates of interest. The empirical result from his analysis confirms Gaubatz’s findings.

In his 1997 article, Bennett takes into consideration all theories of international alliances and tests all sets of hypotheses drawn from each theory using the COW Alliance Data between 1816-1984. In his study, the unit of analysis is an alliance. He classifies theories of alliance duration into four models: the capability aggregation model, the security-autonomy trade-off model, domestic politics model, and institutionalization model. The Weibull model that he employs to analyze the duration of alliances shows that the security-autonomy trade-off model and domestic politics model are well supported by the data. What merits attention in his
study for the purpose of this analysis is that he uses two different measurements to operationalize alliance symmetry/asymmetry: major power status and capability concentration. The former is identical to what Morrow used for his analysis, and the latter, the idea of which is similar to the COW system-level variable \( CON \), is intended to measure the distribution of capabilities within an alliance. In the complete model that controls for all the effects of other variables by including all variables of interest suggested by each approach, the coefficient of asymmetric alliances measured by using major power status is found to have no statistically significant effect on alliance duration; on the other hand, when capability concentration is used to measure the (a)symmetry of alliances, its coefficient is found to be statistically significant. That is, only when the capability concentration variable is used as a measure of the (a)symmetry of alliances is the hypothesis supported that asymmetric alliances are more durable than symmetric ones.

Finally, the study of Leeds & Savun(2007), which covers the temporal domain between 1816 to 2001 using an bilateral alliance-year as the unit of analysis, focuses on whether changes in internal or external factors that may affect the value of alliances cause the alliances to end in violation. Their empirical finding, especially with regard to the relationship between power asymmetry and alliance termination, is consistent with those of the previous studies. The empirical finding shows that asymmetric alliances are found to be less likely to terminate in violation than symmetric ones. However, Leeds et. al’s(2009) research that focuses on the effect
of political regime change on alliance termination also tests the same hypothesis in their statistical model. In this study, the effect of asymmetric alliances on alliance termination is insignificant, although the sign of the coefficient suggests that the asymmetric alliance tends to last longer than the symmetric alliance. This difference may stem from the different temporal domain that each study covers. The latter study that focuses on the internal regime change of allied states covers a shorter temporal domain, 1919-2001, due to the lack of regime change data.

In sum, prior studies focused on the effect of power distribution between allies on alliance duration tend to support that an asymmetric alliances tend to last longer than symmetric alliances but the empirical findings still leave room for the possibility that the relationship is conditional. The strength of the finding has been varied depending on model specification and estimation methods. These empirical findings may suggest that the effect of power (a)symmetry on alliance duration can be conditional upon some other factors, one of which this study suspects to be the geographical distance between allies.

2.3 How Power Status and Distance Interact

This study intends to extend Morrow’s(1991) research by arguing that the effect of the unequal distribution of capabilities between allies is conditional upon the geographical proximity between them. Some scholars referred to the importance
of geographical proximity in alliance relationships. For example, Liska (1962) made an interesting argument, saying, “A weaker power will be commonly anxious to seek alignment with geographically remoter powers; the tendency will be only intensified if it has cultural differences with the more powerful neighbor.” (1962, 13) However, this is a passing remark, and he does not elaborate this claim. Here I also develop a similar argument but an argument based on a different logic.

I assume that there is a tradeoff in maintaining alliance relationships. That is, a state would prefer a stronger ally to an equal ally in terms of capabilities but would prefer an equal ally to a stronger ally in terms of autonomy. Here by autonomy I mean a state’s ability to shape its policy without external influence. In the face of this trade-off, geographical distance may have a different meaning to an equal and an unequal alliance. To begin with, I argue that in asymmetric alliances the geographical distance between allies can play a buffer role that mitigates or aggravates the autonomy concern of the weaker state, by which I mean the concern by the weaker state about the excessive influence of its stronger ally on its domestic and foreign policy. Then how can geographical proximity between allies affect the autonomy concern?

First, in asymmetric alliances, the geographical proximity between allies can exacerbate the entrapment problem (Snyder 1984, Snyder 1997). Suppose that a state is in alliance with a strong state. The weak state may be concerned that its autonomy could be compromised by its stronger ally’s demand and influence.
The weak state may be concerned that it can be embroiled in a conflict that its stronger ally is involved in. That is, the weak state should be concerned about the entrapment problem. In fact, in asymmetric alliances, the weaker state is assumed to be more concerned about abandonment by its stronger partner (Snyder 1984, Snyder 1997), and this fear of abandonment is one of the major reasons why the weaker state seeks to align with the stronger partner’s policy. But in unequal and geographically proximate alliances, the entrapment problem of weak states can also be severe. Even though the contribution of the weaker ally to the alliance is limited in terms of capabilities, its marginal contribution to the alliance will be greater than that would be provided by a remote and weak ally. For example, the proximate and weak state is more likely to be requested to provide not only military support but also logistic support or a military foothold that its stronger partner calls for.

The Iranian case during World War II may fall into this category. Iran signed alliance treaties with Britain and the Soviet Union in January 1942. In fact, this treaty was preceded by Iran’s defeat in the military conflict initiated by these two great powers who sought to secure the oil fields and supply lines in Iran from Germany (Cossa 1990). The resulting alliance treaty required Iran to support the two great powers in every possible means of communication including railways, roads, ports, etc (Great Britain. Foreign Office. Library and Great Britain. Foreign and Commonwealth Office 1952, 1018). If Iran had failed to fulfil the commitment,
it could have been a victim of another attack by its allies. Of course, Britain was a remote ally, but the Soviet Union at that time shared the border with Iran.\(^5\) This seems to be a rather extreme case, but still suggests that a weak ally may be more vulnerable to the influence of its stronger ally if it is geographically close and this will in turn make the weak state more concerned about its autonomy.

Second, when the stronger ally is geographically close, although it is its ally, the weaker state can even perceive its stronger ally as a threat (Walt 1997, 158-159). In advancing his balance-of-threat theory, Walt (1987) includes geographical proximity as a component of threat. Extending his logic implies that weak states may find a proximate and stronger ally to be more threatening than a remote and strong one. However, I do not mean that geographical proximity per se is a cause of conflict between allies. Since it has no variation across time, it cannot be a cause of conflict between allies (Vasquez 1995). Rather, I argue that if any conflict of interests between them occurs, the weak state may be concerned about any military action which is more probable in the case of a stronger and proximate ally. This possibility of being attacked by its stronger ally induces the weaker ally to be more compliant with its stronger ally in terms of its policy, resulting in compromising further its autonomy. Although it seems rare that an allied state attacks its alliance partner, this is likely to happen.\(^6\) In addition, granted that major powers form

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\(^5\)After the collapse of the Soviet Union, Russia no longer shares the border with Iran. Now Azerbaijan is adjacent to Iran.

\(^6\)Bueno de Mesquita (1981) argues that allied states are more likely to fight each other than
asymmetric alliances to control weaker allies, this concern could be heightened between proximate allies (Morrow 1991, Schroeder 1976, Pressman 2008, Mattes 2012). For instance, in 1968, the Soviet Union invaded its ally Czechoslovakia, a member of the Warsaw Pact, to trample on the domestic political reform pushed for by Czech political leaders. Walt (1987) also points out that the geographical distance between the U.S. and its European allies helped mitigate this problem as opposed to the threat that the Soviet Union posed to its allies. Walt writes:

“The United States, by contrast, has only two countries on its borders. Neither is especially powerful. Because U.S. policy toward both has been benevolent in recent decades, both have chosen to ally with the United States. Even more important, the United States is separated by two oceans from the other vital centers of world power. For the middle level powers of Western Europe and Asia, the United State is the perfect ally. Its aggregate power ensures that its voice will be heard and its actions will be felt, and it is driven by its own concern for Soviet expansion to contribute substantially to its allies’ defense. At the same time, the United States is far enough away so as not to pose a significant threat to these allies. Thus the United States is geographically isolated but politically popular, whereas the Soviet Union is politically isolated as a consequence of its geographic proximity to other states.” (Walt 1987, 277; my emphasis)

Finally, military alliances require sharing their security information, but when their power relationship is asymmetric, the information flow is more likely to be nonaligned states. However, empirical evidence about this argument is mixed (e.g. Ray 1990, Bremer 1992, Bearce et. al 2006 ).
asymmetric, too. This asymmetric flow of information may make the weaker side feel more vulnerable in an anarchical structure of the international system because the information with which it provides its stronger partner may be detrimental to its future security. Again, the geographical closeness with a stronger ally can aggravate this concern. The strong empirical relationship between contiguity and military conflict may support this argument as well (Vasquez 1995).

Then why does this type of alliance—close and unequal—come into being in the first place? If a formed alliance is a rational response to a security threat, then a termination of an alliance can be explained primarily by changes in internal and/or external factors that alter the preferences of the allied states and that induce them to reassess the value of the alliance (e.g. Leeds & Savun 2007). In this regard, the question may arise as to how geographical distance, a factor that is constant over time, can affect alliance termination. That is, if geographical distance does not change over time, how can it explain both formation and termination? I argue that although the geographical distance does not change, the perception of autonomy concerns is associated with the distance and this perception may change in response to its ally’s behavior. If the distance between allies is close in an asymmetric alliance, the weaker state would be more sensitive than remote ones to the behavior of its stronger ally. I posit that a weaker state’s concern about

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7 There are some cases where the distance between countries changes due to changes in the border. But since such cases are relatively unusual, I do not take them into consideration.
its autonomy can be dormant at the formation stage (i.e. the weaker state may be uncertain about the stronger ally’s intention). However, this type of alliance is more susceptible to termination because of the dormant risk and its sensitivity. In this regard, this type of alliance can be a more fragile type of alliance than that of an unequal and distant alliance even if the stronger ally was the best choice at the time of alliance formation for a weaker state.

Although geographical proximity intensifies the concern of weaker states in asymmetric alliances, things may be different for a weaker state with a stronger ally located in the distance as suggested above. In general, it may be the case that an ally remote from its alliance partner could be limited in providing for security to its ally. However, this would not be necessarily the case for a weak state with a strong ally. Even if the strong ally is located in the distance, its power projection capabilities may allow it to sustain a deterrent effect on the weak state’s (potential) adversary (Boulding 1962). From the weaker side perspective, the distant ally could be beneficial in both senses. It could still capitalize on the deterrent effect that its strong ally creates, but would be relatively less concerned about the influence of its strong ally. However, one may argue that it can still pose a threat to its weaker ally given the stronger ally’s power projection capabilities. That can be true. However, even if a strong state wants to discipline its weaker ally by using force, it is more costly for the stronger and distant ally than for the stronger and close ally to rely on such an coercive option. Besides, if a strong
state seeks to tame its weaker ally by using force, it has to pay reputational costs. Thus, disputes between unequal and distant allies are more likely to be settled in a peaceful manner. Consequently, the distance can serve as a buffer that mitigate the concern that the weaker side harbors about its stronger ally. This conjecture leads to the first hypothesis of this study:

**Hypothesis 1:** Geographically remote and unequal alliances are more likely to last longer than geographically proximate and unequal alliances.

Then what role does the geographical distance between allies play in symmetric alliances and affect alliance duration? In the case of symmetric alliances, both states are less concerned about the influence of their partner, and consequently they are less concerned about their loss of autonomy unilaterally in favor of one or the other. The entrapment problem mentioned earlier would be less severe even though they were geographically close because one ally can restrain the other from engaging in conflict at a lower cost when one side finds the issue of conflict less vital to its interests (Snyder 1997). Instead, allied states in symmetric alliances are more concerned with capabilities that the other can provide for security. For this reason, they may find geographically proximate allies more attractive than those that are geographically distant. Again, the distance has a different meaning to a different type of alliance. For equal alliances, remoteness may operate as an ob-
Table 2.1: Which Type of Alliance Lasts Longer

<table>
<thead>
<tr>
<th>Geographical Proximity</th>
<th>Proximate</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Unequal</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>

stacte to maximizing capability aggregation effects whereas, for unequal alliances, remoteness may operate as a buffer that could mitigate the autonomy concern of the weaker side. Therefore, other conditions equal, equal alliances that are geographically close seem to last longer than equal alliances that are geographically remote. This argument leads to the second hypothesis of this study:

*Hypothesis 2: Geographically proximate and equal alliances are more likely to last longer than geographically remote and equal alliances.*

The 2 x 2 matrix of Table 1 illustrates the arguments advanced above. In terms of the probability of alliance duration, I predicted that $Pr(D) > Pr(C)$, meaning that given unequal power distribution between allies, geographically distant alliances tend to last longer than geographically close ones as elaborated earlier for Hypothesis 1. I also predicted that $Pr(A) > Pr(B)$, meaning that given equal
power between allies, geographically close alliances tend to last longer than geographically distant ones as elaborated earlier for Hypothesis 2. Along the line of the logics advanced above, I also predict that $Pr(A) > Pr(C)$, meaning that given the geographical proximity between allies, equal alliances are likely to last longer than unequal alliances. The rationale for this argument goes as follows: Provided that allied states are located geographically close, equal allies have less concern about autonomy than unequal allies (in particular, the weaker ally of the unequal alliance) and this will render managing the alliance ties less costly. In addition, equal allies will also capitalize on their geographical proximity to enhance their efficiency gains through economies of scale, for example. Unequal allies can also enjoy the benefits of economies of scale, but given the weaker state’s little contribution to the overall capabilities, the efficiency-generating effect of unequal alliances will be much weaker than that of equal alliances. For the reasons mentioned above, I present the third hypothesis.

Hypothesis 3: Geographically close and equal alliances are more likely to last longer than geographically close and unequal alliances.

Finally, I predict that $Pr(D) > Pr(B)$, meaning that given the geographical remoteness between allies, unequal alliances tend to last longer than equal alliances. Provided that allied states are located geographically distant, weaker states in
unequal alliances can enjoy the deterrent effects that their stronger allies provide and suffer less from autonomy concerns. On the other hand, equal allies that are geographically distant make it hard for them to combine their capabilities in an efficient manner. For this reason, I offer the fourth hypothesis.

**Hypothesis 4:** Geographically remote and unequal alliances are more likely to last longer than geographically remote and equal alliances.

However, I do not predict the relationship either between $Pr(A)$ and $Pr(D)$ or between $Pr(B)$ and $Pr(C)$ because it is indeterminate in the logics presented above.

2.4 Research Design

2.4.1 Data and Variables

To test the hypotheses presented above, I use several datasets commonly used in quantitative studies in IR, which include the Correlates of War (COW) data, Alliance Treaty Obligations and Provisions (ATOP) data (Leeds, Ritter, Mitchell & Long 2002), and POLITY IV data (Marshall, Gurr & Jaggers 2010). All of the

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8If both allies are major powers in the case of equal alliances, this efficiency problem could be ameliorated given their power projection capabilities. But given the entire equal alliances involving both major-major and minor-minor powers, the validity of my argument can be sustained.
data used in this study are compiled by using the EUGene program developed by Bennett and Stam (2000). The spatial and the temporal domain of this study covers all allied-dyads from 1816 to 2002. Accordingly, the unit of analysis of this study is an allied-dyad year. Since this study requires analyzing the duration of alliances, I apply event-history analysis as the estimation method.

2.4.2 Dependent Variable

Alliance Termination: Since this study is concerned with the interactive effects of the power distribution and the distance between allies on alliance duration, the dependent variable of this study is alliance termination. In order to code alliance termination, it is first necessary to operationalize alliances. In this study, I use the ATOP data (Leeds et al. 2002) to operationalize alliances. The ATOP data classifies alliances into five types: defense, offense, nonaggression, neutrality and consultation. Among these five types of alliances, I use only defense pacts because I think only defensive alliances are consistent with the arguments made here. For example, a state that wants to form an alliance with an aggressive aim is likely to prefer an equal and geographically close partner, but less likely to prefer an geographically remote one, whether it is equal or unequal. For such a state, if an alliance partner is stronger than himself, the weaker side might be

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9It is important to note that these five types of alliances are not necessarily mutually exclusive, however.
concerned about the distribution of the spoils that they can garner in the wake of an aggressive foreign policy (i.e. war). In addition, a geographically distant ally could not be so attractive a partner in optimizing the aggregate military capabilities in a timely manner. This suggests that in order to explain the behavior of offensive alliances, different theorizing may be needed. Similarly, different logics may apply to explaining the sustenance of different types of alliances. For this reason, in testing the arguments presented in this study, I confine my attention to defense pacts.

Since this study employs an allied dyad year as the unit of analysis, it is necessary to describe in detail how alliance termination is coded.\textsuperscript{10} If a pair of states is at least the member of either form of alliance, bilateral or multilateral in a given year, it is an allied dyad in a given year. This means that even if one of their alliance relationship terminates, it is still in an allied relationship if the dyad maintains the other alliance relationship. For example, if a pair of states is members of both bilateral and multilateral alliances, and if they terminate the bilateral one, they

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\textsuperscript{10}In fact, using an allied dyad year as the unit of analysis generate two concerns. First, it can make the allied dyads from multilateral alliances overrepresented in the sample. While a bilateral alliance generate one dyad per year, a multilateral alliance composed of 5 states, for example, generates 10 (nondirected) dyads per year. This study assumes that even in multilateral alliances, bilateral relationships among the allies matter and affect their decision on alliance duration. If this assumption holds to a large extent, the overrepresentation is not a serious problem. However, if this assumption does not hold, the empirical findings could be misleading. Second, since most of the prior studies except for Gaubatz (1996) use an alliance-year as the unit of analysis, the empirical findings derived from these studies may not be compatible with the findings from this study. The reason why I adopt the dyad as a unit of analysis despite these concerns is that one of the key independent variables in this study is the distance between allies, which is primarily meaningful in a dyadic relationship.
are still coded as an allied dyad if they are still members of a multilateral alliance. Thus, a dyad in an allied relationship in a given year is coded zero. But when the allied relationship ends (i.e. when the dyad is not a member of either a bilateral or a multilateral alliance) in a year, that end year is coded one. Thus, more precisely, in this study, alliance termination means the end of an allied relationship between a pair of states.

It is worth noting here how I coded some cases where allied dyads no longer exist due to the loss of independence by either state in a dyad. Even though alliance relationships end due to the loss of independence, these cases cannot be simply considered as terminated as long as the loss of independence has nothing to do with the allied relationships. Thus, I coded these cases as censored rather than terminated if a state’s loss of sovereignty is not affected by its dyad relationship. For example, South and North Yemen are unified into one country in 1990. But they had no allied relationship. In this case, each country’s allied dyads before unification are coded as right censored. But if one country is merged into its existing ally (e.g. Prussia’s unification), I coded them as terminated. In fact, most of the cases are coded as censored and the Prussian unification is the only set of

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11The ATOP dataset provides information about the modes of alliance termination. The TERMMODE variable coded at the member level defines six modes of alliance termination (Leeds 2005). I used that information to code the cases mentioned here.

12However, in the ATOP coding, in cases where states lost their independence due to their ally’s failure to fulfil the commitment, they are coded as violation. Naturally, those dyads in which either state lost independence by the other side’s violation are coded as terminated.
cases that I coded as terminated.\textsuperscript{13}

In sum, the dependent variable is dichotomous. In the original dyad-year ATOP data, a pair of states in a defense pact in a given year is coded 1; otherwise missing. To make the data coding compatible to duration analysis, I recode 1 to 0 if a pair of states is in an allied relationship in a given year, and code 1 in a year when the allied relationship ends. This coding rule resulted in 1,165 termination years of allied dyads out of 42,589 all allied-dyad years.

\subsection*{2.4.3 Independent Variables}

One of the key independent variables in this study is the distribution of capabilities between allies. Therefore, how to operationalize equal or unequal alliances is very important. To measure this variable, I use two indicators. One is derived from major power status defined by the COW data, and the other from the COW Composite Index of National Capabilities (CINC).

\textbf{Unequal Alliance}: To operationalize the distribution of capabilities between allies, I first use a simple measure classifying alliances into equal and unequal using the COW coding of major power status. The COW data classifies all nations into two types, major and non-major, relying on historians’ opinion(Krause &
Singer 2001). Thus, here a pair of states is defined as an equal alliance if both countries belong to the same type of major power status, and otherwise an unequal alliance. Accordingly, among the three possible combinations, major-major, minor-minor, and major-minor, the first two types of pairs of states, major-major and minor-minor, are coded as an equal alliance, and the third type as an unequal alliance. However, since this study covers the Cold-War period, this classification can be somewhat questionable because it is hard to consider the two superpowers, the United States and the Soviet Union, as equal vis-à-vis other major powers. To address this problem, I follow Morrow’s (1991: 921) classification of major powers. The United States and the Soviet Union are classified as superpowers from 1945. The Soviet Union is no longer coded as a superpower after 1989, while the United States is considered as maintaining the superpower status from 1945 on. To take this superpower status into consideration, I code superpowers as 2, major powers as 1 and minor powers as 0, and subtract one nation’s score from the other. Then I code unequal alliances as 1 if the subtracted score is either 1 or 2, and equal alliance as 0 if the subtracted score is equal to zero. In sum, the unequal alliance is coded one while the equal alliance is coded zero, serving as the reference for this binary variable.

**Capability Ratio (Logged):** When it comes to the distribution of capabilities between allies, we can think of a “finer measure” than a measure based on the three
level division of major power status (Bennett 1997, 867). To take into consideration more variation in the distribution of capabilities between allies, I use the COW CINC score to create a capability ratio measure. Here the capability ratio is formulated as follows:

\[ \text{capratio} = \log \left( \frac{\text{cap}_{\text{high}}}{\text{cap}_{\text{low}}} \right) \]

Here \( \text{cap}_{\text{high}} \) represents the capabilities of an ally in an allied dyad whose CINC score is equal to or higher than the other in a given year, while \( \text{cap}_{\text{low}} \) represents the capabilities of an ally whose CINC score is lower than the other in a given year. I take the natural log for the ratio to reduce the variation of that ratio. In addition, this natural log transformation allows us to define the equal distribution of capabilities between allies and unequal distribution as well. For example, in a case where an allied dyad shares equal capabilities in a given year, capratio would be equal to zero since \( \ln(1) = 0 \). This is a continuous measure, the value of which ranges between 0 and 11.24.

**Distance:** In this study, I argue that the effect of (un)equal distribution of capabilities between allies on alliance duration is conditional upon the distance between them. The more distant between allies, the more durable unequal alliances than equal, for example. There are several distance measures in the COW data, and among them, I use a measure of the distance between two capitals, accounting for...
contiguity. This measure allows us to consider the distance between two countries and contiguity as well (Bennett & Stam 2007, 23). Since this measure codes zero for a pair of states that shares land borders, the zero distance is highly meaningful in a substantive sense. Since I take an interaction term between capability distribution and distance in the model, the first order term of the capability distribution can be interpreted as the effect of the distribution of capabilities on alliance duration between allies when pairs of countries are contiguous. When the unit of measure is a mile, the effect of this variable on the dependent variable will be too small. To avoid this problem, I rescale it into 1000 miles. That is, the unit of measure is 1000 miles.

2.4.4 Control Variables

**Joint Democracy:** As Gaubatz’s(1997) study suggests, joint regime type may also influence the duration of alliances. So it is necessary to include a joint regime type variable in the model as a control variable. To operationalize the joint regime type, I use Polity2 scores from the Polity IV data (Marshall, Gurr & Jaggers 2010), which range from -10 to 10 with lower scores indicating less democratic regimes. To make a joint democracy variable dichotomous, I code a pair of countries as joint democracy(=1) if both countries have a Polity2 score equal to or higher than 6 in a given year; otherwise zero. Following Gaubatz, I expect that democratic allied
dyads are more durable than non-democratic allied dyads.

**Change in Capabilities:** Most of the studies on alliance duration emphasize the effect of changes in capabilities on alliance duration and empirical results also support these arguments because changes in capabilities lead allied states to alter the valuation of the alliance (Morrow 1991; Bennett 1997; Leeds & Savun 2007). However, it is difficult to predict whether an increase in capabilities of a member state can increase the likelihood of alliance termination because capability change has a different meaning depending on the alliance type and the power status in the alliance in question. For example, in an asymmetric alliance, the weaker states’ increased capabilities may increase the likelihood of termination if they seek to gain more autonomy; but in the same type of alliance the stronger side’s decreased capabilities may be associated with alliance termination. By contrast, in an symmetric alliance, either side’s decrease in capabilities may be strongly associated with alliance termination. Since either an increase or a decrease in capabilities of allied states can alter the value of the alliance, I control for this effect by considering the absolute changes in capabilities of member states. That is, to capture the effect of capability change in allied dyads, whether it is an increase or a decrease, I use a absolute capability change measure. Specifically, using the COW CINC score, I calculate a percentage change in capabilities of each state in a dyad from
the year of alliance formation following Leeds and Savun\textsuperscript{14}(2007). Since the CINC score basically captures relative capabilities of a state in the system in a given year, this measure allows us to capture how much relative capability change has occurred to each member state since the formation of the alliance. Then, it is formulated as follows:

\[ \text{Change in Capabilities} = \frac{|\text{cap}_t - \text{cap}_{t0}|}{\text{cap}_{t0}} \times 100 \]

(Here \( t \) denotes the current year and \( t0 \) the year of alliance formation)

This coding rule generates a capability change rate for each individual state in a given year. Of the two, I choose the higher rate as representing the capability change rate of that allied dyad in a given year because I assume that the higher percentage change in capabilities may have a stronger impact on alliance termination.

\textbf{Change in Threat:} An external threat could be an important factor that influences not only alliance formation but also alliance duration (Walt, 1987, 1997). We anticipate that as an external threat declines, alliances are more likely to end.

\textsuperscript{14}Actually, Leeds and Savun(2007) use a dummy variable for this capability change setting up a threshold value such as a 10 percent change coded as one and otherwise zero. I followed the same path, but when I used a dummy variable for this measure, in empirical tests the significance of the coefficient changed depending on its threshold value. So I choose a continuous measure here.
To control for this effect of an external threat, here I use a threat measure developed by Leeds and Savun(2007). They define an external threat in terms of the external security environment. To this end, a threat level that a state faces is measured by summing up the capabilities (CINC scores) of states in the politically relevant region (contiguous states and major powers in the system) if the unweighted global S scores(1999) of these states are below a threshold level (0.775) and no type of alliance is formed with the state in question. I calculate an external threat based on this measure with some modification. Since the face validity of S scores is somewhat dubious, I use only information regarding the politically relevant region and alliance ties without incorporating S scores in calculating the threat level. Thus, those countries in the politically relevant region that are not any type of allies (based on the ATOP data) are regarded as potential threatening countries and their capabilities (CINC scores) are summed up. Using this CINC score as a threat level an allied country faces, I calculated the change in threat that each country in an allied dyad faces. As done in calculating capability change, the change in threat was calculated as a percentage change in threat from the year of

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For example, according to the unweighted S scores, South Korea shares the highest S score with North Korea(.962) while sharing the lowest S score with the U.S.(.431) among the countries in the politically relevant region. I think this happens because S scores is calculated based on the assumption that the distance between countries reduces foreign policy similarity. This is not a reasonable assumption, but including S scores as a component in calculating a state’s threat level may end up considering a friendly country as an enemy. In South Korea’s case, incorporating S scores into the calculation of threat levels may end up coding the U.S. as an enemy for instance. For this reason, I do not consider unweighted S scores as a component in calculating threat levels. Instead, I include weighted S scores, which show better face validity than unweighted S scores, as a control variable to control for foreign policy similarity.
alliance formation. But this time, I allowed a negative percentage change (unlike capability change) because we anticipate that a positive increase in threat will reduce the likelihood of alliance termination. Consequently, change in threat is calculated as follows:

\[
Change in Threat = \frac{\text{threat}_t - \text{threat}_{t0}}{\text{threat}_{t0}} \times 100
\]

(Here \( t \) denotes the current year and \( t0 \) the year of alliance formation)

This coding rule generates a percentage change in threat for each individual state in a given year. Of the two, I choose the higher rate as representing the threat change of that allied dyad in a given year. I expect that a high percentage change in threat is negatively associated with the likelihood of alliance termination.

**Foreign Policy Similarity:** It is generally accepted that alliances are formed when they share common security interests. The strength of this common interest is reflected in their foreign policy. If an allied dyad shares common interests and their foreign policy is similar, then we can expect that that allied dyad last longer than other dyads that share weaker common interests. Signorino and Ritter’s (1999) S scores are a measure of foreign policy similarity based on alliance portfolios, ranging from -1 (dissimilarity) to 1 (similarity). I use global *weighted* S scores as a control variable because of presumably the better face validity of the
weighted S scores than global unweighted S scores.\textsuperscript{16} Since this measure is built upon alliance portfolios, the termination of an alliance in a year can be represented in the measure of foreign policy similarity in the same year. This may cause an endogeneity problem. To avoid this problem, I take a one-year lag for this variable.

**Wartime Alliance:** Some alliances are formed during wars. These kinds of alliances, called wartime alliances, can outlive wars but can be terminated with the end of the wars because they fulfilled their purposes. Thus I control for the effects of wartime alliances. The ATOP dataset provides information regarding wartime alliances. The ATOP dataset codes alliances as a wartime alliance if any one of the alliance members is involved in a war at the time of alliance formation. Following this coding rule, I code an alliance dyad whose member(either or both) is a participant of a war at formation as a wartime alliance. In case of multilateral alliances, if neither of the member states in a dyad is a participant of a war, it is not coded as a wartime alliance. For example, suppose that there is a multilateral alliance composed of three states A, B, and C. If state A is involved in a war at the time of formation, then (A,B) and (A,C) dyads are coded as a wartime alliance. But (B,C) dyad is not coded as a wartime alliance. The ATOP coding sheets provide more detailed information about which state is a war participant and I use this information to code this variable. The wartime alliance variable is thus a binary

\textsuperscript{16}See fn.13. for detail.
variable. If a dyad is a wartime alliance in a given year, it is coded one; otherwise zero. I expect that wartime alliances are more likely to terminate than peacetime alliances.

**Multilateral Alliances:** The unit of analysis in this study is an allied-dyad year. However, in many cases allied dyads are part of multilateral alliances, and the size of an alliance may affect the duration of the alliance, and especially a large scale of multilateral alliances. NATO is a case in point. To take this institutional effect into consideration, I consider whether an allied dyad belongs to a bilateral or multilateral alliance by relying on the information provided by the ATOP dataset. The ATOP dataset provides information about how many bilateral or multilateral alliances an allied dyad shares in a given year. But, sometimes, an allied dyad shares both bilateral and multilateral alliances and this makes it difficult to group allied dyads simply into bilateral or multilateral alliances. Given this problem, I classify allied dyads in a given year into three groups: pure bilateral year, pure multilateral year and sharing both bilateral and multilateral year. I use pure multilateral year as a baseline. But here I do not make any specific predict as to which type of alliance, bilateral or multilateral, will last longer than the other.

Finally, Table 2 presents descriptive statics for the variables used in this statistical analysis.
Table 2.2: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Obs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alliance Termination</td>
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<td>1</td>
<td>42589</td>
</tr>
<tr>
<td>Unequal Alliance</td>
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<td>.367</td>
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</tr>
<tr>
<td>Capability Ratio (Logged)</td>
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<td>1.968</td>
<td>0</td>
<td>11.243</td>
<td>45289</td>
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<tr>
<td>Distance (in 1000 miles)</td>
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<td>1.728</td>
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<td>11.91</td>
<td>45289</td>
</tr>
<tr>
<td>Joint Democracy</td>
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<td>.437</td>
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</tr>
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<td>Change in Capabilities</td>
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<td>125.193</td>
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</tr>
<tr>
<td>Change in Threat</td>
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<tr>
<td>Share Bilateral Alliances Only</td>
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<td>Share Bi and Multilateral Alliances</td>
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<td>.207</td>
<td>0</td>
<td>1</td>
<td>45289</td>
</tr>
</tbody>
</table>

2.4.5 Estimation Method

Since this study concerns the duration/termination of alliances, event history modeling is amenable to this analysis. There are several parametric models such as exponential or Weibull distribution models, and a semi-parametric model such as the Cox proportional hazard model. Among them, I choose the Cox proportional hazard model for estimation because it allows us to leave duration dependence unspecified (Box-Steffensmeier & Jones 2004). Since the temporal domain of this study extends to 2002, many allied dyads that continue to exist after 2002 are right-censored. In addition, since the data structure is time-series cross-sectional (TSCS), it is necessary to control for possible unit heterogeneity across allied dyads. To address this problem, I use robust standard errors in estimation.
In using the Cox proportional hazard model, it is necessary to check whether the proportional hazard assumption holds. When the proportional hazard assumption was checked, it turned out that there are severe violations of the Cox proportional hazard assumption in the model. Although the set of the key independent variables meet the proportional hazard assumption, most of the control variables violate the proportional hazard assumption. This suggests that the effects of these control variables vary rather than remaining intact over time. One remedy to this problem is to take a time interaction with these variables so that the suppressed time-varying effects can present themselves (Box-Steffensmeier, Reiter & Zorn 2003). To this end, I take time interaction terms with these control variables, which include the set of variables such as joint democracy, capability change, threat change, foreign policy similarity, and bilateral/multilateral alliance type. In this regard, this analysis adopts a nonproportional hazard model.

2.5 Empirical Results and Analysis

In Table 3, the results from the Cox hazard regression model are presented. Here I present the results from four models. The first two models are analyzed using the binary unequal alliance variable generated from the COW major power status, and the last two models are analyzed using the continuous capability ratio variable generated from the COW CINC scores. As mentioned earlier, this estimation
suffers from the nonproportional hazard problem, and hence, Model 2 and Model 4 remedy this problem by including time-interaction terms for the control variables listed above. I also present Model 1 and Model 3 which do not include time-interaction terms to show whether the effects of the key independent variables on alliance duration are affected by this different model specification. Since I provide Model 1 and Model 3 for reference, I focus my discussion of the results on Model 2 and Model 4.

Now look at the results reported in Model 2 and Model 4. Here it is worth noting that since I use the Cox proportional hazard model for analysis, positive coefficients indicate a greater likelihood of termination while negative coefficients indicate a less likelihood of termination. I hypothesized that unequal and distant alliances last longer than unequal and close alliances. This hypothesis (Hypothesis 1) is supported by the results from both Model 2 and Model 4. The coefficients for the interaction terms are negative and statistically significant. Hypothesis 2 suggests that in cases of equal alliances, distant alliances tend to terminate earlier. This hypothesis is also borne out by the results from Model 2 and Model 4. The coefficients for the distance variable are both positive, indicating that given the equal power between allies, the more distant allied dyads tend to terminate earlier.

\[\text{When the proportional hazard assumption is violated, the coefficients with the proportional hazard problem as in Model 1 and Model 3 can be understood as representing the average or aggregate effect of these variables on duration. By “average”, it means the aggregated effect of the initial effect and the time varying effect of a variable of interest (Allison 1995). In this regard, the results reported in Model 1 and Model 3 are informative.}\]
I also hypothesized (Hypothesis 3) that geographically close and equal dyads are more durable than geographically close and unequal dyads primarily because of the autonomy concern of the weaker states in unequal dyads. Based on this hypotheses, I expect a positive sign for both unequal alliance and capability ratio coefficients in Models 2 and 4. The estimated coefficients indicate the conditional effect of capability distribution between allies when they are contiguous(Distance=0). As shown in the results, this hypothesis is partly supported. In Model 2, the sign of Unequal Alliance is positive and highly statistically significant, supporting the hypothesis that unequal and geographically contiguous dyads are likely to terminate earlier; but in Model 4, the sign of capability ratio is negative as opposed to the prediction, although it is marginally significant, at .1 level. Finally, consider whether Hypothesis 4 is supported or not. I hypothesized that geographically distant and unequal dyads last longer than geographically distant and equal dyads. This hypothesis can be checked by looking at the interaction coefficients and the distance coefficients. In both Model 2 and Model 4, the interaction terms are negative and the distance coefficient positive, supporting the hypothesis that unequal and distant allied dyads tend to last longer than equal and distant dyads.

Although Table 2 presents whether the estimated coefficients are significant or not, it is not enough to show the substantive effects of these key independent vari-
Table 2.3: The Effect of the Distribution of Capabilities and Distance between Allies on Alliance Duration: Cox Hazard Model

<table>
<thead>
<tr>
<th></th>
<th>Main</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Model1</td>
<td>Model2</td>
<td>Model3</td>
<td>Model4</td>
</tr>
<tr>
<td>Unequal Alliance</td>
<td>0.601***</td>
<td>0.535***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.139)</td>
<td>(0.144)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal x Distance</td>
<td>-0.137***</td>
<td>-0.136***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.028)</td>
<td>(0.028)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capratio (Logged)</td>
<td>-0.049</td>
<td>-0.066*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.039)</td>
<td>(0.039)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cap Ratio x Distance</td>
<td>-0.018**</td>
<td>-0.016**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance (in 1000 miles)</td>
<td>0.107***</td>
<td>0.098***</td>
<td>0.107***</td>
<td>0.094***</td>
</tr>
<tr>
<td></td>
<td>(0.014)</td>
<td>(0.014)</td>
<td>(0.019)</td>
<td>(0.019)</td>
</tr>
<tr>
<td>Joint Democracy</td>
<td>-0.809***</td>
<td>-0.582***</td>
<td>-0.772***</td>
<td>-0.509***</td>
</tr>
<tr>
<td></td>
<td>(0.126)</td>
<td>(0.147)</td>
<td>(0.130)</td>
<td>(0.145)</td>
</tr>
<tr>
<td>Capability Change</td>
<td>-0.003***</td>
<td>0.001</td>
<td>-0.003***</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>Threat Change</td>
<td>-0.012***</td>
<td>-0.017***</td>
<td>-0.012***</td>
<td>-0.018***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Foreign Policy Similarity</td>
<td>-0.871***</td>
<td>-0.779***</td>
<td>-1.082***</td>
<td>-0.972***</td>
</tr>
<tr>
<td></td>
<td>(0.104)</td>
<td>(0.112)</td>
<td>(0.104)</td>
<td>(0.116)</td>
</tr>
<tr>
<td>Wartime Alliance</td>
<td>1.388***</td>
<td>1.320***</td>
<td>1.440***</td>
<td>1.370***</td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td>(0.105)</td>
<td>(0.102)</td>
<td>(0.109)</td>
</tr>
<tr>
<td>Bilateral Alliance Only</td>
<td>0.121</td>
<td>-0.234</td>
<td>0.279*</td>
<td>-0.053</td>
</tr>
<tr>
<td></td>
<td>(0.175)</td>
<td>(0.210)</td>
<td>(0.169)</td>
<td>(0.203)</td>
</tr>
<tr>
<td>Bi or Multilateral Alliance</td>
<td>0.256</td>
<td>-0.418</td>
<td>0.305*</td>
<td>-0.402</td>
</tr>
<tr>
<td></td>
<td>(0.156)</td>
<td>(0.288)</td>
<td>(0.160)</td>
<td>(0.305)</td>
</tr>
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</table>

TVC

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Democracy</td>
<td>-0.011</td>
<td>-0.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capability Change</td>
<td>-1.84e-04***</td>
<td>-1.92e-04***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6.47e-05)</td>
<td>(6.60e-05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat Change</td>
<td>3.70e-04***</td>
<td>4.14e-04***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7.45e-05)</td>
<td>(7.67e-05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Policy Similarity</td>
<td>-0.028*</td>
<td>-0.036**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(0.018)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilateral Alliance Only</td>
<td>0.039**</td>
<td>0.030*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.015)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bi or Multilateral Alliance</td>
<td>0.055***</td>
<td>0.054***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.013)</td>
<td></td>
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</tr>
</tbody>
</table>

| Observations | 31540 | 31540 | 31540 | 31540 |
| Log Likelihood | -6038.928 | -6012.244 | -6033.705 | -6004.607 |
| No. of Allied Dyads | 1808 | 1808 | 1808 | 1808 |
| Failures | 960 | 960 | 960 | 960 |
| Chi-Squared | 1149.406 | 1235.394 | 1182.854 | 1219.986 |

Robust standard errors in parentheses
* p < .10, ** p < .05, *** p < .01; two-tailed tests
ables on alliance duration. To make the presentation more intuitively appealing, I provide two graphs in Figure 1 that illustrate how predicted hazard rates change over distance in connection with the distribution of capabilities between allies.

As illustrated in Figure 1, the Y axis indicates predicted hazard rates and the X axis represents the distance between allies. The diamond-shaped points represent the mean values of predicted hazard rates for equal alliances, and the triangle-shaped points represent the mean values of predicted hazard rates for unequal alliances. The vertical bars from the mean values represent the 95 percent confidence intervals for the predicted mean values. The predicted hazard rates are calculated by substituting the mean value of each independent variable into the equation. To account for the time-varying effects of the control variables, I draw this graph when the alliance duration is at \( t = 19 \), which is the mean value of the alliance duration years in the sample.

Both graphs illustrate that in the case of equal alliances, regardless of the measure for power distribution between allies, equal alliances tend to face higher risks of termination when the distance between allies is large. By contrast, in the case of unequal alliances, they tend to last longer as the distance between them grows larger even though the slope of the unequal alliance is not so steep, especially when the capability ratio measure is employed. Earlier, I argued that the distance has a different meaning to an equal and an unequal alliance. For an equal alliance, the distance can serve as an obstacle to efficiency in aggregating
capabilities while for an unequal alliance, it can serve as a buffer to the autonomy concern of the weaker state. The steepness of the slope may indicate the degree of this different effect. The steep and upward curves for equal alliances in both graphs indeed indicate that the symmetric alliance is aimed at power aggregation and efficiency. The downward slope for unequal alliances may imply that the buffering effect matters and the power projection capabilities of major powers also matter in maintaining asymmetric alliances. If the slope were flat, we would cease to think about these effects. In this regard, the buffering effect and the power projection effect of major powers are partly supported given the flatter slope of the unequal alliance measured by using the logged capability ratio.

As suggested in the results, when the major power status variable is used, unequal alliances face a higher risk of termination than equal alliances do when they are geographically contiguous. On the other hand, when the capability ratio variable is used, the result is reversed. But both shows that when the distance between them is large, equal alliances face a higher risk of termination.

It is important to note that most of the alliances are located relatively closely. The mean value of the distance is 1761 miles, and thus a more meaningful range of the distance between allies is within 6000 miles although the maximum distance in the sample is 11910 miles.\footnote{The standard deviation of the distance equals 1728 miles. If I sum up the mean value and two-standard deviation, it is 5217 miles. The 95 percentile is 4817 miles and the 99 percentile is 8503 miles.} In addition, given that the standard errors of the
predicted values are large as the long confidence intervals suggest, it is necessary
to check whether these differences between equal and unequal alliances are statisti-
cally significant. For this purpose, I run another simulation, and the resulting
graphs are shown in Figure 2.

Figure 2 illustrates that unequal alliances, when the major power status mea-
sure is employed, face a higher risk of termination than equal alliances when the
distance between them is less than 2800 miles. However, this difference in the
risk of termination between the two types becomes insignificant between 2800 and
5200 miles. Beyond that distance, unequal alliances face a lower risk of termina-
tion than equal alliances. That is, unequal alliances are more likely to terminate
in the close distance than than equal alliances but less likely to terminate in the
long distance than equal alliances. Therefore, this implies that the interaction
effect between power distribution and geographical proximity is significant in the
meaningful range of distance. If the difference in the risk of termination were in-
significant around 6000 miles, it would be hard to conclude that the interaction
effect is significant in the long distance. By contrast, when the capability ratio
measure is employed, equal and unequal alliances do not face any different risk
of termination in the close distance. But beyond 1000 miles on, unequal alliances
face a lower risk of termination.

Now, Table 4 presents the substantive effects, illustrating the extent to which
the predicted hazard rate changes in response to a one-unit change in an indepen-
dent variable\textsuperscript{19}. The estimated coefficients in Table 2 are not easy to interpret in an intuitive manner. By contrast, hazard ratios obtained by exponentiating the estimated coefficients are more intuitively appealing. Therefore, Table 4 report these results based on hazard ratios. What is most striking in that table is the substantive effects of the unequal alliance measured by using major power status. The result suggests that if a contiguous and equal alliance changes to a contiguous and unequal alliance, the risk of termination of that kind of alliance increases by as much as 70.7\%. (This is equivalent to saying that the hazard of termination of an contiguous and unequal alliance is 1.7 times higher than that of a contiguous and equal alliance.) However, the power distribution between allies is measured by using the logged capability ratio, the result was opposite as shown above. A one-unit increase in the logged capability ratio in the condition under which a pair of allied states is contiguous, the hazard of termination decrease by 6.5\%, but this magnitude is statistically significant at the .1 level as shown above. Here, what is meant by a one-unit increase in the logged capability ratio is not intuitively clear. Since here the capability ratio is logged, a one-unit increase means that an equal dyad changes to an unequal dyad in terms of capabilities and thus the capability ratio changes from 1 (equal) to 2.78 (unequal). This change is not so striking, and that is why we observe such a modest change in the risk of termination (6.5

\textsuperscript{19}In Table 4, I excluded the variables that have time-varying effects
percent decrease). However, if the logged capability ratio changes from 0 to 6, which means that the capability ratio between an contiguous dyad changes from 1 to 403, then the risk of termination decreases by 32.7%.

Before mentioning the substantive effect of distance and the interaction terms, it is worth recalling that the unit of measure for distance is 1000 miles. Thus, a one-unit increase in distance means a 1000 mile increase in distance. Regardless of which measure is used for power asymmetry, a one-unit increase in distance given that allied dyads are equal in power results in about a 10% increase in the hazard rates. This is why we observe the relatively steep and upward curves in Figure 1 in the case of equal alliances. These steep and upward curves for equal alliances imply that equal alliances lose efficiency as the distance between them increases. Again, this confirms the view that symmetric alliances are more inclined towards capability aggregation. However, the substantive effects of the interaction terms vary depending on which measure is used. When the major power status is used, it decreases the hazard rate by 12.7%. But when the capability ratio is used, it decreases the hazard rate by only 1.6%. This is partly due to the fact that a one-unit increase in the logged capability ratio is different from the one-unit change in the major power status as mentioned above but it is partly due to the weak effect of the capability ratio variable as shown in the flatter slope of the capability ratio

\footnote{I choose this value, 6, because I think this change is almost similar to the power status change from a minor to a major power.}
curve in Figure 1.

Finally, let us look at the effects of control variables on alliance duration. By and large, the effects of the control variables do not deviate much from our expectation. Joint democracy is less likely to terminate, alliance dyads with similar foreign policy interests also last longer, and wartime alliances tend to terminate earlier. An increased external threat to either side of an allied dyad tends to decrease the likelihood of termination at the initial stage but this tendency is reversed over time. This result is somewhat puzzling. Change in capabilities has no discernible effect at the initial stage on alliance termination but does affect it as time passes. It reduces the likelihood of termination rather than increasing it. This could be puzzling in one sense but is understandable in another given that here change is operationalized as either an increase or a decrease in capabilities. Although alliance type variables (Sharing both bilateral and multilateral alliance and sharing only bilateral alliances) are not significant at all in Model1 and marginally significant in Model3, it turns out that they have significant time-varying effects on alliance termination. The result shows that at the initial stage allied dyads in bilateral alliances are little different from those in multilateral alliances in terms of the risk of termination but over time allied dyads in bilateral alliances are more exposed to the risk of termination than those only in multilateral alliances.
Figure 2.1: Interaction Effects 1: How the predicted hazard rate changes over distance in connection with the distribution of capabilities between allies.

Table 2.4: Substantive Effects

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 2</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unequal Alliance</td>
<td>70.7% increase</td>
<td></td>
</tr>
<tr>
<td>Unequal Alliance × Distance</td>
<td>12.7% decrease</td>
<td></td>
</tr>
<tr>
<td>Capability Ratio (Logged)</td>
<td>6.5% decrease (significant at .1 level)</td>
<td>1.6% decrease</td>
</tr>
<tr>
<td>Capability Ratio × Distance</td>
<td>10.2% increase</td>
<td>9.9% increase</td>
</tr>
<tr>
<td>Distance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 2.2: Interaction Effects 2: This graph illustrates whether the mean differences in the predicted hazard rates are statistically significant. Intuitively speaking, the diamond-shaped points represent the relative hazard of the unequal alliance to the equal alliance. For example, major power status employed, the relative hazard of the unequal alliance decreases as the distance between allies increases as predicted. But when the relative hazard touches the zero line, it is not statistically meaningful.
2.6 Conclusion

In this chapter I have extended Morrow’s study (1991) with some modifications. Morrow argues that unequal alliances are more durable than equal alliances because of their more stable give-and-take or complementary relationship. In this study I have argued that the effect of the distribution of capabilities between allies on the duration of alliances can be conditional upon the distance between them because the geographical proximity between allies may function as a factor that aggravates or ameliorate autonomy concerns that allied states have. Hence, I hypothesized that geographically remote and unequal alliances are more likely to last longer than geographically proximate and unequal alliances, and that geographically close and equal alliances are more likely to last longer than geographically close and unequal alliances. These hypotheses are tested against the allied-dyad data from 1816-2002 using the Cox proportional hazard model. Then what do the results we obtained here suggest?

First, the empirical results show that equal alliances tend to last longer when they are geographically close while unequal alliances tend to last longer when they are geographically remote. This distinct pattern of alliance duration is more prominent in equal alliances than in unequal alliances as the slopes of the predicted hazard rates indicate. This distinct pattern of alliance duration between unequal and equal alliances suggests a few things. To begin with, the duration of equal
alliances is much more sensitive to the distance between them than that of unequal alliances. The drastic rise of the risk of termination with the increase in the distance between equal allies may suggest that in the case of equal alliances, how to aggregate capabilities between them is a major concern and the large distance between them reduces the value of the alliance. This may uphold Morrow’s argument that symmetric alliances are primarily aimed to maximize capability aggregation effects. In addition, the relatively gradual decrease in the risk of termination over distance in the case of unequal alliances suggests that geographical distance is a less important factor in determining alliance termination than in the case of equal alliances. Nevertheless, this finding lends moderate support to the argument that the geographical remoteness between allies can serve as a buffer to the autonomy concern of the weaker ally.

Second, the argument that the geographically close and stronger ally can aggravate the autonomy concern and even can pose a threat to its weaker ally is weakly supported and needs further research. The main reason for claiming a shorter duration of the geographically close and unequal alliance than the geographically close and equal alliance is that in the case of an unequal alliance the weaker state is concerned about the influence of the stronger ally on its policy and that this concern can be intensified proportional to the geographical proximity. If this underlying mechanism is at work, we should observe that the geographically close and unequal alliance faces a higher risk of termination than the geographically close
and equal alliance as hypothesized above. The empirical findings do not invalidate this argument because, when using major power status as a measure of power asymmetry, we find strong support for the hypothesis. However, this hypothesis is not supported at all when the capability ratio measure is employed to capture the power asymmetry between allies. Given that the hypothesis is not invalidated, it has some substantive implication. Great powers seeking to expand its power to the other regions of interest may find it less difficult and costly to look for a minor power partner and maintain its alliance ties because minor powers may also want strong sponsors in the distance. This pattern of alliance duration may partly explain how alliance networks are geographically expanded and how great powers can be involved in geopolitics in the other regions.

In conclusion, this study provides some answers to the question of which type of alliance last longer. The empirical findings do not invalidate Morrow’s original claim that symmetric alliances are more capability-aggregation oriented while asymmetric ones are more security-autonomy tradeoff oriented. Nonetheless, the findings suggest that there could be further variation in each type of alliance that affects alliance duration, depending on the geographical distance between allies. In the case of symmetric alliances, geographically close alliances tend to last longer, suggesting that the more efficient ones in terms of capability aggregation outlive the less efficient ones. In the case of asymmetric alliances, the geographically remote alliances tend to last longer, suggesting that alliances that mitigate the
concern of autonomy of the weaker state may live longer.
Chapter 3

Capability Change, Economic Dependence and Alliance Termination

3.1 Introduction

What causes an asymmetric alliance to end? To answer this question, this study explores the effect of changes in the capabilities of the weaker ally on alliance termination. Prior studies suggest that allied states’ changes in their capabilities are associated with alliance termination (Morrow 1991, Bennett 1997, Leeds & Savun 2007, Leeds, Mattes & Vogel 2009). However, it is not clear whether and how changes in the capabilities of the weaker state affect alliance termination and under what conditions it is more likely. In addition, Morrow (?) argues that changes in the capabilities of the weaker ally in an asymmetric alliance have little effect on alliance termination because the weaker ally’s contribution to the joint capabilities of the alliance would be marginal. However, based on the assumption that in asymmetric alliances weaker states suffer more from autonomy concerns than allied states in symmetric alliances (Altfeld 1984, Rothstein 1968, Morrow 1991), I argue otherwise; increased capabilities of a weaker state in an asymmetric alliance can motivate the state to end the ties to gain more autonomy. Thus, I argue that in
an asymmetric alliance a weaker state’s increased capabilities can lead to alliance termination. However, more precisely, I argue that the weaker state’s decision to end the alliance is conditional upon its economic dependence on the stronger ally. If its increased capabilities are largely due to economic dependence on its stronger ally, the weaker state may have little incentive to end the ties because it may harm its ongoing economic relations that provide the weaker ally with a material basis for its economic growth. Thus here I hypothesize i) that when there is an increase in the capabilities of the weaker ally, an alliance in which its economic dependence is high is less likely to terminate than an alliance in which its economic dependence is low, and ii) that the weaker ally whose capability rises and its economic dependence is low is likely to increase its military expenditure to substitute arms for the alliance. I find support for the first hypothesis but no strong support for the second hypothesis as a result of empirical analysis.

The remainder of this paper is organized as follows: In the next section, I elaborate my theoretical arguments on how capability change of the weaker ally in the asymmetric alliance can affect alliance duration. In the third section, I present a research design to test the hypotheses drawn from the arguments. In the fourth section, I provide results from statistical analysis. In the final section, I conclude with a summary of the findings from this study and with a few suggestions for future research.
3.2 How Capability Change Affects the Duration of Asymmetric Alliances

Before proceeding to elaborating arguments on why the capability change of weaker states can affect the duration of asymmetric alliances, it is necessary to discuss first what I mean by asymmetric alliances and why this study focuses on asymmetric alliances associated with alliance termination.

Although asymmetric alliances can be defined in various ways, here I define asymmetric alliances in terms of the power distribution between allies. For example, in his security-autonomy trade-off model, Morrow(?) classifies alliances into two types on the basis of the capability distribution between allies: symmetric alliances and asymmetric alliances. While symmetric alliances are composed of equal powers, asymmetric alliances are composed of unequal powers such as major-minor powers. If alliances are simply aimed at aggregating capabilities between allies as realists posit, the formation of this asymmetric type of alliance cannot be well explained by the realist perspective. Morrow argues that this type of alliance is formed because it allows states to trade security for autonomy or vice versa between allies. That is, in asymmetric alliances, the stronger side gains autonomy in return for providing security to its weaker partner, and the weaker partner gains security by providing autonomy to its stronger partner.¹

¹In this sense, this type of alliance is asymmetric in Morrow’s definitions of symmetric and asymmetric alliances. That is, in symmetric alliances both allies enjoy the same kind of benefits,
Then what does his asymmetric alliance argument suggest about alliance termination? Morrow argues that a change in capabilities plays an important role in alliance dissolution. In particular, in asymmetric alliances, a decline in the stronger state’s capabilities can increase the likelihood of alliance termination. Since enhancing its capabilities is the main reason for forming an alliance from the weaker state’s point of view, the declining capabilities on the stronger side undermine the incentive for the weaker ally to continue the alliance (Morrow 1991, 917). By contrast, Morrow argues that a change in capabilities on the weaker side is less likely to cause an end to the alliance because the weaker side makes little contribution to the overall capabilities of the alliance in the first place and thus its capability change is less likely to affect the value of the alliance. That is, weaker states’ capability change in asymmetric alliances has little effect on alliance termination. For this reason, Morrow argues that asymmetric alliances last longer than symmetric alliances (Morrow 1991, 918).

However, I argue that in asymmetric alliances, changes in the capabilities on the weaker side can also increase the likelihood of alliance termination because in asymmetric alliances, weaker states suffer from severe autonomy concerns. Rothstein writes:

“[Through alliance with a superior power] the Small Power may move not from either security or autonomy. But in asymmetric alliances, one side gains autonomy (or security) and the other side security (or autonomy) (Morrow 1991, 908-9).
insecurity to security, but from insecurity to the status of a satellite.” (Rothstein 1968, 61)

The quote cited above illustrates well what I mean by the autonomy concern of the weaker state.² The quote suggests that minor powers want to enhance their security by forming alliances with major powers but they don’t want to be subordinate to the influence of its stronger allies. However, due to the power gap between them, minor powers are vulnerable to the influence of their stronger allies on its domestic and foreign policy (Barnett & Levy 1991, Rothstein 1968). Granted that minor powers in asymmetric alliances suffer from a severe autonomy concern, it is likely that as their capabilities increase, minor powers could be inclined to terminate the alliance to gain more autonomy. This is the reason why this study focuses on asymmetric alliances associated with alliance termination. In asymmetric alliances, the autonomy concerns of the weaker states matter with regard to alliance duration.

Several empirical studies suggest that changes in capabilities are associated with alliance termination (Morrow 1991, Bennett 1997, Leeds & Savun 2007, Leeds, Mattes & Vogel 2009). However, most of them do not specify which side’s change

²But it is important to note that I refer to autonomy as the degree of the ability of a state to shape policy without external influence, the definition of which is different from that of Morrow. Morrow defines autonomy as a state’s ability to change the status quo, which makes his definition of autonomy orthogonal to his definition to security, defined as a state’s ability to maintain the status quo (Morrow 1991, 908-9). This conceptualization of autonomy allows him to analyze a state’s decision on seeking autonomy independent from its decision on security, it is different from a general notion of autonomy. Thus, here I refer to autonomy as the degree of ability of a state to shape policy without external influence.
in capabilities is associated with alliance termination. In empirical analysis, Morrow (1991) and Bennett (1997) aggregate the capabilities of allied members and test how changes in aggregated capabilities affect alliance termination. Leeds and Savun (2007) and Leeds et. al (2009) take a different approach. They identify factors that can affect the valuation of the alliance, and how changes in these factors are associated with alliance termination in violation of the terms. One of these factors include capabilities, and they find that either side’s change in capabilities can lead to alliance termination. In a recent study on alliance termination, Von Hagen-Jamar et. al (2012) investigate which side’s capability change affects alliance termination. By drawing on Morrow’s asymmetric arguments on alliance termination, they hypothesize that the weaker side’s increase in capabilities leads to alliance termination because it will increase the probability of winning a war against the rival and the weaker side can provide for its own security with an increase in its capabilities. And they find support for this hypothesis. This is empirical evidence that the weaker ally’s increased capabilities can lead to alliance termination.

In this regard, their empirical finding is consistent with my argument. However, I argue that the desire of the weaker state to terminate the alliance with its increased capabilities is dampened by its economic dependence on its stronger ally. That is, the weaker side’s decision to terminate the alliance is conditional upon its economic relations with its stronger ally. If the weaker side is highly
economically dependent on its stronger ally for its overall capabilities, the weaker side’s incentive to terminate the alliance would be diminished. By contrast, if its overall capabilities is less dependent on its economic relations with its ally, it is more likely to terminate the alliance with its increase in overall capabilities.

This conditional argument linking economic dependence and alliance termination is based on many studies that suggest that nonsecurity factors, especially economic ties between allies, also play an important role in cementing ties between allies, consequently contributing to continuing the alliances (Gowa & Mansfield 1993, Long & Leeds 2006, Leeds & Savun 2007, Fordham 2010). Gowa and Mansfield (1993) and Gowa (1994) emphasize a security externality that trade can generate. Trade allows states to accumulate resources, and states can transfer the resources gained from trade to the military. This suggests that allied states have an incentive to trade more with allies than non-allies because trade between allies can enhance the security of the alliance. Long (2003) finds that variations in the type of alliance agreements explain the alliance-trade relationship. He finds that defense pacts promote trade between allies while other types of alliances do not. Long and Leeds (2006) also find that specific provisions in alliance agreements matter. They show that pre-World War military alliances of 1885-1938 that pledged

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3 The security externality argument suggests that there will be little trade between adversaries. However, Morrow (1997) argues that although the security externality is a plausible argument, it does not necessarily impede trade between adversaries because the gains from trade can outweigh the costs of trade. Trading countries can simply invest more resources in the military that they gained from trade. Although Morrow is skeptical about the security externality logic, he does not seem to deny that allied states have a more incentive to trade with one another.
economic cooperation in their alliance agreements tend to increase their trade than non-pledged allies. Their study suggests that there is significant variation across allies in economic cooperation depending on the provisions of alliance agreements. Leeds and Savun (2007) also show that allies that agreed on nonmilitary cooperation in signing their alliance treaties are less likely to be exposed to the risk of alliance termination by opportunistic behavior of either ally. While these studies indicate some trade-generating effect of alliances, Fordham (2010) argues that in asymmetric alliances increasing trade leads to alliance formation rather than vice versa. That is, rather than alliances have a trade-generating effect, states that share economic interests, especially trade interests, tend to form alliances to protect their trade interests and these alliances are less likely to dissolve as well. With this finding, he attempts to provide an answer to the question of why asymmetric alliances tend to form and last longer than symmetric alliances. He argues that the stronger side’s motivation to protect their trade interests play an important role in forming and continuing the alliance. Although the causal mechanism he offers is different from other scholars, his finding suggests that in asymmetric alliances common economic interests are of great importance in sustaining alliance ties.

By considering both the logic of the autonomy concern of the weaker state in asymmetric alliances and the importance of economic ties in alliance relationships, in what follows I present more detailed arguments on how weaker states’ capability
changes can interact with their economic dependence on their major power allies and consequently affect the likelihood of alliance termination. Figure 1 provides a diagram of the causal mechanism that depicts how an increase in the capabilities of the weaker side can lead to alliance termination.

To begin with, a weaker state’s increase in overall capabilities (or economic growth) can enhance its ability to gain more autonomy. Whether to substitute arms for the alliance will be conditional upon the economic dependence of the

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4There could be several forms of economic dependence. The most common form of economic dependence may concern trade relations. A weaker state’s ally may take up a large portion of the total trade (i.e. the ratio of the trade volume of the weaker state with the stronger ally to the total trade of the weaker state). The greater the portion, the more dependent on the stronger ally. Another form of economic dependence may concern economic or military aid. Depending on the amount of aid, it can help relieve the weak state of its burden on military or societal expenditure. But in empirical analysis, I focus on trade relations primarily due to the availability of data.
weaker state on the stronger ally. If the weaker side is highly dependent on the stronger ally, the weaker side may think that replacing the alliance with self-defense is not a viable option because it may inflict damage on ongoing economic relations that provide a source of its increased capabilities. That is, ending the existing alliance means that the weaker side has to substitute arms for the alliance if we assume away that states will give up on their security. But this armament policy definitely requires increasing its military expenditure to fill the void generated by ending the alliance ties. If increasing military expenditure can be backed up by domestic mobilization, terminating the alliance causes little problem in maintaining its security. However, if increasing arms expenditure is either directly or indirectly dependent on the relationship with its stronger ally, policymakers may find that replacing the alliance with their own arms is not a viable alternative.

Regarding the arms vs. alliance choice especially by Third World countries, Barnett and Levy (1991, 372) emphasize the role of alliances as “a source of economic resources and military equipment.” Their study suggests that in asymmetric alliances the stronger side provides the very material base of economic resources that the weaker side needs to increase its arms. Thus, in such a case, despite an increase in minor powers’ capabilities, they still want to stay in the alliance. De

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5The assumption that the weaker state has two options but to maintaining the existing alliance or move towards self-defense could be a strong assumption given that the weaker state has other options like joining other alliances, or search for another major power partner. Since I focus on the autonomy concern of the weak state, forming another alliance with a major power will also incur loss of autonomy. This is why I focus primarily on the two options. Afterwards, I discuss this issue again.
Castro’s case study (2005) on the U.S.-Philippines alliance illustrates this point. The U.S. and the Philippines have been a long-standing alliance since 1951 when they signed a defense pact. In 1991, with the end of the Cold War and with increasing its capabilities, the Philippine government sought a more autonomous defense posture with a plan to modernize its armed forces. The Philippine Senate refused to ratify a new military base treaty in September 1991. This decision prompted the Bush administration to cut down as much as 60 percent of the military and economic aid that had been provided by the U.S. In particular, the Philippine government was unable to replace with internal revenue the US$200 million military assistance that had been provided annually until 1991, and the plan of the Philippines government to modernize its force was thwarted in the end.

It is important note here that this conditional argument assumes that terminating the alliance with a stronger ally can provoke an economic backlash from the stronger partner. It is important to consider whether the stronger ally has some incentive to impose any penalty on its former weaker ally, however. Wagner (1988) asserts that unlike the commonly held belief that an economically dependent state is vulnerable to the political influence of the less dependent trading partner (e.g. Hirschman 1945), the dependent side does not necessarily suffer from a weak bargaining position. His argument is well epitomized by the Blackmailer’s Fallacy (Wagner 1988, 474). This Blackmailer’s Fallacy logic implies that since interrupting trade can be costly to the stronger ally as well, such a threat to interrupt trade
can be an empty threat. In the context of an asymmetric alliance, his argument suggests that a minor power’s economic dependence may not restrain the minor power from terminating the alliance ties because the economically dependent ally does not need to be concerned about the stronger ally’s backlash.

But it is doubtful whether the weak state does not need to worry about the stronger ally’s backlash. The Philippines case cited above proves this point. In addition, as noted earlier, trade with its ally can create a positive security externality (Gowa and Mansfield 1993, Gowa 1994). However, with the end of the alliance ties, the stronger ally may lose an incentive to favor its former ally in economic terms because its economic relations no longer produce a positive security externality. On the other hand, if the weaker state were highly dependent on its stronger ally, it might think that the stronger ally’s small policy change would have a big impact on its economy and find it costly to adjust its economy accordingly. After reviewing Wagner’s argument, Nye and Keohane (1987) maintain that political influence can still arise from asymmetric economic interdependence because the stronger side “can make concessions at lower costs.” (Keohane & Nye 1987, 734). That is, even if imposing a penalty on the weaker side could be costly to the stronger side, it would be much more costly to the weaker side, and this can constrain the behavior of the weaker side.

The U.S.-Japan treaty renegotiation case of 1953 shows that the weaker state–Japan–is really concerned about its alliance ties at the same time with its economic
relations with the U.S. Japan signed an alliance treaty with the U.S. in 1953 and with its increased capabilities it wanted to revise the 1953 treaty in the late 1950s. Although Japan’s increased capabilities allowed it to move towards self-defense, it recognized the importance of the alliance ties with the U.S. in continuing its economic growth. Buckley emphasizes that the economic dependence of Japan on the U.S. played a crucial role in extending the alliance ties. He states:

“New prosperity was also widely seen by the Japanese public as intimately connected with the American alliance. Trade to and from the United States was perceived by both American and Japanese leaders as a vital rationale for continuing friendship between their two nations. Many who had serious reservations about the US-Japan defense arrangement found it impractical to ignore the economic benefits that had accrued to Japan throughout the 1950s and saw the American market as vital to continuing Japanese economic growth... To object to Japan’s policies toward the United States was to risk jeopardizing all.” (Buckley 1992, 77-78)

In sum, the more dependent on its ally for the economy, the less likely the weaker state is to take the risk of terminating the alliance because its increased capabilities come largely from its alliance relationship.

In addition, high economic dependence on its stronger ally may constrain the political leader’s capacity to seek a particular policy in the face of resistance by vested domestic interests(Hirschman 1945, Papayoanou 1999). For example, Papayoanou(1999) attempts to explain variations in balancing behavior—why sometimes states balance against a challenger but sometimes do not. He argues that
states will balance against a threat when the economic ties between the defender and the challenger is low. When there are significant economic ties between them, he asserts, the defender is more likely to pursue an appeasement policy rather than stand firm against the challenger because in such a case vested domestic interests that benefit from economic relations with the challenger will mobilize opposition to the balancing policy to secure their economic interests. A similar logic can apply to economic dependence and alliance policy. If a weaker ally is highly economically dependent on its major power ally, it is likely that there are domestic interests that benefit from this economic relationship such as export and import industries. Consequently, if a government seeks to shift its alliance policy that can influence the status quo in a way that could be detrimental to or jeopardize the domestic interests, the government may face internal resistance mobilized by the domestic interests. This concern may deter the government from shifting its alliance policy.

Furthermore, even if the government anticipates little economic backlash from its ally due to alliance termination, the domestic interests may still oppose replacing the alliance with self-defense policy. Because self-defense policy requires extracting domestic resources from the domestic society through heavy taxation, the domestic interests that believe that this burden will fall heavily on them have an incentive to mobilize opposition to such a policy change. Given that the domestic interests have accumulated wealth and power from this particular economic relationship with the major power, we can anticipate that these domestic interests
may exert significant influence on the government security policy. For the reasons
mentioned above, I argue that when economic dependence is high, minor powers
find it more difficult to substitute self-defense policy for the existing alliance.

Otherwise, the weaker state whose capabilities are on the rise and whose eco-
monic dependence is low may move towards self-defense. Since self-defense needs
a long-term plan on the weaker side, I posit that the weaker side will increase their
military expenditure before it terminates the alliance. Thus, before the termina-
tion of alliances, we should observe an increase in military spending on the weaker
side. From these arguments I derive two hypotheses:

**Hypothesis 1:** In asymmetric alliances, if the capabilities of the weaker side in-
crease, alliances in which the economic dependence of a weaker ally is high are
more likely to endure than alliances in which the economic dependence of a weaker
ally is low.

**Hypothesis 2:** In asymmetric alliances, if the capabilities of the weaker side increase
and its economic dependence on the stronger ally is low, the military expenditure
of the weaker side is likely to increase prior to alliance termination.
3.3 Research Design

3.3.1 Data, Sample, and the Dependent Variable

To test the hypotheses presented earlier, I employ large N analysis. Testing the hypotheses involves two dependent variables, alliance duration and military expenditure. But it is important to note here that the major purpose of this study is to investigate the interaction effect on alliance termination of capability change of a weaker ally and its economic dependence on its stronger ally; the research design will focus on describing how to test the first hypothesis. In fact, testing the second hypothesis is meaningful only when the first hypothesis is empirically supported. In this regard, the key dependent variable in this study is alliance termination.

The unit of analysis in this study is a bilateral alliance year. The temporal domain for this study is the period between 1870-2002, which was determined by the availability of data. Let me first describe how to identify the sample for analysis. To identify the sample of alliances, I use the Alliance Treaty Obligations and Provisions (ATOP) data (Leeds et al. 2002). The ATOP data classifies alliance treaties into five categories, which are not mutually exclusive, however: defense pacts, offense pacts, consultation pacts, neutrality pacts and nonaggression pacts. This study does not include all these five types of agreements but includes only defense pacts because defensive alliances fit the theoretical arguments made earlier. Here I assume a situation where security commitments are provided by major
powers to minor powers and want to consider how minor powers would change their alliance policy as their capabilities increase. In this regard, defensive alliances characterized by security commitments to alliance partners are an appropriate object of study. The major focus of this study is on asymmetric alliances. To code asymmetric alliances, I use the COW classification of major power status. In addition, following Morrow(?), I code the U.S. as a superpower in the post-World War era and also Russia as a superpower from 1945 to 1990.

The sample of alliances includes only bilateral alliances, which refer to alliance agreements signed by two independent states. That is, multilateral alliances are excluded from analysis. Even though multilateral alliances can be analyzed on the basis of a dyadic relationship, this study includes only bilateral alliances because the property of asymmetric alliance is more pronounced in bilateral alliances than in multilateral alliances. In addition, since the sample size of bilateral alliances is much smaller than the sample size of allied dyads by including multilateral alliances, this will allow for a more stringent empirical test of the hypothesis. Future research may be extended to test the relationship posed in the hypothesis including multilateral alliances on the basis of dyadic relationships. To identify bilateral alliances, I use the ATOP dataset which provides information about whether a particular alliance is a bilateral or a multilateral alliance.

To finalize which cases are included in the sample for analysis, it is necessary to discuss how alliance termination is defined here. Since this study focuses on how
alliances are ended, it considers different modes of alliance termination following Leeds and Savun (2007). In their studies, they classify alliance termination into four modes: i) fulfilment ii) loss of independence iii) renegotiation and iv) violation. Based on these four modes of termination, I determine which cases are included in the sample for analysis and which ones are excluded from the sample. If alliances are terminated for some reason explicitly unrelated to the theoretical arguments made here, including such cases in the sample may lead to a misleading conclusion about the determinants of alliance termination. All violation cases are included in the sample, regardless of which side violated the terms of the agreement. The reasons for including all the violation cases are twofold: First, it is hard to identify which side violated the terms of the agreement (Leeds & Savun 2007, 1125). Second, related to the first reason, if a major power ally recognizes its partner’s grievance against the current defense agreement, it may declare the end of the alliance unilaterally anticipating an excessive demand by its weaker ally for changing the current agreement. For these reasons, I include all the violation cases because the underlying casual mechanism described above can still work even when the major power is responsible for the termination of the agreement.

Thus, in what follows, I will discuss further how I deal with the remaining three modes of termination to identify termination cases. First, let us consider

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6More precisely, those cases are right-censored.
the fulfilment category. This category broadly means that an alliance ends as its specific purpose is fulfilled. The fulfilment category can be divided into two subcategories: achievement of alliance goals and lapse (Leeds & Savun 2007, 1124). For example, some alliances have specific goals at the time of formation and they make it clear that they will terminate the alliance once the goals for the alliance are achieved. The U.S.-Israel alliance agreement of 1981 is a case in point. They formed an alliance specifically against the Soviet threat, and they agreed to make the alliance effective until the Soviet’s threat exists. As a result, they ended the alliance in 1991 when the Soviet threat disappeared with its collapse. If an alliance has a specific goal, and if it is terminated with its goal accomplished, I do not consider those cases in the sample to be terminated because these cases have little to do with the causal mechanisms associated with alliance termination that I provided earlier. Rather, I have those cases right-censored.

However, if alliances are ended with their consent not to extend the alliance, which fits into the second subcategory of fulfilment (lapse), I include some of the cases for analysis by looking at the causes of their terminations because in these cases, we cannot exclude the possibility that either side of the allies had some

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7 Article 1 of the U.S.-Israeli agreement says, “United States-Israel strategic cooperation, as set forth in this memorandum, is designed against the threat to peace and security of the region caused by the Soviet Union or Soviet-controlled forces from outside the region introduced into the region.” [http://avalon.law.yale.edu/20th_century/pal03.asp](http://avalon.law.yale.edu/20th_century/pal03.asp) (accessed on March 1, 2014).

8 This allows me not only to include relevant cases only in the sample for analysis, but also to use the information about those right-censored cases until their termination. In this regard, this study applies a competing risks method.
grievance against the other, and this may have resulted in failure to extend the alliance agreement. For the sake of accuracy and consistency in making these decisions, I refer to the ATOP data. The ATOP data provides information about the modes of alliance termination (TERMMODE) and the causes of alliance termination (TERMCAUS) as well. Regarding fulfilment, the ATOP provides five modes of termination and TERMMODE=1 or 5 falls on the fulfilment category. TERMMODE=1 means “The alliance was not renewed at its scheduled termination date.” and TERMMODE=5 means “The specified casus foederis ceased to exist and thus the alliance was moot.” (Leeds 2005, 19) While the TERMMODE variable specifies the conditions under which an alliance member left the alliance, the TERMCAUS variable provide information about why an alliance member left the alliance. If terminated alliances are coded as TERMCAUS=3 of the eight causes identified in the ATOP, which means that the alliance ended because “The problem the alliance was aimed at was resolved.” (Leeds 2005, 19) I had those fulfilment cases right-censored. In sum, if TERMCAUS is equal to 3 and if either TERMMODE is equal to 1 or 5, such cases were right-censored. By this coding rule, 6 cases were right-censored. These six cases include USA-Panama(1977), USA-Spain(1963), USA-Portugal(1944), Britain-Ethiopia(1944), and China-Japan(1918).9

In addition, I consider the second mode of termination examined in Leeds and Savun(2007): loss of independence. Some alliances are considered to be termi-

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9The years in parentheses indicate the years of alliance formation.
nated due to the fact that one of the alliance members lost independence. In such cases, however, it is probable that allied states lose independence for some reasons unrelated to the alliance relationship. So I have several “exogenous” lost-independence cases right-censored (Leeds & Savun 2007, 1124). Based on the coding of the ATOP dataset, I had several cases right-censored if its TERMMODE=4 and TERMCAUS=2 (and TERM=0), which means that one of the allied members lost independence without regard to the alliance relationship. By this coding rule, two cases were right-censored. These two cases are France-Poland (1921) and Britain-Poland(1939).\(^\text{10}\)

Finally, when alliance partners renegotiate their alliance agreement and replace it with a new treaty before the old agreement becomes ineffective, I coded such alliance cases as not terminated. That is, I code such renegotiation cases—by which I mean the cases where replacing the old alliance agreement with a new agreement takes place in the same year and thus both sides are in alliance during the transition period—as continued. For instance, as the Japanese case mentioned earlier suggests, although the U.S. and Japan replaced the old treaty of 1953 with the new treaty of 1960, they did not abrogate their alliance ties. Thus, I code the U.S.-Japan alliance as started in 1953 and continued until 2002. This coding rule found 10 renegotiation cases including the Japan case. These renegotiation cases include Britain-Jordan(1948), Britain-Iraq(1955), Russia-China(1950),

\(^{10}\)The years in parentheses indicate the years of alliance formation.
Russia-Poland(1965), Russia-Mongolia(1966), Russia-Hungary(1967), Russia-Bulgaria(1967),
Russia-Czechoslovakia(1970), and Russia-Romania(1970).

As a result of this coding rule, 1022 bilateral alliance years were identified with 54 bilateral alliances included in the sample. Of the 54 bilateral alliances, 32 alliances were terminated, and the mean duration of the alliances in the sample was 15 years. The shortest-lived alliances lasted only for 1 year while the longest-lived alliance has lasted for 52 years.

3.3.2 Independent Variables

Capability Change of the Weaker State: To test the hypotheses presented earlier, it is necessary to measure the capability change of the weaker ally. To this end, how to define capability should be determined. In this study, I use energy consumption data in the COW CINC scores to operationalize a state’s capabilities. In most of the IR quantitative analyses, the COW CINC scores are frequently used to capture a state’s capabilities. But in this study, when I refer to capabilities, its notion is similar to economic capabilities that can be transferred to military capabilities. Advantages of using the consumption data lies in its data availability dated back

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11Here the years in parentheses indicate years when the old agreements were replaced by new agreements.
12Right-censoring the cases and recoding renegotiation cases as not terminated did not affect the estimation results. When I run the models by including the excluded cases and by recoding the renegotiated cases as terminated, I found similar results that I obtained from main analysis. The sign and significance of the coefficients for the key independent variables remained intact. These results are reported in Appendix.
13This is a right-censored case.
to 1816 and a higher correlation with GDP data, whose availability is relatively limited (usually available since 1945). In addition, when it comes to the concept of capabilities in IR, it refers primarily to relative capabilities in the system. To render a state’s capabilities relative capabilities, I sum up the level of energy consumption of all the countries in the system in a given year and divide a state’s energy consumption by this summed value. In sum, a state’s capabilities in a given year are operationalized as the energy consumption of the state over the sum of the energy consumption of all the states in the system. Thus a state’s capabilities in a given year is the state’s share of capabilities in the system.\footnote{A state’s relative capabilities calculated here is analogous to a state’s CINC score in the COW data. The only difference is here I consider only energy consumption levels.}

Since this study focuses on changes in capabilities, it is in order to discuss how to capture the changes in capabilities. Here I follow Leeds and Savun’s (2007) basic idea of operationalizing capability change. Rather than calculating an annual change of capabilities, they set the year of alliance formation as a base year, and calculate the change from that base year. Then, they calculate a percentage change of capabilities in a given year. Here I calculate capability changes by using the year of alliance formation as the base year but I do not calculate the percentage change of capabilities because there are many zero values in the energy consumption data at the time of alliance formation, which indicate the pre-industrial age of the countries in question. Thus, calculating percentage values can lead to many missing
values because of the zero denominators. For this reason, I simply subtract the base year’s relative capabilities from a current year’s relative capabilities. Consequently, the capability change of a minor power in a given year \((t)\) is calculated as follows:

\[
\text{Capability Change}_{it} = \frac{\text{Energy Consumption}_{it}}{\sum_j \text{Energy Consumption}_{jt}} - \frac{\text{Energy Consumption}_{i0}}{\sum_j \text{Energy Consumption}_{j0}}
\]

Here \(i\) denotes a minor power and \(j = 1, 2, ..., N; N\) is the number of states in the system in a given year.

Intuitively speaking, this measure captures changes in the capability share of a minor power in the system. The mean value of this measure is 0.0025, which indicates that minor powers undergo on average a 0.25 percent point increase in the capability share from the year of alliance formation.

**Economic Dependence**: To measure economic dependence of a weaker ally on its stronger ally, this study uses a weaker state’s trade dependence on its stronger ally. In IR studies, the trade dependence of a country has been operationalized as a ratio of bilateral trade to the country’s GDP or a ratio of bilateral trade to the country’s total trade. Of the two, I use the latter because the availability of GDP data is temporally limited. To obtain annual trade and bilateral trade values, I
use the COW Trade Data (v.2.0) extracted from the EUGENE program. In this study, I focus on minor powers’ economic dependence on their major power allies, and thus, the trade dependence in a given year is calculated as follows:

\[ \text{Trade Dependence}_t = \frac{\text{Bilateral Trade}_t}{\text{Total Trade of Minor Power}_t} \]

3.3.3 Control Variables

Here I include a set of control variables that may confound the theoretical relationship or affect alliance duration.

*Capability Change of the Stronger State:* In this study, I focus on how the capability change of the weaker side can affect alliance duration. However, it is also likely that the capability change of the stronger side can affect alliance duration. Since in an asymmetric alliance the major power’s capabilities take up a major portion of the alliance, the major power’s change in capabilities may alter the valuation of the alliance. In particular, if the major power’s capabilities decline, the value of the asymmetric alliance also declines. Therefore, I expect that a decrease in

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Despite the importance of the availability of trade data for accurate estimation, many missing values were found. In particular, there were many missing values in bilateral trade data. Almost 28 percent of the trade data in the sample were missing and as a result, 28 percent of economic dependence data were also missing. Two patterns of missing values were recognized. First, in many cases, bilateral trade data during the two World Wars were missing. Second, during the Cold War era, bilateral trade values between the Soviet Union and Eastern European countries were missing. It would be worrisome in the case of missing values in the Soviet bloc trade data if the Soviet bloc had a distinct pattern of trade and it affected their alliance relationship. Nonetheless, I did not impute those missing values using other trade data such as Barbieri (2009) or Gleditsch (2002) because of the problem of data compatibility and consistency.
a major power’s capabilities increases the likelihood of alliance termination. To measure the capability change of the major power ally, I apply the same procedures that I used to measure the capability change of a minor power ally.

Changes in Threat: An external threat is an important factor that can influence alliance formation and thus whether such a threat persists or not can influence alliance duration (e.g. Walt, 1987, 1997). We can anticipate that as an external threat declines, alliances are more likely to terminate. To control for the effect of threat, I use a similar method that I applied to capture the capability change—a relative capability change from the year of alliance formation. In the first place, to identify sources of threat, I use the strategic rivalry data collected by Thompson (2001). By focusing on policymakers’ perceptions of threat rather than on the frequency of military disputes between states in defining rivalries (Klein, Goertz & Diehl 2006), Thompson’s strategic rivalry data have more strength than dispute-based rivalry data given that defensive alliances generate deterrent effects (Leeds 2003, Johnson & Leeds 2011). Given this, it is highly probable that we can observe no dispute between rivals and Thompson’s data take this possibility into consideration. Based on Thompson’s data, I calculate the CINC score of a particular rival state corresponding to an allied state. Then this rival state’s CINC score in the year of alliance formation serves as the base threat posed to an allied state. Then the changes in threat is calculated as the current year’s rival
CINC score minus the base year’s rival CINC score.\textsuperscript{16} Here I separate the changes in threat faced by a minor power from those faced by a major power. I expect that the decline in threat may increase the likelihood of alliance termination.

*Domestic Political Changes:* Domestic political changes can influence a country’s foreign policy. Siverson and Starr(1994) find that drastic domestic political changes such as a military coup that may alter the rules of the game under which domestic politics is played out may affect alliance policy. Leeds et. al(2009) also find that leadership changes accompanied by changes in societal supporting coalitions increase the likelihood of violated alliance termination although such an effect is more prominent in nondemocratic regimes than in democratic regimes. These findings suggest that domestic political changes involving domestic institutional changes or the emergence of new domestic political forces can affect existing foreign policy in general and alliance policy in particular. To control for the effects of domestic political changes, this study includes two control variables. One measure focuses on institutional changes and the other on social preference changes.\textsuperscript{17} To measure institutional changes, I use polity scores from the POLITY IV dataset(Marshall, Gurr & Jaggers 2010). Following Leeds and Savun(2007), I define domestic insti-

\textsuperscript{16}However, there is some drawback from using strategic rivalry data because not all states have a strategic rival. Of the 1016 observed years, 611(60.14\%) years had no strategic rivals.

\textsuperscript{17}This distinction between institutional change and social preference change is intended to isolate one effect from the other as in Leeds et. al(2009).
tutional change on the basis of the time of alliance formation. They operationalize a 2 point polity-score change from the time of alliance formation as the occurrence of domestic institutional change. Here I define it slight differently. Rather than applying the same criterion of institutional change to major and minor powers, I define a 3 point polity-score change in minor powers as institutional change and a 1 point polity-score change in major powers as institutional change.\textsuperscript{18} Then, if either major or minor power undergoes a domestic political change in a given year as defined above, I code the variable as one; otherwise zero. Thus, domestic political change is a binary variable. As the prior empirical findings suggest, I expect that domestic institutional change will increase the likelihood of alliance termination.

To measure how social preference change affects alliance termination, I employ a leadership change variable called SOLSchange\textsuperscript{19} drawn from the Change in Source of Leader Support (CHISOLS) dataset collected by Leeds and Mattes (2014). One strength of this dataset lies in providing information about which leadership change is accompanied by a societal coalition change and which one is not. In the original dataset, the leadership change variable that account for societal support-

\textsuperscript{18}I use this coding rule because major powers are less likely to undergo institutional change than are minor powers. Looking at the polity score change from the year of alliance formation, I find minor powers’ 75 percentile polity change falls on a 3 point change while major powers’ 75 percentile polity change falls on a 1 point change. That is why I chose these thresholds values.

\textsuperscript{19}To avoid any confusion about simple leadership change with leadership change accompanied by supporting coalitions change, hereafter I call the variable for leadership change accompanied by supporting coalitions SOLSchange because in the original dataset, the variable is named “solschange.”
ing coalitions change is a count variable because SOLSchange can occur more than once in a year. When the SOLSchange variable was merged into the sample of alliances for analysis, the maximum number of the SOLSchange was three. Here I recode the SOLSchange variable into a binary variable. Thus, if there is any SOLSchange in either major or minor power in a given year, the variable of the year was coded one and otherwise zero. The temporal domain of the CHISOLS dataset is designed to cover the years from 1919 to 2008. However, currently, the dataset is available from 1945. Thus the SOLSchange variable is included in the statistical model testing the hypothesis in the post 1945 era. Finally, I expect that SOLSchange will increase the likelihood of alliance termination as the prior studies suggest.

*Joint Democracy:* As Gaubatz’s(1996) study suggests, joint regime type may also influence the duration of alliances. If democratic regimes are more committed to international treaties than nondemocratic regimes, and if alliance duration reflects this distinct joint regime characteristic, we can expect that alliances formed by joint democratic regimes tend to last longer than those by nondemocratic regimes. So it is necessary to include a joint regime type variable in the model as a control variable. To operationalize the joint regime type, I use Polity2 scores from the Polity IV data(Marshall, Gurr & Jaggers 2010), which range from -10 to 10 with lower scores indicating less democratic regimes. To make a joint democracy
variable dichotomous, I code a pair of countries as joint democracy(=1) if both countries have a Polity2 score equal to or higher than 6 in a given year; otherwise zero. Following Gaubatz, I expect that democratic alliances are more durable than non-democratic alliances.

*Distance:* In the previous chapter, I argued that asymmetric alliances tend to last longer when allied states are geographically proximate than when they are geographically close because geographical distance can alleviate the concern of the autonomy that the weaker side can entertain. Since in this study, only asymmetric alliances are included in the sample for analysis, I expected a negative relationship between distance and the risk of termination. There are several distance measures in the COW data, and among them, I use a measure of the distance between two capitals, accounting for contiguity. Thus, here the distance zero means contiguity. And the original distance is divided by 1000 for the sake of an easy interpretation of the estimated coefficient. Therefore, one unit increase in the distance means a 1,000 mile increase in the distance between allies.

*New Alliance Formation:* If an allied state forms a new alliance with a third-party country, this may affect the relationship with an existing ally. Or an allied state may have formed a new alliance in order to change its existing alliance policy. Prior studies indicate that new alliance formation will increase the likelihood of al-
liance termination (Leeds & Savun 2007, Leeds, Mattes & Vogel 2009). To account for this effect on alliance termination, I include a dummy variable in the model using the ATOP dataset. If either of the allied states forms a new alliance in a given year, regardless of the types of alliances, that year is coded one; otherwise zero. I expect that newly formed alliances may increase the likelihood of alliance termination.

*Economic Cooperation*: Here one of the key independent variables is the economic dependence of a major power on the stronger ally. However, the variation in economic interactions between allies may stem from the commitment to engage in economic cooperation at the alliance formation stage. That is, allies that included a provision for economic cooperation in their alliance agreement may engage more in trade than those that did not. For example, Leeds and Savun (2007) and Leeds et. al (2009) find that alliances that pledged nonmilitary cooperation in their alliance agreements face a lower risk of alliance termination caused by opportunistic behavior by their alliance partners. In their studies, the notion of nonmilitary cooperation is broader than that of economic cooperation, so I looked at each alliance case and checked whether each agreement refers specifically to economic cooperation.\(^{20}\) If an alliance agreement contains a provision for economic cooperation, I

\(^{20}\)To do this, I referred to the ATOP codesheets available at http://atop.rice.edu/codesheets
code the alliance one; otherwise zero. Thus, this economic cooperation variable is a binary variable. I expect that alliances with provisions for economic cooperation are less likely to terminate than those without.

**Economic Aid:** For a similar reason that I include the economic cooperation variable in the model, I also control for the effect of a commitment to provide its alliance partner with economic aid. If states are committed to offering economic aid to the other in various forms, such a commitment can affect the level of economic dependence and the likelihood of alliance termination as well. The ATOP dataset provides information about this kind of aid commitment (Leeds 2005). It classifies three types of economic aid: i) general economic aid ii) aid for postwar recovery iii) trade concessions such as granting MFN status. But here I do not make distinctions as to which type of aid is committed. Instead, if an agreement includes any type of economic aid commitment, then I code the economic aid variable as one; otherwise zero. Thus, this is also a binary variable. I expect that alliances with provisions for economic aid are less likely to terminate than those without.

**Former Colony** The past history between allies can affect alliance duration. In particular, if a minor power was a colony of its major power ally, and if this special relationship affected their decision to form an alliance, it may also affect alliance
termination. In fact, in the sample, some of the major powers such as Britain and France formed defensive alliances with their former colonies. Major powers may have to form alliances with their former colonies to maintain its strategic and commercial interests in the region. For example, Britain had a vital strategic interest to retain its control over the Suez Canal and this led Britain to form an alliance with Egypt as Egypt declared independence from Britain (Marlowe 1965). From minor powers’ point of view, the alliance with the former colonizer may be viewed as a colonial legacy that they seek to overcome in the end, or may be viewed as a source of economic aid for economic development. Thus, in this regard, although it is difficult to predict in which direction, towards termination or continuation, the history of the former colonial rule has a stronger effect, it is likely to affect the alliance relationships. To identify whether the allied states had a colonial history, I use ICOW Colonial History Data Set (v. 0.4), which provides information about whether a country was a colony of a certain country (Hensel 2009). Thus, if a weaker state was a former colony of its stronger ally, the alliance is coded one; otherwise zero.

3.3.4 Estimation Method

Since this study aims to investigate the interaction effect on alliance duration of economic dependence of the weaker state on the stronger ally associated with
its capability change, event history modeling is amenable to analyzing the effect. Broadly speaking, there are two types of estimation modeling depending on whether the distribution function of duration dependence or the baseline hazard is specified or not: parametric and nonparametric models. Parametric models such as the Weibull model allow researchers to specify the function of duration while semi-parametric models such as the Cox Proportional Hazards model can go without a specified duration function. If researchers have informed knowledge or theory about the duration dependence of alliances\textsuperscript{21}, they would benefit from employing parametric models. On the other hand, there is no specific theory or informed knowledge about duration dependence, nonparametric models can be a better model specification strategy in that it allows for assuming away any specific duration dependence of alliances ex ante. In this study, because duration dependence is not an important factor but considered as a statistical nuisance to be controlled for, I choose the Cox Proportional Hazard model (Box-Steppensmeier & Jones 2004).\textsuperscript{22} But I additionally employ the Weibull model for robustness checks.

One advantage of using a duration model involves taking censored observations into consideration. There are many ongoing alliances that continue to exist until

\textsuperscript{21}For example, Bennett (1997) assumes that duration dependence is associated with the institutionalization of alliances. For this reason, he employs a Weibull model.

\textsuperscript{22}I also checked whether the Proportional Hazards assumption holds in the Full Model, and there was no serious violation of the PH assumption. When the PH assumption is tested using the STATA 11 estat phtest command, there was no variable violating the PH assumption seriously and the chi-square value for global test was 7.50 with df=13, whose p-value was .8745.
Table 3.1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alliance Duration (year)</td>
<td>15.132</td>
<td>14.248</td>
<td>1</td>
<td>52</td>
</tr>
<tr>
<td>Military Expenditures (Logged)</td>
<td>12.086</td>
<td>2.990</td>
<td>0</td>
<td>17.732</td>
</tr>
<tr>
<td>Capability Change of the Weak</td>
<td>.0025</td>
<td>.009</td>
<td>-.016</td>
<td>.057</td>
</tr>
<tr>
<td>Economic Dependence</td>
<td>.248</td>
<td>.162</td>
<td>0</td>
<td>.963</td>
</tr>
<tr>
<td>Capability Change of the Strong</td>
<td>-.032</td>
<td>.084</td>
<td>-.342</td>
<td>.098</td>
</tr>
<tr>
<td>Change in Rival Capabilities (W)</td>
<td>.0007</td>
<td>.023</td>
<td>-.139</td>
<td>.339</td>
</tr>
<tr>
<td>Change in Rival Capabilities (S)</td>
<td>-.0783</td>
<td>.127</td>
<td>-.563</td>
<td>.314</td>
</tr>
<tr>
<td>Domestic Institutional Change</td>
<td>.103</td>
<td>.304</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Joint Democracy</td>
<td>.176</td>
<td>.381</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>SOLS change</td>
<td>.132</td>
<td>.338</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>New Alliance Formation</td>
<td>.403</td>
<td>.491</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Distance (in 1000 miles)</td>
<td>2.472</td>
<td>2.806</td>
<td>0</td>
<td>8.570</td>
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<tr>
<td>Economic Cooperation</td>
<td>.407</td>
<td>.491</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Economic Aid</td>
<td>.194</td>
<td>.396</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Former Colony</td>
<td>.318</td>
<td>.466</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

2002, the last year of this data, and these observations are right-censored.

3.4 Results

To evaluate the validity of the first hypothesis, I explore the effect of the key independent variables across several model specifications. The results are reported in Table 1. Here, since I use the COX proportional hazard model positive coefficients indicate a shorter duration (or a greater likelihood of termination) and negative coefficients indicate a longer duration (a less likelihood of termination).

Let’s first look at Model 1. Model 1 includes only the key independent variables
without the set of control variables. Since including control variables drop many observations due to missing values in the set of control variables, I include the key independent variables only to test the first hypothesis with as many observations as possible. I find strong support for the first hypothesis in the first model. The coefficient for the interaction term is negative and statistically significant at the .01 level, suggesting that when there are an increase in the capabilities of a weak ally and a high level of economic dependence of the weak ally on its stronger ally, the alliance is less likely to terminate. In addition, the first order term, the coefficient for capability change, is positive and statistically significant at the .01 level. Since I include the interaction term in the model, the effect of capability change of the weaker state on alliance termination represents a conditional effect when there is no economic dependence of the weaker state on its stronger ally (Brambor, Clark & Golder 2006, Braumoeller 2004). That is, when the weaker state is not economically dependent on its stronger ally at all, as the positive coefficient indicates, such an alliance is more likely to end. Here, I did not make a explicit theoretical prediction about the effect of economic dependence on alliance termination because my argument focuses on an interaction effect between capability change and economic dependence. That is, the starting point of my theoretical argument presupposes an increase in the capabilities of the weaker ally in the asymmetric alliance. In this regard, I did not provide any theoretical prediction about an effect of economic dependence on alliance duration when there is no capability
change. Nor did I provide any theoretical prediction about an independent effect of economic dependence on alliance termination. But provided that there is no capability increase in the weaker ally, such an alliance is less likely to terminate. The estimated coefficient for economic dependence in Model 1 indicates that when there is no capability change, the higher economic dependence the less likely the alliance is to end. However, this is statistically significant only at the .1 level and this effect becomes insignificant in the other models. This result suggests that economic dependence produces a conditional effect rather than an independent effect on alliance termination especially when the weaker ally’s capabilities are on the rise.

Across the models specified to test the first hypothesis, I find support for the first hypothesis. Even when all control variables except SOLSchange are included in the model, as shown in Model 2, the relationships between the key independent variables and the dependent variable remain intact. Even when the temporal domain limited to the post-World War era, the relationships remain intact. Now both the coefficients for capability change and the interaction term are statistically significant at the .05 level.

I also include a model without an interaction term between capability change and economic dependence to see the independent effects of the capability change
Table 3.2: Event History Analysis of Alliance Termination, 1870-2002

<table>
<thead>
<tr>
<th></th>
<th>(1) Basic</th>
<th>(2) Full</th>
<th>(3) Post1945</th>
<th>(4) NoInteraction</th>
<th>(5) CINC</th>
<th>(6) Weibull</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capability Change (W)</td>
<td>43.40***</td>
<td>74.18***</td>
<td>95.39**</td>
<td>14.89</td>
<td>301.61***</td>
<td>30.04**</td>
</tr>
<tr>
<td></td>
<td>(14.96)</td>
<td>(28.76)</td>
<td>(38.80)</td>
<td>(27.56)</td>
<td>(86.81)</td>
<td>(15.00)</td>
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<tr>
<td>Economic Dependence</td>
<td>-2.15*</td>
<td>-1.41</td>
<td>-0.83</td>
<td>-1.54</td>
<td>-1.32</td>
<td>-1.61</td>
</tr>
<tr>
<td></td>
<td>(1.17)</td>
<td>(1.32)</td>
<td>(1.54)</td>
<td>(1.45)</td>
<td>(1.52)</td>
<td>(1.41)</td>
</tr>
<tr>
<td>Cap Change x Econ Dep</td>
<td>-735.38***</td>
<td>-657.49**</td>
<td>-851.65**</td>
<td>-1784.68***</td>
<td>-585.26**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(239.15)</td>
<td>(265.96)</td>
<td>(347.63)</td>
<td>(395.69)</td>
<td>(276.90)</td>
<td></td>
</tr>
<tr>
<td>Capability Change (S)</td>
<td>0.05</td>
<td>0.07</td>
<td>-0.42</td>
<td>0.42</td>
<td>0.42</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>(3.52)</td>
<td>(4.47)</td>
<td>(3.80)</td>
<td>(8.70)</td>
<td>(2.99)</td>
<td></td>
</tr>
<tr>
<td>Changes in Rival Cap (W)</td>
<td>14.37**</td>
<td>13.15</td>
<td>13.06</td>
<td>18.70***</td>
<td>12.38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6.27)</td>
<td>(12.80)</td>
<td>(8.73)</td>
<td>(4.08)</td>
<td>(10.30)</td>
<td></td>
</tr>
<tr>
<td>Changes in Rival Cap (S)</td>
<td>-2.38*</td>
<td>-6.85***</td>
<td>-1.90</td>
<td>-1.42</td>
<td>-2.50**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.29)</td>
<td>(2.33)</td>
<td>(1.25)</td>
<td>(1.33)</td>
<td>(1.10)</td>
<td></td>
</tr>
<tr>
<td>Institutional Change</td>
<td>0.95*</td>
<td>1.09**</td>
<td>0.95**</td>
<td>0.81*</td>
<td>0.74*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.49)</td>
<td>(0.54)</td>
<td>(0.48)</td>
<td>(0.46)</td>
<td>(0.40)</td>
<td></td>
</tr>
<tr>
<td>Joint Democracy</td>
<td>0.27</td>
<td>-0.28</td>
<td>0.24</td>
<td>0.27</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.47)</td>
<td>(0.71)</td>
<td>(0.53)</td>
<td>(0.54)</td>
<td>(0.50)</td>
<td></td>
</tr>
<tr>
<td>New Alliance Formation</td>
<td>0.48</td>
<td>0.93</td>
<td>0.65</td>
<td>0.65</td>
<td>0.51</td>
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<tr>
<td></td>
<td>(0.51)</td>
<td>(0.57)</td>
<td>(0.48)</td>
<td>(0.49)</td>
<td>(0.39)</td>
<td></td>
</tr>
<tr>
<td>Distance</td>
<td>-0.01</td>
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<td>-0.10</td>
<td>-0.14</td>
<td>-0.03</td>
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<tr>
<td></td>
<td>(0.11)</td>
<td>(0.15)</td>
<td>(0.11)</td>
<td>(0.14)</td>
<td>(0.11)</td>
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</tr>
<tr>
<td>Economic Cooperation</td>
<td>0.22</td>
<td>0.89</td>
<td>0.23</td>
<td>0.48</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.48)</td>
<td>(0.62)</td>
<td>(0.50)</td>
<td>(0.44)</td>
<td>(0.42)</td>
<td></td>
</tr>
<tr>
<td>Economic Aid</td>
<td>0.20</td>
<td>0.37</td>
<td>0.70*</td>
<td>0.44</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.49)</td>
<td>(0.52)</td>
<td>(0.41)</td>
<td>(0.44)</td>
<td>(0.52)</td>
<td></td>
</tr>
<tr>
<td>Former Colony</td>
<td>0.49</td>
<td>0.55</td>
<td>0.56</td>
<td>0.78**</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.41)</td>
<td>(0.49)</td>
<td>(0.42)</td>
<td>(0.40)</td>
<td>(0.39)</td>
<td></td>
</tr>
<tr>
<td>SOLS Change</td>
<td>0.88*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.47)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-4.94***</td>
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</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1.12)</td>
<td></td>
</tr>
</tbody>
</table>

ln_p
Constant 0.17
Observations 1022
Log Likelihood -84.20
Subjects 54
Failures 32
Chi-Squared 16.67

Dependent variable: Alliance termination
W denotes Weak State; S denotes Strong State
Robust standard errors in parentheses
* p < .10, ** p < .05, *** p < .01
of weaker states on alliance termination. For example, Morrow(?) argues that changes in the capabilities of the weaker ally have little effect on alliance duration. The result from Model 4 (No Interaction Model) shows that minor powers’ increased capabilities have no discernible effect on the likelihood of alliance termination. This may support Morrow’s argument per se, but the presence of the conditional effect suggests that the effect of capability change on alliance termination is highly conditional upon economic dependence, lending support to the first hypothesis presented here.

In Model 5, I replace the energy consumption variable with the CINC score. The results from this model are consistent with the results from the prior models tested using energy consumption measures, and lend support to the first hypothesis. Both the coefficient for the CINC capability change and the coefficient for the interaction term are consistent with the hypothesis and are highly statistically significant. Thus, the empirical finding is robust to the measurement change.

In the final model specification, I replace the semi-parametric COX proportional hazards model with a parametric Weibull model to see if using the parametric model can affect the estimation result. As shown in Model 6, there is little change in the result. Since the Weibull model includes a shape parameter to estimate, the estimate for this parameter is reported here. The shape parameter \( p \) indicates the shape of the baseline hazard (or duration dependence). If \( \ln p \) is positive or \( p \) is greater than one, it means that the event of interest is likely to occur over time.
By contrast, if \( \ln p \) is negative or \( p \) is less than one, it means that the event of interest is less likely to occur as time passes.\(^{23}\) Here the estimated coefficient for \( \ln p \) is .17, which indicates that asymmetric alliances are more likely to terminate over time. However, this is not statistically significant. Therefore, we find no evidence of duration dependence in this sample.

Finally, let me briefly discuss the results of the set of control variables included in the model. First, we expect that with an increase in the capability of the stronger ally, the alliance is less likely to end because the stronger ally makes an essential contribution to the overall capabilities of the alliance and thus maintaining the alliance is a more attractive option. As expected, the coefficients for the stronger ally’s capability change are all negative across the models, but they all fall short of being statistically significant. Thus, I find no strong evidence that a stronger ally’s capability decrease increases the likelihood of alliance termination here. Here I include rival’s capability change as a proxy for threat. But the empirical results from this variable are somewhat puzzling. In particular, the coefficients for rival capabilities faced by a weaker ally suggests that when a strategic rival’s capabilities faced by a weaker ally increases relative to those of the time of alliance formation, the alliance is more likely to terminate. Furthermore, some of the coefficients are highly significant as in Model 2 and Model 5. This puzzling result may stem from

\(^{23}\)If it is zero, it means that there is no duration dependence.
the possibility that strategic rivalry is not a valid measure for an external threat.\textsuperscript{24} Otherwise, as the result indicates, although this interpretation may not be so convincing, weaker allies may be less influenced by a change in the capabilities of a threat.

Domestic institutional changes seem to increase the likelihood of alliance termination. Despite some fluctuations in the significance level, the coefficients for institutional change are all positive and statistically significant. I find a similar result for leadership changes accompanied by changes in societal supporting coalitions, although it is statistically significant at the .1 level. These empirical findings are consistent with prior findings that domestic institutional changes either in a major or in a minor power lead to change in alliance policy (Leeds & Savun 2007, Leeds, Mattes & Vogel 2009).

Joint democracy has no discernible impact on the likelihood of alliance termination. Nor does new alliance formation have a significant effect on the likelihood of alliance termination although the signs of the coefficients are positive as predicted. Former colonial history tends to increase the likelihood of alliance termination. This may suggest that a weaker ally that experienced colonial rule by its major power ally may have a stronger desire to seek more autonomy. But the coefficient for former colony is significant only in Model 5. The results from economic coop-

\textsuperscript{24}In fact, there are many cases where weaker allies do not have any strategic rival in the data. Of the 1016 observed years, 611 (60.14\%) years had no strategic rivals. This fact poses a challenge to the argument that alliances are formed in response to an external threat in the first place.
eration and economic aid are puzzling. Contrary to the prediction, the coefficients for economic cooperation and economic aid are all positive although most of them are not statistically significant. Finally, let us look at the distance variable. I find no support for the hypothesis that I presented in the prior chapter that geographically distant asymmetric alliance tend to last longer than geographically close ones. I expected a negative sign but the results are mixed and none of the coefficients is statistically significant at all. Thus, the hypothesis for which I found support in allied dyads is not supported in bilateral alliances.

In the next section, I discuss the substantive effects that the key variables of interest have on the likelihood of alliance termination. Before proceeding, here I report the substantive effects of some control variables. I report the substantive effects of the control variables that are statistically significant in the Full Model. But SOLS Change variables are included only in the Post 1945 Model and they are statistically significant, I report its substantive effects as well. The results are reported in Table 3. As shown in Table 3, domestic institutional change and SOLS change generate a large effect on the likelihood of alliance termination. This result is revealing in a sense that even if it has been assumed that the area of foreign policy is relatively immune from the influence of domestic politics, domestic institutional changes and societal preference changes, more than anything else, have a substantial impact on alliance policy.


Table 3.3: Substantive Effects of Control Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Change in Hazard Rates</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Rival Capability (W)</td>
<td>41% increase</td>
<td>A one-SD-above-the-mean increase in rival cap</td>
</tr>
<tr>
<td>Change in Rival Capability (S)</td>
<td>6% decrease</td>
<td>A one-SD-above-the-mean increase in rival cap</td>
</tr>
<tr>
<td>Institutional Change (S)</td>
<td>158% increase</td>
<td>Either ally experienced an institutional change</td>
</tr>
<tr>
<td>SOLS Change (S)</td>
<td>141% increase</td>
<td>Either ally experienced a SOLS change</td>
</tr>
</tbody>
</table>

3.4.1 Substantive Effects

So far I have discussed whether the estimated coefficients are statistically significant or not; that is, whether the effects of the key independent and control variables are statistically discernible from zero. However, it is also necessary to examine the substantive effects—the size of effects—of the key variables of interest on the likelihood of alliance termination. Figure 2 illustrates the extent to which the predicted hazard rates change in response to changes in the level of economic dependence across changes in the capability share of the minor power. In the event history model, the coefficients obtained from estimation defy intuitive interpretations. In this regard, hazard ratios obtained by exponentiating the coefficients are more intuitively appealing. However, the obtained hazard ratio values should also go through computational process, although not complex, to obtain values that allow for an easy interpretation. For example, if a hazard ratio (HR) is .4, it means that the predicted hazard rate (or the risk of termination) decreases by 60%. This
Figure 3.2: Substantive Effects
predicted hazard rate change is obtained by this simple formula (Box-Steppensmeier & Jones 2004, 60):

\[
\Delta \text{hazard rate}(\%) = (HR - 1) \times 100 = \left( \frac{e^{x_2 \beta}}{e^{x_1 \beta}} - 1 \right) \times 100
\]

There are a couple of advantages of using this formula. Since the calculation of hazard rate changes is based on hazard ratios, it allows us to assess the changes of the predicted hazard rate as an independent variable of interest changes from \(x_1\) to \(x_2\). In addition, since the hazard ratio is constant over time in the proportional hazard model and in this analysis the proportional hazard assumption does hold, it can be assumed that the resulting predicted hazard rate changes remain constant over time. For these reasons, here I report predicted hazard rates change (\%) on the y-axis. The x-axis represents capability change. For an easier interpretation of the x variable, I multiply the capability change values by 100 so that they can represent a \% point change in capability share. Originally, capability change represents the current year’s capability share in the system \(\frac{\sum_j \text{Energy Consumption}_{jt}}{\sum_j \text{Energy Consumption}_{0j}}\) minus the base-year’s capability share in the system \(\frac{\text{Energy Consumption}_{0}}{\sum_j \text{Energy Consumption}_{0j}}\). But each capability share was not calculated as a percentage, so I multiply them by 100 to make each capability share represents percentage values. As a result, if an original value of capability change is equal to 0.003 in a given year, for example, then it is equivalent to 0.3\% point change \((100 \times 0.003)\) in capability share. Here I also added two
reference lines in the graph. The vertical reference line indicates the mean value of capability change (0.25% point), and the horizontal reference line indicates a zero of the predicted hazard rate change. Thus, if a 95% confidence interval line touches the zero horizontal bar, then the predicted hazard rate change is indiscernible from zero at .05 significance level. A diamond-shaped point represents the mean value of a predicted hazard rate change at the corresponding x value and the vertical bar from the mean value represents a 95% confidence interval as noted.

Here I illustrate how the risk of termination (or predicted hazard rate) changes as the level of economic dependence changes. The graph on the left shows how the risk of termination changes as the level of economic dependence changes from 8% to 25%. Here 8% represents one standard deviation below the mean of economic dependence and 25% represents the mean value of economic dependence. I argued earlier that when there is an increase in the capability of minor powers, asymmetric alliances with economically dependent minor powers are less likely to terminate. As predicted, the risk of termination decreases as the graph illustrates. For example, when a change in capability share is .4% point, the risk of termination decreases by 47% as the economic dependence level change from 8% to 25%. This suggests that when there are two minor power allies under comparison, whose economic dependence level is 8% and 25%, respectively, the latter’s risk of termination is 47% lower than the former. The graph on the right illustrates how the risk of termination changes when the economic dependence level changes from 8% to
Again, fixing the change in capability share at .4% point, the risk of termination decreases by 68%. Here I chose the change in capability share (.4% point) for the reason that it is above the mean of capability change, and this value falls on 75 to 90 percentiles of capability change. These result show that in the meaningful ranges of the independent variables, the substantive effects of the independent variables are substantial and significant.

Finally, Figure 3 illustrates estimated survival functions corresponding to Fig-

---

41%.25 Here 41% represents one standard deviation above the mean of economic dependence.
Figure 2. I fixed the value of capability change at .4% point to represent a significant increase in capabilities of the weaker ally.\textsuperscript{26} The visualized estimated survival functions show that when there are substantial capability change on the side of the weaker ally, the durations of alliances differ depending on the levels of economic dependence. As predicted, when there is a significant increase in the capabilities of a weaker ally, alliances with a weaker ally whose level of economic dependence on its stronger ally is low have lower probabilities of survival in a given year than alliances with a weaker ally whose level of economic dependence is high. Also, the differences in predicted survival probabilities become larger as the differences in the level of economic dependence increase as the graph on the right side illustrates.

3.4.2 Testing the second hypothesis

Now it is in order to test the second hypothesis presented earlier. The second hypothesis concerns the behavior of the weaker ally whose economic dependence on its stronger ally is low. I argued earlier that the weaker ally whose economic dependence is low is more likely to end the alliance as its capability increases and that the weaker ally that seeks to replace the existing alliance with its own arms will increase its military expenditures to finance self-defense efforts. Here what I want to capture by using military expenditures is whether the weaker ally that wants to walk away from the existing alliance will increase its self-reliant effort

\textsuperscript{26}All other variables’s values except for economic dependence are hold at their mean values.
to replace the alliance. As a matter of fact, several measures are used to capture resource allocation to the military such as military expenditures as a percentage of GDP, military expenditures as a percentage of government expenditure, military personnel as a percentage of total population, etc (Goertz & Diehl 1986). Among these measures, when it comes to measuring self-reliant effort, many studies suggest employing military expenditures as a percentage of GDP (Goertz & Diehl 1986, Palmer 1990, Goldsmith 2003, Fordham & Walker 2005). Since the military expenditure over GDP captures the portion of resources allocated to the military from the entire resource base available to a state, changes in this percentage may capture a state’s defense effort. But for robustness, here I use two measures for military resource allocation. One is simple military expenditures and the other is military expenditures over GDP. For military expenditures, I use the military expenditure data from the COW CINC. But some drawbacks of this data lie in the fact that different standard currency units are used to obtain the military expenditure data across time (British pounds sterling prior to 1914 and U.S. dollars after 1914) and the collected military expenditure data are not adjusted for inflation (e.g. current U.S. dollars in a give year). To mitigate the problems caused by these drawbacks, I will test the second hypothesis using the military expenditures data from 1950, the data from which is corrected for price fluctuations. For GDP, I use the GDP data collected by Gleiditch (2002). Here the sample for analysis

---

27 This measure is usually equated with defense burden.
includes only the weaker ally’s military expenditure, and thus the unit of analysis is a country-year covering the period of 1950-2002, generating 750 country-year observations.\textsuperscript{28}

To test the hypothesis, I include the key independent variables used to test the first hypothesis and several control variables as well. I include capability change of the stronger state in the model because its capability change can also affect the weaker state’s military expenditure. With regard to alliance-burden sharing, the free-riding model suggest that a minor power will free-ride on its major power ally (Olson & Zeckhauser 1966, Oneal 1990, Oneal & Diehl 1994, Oneal & Whatley 1996). By contrast, the bargaining model (e.g. Palmer 1990) suggests that the free-riding of a minor power on its major power ally is less likely because it can be easily detected by the major power ally, and thus the minor power’s ally will also adjust its military expenditure in tandem with its stronger partner. As a result, the free-riding model predicts a negative relationship between capability change of the stronger state and military expenditure of the weaker state but the bargaining model predicts a positive relationship. Whether a weaker ally forms a new alliance or not may also influence military expenditures. Therefore, I include a binary variable of new alliance formation in the model. I also include changes in

\textsuperscript{28}Here, the right-censored cases for the fulfilment and loss-of-independent reasons are excluded from the sample for analysis.
Table 3.4: Analysis of Military Expenditure, 1950-2002

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MilEx_AR1</td>
<td>MilEx_Lagged DV</td>
<td>GDP_AR1</td>
<td>GDP_Lagged DV</td>
</tr>
<tr>
<td>Capability Change (W)</td>
<td>6.752</td>
<td>2.802</td>
<td>10.398</td>
<td>2.477</td>
</tr>
<tr>
<td></td>
<td>(6.420)</td>
<td>(2.792)</td>
<td>(6.420)</td>
<td>(2.809)</td>
</tr>
<tr>
<td>Economic Dependence</td>
<td>-1.112***</td>
<td>-0.084</td>
<td>-1.078***</td>
<td>-0.122*</td>
</tr>
<tr>
<td></td>
<td>(0.257)</td>
<td>(0.072)</td>
<td>(0.270)</td>
<td>(0.072)</td>
</tr>
<tr>
<td>Cap Change x Econ Dep</td>
<td>3.105</td>
<td>-2.798</td>
<td>-2.391</td>
<td>-1.278</td>
</tr>
<tr>
<td></td>
<td>(26.923)</td>
<td>(9.914)</td>
<td>(27.946)</td>
<td>(10.377)</td>
</tr>
<tr>
<td>Capability Change (S)</td>
<td>3.336***</td>
<td>0.064</td>
<td>2.832***</td>
<td>0.208*</td>
</tr>
<tr>
<td></td>
<td>(0.626)</td>
<td>(0.133)</td>
<td>(0.576)</td>
<td>(0.108)</td>
</tr>
<tr>
<td>Changes in Rival Cap (W)</td>
<td>1.658</td>
<td>-0.107</td>
<td>1.448</td>
<td>0.070</td>
</tr>
<tr>
<td></td>
<td>(1.605)</td>
<td>(0.659)</td>
<td>(1.608)</td>
<td>(0.667)</td>
</tr>
<tr>
<td>Polity Score of the Weak</td>
<td>-0.025***</td>
<td>-0.007***</td>
<td>-0.023***</td>
<td>-0.006***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.002)</td>
<td>(0.005)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>New Alliance Formation (W)</td>
<td>-0.083*</td>
<td>-0.082</td>
<td>-0.086*</td>
<td>-0.070</td>
</tr>
<tr>
<td></td>
<td>(0.050)</td>
<td>(0.056)</td>
<td>(0.050)</td>
<td>(0.056)</td>
</tr>
<tr>
<td>Logged GDP (W)</td>
<td>1.051***</td>
<td>0.078***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.023)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged Military Expenditures(logged)</td>
<td>0.917***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.018)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lagged MilEx/GDP(logged)</td>
<td></td>
<td></td>
<td>0.911***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.019)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-4.383***</td>
<td>-0.145</td>
<td>-3.623***</td>
<td>-0.313***</td>
</tr>
<tr>
<td></td>
<td>(0.798)</td>
<td>(0.202)</td>
<td>(0.089)</td>
<td>(0.068)</td>
</tr>
<tr>
<td>Observations</td>
<td>750</td>
<td>742</td>
<td>742</td>
<td>728</td>
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<tr>
<td>Wald Chi-Square</td>
<td>933.521</td>
<td>43865.704</td>
<td>109.690</td>
<td>7163.575</td>
</tr>
<tr>
<td></td>
<td>803</td>
<td>852</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rho</td>
<td>0.932</td>
<td>0.982</td>
<td>0.595</td>
<td>0.933</td>
</tr>
<tr>
<td>R-Squared</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

W denotes Weak State; S denotes Strong State
Logged Military Expenditures(Models 1, 2)
Logged Military Expenditure as a percentage of GDP(Models 3, 4)
Panel Corrected Standard Errors(PCSE) in parentheses
* p < .10, ** p < .05, *** p < .01
the capabilities of the rival state that a weaker ally faces. Since the rival state's capability change captures changes in threat that the weaker state faces, we can expect that its rise can also increase military expenditures. In addition, I include the polity score of the weaker state. Fordham and Walker (2005) find that regime type influences military resource allocation, and the polity score has a negative relationship with military expenditures. Thus, to control for the effect of domestic political institutions, I include polity scores of minor powers in the model. Finally, I include weaker states’ GDP in the model to control for the effect of different resource bases of different countries.\footnote{This GDP variable is included only when the dependent variable is military expenditures. When the dependent variable is the military expenditure over GDP, it is not included.} Here I take a one-year lag for the variables associated with capabilities assuming there is a time-lag between capability change and the decision on military expenditure.\footnote{Except for the variables of new alliance formation, and polity scores, all the other variables are one-year lagged.}

To evaluate whether this argument is valid, I run a relatively simple statistical model. Since the data structure is time-series cross-sectional (TSCS) and the dependent variable is military expenditures, I have to address the common problems inherent in TSCS data, i.e. the unit heterogeneity and serial correlation problems (Beck & Katz 1995). That is, across alliances there could be unobserved factors that are proper to individual alliances, and within the alliances the weaker state’s annual military expenditures can be serially correlated. If this is the case,
then simple OLS estimates are inaccurate especially when the serial correlation is not controlled for; OLS estimates can overestimate the effect of independent variables by deflating the standard errors of estimates (Gujarati 2003). To address these problems and to make the test more robust, I specify statistical models in two ways. In one model, I choose a Prais-Winsten AR1 (first-order autoregression) model to account for autocorrelation along with the Panel Corrected Standard Errors to control for unit heterogeneity (Beck & Katz 1995). In the other model, I include a lagged dependent variable as a regressor in the regression equation along with the Panel Corrected Standard Errors (Beck & Katz 1995, Beck & Katz 1996).

The results are reported in Table 3. Here I focus on the coefficient for capability change because it represents the effect of the capability change of minor powers on military expenditures when their economic dependence is zero. I expect that the capability change coefficient is positive as the second hypothesis posits: a weaker ally whose economic independence is low and whose capabilities increase may increase its military expenditure to replace the existing alliance with self-defense. Across the models the coefficients for capability change are all positive as predicted, but they are not statistically significant even at the .1 significance level. In Model 3, the $p$-value for the estimated coefficient is .103, slightly short of being significant at the .1 level. As a result, I find no strong support for the

---

31 Due to the measurement problem associated with military expenditures mentioned earlier, the temporal domain was limited to the period from 1950.
second hypothesis.

The results from the set of control variables are consistent with expectations. In the case of the capability change of the stronger state, the result provides support to the bargaining model (Palmer 1990)\(^{32}\). A stronger state's capability change is positively associated with the weaker state's resource allocation to the military. Polity scores are negatively correlated to military expenditures as in Fordham and Walker's (2005). The more democratized minor powers tend to spend less on military spending. Although statistically not significant, a rival state's capability change is positively associated with the minor power's military expenditure. New alliance formation tends to reduce minor powers' military expenditures although, overall, the coefficients for new alliance formation are marginally significant.

### 3.5 Conclusion

In this study, I have explored whether and how the capability change of minor powers in asymmetric alliances can affect alliance duration. In existing studies, whether a minor power's capability change in the asymmetric alliance has any effect on alliance duration has not been clarified. Starting from a structural condition that asymmetric alliances place on minor powers, the condition that minor powers suffer from severe autonomy concerns in asymmetric alliances due to the

---

\(^{32}\)However, this result does not undermine severely the free-riding model because the free-riding model is primarily based on multilateral alliances such as NATO.
power gap with their stronger allies, this study developed arguments on how the capability change of minor powers can affect the likelihood of alliance termination. Here I argued that as the minor powers’ capabilities increase in asymmetric alliances, they have an ability to gain more autonomy, and this will destabilize the existing alliance. More precisely, I argued that whether minor powers’ increased capabilities can lead to alliance termination is conditional upon their economic dependence on major powers because under economic dependence ending the alliance can jeopardize its economic benefits from the alliance relationship, which in turn may provide the very sources for their increased capabilities. I tested this argument against empirical data and I found strong support for this conditional argument. This implies that asymmetric alliances that link security interests with economic interests are more likely to endure than otherwise and that economic dependence serves to restrain the weaker ally from seeking more autonomy by ending the alliance. In this regard, economic benefits that the weaker ally gains from trade with the major power ally may be considered by the weaker ally as some compensation for their autonomy concern. This finding suggests that for the major power that wants to continue the ties, promoting economic ties to its weaker ally when its capabilities increase would be an effective policy in managing the alliance relationship.

Along the line of the first argument, I also argued that minor powers whose capabilities rise and whose economic dependence on their stronger allies are low
may move towards self-defense and that we should observe the increase in their military expenditure. However, I found no strong support for this hypothesis. Then how can we interpret the results from this analysis as to the behavior of minor powers that seek to terminate the alliance to gain more autonomy? In this study, I presumed that minor powers can choose between staying in the alliance or leaving the alliance for self-defense. But the empirical results suggest that minor powers seeking to gain autonomy may choose other alternatives other than fully devoted to self-defense when they decide to terminate the alliance. To reduce military burden, minor powers may seek an appeasement policy with an adversary by signing a nonaggression pact (Narizny 2003), join a multilateral alliance with more equal powers, or sign a new defense pact with another major power that offers a more attractive option. I have not fully taken into consideration these alternatives in this study. This may be part of reasons why I find no support for the second hypothesis, albeit not fully rejected, and what alternative routes minor powers would choose with their capabilities increasing begs for further research.

Finally, let me briefly discuss why this study is important. Put another way, what can we learn from this and how can this study advance our understanding of international politics? This study attempted to ascertain a causal mechanism driven by minor powers’ capability change in asymmetric alliances. Although Morrow’s security-autonomy tradeoff model provides a theoretical basis for the arguments made here, arguably, Morrow is ambivalent about minor powers’ role in the
likelihood of alliance termination. Although he recognizes the importance of capability change in allied states with regard to the durability of alliances (he also argues that capability change influences the desire to restore the lost autonomy), he does not extend that argument explicitly to minor powers’ capability change. Rather, he argues that minor powers’ capability change has little effect on alliance termination. By highlighting the autonomy concern of the weak state—this was done by defining the notion of autonomy in a traditional sense, this study urged paying due attention to the minor power’s autonomy concern which has been relatively ignored even in Morrow’s security-autonomy tradeoff model. Given that asymmetric alliances take up almost 50 percent of military alliances (Fordham 2010), this lack of attention to a possible causal mechanism driven by minor powers’ capability change that leads to alliance termination may undermine our understanding of military alliances. Given that military alliances have been recognized as an important policy tool for maintaining security and peace in the world, advancing our understanding of how to maintain alliances with their allied partners would be important. In this regard, the empirical findings of this study suggest that paying more attention to minor powers’ autonomy concerns and to how they can impact alliance relationships could be a fruitful way of future research.
Table 3.5: Appendix: Event History Analysis of Alliance Termination, 1870-2002

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Capability Change (W)</td>
<td>77.78***</td>
<td>112.38***</td>
<td>73.80***</td>
</tr>
<tr>
<td>Economic Dependence</td>
<td>-0.96</td>
<td>-1.53</td>
<td>-0.84</td>
</tr>
<tr>
<td>Cap Change x Econ Dep</td>
<td>-719.22***</td>
<td>-725.09***</td>
<td>-494.28***</td>
</tr>
<tr>
<td>Capability Change (S)</td>
<td>0.84</td>
<td>-1.58</td>
<td>0.23</td>
</tr>
<tr>
<td>Changes in Rival Cap (W)</td>
<td>13.61**</td>
<td>15.22**</td>
<td>11.87**</td>
</tr>
<tr>
<td>Changes in Rival Cap (S)</td>
<td>-2.89**</td>
<td>-3.48*</td>
<td>-2.81*</td>
</tr>
<tr>
<td>Institutional Change</td>
<td>0.89*</td>
<td>1.07***</td>
<td>0.52</td>
</tr>
<tr>
<td>Joint Democracy</td>
<td>0.39</td>
<td>0.42</td>
<td>0.56</td>
</tr>
<tr>
<td>New Alliance Formation</td>
<td>0.52</td>
<td>0.51</td>
<td>0.22</td>
</tr>
<tr>
<td>Distance</td>
<td>0.04</td>
<td>-0.03</td>
<td>-0.01</td>
</tr>
<tr>
<td>Economic Cooperation</td>
<td>0.26</td>
<td>0.14</td>
<td>0.29</td>
</tr>
<tr>
<td>Economic Aid</td>
<td>-0.05</td>
<td>0.17</td>
<td>0.12</td>
</tr>
<tr>
<td>Former Colony</td>
<td>0.14</td>
<td>0.71*</td>
<td>0.41</td>
</tr>
<tr>
<td>Observations</td>
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<td>994</td>
<td>994</td>
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<tr>
<td>Log Likelihood</td>
<td>-83.16</td>
<td>-77.23</td>
<td>-109.29</td>
</tr>
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<td>Subjects</td>
<td>52</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>Failures</td>
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<td>30</td>
<td>38</td>
</tr>
<tr>
<td>Chi-Squared</td>
<td>32.59</td>
<td>66.75</td>
<td>45.78</td>
</tr>
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</table>

Model 1: Renegotiated as not terminated with the right-censored cases as terminated
Model 2: Renegotiated as terminated with the right-censored cases intact
Model 3: Renegotiated as terminated with the right-censored cases as terminated

Robust standard errors in parentheses

* p < .10, ** p < .05, *** p < .01
Chapter 4

The US-South Korean Military Alliance and Its Resilience

4.1 Introduction

The U.S.-South Korean military alliance is a long-standing alliance. The Mutual Defense Treaty was signed in October 1953, right after the Korean War, and in 2013 the U.S. and South Korea celebrated the 60th anniversary of this bilateral security agreement. But not all celebrated the survival of this alliance. In an article, a U.S think-tank analyst urged the end of the U.S.-South Korean military alliance, questioning the necessity of and claiming the futility of the persistence of this alliance especially in terms of U.S. interests (Bandow 2010). Then, why has the U.S.-South Korean military alliance not ended yet? Put differently, what makes the U.S.-South Korean military alliance endure? Granted that South Korea’s military capabilities have grown strong enough to defend itself, why does the South Korean government continue to rely on the U.S. security commitment?

To answer this question, this study focuses on economic relations between the U.S. and South Korea. Although policymakers and scholars have repeatedly stressed the importance of the bilateral economic relations as a backbone of the
U.S.-ROK alliance, there have been few in-depth analyses of how the economic ties between the U.S. and South Korea really work toward enhancing security ties and vice versa. Along the line of the argument advanced in the third chapter of this dissertation, in this chapter I investigate whether the economic dependence of South Korea on the U.S. has contributed to the continuance of the alliance. To this end, this study explores how U.S. policy toward Korea in the early 1960s, derived from U.S. security interests in Korea, contributed to generating pro-US economic forces that have since influenced ROK governments to maintain pro-U.S policy. Here, I argue that although the U.S. may not have specifically directed the Korean government to adopt an export-led growth strategy, its policy guidance left little room for choice other than embracing that strategy in the early 1960s, and the adoption of the export-led growth strategy generated a ruling coalition involving conservative elites and export business interests. The successful economic growth in the wake of the adoption of this development strategy allowed for the maintenance of this ruling coalition and particularly the rise of export business interests (or the chaebol) as strong domestic forces that support pro-American policy. That is, the export-oriented development strategy generated the Korean economic structure highly dependent on trade, consequently empowering export business interests in Korean society. Because export business interests have benefited primarily from economic relations with the U.S., because the U.S. has also served as a sponsor for market-oriented (or outward-looking) forces in Korea, and because the U.S.-ROK
alliance has relieved export business interests of the heavy tax burden that would otherwise be shouldered on them, they have strongly upheld the status quo in U.S.-Korean relations–no change in the U.S.-ROK alliance. This means that the U.S.-Korean military alliance is deeply embedded in the socioeconomic structure of Korean society generated by export-led growth and its economic dependence on the U.S, consequently making the U.S.-ROK alliance more resilient.

In fact, there is a huge body of literature devoted to the economic development of Korea, and there are a number of studies on the U.S.-ROK alliance. However, there have been few studies that combine the perspective from international relations with that from domestic politics and economy to examine the effect of the U.S.-ROK alliance on domestic politics and the effect of domestic politics on the U.S.-ROK alliance. Is it simply a coincidence that then U.S. East Asian allies such as Japan, Korea and Taiwan adopted a similar development strategy? Literature on the economic development of Korea pays little attention to this question and this study intends to fill this gap.

The remainder of this paper is organized as follows: In the next section, I review

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1There are convincing explanations in economic terms of why these three countries adopted an export-led growth strategy. Given the small size of the domestic markets of these countries, import-substitution industrialization might not be a best strategy for economic growth because economies of scales are restricted in small domestic markets(Haggard 1990). Bruce Cumings(Cumings 1984) attempts to explain this adoption of the similar development strategy drawing on product-cycle theory. Nonetheless, considering that these East Asian countries were exposed to severe threats in the Cold-War Era, it is worth investigating how their alliance with the U.S. affected their economic policy in more detail. Stephen Haggard(1990) also recognizes the importance of the influence of external environments on economic development.
the literature addressing the question of why the U.S.-ROK alliance has been sustained. In the third section, I examine U.S.-ROK economic relations, focusing on the trend of bilateral trade from the 1960s to the current period. Looking at bilateral trade between the U.S. and South Korea allows us to examine whether the economic dependence of South Korea on the U.S. market has served to sustain the alliance. In the fourth section, I look at how the U.S. government in the late 1950s and in the early 1960s influenced economic policies of the Korean government and particularly the adoption of the export-led growth strategy. This section is most important in this paper in that it attempts to ascertain how the adoption of the export-oriented growth strategy determined the nature of the ruling coalition involving political elites and big business formed in the early 1960s. In the fifth section, I turn my attention to a wartime operational control issue, a pending issue between the U.S. government and the ROK government. This wartime operational control issue shows how the governing coalition impacts South Korea’s alliance policy. In the final section, I conclude with a summary of my argument and several suggestions for future research.

4.2 Literature Review

The U.S.-ROK alliance has endured for more than 60 years since its inception in 1953. What has made this alliance durable and what factors will determine the fate
of this alliance? Many argue that since North Korea’s military threat still exists, and it was the very rationale for the existence of this alliance, they believe that this alliance will (or should) persist until this threat disappears. According to this view, since the U.S.-ROK alliance has been successful in deterring North Korea’s threat and invasion, there is no reason to terminate the alliance. This threat-centered approach is widely accepted by many observers of U.S.-ROK relations. Thus, the presence of North Korea’s threat explains the sustenance of the U.S.-ROK alliance and implies that the termination of this threat will dissolve the alliance. This view seems to be valid in a sense that the existence of an external threat constitutes a main cause of alliance formation, and thus diminished threat will affect the cohesion of the alliance. However, given the fact that South Korea’s military capabilities have increased due to its rapid economic growth and the military balance between the South and the North has been tilted in favor of the South, the validity of this threat centered view can be undermined.

One may argue from the threat-centered perspective that the U.S.-ROK military alliance no longer targets only the North’s threat, but it has been expanded to encompass the regional threat in East Asia. For example, one may argue: “Already, the alliance is shifting from a predominantly North Korea threat-focused alliance to a more flexible alliance that is taking into account the possibility of a very different strategic equation on the peninsula over the next 10-20 years” (Lee 2003, 293). If this argument holds, this may explain why the U.S.-ROK alliance has
been sustained despite the enormous increase in the ROK’s military capabilities. But as Lee (2003) points out, there has been a lack of consensus between the U.S. and South Korea about building a new strategic framework toward this end. In sum, this argument can explain the sustenance of the alliance but it remains to be seen whether the bilateral alliance will be expanded to that direction.

Another approach attributes the maintenance of the alliance to misjudgment by U.S. policymakers. This approach is fundamentally rooted in the assessment of the low strategic value placed on South Korea: “The Korean Peninsula is not critical for America’s defense” (Bandow 1992, 91). Bandow (1992) asserts that the U.S. should withdraw its forces from the Korean Peninsula and abrogate the defense treaty because South Korea is strong enough to defend itself against North Korea’s threat. This view implies that South Korea free-rides on the U.S. military capabilities for its defense and thus the U.S. has been wasting its resources. But a series of questions arise as to this view. If the U.S.-ROK alliance is outdated and futile (Bandow 2012), how can it be continued? What explains the sustained miscalculation by U.S. policymakers and why do U.S. policymakers condone the free-riding of South Korea on the U.S.? Admittedly, there has been a long-lasting belief among U.S. policymakers that South Korea is of no vital importance to the U.S. security interest. The Acheson line that excluded South Korea from U.S.’s defense perimeter is a well-known historical example (Bandow 1992, 76). Besides, even after the conclusion of the Mutual Defense treaty in 1953, there were U.S.
policymakers skeptical about the strategic value of South Korea, insisting on a reduction of U.S. troops stationed in the peninsula.\footnote{In Kennedy’s presidency Robert W. Komer of National Security Council sends a memorandum to President Kennedy, questioning the need for further assistance to South Korea. “In fact, I’d argue that our investment in Korea far exceeds our strategic interest. On top of over $5 billion already invested since the end of the Korean War, we plan another billion in MAP [Military Assistance Program] alone over the next five years...In short, Korea continues to be our most expensive military satellite. Is it worth as much as it costs?” “Memorandum from Robert W. Komer of the National Security Council Staff to President Kennedy.” May 31, 1963. FRUS, 1961-1963, Volume XXII, Northeast Asia, Doc 306. In another memorandum sent to President Johnson, he makes a similar argument. “There is never a good time to cut [U.S. forces in Korea], but the plain fact of the matter—no longer denied by any one—is that we’re overinsured militarily in Korea at a time when we need strength much more elsewhere.” “Memorandum From Robert W. Komer of the National Security Council Staff to President Johnson.” January 22, 1964. FRUS, 1964-1968, Volume XXIX, Part 1, Korea. Doc 2.} Nonetheless, can we explain the long survival of the alliance simply as the consequences of miscalculated or misguided policy?\footnote{Given Bandow’s claims (1992, 2012), he seems to argue that the sustenance of the alliance is partly due to the Korean lobby, policy inertia, and exaggerated military threat and capabilities of North Korea.} Assuming that policymakers are rational in formulating policy, this kind of argument is hard to uphold unless this approach provides a more systematic explanation for this miscalculation. This study attempts to offer a different answer for the endurance of the U.S.-ROK alliance.

Whereas the studies mentioned above do not directly address the question of what makes the U.S.-ROK alliance durable but address broadly issues of the U.S.-ROK alliance, several studies pay more direct attention to the durability of the U.S.-ROK alliance. Sung-joo Han (1980) views the U.S.-ROK alliance as a typical type of asymmetric alliance given that South Korea was heavily dependent on the U.S. for security and economic development. However, he contends that the U.S.-
ROK alliance was in transition in the 1970s due to the changes in three factors: the realignment of major powers in East Asia such as the advent of detente between the U.S. and China, the rapid economic growth of South Korea, and the greater autonomy-seeking on the Korean side. Despite the difficulties that the alliance underwent due to these destabilizing factors, he claims, the persistence of the alliance is evidence that proves its resilience of the alliance. He states:

[T]he fact that the alliance survived the simultaneous pressures during 1976-1980 of the so-called Koreagate scandal, the troop withdrawal question, and tensions over the issues of human rights and political development in Korea is a testimony to the importance that the two countries attach to their relationship and the strong interests that each country recognizes to exist in the alliance (Han 1980, 1077).

Han attributes the continuance of the ties to the strong interests the U.S. and South Korea share but this sort of argument appears to be tautological in a sense that he does not identify clearly the factors that contributed to the sustenance of the alliance other than common interests. What he means by common interests is somewhat vague. In sum, although he emphasizes that internal and external changes can pose a challenge to the maintenance of the alliance, he fails to identify what factor(s) will determine the fate of the alliance.

Victor Cha(1997) also recognizes that once the underlying conditions that led to the formation of an alliance change, the alliance is more likely to undergo some change. However, he contends that what is more important with regard to alliance
termination is the direction of the change. That is, if the change is directed toward the convergence of security conception, it will be likely to continue, but if the change is directed toward the divergence of security conception, it will be likely to end. “[A] key variable for the future resiliency of U.S. alliances is the underlying conception of security. Beliefs, perceptions, and definitions about what constitutes security and the degree of convergence among alliance partners about these conceptions are key determinants of alliance cohesion” (Cha 1997, 610). Then, what does he mean by the convergence (or divergence) of security conception? The convergence of security conception occurs if both the allied states adopt either a realist approach or a liberalist approach. By contrast, the divergence of security conception occurs if one ally adopts a position different from that of the other ally(Cha 1997, 613). According to him, the liberalist position is characterized by a conciliatory policy such as dialogue and mutual accommodation; on the other hand, the realist position is characterized by a hard-line policy such as “containment, forward deployed deterrence, relative military superiority, and non-dialogue” (Cha 1997, 615). Regarding the U.S.-ROK alliance, his argument suggests that which type of regime is in power in each country and how they are matched can aggravate or ameliorate the likelihood of alliance termination. He takes the Agreed Framework in 1994 as a typical example of the divergence of security conception. While the Clinton administration oriented toward a liberal approach pursued a more conciliatory policy toward North Korea, Seoul stuck to a hard-line approach, and
this brought about crisis in the relationship.

Cha(1997) pinpoints the divergence of a view over security conception as a main source of the tension and the eventual dissolution of the U.S.-ROK alliance, and Chung Min Lee(2003) makes a similar argument. Lee also believes that the divergent views over pending issues, especially an issue over how to handle North Korea, can pose a challenge to the future of the U.S.-ROK alliance. However, while Cha believes that this divergent view arises primarily from the confrontation of different domestic policy preferences (e.g. Republican regime in America and liberal regime in Korea), Lee(2003, 283) believes that this divergent view comes largely from South Korea’s democratization, its increased economic capabilities, and its subsequent pursuit of greater autonomy. He also predicts that the policy coordination between the ROK government and the U.S. government will become more difficult with a liberal government coming to power in South Korea. The Roh Mu Hyun government, the most liberal one since the inception of the ROK government in 1948, is a case in point. In Roh’s presidential terms, because of their different threat perceptions of North Korea, the differences in North Korea policy between the U.S. and South Korea became salient. While the Korean government wanted to ‘engage’ North Korea the Bush administration endorsed a hard-line approach, calling North Korea as an ‘axis of evil.’ To sustain the alliance, he argues, it is necessary to redefine the alliance by making the alliance stand on a more equal footing and reconfiguring the scope and the role of the alliance so that
it can make adjustment to the changed domestic and international circumstances. In particular, he recommends that the ROK government take into account the unification of Korean and the role of the alliance in the unified Korea.

This paper is commensurate with Lee’s view in that the increased capabilities of South Korea will encourage the ROK government to seek more autonomy, and this can cause tension between the U.S. and South Korea. But this paper departs from Lee’s view because this study emphasizes the economic dependence of South Korea on the U.S. as the restraining force toward further autonomy-seeking.

### 4.3 Economic Dependence and the U.S.-ROK Alliance

In the prior chapter, I argued that in asymmetric alliances, alliances with a minor power whose capabilities are on the rise but whose economic dependence on its stronger ally is high are less likely to terminate than those with a minor power whose economic dependence on its stronger ally is low. The logic behind this argument goes as follows: When a minor power’s capabilities increase, the minor power may want to gain more autonomy by terminating the alliance. But if the minor power is highly economically dependent on its stronger ally, the desire to gain more autonomy can be dampened because it is not a viable policy alternative it can choose. That is, high economic dependence means that the increased capabilities of the weaker ally come largely from the alliance relationship, and if this is the
case, the minor power will not take the risk of breaking the relationship because breaking the alliance may cause damage to the ongoing economic relations with the stronger ally. By contrast, if a weaker ally’s capabilities increase and its economic dependence is low, it may not be restrained from terminating the alliance to gain more autonomy.

The U.S.-ROK alliance is a typical type of asymmetric alliance comprised of one major power (the U.S.) and one minor power (South Korea). Then does this argument hold in the U.S.-ROK alliance case? Figure 1 illustrates the trends of the capability change and the economic dependence of South Korea since 1960. To begin with, the graph on the top plots the relative capability change of South Korea from 1960. The solid line in the graph indicates South Korea’s relative capabilities measured by using COW CINC scores. This graph shows that South Korea’s relative capabilities have gradually increased since its forming an alliance with the U.S. The slope of this line was not so steep until the late 1980s but exhibits a gradual increase in relative capabilities over time. In the meanwhile, the graph at the bottom represents South Korea’s economic dependence on the U.S. The thick dashed line in the graph indicates South Korea’s trade dependence on the U.S., measured by a percentage ratio of bilateral trade between Korea and the U.S. to the total trade of South Korea in a given year. This trade dependence plot shows that despite some periodic fluctuations, South Korea’s trade dependence on the U.S. peaked in the mid-1960s but declined thereafter. Since the United States
has been a major export market for South Korean products, I added another plot that represents South Korea’s export dependence on the U.S. as well. Export dependence plotted in a thin dashed line also exhibits a trend similar to that of trade dependence. South Korea’s export dependence on the U.S. culminated in 1970 but declined thereafter. The horizontal line represents a mean value of trade dependence of minor powers on their major power ally in bilateral defensive alliances, which reaches 24 percent.

Then, from Figure 1, what conclusion we can draw regarding South Korea’s economic dependence on the U.S. and the sustenance of the U.S-ROK alliance? As shown in Figure 1, South Korea’s capabilities have gradually increased, and this means that South Korea has an incentive to terminate the alliance to gain more autonomy. However, both the lines for trade dependence and export dependence commonly indicate that South Korea’s level of economic dependence on the U.S. was very high at least until 1990, exceeding 24 percent in almost every year. Therefore, the continuance of the U.S.-ROK alliance until 1990 seems to fit my argument that increased capabilities and high economic dependence reduce the likelihood of alliance termination. However, after 1990, the level of economic dependence dropped substantially. Furthermore, it is worth noting that while the U.S. had been number one export market for South Korea’s exports until 2002, in

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4This is a mean value of trade dependence of bilateral defensive alliances, and the horizontal line represent this mean value.
2003 China replaced the U.S. as South Korea’s number one export market (CRS 2004).

Since South Korea’s economic dependence has dropped significantly in recent years, does my theory dictate that we have to witness the dissolution of the U.S.-ROK alliance? Not necessarily and the final judgment could be mixed. On the one hand, we can say that South Korea is still highly dependent on the U.S. given the fact that despite China’s displacement of the U.S. as South Korea’s top export market, the U.S. remains the second-largest export market for Korea and exports to the U.S. account for 11 percent of ROK’s total exports in 2010. On the other hand, South Korea’s recent dependence level is far below the mean level of economic dependence—24 percent—of minor powers on their stronger ally. In this regard, the current status does not seem to fit well with my argument. From the theoretical perspective presented here and from the data shown above, it can be argued that the U.S.-ROK alliance is at crossroads inching toward dissolution rather than consolidation, ceteris paribus. But here I want to emphasize a factor that renders the U.S.-ROK alliance resilient.
4.4 ROK’s Adoption of Export-Led Growth Strategy and U.S. Role

When it comes to the remarkable economic “take-off” of South Korea since the early 1960s, few would disagree that the adoption of an export-oriented growth strategy played a crucial role in South Korea’s rapid economic growth. Then, what was the U.S. role in the ROK government’s adopting an export promotion strategy for economic development and why is this question important as to the sustenance of the U.S.-ROK alliance? This question is important in two respects.

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However, this does not necessarily mean that there is a consensus among scholars that an export-led growth strategy is the only way of achieving economic development. For example, see Bruce E. Moon (1998).
First, the adoption of EOI generated an EOI-based ruling coalition, which is a long-standing pro-US coalition in South Korea. In this regard, it is important whether and how the U.S. is involved in this process. If we are more informed about the extent to which the U.S. influenced ROK’s development strategy, we may have a better understanding of the origin and intensity of pro-Americanism in the ruling coalition that helped to sustain the U.S.-ROK alliance. For instance, if the U.S. was deeply involved in formulating the export-led growth strategy, this would mean that the ensuing economic success of South Korea reinforced pro-Americanism in the ruling coalition. On the other hand, if the U.S.’s influence on the adoption of the strategy was weak, the pro-Americanism formed in the ruling coalition should be found somewhere else. Second, ascertaining the extent of U.S. involvement in the economic development process of South Korea may shed light on why East Asian countries, such as Japan, Korea and Taiwan adopted a similar development strategy. Given that these countries are U.S. allies, did the U.S. influence lead these countries to adopt the similar development strategy? Looking at the Korean case may help to answer this question.

To this end, I address two issues in the following two subsections. In the next subsection, I address whether and how the U.S. influenced South Korea’s economic development process, especially focusing on the extent to which the U.S. government affected the ROK government’s decision on economic development strategy. In the following subsection, I discuss how the adoption of an export-led
growth strategy generated a pro-U.S. ruling coalition that has helped to sustain the U.S.-ROK alliance with a focus on the nature of a ruling coalition generated in the wake of the adoption of an export-led growth strategy and how the generation of the ruling coalition was conducive to the sustenance of the U.S.-ROK alliance.

4.4.1 U.S. goal of stabilization and the South’s development strategy

In order to understand how the U.S. influenced South Korea’s economic development process, it is first necessary to discuss what the U.S. policy objective toward South Korea was in the post-Korean War period. A number of U.S. diplomatic documents demonstrate that after the Korean War and at least until the mid-1960s, the U.S. policy priority was sustaining political stability in South Korea. Given that the U.S. and South Korea signed a mutual defense treaty after the Korean War, it is not so surprising that the U.S. placed priority on stability over anything else. Nonetheless, the fact that the U.S. government prioritized political stability has several ramifications with regard to U.S. economic policy toward South Korea.

To begin with, this stabilization-first policy reflected the U.S. view that South

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6Dr. Besterin, U.S. AID Director back in the 1960s is quoted as saying, “Dr. Besterin explained that at the time he became Director, the overriding American objectives were incorporated into what became known as the stabilization program.” (United States. Congress. House. Committee on International Relations. Subcommittee on International Organizations 1978, 166); In a NSC meeting State Secretary is quoted as saying as follows: “Mr. Dillon stated that he was aware of the importance of economic improvement in the less-developed countries. Since political and economic stability were recognized as objectives of our policy, we would need to find ways to increase the amounts provided for economic development while maintaining security in these countries.” “Memorandum of Discussion at the 465th Meeting of the National Security Council.” October 31, 1960. FRUS, 1958-1960 Volume IV, Foreign Economic Policy, Doc 266 (my emphasis).
Korea is of little importance in economic light. That is, at the time of the alliance formation, the U.S. found little economic interest in South Korea and therefore U.S. policymakers had little interest in boosting the economy for further development. Rather, they were pessimistic on the prospect of South Korea’s economic development (Haggard, Kim & Moon 1991, 852). This partly explains why U.S. aid focused on maintaining stability and U.S. aid after the Korean War was spent primarily for this purpose. In this regard, the U.S.-ROK alliance is not a case where the alliance is driven by common economic interests (Fordham 2010). Due to this lack of economic interests in South Korea, until the late 1950s economic assistance was provided primarily in the form of short-term aid rather than long-term aid for development. Its policy goal was not accompanied by recommendations for a long-term development plan but was simply set to restore the Korean economy at the pre-war level.

More importantly, this U.S. stabilization-first policy limited the set of economic policies that the South Korean government can choose. From the U.S. government perspective, an economic development strategy that could cause harm to domestic political stability should be avoided. For example, U.S. policymakers repudiated an expansionary fiscal policy that the ROK government sought to attain rapid economic development because it might give rise to economic instability through inflation which could be transformed into political upheaval against the ROK government. Hence, the U.S. policymakers advised strongly not to employ such an
expansionary fiscal/monetary policy that can cause inflation. The U.S. government was willing to sacrifice economic development in return for less risk of domestic instability. Since the ROK government had been highly dependent on U.S. aid for its economy until the early 1960s, the South Korean government had to comply with U.S. policy recommendations. This, in turn, suggests that the ROK government that sought to devise economic development plans had to choose a development strategy within this stabilization framework.

In the early 1960s, U.S. foreign aid policy underwent changes. A key change was a reduction in aid given in the form of grants. This reduction in grant aid stemmed from the suffering of the U.S. economy in the late 1950s and the early 1960s. During this period, the U.S. economy suffered from balance-of-payment problems, and to mitigate this problem, the U.S. Congress put pressure on the Kennedy government to cut down the government expenditure on foreign aid.

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7An illustrative example that South Korea was susceptible to U.S. influence includes U.S. incessant pressure on ROK governments to improve relations with Japan. Since the liberation of the Korean Peninsula in 1945 from 36-year Japanese rule, the South Korean government had had no diplomatic relations with Japan until 1965. But the U.S. government kept pressuring the ROK government to normalize diplomatic relations with Japan because it wanted to share with Japan the financial burden of supporting South Korea. U.S. policymakers believed that once the diplomatic relations were established, the Japanese government would provide economic assistance to South Korea and Japan would serve as an export market to Korean products. However, for ROK political leaders, normalizing relations with Japan was not an attractive option because of the strong anti-Japanese sentiments in Korea. Besides, Korean political leaders were concerned that once ROK-Japan diplomatic relations were established, the U.S. would pass the buck to Japan. The U.S. was aware of this dilemma, but kept pressure on ROK governments for its policy purpose. The Aid-Memoire provided by the Park regime to the U.S. government refers to this dilemma. “Airgram From the Embassy in Korea to the Department of State.” FRUS, 1964-1968 Volume XXIX, Part 1, Korea, Doc 3. The ROK government finally normalized diplomatic relations with Japan in June 1965, but in the process, the Park regime was confronted with severe domestic resistance.
March 1961, President Kennedy declared drastic changes in U.S. foreign aid policy through his special message to the Congress. Claiming that U.S. foreign aid programs have been undertaken in an inefficient manner, he urged whole-hearted reforms of U.S. foreign aid programs (Kennedy 1961). This new aid policy was followed by two remarkable changes: (i) multiple government aid agencies were merged into a single organization, Agency for International Development (AID), and (ii) grant-based aid programs focused on emergency relief were replaced by loan-based aid programs aimed at long-term economic development in underdeveloped countries. As a result, grant-type aid was substantially reduced and replaced with loans. Reflecting this trend, U.S. military and economic aid to South Korea also cut down. Along with the reduction in the amount of foreign aid, the direction of aid policy also changed. The Kennedy administration, after reexamination of the past conduct of foreign aid programs, came to the conclusion that foreign assistance was used in an inefficient manner for lack of long-term planning for economic development. Thus, from the early 1960s on, the U.S. aid policy has shifted from grant-based aid to loan-based aid calling on recipient states to establish long-term development planning.

Since its inception in 1948, the ROK government had relied heavily on a variety

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8U.S. grant-type aid peaked during the period of 1954-60, reaching 1,581 million dollars, but this grant-type aid declined drastically thereafter. During the period of 1961-1965, grant-type aid amounted to 599 million dollars. Then during the period of 1966-1971, this dropped to 238 million dollars (Chung 1983, 181).
of U.S. aid programs for government expenditures, and this dependence became more severe in the aftermath of the Korean War that devastated the Korean economy. In 1960, U.S. aid (counterpart funds) still took up as much as 39.2 percent of the ROK government revenue. Thus, the U.S. policy shift to reduce foreign aid compelled the ROK government to take actions to meet this challenge. At that time, South Korea was in political turmoil. In the early 1960s, along with the changes in U.S. aid policy, there was a series of political events that brought about changes in the domestic political settings of South Korea. In 1960, Syngman Rhee’s government collapsed in the wake of the April 19 Student Revolution triggered by the rigged election on March 15, 1960 and was replaced with the Democratic Party’s regime led by Prime Minister Chang Myon. However, the democratically elected Chang Myon regime survived less than a year due to a military coup of May 16, 1961 led by General Park Chung Hee. Because, for the coup leader General Park, the commitment to develop the Korean economy was a main pledge and justification for his military coup, U.S. aid reduction was an urgent issue to deal with.

Since an export-oriented development strategy was adopted by the military regime, in what follows, I will discuss in more detail how this export promotion strategy was opted for by the Park regime and what influence the U.S. government

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9This information was obtained from the National Archives of Korea website: http://www.archives.go.kr/next/search/listSubjectDescription.do?id=008533; accessed on July 25, 2014.
wielded.

The declining U.S. aid drove the ROK government to embark on government-level planning in the early 1960s fully devoted to economic development. Since the new aid policy emphasized the self-reliance of recipient countries for sustained economic growth, the military government accelerated its efforts to develop the economy in a more systematic manner. The power dominance of the newly emerged military regime created a favorable environment for economic reforms (Haggard, Kim & Moon 1991). This effort was culminated in the First Five Year Economic Development Plan for 1962-1966. With this draft economic plan in hand, General Park visited the U.S. in November 1961. In the first place, General Park wanted to extract some concession from the U.S. to make Korea an exceptional case in which the new aid policy does not apply or the application of the new policy is suspended for years. In his talks with President Kennedy during his visit to the U.S., General Park tried unsuccessfully to convince Kennedy that U.S.’s continued grant aid would be indispensable for the ROK government to take the heavy burden of maintaining military posture and attaining economic development at the same time.

10 However, it should be noted that the Park regime was not the first ROK government that made up an economic development plan. Actually, the Rhee regime had a three-year economic development plan and the short-lived Chang Myon regime had already made up an economic development plan in March 1961, which served as the foundation of the Park regime’s plan. But the Democratic Party’s economic development plan was not disclosed to the public due to the military coup. That is, although the Chang Myon regime had a plan for economic development, they did not have an opportunity to carry out this plan.

11 “Memorandum of Conversation.” November 14, 1961. FRUS, 1961-1963, Volume XXII,
this development plan as well. When U.S. policymakers looked first at the First Five Year Development Plan, they were, to a large extent, critical or pessimistic about the plan. More than anything else, they saw the target growth rate of the plan, 7.1 percent per year, as unrealistic or too high. This criticism arose from their concern that the high target growth rate would lead the goal-oriented ROK policymakers to adopt an expansionary fiscal/monetary policy that could impair domestic stability in South Korea. As a result, in the amended First Five Year Development Plan of February 1964 (Lee 1999, 110), the target growth rate was lowered to 5 percent. This fact demonstrates that U.S. policymakers sought to manage ROK’s development plan within the stability framework.

It is also important to note that in the original First Five Year Development Plan released in January 1962, its focus was not on promoting exports but rather on accelerating import-substitution (Lee 1999, Chung 1983). The plan referred to export promotion, but as a means to improve balance-of-payments rather than as a driving force for economic growth. Regarding long-term economic development, the plan emphasized indigenous industrialization and resource mobilization, and especially the building-up of infrastructure for heavy industries. However, this plan was revised due to U.S. pressures. Two blunders that the military regime committed also compelled the military government to revise the original plan. The

Northeast Asia, Doc 246. In his talk with Kennedy, General Park for the first time proposed sending ROK troops to Vietnam.
Park military regime launched currency conversion reform in June 1962, freezing bank accounts and exchanging the current hwan to won at a ratio of 10:1 without consultation with the U.S. counterpart. This currency conversion plan was intended to mobilize domestic capital by bringing out hoarded funds. However, this reform failed without achieving the intended outcomes, instead bringing more instability and uncertainty to the economy. In addition, one of the coup leaders, Jong-pil Kim, who was the head of the Korean Central Intelligence Agency (KCIA), was suspected of having been involved in a stock market manipulation using his position.\textsuperscript{12} These two events eroded severely U.S.’s confidence about the Park military regime.\textsuperscript{13} Following these two events, the Kennedy government withheld its economic aid to force the military regime to conform to the stabilization program (Haggard, Kim & Moon 1991, 863).

After this series of events, the original economic development plan that stressed indigenous industrialization also underwent changes. The failure in the currency conversion reform brought home to the coup leaders the limitations of mobilizing internal resources. Facing the lack of resources to invest in economic development, the ROK military regime had to comply with the U.S. stabilization program and thus had to adopt an economic development strategy that would be commensurate

\textsuperscript{12}“Memorandum From Michael V. Forrestal of the National Security Council Staff to President Kennedy.” March 26, 1963. FRUS, 1961-1963, Volume XXII, Northeast Asia, Doc 268.

\textsuperscript{13}“Memorandum of Discussion at a Department of State-Joint Chiefs of Staff Meeting.” June 15, 1962. FRUS, 1961-1963, Volume XXII, Northeast Asia, Doc 264.
with it. In this regard, I argue that an export-promotion strategy could be the most viable option that conformed to the U.S. policy recommendations—in particular, the stabilization program. Even if the U.S. government did not impose an export promotion policy on the ROK government, however, U.S.’s stabilization policy framework actually left little room for choice with the ROK government. U.S. policymakers would have found any economic development plan acceptable if it had not been a radical but a moderate plan conforming to the stabilization framework. The original plan aimed at indigenous industrialization required a large-scale government investments and loans, but such large-scale investments and loans could generate strong inflationary pressure on the economy and thus were ill-suited to the U.S. stabilization goal.

More importantly, the U.S. brought consistent pressure to bear on the ROK government to devalue its currency relative to dollar. This relentless call for devaluation, however, should not be equated with a call for adopting an export

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14 In fact, there is little empirical evidence that U.S. policymakers forced Korean policymakers to adopt an export promotion strategy for economic development. I found no official documents such as NSC reports or FRUS documents that recommend export promotion as strategy for economic development. Accordingly, I was unable to find any official documents from the U.S. indicating or insinuating that export promotion is a U.S. strategy shared by U.S. policymakers. An individual U.S. policymaker or advisor might have a preference for export promotion but there was no consistent policy advice shared by the policy circle toward export promotion as a development strategy. For example, Draper visited South Korea in Rhee’s presidency, and in his conversation with President Rhee, he strongly urged adopting export promotion strategy. “With great tact Draper cautioned President massive U.S. aid could not continue indefinitely and first emphasis must now be placed on developing export industries and export markets. He asserted prelude this step must be establishment realistic exchange rate permitting Korean goods and services compete in world market.” “Telegram From the Embassy in Korea to the Department of State.” February 11, 1959. FRUS, 1958-1960 Volume XVIII, Japan; Korea, Doc 268.
promotion strategy. Of course, U.S. policymakers believed that devaluation could promote exports; however, they recommended devaluation not as an impetus to export-led growth but as one solution to the balance-of-payment problem that the ROK government had been struggling with. The U.S. government also believed that devaluing the currency would help to stabilize the economy because it would absorb more local currency circulating in the economy when Korean people purchased U.S. aid goods. The U.S. government also urged devaluing the currency in the belief this highly overvalued currency not only distorted the economy but also caused corruption.\(^{15}\) The ROK government had to comply with the U.S. call for devaluation, but it still needed to earn foreign exchange to invest in development projects. For example, it needed foreign exchange earnings to purchase capital goods from overseas. Given this constraint, earnings from exported goods seemed to be a better alternative. Exports increase foreign exchange earnings and enhance the economic independence of South Korea because the government can dispose of these earnings at their will (Lim 1998, 65).

\(^{15}\)There existed multiple exchange rates for dollar before 1964 in South Korea. The official exchange rate was much lower than the market exchange rate (i.e. the Korean currency was overvalued in terms of the official exchange rate). This means that businessmen who obtained a certain amount of dollar distributed by the government at the official exchange rate can earn a lot of money simply by selling it to the market at a market exchange rate. Thus, this overvalued currency served to promote a illicit connection between government and business. Despite these problems, the ROK government wanted to retain this overvalued currency because it allowed the ROK government to attract more foreign aid from the U.S. government. For example, the major source of government expenditure—the counterpart fund—was deposited in terms of Korean currency. Therefore, the ROK government was able to increase the amount of U.S. dollar given by aid by overvaluing its local currency.
Not only was export-oriented industrialization (EOI) strategy amenable to the U.S. stabilization program, but it was also more likely to be preferred to import-substitution industrialization (ISI) by U.S. policymakers for some reasons. First, the U.S. global economic policy aimed at trade liberalization as the GATT system created by the U.S. in the post-War period indicates. That is, EOI was more preferable and amenable to the U.S. global economic framework. Second, since Japan adopted EOI, the U.S. might have found that EOI is a better strategy for Korea as well. Lee (1999, 133) notes that the experience of Japan, which achieved rapid economic growth through export-oriented development strategy, had a crucial impact on the adoption of the EOI by the ROK government. In sum, although the U.S. did not force the ROK government to adopt any specific development strategy, the U.S. stabilization program actually left little room for choice with the ROK government. That is, for the ROK government, the export-led growth strategy was the most viable alternative that not only conforms to the U.S. stabilization goal, but enhances, to some extent, its economic independence as well.

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16U.S. policymakers recommended Taiwan policymakers to adopt the Japanese model of development. But I failed to find a piece of policy advice to the same effect given to Korean officials. “Telegram From the Embassy in the Republic of China to the Department of State.” FRUS, 1958-1960 Volume XIX, China, Document 261. But we can infer that as a successful economic development case U.S. policymakers recommended Korean policymakers to follow Japan’s developmental path.
4.4.2 Creation of a ruling coalition involving conservatives and chaebol and its nature

In the previous subsection, I described how South Korea adopted an export-led growth strategy and how the U.S. influenced the decision process. The fact that the ROK government embraced an export-led growth strategy for economic development and the U.S. played a significant role in its adoption is important because the adoption of the export-led growth strategy created a ruling coalition involving conservative elites and export business interests (or chaebol) that would be different from a ruling coalition generated by an import-substitution strategy (Kim 1999). Unlike an ISI-based coalition, an EOI-based ruling coalition that is dependent on the U.S. market for exports requires friendly relations with the U.S. In this regard, I argue that the creation of the EOI-based ruling coalition helped to sustain the U.S.-ROK alliance because both conservative elites and big businesses constituting the ruling coalition commonly, albeit not equally, benefit from the sustenance of the U.S.-ROK alliance especially due to the economic dependence on the U.S. market. I also argue that given increasingly concentrated economic power on the chaebol and their overwhelming influence on the Korean economy, the chaebol’s preference for security policy will have increasing influence on the maintenance of the U.S.-ROK alliance. In what follows, I attempt to elucidate these arguments.

How did the EOI-based coalition contribute to the sustenance of the U.S.-ROK
alliance? To answer this question, it is necessary to examine the nature of this ruling coalition. In the development stage of the early 1960s, the ruling coalition was forged between the military junta and export business interests, which grew into the chaebol later(Kim 1997, Kim 1999). In terms of political ideology, the military junta could be classified as extreme right-wing given that they strongly endorsed anti-communism and ruthlessly cracked down on labor movements. In this regard, the ruling coalition that was formed in the early 1960s can be seen broadly as a coalition between conservatives and big businesses.

Then, what are the common interests they share? As mentioned above, this ruling coalition shared common interests in that they benefit from excluding labor from its rule. At the initial export-led growth stage, South Korea’s major exports were light manufactured goods such as textiles, toys, apparels, etc. The military regime suppressed the rise of wages and kept workers’ wages low in order to make these labor-intensive manufactured goods competitive in the world market. Since low wages allowed businesses to earn more profits, they had no reason to oppose the military regime’s repressive labor policy and the exclusion of workers from the ruling circle. This ruling coalition always prioritized growth over (re)distribution. More importantly, the fact that this ruling coalition originated from an export-led growth strategy determined its nature, and their common interests. Since both

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17The chaebol refers to family-owned big business conglomerates(Kim 1997). Today, Samsung, Hyundai, and LG are typical examples of the Korean chaebol. Here I use the term ‘chaebol’ and ‘big business(es)’ interchangeably.
conservative elites and big businesses gained benefits from friendly relations with the U.S., they had ample reason to be pro-U.S. From the businesses’ perspective, the U.S.-ROK alliance enabled them to have easier access to the U.S. market for their exports (Chung 1983). From the ruling elites’ perspective, the economic growth based on increased exports provided a basis for their political survival. In this sense, this ruling coalition was a pro-U.S. coalition. That the EOI-based coalition generated a pro-U.S. coalition is important because, arguably, this type of coalition was conducive to the sustenance of the U.S.-ROK alliance. Here I want to claim that if South Korea had adopted import-substitution as a major strategy for economic development, it might have had a different effect on the U.S.-ROK alliance. When a state adopts import-substitution industrialization, as in many cases of Latin American states, private entrepreneurs may tend to be more nationalistic. Since import-substitution industrialization requires keeping the

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18 In the first bilateral ministerial-level talks held in October 1967 between U.S. Secretary of Commerce and Korean Minister of Commerce and Industry, the top priority agenda that the U.S. side had offered was on the expansion of Korean exports to the U.S. market. Five agendas were offered by the U.S.: a) expansion of Korean exports to U.S. b) promotion of U.S. export to Korea c) Korean regulations affecting US professional and commercial services d) patents, trademarks, and copyright protection e) US banking and private activities in Korea. In these talks, Korean minister expressed gratitude to the U.S. counterpart for U.S. help in facilitating Korean exports to the U.S. market. According to the diplomatic document, the U.S. government helped to promote Korean exports by arranging meetings so that Korean government officials who traveled around U.S. cities to explore the U.S. market could contact key economic figures in U.S. cities such as bureaucrats, bankers, business people, etc. This suggests that the U.S. was greatly interested in the promotion of Korean exports and provided support to that end. Given that Korean business people participated actively in the policymaking process for export promotion, they may have been aware of the U.S. favors. Ministry of Foreign Affairs. “The First Korean-American Commerce-Ministers’ Talks, Seoul, October 27-November 1, 1967.” Roll No. N-0006. File No.1, Diplomatic Archives in Seoul.
domestic markets closed to more developed states’ competitive products, private entrepreneurs could be inclined towards nationalism and even hostile toward developed countries. Given this, it can be argued that the EOI adoption made not only the U.S.-ROK alliance but also the ruling coalition more stable because they had no reason to dispute over the U.S.-ROK relationship. Neither conservative elites nor big businesses had reason to antagonize the U.S.

It is important to note that in the early 1960s the state-business relations in South Korea were dominated by the state. That is, the military regime and the subsequent ROK governments until 1980 had an upper hand over big businesses (Kim 1997, Kim 1988). This state dominance over business stemmed from the fact that the government controlled access to domestic and foreign capital. The government was able to control the access of firms to foreign capital because the military government was involved in every decision on how to distribute foreign aid funds, which were the major source of foreign capital in the early developmental period. More importantly, the military government nationalized private banks in Korea in June 1961, right after the coup (Kim 1997, Saxonhouse 1983). This nationalization of banks, along with its decisional power associated with the allocation of foreign capital, allowed the military government to retain effective control over the businesses. Other than the control of access to domestic and foreign capital, the

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19 As many observers notes, export-oriented industrialization is outward-looking while import-substitution is an inward-looking.
military government was able to control firms using a set of policy incentives such as tax credits, export subsidies, etc.

Not only did the military government employ its policy tools to discipline the businesses but also abused its law enforcement power. Right after the military coup, the military junta charged big business owners with illicit accumulation of wealth. The big business owners were accused of giving political funds to government officials (bribery), tax evasion, illegal acquisition of government invested properties, etc (Kim 1997, 115). As a matter of fact, these illegal activities committed by firms and dirty connections between politicians and private entrepreneurs were rife and an open secret at that time. Thus, the military government’s charges of these businesses were aimed at taming the private entrepreneurs and earning legitimacy for their military coup rather than at getting rid of corruption (Kong 1999). Since the military junta needed cooperation from the businesses for economic growth, they had to demonstrate their power first to subordinate the businesses to their will (Kim 1997).

It is worth pointing out U.S. reactions to this illicit-accumulation-of-wealth issue. Even though U.S. policymakers were well aware of the illegal practices of these private entrepreneurs who were charged with illicit accumulation of wealth, the U.S. perception of this event is well illustrated in the following: “Among the pending problems assumed by the new government was a group of old cases of tax evasion, profiteering by illicit means and related offenses involving most of the country’s leading industrialists. This posed a real dilemma, since the offenses were so flagrant and well-known that they could not be allowed to go unpunished, yet the people and corporations concerned represented a very substantial
they felt uncomfortable and discontent with the military regime’s accusation of the private entrepreneurs (Kong 1999). The U.S. government, which was highly suspicious of the real intention of the military regime,21 was concerned more about the adverse effect of these charges on economic stability. A telegram from the U.S. Embassy in South Korea that analyzes the Korean situation at that time reads:

In [the] final analysis [the] ability [to] control price inflation will depend on more rapid revival of manufacturing and trade to meet potential demand which has been created. This in turn requires government settlement with illicit profiteers and tax evaders who control Korean industry and who have been dragging their heels in [an] effort [to] obtain better terms on their assessments and fines.22

The quote cited above confirms that the U.S. primary concern was about stability, and for this reason U.S. policymakers may have wanted to protect business people in South Korea. The U.S. may have intended to favor and encourage the growth of market-oriented forces or capitalists in South Korea. Kong (1999) asserts that the U.S. brought strong pressure to bear on the military government to settle this dispute with the business people in favor of them. In this regard, I argue, the

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21The U.S. government was suspicious of the ROK government law enforcement because the ROK CIA was deeply involved in this charge. “Telegram From the Embassy in Korea to the Department of State.” October 28, 1961. FRUS, 1961-1963 Volume XXII, Northeast Asia, Doc 244.

U.S. served as a sponsor to private entrepreneurs in Korea and this U.S. role as a sponsor could be another source that cultivated the pro-Americanism among the chaebol. I offer three reasons to support this argument. First, in the polarized Cold War era, U.S. governments supported anti-communism and in this regard the U.S. had a strong reason to favor capitalists or market-oriented forces. Second, U.S. policy toward South Korea at that time emphasized economic development as a means to achieve stability. Thus, it was necessary to encourage the growth of local private entrepreneurs for sustained economic growth. A Draper Committee report\textsuperscript{23} that played a crucial role in formulating the new aid policy of the 1960s recommends the growth of local private enterprise(States. 1959, 92)\textsuperscript{24}. Finally, when the military junta took power in Korea, the U.S. government suspected the political orientation of this military junta to be more nationalistic and radical than its predecessor governments and thus to be less amenable to U.S. influence.\textsuperscript{25}

\textsuperscript{23}Draper Committee was established on November 24, 1958 by the request of President Eisenhower to evaluate the Mutual Security Program established in 1951. William H. Draper Jr. was chair of this committee. The committee report was done in 1959. For the influence of this report, see “Memorandum of Discussion at the 465th Meeting of the National Security Council.” October 31, 1960. FRUS, 1958-1960 Volume IV, Foreign Economic Policy, Doc 266.

\textsuperscript{24}The report says, “In this connection, every feasible means should be employed to assist and encourage the growth of local private enterprise.”

\textsuperscript{25}A U.S. special intelligence report that was written right after the 1961 coup refers to this political orientation of the coup leaders. “South Korea’s coup leaders are a new and different breed from the civilian and the more senior military people with whom the US has had most contact. Their authoritarian and nationalistic stamp suggests that they will be less receptive to US guidance. Furthermore, they will be tough, determined, and difficult to deal with. They will probably continue South Korea’s alignment with the US, recognizing their country’s dependence on the US, but at the same time will seek to assert South Korea’s independence in military, economic, and political affairs. ROK-UN military command relationships will probably be a source of continuing difficulty.” “Special National Intelligence Estimate.” FRUS, 1961-1963 Volume XXII, Northeast Asia, Doc 224; a similar recognition is also found in a US Task Force
Concerned about this nationalistic tendency in the new military regime, the U.S. government may have found it necessary to support private entrepreneurs, who seemed to be less nationalistic, in order to counter this nationalistic trend.

As time passed, the state dominance over businesses changed. It is important to note that the balance of power between the state and big businesses has tilted in favor of the big businesses. There are four factors that contributed to this trend toward the enhanced power of big businesses in South Korea. One factor is the progress of democratization in South Korea. Many Korean observers argue that democratization changed the rules of the game that had been played by the state and business. “Democratization and the rise of electoral politics have radically changed the rules of engagement between business and government” (Moon 1994, 153). Progress towards democracy meant politicians should rely on financial support from business circles for campaign funds. Facing the upcoming presidential election of 1992, the head of the Federation of Korean Industry (FKI), the most influential business association in Korea, announced that they would provide political donations only to politicians who are willing to support and protect business freedom (Moon 1994, 155). This illustrates that the chaebol were politically more assertive as the political system shifts toward democracy.

Report on Korea. “Now we are faced by a tough, authoritarian, nationalistic regime which may be capable of overriding the political obstacles to action on Korean problems, but which is inexperienced, likely to be plagued by continued factionalism, and clearly less amenable to U.S. influence.” “Memorandum by Robert H. Johnson of the National Security Council Staff.” FRUS, 1961-1963 Volume XXII, Northeast Asia, Doc 225.
Another factor that enhanced the influence of the big businesses in Korea is globalization. Globalization and liberalization of economic policy means leaving lesser room for a state’s intervention in the market that reduces the governmental power over business such as preferential credit (Mo & in Moon 2003, 136). That is, globalization deprives the government of traditional policy tools that can discipline the private sector (Mo & in Moon 2003, 137). As mentioned earlier, the military regime held leverage over big businesses by controlling access to capital. But financial globalization allowed the chaebol to have easy access to foreign capital for investment, eroding the state’s ability to control businesses.

A third factor worth mentioning is the strengthened organizational power of big businesses in South Korea. Many observe that business associations played a central role in business-government interactions in South Korea (Jones & Sakong 1980, Moskowitz 1984). These business associations helped to reduce collective action problems among individual big firms and strengthened the bargaining power of business over the government. As mentioned above, the Federation of Korean Industries was organized in 1961 and has been the most influential business organization.

Finally, the Korean economy has moved toward concentrated economic power on the chaebol as the economy becomes more heavily dependent on exports for growth, and as the chaebol’s production accounts for an increasingly greater portion of the total national production. Exports as a share of GDP continued to
rise from 4.9 percent in 1962 to 56.5 percent in 2012.\textsuperscript{26} Similarly, the ten largest chaebols’ total sales as a share of GDP continued to increase from 15.1 percent\textsuperscript{27} in 1974 to 76.5 percent in 2011.\textsuperscript{28} In 2012, Samsung Group, the biggest chaebol in South Korea, alone accounted for 28 percent of total South Korea’s exports in that year.\textsuperscript{29} These figures indicate that economic power has been concentrated on the few select chaebol and as a result the few select chaebol will have more say in how the Korean society should be run.

In sum, the adoption of export promotion for economic growth determined the nature of the ruling coalition, allowing both government elites and big businesses to strongly endorse the U.S.-ROK alliance. This implies that pro-Americanism is deeply embedded in the socio-economic structure of South Korea, resultingly bolstering the resiliency of the U.S.-ROK alliance. This suggests that as long as common interests last that arise from economic relations with the U.S., this coalition will continue to endorse the U.S.-ROK alliance. In addition, the shift in power balance between the state and big business is important because the growing power of the big businesses vis-à-vis the government implies that the policy preferences of big businesses may become more important even in the issue

\textsuperscript{26}I obtained this information from the World Bank database website: \url{http://data.worldbank.org/}
\textsuperscript{27}This figure is a share of GNP not of GDP (Kim 2013).
\textsuperscript{28}“Top ten chaebol now almost 80\% of Korean economy,” August 28, 2012. Hankyoreh.
\textsuperscript{29}“S. Korea’s ratio of exports to GDP hits new record last year.” January 8, 2013. Yonhap News Agency.
of the U.S.-ROK alliance.

4.5 Wartime Operational Control and U.S.-ROK Alliance Debate

Broadly speaking, so far I have discussed how the EOI-based socio-economic and political order was formed in the wake of the adoption of an export-oriented growth strategy in South Korea and how the U.S.-ROK alliance, whether directly or indirectly, affected the creation of this order. Today’s Korean society is still overwhelmingly influenced by this socio-economic order created in the 1960s. In this section, I address the issue of wartime operational control—the question of whether the U.S. should retain or return the wartime command to control ROK forces to South Korea—that came to surface in 2003 and is still a pending issue between the U.S. and South Korea. This wartime operational control issue is not only important but also revealing in several respects. First, this wartime operational control issue started to surface when the ruling coalition comprised of conservatives and the chaebol was replaced by a liberal government in South Korea. Second, when this issue emerged, the South’s economic dependence on the U.S. was on the decline. Third, when this issue emerged, although the chaebol were not a member of the ruling coalition of the liberal regime, they were restoring its power damaged by the 1997 financial crisis (Mo & in Moon 2003). That is, the wartime operational
control issue was raised in the context of the overall erosion of the existing order that had supported the EOI-based ruling coalition, except for the revival of the chaebol’s power arising from their increasing economic concentration. Finally, this wartime control issue illustrates how big businesses in Korea would respond to autonomy-seeking by a progressive government.

This wartime operational control issue dates back to the Korean War period. When the Korean War broke out in June 1950, then-President Syngman Rhee voluntarily handed over the command of ROK forces to U.N. Supreme Commander General MacArthur in July 1950 for effective command and control of U.N. forces including the ROK and the U.S. forces.\(^30\) But even after the war the operational command was not returned to South Korea because the Korean War ended in a cease-fire not in a peace treaty.\(^31\) In November 1978, there was some change in the command structure of the troops that has been maintained since. The Combined Forces Command (CFC) was created in 1978 and the operational control was transferred from the United Nations Command (UNC) to the CFC. The CFC is a joint defense system commanded by a four star U.S. general as commander-in-chief and a Korean four star general as deputy commander-in-chief.\(^32\) The U.S.


\(^{31}\)Right after the Korean War, the Mutual Defense Treaty was concluded in 1953 between South Korea and the U.S., but the treaty does not refer to the command structure of the ROK forces, with the operational control of the Korean Army still in the hands of the U.S. command.

command exercised both wartime and peacetime control of the ROK forces, but
the peacetime control was handed over to ROK government in 1994 while wartime
control remaining in the hands of the CFC commander.\textsuperscript{33}

In the 2002 presidential campaign, the presidential candidate Roh Moo-hyun
raised the wartime operational control issue and pledged to take it back to ROK
forces.\textsuperscript{34} What drove him to endeavor to regain the control was his confidence in
the increased capabilities of Korea. Roh repeatedly emphasized that South Korea
is strong enough to assume more responsibility for self-defense. In an interview
with a news agency, he said, “The time has come for South Korea to defend itself.”
“We have the capability. There will be no problem with national security. South
Korea’s defense capabilities have been much underestimated.”\textsuperscript{35} President Roh’s
policy fits well with the theoretical argument advanced earlier: With its increased
capabilities, a weaker state in an asymmetric alliance seeks to regain its autonomy.
Another underlying motivation that called for the return of the operational control
was a divergent view between the allies over the North Korean nuclear issue. While
the Bush administration adopted a hard-line policy against the North and was
even ready to wage a war against the North to stop it from developing the nuclear
program, the Roh administration sought to engage North Korea and adopted a

\textsuperscript{33}“S. Korea, US to Discuss Command Transfer Fri.” October 17, 2005. Korea Times.
\textsuperscript{34}“U.S. says South Korean push for wartime command of troops won’t affect alliance” September 26, 2006. Associated Press.
\textsuperscript{35}“President Roh says SKorea’s military strong enough to regain wartime command from US” August 9, 2006. Associated Press.
conciliatory approach to this issue. Since the Roh administration did not want a war to occur in the Peninsula, it believed that taking back operational control would help reduce the chance of war.\(^{36}\) That is, it can be said that the fear of entrapment was another motivation of the ROK government to take wartime control back (Snyder 1984). But given President Roh’s repeated emphases, the former seemed to be a stronger motivation to regain the wartime control.

As the South put this wartime operational control on the agenda for security cooperation, this issue was first discussed at the defense ministerial level in the 32nd Security Consultative Meeting (SCM) held in October 2005.\(^ {37}\) However, in the 33rd SCM talks held in October 2006, divergent views surfaced over the timing of the transfer of the control.\(^ {38}\) Both sides had little trouble in reaching agreement on handing it over to the ROK command, but they displayed differences over the timing of the transfer and this timing issue remains unsolved until 2007. While the South wanted to regain the wartime control by 2012, the U.S. wanted to give it back earlier, by 2009.\(^ {39}\) Right before the SCM meeting of October 2006, North

\(^{36}\) “Korean Foreign Minister Ban Ki-moon and U.S. Secretary of State Condoleezza Rice agreed on a joint statement in which Seoul respects the necessity for “strategic flexibility” while Washington respects Korea’s position that it shall not be involved in regional conflicts in Northeast Asia against the will of the Korean people.” (my emphasis) “Korea-U.S. step up talks on command transfer.” Jan 26, 2006. Korea Herald; Ties between the two allies have been strained over how to rein in North Korea from developing nuclear weapons and Roh’s rejection of a joint plan for armed intervention in the event of instability there. “South Korea leader hints at ending US control over army” Oct 1, 2005. AFP.


\(^{38}\) “US, S Korea at odds over when to transfer wartime control command.” Oct 2, 2006. BBC Monitoring Asia-Pacific.

\(^{39}\) South Korea preferred 2012 insisting that it takes some time for ROK forces to be fully
Korea undertook the first alleged nuclear weapon test on Oct 9, 2006, and this issue dominated the agenda for the SCM meeting. Hence, the timing for the transfer was not settled in this meeting. Then why did they reach agreement on the transfer so quickly while they failed to reach agreement on the timing of the transfer? Actually, for the U.S., holding the wartime control of ROK forces has two practical meanings: responsibility for the defense of South Korea and the assurance of the presence of U.S. forces in Korea.\textsuperscript{40} Thus, handing it back to South Korea means relieving the U.S. of both burdens, although it entails less U.S. influence on South Korea.

More importantly, at that time, the Bush administration was also planning to redeploy and reorganize U.S. forces in Korea in order to transform the U.S. troops into quick reaction forces following a Global Posture Review (GPR) (Lee 2007, 73). In sum, the South’s desire to change the status quo of the U.S.-ROK alliance coincided with the U.S.’s need to change it in the same direction (loosening the ties and loosening the commitment). Then why did the allies fail to reach consensus on the timing? Reportedly, the U.S. preferred an early transfer because it allows the Pentagon to focus its resources somewhere else.\textsuperscript{41} However, the U.S. proposal for an early transfer may be due to uneasiness toward South Korea’s rather assertive attitude. A Korean observer commented that “The U.S. proposal for 2009 is, I ready to assume the operational control. But the U.S. insisted on an earlier transfer, claiming that South Korea has enough capability to deal with the earlier transfer.

\textsuperscript{40}“Wartime Army Control.” October 5, 2005. Korea Herald.

believe, like a reaction to the Seoul government’s increasing call for independent defense posture.” 42

But after U.S. Secretary of Defense Rumsfeld stepped down from his position, things changed. On 8 November 2006, U.S. Defense Secretary Donald Rumsfeld resigned and CIA Director Robert Gates took over the position. In November 2006 South Korea’s Defense Minister was also replaced with new Defense Minister Kim Jang-soo. Since the CFC Commander urged a prompt settlement of the transfer issue, defense ministerial level talks were scheduled on 24 Feb 2007. Right before the talks, working-level Security Policy Initiative (SPI) talks were held to settle differences over this issue during 8-9 Feb 2007. Finally, in February 2007, they reached agreement to transfer the wartime operation command back to South Korea by April 17, 2012. They also agreed to disband the CFC and for each force to create a separate command. But for effective cooperation between the two separate commands, they agreed to create a Military Cooperation Center (MCC) with ten subordinate institutions. 43

The Roh administration’s push for regaining operational control provoked severe criticisms and objections from the conservative opposition party. These criticisms included a budget issue, the inefficient command structure in the wake of

dismantling the CFC, the erosion of the U.S.-ROK alliance, etc. I will not address all these issues, but it is worth noting that these criticisms provided justifications for reversing the course of the wartime control transfer and delaying the transfer once the conservative party regained power in the 2007 presidential election.

Instead of looking at the opposition party’s criticisms, here I focus my attention on what was the voice of the business community regarding this wartime operational control issue. The reasons why I am interested in the view of the business community are twofold. First, it was very rare in Korea that business people express their view collectively regarding some foreign policy issue. But this happened during the Roh administration.44 So I want to analyze what this means. Second, a closer look at the view of the business community allows us to find some clues to why the business community supports the persistence of the U.S.-ROK alliance. Provided that the power of the big businesses increases, understanding their position may help have a better understanding of the future of the U.S.-ROK alliance. I will address each point in what follows.

As mentioned above, it is important to note that the Korean business community had rarely raised their voice on foreign policy issues, and it started to voice

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44 One may tempt to raise a question as to why during the presidential term of the Kim Dae-jung administration, which was also a liberal regime, little voice was raised by the business community. My answer would be that during his presidential term the big business underwent restructuring and the Kim Dae-jung government was in a dominant position (Mo & in Moon 2003). Besides, the Kim Dae-jung government had a coalition partner, the United Liberal Democrats, a right-wing conservative party led by Kim Jong-pil, who used to be one of the coup leader that created the military government in 1961. This fact might have rendered the Kim administration’s security policy moderate.
their opinion on foreign policy agendas, for example, by issuing a public statement, especially concerning the U.S.-ROK alliance as the Roh administration took office in 2003. Kim (2011, 4) notes that “Historically reviewing the influence of Korean business sectors on the ROKUS alliance, I found that it had been, at best, marginal until the 1990s, but turned relatively striking in the 2000s.” He also adds that “In reality the Federation of Korean Industry, the umbrella interest group of large firms, showed little interests in foreign policy and even looked incompetent to push their agenda to the government. Although the portion of FKI’s policy proposals with international orientation was only 0.7% in the 1995-2000 years, its overall rate of acceptance was as high as 70%” (Kim 2011, 6). Then what explains this change in the trend? Why did the big business remain silent before 2000 but become more vocal in the 2000s? Kim (2011) attributes this change to the progress of democratization. As noted in the prior section, it seems to be the case that democratization enhanced the influence of big businesses in Korea because politicians need financial support from the big businesses for campaign funds. However, given that democratization became settled in South Korea in the 1990s, this democratization argument does not explain well why the big businesses remained silent in the 1990s.

This frequent expressions of their views on the U.S.-ROK alliance can be explained better by the regime change from conservatives to liberals in South Korea in the 2000s than the democratization argument. In South Korea, it was the 1997
presidential election that for the first time the opposition party candidate, Kim
Dae-jung, defeated the ruling conservative party candidate and came to power,
ending the almost 50 year rule by the conservative ruling coalition. In the next
presidential election, liberals succeeded in retaining power, extending the rule of
liberals for ten years. Thus, what made the big business more vocal was the con-
secutive progressive regime rule. For the big businesses, if its ally, a conservative
party, were in power, they would have little reason to make their voice heard in such
a vociferous manner. In the first place, they have little reason to raise their voice
because of little chance of differences over certain issues. Second, even if disputes
arise between the conservative government and business due to some differences
over certain issues, the Korean business community has developed a variety of ef-
effective communication routes(Moskowitz 1984), whether formal or informal, that
allows for resolving the differences between them without resorting to a public
statement.\footnote{Jones and Sakong(1980) suggest that business interests can affect economic policy in various ways. In particular, business associations such as FKI, and Korea Trade Association(KTA), played a central role in business-government interactions and allowed business people to exert influence on government policy. In formulating economic policy, personnel from business associations participated in government decision-making as well. Personal contacts with high ranking government officials allowed them to influence government policy and raise voice through business associations(Jones & Sakong 1980, Moskowitz 1984). Besides, heads of these business associations were recruited from a person of national prominence with cabinet-level experience in economic affairs(Moskowitz 1984, 169). Jones and Saking(1980, 70-71) note that “for example, in 1974 KTA made 167 formal recommendations to the government and 76 percent were adopted, at least in part.”} But when its ally failed to hold onto power, the big businesses had
to resort to alternative method such as releasing a public statement to influence
the government policy. This may reveal that the big businesses in Korea may have influenced the government’s foreign policy, especially policies related to U.S.-ROK alliance issues.

An illustrative example includes a press release issued by the FKI, the most influential business association in Korea, that urges the Roh administration to dispatch ROK troops to Iraq in 2003 in the face of the demand from the U.S. Bush administration. At that time, the U.S.-ROK relations was at quite a delicate moment because of a series of events that took place in Korea: heightened anti-U.S. sentiments triggered by an incident that killed two middle-school female students run down by U.S. military vehicles during training; criticisms of U.S. unilateral foreign policies; the emergence of a new Roh administration that emphasized a more equal partnership with the U.S.; base relocation issues with the U.S. Although this press release focused on advertising economic benefits accruing from dispatching ROK troops to Iraq, it is interesting that this brief report also reveals how the business community evaluates the U.S.-ROK alliance in economic terms. In this press release, the FKI warns that if the ROK government does not accept the U.S. offer, the U.S. will deteriorate economic relations with South Korea by reinforcing its trade pressure on South Korea, resulting in the degrading of South Korea’s sovereign credit rating. The FKI also argues that the presence of the U.S. forces contributes to a 1.2 percent point increase in economic growth. This means that withdrawal of U.S. forces will reduce Korean GDP by 1.2 percent point. Accord-
ingly, the economic value of the U.S.-ROK alliance is estimated to be as much as 50 trillion won (roughly $50 billion) as of 2002.\footnote{This press release in Korean is available at: http://www.fki.or.kr; accessed on June 24, 2014.} This report hints at why the big businesses opposes the transfer of wartime control or the change in the U.S.-ROK alliance. The retaking of wartime operational control or the dissolution of the alliance commonly mean that the ROK government should take more responsibility for defense or full responsibility for defense. In the final analysis, the big businesses oppose such an idea because taking more (or full) responsibility means that they have to shoulder the heavy tax burden as South Korea assumes more responsibility for self-defense. At that time, along with the plan to retake wartime operational control, the Roh administration also pushed for a military modernization program designed to enhance its independent military capabilities. But a conservative media was highly critical about this plan, pointing out excessive costs: “To guarantee national security once the Korea-U.S. Combined Forces Command is dismantled, that would mean spending 20 times as much as the annual defense budget by 2020. To secure those funds, the government must either collect W12.5 million in tax from each Korean or drastically slash the education and welfare budgets.”\footnote{“Seoul Must Get Ready to Take Back Troop Control in 2015.” July 1, 2010. Chosun Ilbo.}

In addition to public statements, during that time, a series of reports from the think-tanks created or supported by the big businesses alerted the crisis that the U.S.-ROK alliance faced and advocated restoring the U.S.-ROK alliance. Kim(2011,
6) notes that “Now, societal stakeholders got actively involved in foreign policy debates. Particularly the Korean big businesses functioned as a stronghold of justifying the ROK-US alliance. It was never an accident that Samsung Economic Research Institute (SERI) published a paper on the ROK-US relations for the first time in 2004.” A view similar to the one that was expressed in the public statement of the FKI is revealed in a report released by the Samsung Economic Research Institute (SERI). This report (SERI 2004) emphasizes that the U.S. is still important as an export market for Korean products. Although China replaced the U.S. as the top trading partner, this report claims that the U.S. market is still important for Korean products, especially high value-added exports such as semi-conductors, automobiles, mobile phones, and computers. Similarly, in 2008, a book-type report was published in the Korean Economic Research Institute, which is a research institute for the FKI. The book (Chung 2008) deals with the U.S.-ROK alliance, and focuses on how to restore the compromised relationship in the last decade (i.e. during the liberal regime rule in Korea).

In sum, a series of reports suggest that the big business still place a great value on the U.S.-ROK alliance. The reason why they place a great value on it is simple. The relationship with the U.S. generate greater benefits than the costs to the big businesses. The U.S.-ROK alliance allows them to avoid a high tax burden. The U.S. market is still important for their high-end products despite the overall reduction in economic dependence. These things suggest how the big businesses in Korea
would respond to moves toward autonomy-seeking behavior such as calling for the return of wartime operational control. They would oppose such behavior. The negotiation between the South and the U.S. over the wartime operational control issue is in stalemate. In June 2010, the conservative Lee Myung-bak government following the Roh government agreed with the U.S. government to postpone the transfer of the wartime control from April 17, 2012 to December 1, 2015. The Park Geun-hye government that succeeded the Lee government followed the path of the predecessor. This EOI coalition will seek to delay the transfer of the control at the sacrifice of other issues that do not harm their interests.

4.6 Conclusion

This study started with the question of why the U.S.-ROK alliance persists despite South Korea’s remarkably enhanced capabilities since its alliance formation with the U.S. Drawing on the prior chapter’s argument that the asymmetric alliance is more likely to endure if the economic dependence on the major power ally is high despite its increasing capabilities, this study examined the continuation of the U.S.-ROK alliance in this light. The Korean case defied a clear-cut conclusion of whether this case fits the argument because South Korea’s level of economic dependence on the U.S. is still high in general although its level of economic dependence is low relative to those of minor powers in bilateral defensive alliances. Thus, it would
be safe to assume that the U.S.-ROK alliance is headed toward dissolution rather than toward consolidation.

Nonetheless, this study focused on what factors render the U.S.-ROK alliance resilient. I explored how the U.S. played a role in creating the EOI-based ruling coalition in South Korea and the resulting pro-Americanism that was conducive to the sustenance of the U.S.-ROK alliance. Although the U.S. did not impose any specific development strategy such as export promotion policy, the U.S. stabilization program that prioritized internal stability over economic development severely circumscribed South Korea’s choice of development strategy. In this regard, the adoption of an export-led growth strategy was the most viable alternative that the ROK government can opt for.

Although it is not clear whether the U.S. intended or not, the export-led growth strategy generated a ruling coalition involving conservative elites and big businesses (or the chaebol) that benefit from friendly relations with the U.S. In addition, export promotion empowered big businesses in Korea. The fact that this EOI ruling coalition still wields overwhelming influence in South Korea implies that the influence of the U.S.-ROK alliance is deeply entrenched in the socio-economic structure of South Korea, making the U.S.-ROK alliance resilient. The wartime operational control issue is suggestive in that it reveals how the big businesses in Korea evaluate the U.S.-ROK alliance and why they subscribe to the status quo of the alliance in response to autonomy-seeking forces in Korea. Given the
growing power of the big businesses in Korea, this may serve as a factor conducive to prolonging the U.S.-ROK alliance. This study suggested that the future of the U.S.-ROK alliance will be greatly influenced by the preferences of the big businesses in Korea given their growing power in Korean society. Since the chaebol do not want the alliance to end, it will last for a long while but if it should be dissolved, it is likely to be replaced with a multilateral alliance led by the U.S. because of the reluctance of the big businesses to bear the heavy tax burden of self-defense and of their deep-seated pro-Americanism.

Finally, based on the research undertaken here, I will provide several suggestions for future research. First, here I attempted to ascertain how pro-Americanism emerged among the Korean business community by looking at the early economic development stage. I claimed a sponsor role of the U.S. for private entrepreneurs but this arguments needs more elaboration and further empirical evidence to substantiate. In addition, it is not empirically borne out what special treatments was granted to South Korea. Thus, this needs further empirical evidence. Second, the South Korean case shows that the U.S. exercised significant influence on the ROK government in the process of adopting its development strategy. The South Korean case study suggests that U.S. policymakers carried out Korean policy within the framework of regional policy. In this respect, a comparative study on these countries focusing on the U.S. influence on these countries may allow us to have a better understanding on the economic development processes of these countries.
and their security policy.
Chapter 5

Conclusion

It is in order to discuss what we have learned from this thesis and what are the directions for future research. In this thesis, the starting point was taking into consideration the autonomy concern of a minor power with regard to alliance duration. In prior studies, the likely effect of the autonomy concern of a minor power on alliance duration has been underestimated. Even Morrow (1991), who put forward the security-autonomy tradeoff model, approaches the issue of a minor power’s capability increase from the capability aggregation approach, arguing for little effect of a minor power’s increased capabilities on alliance duration on the ground that the minor power’s increased capabilities end up making a marginal contribution to the overall capabilities of the alliance. However, empirical findings do suggest that the autonomy concern of weaker states play a role in alliance duration; that is, an array of alliances conceived to be susceptible to the autonomy concern of minor powers tend to terminate earlier than otherwise, other condition being equal. As shown in Chapter 2, geographically close and unequal alliances—the unequal distribution of power between allies exacerbates the autonomy concern—tend to terminate earlier than geographically close and equal alliances. Similarly, as shown
in Chapter 3, minor powers’ increased capabilities may increase the likelihood of alliance termination although their effect on alliance duration is conditional upon their economic dependence on major power allies. In Chapter 4, I find that the U.S.-Korean military alliance has enduring because South Korea’s economic dependence on the United States also created a pro-U.S. ruling coalition involving conservative elites and big businesses that exerts great influence on the Korean society.

These findings definitely have some policy implications. First, major powers with geographically close minor power allies should take the autonomy concern of their weaker partners seriously if they don’t want to jeopardize the alliance ties because geographically close minor power allies may be more sensitive to assertive or unilateral actions that appear to ignore the minor powers’ interests. Thus, for such major powers, being prudent may help to manage the alliance ties at lower costs. Second, while the autonomy concern of a minor power may operate as a destabilizing factor in maintaining the alliance, linking security interests with economic interests between allies seem to produce countervailing effects especially when minor power allies’ capabilities increase. Economic linkage (e.g. trade dependence) may serve to restrain minor powers that seek to gain more autonomy in line with their increased capabilities. Thus, providing some economic incentives to a minor power ally could be an effective means of sustaining the alliance ties when the minor power’s capabilities are on the rise. As the U.S.-ROK alliance
case suggests, this economic linkage could also help cultivate domestic forces that support the existing alliance. Finally, minor powers that want to gain more autonomy should try to minimize friction with their stronger ally, (otherwise gaining autonomy could be costly) and they also should consider likely domestic resistance if changing the status quo involves undermining the dominant domestic interests.

Based on these findings, I provide a few suggestions for future research. First, the empirical findings of this study suggest that paying more attention to minor powers’ autonomy concerns in terms of how they can impact alliance ties could be a fruitful avenue for future research. Although empirical tests undertaken in this thesis did not quantify the concept of autonomy, the Alliance Treaty Obligations and Provisions (ATOP) (Leeds et al. 2002) dataset provides information on whether an alliance treaty includes any provision for adherence to the noninterference in the internal affairs of its alliance partner(s).\(^1\) Since this adherence to the noninterference in the internal affairs of its alliance partner(s) is very closely related to the notion of autonomy, it can be used to measure the concept of autonomy in future studies. Using this variable we can test many interesting hypotheses. For example, this thesis suggests that granting autonomy to alliance partners may prolong the duration of alliances by relieving the alliance partners of their autonomy concerns. However, we should consider some selection effects at the formation stage. That is, either at least one of the alliance members is seriously concerned

\(^1\)For more detail, refer to the ATOP website: http://atop.rice.edu.
about the interference by their potential alliance partner or neither of the alliance members is concerned about the interference by their potential allies may include this provision. Therefore, examining under what conditions allied states insert this provision and whether the insertion of this provision affects alliance behavior including alliance duration could be an interesting topic for future research.

Second, in the second chapter, I test my theoretical argument associated with (un)equal alliances and geographical distance against the data of alliance duration. But my argument advanced in the second chapter can be also tested against the data of alliance formation because if the autonomy concerns of weaker states are at work and the geographical distance between allies plays a role as the theory contends, alliances that are more likely to end should be less likely to be formed in the first place. For instance, inefficient type of alliances such as geographically distant and equal alliances are less likely to be formed than geographically close and equal alliances. Thus, testing the argument against alliance formation allows us to appraise the extent of the validity of this autonomy concern argument.

Third, in the third chapter, the unit of analysis is bilateral alliances. But the hypotheses tested in that chapter are also readily applicable to multilateral alliances. In this regard, the empirical analysis can be extended to these cases and test the generalizability of the argument advanced in Chapter 3.

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2If neither of the members is concerned, they may decide not to include this provision.

3To test the hypotheses, multilateral alliance can be broken down into allied dyads as done in Chapter 2, for example.
Finally, the case study of the U.S.-ROK alliance of Chapter 4 suggests that the characteristics of a ruling coalition have had an impact on the sustenance of the U.S.-ROK alliance. That is, the U.S.-ROK alliance case suggests that a politically liberal regime (or a leftist regime) is more eager to seek autonomy than is a conservative regime. This means that there is some variation in autonomy-seeking behavior depending on the political orientation of the regime in office. In the large N analysis undertaken especially in Chapter 3, I assume that minor powers’ are unitary actors and they seek to gain more autonomy as their capabilities increase; however, the U.S.-ROK alliance case suggests that autonomy seeking behavior is more prominent in leftist regimes than in rightist regimes. While the liberal Roh regime was ready to loosen the alliance ties with the U.S. and to move toward self-defense, the following conservative regimes sought to reverse the course. What we observe from the U.S.-ROK case study is commensurate with Narizny’s argument. Narizny (2007) argues that the emergence of different domestic political preferences result in different foreign policy despite no change in the international security environment. This means that foreign policymaking is partisan rather than highly autonomous from domestic interests. In the large N analysis conducted in the prior chapters, I did not control for the effect of the political orientations of regimes in power on alliance duration, but future large N analysis may incorporate this factor into the statistical model. To look at whether this left-right distinction in terms of autonomy-seeking is applicable to other cases, a comparative case study may
also be useful. Given that in appearance East Asian countries such as Japan and Taiwan followed a similar path of economic development in the Cold War era, a comparative study or case studies of individual countries from the point of view of how the U.S. security commitment has affected the economic development process and what kind of ruling coalition it generated may shed light on the current security relations of these countries with the U.S.
Bibliography


