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MONTEREY, CALIFORNIA

THESIS

**THE RELATIONSHIP BETWEEN U.S. MILITARY
SPENDING AND THE COHESION OF THE ROK-U.S.
ALLIANCE**

by

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December 2016

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**THE RELATIONSHIP BETWEEN U.S. MILITARY SPENDING AND THE
COHESION OF THE ROK-U.S. ALLIANCE**

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ABSTRACT

The ROK-U.S. alliance is facing a new security circumstance due to the rise of China and the deepening nuclear ambition of the DPRK, along with U.S. military spending reduction by the sequestration. The research question of this thesis is this: How has U.S. military spending affected the cohesion of the ROK-U.S. alliance since 1953? No studies have researched the cohesion of the ROK-U.S. alliance through robust empirical analysis. To answer this question empirically, this thesis examines three indicators for measuring the cohesion of the ROK-U.S. alliance: institutionalization, capacity of the USFK, and the ROK-U.S. combined exercises. In addition, this thesis analyzes three categories of the U.S. military spending to determine whether a certain relation exists between the cohesion of the ROK-U.S. alliance and U.S. military spending.

Through empirical analysis, this thesis concludes that there is no certain relationship between the cohesion of the ROK-U.S. alliance and U.S. military spending. Comparing two variables, the cohesion of the ROK-U.S. alliance and U.S. military spending, this thesis found a striking difference between the Cold War and the Post-Cold War. Based on the variable findings, this thesis explores the implications for future tasks for the ROK-U.S. alliance under new security circumstances.

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LIST OF ACRONYMS AND ABBREVIATIONS

AIIB	Asian Infrastructure Investment Bank
ASWEX	Anti-Submarine Exercise
BA	Budget Authority
BDM	Ballistic Missile Defense
C4	Command, Control, Communication, and Computer
C4I	Command, Control, Communication, Computer, and Intelligence
CFA	ROK-U.S. Combined Field Army
CFC	ROK-U.S. Combined Force Command
CPP	Joint Conventional Provocation Plan
CPX	Command Post Exercise
DOD	Department of Defense
DPRK	Democratic People's Republic of Korea
EASI	East Asia Strategic Initiative
EASR	East Asia Strategic Report
FE	Foal Eagle
FOTA	Future of the ROK-U.S. Alliance Policy Initiative Talks
FTX	Field Training Exercise
FY	Fiscal Year
GDP	Gross Domestic Product
HSV	High Speed Vehicle
ISR	Intelligence, Surveillance, and Reconnaissance
JCS	Joint Chief of Staff
KAMD	Korea Air and Missile Defense
KIDD	ROK-U.S. Integrated Defense Dialogue
KR/FE	Key Resolve & Foal Eagle
MCM	Military Commitment Meeting
MD	Missile Defense
MLRS	Multi Launch Rocket System
MLSA	Mutual Logistic Support Agreement
OPCON	Operational Control

PENORE	Peninsula Operation Readiness Exercise
PRC	People's Republic of China
RIMPAC	Rim of the Pacific Exercise
ROK	Republic of Korea
ROKAF	Republic of Korea Air Force
RSOI	Reception, Staging, Onward Movement, and Integration
SCM	Security Consultant Meeting
SMA	Special Measures Agreement
SIPRI	Stockholm International Peace Research Institute
SOFA	Status of Forces Agreement
THAAD	Terminal High Altitude Area Defense
TOA	Total Obligation Authority
UFG	Ulji-Freedom Guardian
UFL	Ulji-Focus Lens
UNC	United Nations Command
U.S.	United States of America
USAF	United States Air Force
USFK	U.S. Forces in Korea
NATO	North Atlantic Treaty Organization
WHNS	War Time Host Nation Support
WRSA	War Reserve Stock for Allies
WMD	weapons of mass destruction

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I. INTRODUCTION

A. MAJOR RESEARCH QUESTION

China's power in Asia has risen dramatically since 2002. In response, U.S. policy has emphasized a Pivot to Asia (or Rebalancing Policy), indicating increasing U.S. attention to its regional role. However, U.S. military spending in recent years has diminished under the influence of sequestration and other factors. During the current U.S. presidential campaign, some candidates have explicitly called for reduced U.S. military spending in support of South Korea (and Japan). If U.S. military spending decreases, the Republic of Korea's (ROK) financial burdens for the ROK-U.S. alliance could increase, and this could affect the cohesion of the ROK-U.S. alliance. Therefore, this thesis will ask a vital question: How has U.S. military spending affected the cohesion of the ROK-US alliance since 1953?

This thesis will investigate whether a variation in U.S. military spending affects the cohesion of the ROK-U.S. alliance, and identify relationships between the rise or fall of U.S. military spending and the cohesion of the ROK-U.S. alliance.

B. SIGNIFICANCE OF THE RESEARCH QUESTION

Previously, no studies have explored a relationship between U.S. military spending and the cohesion of the ROK-U.S. alliance. The ROK-U.S. alliance is one of the strongest alliances in the world. Over the last 60 years, the strategic value of the alliance with the United States has increased to control the rise of China. However, during those 60 years, the cohesion of the ROK-U.S. alliance has not maintained its strength. Historically, the cohesion of the ROK-U.S. alliance has repeatedly risen or fallen due to several factors. Many early scholars have focused on the changing strategic value of the ROK-U.S. alliance as a cause of alliance cohesion to rise or fall. Other scholars have determined that the ROK's perception change toward the alliance has caused alliance cohesion to rise or fall. These prior studies analyzed the influence of their independent variables to the cohesion of the ROK-U.S. alliance, and divided the cohesion of the ROK-U.S. alliance by rise and fall into two simple levels.

Due to recent challenges of China, the United States has experienced financial difficulties that have affected the alliance. Because defense cost-sharing for the alliance is an important factor for the solidarity of the alliance, U.S. military spending could be a vital agent of cohesion. Previous research has not provided any credible predictions regarding the cohesion of the ROK-U.S. alliance, and few studies have focused on the effect of U.S. military spending toward the cohesion of the ROK-U.S. alliance. Therefore, this thesis is important to future studies with regard to the ROK-U.S. alliance.

This thesis will utilize empirical analysis to distinguish the cohesion of the ROK-U.S. alliance using more defined levels than prior studies, and will focus on identifying the relationship of cohesion to U.S. military spending. In addition, this thesis will determine which of three categories of U.S. military spending has most influence on the cohesion of the ROK-U.S. alliance.

C. LITERATURE REVIEW

The objective of this thesis is to determine the relation between U.S. military spending and the cohesion of the ROK-U.S. alliance. After researching prior studies related to this objective, this review will posit using five component parts: definition of alliance, definition of alliance cohesion, the ROK-U.S. alliance, cohesion of the ROK-U.S. alliance, and U.S. military spending for alliances in general.

1. Definition of Alliance

As alliance is not an easy term to understand, this thesis will attempt to clarify the concept of alliance to avoid further confusion in reference to alliance cohesion. George Liska mentioned that, “It is impossible to speak of international relations without referring to alliances.”¹ He defines an alliance as “an event in politics as is conflict; it associates like-minded actors in the hope of overcoming their rival.”²

¹George Liska, *Nations in Alliance: The Limits of Interdependence* (Baltimore: Johns Hopkins University Press, 1962), 3.

²*Ibid.*

While Liska emphasized the importance of alliance in international relations, Ole R. Holsti, P. Terrence Hopmann, and John D. Sullivan defined an alliance as “a formal agreement between two or more nations to collaborate on national security issues.”³ Glenn H. Snyder tried to distinguish an alliance from an alignment.⁴ Glenn Snyder defined an alliance as “formal associations of states for the use (or nonuse) of military force, in specified circumstances, against states outside their own membership,” while defining alignment as “expectations of states about whether they will be supported or opposed by other states in future interaction.”⁵

By contrast, Stephen M. Walt defined an alliance as a “formal or informal arrangement for security cooperation between two or more sovereign states.”⁶ The definition of Walt embraces both informal and formal arrangements with regard to security cooperation; however, the definition is ambiguous regarding the coalition that could develop political or military cooperation for specific objectives.⁷

To deal with the ROK-U.S. alliance, this thesis will follow the definition of Snyder because it does not have any ambiguity, and is the best option to apply the ROK-U.S. alliance.

2. Definition of Alliance Cohesion

Based on previous definitions of alliance, this thesis will review a core term, alliance cohesion, and include valuable definitions by prominent scholars. Liska tried to explain the “conditions of alliance cohesion and efficacy by using the cause of making and breaking alliance instead of explaining directly.”⁸ Liska argued that the conditions of alliance cohesion were determined by “ideologies and diplomatic style, capability and

³Ole R. Holsti, et al., *Unity and Disintegration in International Alliance* (Lanham, MD: University Press of America, 1985), 4.

⁴Glenn H. Snyder, *Alliance Politics* (Ithaca, NY: Cornell University Press, 2007), 6.

⁵*Ibid.*, 4–6.

⁶Stephen M. Walt, *The Origin of Alliances* (Ithaca, NY: Cornell University Press, 1987), 12.

⁷Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness: A Case Study on ROK-U.S. Alliance, 1968–2005” (PhD dissertation, The Graduate School of Yonsei University, 2004), 20.

⁸Liska, *Nation in Alliance*, 61.

pressure, and pretension and coercion,”⁹ while the conditions of alliance efficacy were determined by “integration and interdependence, deterrence and auxiliaries, and restraints among allies.”¹⁰ Liska also claimed that, “demands of the alliance cohesion concur with alliance efficacy.”¹¹

By contrast, Holsti et al. distinguished “three types of definitions of alliance cohesion.”¹² The first definition is “the ability of alliance partners to agree upon goals, strategy, and tactics, and to coordinate activity directed toward those end.”¹³ The second is to “overlap with alliance efficacy, the ability of the alliance to achieve its goals.”¹⁴ The last is an “antonym of disintegration, the ability of the coalition to survive.”¹⁵ Under these definitions, Holsti et al. argued that, “the alliance cohesion is determined by threat, decision-making structure, alliance duration, and disintegration.”¹⁶ In fact, alliance cohesion could be affected by non-material factors like the perception change of states within alliances and domestic politics; however, Holsti focused on material factors to determine the cause of alliance cohesion. Thus, explaining the various factors of the alliance cohesion may be limited.

Julian R. Friedman, Christopher Bladen, and Steven Rosen argued that the “cohesiveness or togetherness” is an essential character of an alliance, and “the degree of cohesion is related to its vitality rather than durability.”¹⁷ They determined that “common interests within allies affected the cohesiveness of alliance.”¹⁸ According to their argument, “by sharing common interests and achieving common goals, the cohesiveness

9Ibid.

10Ibid., 61–157.

11Ibid., 116.

12Holsti et al., *Unity and Disintegration in International Alliance*, 16.

13Ibid.

14Ibid.

15Ibid.

16Ibid.

17Julian R. Friedman, Christopher Bladen, and Steven Rosen, *Alliance in International Politics* (Needham Height, NJ: Allyn and Bacon, 1970), 288–289.

18Ibid.

of alliance is getting bigger.”¹⁹ Alliances do not face the same external and internal environment, and elements of alliance cannot share the exact same interests and goals. Thus, elements of alliance should develop various tools to share and achieve common values for the strong cohesiveness of alliance.

Snyder added to the importance of sharing common interests with regard to the cohesiveness of alliance. Snyder introduced two concepts; “the guarantee motive and the get help motive,”²⁰ and he emphasized entering an alliance by using these concepts. Snyder argued that “sharing each interest make alliances strong, getting cohesiveness, while if there are not sharing their interest, states do not prefer to ally others.”²¹ This is because they know others among the alliance do not support its interest.²² In addition, Snyder emphasized on procedure of reassurance of the alliance and included “joint military planning, supporting ally in a dispute the third party or public restatement of the alliance pledge”²³ by means of validation reassurance.

As a result, the Snyder’s definition of alliance cohesion more accurately defines the ROK-U.S. alliance. This is because validated reassurance and sharing common interests are indispensable factors to the cohesion of the ROK-U.S. alliance.

3. The ROK-U.S. Alliance

This thesis will determine whether a certain pattern between the cohesion of the ROK-U.S. alliance and U.S. military spending exists. With the rise of China, prominent scholars have published valuable studies of the ROK-U.S. alliance. This thesis explores many of the recent ROK-U.S. alliance studies related to the rise of China and external environments with regard to politics and the economy.

¹⁹Ibid.

²⁰Snyder, *Alliance Politics*, 10–11.

²¹Ibid.

²²Ibid.

²³Ibid.

Ellen Kim and Victor D. Cha claim that the ROK could attain “positive sum gains” in the triangular relations with the United States and China.²⁴ Even though the ROK has faced “four strategic dilemmas with regard to power, economy, North Korea, and entrapment in the ROK-U.S. alliance due to the rise of China,”²⁵ its proximity to China does not separate it from the United States.²⁶ In fact, the rise of China and the rebalancing policy of United States have escalated tensions in Northeast Asia, and caused difficulties with the ROK. This is because the ROK has had a complex interest in the relations between both super powers with regard to security and the economy, making it difficult to create a balance in a direction that satisfies each of them. Kim and Cha argued that, “even though the optimum path for the ROK is to circumvent the four dilemmas, there is not enough space to manage these problems with the ROK.”²⁷ Thus, the ROK and the United States should prepare and talk about the “dilemma together in order to achieve positive sum gains,”²⁸ and U.S. alliances have to take a role to solve “complex patchworks in East Asia as part of Asia’s regional architecture.”²⁹

In addition, Scott Snyder argues that the ROK must pursue the “stable tripartite cooperation with China and the United States, rather than an alliance reaffirmation and separation,”³⁰ to solve the problem of the Democratic People’s Republic of Korea (DPRK). In fact, cooperation with China is essential for the bright future of the Korean peninsula because China does not want to collapse the Kim regime of DPRK, but instead wants to maintain the status quo to use the DPRK as the buffer zone. Using this argument, China has continually supported the DPRK in spite of the enforcement of international sanctions to the nuclear tests of DPRK. Under this situation, according to

²⁴Ellen Kim and Victor Cha, “Between a Rock and a Hard Place: South Korea’s Strategic Dilemma with China and the United States,” In *Asia Policy* 21 (2016): 102. DOI: <http://doi.org/10.1353/asp/2016.0016>.

²⁵Ibid.

²⁶Ibid.

²⁷Ibid., 120.

²⁸Ibid., 121.

²⁹Victor D. Cha, “Complex Patchworks: U.S. alliances as Part of Asia’s Regional Architecture,” In *Asia Policy* 11 (2011): 28.

³⁰Scott Snyder, *China’s Rise and the Two Koreas* (Colorado: Lynne Rienner Publishers, 2009), 178–180.

Snyder, the desirable future of the Korean peninsula could result from the cooperation with ROK-U.S.-China by “mutual efforts to solve the crisis of DPRK,”³¹ and “the ROK should make clear of its posture not to pursue biased relations to a certain country, but to pursue cooperative relations with China and the U.S.”³²

In contrast to previous scholars, Jae-ho Chung argued that, “China’s view of the ROK-U.S. alliance will grow more negative and antagonistic in tandem with the overall power it gets to possess.”³³ To prove this argument, Chung created four periods to determine whether different views in each period define a relationship between China’s view and the cohesion of the ROK-U.S. alliance. As a result, Chung claims that, the ROK should have trust-building and strategic communication with China to present a more favorable view of China to the ROK-U.S. alliance.³⁴ However, Chung is concerned that it is hard to achieve a favorable view of China when a severe security dilemma exists between China and the United States.³⁵

Scholars commonly argue that the ROK must maintain cooperative relations with both China and the United States to assure a proper direction in the current complex circumstances in East Asia. Although this is one solution to solve the complex situation with the ROK, it is not easy to create optimistic and cooperative relations with both countries. This thesis does not intend to solve this relationship problem, but the thesis focus on the relations between U.S. military spending and the cohesion of the ROK-U.S. alliance is directly relevant to this larger problem. The following sections will explore prior studies that focused on measuring the cohesion of the ROK-U.S. alliance.

4. Cohesion of the ROK-U.S. Alliance

This thesis focuses on measuring the cohesion of the ROK-U.S. alliance using more delicate levels compared to previous studies. Even though there are studies for the

31Ibid.

32Ibid.

33Jae-ho Chung, “China’s Evolving Views of the Korea-American Alliance, 1953–2012,” in *Contemporary China* 23, no 87 (2014): 442 DOI:10.1080/1067564.2013.843882.

34Ibid., 439–442

35Ibid.

cohesion of the ROK-U.S. alliance, they focused on factors such as change of the ROK's perception toward the alliance or the strategic value change of the alliance in the U.S. side, and they did not try to evaluate the cohesion of ROK-U.S. alliance. Although it is difficult to evaluate the cohesion of the ROK-U.S. alliance, several scholars did focus on the cohesion of the ROK-U.S. alliance and tried to determine indicators to measure that cohesion. These studies do add valuable meaning to this thesis.

Victor D. Cha argued that ten indicators can be used to assess the success of alliance for the United States. A successful alliance “deters aggression, facilitates U.S. power accretion and projection, shares risks and costs among the parties, enables common tactics and doctrine through joint training, promotes a division of security roles, serves U.S. security objectives in the broader regional context, facilitates cooperation in production and development of military equipment, facilitates a reasonable quality of life and hospitable environment for U.S. forces stationed abroad, reflects shared political values, and elicits political support among domestic constituencies.”³⁶ Cha concluded that the ROK-U.S. alliance satisfied these indicators for 50 years, even though several obstacles have been identified: “the gap of the common interest like military burden sharing, anti-American demography, and sunshine policy.”³⁷

In addition, Cha argued that the United States must provide more commitments toward the alliance to bridge the gap and lead to a direction of the future of the ROK-U.S. alliance that both sides want, and suggested two methods to show this commitment to Seoul.³⁸ First is to provide “material evidences” for reassurance.³⁹ He argued that the United States should upgrade U.S. military capabilities in the Korean peninsula to give reassurance to the ROK by maintaining funding to the peninsula, keeping “joint combined training, and improving intelligence sharing.”⁴⁰ Second is to give “strategic

³⁶Victor D. Cha, “Shaping Change and Cultivating Idea in the U.S.-ROK Alliance,” in *The Future of America's Alliance in Northeast Asia* ed. Michel H. Armacost and Daniel I. Okimoto (Stanford, CA: Washington, DC: Asia Pacific Research Center, 2004), 122.

³⁷Ibid.

³⁸Ibid., 125.

³⁹Ibid.

⁴⁰Ibid.

evidences.”⁴¹ He also argued that the United States must commit to change the vision of the ROK-U.S. alliance through rebalancing plans, which will give the ROK a bright “long-term alliance future” even after the unification of the Korean peninsula.⁴² The 10 indicators were applicable to examining the ROK-U.S. alliance and determining methods to make a more cohesive alliance in the United States posture. Even though the study does not use statistical data to examine the cohesion of the ROK-U.S. alliance in the posture of the ROK, it is very meaningful to try to test the cohesion of the ROK-U.S. alliance using indicators in the posture of the United States.

By contrast, three South Korean analysts tried a different approach to examine the cohesion of the ROK-U.S. alliance. Hyo-keun Jee argued that the alliance security culture of ROK played a crucial role in determining the cohesion of the ROK-U.S. alliance, and revising the alliance security culture of ROK derived from the critical security crisis.⁴³ He asserted that the alliance security revised its image of interest and threat recognition, and its influence on the cohesion of the alliance.⁴⁴ He demonstrated four vital events for the change of the alliance security culture: Nixon Doctrine and withdrawal of the United States Force Korea (USFK) in 1969, new Cold War caused by the Soviet Union’s invasion to Afghanistan in 1979, the democratization of ROK in 1987, and establishing the Kim Dae-Jung administration and the North-South Korean Summit in 1998.⁴⁵

Jee attempted to examine the cohesion of the ROK-U.S. alliance with four periods, each divided by vital events. He defined the alliance cohesion as the extent of the security policy corporation within the countries of an alliance.⁴⁶ To measure the cohesion, he suggested four indicators: “troops and facilities of the USFK, alliance pledges of leaders, the extent of alliance institutionalization, and ROK-U.S. combined

⁴¹Ibid.

⁴²Ibid.

⁴³Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness,” 46–70.

⁴⁴Ibid.

⁴⁵Ibid., 15.

⁴⁶Ibid., 49.

drills.”⁴⁷ According to his study, the cohesion of the ROK-U.S. alliance was the strongest in the early-mid 1980s, due to “dependent cooperation type,” because the rise of security threats caused by the Soviet Union and North Korea influenced change to the security culture of the alliance cohesion in a positive way.⁴⁸ By contrast, the cohesion was weakest in the early-mid 2000s, due to “independent conflict type,” because of the revised U.S. security policy after 9/11 terror, sunshine policy by Kim Da-Jung and Roh Moo-Hyun, and the pursuing expansion of autonomy in ROK that influenced the alliance security culture in negative way.⁴⁹

Jee suggested that the ROK-U.S. alliance should become a symmetric type because the alliance could return to the “dependent conflict type” in 1980 due to the development of the ROK.⁵⁰ Thus, he concludes that the attitude of the United States that recognizes Korea as an authentic partner is important to strengthen the cohesion of ROK-U.S. alliance.⁵¹ While Cha focus on the commitments of the United States for the success of the ROK-U.S. alliance by both material and strategic evidences, Jee emphasized the alliance security culture, which influenced the cohesion of the alliance through constructivism. Jee’s study is also meaningful because he tried to examine the cohesion of ROK-U.S. alliance through four divided periods; however, he did not have any statistical data, and thus his research defined only a single case study related to the cohesion of the ROK-U.S. alliance.

Another Korean, Bon-cheul Koo, asserted that many studies about the cohesion of an alliance focused on the material factors like power, threat, and self-interest, and realistically, the factors did not explain the East Asia alliance cohesion.⁵² Koo argued that collective identity played a crucial role in determining the cohesion of the alliance, and the revised collective identity of the People’s Republic of China (PRC) and the ROK

⁴⁷Ibid.

⁴⁸Ibid., 112–134.

⁴⁹Ibid., 170–196.

⁵⁰Ibid., 198.

⁵¹Ibid.

⁵²Bon-cheul Koo, “The Impact of Changes in State Identity on Alliance Cohesion in Northeast Asia,” (master’s thesis, Naval Postgraduate School, 2009), 1–3.

influence on the cohesion of both ROK-U.S. alliance and PRC-DPRK alliance.⁵³ Koo utilized three indicators to gauge the cohesion of the ROK-U.S. alliance: “Compromise on security issues, military exchange and assistance, and economic contribution to mutual security.”⁵⁴ As a result, he concluded that the ROK’s economic development, democratization, and globalization created a new collective identity, and allowed the ROK-U.S. alliance to move closer to a cohesive direction.⁵⁵ Koo’s study was similar to Jee’s in that it focused on constructivist perspectives rather than realistic perspectives. However, Koo’s study included both the ROK-U.S. alliance and the PRC-DPRK alliance, and focused on identifying the state identity rather than evaluating the cohesion of the alliances. In addition, his finding of the cohesion of the ROK-U.S. alliance was more optimistic than those of Cha and Jee, focusing on a short period after the end of the Cold War.

Contrary to Jee and Koo, who focused on the ROK’s constructivist values as vital determinants of the cohesion of ROK-U.S. alliance cohesion, Kwang-il Noh emphasized a “dominant U.S. threat perception.”⁵⁶ Noh argued that the dominant U.S. threat perception played a crucial role in determining the cohesion of the ROK-U.S. alliance, and the change of the perception derived from major crises of the United States.⁵⁷ He introduced five major events that affected the dominant U.S. threat perception: “Détente with the USSR, second Cold War by the Soviet Union in Afghanistan, collapse of the Soviet Union and 9/11 attack, and political and economic rise of China.”⁵⁸ Using these five events, he divided five periods to examine the cohesion of the ROK-U.S. alliance: 1970s, 1980s, 1990s, 2000s, and 2010s.⁵⁹

⁵³Ibid.

⁵⁴Ibid., 96–104.

⁵⁵Ibid., 95–96.

⁵⁶Kwang-il Noh, “The Impact of Changes in Dominant U.S. Threat Perception on the Cohesion of the U.S.-ROK Alliance,” (master’s thesis, Naval Postgraduate School, 2014), 1–3.

⁵⁷Ibid.

⁵⁸Ibid.

⁵⁹Ibid., 98.

To evaluate the cohesion of the ROK-U.S. alliance, Noh utilized four indicators: “official statements and document by leaders, combined exercise and operations, the institutionalization of the alliance, and combined military capability.”⁶⁰ After evaluating the cohesion of the ROK-U.S. alliance with four indicators, he concluded that the 1980s and 2010s were the strongest periods of the cohesion of the ROK-U.S. alliance, but the 1970s, 1990s, and 2000s were the weak periods.⁶¹ He asserted that major drivers for the cohesion of the ROK-U.S. alliance were not the ROK’s variables, but U.S. variables.⁶² This study was unique because most studies that were implemented about the cohesion of the ROK-U.S. alliance focused on the ROK’s perception within the constructivist perspective. By contrast, Noh emphasized the role of the dominant U.S. perception as his independent variable. In addition, to evaluate the cohesion of the ROK-U.S. alliance, he utilized similar indicators with Jee such as statements of leaders, institutionalization of the alliance, and the ROK-U.S. combined exercise and capacity. Evaluating the four indicators of these prior studies adds substance to prior assessments of the cohesion of the ROK-U.S. alliance.

In summation, a number of studies have evaluated the ROK-U.S. alliance cohesion. Different independent values play a crucial role in determining the cohesion of the ROK-U.S. alliance in their articles. However, with the exception of Cha, they emphasized the constructivist variables by criticizing the alliance studies that focused on the realistic variables. When it comes to the ROK-U.S. alliance, realistic values, like military burden sharing and commitments to the alliance, are becoming increasingly more important to make the alliance cohesion strong. Constructivist values cannot be empirical because they do not have empirical evidence for their independent variables. Thus, the thesis will utilize the U.S. military spending as an independent variable, and figure out the relation between the U.S. military spending and the cohesion of the ROK-U.S. alliance.

⁶⁰Ibid., 8–9.

⁶¹Ibid., 97–100.

⁶²Ibid.

5. U.S. Military Spending for Allies

While there are few studies that evaluated the relationship between U.S. military spending and the ROK-U.S. alliance cohesion, a few South Koreans have researched the defense cost-sharing issue of the ROK-U.S. alliance. These studies attempted to determine the causes of the inappropriate defense cost sharing hitherto, and better directions for proper defense cost sharing in the future. According to Myung-gun Lee, the ROK has charged more defense cost sharing for the ROK-U.S. alliance in consideration of relative economic capacity compared to Germany and Japan,⁶³ and demands of the United States to increase the defense cost sharing could make challenges to the ROK-U.S. alliance.⁶⁴ He suggested five solutions for better defense cost sharing: compiling an expert group, careful management of ROK government, transparency of the decision making and negotiation, emphasis on economic approach, and efforts to not overlook direct or indirect support.⁶⁵

Won-gon Park asserted that defense cost sharing plays a crucial role in the continuation of the ROK-U.S. alliance because the result of the cost-sharing negotiation can be an accurate parameter in examining commitments for the alliance to both governmental and domestic public opinion.⁶⁶ To create a more prosperous negotiation, he suggested that the ROK and the United States should bridge the gap of opinion toward defense cost sharing by considering the economic situation and changes to the security environment on both sides.⁶⁷ To summarize their arguments, defense cost sharing is a key factor in examining commitments toward the alliance, and appropriate cost-sharing negotiations help to strengthen the ROK-U.S. alliance. However, unlike the focus of this thesis, their emphasis was on the effect of the defense burden sharing to the ROK-U.S. alliance provided limited results.

⁶³Myung-gun Lee, "A Study on the Policy Assessments and Recommendations for the Defense Cost Sharing between the United States and the ROK," (master's thesis, Hansung University, 2006), 90.

⁶⁴Ibid., 89.

⁶⁵Ibid., 78–83.

⁶⁶Won-gon Park, "A Challenge for the ROK-U.S. Alliance: Defense Cost-Sharing," *EAI Asia Security Initiative Working Paper 30* (2013): 1–2.

⁶⁷Ibid.

Contrary to the studies with regard to defense cost sharing for the ROK-U.S. alliance, Japanese scholar Yuki Tatsumi researched the impact of U.S. military budget cuts to the U.S.-Japan alliance. Tatsumi argued that the U.S. military budget cut could provide a new opportunity for the U.S.-Japan alliance to deepen in the future.⁶⁸ The U.S. military budget cuts could weaken the U.S. military's ability to defend Japan from North Korea and China and affect Japan's confidence about the U.S. commitments. However, Tatsumi argued that both governments could solve this problem through frank discussions to reassure Japan that taking further steps would "forge a shared strategy for the future" in spite of the bad financial situation of both.⁶⁹ When it comes to U.S. military budget cuts, Japan cannot afford to take on a greater share of the budget for the alliance, and the ROK-U.S. alliance faces similar difficulties as well. This study has a vital implication that the methods to overcome these challenges, like frank discussion, also will be helpful to the ROK-U.S. alliance. However, Tatsumi's study just focuses on the future of the U.S.-Japan alliance without presenting real evidence, and does not deal with the ROK-U.S. alliance.

Unlike the ROK-U.S. and U.S.-Japan bilateral alliances, the North Atlantic Treaty Organization (NATO) is a multilateral alliance with 28 members. NATO has three unique budgets to pay for common activities; NATO and the United States share the largest portion of these three funds ranging from about 22–25%.⁷⁰ Under the assumption that most members of NATO will diminish their defense budget in the wake of global financial crisis, Carl Ek casts doubt on the willingness and ability of NATO members to contribute to future alliance operations.⁷¹ Charles Barry and Hans Binnendijk argued that defense budget cuts by NATO members are creating more gaps between the United States and European countries within NATO with regard to defense ability and

⁶⁸Yuki Tatsumi, *Opportunity out of Necessity: The Impact of U.S. Defense Budget Cuts on the US-Japan Alliance*, (Washington: Stimson, 2013), 13–15.

⁶⁹*Ibid.*, 17–19.

⁷⁰Carl Ek, "NATO Common Funds Burdensharing: Background and Current Issues," *Congressional Research Service* (February 2012), 1–8.

⁷¹*Ibid.*

cooperation.⁷² They asserted that NATO should implement a “smart defense” to overcome the crisis of defense resources, and create new organizations to change the specialization roles regarding defense budget issues.⁷³

Ted Galen Carpenter held a more pessimistic vision of NATO. He argued that there were two reasons for the United States to quit NATO.⁷⁴ New members of NATO are weak and vulnerable,⁷⁵ and “the defense-spending level and military capabilities”⁷⁶ of NATO members have decreased. To sum up studies about NATO, military burden sharing among the NATO members plays a crucial role in the cohesion of NATO. The inclination of military budget cuts by European members had a bad impact on the military performance of NATO; continuation of this trend will influence the cohesion of NATO in a bad way.⁷⁷

There are three topics of studies with regard to the relation between military spending and the cohesion of the alliances: the ROK-U.S. alliance, the U.S.-Japan alliance, and NATO. Even though they have different implications, the one common emphasis is on the influence of U.S. military spending toward the cohesion of the alliances. Studies of all three alliances have limitations regarding this thesis, which focuses on three categories of U.S. military spending, not just defense cost sharing or defense burden sharing.

D. POTENTIAL EXPLANATIONS AND HYPOTHESES

According to the literature review, the following factors are obvious: 1) U.S. military spending is one of vital factors that can potentially determine the cohesion of the U.S. alliance; 2) the cohesion of the ROK-U.S. alliance has had periodic variations; and

⁷²Charles Barry and Hans Binnendijk, “Widening Gaps in U.S. and European Defense Capabilities and Cooperation,” *Transatlantic Current* No. 6 (July 2012), 1–12.

⁷³Ibid.

⁷⁴Ted Galen Carpenter, “NATO at 60: A Hollow Alliance,” *Policy Analysis* No. 635 (March 2009), 1–12.

⁷⁵Ibid.

⁷⁶Ibid.

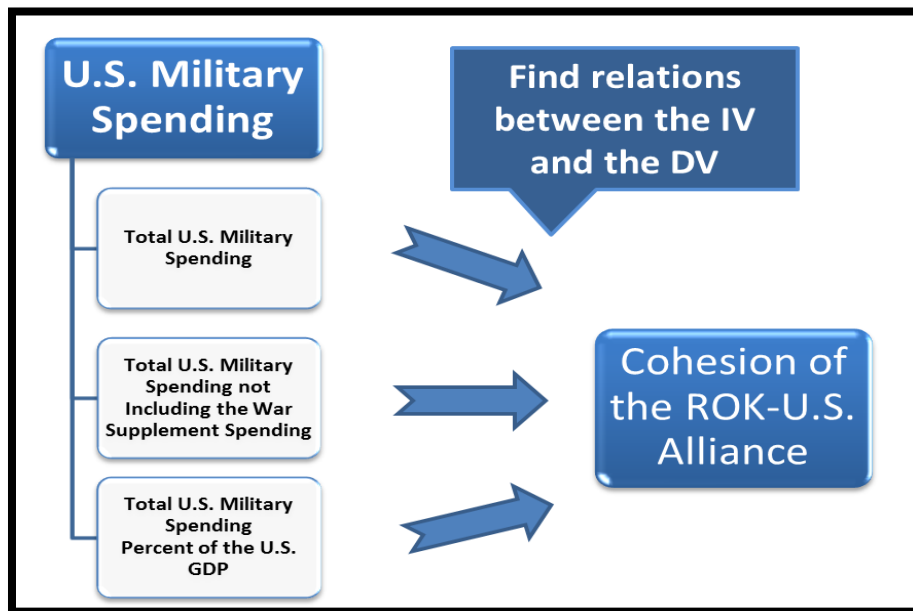
⁷⁷Ibid.

3) there have been no studies to determine the relation between U.S. military spending and the ROK-U.S. alliance with statistical data. As independent variables for the study about the cohesion of the ROK-U.S. alliance, the change of perceptions or strategic values to the ROK-U.S. alliance are limited in identifying the proper cause and effect for their arguments compared to studies that utilize statistical data.

This thesis will collect statistical data about the three categories of U.S. military spending as potential independent variables. The research for the thesis will investigate the following three hypotheses (depicted in Figure 1), which may be mutually exclusive to some degree.

- There might be a certain relation between total U.S. military spending and the cohesion of the ROK-U.S. alliance
- There might be a certain relation between total U.S. military spending not including with war supplements spending and the cohesion of the ROK-U.S. alliance
- There might be a certain relation between total U.S. military spending as a percentage of U.S. gross domestic production (GDP) and the cohesion of the ROK-U.S. alliance

Figure 1. Potential Explanations about Hypotheses



The independent variables (IV) are the three categories of U.S. military spending, and the dependent variable (DV) is the cohesion of the ROK-U.S. alliance. While this thesis may determine one or more valuable patterns between the IVs and the DV, it may also find no valuable pattern at all. Whether valuable patterns exist, however, this thesis may be meaningful to future research with regard to the cohesion of the ROK-U.S. alliance. The fact that no pattern exists within this study can be a new and valuable finding to the academy.

E. RESEARCH DESIGN

This research is based on “empirical social science.”⁷⁸ According to Ung-jin Kim and Jee-hyee Kim, there are three characteristics of an empirical social science study.⁷⁹ First, social phenomenon is driven by the regular and repetitive order. Secondly, these researches pursue raw information through the process of analyzing the empirical validation of a causal type hypothesis. Finally, deducted raw information is limited to certain explanations or predictions of social phenomenon.⁸⁰ This thesis undertakes empirical analysis research and does not seek to deduce an outcome by comparing other alliances or simply focusing on change of cohesion of the ROK-U.S. alliance with the passage of time. To create appropriate independent variables, this thesis analyzes the statistical data of the U.S. military spending.

Initially, the research will examine the cohesion of the ROK-U.S. alliance from 1953 to 2012. As noted above, the cohesion of the ROK-U.S. alliance will be examined by exploiting three indicators: the institutionalization of the ROK-U.S. alliance, the capacity of the United States Force in Korea (USFK), and the ROK-U.S. combined drills. Even though whole indicators enable this thesis to precisely examine the cohesion of the ROK-U.S. alliance, this thesis will not examine the cohesion of the ROK-U.S. alliance for annual periods. This is because indicators could vary greatly within each year. For example, within a specific year, there may be no important event related to the three

⁷⁸Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness,” 7.

⁷⁹Ung-jin Kim and Jee-hyee Kim, *Comparative Social Research Methods: Comparative Politics, Comparative Administration*, Regional Research Strategy (Seoul: Hanul, 2000), 12.

⁸⁰*Ibid.*

indicators. These three indicators, however, are determined by the analysis of prior studies, and are the best tools to examine the cohesion of the ROK-U.S. alliance for the purposes of this thesis. As a result, the thesis divides the cohesion of the ROK-U.S. alliance into more intricate levels than previous studies, and this thesis serves to demonstrate the credibility of this management of the data.

Secondly, this thesis will explore the statistical data regarding three categories of U.S. military spending: total military spending, total military spending not including with the war supplement spending, and total military spending percentage of U.S. Gross Domestic Product (GDP). To create credible statistical data of U.S. military spending, this thesis will explore the National Defense Estimates Fiscal years (FY) 2013 and FY 2017 by the Department of Defense (DOD), which contain a good history of U.S. military spending and deal with various categories of U.S. military spending. Moreover, this thesis will determine certain patterns between each of those military spending groups and the cohesion of the ROK-U.S. alliance by comparing two categories of data. This is a vital part of this thesis because the objective of this thesis is to figure out relations between the U.S. military spending and the cohesion of the ROK-U.S. alliance and to find vital implications for a future of the ROK-U.S. alliance cohesion with the U.S. military spending.

F. THESIS OVERVIEW AND DRAFT CHAPTER OUTLINE

This thesis consists of four chapters. Chapter I contains six sections: the major research question, significance of the research question, literature review, potential explanations and hypotheses, research design, and thesis overview.

Chapter II measures the cohesion of the ROK-U.S. alliance. This chapter examines and qualifies the cohesion of the ROK-U.S. alliance with three indicators, and each indicator has its own method to distinguish the level of the cohesion. After the analysis of each indicator, the three indicators of cohesion levels are summarized for each period, and a comprehensive cohesion level of the ROK-U.S. alliance from 1953 to 2012 is created. Acquiring credible data related to the cohesion is important, because this data

is used to analyze and determine the relationship between the three categories of independent variables.

Chapter III discusses the U.S. military spending. Three categories of total U.S. military spending are analyzed and the statistical data are compared and analyzed with regard to the cohesion of the ROK-U.S. alliance. After comparing the three categories, this thesis will determine whether a certain pattern exists between U.S. military spending and the cohesion of the ROK-U.S. alliance.

Finally, Chapter IV provides a four-part conclusion. The first part is a general observation that synthesizes whole outcomes and compares them to each alliance relationship. The second part discusses implications for the future of ROK-U.S. alliance cohesion related to U.S. military spending, which provides valuable lessons to the foreign policy decision making of the ROK in today's new security circumstances. The third part is an anticipation, which suggests future tasks for the ROK-U.S. alliance. Finally, opportunities for future research on the cohesion of the ROK-U.S. alliance are provided, which includes limitations of this thesis.

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II. THE COHESION OF THE ROK-U.S. ALLIANCE

This chapter measures the cohesion of the ROK-U.S. alliance from 1953 to 2012 through three indicators: the institutionalization of the ROK-U.S. alliance, the capacity of the USFK, and ROK-U.S. combined drills. The next three sections of this chapter consider each of these indicators in turn. Within each indicator, the chapter determines intricate levels of the ROK-U.S. alliance cohesion across nine periods marked by the presidential administrations of the ROK. (The chapter divides the term of President Park Chung-hee into two periods because the length of his rule was much longer than other ruling periods, and the chapter sets the ruling of the President Park as starting after the military coup of 1961.)

A. INSTITUTIONALIZATION OF THE ROK-U.S. ALLIANCE

As noted in the literature review, Snyder emphasized a sharing of common interests and a reassurance to consolidate the cohesion of alliance. In addition, according to Robert O. Keohane, Helga Haftendorn, and Celeste A. Wallander, “institutions can promote reciprocity, make members accountable for their actions, and contribute to the maintenance of cooperative security strategies.”⁸¹ In other words, to consolidate the cohesion of alliance, elements of alliance should have concrete means of conversation to enhance reciprocity of common security goals, and institutionalization to allow elements of alliance to trust each other. Thus, the institutionalization of alliance could influence the sharing of common interests and valid reassurance. For example, the ROK-U.S. Mutual Defense Treaty signed in 1953 began the security cooperation system based on the Treaty.⁸² Despite characteristics of imbalance, the Treaty has proper provisions to promote cooperation between both countries against adversaries. As an example, the institutionalization of alliance has a great impact on the cohesion of alliance, which is a first indicator to measure the cohesion of the ROK-U.S. alliance.

⁸¹Robert O. Keohane, Helga Haftendorn, and Celeste A. Wallander, *Imperfect Unions: Security Institutions over Time and Space* (London; New York: Oxford University Press, 1999), 3.

⁸²Jong sup Lee and UK-Heo, *The U.S.-South Korean Alliance, 1961–1988: Free-Riding or Bargaining?* (Lewiston, NY: Edwin Mellen Press, 2002), 37–38.

To determine the cohesion of the ROK-U.S. alliance by measuring the institutionalization, this thesis will divide the institutionalization of the alliance into defined levels in each administration of the ROK. In fact, it is hard to measure the extent of alliance institutionalization at certain levels, and no study has explored this until now.

Because there are so many institutionalization events of the ROK-U.S. alliance, the chapter will identify the most vital events in each period. With this focus, the thesis will identify three levels of institutionalization of the ROK-U.S. alliance: cooperative, required, and disputed. Table 1 distinguishes these three levels of institutionalization, and this level will be determined for each of the significant events of institutionalization in each period.

Table 1. Three Levels of Institutionalization

	Cooperative	Required	Disputed
Mean	Helpful to consolidate	Necessary to progress	Caused by dissatisfaction
Level	2	1	0

First is a cooperative institutionalization for the alliance, which consolidates the cohesion of the ROK-U.S. alliance, and is expressed as a level 2. Second is a required institutionalization, which is necessary to equip the combined defense posture of USFK, and is expressed as level 1. Third is a disputed institutionalization, which is caused by the dissatisfaction of one side toward the alliance, and is expressed as level 0. Finally, the assessment provides a total accumulated level of institutionalization for each period.

1. The Rhee Syng-Man Administration (1953–1960)

The ROK-U.S. Mutual Defense Treaty is not simply a beginning of the ROK-U.S. alliance, but also a creation of the “strong ROK-U.S. combined defense posture.”⁸³ Near

⁸³The Office of the Deputy Minister for Policy, *ROK-US Alliance and USFK* (Seoul: Ministry of National Defense, 2002), 28–29.

the end of the Korean War, the ROK did not have enough military capacity against aggressions by DPRK, and thus, President Rhee had to sign the ROK-U.S. Mutual Defense Treaty to guarantee security of ROK by the United States. Under this situation, diplomatic efforts of President Rhee who wished to take guarantee from the United States helped to sign the ROK-U.S. Mutual Defense Treaty in spite of many obstacles. In fact, it took time to adjust the common interest, and eventually the Treaty took effect in 1954 through the ROK-US summit in July 1954.⁸⁴ The agreed minutes relating to continued cooperation in economic and military matters reaffirmed the delicate plans for execution of the ROK-U.S. Mutual Defense Treaty in November 1954.⁸⁵

The ROK-U.S. Mutual Defense Treaty consisted of the preamble and six provisions.⁸⁶ In the second provision, the Treaty guaranteed that if the security of ROK were threatened by external threats, both countries would take proper actions together to handle this problem.⁸⁷ Because the Treaty began the initial steps toward the enhancement of the ROK-U.S. alliance, it became level 1 of the institutionalization progress.

In addition, there was another required institutionalization in this administration, which the USFK command was established in 1957. Though the Korea War ended, lots of USFK troops have stayed in ROK based on the Mutual Defense Treaty. To have effective commanding system, the foundation of the USFK command was inevitable, and this institutionalization could be regard as the required institutionalization. As a result, there were two required institutionalizations in this period, and the level of institutionalization is 2.

2. The First Half of the Park Chung-Hee Administration (1961–1968)

During the first half of President Park's administration, there were two institutionalizations to the ROK-U.S. alliance in the first half of President Park; the States

⁸⁴ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance* (Seoul: Ministry of National Defense, Institute for Military History, 2013), 63.

⁸⁵Ibid.

⁸⁶Ibid., 62.

⁸⁷Ibid.

of Forces Agreements (SOFA), and the defense officials' talk. Under the Provision of Article 4 of the ROK-U.S. Mutual Defense Treaty, the United States could remain in the ROK.⁸⁸ Both countries contracted the SOFA to define the legal status of the USFK in 1966,⁸⁹ prompting numerous debates between the ROK and the United States. Thus, the SOFA could be regarded as the required institutionalization, and would be expressed as level 1.

In 1968, both countries began to having a defense officials' talk to perform policy consultation with regard to the whole issues of both countries' security and to mediate difference of opinions for the military cooperation.⁹⁰ This talk could be regarded as a cooperative institutionalization because it is very helpful to share common interest and solve problems derived from the difference between both sides. In addition, it had developed to the Security Consultant Meeting (SCM) later and it has persisted until nowadays. Thus, this talk could be expressed as level 2, and the level of the institutionalization in this period is 3.

3. The Second Half of the Park Chung-Hee Administration (1969–1979)

Similar to the first half of the Park Chung-hee administration, second half of the administration prompted further toward the institutionalization of the alliance. A foundation of the ROK-U.S. Combined Forces Command (CFC), and a construction of the combined command system, created a salient institutionalization during this period.⁹¹ As a main body of the ROK-U.S. combined defense system, both countries made an agreement to activate the CFC by the 10th SCM meeting in 1977, and established the CFC based on the '1st Strategy Directives' from Military Commitment Meeting (MCM) in 1978.⁹² Through the foundation of the CFC, the operation control authority transferred from a commander of UN forces to a commander of the CFC.⁹³ This institutionalization

⁸⁸Ibid., 106.

⁸⁹Ibid., 106–110.

⁹⁰Ibid., 114–116.

⁹¹Hyo-keun Jee, "Alliance Security Culture and Alliance Cohesiveness," 92.

⁹²Ibid.

⁹³Ibid., 92–93.

was a salient event for the ROK-U.S. alliance. This is because the ROK received strong assurance through this organization, and it is helpful to consolidate the cohesion of the ROK-U.S. alliance. Through consolidation of alliance, the foundation of the CFC and the MCM in this period was regarded as the cooperative institutionalization, and would be expressed as a level 2.

4. The Chun Doo-Hwan Administration (1980–1987)

Both countries began discussing logistic support for the effective combat power of the ROK-U.S. alliance, making progress in two logistical areas in this term. First, was the War Time Host Nation Support (WHNS), which referred to “the military and non-military support provided for the acceptance, transport and war-fighting of the U.S. augmentation to Korea during contingencies of war.”⁹⁴ The WHNS created a first step toward an agreement through discussion at the SCM of 1985.⁹⁵ Even though both sides did not sign up for the WHNS in this period, they created significant efforts to proceed for signing up.

Next, were the arrangements prompted by the War Reserve Stock for Allies (WRSA), which define “war materials stored by the United States within allied nations.”⁹⁶ The ROK Defense Minister and the US Secretary of Defense made agreements about the sale of the U.S. war reserve stock to the ROK in both 1982 and 1984.⁹⁷ Both countries made agreements to solve problems, as the normal process for sales took too much time due to required approval by the U.S. Congress, and it is hard to supplement insufficient material in the initial step of war.⁹⁸

Both institutionalizations of this period supported the same objective of effective logistic support to the ROK-U.S. alliance, and could thus be regarded as a single cooperative institutionalization, which would be expressed as level 2.

⁹⁴The Office of the Deputy Minister for Policy, *ROK-US Alliance and USFK*, 62.

⁹⁵*Ibid.*

⁹⁶*Ibid.*, 63.

⁹⁷*Ibid.*

⁹⁸*Ibid.*

5. The Roh Tae-Woo Administration (1988–1992)

During the Roh Tae-Woo administration, the logistical support efforts continued, prompting each country to sign up for the War Time Host Nation Support (WHNS) at the 1991 SCM.⁹⁹ Even though the United States had started to resist this agreement, the agreement meant that the ROK was ready to give logistic support to the U.S. augmentation of troops in wartime. Adhering to this agreement prompted a consolidated alliance by creating regulations of logistical support to the U.S. augmentation troops.

In 1988, the United States and the ROK signed the Mutual Logistic Support Agreement (MLSA) for “the purpose of mutual logistical support during war and peacetime combined exercises, training operations, and joint missions.”¹⁰⁰ Through this agreement, both countries were equipped with better logistical support for the efficient operation of the ROK-U.S. alliance. This agreement could be regarded as cooperative institutionalization and would be expressed as a level 2.

By contrast, the ROK-U.S. Combined Field Army (CFA) that was designated in 1980 was dispersed in 1992,¹⁰¹ and the ROK army forces were able to promote further land force attacks against the DPRK. Even though disbanding of the combined forces let the ROK force take on more self-sufficiency for security, diminishing the USFK troop levels impacted the capacity of the USFK. Thus, this disbanding of the CFA could be regarded as a harmful institutionalization for the alliance cohesion, expressed as 0.

Beginning in 1991, both countries began sharing costs for the USFK through the Special Measure Agreement (SMA). Even though this development indicated the ROK’s national power growth and the end of the Cold War, it prompted many debates between the countries regarding the compromise of a proper level of military sharing for the alliance. Thus, the SMA could be regarded as a disputed institutionalization and would be expressed as a level 0. As a result, the level of the institutionalization of this period is 2.

⁹⁹Ibid.

¹⁰⁰Ibid.

¹⁰¹Kwang-il Noh, “The Impact of Changes in Dominant U.S. Threat Perception on the Cohesion of the U.S.-ROK Alliance,” 57.

6. The Kim Young-Sam Administration (1992–1997)

After the end of the Cold War in 1992, several changes were implemented regarding the ROK-U.S. combined command system. Among those, the transfer of Operational Control (OPCON) from the CFC to ROK Joint Chief of Staff (JCS) was a vital institutionalization during this period. Historically, President Rhee Syng-man tried to transfer the OPCON from the ROK to the United Nations Command (UNC) during the Korean War, and eventually the ROK armed forces decided to place control of the UNC through the ROK-U.S. protocol agreement in 1954. After the foundation of the CFC, the OPCON was transferred from the UNC to the CFC, and the peacetime OPCON was transferred from the CFC to the JCS of ROK in 1994.

The peacetime OPCON transfer resulted from the wish of the self-reliance of the ROK, and it could be interpreted as not being helpful to consolidate the ROK-U.S. alliance. Through the peacetime OPCON transfer, the USFK would not take charge of the security of the ROK during peacetime anymore¹⁰², and rather the ROK took the responsibility for peacetime operational control authority after 1994. The end of the Cold War set the mood, in which domestic politics of the United States required reducing military costs, and a requirement of the peacetime OPCON transfer by the ROK allowed the President Bush to accept the ROK's proposal easily.¹⁰³ With dramatic economic growth and democratization, the ROK began to pursue self-reliance in the external environments that had been revised by the end of the Cold War. The peacetime OPCON transfer was regarded as the required institutionalization, and thus the level of institutionalization for this period would be a level 1.

7. The Kim Dae-Jung Administration (1998–2002)

During the administration of Kim Dae-Jung, in 2001, the second revision of the SOFA was applied through a long negotiation between both countries. Even though the first revision of SOFA had come in effect in 1991, criticisms of the first SOFA revision

¹⁰²Ibid., 54–55.

¹⁰³Ibid.

remained from the ROK.¹⁰⁴ In addition, incidents by U.S. troops caused the ROK to have a negative perception toward the USFK.¹⁰⁵ The negotiations and discontent of the ROK toward the USFK that prompted the second revision of the SOFA was regarded as a disputed institutionalization, and would be expressed as a level 0.

Both countries issued the Land Partnership Plan (LPP), which defined an “effort to consolidate USFK military facilities and manage the USFK and ROK-U.S. shared facilities with higher efficiency.”¹⁰⁶ This plan helped to diminish local complaints toward the USFK and minimize the anti-Americanism in Korean society.¹⁰⁷ After the signing at the 33rd SCM in 2001, the ROK national assembly ratified the LPP in 2002. As a result, the USFK would return “a total of 33,000 acres that included 28 bases, facilities, and fields”¹⁰⁸ to the ROK, and by 2001, gradually diminished other land parcels in Korea. Even though the LPP focused on the effectiveness of land use in the Korean Peninsula and enhanced the living conditions of the USFK, this plan forces the USFK to move to the south side of the Korean peninsula, and weaken the importance of the USFK against the attack of the DPRK. Thus, the LPP could be regarded as disputed institutionalization and would be expressed as a level 0 as well.

8. The Roh Moo-Hyun Administration (2003–2007)

Following his predecessor’s sunshine policy, the Roh Moo-Hyun administration emphasized self-reliance for the security of the ROK. As a result, President Roh promoted discussions about the wartime OPCON transfer, and through the preliminary agreement at the summit meeting in 2006, the U.S. secretary of Defense and ROK

104Kwang-sub Kwak, “The US-ROK Alliance, 1953–2004: Alliance Institutionalization” (PhD dissertation, Graduate School Southern Illinois University, 2006), 218–219.

105Ibid.

106The Office of the Deputy Minister for Policy, *ROK-US Alliance and USFK*, 74.

107Ibid.

108Ibid.

Defense Minister agreed to the wartime OPCON transfer in 2007.¹⁰⁹ The wartime OPCON from the CFC to the JCS of ROK was planned to occur by March 15, 2012.¹¹⁰

Although the wartime OPCON transfer did not disband the ROK-U.S. alliance, the role of the USFK would transfer from lead to support with regard to the security of the ROK. This change was initiated by the ROK for furthering its self-reliance, and accepted by the United States. The diminishing dependency of the USFK was a desirable course to consolidate the cohesion without “the entrapment dilemma.”¹¹¹ However, this was not like the peacetime OPCON transfer. Under increasing nuclear threat from the DPRK, both countries did not consider this decision thoroughly enough to avoid later delay of the transfer plan. As a result, the agreement of the wartime OPCON transfer is regarded as a disputable institutionalization and would be expressed as a level 0.

Both countries supported the Future of the Alliance’s Policy Initiative (FOTA) in 2003.¹¹² Through this meeting, both countries agreed to integrate as the 2nd Infantry Division and moved to the southern part of the Han River, which meant that the USFK force did not lead the charge, but instead, provided a supporting role confronting the aggressions of the DPRK. By considering the tendency to increase self-reliance under new security circumstance of the world, this institutionalization was natural and closely related to the LPP. Thus, it could be regarded as a disputable institutionalization and would be expressed as a level 0.

Finally, the United States suggested that ten missions by the USFK would be transferred to the ROK through the first FOTA,¹¹³ and both countries made an agreement for this transfer during the ROK-U.S. Secretary of Defense meeting in 2003.¹¹⁴ To

¹⁰⁹ROK Ministry of National Defense, *2012 Defense White Paper* (Seoul: ROK Ministry of National Defense, 2012), 70.

¹¹⁰ROK Ministry of National Defense, *2010 Defense White Paper* (Seoul: ROK Ministry of National Defense, 2010), 81.

¹¹¹Ellen Kim and Victor Cha, “Between a Rock and Hard Place: South Korea’s Strategic Dilemma with China and the United States,” In *Asia Policy* 21 (2016): 112–113. DOI: <http://doi.org/10.1353/asp/2016.0016>.

¹¹²Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness,” 174.

¹¹³ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 319–321.

¹¹⁴*Ibid.*

execute this plan, the United States attempted to modernize the USFK and ROK forces.¹¹⁵ Through this plan, roles of the ROK force expanded for the security of the ROK, and the role of the USFK gradually diminished. With the LPP, this was a required process to support the ROK-US alliance. Thus, the mission translation was regarded as required institutionalization and would be expressed as a level 1.

9. The Lee Myung-Bak Administration (2008–2012)

During the Lee Myung-Bak administration, the ROK-U.S. alliance continued to enforce security for the ROK. The wartime OPCON transfer was delayed until 2015 by the ROK-U.S. Summit in 2010,¹¹⁶ and the fear of the people toward the DPRK increased due to provocations and nuclear testing. Public opinion in the ROK sought response by the USFK and CFC against threats by the DPRK, and President Lee demanded that the wartime OPCON transfer to the United States be delayed.¹¹⁷ After consultation between both sides, President Obama and President Lee eventually agreed to the delay of the wartime OPCON transfer. This delay improved the cohesion of the ROK-U.S. alliance because it derived from the recognition of the ROK of the importance of the ROK-U.S. alliance and the USFK. This delay, however, cannot be considered an institutionalization of the alliance because this is not cancellation of the wartime OPCON transfer but just a delay of three years. Thus, this delay could be expressed as a level 0.

The ROK-U.S. Foreign and Defense minister meeting (2+2) has been commenced since 2010 to solve present problems with regard to the ROK-U.S. alliance and both secretary of defenses agreed to progress the Strategic Alliance 2015 at the first ROK-U.S. foreign and Defense minister meeting in 2010, which including the developmental plan of the ROK-U.S. alliance until the wartime OPCON transfer.¹¹⁸ In addition, both secretaries reassured the timeline of the wartime OPCON transfer at the

¹¹⁵Ibid.

¹¹⁶ROK Ministry of National Defense, *2012 Defense White Paper*, 70.

¹¹⁷Kwang-il Noh, “The Impact of Changes in Dominant U.S. Threat Perception on the Cohesion of the U.S.-ROK Alliance,” 89.

¹¹⁸ROK Ministry of National Defense, *2012 Defense White Paper*, 71.

second ROK-U.S. Foreign and Defense Minister meeting in 2012.¹¹⁹ This institutionalization assisted in enhancing cohesion, and began preparation of the wartime OPCON transfer. Thus, it can be regarded as a required institutionalization and expressed as level 1.

Finally, both Defense Ministers agreed to establish the ROK-U.S. Integrated Defense Dialogue (KIDD) to enforce the ROK-U.S. security consultation system.¹²⁰ The first of these two-day KIDD conferences was held in Washington on April 26, 2012, and the second KIDD in Seoul on September 12, 2012. Because KIDD was regarded as the cooperative institutionalization, it would be expressed as a level 2. As a result, the level of the institutionalization in this period was 3.

10. Analysis of the Cohesion by Institutionalization

This section will attempt to measure the cohesion of the ROK-U.S. alliance by adjusting the three levels of institutionalization in each administration of ROK. As a result of the alliance adjustment, the level of the institutionalization will be distinguished into 4 levels. The maximum level is 3 and the minimum level is 0.

Table 2 displays an analysis of the cohesion of each administration by level of institutionalization.

Table 2. Analysis of the Cohesion by Institutionalization

	Event	Level of institutionalization	Level of cohesion
Rhee Syng-Man (1953~1960)	Mutual Defense Treaty USFK Command	2	2
Park Chung-Hee 1 (1961~1968)	SOFA	1	3
	SCM	2	
Park Chung-Hee 2 (1969~1979)	CFC	2	2

¹¹⁹Kwang-il Noh, "The Impact of Changes in Dominant U.S. Threat Perception on the Cohesion of the U.S.-ROK Alliance," 89.

¹²⁰ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 304.

	Event	Level of institutionalization	Level of cohesion
Chun Doo-Hwan (1980~1987)	WHNS	2	2
	WRSA		
Roh Tae-Woo (1988~1992)	MLSA	2	2
	CFA	0	
	SMA	0	
Kim Young-Sam (1993~1997)	Peacetime OPCON Transfer	1	1
Kim Dae-Jung (1998~2002)	Revision of the SOFA	0	0
	LPP	0	
Roh Moo-Hyun (2003~2007)	Agreement of the Wartime OPCON Transfer	0	1
	FOTA	0	
	Msn Transfer	1	
Lee Myung-Bak (2008~2012)	Delay of the Wartime OPCON Transfer	0	3
	2+2 Meeting	1	
	KIDD	2	

B. THE CAPACITY OF USFK

The capacity of USFK is a good indicator to measure the cohesion of the ROK-U.S. alliance, and number of troops and equipment provide a measurement of that capacity. Due to pressure from domestic politics and changes in strategic perceptions, the United States has repeatedly increased and diminished its troops and equipment in the ROK since the Mutual Defense Treaty. In addition, a bilateral alliance has been maintained by consultations and agreements between both sides, which were influenced by each side's domestic interests and external circumstances. Through these negotiations, both countries were able to reach a proper level of capacity to satisfy both sides of the alliance. The ROK, however, has been perpetually threatened by the DPRK, so USFK troops and equipment have a vital role for the security of ROK in spite of the dramatic economic growth and military modernization of the ROK. Thus, the withdrawal of U.S. troops and equipment has a great impact on the cohesion of the ROK-U.S. alliance. For

example, the U.S.-Philippine alliance has weakened its cohesion since 1992 after the withdrawal of the whole US troops and equipment.¹²¹

This thesis will determine the cohesion of the ROK-U.S. alliance by measuring the capacity of USFK against two categories in each administration. The first category is the USFK troop numbers, and the second is the equipment of the USFK in each administration. The withdrawal of USFK has historically resulted not from agreements between United States and ROK, but from U.S. foreign policies like the Nixon Doctrine and the East Asia Strategic Initiative (EASI). Due to this, USFK troop numbers have been a source of tension between both countries. Even though there have been periods when both sides reduced troops for strategic interests at the end of the Cold War, the level of USFK troop numbers have continued to be good indicator of the strong ROK-U.S. alliance. This is because the United States could reassure the strategic value of the ROK-U.S. alliance to the ROK by maintaining and increasing the troop numbers of the USFK. Thus, this thesis utilizes troop numbers of USFK as an element to measure the capacity of USFK.

The second category, the measurement of USFK equipment, explores the conventional and the nuclear equipment of USFK. Due to limitations to research the conventional equipment of USFK, it is hard to distinguish the rise or fall of USFK's conventional equipment on the whole. Thus, this thesis will mainly deal with nuclear equipment of USFK as the main indicator.

To distinguish the level of the cohesion, this thesis suggests a plausible method that distinguishes the cohesion of the ROK-U.S. alliance into five levels. For instance, the thesis is going to measure as 2 when the USFK troop numbers or equipment had increased during each administration: 1 when the troop numbers or equipment had maintained: and 0 when the troops or equipment had decrease. Through the classification, the capacity of USFK can be divided as five levels in each administration. In addition, this thesis assumes that the level of troop numbers and the level of equipment can be calculated as an equivalent level unit, and an outcome of the levels appears a Table 3.

121Hyo-keun Jee, "Alliance Security Culture and Alliance Cohesiveness," 49.

Table 3. Five Levels of the Capacity

Troops	2	2	2	1	1	1	0	0	0
Equipment	2	1	0	2	1	0	2	1	0
Level	4	3	2	3	2	1	2	1	0

This classification could have many limitations of explanatory power due to overgeneralization. However, this thesis is a first trial to measure the cohesion of the ROK-U.S. alliance with statistical data related to the capacity of USFK, and the thesis expects further progress to this study. Also, the thesis does not explore the cause of the rise or fall with regard to the capacity of USFK, and it emphasizes measuring the rise or fall of the capacity in each administration.

Table 4 presents variations of USFK troop numbers from 1953 to 2012, and this thesis is going to measure the capacity of USFK based on the Table 4 and definite changes of USFK equipment, not including minor periodic changes.

Table 4. USFK Troop Number in the ROK from 1953 to 2012¹²²

Year	Number	Change	Year	Number	Change	Year	Number	Change
1953	325,000	-	1973	42,000	+1,000	1993	36,500	-
1954	223,000	-102,000	1974	38,000	-4,000	1994	36,500	-
1955	85,500	-137,500	1975	42,000	+4,000	1995	36,500	-
1956	75,000	-10,500	1976	39,000	-3,000	1996	36,000	-500
1957	70,000	-5,000	1977	42,000	+3,000	1997	36,500	+500
1958	52,000	-18,000	1978	39,000	-3,000	1998	36,500	-
1959	50,000	-2,000	1979	39,000	-	1999	36,500	-

122ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 315.

Year	Number	Change	Year	Number	Change	Year	Number	Change
1960	56,000	+6,000	1980	39,000	-	2000	37,000	-
1961	58,000	+2,000	1981	38,000	-1,000	2001	36,500	-500
1962	57,000	-1,000	1982	39,000	+1,000	2002	37,000	+500
1963	57,000	-	1983	39,000	-	2003	37,500	+500
1964	63,000	+6,000	1984	41,000	+1,000	2004	32,500	-5,000
1965	62,000	-1,000	1985	42,000	+1,000	2005	29,500	-3,000
1966	52,000	-10,000	1986	43,000	+1,000	2006	28,500	-1,000
1967	56,000	+4,000	1987	45,000	+2,000	2007	28,500	-
1968	67,000	+11,000	1988	46,000	+1,000	2008	28,500	-
1969	61,000	-6,000	1989	44,000	-2,000	2009	28,500	-
1970	54,000	-7,000	1990	43,000	-1,000	2010	28,500	-
1971	43,000	-11,000	1991	43,000	-	2011	28,500	-
1972	41,000	-2,000	1992	36,500	-6,500	2012	28,500	-

This thesis analyzes the cohesion of the ROK-U.S. alliance through nine administrations of the ROK. Table 4, however, presents variations of USFK troop numbers annually, which could make short-term variations obscure longer-term trends in some specific periods. To make longer-term trends clearer, this thesis will use mean values of USFK troop numbers in some periods. Table 5 presents these mean values.

Table 5. Mean values of USFK Troop Number

	Rhee Syng-Man (1953–1960)	Park Chung-Hee 1 (1961–1968)	Park Chung-Hee 2 (1969–1979)
Mean value	117,000	59,000	42,500
	Chun Doo-Hwan (1980–1987)	Roh Tae-Woo (1988–1992)	Kim Young-Sam (1993–1997)

	Rhee Syng-Man (1953–1960)	Park Chung-Hee 1 (1961–1968)	Park Chung-Hee 2 (1969–1979)
Mean value	40,700	42,400	36,500
	Kim Dae-Jung (1998–2002)	Roh Moo-Hyun (2003–2007)	Lee Myung-Bak (2008–2012)
Mean value	36,700	31,300	28,500

As appeared in Table 4 and Table 5, USFK troop numbers have changed since 1953, and the thesis will analyze the cohesion of the ROK-U.S. alliance by using both tables and significant equipment changes of USFK.

1. The Rhee Syng-Man Administration

The USFK troop numbers diminished a lot during this administration as a result of the Korean War and the withdrawal of six divisions of the USFK by the United States between 1954 and 1955.¹²³ Although the withdrawal of U.S. troops occurred without negotiations with the ROK,¹²⁴ the ROK was compensated by the relocation of the United Nation Command (UNC) from Japan to the ROK, and the foundation of the USFK command in 1957.¹²⁵ Through this course, both countries had reached agreements regarding the proper level of USFK troop numbers during the 1950s. As displayed in Table 4, the number of cuts was larger than other periods due to the end of the Korean War. Thus, the level of USFK troop numbers in this administration would be expressed as a level 0.

Regarding the equipment of the USFK, tactical nuclear weapons in Japan moved into the ROK in 1957¹²⁶ to fortify the deterrence against the DPRK under the enhanced weapon system of USFK, and to show the consolidated ROK-U.S. alliance figuratively

¹²³ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 70.

¹²⁴Ibid., 71.

¹²⁵Ibid.

¹²⁶Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness,” 84.

by locating these tactical nuclear weapons to the front.¹²⁷ With the relocation of tactical nuclear weapons, the United States deployed nuclear-capable surface-to-surface Honest John missiles in 1958 and the squadron of nuclear-capable Matador cruise missiles in 1959.¹²⁸ As a whole, the relocation of the tactical nuclear weapons, along with other efforts, enhanced the capacity of the USFK. Thus, the equipment of the USFK increased during this period, and the USFK equipment would be expressed as a level 2. Lastly, the level of USFK capacity in this period is 2.

2. The First Half of the Park Chung-Hee Administration

During the first half of the Park Chung-Hee administration, USFK troop numbers increased. For example, the USFK troop numbers were 67,000 in 1968, 11,000 more than at the end of the previous administration; however, this increase was due to the Vietnam War dispatch by the ROK.¹²⁹ Although Figure 4 displays a definite increase of U.S. troop numbers, the dispatch of ROK forces in the Vietnam War was much larger. Thus, this increase did not strengthen the military power for the Korean Peninsula, and was somewhat regarded as compensation for the Vietnam War dispatch. As a result, the level of USFK troops would be expressed as a level 1.

There were definite enhancements of USFK equipment in this period. The deployment of anti-air and surface-to-surface missiles, such as Nike-Hercules and Hawk,¹³⁰ and the establishment of guided missile squadrons advanced the capacity of USFK much more than before.¹³¹ In addition, the USFK equipment was also strengthened by the deployment of 155mm Howitzer in 1964.¹³² With the deployment of

¹²⁷Ibid.

¹²⁸Dong-ryong Oh, "Disband of the U.S. 2nd Infantry Division and the Fates of ROK troops," Chosun-Media, July 9, 2015, <http://www.pub.chosun.com/>.

¹²⁹ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 96.

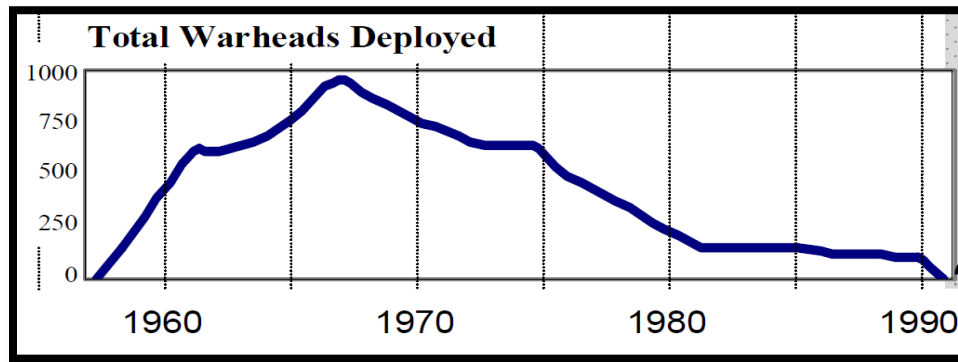
¹³⁰Dong-ryong Oh, "Disband of the U.S. 2nd Infantry Division and the Fates of ROK troops."

¹³¹Seong-hun Cho, *The Establishment and Development of Military Relation Between ROK and U.S.* (Seoul: ROK Ministry of National Press, 2008), 182–3.

¹³²"A History of U.S. Nuclear Weapons in South Korea," The Nuclear Information Project: Documenting Nuclear Policy and Operation, September 28, 2005, <http://www.nukestrat.com/>.

advanced weapon systems, the number of nuclear weapons increased by 950 during this period.¹³³ Figure 2 displays the increase of nuclear weapons during this administration.

Figure 2. Number of U.S. Nuclear Weapons in the ROK¹³⁴



With the increase of USFK equipment that occurred during this period, the level of USFK equipment would be expressed as a level 2. As a result, the level of the USFK capacity in this period is 3.

3. The Second Half of the Park Chung-Hee Administration

During the second half of the Park Chung-Hee administration, the USFK troop numbers diminished due to the Nixon Doctrine issued in Guam in 1991. The Nixon Doctrine confined the role of United States to deterrence, transferring primary responsibility for the security of other states to themselves.¹³⁵ After the term of President Nixon, President Park was unable to maintain a good relation with President Carter due to his emphasis on human rights in South Korea rather than security issues.¹³⁶ During his administration, President Carter issued a two-phased withdrawal plan of U.S. troops from

¹³³Ibid.

¹³⁴Ibid.

¹³⁵Joo-hong Nam, *America's Commitment to South Korea: The First Decade of the Nixon Doctrine* (New York: Cambridge University Press, 1986), 62–65.

¹³⁶Kwang-il Noh, "The Impact of Changes in Dominant U.S. Threat Perception on the Cohesion of the U.S.-ROK Alliance," 18–19.

the ROK.¹³⁷ Even though this plan had been opposed by the ROK and U.S. Congress, it was executed and followed until December 1979, when the Soviet Union invaded Afghanistan.¹³⁸ As a result, U.S. and USFK troop numbers diminished during this timeframe, and the level of USFK troop numbers would be expressed as a level 0.

United States nuclear weapons that were located on the front north of Seoul moved to the Kunsan Air Base in 1975,¹³⁹ and number of tactical nuclear weapons continued to diminish from 750 to 250 during this period.¹⁴⁰ Under the Nixon Doctrine, the United States began to gradually decrease nuclear weapons in the ROK. Even though the ROK stored U.S. nuclear weapons in three areas, Camps Ames, Kunsan Air Base, and Osan Air Base¹⁴¹, “the storage sites at Osan Air Base were deactivated in 1977.”¹⁴² In addition, the decline and movement of U.S. nuclear weapons in the ROK caused concerns over contingency usage of nuclear weapons.¹⁴³ As a result, this gradual decrease of U.S. nuclear weapons weakened the capacity of USFK, and the level of USFK equipment in this period could be expressed as a level 0. Thus, the level of USFK capacity in this period would be a level 0 as well.

4. The Chun Doo-Hwan Administration

During Chun Doo-Hwan’s administration, USFK troop numbers gradually increased, even though the mean value of USFK troop numbers is lower than prior periods. As noted, President Carter planned to withdraw large numbers of the USFK troop in the late 1970s. With U.S. President Reagan and President Chun, however, this tendency of U.S. troop withdrawal was definitely reversed by the ROK-U.S. summit

¹³⁷Ibid.

¹³⁸Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness,” 113.

¹³⁹Ibid., 84.

¹⁴⁰Ibid.

¹⁴¹United States Pacific Command, *Pacific Command History 1977 Volume 2*, quoted in The Nuclear Information Project: documenting nuclear policy and operation, “A History of U.S. Nuclear Weapons in South Korea,” <http://www.nukestrat.com/>.

¹⁴²Ibid.

¹⁴³Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness,” 84

meeting in 1981.¹⁴⁴ Unlike the Carter administration that focused not on security issues but human rights, President Reagan emphasized the ROK-U.S. alliance to impede the movement of the Soviet Union into Asia.¹⁴⁵ Under this intention, USFK troop numbers increased in this period, and it showed the strong cohesion of the ROK-U.S. alliance. Thus, the increase in this period would be expressed as a level 2.

Furthermore, the President Reagan expanded military supports with regard to advanced equipment of USFK. For instance, the USFK was equipped with advanced weapon systems including A-10 and F-16 squadrons and modernized these weapon systems during this period.¹⁴⁶ In addition, the Reagan administration made enhancements to the nuclear capability of USFK.¹⁴⁷ For example, sixty nuclear gravity bombs that could be loaded to fighter-bombers were allocated at Kunsan in 1985,¹⁴⁸ enhancing USFK nuclear delivery systems. Through these enhancements, the ROK could feel the assurance by the United States to the alliance, increasing the cohesion of the ROK-U.S. alliance. The further alliance cohesion of the ROK-U.S. through equipment meant this period would be expressed as a level 2, and the USFK capacity would be expressed as a level 4.

5. The Roh Tae-Woo Administration

During the Roh Tae-Woo administration, the East Asia Strategic Initiative (EASI) decreased USFK troop numbers. Even though U.S. troop numbers decreased in 1992 as shown in Table 4, the mean values of U.S. troop numbers in the term of President Roh Tae-Woo was higher than the term of President Chun. In addition, this decrease of USFK consisted of non-combatant troops¹⁴⁹ and U.S. forces in Philippine entirely withdrew in the same year. In consideration with a factor of the end of the Cold War in this year and

¹⁴⁴Ibid., 115.

¹⁴⁵Richard T. Detrio, *Strategic Partners: South Korea and the United States* (Washington, DC: National Defense University Press, 1989), 89.

¹⁴⁶Young-seon Ha, *Nuclear weapons of Hanbando and World Order* (Seoul: Nanam, 1991), 223.

¹⁴⁷Hyo-keun Jee, "Alliance Security Culture and Alliance Cohesiveness," 117.

¹⁴⁸Il-young Kim and Sung-yeol Cho, *The USFK: History, Issue, and Prospect* (Seoul: Hanul, 2003), 113.

¹⁴⁹Hyo-keun Jee, "Alliance Security Culture and Alliance Cohesiveness," 140.

comparing other U.S. alliances, this result was interpreted as the minimum level of withdrawal. Thus, U.S. troop numbers in this period can be interpreted as being maintained, and the level of U.S. troop numbers can be expressed as a level 1.

In 1991, the United States completely withdrew U.S. nuclear weapons in the ROK, in part to encourage the DPRK to end its ambition of nuclear armament.¹⁵⁰ However, the United States did not talk with the ROK enough with regard to the entire withdrawal of U.S. nuclear weapons in the ROK, and the decision of this withdrawal was made by the United States unilaterally.¹⁵¹ This action would divide the cohesiveness of the ROK-U.S. alliance. Thus, the level of USFK equipment in this period would be expressed as 0, while the level of USFK capacity would be expressed as 1.

6. The Kim Young-Sam Administration

During the Kim Young-Sam administration, USFK troop numbers were maintained at 36,500. Followed the tendency with regard to the reduction of U.S. forces abroad, both sides had negotiated further reduction of USFK troop numbers by the gradual EASI plan.¹⁵² The nuclear crisis of DPRK, however, stopped the USFK withdrawal plan.¹⁵³ In addition, the first East Asia Strategic Report (EASR), issued in 1995, called for 100,000 U.S. troops to maintain stability in East Asia.¹⁵⁴ Even though the further reduction of USFK troops did not occurred in this period, the mean value of U.S. troop numbers in the term of President Kim Young Sam is much lower than the term of President Roh Tae-Woo. As a result, U.S. troop numbers could be interpreted as being reduced, and the level in this period can be expressed as 0.

When it comes to the equipment of USFK, U.S. President Bill Clinton had enhanced the equipment of USFK by adopting and expanding the Patriot missile systems against Scud missiles of the DPRK, the Multi-Launch Rocket System (MLRS), and AH-

¹⁵⁰Ibid., 141.

¹⁵¹Ibid., 142.

¹⁵²The ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 188–189.

¹⁵³Ibid.

¹⁵⁴The ROK Ministry of National Defense, *2012 Defense White Paper*, 337.

64 Apache attack helicopters.¹⁵⁵ This enhancement of USFK equipment that confronted the nuclear program of DPRK could be interpreted as compensation for the entire withdrawal of U.S. nuclear weapons in the ROK. Although the USFK troop numbers diminished during this period, the nuclear crisis with the DPRK forced the USFK to add advanced equipment. Thus, USFK equipment could be regarded as having been enhanced and would be expressed as a level 2. As a result, the level of USFK capacity in this period would be expressed as a level 2.

7. The Kim Dae-Jung Administration

During the Kim Dae-Jung administration, USFK troop numbers were maintained due to the second EASR in 1998, which included the Comprehensive Engagement of U.S. forces in East Asia.¹⁵⁶ With this report and the nuclear threat of the DPRK, USFK troop numbers were maintained during this administration in spite of the Sunshine policy and the first South-North summit meeting in 2000. Thus, the level of the USFK troop could be expressed as a level 1.

With regard to the equipment of the USFK, there was no special alternation during this period. In fact, the enhancement of the prior administration—expanding the Patriot missile systems, the MLRS, and AH-64 helicopter—persisted in this period as well.¹⁵⁷ Compared to the prior administration, however, the scale of this enhancement was not large. Thus, the level of USFK equipment was unchanged in this period and can be expressed as a level 1. As a result, the level of USFK capacity in this period is 2.

8. The Roh Moo-Hyun Administration

During the Roh Moo-Hyun administration, USFK troop numbers were decreased. In 2003, President George W. Bush declared the Global Defense Posture Review, which secured against new threats and enhanced the compatibility of the war on terror in the

¹⁵⁵Dong-ryong Oh, “Disband of the U.S. 2nd Infantry Division and the Fates of ROK troops.”

¹⁵⁶The ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 188.

¹⁵⁷Dong-ryong Oh, “Disband of the U.S. 2nd Infantry Division and the Fates of ROK troops.”

Middle East.¹⁵⁸ As a result, the United States declared that USFK forces would be reduced to 12,500 by June 2004,¹⁵⁹ with plans to continue the troop reduction of both countries through 2008.¹⁶⁰ With these plans, the USFK troop forces had diminished during this periods, and the level of USFK troops in this period could be expressed as 0.

To compensate for this reduction of USFK forces, the United States enhanced the equipment of the USFK by modernizing the Apache helicopter, the Patriot-3 battery, the high speed vehicle (HSV), and the Command, Control, Communication, Computers, and Intelligence (C4I) system.¹⁶¹ Even though this development supplemented the reduction of USFK troops, it is hard to interpret this as enhancement of USFK equipment. Thus, USFK equipment was being maintained and would be expressed as a level 1. As a result, the level of USFK capacity in this period is 1.

9. The Lee Myung-Bak Administration

During the Lee Myung-Bak administration, the strategic value of the ROK-U.S. alliance increased significantly under the ‘Pivot to Asia’ of the Obama administration, and the USFK troop numbers were maintained at 28,500. In addition, there was no definite development of USFK equipment as well. Thus, both categories would be expressed as level 1, and the level of USFK capacity in this period is 2.

10. Analysis of the Cohesion by the Capacity of USFK

This section attempts to measure the cohesion of the ROK-U.S. alliance by summarizing the preceding assessments of levels of USFK equipment and troop numbers in each period. When these levels were increased, they were analyzed as a level 2. When they were maintained, they were analyzed as a level 1. When they were decreased, they were analyzed at a level 0. As a result, the level of USFK capacity of each period can be assessed at 5 levels, where the maximum level is 4 and the minimum level is 0. Table 6 displays the summary of the preceding analysis of the cohesion by the USFK’s capacity.

¹⁵⁸ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 288–289.

¹⁵⁹*Ibid.*, 313–314.

¹⁶⁰*Ibid.*

¹⁶¹*Ibid.*

Table 6. Analysis of the Cohesion by the Capacity of USFK

	Number	Equipment	Level of cohesion
Rhee Syng-Man (1953–1960)	Decrease 0	Increase 2	2
Park Chung-Hee 1 (1961–1968)	Increase not 2 but 1	Increase 2	3
Park Chung-Hee 2 (1969–1979)	Decrease 0	Decrease 0	0
Chun Doo-Hwan (1980–1987)	Increase 2	Increase 2	4
Roh Tae-Woo (1988–1992)	Decrease not 0 but 1	Decrease 0	1
Kim Young-Sam (1993–1997)	Maintain not 1 but 0	Increase 2	2
Kim Dae-Jung (1998–2002)	Maintain 1	Maintain 1	2
Roh Moo-Hyun (2003–2007)	Decrease 0	Maintain 1	1
Lee Myung-Bak (2008–2012)	Maintain 1	Maintain 1	2

C. ROK-U.S. COMBINED EXERCISES

As Victor Cha mentioned, “the common tactics and doctrine through the joint training”¹⁶² is one of vital factors for the success of U.S. alliance, and the ROK-U.S. alliance is as well. Because combined forces face many obstacles when deploying fire power due to the language and tactic differences, repetitive exercises are helpful in enhancing the operational capacity of these forces against threats

ROK-U.S. exercises began in 1954 with the first Command Post Exercise (CPX). Because it is difficult to measure the cohesion of forces during these exercises, this thesis will use a measurement divided into scale and extent to measure combined exercises during each administration. The scale and extent can be considered equivalent level units. The five levels of combined exercises, along with their scale and extend quality, are displayed in Table 7.

When a scale or extent has increased, it is considered a level 2. When a scale or extent has maintained, it is considered a level 1. When a scale or extent has decreased, it

¹⁶²Victor D. Cha, “Shaping Change and Cultivating Idea in the US-ROK Alliance,” 122.

is considered a level 0. In addition, the first administration could not be assessed by this method because there are no regular drills with large participation of ROK forces. Thus, the first period could be regarded as a minimum level with regard to the ROK-U.S. combined exercise. Using these levels, the ROK-U.S. combined exercises can be divided into five levels for each administration from a level 0 to a level 4.

Table 7. Five Levels of ROK-U.S. Combined Exercises

Scale	2	2	2	1	1	1	0	0	0
Extent quality	2	1	0	2	1	0	2	1	0
Level	4	3	2	3	2	1	2	1	0

1. The Rhee Syng-Man Administration

The beginning of ROK-U.S. combined exercise was supervised by the UNC at Tokyo¹⁶³, and a few combined exercises had existed during this administration. There was no UNC in the ROK until 1956, and the UNC at Tokyo had supervised the initial stage of the combined exercise from 1954 to 1956. The first ROK-U.S. combined exercise was the Focus Lens exercise was led by the UNC headquarter at Tokyo, which started in 1954 as the CPX.¹⁶⁴ After moving the UNC headquarter from Tokyo to Seoul in 1957, the UNC had commanded the Focus Lens exercise. Even though the Focus Lens exercise had been regularly implemented by the ROK-U.S. combined forces, the ROK forces had only participated to a minimal extent.¹⁶⁵

In 1955, there was a Field Training Exercise (FTX), the “Chugi or Autumn season.”¹⁶⁶ This FTX, however, was not executed regularly by the ROK-U.S. combined

¹⁶³Robert Collins, “A Brief History of the US-ROK Combined Military Exercise,” 38 North: Informed Analysis of North Korea, last modified February 26, 2014, [Http://38North.org/](http://38North.org/).

¹⁶⁴ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 171.

¹⁶⁵Sang-hyeok Joeng, “A Study on the Intensity Change of the ROK-US Combined Exercises,” (Master’s thesis, National Defense University of ROK, 2015), 42–43.

¹⁶⁶Robert Collins, “A Brief History of the US-ROK Combined Military Exercise.”

forces. As a result, this period had few combined exercises for the ROK-U.S. alliance, and thus, the combined exercise of this period is regarded as the minimum level, expressed as a level 0.

2. The First Half of the Park Chung-Hee Administration

During the first half of the Park Chung-Hee administration, the scale of the combined exercises increased due to the beginning of the regular FTX; however, the extent of the combined exercises had not changed during this period. Between 1961 and 1967, UFL exercises were implemented bi-annually by the combined forces, and once yearly beginning in 1968. In addition, the first regular FTX, Foal Eagle (FE) training, started in 1961, which is for the rear area protection in small scale.¹⁶⁷ One squadron each of ROK and U.S. participated in the FE training in the beginning, and its scale had increased over time. However, the Focus Lens and the Foal Eagle did not enhance their scale and extent much during this period. As a result, the scale of combined exercises increased due to the Foal Eagle training, and the extent was maintained during this period. This is because the extent of Foal Eagle training did not expand much compared to the prior FTX training in spite of their regularity. Thus, a level of the ROK-U.S. combined exercise during this period would be expressed as a level 3.

3. The Second Half of the Park Chung-Hee Administration

During the second half of the Park Chung-Hee administration, the ROK-U.S. combined exercises continued to expand in scale and extent. There were three definite developments with regard to both the scale and extent of the combined exercises. First is the beginning of the Ulji Focus Lens (UFL) exercise in 1976 by combining the Focus Lens and the Ulji exercise. With the foundation of the UFL exercise, dual exercise systems for the combined CPX were unified. Under this unified system, military exercises were led by the UNC, and civilian exercises were led by the government of the ROK.¹⁶⁸ The UFL exercise included not only the military exercises, but also government

¹⁶⁷ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 171.

¹⁶⁸*Ibid.*, 173–174.

plans and mobilizing training.¹⁶⁹ In addition, after the foundation of the CFC in 1978, the CFC led by the military exercise of the UFL, and it allowed the UFL exercise to develop much further through the certain command system.

Second is the beginning of the Team Spirit, in 1976, which was a large scale FTX and “emphasized force flow and force-on-force operation.”¹⁷⁰ The Team Spirit is an exercise to deploy and operate U.S. argumentation forces on the Korea peninsula whenever the ROK confronts conflicts with the DPRK.¹⁷¹ The beginning of the Team Spirit exercise had low participation in 1976, just 46,000 of the combined forces implementing an amphibious operation.¹⁷² But Team Spirit dramatically increased its scale and extent over time. As a result, in 1979 160,000 combined forces participated¹⁷³ and the air-ground operation and anti-submarine warfare were added.¹⁷⁴ Even though there existed other FTXs during this period, like the Focus Letina in 1969 and the Freedom Volt in 1971, those were not regular exercises and the scale was much smaller than the Team Spirit. As a result, the Team Spirit exercise assisted in creating effective combined operations for defensive exercises, demonstrating capacity to the DPRK.

Lastly, since 1976 the FE expanded from the small scale to large scale by the participation of both ROK and U.S. operation detachment teams.¹⁷⁵ In addition, the FE expanded its extent to prepare for regular warfare during this period.¹⁷⁶ With these developments, the combined exercises had increased in both scale and extent beyond the prior eras, and would be expressed as a level 2. As a result, the level of the ROK-U.S. combined exercises in this period would be expressed as a level 4.

169Sang-hyeok Joeng, “A Study on the Intensity Change of the ROK-US Combined Exercises,” 45.

170Robert Collins, “A Brief History of the US-ROK Combined Military Exercise.”

171Ibid.

172Jeong-hyeok Lee, *The Team Spirit and U.S. military strategy* (Seoul: DongNyeok, 1989), 69.

173Ibid.

174Jeong-ok Nam, *The Relationship between the ROK and the U.S. Military: 1871–2002* (Seoul: ROK Ministry of National Press, 2002), 626.

175Hyo-keun Jee, “Alliance Security Culture and Alliance Cohesiveness,” 96.

176ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 176–177.

4. The Chun Doo-Hwan Administration

During the Chun Doo-Hwan administration, regular combined exercises, the UFL, the Team spirit, and the FE continued to develop during this period with regard to scale and extent. There were four enhancements with regard to the combined exercises. First of all, the UFL had expanded its scale and extent during this period by adding various enhancements of the exercise. First, the blackout and civil defense training were added to the UFL in 1982.¹⁷⁷ Second, trainings for large-scale river crossings were added in 1984.¹⁷⁸ Third, the runway repair and counter-infiltration trainings were added in 1985.¹⁷⁹ Finally, the critical facility protection and civilian vessel mobilization trainings were added in 1986.¹⁸⁰

In 1987, the beginning of another CPX, the Focus Clear exercise, was led by the CFC. With this exercise, the combined forces could conduct combined CPX exercises twice a year, and begin to increase their scale and extents.

Next, the Team Spirit expanded its scale and length, increasing from 145,000 troops in 1980 to 218,984 in 1986.¹⁸¹ With regard to the extent, the Air-Land concept was added to the Team Spirit.¹⁸² In addition, the length of the Team Spirit expanded from 10 days in 1980 to about 70 days in 1981, and 80 days in 1987. This large-scale expansion of the Team Spirit presented stiffer capacity to the DPRK than the combined exercises, increasing the strong cohesion of the ROK-U.S. alliance.

Finally, the extent of the FE expanded during this period through regular warfare and increased training of both parties.¹⁸³ In addition, counter-terrorism training was

¹⁷⁷ROK Ministry of National Defense, *A Chronicle of ROK military: 1981–1985* (Seoul, ROK Ministry of National Press, 2007), 156.

¹⁷⁸Ibid., 182.

¹⁷⁹Ibid., 205.

¹⁸⁰ROK Ministry of National Defense, *A Chronicle of ROK mMilitary: 1986–1990* (Seoul, ROK Ministry of National Defense, 2009), 92.

¹⁸¹Jeong-hyeok Lee, *The Team Spirit and U.S. Military Strategy*, 69.

¹⁸²Ibid.

¹⁸²Sang-hyeok Joeng, “A Study on the Intensity Change of the ROK-US Combined Exercises,” 52.

¹⁸³ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 177.

implemented in preparation for the Asian Game of 1986.¹⁸⁴ With these enhancements, the combined exercises had expanded their scale and extent during this period, and would be expressed as a level 2. As a result, the level of the ROK-U.S. combined exercises during this period would be expressed as a level 4.

5. The Roh Tae-Woo Administration

During the Roh Tae-Woo administration, the scale of combined exercises diminished, marked by two distinct backward steps. First, the UFL exercise was divided into two parts in 1991, creating a military part and a civilian part.¹⁸⁵ Under this system, the scale of combined exercises diminished, and the implementation of the UFL in 1990 was reduced under Roh's northern policy.¹⁸⁶ The regular combined exercises were a major indicator of the cohesion of the alliance. If the combined forces miss the regular combined exercise in specific year, it could be harmful to assure the strong cohesion of alliances. As a result, the UFL had weakened during this period with regard to its scale.

Team Spirit had also diminished during this period. Until the late 1980s, the Team Spirit had maintained its scale with about 200,000 combined forces participating in the exercises,¹⁸⁷ and increased its length by about ninety days since 1988.¹⁸⁸ Its scale, however, had gradually diminished since the end of this administration, with both countries cancelling the exercise in 1992 due to negotiations regarding the nuclear program of DPRK.¹⁸⁹ Insofar as the scale of combined exercises was influenced by the efforts to improve the relation with the DPPK during this period, the mean value of the scale of combined exercises during this administration was higher. Thus, the scale of the combined exercise would be expressed as a level 1.

¹⁸⁴Ibid.

¹⁸⁵Ibid., 174.

¹⁸⁶Sang-hyeok Joeng, "A Study on the Intensity Change of the ROK-US Combined Exercises," 68–69.

¹⁸⁷Jeong-hyeok Lee, *The Team Spirit and U.S. Military Strategy*, 69.

¹⁸⁸Ibid.

¹⁸⁹Sang-hyeok Joeng, "A Study on the Intensity Change of the ROK-US Combined Exercise," 73–74.

During this administration, the ROK Navy participated in the Rim of the Pacific Exercise (RIMPAC), which was intended for multilateral exercises rather than the ROK-U.S. alliance; however, it did not matter much to the cohesion of the ROK-U.S. alliance. As a whole, while the scale and the extent of combined exercises were maintained. Therefore, the scale and the extent would be expressed as a level 1, and the level of the ROK-U.S. combined exercise in this period would be expressed as a level 2.

6. The Kim Young-Sam Administration

During the Kim Young-Sam administration, the scale of the Team Spirit exercises diminished drastically in 1994. Three changes to combined exercises took place during this period. During this period, the Team Spirit became a strong means of negotiation with the DPRK over nuclear programs, and had impacted the scale of combined exercises between 1976 and 1991.¹⁹⁰ The Team Spirit was again implemented for a short period in 1993, and was then dissolved.¹⁹¹ In addition, the extents of the combined FTX decreased due to the halt of the Team Spirit.

In 1994, the Reception, Staging, Onward Movement, and Integration (RSOI) exercise was implemented. This exercise was a combined CPX that used computer simulators.¹⁹² Its objectives were to exercise with regard to wartime supports by the ROK force, mutual logistic support, and the mobilization and combat power restoration exercises of the ROK force.¹⁹³ Although the ROK and United States wanted to substitute the Team Spirit with the RSOI, there were two reasons why the RSOI was not equipped to perform as well. First, the RSOI was not a FTX to exercise combined forces realistically but a CPX to use computer simulators. Secondly, the scale of U.S. augmented forces was 4,000–7,000, which was much smaller than the Team Spirit.¹⁹⁴

¹⁹⁰Robert Collins, “A Brief History of the US-ROK Combined Military Exercise.”

¹⁹¹Jeoung-ok Nam, *The Relationship Between the ROK and the U.S. Military*, 626.

¹⁹²ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 174–175.

¹⁹³*Ibid.*

¹⁹⁴Sang-hyeok Joeng, “A Study on the Intensity Change of the ROK-US Combined Exercise,” 74–75.

By contrast, the UFL unified its military parts and civilian parts in 1994, expanding its scale and extent. However, because this unification did not influence the scale, the scale diminished and can be expressed as level 0. The extent was maintained due to enhancements of the ROSI and the UFL, and can be expressed as level 1.

7. The Kim Dae-Jung Administration

The scale and extent of combined exercises had not changed much during this period, and three major combined exercises, the UFL, the FE, and the ROSI, had regularly been implemented. The level of strength, however, had diminished because President Kim wanted to reduce tensions with DPRK under the Sunshine policy. For example, most of combined exercises had quietly proceeded without much media attention during this period.¹⁹⁵ In addition, the ROK side did not participate in the combined FTX in 2000 due to the South-North summit meeting, and the FTX was executed by US forces mostly.¹⁹⁶ Even though the scale and extent had not diminished during this period, strength level of the combined exercises fell during this period due to the reconciliation efforts with the DPRK.

Additionally, in 2002 RSOI and the FE were unified to increase the effectiveness of the combined exercises.¹⁹⁷ In addition, the DPRK was more sensitive about the combined FTX exercises due to the memory of the Team Spirit, so both the ROK and the United States agreed to integrate the two exercises to reduce the needless tension of frequent combined exercises. Although the objective of the RSOI/FE was to implement more effective combined exercises than the prior era, this result was not achieved, mainly because the RSOI and FE were different exercises. The combined exercises did not advance the quality of exercises during this period. As a result, the scale was maintained and can be expressed as a level 1, and the extent was decreased and can be expressed as a level 0. Thus, the level of the ROK-U.S. combined exercises in this period can be expressed as a level 1.

¹⁹⁵Ibid., 69–70.

¹⁹⁶Ibid.

¹⁹⁷ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 174–175.

8. The Roh Moo-Hyun Administration

During the Roh Moo-Hyun administration, the scale and extent of combined exercises did not change; however, the UFL and RSOI/FE were regularly implemented by the combined forces. President Roh perpetuated the Sunshine Policy, and adjustments to the level of combined exercises were implemented in response to demands of the DPRK. Considering that the DPRK conducted its first nuclear test in 2006, these adjustments weakened the cohesion of the ROK-U.S. alliance. In addition, willingness for self-reliance during this administration prompted an agreement regarding the wartime OPCON transfer, and the combined exercises changed their name and methods in response to the wartime OPCON transfer plan in 2007.¹⁹⁸

The name of the UFL also changed to the Ulji Freedom Guardian (UFG), and the name of the RSOI/FE was altered to the Key Resolve & Foal Eagle (KR/FE). Both countries agreed that the ROK would officially lead the UFG exercises after 2008,¹⁹⁹ and the JCS of ROK would manage the planning, implementation, and review of the exercises instead of the CFC.²⁰⁰ The USFK managed the supporting role with regard to this exercise after 2008.²⁰¹ Even though both countries agreed that the USFK would officially lead the KR/FE exercises, the role of ROK forces also increased to prepare for the wartime OPCON transfer.

Although both countries made an agreement with regard to this change in this period, this change did not influence to the combined exercises. During this period, both countries had executed two regular exercises, and the scale of combined exercises did not change as it had under the prior administration. The RSOI/FE, however, still could not substitute to various extents for the Team Spirit, and decisions to diminish roles of the USFK in the combined exercise were not helpful to create more effective combined exercises and consolidate the cohesion of the ROK-U.S. alliance as well. As a result, the

¹⁹⁸Ibid.

¹⁹⁹Ibid.

²⁰⁰Kwang-il Noh, "The Impact of Changes in Dominant U.S. Threat Perception on the Cohesion of the U.S.-ROK Alliance," 68.

²⁰¹Ibid.

scale could be read as maintained and can be expressed as a level 1, and the extent could be read as decreased and can be expressed as a level 0. Thus, the level of the ROK-U.S. combined exercises in this period can be expressed as a level 1.

9. The Lee Myung-Bak Administration

During the Lee Myung-Bak administration, the UFG and KR/FE regular exercises maintained their scale. However, the extents of combined exercises increased during this period. In 2009, the Max thunder training began, focusing on “striking package mid-altitude infiltration training and enhancement of survivability and mission execution capability during infiltration,”²⁰² enhancing the combined air operational capacity between the Republic of Korea Air Force (ROKAF) and the United States Air Force (USAF). The Peninsula Operations Readiness Exercise (PENORE) exercises “combined large force exercises, alert air interdiction operations, close air support operations, and counter-fire training between the ROKAF and the USAF.”²⁰³ The combined Anti-Submarine Exercise (ASWEX) and the combined unconventional warfare training (Balance Knife) were begun and regularly executed during this period.²⁰⁴

These new combined exercises increased the extents of the exercises, and reassured the strong cohesion of the ROK-U.S. alliance during this period. Therefore, the scale of combined exercises were maintained during this period and can be expressed as a level 1, and the extent of combined exercises were increased and can be expressed as a level 2. Finally, a level of the ROK-U.S. combined exercise in this period can be expressed as a level 3.

10. Analysis of the Cohesion by the ROK-U.S. Combined Exercise

This thesis has attempted to determine the cohesion of the ROK-U.S. alliance by assessing the three levels of both the scale and extent of combined exercises. As a result, five levels distinguish ROK-U.S. combined exercises in each period. The maximum level

²⁰²The ROK Ministry of National Defense, *2012 Defense White Paper*, 398.

²⁰³The ROK Ministry of National Defense, *2014 Defense White Paper*, 283.

²⁰⁴Kwang-il Noh, “The Impact of Changes in Dominant U.S. Threat Perception on the Cohesion of the U.S.-ROK Alliance,” 86.

is 4 and the minimum level is 0. Table 8 displays an analysis of the cohesion by the ROK-U.S. combined exercises.

Table 8. Analysis of the Cohesion by the ROK-U.S. Combined Exercises

	Scale (level)	Extent (level)	Level of cohesion
Rhee Syng-Man (1953–1960)	Minimum 0	Minimum 0	0
Park Chung-Hee 1 (1961–1968)	Increase 2	Maintain 1	3
Park Chung-Hee 2 (1969–1979)	Increase 2	Increase 2	4
Chun Doo-Hwan (1980–1987)	Increase 2	Increase 2	4
Roh Tae-Woo (1988–1992)	Maintain 1	Maintain 1	2
Kim Young-Sam (1993–1997)	Decrease 0	Maintain 1	1
Kim Dae-Jung (1998–2002)	Maintain 1	Decrease 0	1
Roh Moo-Hyun (2003–2007)	Maintain 1	Decrease 0	1
Lee Myung-Bak (2008–2012)	Maintain 1	Increase 2	3

D. CONCLUSION

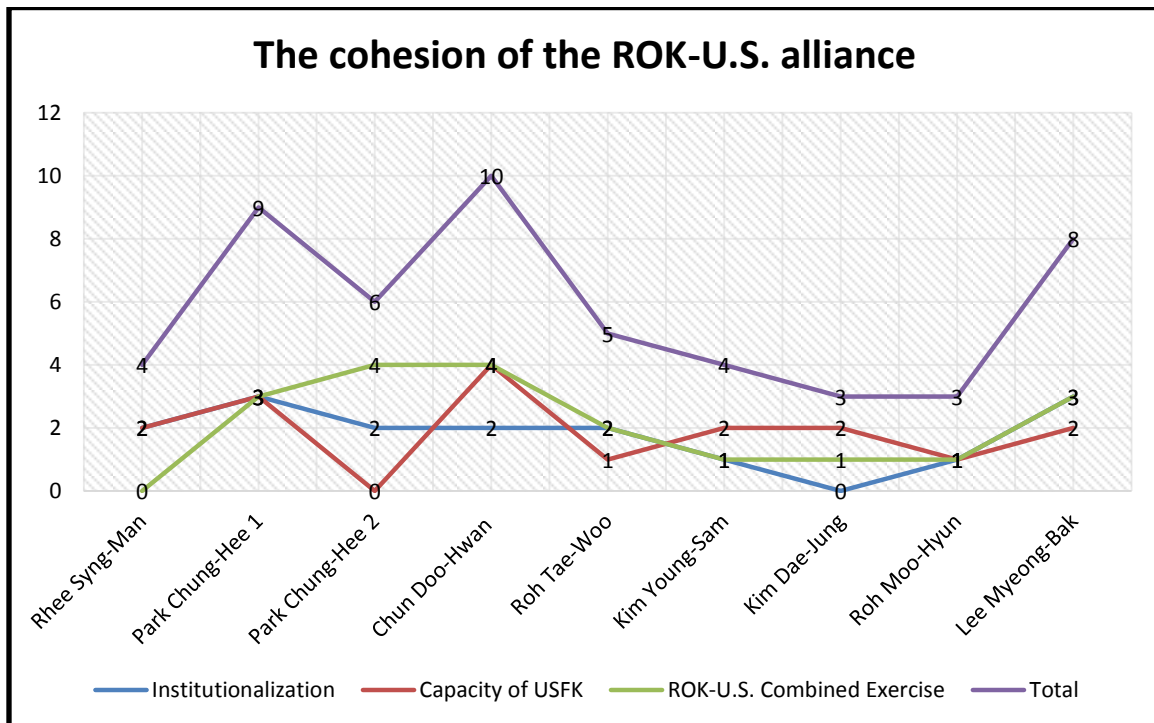
This chapter attempted to measure the cohesion of the ROK-U.S. alliance in each administration by adjusting three indicators: institutionalization, the capacity of USFK, and the ROK-U.S. combined exercises. To distinguish the cohesion of the ROK-U.S. alliance more precisely, each indicator was assessed at one of five levels by its own methods. Although the methods used to divide cohesion levels in each indicator were not completely defined, no other study has explored these cohesion measurements with more precision than this thesis. Thus, the analysis with regards to the cohesion of the ROK-U.S. alliance can be meaningful to develop future studies for the ROK-U.S. alliance.

The cohesion of the ROK-U.S. alliance contained periodic variations as the thesis assumed, resulting in several significant findings. First, the cohesion of the ROK-U.S.

alliance during the Cold War was stronger than the cohesion after the end of the Cold War. Secondly, the level of the cohesion peaked during the Chun Doo Hwan administration. Thirdly, the cohesion of the ROK-U.S. alliance weakened from the end of the Cold War during the Progressive governments of the ROK. Finally, the cohesion was strengthened during the Lee Myung-Bak administration.

Figure 3 displays an analysis with regard to the cohesion the ROK-U.S. alliance in each administration, combining the findings for all three indicators. Using this information, Chapter III will focus on seeking relationships between U.S. military spending and the cohesion of the ROK-U.S. alliance.

Figure 3. The Cohesion of the ROK-U.S. Alliance from 1953 to 2012



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III. U.S. MILITARY SPENDING

In Chapter II, this thesis measured the cohesion of the ROK-U.S. alliance through three indicators, and created Figure 3 as a result. Based on this outcome, this chapter will determine the relationship between the cohesion of ROK-U.S. alliance and three categories of the U.S. military spending. The objective of this chapter is to determine whether or not certain patterns exist.

A. TOTAL U.S. MILITARY SPENDING

To have more transparency, the Department of Defense (DOD) of the United States publishes the National Defense Budget Estimates annually. With this data, it is possible to analyze the total U.S. military spending; however to acquire more credible data, analysts must determine the most valuable data from the findings. Thus, there are several rules to determine the total U.S. military spending.

First, this thesis uses the Total Obligation Authority (TOA) category, including three standard categories: “Budget Authority (BA), TOA, and Outlay.”²⁰⁵ According to the FY2017, “TOA is a DOD financial term expressing the value of the direct Defense program for a fiscal year, whereas BA is recognized by the general public as the amount of funding appropriated to the DOD by Congress,”²⁰⁶ since BA affects “a current year and future outlays, TOA affects the fiscal year.”²⁰⁷ To eliminate influences to future outlays, this thesis uses the TOA category with regard to the total U.S. military spending. In addition, according to the FY 2017, “outlay may represent the liquidation of obligations incurred over a number of years, and there is a time lag between congressional appropriations, obligations, and liquidation of obligations.”²⁰⁸ While the BA or Outlay may have influences outside of a fiscal year, the TOA is always related to a fiscal year. Due to this, this thesis uses the TOA category.

²⁰⁵Department of Defense, *National Defense Budget Estimate for FY 2017* (Washington: Office of the under Secretary of Defense, 2016), 1.

²⁰⁶Ibid.

²⁰⁷Ibid.

²⁰⁸Ibid., 2.

Next, the thesis adjusts constant dollars to have data rather than current dollars in the first two categories of the total U.S. military spending. Even though current dollars have a merit considering the effect of inflation, total U.S. military spending data by current dollars is not proper for this thesis. This is because this thesis deals with numerous administrations. If this thesis uses current dollars, it would be difficult to find proper variations of the total U.S. military spending and compare data. Therefore, this thesis uses constant dollars in the first two categories drawing on data in the National Defense Budget Estimates for FY 2013 and FY 2017, and adjusts to FY2013 constant dollars.

1. Data of Total U.S. Military Spending

To aggregate data with regard to total U.S. military spending, this thesis analyzes the TOA category adjusting the FY 2013 to constant dollars. In fact, to have data about authentic total U.S. military spending is difficult to research because immeasurable variables can influence U.S. military spending. This thesis, however, needs to have credible data that could represent variation of total U.S. military spending periodically, and this category of total U.S. military spending could be proper to serve definite variations in each period. Table 9 displays the total U.S. military spending in terms of TOA and adjusted by FY 2013 constant dollars.

Table 9. Total U.S. Military Spending TOA (FY 2013 Constant Dollars with Millions)²⁰⁹

Year	Total	Year	Total	Year	Total	Year	Total	Year	Total
1953	504,865	1965	424,367	1977	406,166	1989	540,004	2001	420,121
1954	381,633	1966	501,858	1978	403,944	1990	525,426	2002	472,755
1955	390,964	1967	540,377	1979	402,781	1991	531,581	2003	559,056
1956	409,238	1968	546,853	1980	409,588	1992	480,350	2004	570,096
1957	415,861	1969	543,490	1981	450,997	1993	450,504	2005	601,201

²⁰⁹Department of Defense, *National Defense Budget Estimate for FY 2013* (Washington, DC: Office of the under Secretary of Defense, 2012), chapter six.

Year	Total	Year	Total	Year	Total	Year	Total	Year	Total
1958	415,414	1970	499,212	1982	496,858	1994	412,214	2006	621,989
1959	410,400	1971	452,610	1983	529,392	1995	408,020	2007	681,758
1960	388,531	1972	436,982	1984	553,710	1996	399,468	2008	736,359
1961	415,419	1973	414,727	1985	577,427	1997	389,040	2009	719,861
1962	447,017	1974	393,878	1986	568,479	1998	384,979	2010	730,715
1963	435,928	1975	383,461	1987	561,953	1999	395,696	2011	713,194
1964	435,236	1976	386,446	1988	551,743	2000	405,356	2012	660,360

To compare between the total U.S. military spending and the cohesion of the ROK-U.S. alliance, mean values of divided periods based on Table 9 could be valuable. Thus, this thesis calculates mean values of total U.S. military spending in each period, and displays the results in Table 10.

Table 10. Mean Value & Coding Level of Total U.S. Military Spending
(FY2013 Constant Dollars in Millions)

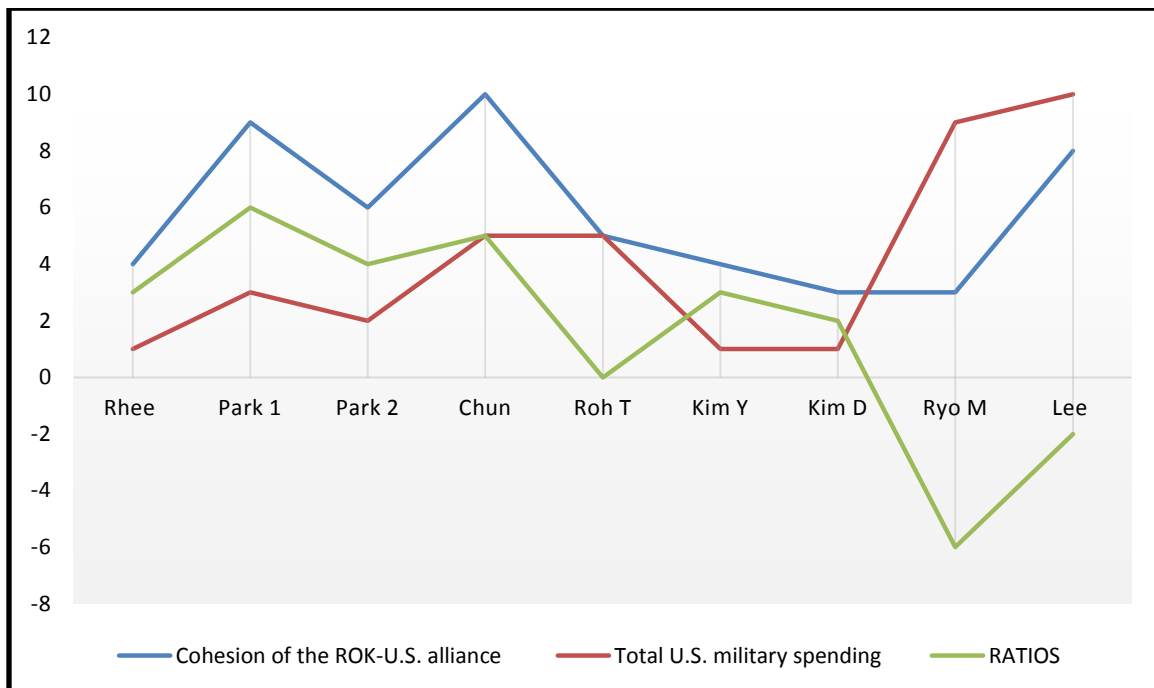
Presidential period	Rhee Syng-Man (1953–1960)	Park Chung-Hee 1 (1961–1968)	Park Chung-Hee 2 (1969–1979)
Mean value	414,613	468,382	429,427
Coding level	1	3	2
Presidential period	Chun Doo-Hwan (1980–1987)	Roh Tae-Woo (1988–1992)	Kim Young-Sam (1993–1997)
Mean value	518,550	525,821	411,849
Coding level	5	5	1
Presidential period	Kim Dae-Jung (1998–2002)	Roh Moo-Hyun (2003–2007)	Lee Myung-Bak (2008–2012)
Mean value	415,781	606,820	712,098
Coding level	1	7	10

As noted in Table 10, while the minimum mean value was 411,849 during the administration of President Kim Young-Sam, the maximum mean value was 712,098 during the administration of President Lee Myung-Bak. The difference between both values is 300,249. To determine a pattern between the total U.S. military spending and the cohesion of the ROK-U.S. alliance, this thesis must divide mean values into 10 levels similar to the cohesion levels. Results are displayed in Table 10.

2. Relationship Between Total U.S. Military Spending and the Level of the Cohesion

To determine whether a certain pattern exists, this thesis compares the category of total U.S. military spending and the cohesion of the ROK-U.S. alliance, both of which are divided into 10 levels. Figure 4 displays the compared results between these two variables.

Figure 4. Comparison Between Total U.S. Military Spending and the Level of the Cohesion



3. Analysis of Figure 4

This thesis found that ratios between the cohesion of the ROK-U.S. alliance and the total U.S. military spending change over time. The ratios refer to a coding level that subtracts the level of the cohesion from the level of the U.S. military spending in each period. Variations of this coding level mean that there is no delicate relationship between these two variables. For instance, if there is a delicate relationship between two variables, ratios line in Figure 4 would appear as a straight line or a line with a shallow angle. As displayed in the Figure, however, the ratios change a lot over time, which means that there is a no certain pattern between two variables.

Next, this thesis found that there is a striking difference between the Cold War and the Post-Cold War with regard to the ratios. Whereas the ratios of the Cold War appear as large positive numbers in Figure 4, the ratios of the Post-Cold War appear as small positive numbers or negative numbers for this category of U.S. military spending. Like the level of the cohesion, this thesis found the specific difference with regard to the ratios, which is a meaningful finding. To illustrate this finding more definitively, this thesis uses the term “positive tendency.” In fact, terms of a positive and negative relationship are imprecise in this analysis because the coding of two variables is rather arbitrary. Therefore, this thesis compares the tendency of each variable when two variables simultaneously rise or fall. With this approach, the thesis is more guarded in its use of its data, but therefore can be more robust in its conclusions.

This thesis found the positive tendency between both variables in the Cold War. Even though Figure 4 displays large gaps of each variable, a positive tendency is displayed in the Cold War for this category. For instance, while the level of the cohesion gradually varied from the administrations of President Rhee to the President Chun as levels 4, 9, 6, and 10, the level of U.S. military spending also varied positively with levels of cohesion as level 1, 3, 2, and 5. With this comparison, this thesis finds a positive tendency between the cohesion of the ROK-U.S. alliance and total U.S. military spending during the Cold War.

By contrast, this thesis did not find the positive tendency between two variables after the Cold War. Even in a transition from President Kim Dae-jung to President Roh Moo-Hyun, this thesis found a negative tendency in the figure. There is no certain pattern between the cohesion of the ROK-U.S. alliance and the total U.S. military spending, because the ratios changed over time, as displayed in Figure 4.

A factor to be taken into account is the dramatic increase of total U.S. military spending that occurred after President Ryo Moo-Hyeon. This thesis argues that this outcome could result from the war supplement spending for the Iraq and Afghanistan Wars. After the terrorist attack in 2001, the DOD of the United States added funding to support the global war on terror,²¹⁰ and thus adjusted the National Defense Budget Estimates.²¹¹ Because the Iraq and Afghanistan Wars increased this funding, the total U.S. military spending has gradually increased.²¹² This funding, however, did not affect the ROK-U.S. alliance; therefore, this thesis must determine a more credible relationship between the cohesion of the ROK-U.S. alliance and the total U.S. military spending by counting out the war supplement spending after 2001.

B. TOTAL U.S. MILITARY SPENDING NOT INCLUDING THE WAR SUPPLEMENT SPENDING

As noted above, this thesis will estimate and subtract the war supplement spending included in the total U.S. military spending to create a more plausible outcome. In fact, this adjustment applies not to the whole historical war supplement spending of the United States but only the war supplement spending for the Iraq and Afghanistan War after 2001. There are three reasons for that. First, and most importantly, the thesis does not adjust for supplemental spending for the Vietnam War because this war was related with the ROK-U.S. alliance, including ROK troops dispatched to Vietnam as part of maintaining the security benefits of the United States. Thus, this thesis does not eliminate the war spending to the Vietnam War. Second, the U.S. military spending used in this thesis is based on the Fiscal Year Budget Estimate by the DOD, and there is no available

²¹⁰Department of Defense, *National Defense Budget Estimate for FY 2017*, 22–35.

²¹¹Ibid.

²¹²Ibid.

data with regard to the Vietnam War and others in the Fiscal Year before 2001. Finally, this thesis is original in noting the dramatic increase of U.S. military spending after 2001 and the need to eliminate influences of spending for the two wars.

This thesis utilizes the total U.S. military spending using the TOA and FY 2013 constant dollars. The National Defense Budget Estimates for FY 2017, however, only provides comprehensive data related to the war supplement spending after 2001, and FY 2017 does not provide data for the FY 2013 constant dollars. Thus, this thesis needs to transform the war supplement spending by adjusting the FY 2017 current dollars to match the FY 2013 constant dollars.

The following equation displays this adjustment:

$$\text{Deflator} = \text{Current \$} / \text{Constant \$} \times 100^{213}$$

$$\text{Deflator} = \text{FY 2017 Current \$} / \text{FY 2013 Constant \$} \times 100^{214}$$

Converting current dollars to constant dollars this thesis exploits two equations below

$$\text{Constant \$} = \text{Current \$} / \text{Deflator} \times 100$$

$$\text{FY 2013 Constant \$} = \text{FY 2017 Current \$} / \text{Deflator} \times 100$$

Through these equations, this thesis can continue to use new total U.S. military spending not including with the war supplement spending for the FY 2013 constant dollars, and evaluate the consistency of data.

1. Data of Total U.S. Military Spending Not Including the War Supplement Spending

As noted above, this thesis attenuates effects of the war supplement spending to total U.S. military spending, and this category of total U.S. military spending is adjusted to diminish the effects of the war supplement spending since 2001 through the above

²¹³Ibid., 2–3.

²¹⁴Ibid.

equations. In addition, for consistency of data, this thesis uses the TOA and the FT 2013 constant dollars in this category, as displayed in Table 11.

Table 11. Total U.S. Military Spending TOA Not Including War Supplement Spending (FY2013 Constant Dollars in Millions)²¹⁵

Year	Total	Year	Total	Year	Total	Year	Total	Year	Total
1953	504,865	1965	424,367	1977	406,166	1989	540,004	2001	382,715
1954	381,633	1966	501,858	1978	403,944	1990	525,426	2002	450,318
1955	390,964	1967	540,377	1979	402,781	1991	531,581	2003	462,783
1956	409,238	1968	546,853	1980	409,588	1992	480,350	2004	407,907
1957	415,861	1969	543,490	1981	450,997	1993	450,504	2005	500,597
1958	415,414	1970	499,212	1982	496,858	1994	412,214	2006	468,024
1959	410,400	1971	452,610	1983	529,392	1995	408,020	2007	463,094
1960	388,531	1972	436,982	1984	553,710	1996	399,468	2008	487,771
1961	415,419	1973	414,727	1985	577,427	1997	389,040	2009	526,085
1962	447,017	1974	393,878	1986	568,479	1998	384,979	2010	514,736
1963	435,928	1975	383,461	1987	561,953	1999	395,696	2011	502,006
1964	435,236	1976	386,446	1988	551,743	2000	405,356	2012	507,300

To compare the total U.S. military spending not including war supplement spending and the cohesion of the ROK-U.S. alliance, the mean values of divided periods provide an analysis of both variables. In addition, this thesis analyzes three categories of total U.S. military spending through a consistent process. Thus, this thesis utilizes the mean values for comparison with the levels of the cohesion, as displayed in Table 12.

²¹⁵Depart of Defense, *National Defense Budget Estimate for FY 2013* (Washington: Office of the under Secretary of Defense, 2012), chapter six, seven, and chapter two of the FY2017.

Table 12. Mean Values & Coding Level of Total U.S. Military Spending Not Including the War Supplement Spending

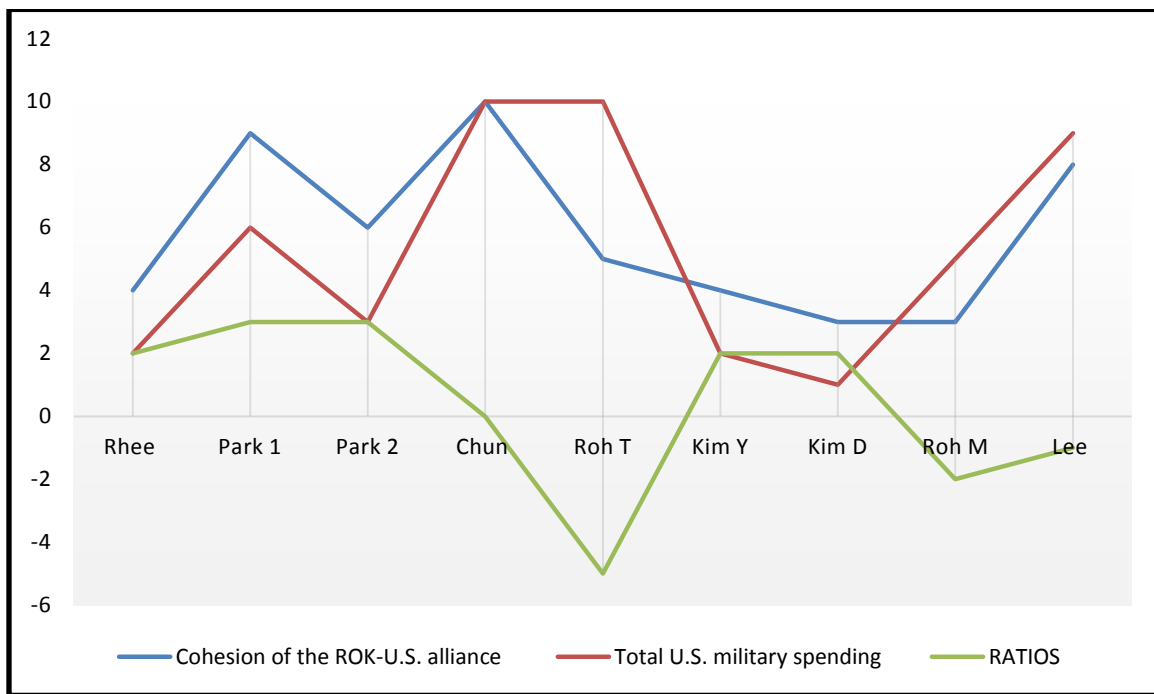
Presidential period	Rhee Syng-Man (1953–1960)	Park Chung-Hee 1 (1961–1968)	Park Chung-Hee 2 (1969–1979)
Mean value	414,613	468,382	429,427
Coding level	2	6	3
Presidential period	Chun Doo-Hwan (1980–1987)	Roh Tae-Woo (1988–1992)	Kim Young-Sam (1993–1997)
Mean value	518,550	525,821	411,849
Coding level	10	10	2
Presidential period	Kim Dae-Jung (1998–2002)	Roh Moo-Hyun (2003–2007)	Lee Myung-Bak (2008–2012)
Mean value	403,813	460,481	507,716
Coding level	1	5	9

As noted in Table 12, while the minimum mean value was 403,813 during the Kim Dae-Jung administration, the maximum mean value was 525,821 during the Chun Doo-Hwan administration, and the difference between both values is 122,008. To estimate a more credible pattern, this thesis divides mean values into 10 levels, and displays the results in Table 12.

2. Relationship Between Total U.S. Military Spending Not Including War Supplement Spending and the Level of the Cohesion

To determine whether a certain pattern exists, this thesis compares the total U.S. military spending not including war supplement spending with the cohesion of the ROK-U.S. alliance. Figure 5 displays the outcome of comparison between the two variables.

Figure 5. Comparison between Total U.S. Military Spending Not Including the War Supplement Spending and the Cohesion of the ROK-U.S. Alliance



3. Analysis of Figure 5

Similar to the prior analysis with regard to the first category of total U.S. military spending, ratios between the cohesion of the ROK-U.S. alliance and total U.S. military spending not including the war supplement spending change over time. The variations of the ratios are smaller than the first category, and the graph clearly displays a closer symmetry between the two measures, although it is hard to argue that two variables correlate with each other. In addition, the difference between the Cold War and the Post-Cold War with regard to the ratios is less definitive than the first category, indicating that the difference between these two periods indicated in the first category may result more from the anomalous impact of post-9/11 supplemental spending than the end of the Cold War itself.

Secondly, this thesis found the positive tendency between total U.S. military spending not including the war supplement spending and the cohesion of the ROK-U.S. alliance in the Cold War. Figure 5 provides a more definitive positive tendency than

Figure 4. In addition, the thesis found relatively small gaps between two variables in this category with the exception of President Ryo-Tae Woo. With these findings, this category shows more definitive positive tendencies in the Cold War than appeared in the prior category. By contrast, the positive tendencies do not occur in the Post-Cold War in this category of U.S. military spending. Thus, this thesis does not find a definite relationship between the two variables in this category.

Unlike the prior analysis, both variables peak during the President Chun administration at the highest level. Although the positive tendency was not consistent during the Ryo Tae-Woo administration, this outcome is meaningful to explain the positive tendency during the Cold War.

As a result, there is no definite relationship between the cohesion of the ROK-U.S. alliance and the total U.S. military spending not including the war supplement spending. In addition, there remain some differences between the Cold War and the Post-Cold War in this category. Although the positive tendency appears more definitive for the category in Figure 5, this thesis cannot argue that there exists a definite relationship between the two variables based on this figure. To provide further findings, this thesis moves forward to the third category of U.S. military spending.

C. TOTAL U.S. MILITARY SPENDING PERCENT OF THE U.S. GDP

The status of the U.S. economy has been heavily influenced by the total U.S. military spending. To adjust for this economic factor, this thesis utilizes a third category of total U.S. military spending as a percent of U.S. GDP. In fact, the Stockholm International Peace Research Institute (SIPRI) provides this data with high credibility for all countries. The data from the SIPRI, however, has limits for this thesis because it is only available from 1988. In addition, the National Defense Budget Estimates also provide this data in its last chapter. The data from there, however, is hard to make consistent with the prior two categories of total U.S. military spending. Thus, this thesis provides its third category of U.S. military spending without the two data sources mentioned at above.

Per the definition of current dollars and constant dollars, current dollars consider the effect of inflation. This category of U.S. military spending considers the relationship of economic factors to total U.S. military spending. Thus, to use current dollars is more proper than constant dollars with regard to the third category. In addition, to have more consistency with the above the two categories, this thesis uses the FY 2013 current dollars for this category, and total U.S. military spending TOA with FY 2013 current dollars. To estimate the U.S. GDP with the FY 2013 current dollars, this thesis uses the National Defense Budget Estimates FY 2013.

1. Data about Total U.S. Military Spending Percent of the U.S. GDP

To consider economic factors to the U.S. military spending, this thesis utilizes U.S. military spending as a percent of U.S. GDP as the third category. In order to achieve consistency with other two categories, this thesis proposes the use of the TOA and the FY 2013. To adjust the influences by inflation, however, it utilizes the unified criteria as the FY 2013 current dollars with regard to both total U.S. military spending and U.S. GDP. Results of this by category are displayed in Table 13.

Table 13. Total U.S. Military Spending Percent of the U.S. GDP (FY 2013 Current Dollars)²¹⁶

Year	Percent	Year	Percent	Year	Percent	Year	Percent	Year	Percent
1953	11.8	1965	7.2	1977	5.4	1989	5.3	2001	3.0
1954	8.1	1966	8.5	1978	5.2	1990	5.1	2002	3.4
1955	8.5	1967	8.8	1979	5.0	1991	5.2	2003	3.9
1956	8.9	1968	8.6	1980	5.2	1992	4.6	2004	3.9
1957	8.8	1969	8.2	1981	5.7	1993	4.1	2005	4.0
1958	8.9	1970	7.4	1982	6.5	1994	3.6	2006	4.1

²¹⁶ Depart of Defense, *National Defense Budget Estimate for FY 2013* (Washington: Office of the under Secretary of Defense, 2012), chapter six and seven.

Year	Percent	Year	Percent	Year	Percent	Year	Percent	Year	Percent
1959	8.6	1971	6.7	1983	6.8	1995	3.5	2007	4.3
1960	7.7	1972	6.4	1984	6.6	1996	3.3	2008	4.7
1961	8.4	1973	6.0	1985	6.7	1997	3.1	2009	4.7
1962	8.5	1974	5.7	1986	6.3	1998	3.0	2010	4.8
1963	8.2	1975	5.5	1987	6.1	1999	2.9	2011	4.6
1964	7.7	1976	5.5	1988	5.7	2000	2.9	2012	4.1

To compare between total U.S. military spending as a percent of U.S. GDP and the cohesion of the ROK-U.S. alliance, mean values must be adjusted by the unified criteria. Thus, this thesis utilizes the mean values, and results from this category are displayed in Table 14.

Table 14. Mean Values & Coding Level about Total U.S. Military Spending Percent of the U.S. GDP

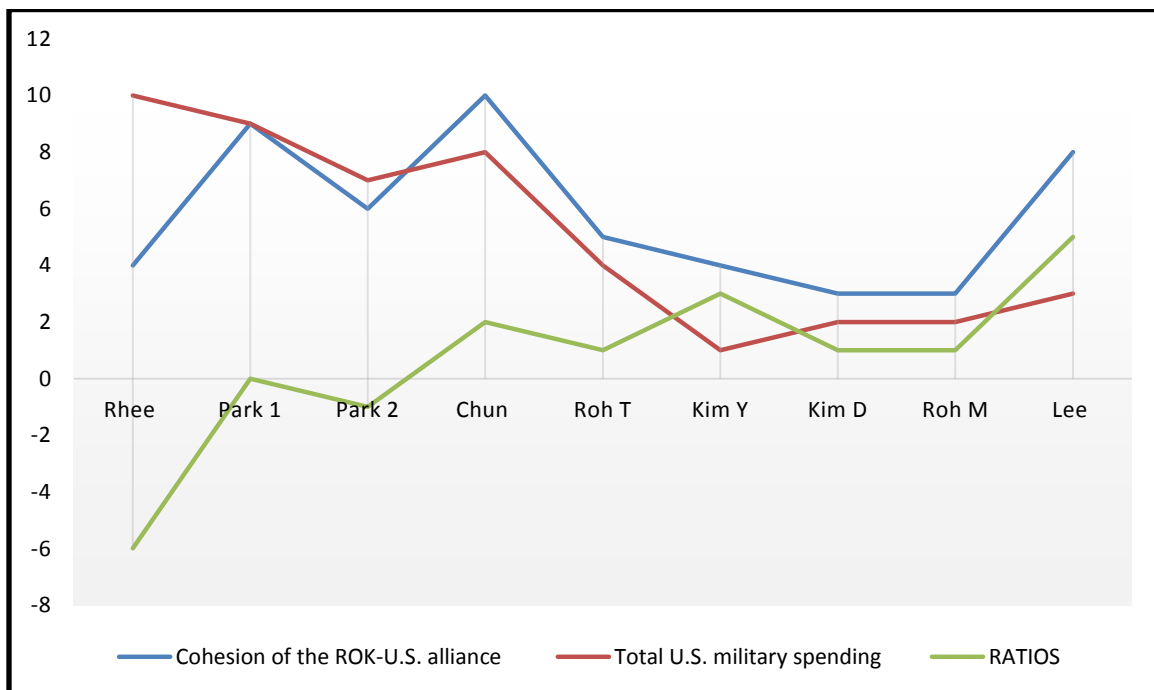
Presidential period	Rhee Syng-Man (1953–1960)	Park Chung-Hee 1 (1961–1968)	Park Chung-Hee 2 (1969–1979)
Mean value	8.9	8.2	6.1
Coding level	10	9	7
Presidential period	Chun Doo-Hwan (1980–1987)	Roh Tae-Woo (1988–1992)	Kim Young-Sam (1993–1997)
Mean value	6.2	5.1	3.5
Coding level	8	4	1
Presidential period	Kim Dae-Jung (1998–2002)	Roh Moo-Hyun (2003–2007)	Lee Myung-Bak (2008–2012)
Mean value	3.8	4.0	4.6
Coding level	2	2	3

As noted in Table 14, while the maximum mean value is 8.9% in the Rhee Syng-Man administration, the minimum mean value is 3.5% in the Kim Young-Sam administration, and the difference between both values is 5.4%. To compare two variables, this thesis divides mean values into 10 levels, as displayed in Table 14.

2. Relationship Between total U.S. Military Spending Percent of the U.S. GDP and the Level of Cohesion

To determine whether a more valuable pattern exists, this thesis compares the total U.S. military spending as a percent of U.S. GDP with the cohesion of the ROK-U.S. alliance. Figure 6 displays the results of comparison between the two variables.

Figure 6. Comparison Between Total U.S. Military Spending Percent of the U.S. GDP and the Cohesion of the ROK-U.S. Alliance



3. Analysis of Figure 6

Similar to the prior two categories, the ratios between the cohesion of the ROK-U.S. alliance and total U.S. military spending percent of the U.S. GDP change over time, which means that the two variables do not correlate with each other.

The ratios have a tendency to move in the opposite direction from the prior two categories. For example, whereas there are positive tendencies with the prior categories in the Cold War, the positive tendency does not appear in the Cold War with regard to this category because the level of total U.S. military spending during the President Ryee administration was too high. Although there is also a specific category difference between the Cold War and the Post-Cold War, the reverse ratios appear in this category. For example, while the ratios of the prior two categories in the Cold War are bigger than the ratios of the Post-Cold War, the ratios of this category in the Cold War are relatively smaller than the ratios of the Post-Cold War. Moreover, there is a more definitive positive tendency in the Post-Cold War for this category rather than prior categories.

Figure 6 surprisingly presents a positive tendency that had not appeared from the prior two figures. First, the Figure 6 presents the most positive tendency during the period from President Chun to President Roh Tae-Woo among the three categories of total U.S. military spending. Secondly, the figure also shows minimum gaps between two variables in a transition from President Kim Dae-Jung to President Roh Moo-Hyun. For instance, whereas there are large gaps between the level of the cohesion and the level of total U.S. military spending in the President Roh Moo-Hyun period with the prior two figures, Figure 6 presents an almost similar level between cohesion and spending in the Roh Moo-Hyun period. This outcome is valuable to this thesis because Figure 6 shows this positive tendency at periods when the prior two figures did not.

As a result, there is no definite relationship between the cohesion of the ROK-U.S. alliance and total U.S. military spending as a percent of the U.S. GDP. In addition, this category shows the reverse ratios compared to the prior categories. Hence, the findings for this category can supplement exceptions derived from Figures 4 and 5.

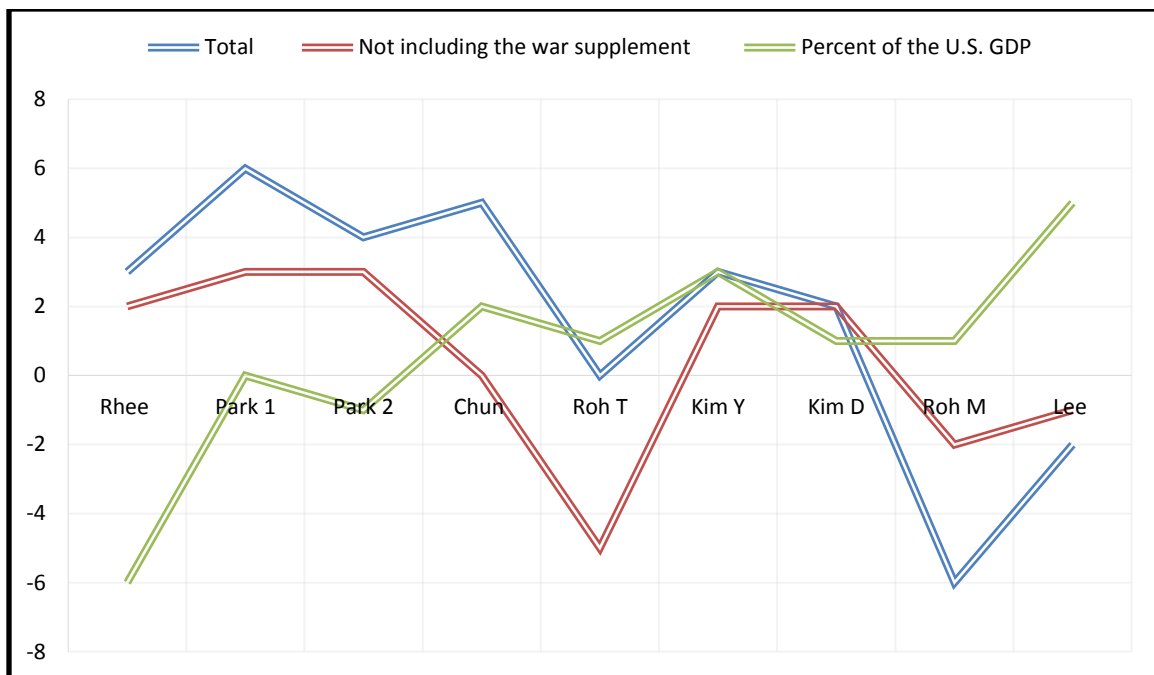
D. CONCLUSION

In conclusion, this thesis provides valuable results from the research analysis. One result was that there is no definite relationship between the cohesion of the ROK-U.S. alliance and the U.S. military spending. If there were a distinct relationship, the calculations of ratios would show relatively straight lines. Even though this thesis found

many positive tendencies between two variables with some categories or periods, it is not enough to argue that there is a consistent positive tendency between two variables.

Secondly, this thesis found that there are specific differences between the Cold War and the Post-Cold War with regard to the ratios between two valuables that appears, in some form, in all three categories. Figure 7 displays the comparisons of the three categories.

Figure 7. Comparison to Three Categories of the Ratios



As shown in Figure 7, even though the ratios of the third category present a reverse direction from the other categories, the specific differences between the Cold War and the Post-Cold War appear clearly.

Finally, the total U.S. military spending as a percent of the U.S. GDP could be useful to supplement for periods that could not be explained by the other two categories. For instance, a definitive positive tendency during the terms of President Roh Tae Woo and Roh Moo-Hyun were displayed in Figure 6 only. With these outcomes, this category of U.S. military spending is valuable to increment the patterns displayed in Figure 5.

IV. CONCLUSION

Under the new security circumstance with the rise of China and deepening nuclear threats by DPRK, the government of ROK needs to comprehend what elements are vital not to weaken the cohesion of the ROK-U.S. alliance. Even with reductions of U.S. military spending due to the sequestration and other factors, there are growing voices of concern about the cohesion of the ROK-U.S. alliance in the ROK. Does the ROK have to be concerned about this situation? The prior studies that focused on constructivist perspectives on the cohesion of the ROK-U.S. alliance could not answer this question with support by empirical analysis. Thus, this thesis tried to answer this question properly by analyzing both variables, the cohesion of the ROK-U.S. alliance and U.S. military spending. To give an answer, this thesis explored whether a certain pattern between the cohesion of the ROK-U.S. alliance and the U.S. military spending exists.

A. GENERAL OBSERVATIONS

This thesis found valuable general observations between U.S. military spending and the cohesion of the ROK-U.S. alliance.

1. The Cohesion of the ROK-U.S. Alliance

To compare two variables, this thesis measured the cohesion of the ROK-U.S. alliance from 1953 to 2012 by assessing three indicators, which resulted in definite characteristics of the cohesion. As shown in Figure 3, the ROK-U.S. alliance during the Cold War was more consolidated than after the end of the Cold War. Secondly, whereas the Chun Doo-Hwan administration had enjoyed a strong ROK-U.S. alliance, the Progressive governments of the ROK and Presidents Kim Dae-Jung and Roh Moo-Hyun experienced the weakest ROK-U.S. alliance. Finally, the Lee Myung-Bak administration returned the ROK-U.S. alliance to a consolidated position.

2. Patterns Between the Cohesion of the ROK-U.S. Alliance and U.S. Military Spending

To find out whether a certain pattern exists between alliance cohesion and U.S. military spending, this thesis utilized three categories of total U.S. military spending. The following sections summarize the characteristics of these three categories.

a. Total U.S. Military Spending

The first category is the total U.S. military spending adjusted by TOA and 2013 constant dollars. As shown in Figure 4, there is no certain relationship between the cohesion of the ROK-U.S. alliance and total U.S. military spending for this category. Secondly, there is the striking difference between the Cold War and the Post-Cold war with regard to the ratios. Finally, while the positive tendency between two variables appears in the Cold War, it does not appear in the Post-Cold War for this category.

b. Total U.S. Military Spending Not Including the War Supplement Spending

After excluding post-9/11 war supplement spending from the total U.S. military spending, this thesis found a more positive relationship between the ROK-U.S. alliance and the U.S. military spending than in the prior category. However, it is not enough to argue that there is a definite relationship between two variables for this category, because the ratios still change over time in spite of smaller gaps between the two variables compared to the prior category. Secondly, there remains a difference between the Cold War and the Post-Cold War with regard to the ratios in this category, even though the difference is less definitive than the prior category. Finally, a positive tendency appears not only during the Post-Cold War, but in the Cold War as well in spite of the small gaps between the two variables.

c. Total U.S. Military Spending Percent of the U.S. GDP

The third category of total U.S. military spending considered adjusted for U.S. economic status periodically changing, and outcomes of this category are valuable to supplement the exceptions in prior categories. There are three definite findings in this

category as shown in Figure 6. First, there is no certain relationship as with the other categories. Secondly, there is the reverse of ratios for this category. Although there are specific differences between the Cold War and the Post-Cold War with regard to the ratios, these are in the opposite direction of the ratios from the other categories. Finally, this category had a positive tendency in periods that the prior two categories did not show, which could supplement interpretations of the findings in the other categories.

B. IMPLICATIONS

Based on general observations, this thesis will develop policy-making implications. Prior to stating implications, this thesis analyzes the new security circumstance of the ROK because it is helpful to comprehend the implications, the anticipation, and the future research.

1. A New Security Circumstance of the ROK

The ROK faces a new security circumstance from strengthening nuclear threats of the DPRK, influence of a rising China, and the reduction of U.S. military spending.

a. Strengthening Nuclear Threats of the DPRK

The DPRK's ambition for nuclear weapons increasingly drives the ROK concern about the security of the Korea Peninsula. The ROK military has had enough capability to cope with conventional attack by the DPRK, based on its dramatic economic growth since the end of the Cold War.²¹⁷ The ROK, however, cannot guarantee the safety of citizens against nuclear threats of the DPRK. In spite of the DPRK's bad economic situation and isolation from the international order, its leaders have unceasingly pursued development of nuclear programs and it has conducted five nuclear tests since 2006. Even more seriously, when the DPRK conducted two nuclear tests in 2016, it may have shown more enhanced nuclear technology than before, such as standardization of smaller,

²¹⁷Chung Min Lee, "Challenge of South Korea in the Early 21st Century," in *Strategic Asia 2015–16: Foundations of National Power in the Asia-Pacific*, ed. Ashley J. Tellis, Alison Szalsinski, and Michael Wills (Seattle and Washington, DC.: The National Bureau of Asian Research, 2015), 100–101.

lighter, and diversified nuclear warheads, to go along with the development of ballistic missile capacity.²¹⁸

b. *Influence of China's Rising*

According to Scott Snyder, “China’s core interest is maintaining a stable relationship with North Korea as a strategic security buffer.”²¹⁹ With this core interest, China has sustained a vague relation with the DPRK, even though the Obama administration has continually suggested that China help more to prevent further DPRK nuclear tests.²²⁰ This posture of China helps perpetuate the unstable regional security circumstances created by DPRK nuclear threats.

In addition, the ROK is getting more dependent on its trade with China.²²¹ For example, the ROK’s trade with China as a percentage of its total trade escalated from 8.2% in 1998 to 18.4% in 2006²²², and it eventually reached 26.1% in 2013.²²³ This higher dependence on trade with China could adversely affect the security of the ROK.

c. *The Reduction of U.S. Military Spending by the Sequestration*

The U.S. Congress has planned to cut U.S. military spending under the policy of sequestration, which is part of the Budget Control Act of 2011.²²⁴ To control the rise of China and reassure U.S. allies in East Asia, however, the Obama administration simultaneously emphasized the Pivot to Asia or rebalancing policy in the fall of 2011,²²⁵

²¹⁸Sang Hun Shoe and Jane Perlez, “North Korea Tests a Mightier Nuclear Bomb, Raising Tension,” New York Times, September 8, 2016, <http://www.nytimes.com/>.

²¹⁹Snyder, *China’s Rise and the Two Koreas*, 137.

²²⁰Sang Hun Shoe and Jane Perlez, “North Korea Tests a Mightier Nuclear Bomb, Raising Tension,” The New York Times, September 8, 2016, <http://www.nytimes.com/>.

²²¹“Korea’s Dependence on China Trade Deepens: Data,” The Korea Herald, November 3, 2015, <http://www.koreaherald.com/>.

²²²Snyder, *China’s Rise and the Two Koreas*, 49–50.

²²³“Korea’s Dependence on China Trade Deepens: Data,” *The Korea Herald*, November 3, 2015, <http://www.koreaherald.com/>.

²²⁴Office of Management and Budget, *OMB Sequestration Update Report to the President and Congress for Fiscal Year 2013* (Washington, DC: Executive Office of the President, 2012), 3.

²²⁵Mark E. Manyin et al., “Pivot to the Pacific? The Obama Administration’s “Rebalancing” Toward Asia,” CRS Report No. R42448 (Washington, DC: Congressional Research Service, 2011), 1.

and stated that “notwithstanding reductions in overall levels of U.S. defense spending, the U.S. military presence in East Asia will be strengthened.”²²⁶

Based on the findings of this thesis, which show that there is no necessary connection between U.S. military spending and ROK-U.S. alliance cohesion, the thesis carefully predicts that reduction of the U.S. military spending under sequestration may not influence greatly the cohesion of the ROK-U.S. alliance.

2. Implications by General Observations

As noted above, the ROK faces a complex security circumstance in Northeast Asia and the United States has focused on the East Asia region more than before. Under this situation, the ROK seeks the optimal path to maximize its interests in the complex regional security situation. Even though the ROK-U.S. alliance has historically served a vital role for the security of the ROK, the ROK should recognize the proper extent of the cohesion of the ROK-U.S. alliance that it really needs in new security circumstances. To choose an optimal path, ROK leaders have to comprehend all the factors that influence the cohesion of the ROK-U.S. alliance. To build such comprehension with empirical analysis, this thesis researched the cohesion of the ROK-U.S. alliance, and found several valuable outcomes.

a. *No Certain Relationship between Two Variables*

This thesis found that there is no certain relation between the cohesion of the ROK-U.S. alliance and total U.S. military spending. In other words, the total U.S. military spending has not greatly influenced the cohesion of the ROK-U.S. alliance since 1953. In fact, this finding disconfirms all three potential hypotheses noted in the introduction. This finding, however, has significant implications. Through this finding, the ROK can relieve itself of unnecessary anxiety over abandonment caused by future reduction of U.S. military spending. For example, as noted above, the reduction of U.S. military spending by the sequestration may not influence the cohesion of the ROK-U.S.

²²⁶Ibid.

alliance a lot, due to the rebalancing policy. This will be a valuable insight for ROK decision-makers as they manage the ROK-U.S. alliance in the future.

b. The Specific Difference Between the Cold War and the Post-Cold War

Even though this thesis could not find the certain relation between its two key variables, it found a notable difference between the Cold War and the Post-Cold War for all three categories of the U.S. military spending. In fact, prior studies regard the end of the Cold War as an important event weakening the cohesion of the ROK-U.S. alliance in the Post-Cold War world. This thesis, however, found an empirical demonstration of this specific difference between the Cold War and the Post-Cold War, adding more explanatory power than other studies to observations of the weaker cohesion of the ROK-U.S. alliance in the Post-Cold War. In addition, this finding points to another specific implication with regard to the new security circumstance. The rise of China, a specific difference derived from the end of the Cold War, may now be a key driver with regard to the cohesion of the ROK-U.S. alliance.

c. Adjust to These Categories of U.S. Military Spending for Future Studies

All three categories of U.S. military spending are all useful to analyze the specific difference between the Cold War and the Post-Cold War. The second category is useful to analyze the positive tendency between the cohesion of the ROK-U.S. alliance and the U.S. military spending in the Cold War. Even though the first category shows some gaps between two variables, it also shows the positive tendency. Conversely, the third category could be more appropriate to analyze the positive tendency between the cohesion of the ROK-U.S. alliance and U.S. military spending in the Post-Cold War period. Even though this thesis could not find any certain relationship between its two key variables, these outcomes from the empirical analysis could be helpful to future studies with regard to the cohesion of the ROK-U.S. alliance.

C. ANTICIPATION

Based on the preceding general observations, decision-makers should consider other factors than the reduction of the U.S. military spending on the cohesion of the

ROK-U.S. alliance. In this light, the following discussion considers the optimal path of the ROK-U.S. alliance focusing on the new security circumstance derived by the rise of China and the deepening DPRK nuclear threat. In addition, this thesis will anticipate future tasks to achieve the optimal path by using the three indicators for the cohesion of the ROK-U.S. alliance discussed in Chapter II.

1. The Optimal Path for the ROK-U.S. Alliance

This thesis suggests three methods for the optimal path for the ROK-U.S. alliance.

a. Avoid the Entrapment Dilemma

Under the complex security situation, the ROK should avoid the “entrapment dilemma”²²⁷ with regard to either the United States or China, in order to realize its own interests with regard to both economy and security. The Park Geun-Hye administration suffered this entrapment dilemma with regard to two issues, the Asian Infrastructure Investment Bank (AIIB) and the Terminal Altitude Area Defense (THAAD).²²⁸ Even though the Park administration eventually made decisions participating in the AIIB and also locating the THAAD in South Korea, the courses of these decisions were not easy due to the entrapment dilemma.

Ellen Kim and Victor Cha suggest that the ROK should overcome the “friend-threat dichotomy”²²⁹ to avoid this entrapment dilemma, and that strong cohesion of the ROK-U.S. alliance enables the ROK to have better position in relation with China than weak cohesion.²³⁰ As long as the DPRK nuclear program continues to grow and China is unwilling to stop the ambition of DPRK, the ROK primarily has to consider a credible way to deter the DPRK nuclear threat through the ROK-U.S. alliance regardless of any anxiety this may create about the relationship with China. The ROK decision to accept THAAD in response to the fifth nuclear test of DPRK is an example of this necessity.

²²⁷Ellen Kim and Victor Cha, “Between a Rock and a Hard Place,” 112.

²²⁸*Ibid.*, 113.

²²⁹*Ibid.*

²³⁰*Ibid.*

b. Diminish the Dependence on the Economy of China

The deepening dependence on the economy of China could make it hard for the ROK to avoid the entrapment dilemma, and so the ROK should diminish its degree of dependence on the economy of China. Economics and politics cannot be entirely separate from each other in the contemporary world, and this biased dependence could influence vital political decisions related with the ROK-U.S. alliance. Thus, to avoid the entrapment dilemma, the ROK needs to diminish economic dependence on China because it adversely affects good relations with China with regard to both economy and security.

c. Avoid Entire Dependence on the ROK-U.S. Alliance to Deter Nuclear Threats of the DPRK

Entire dependence on the ROK-U.S. alliance for deterring nuclear threats of the DPRK could make it hard for the ROK to avoid the entrapment dilemma, and so the ROK should increase capabilities of ROK forces to deter not only the conventional threats but also the nuclear threats. As explored in the chapter two, the cohesion of the ROK-U.S. alliance during the Cold War was much higher than the cohesion during the Post-Cold War. The relatively weak cohesion during the Post-Cold War, however, is not necessarily the wrong direction for the ROK-U.S. alliance. With the ROK's Post-Cold War superiority over the DPRK in terms of economic strength and conventional military capabilities, the ROK-U.S. alliance has changed in response to changes in the security circumstance during the Post-Cold War.

As noted in the prior section, like the specific difference between the Cold War and the Post-Cold War, the rise of China is a specific difference shaping the new security circumstance. To cope with this change properly and avoid the entrapment dilemma, the ROK should increase its own military capabilities to deter the nuclear threat of DPRK. The Korea Air and Missile Defense (KAMD) and the Kill Chain are examples of this effort. Meanwhile, the ROK-U.S. alliance has to rely upon the "extended-deterrence capabilities"²³¹ to deter DPRK nuclear threats. As a result, even though the ROK-U.S.

²³¹Chung Min Lee, "Challenge of South Korea in the Early 21st Century," 109.

alliance is still a core component for the security of the ROK, enhanced ROK military capabilities could allow the ROK-U.S. alliance to be more strategic and valuable for both countries.

2. Future Tasks for the Optimal Path

There are lots of future tasks for the optimal path of the ROK-U.S. alliance in today's complex security circumstance. The following discussion uses the three indicators for the cohesion of the ROK-U.S. alliance to present specific future tasks.

a. Institutionalization

The institutionalization of the ROK-U.S. alliance is most productive when following a cooperative direction, serving both countries' common interests with mutual satisfaction. To step forward in this direction, both countries have to try to pursue cooperative institutionalization and revise the disputed institutionalization appropriately. The KIDD is an excellent example for cooperative institutionalization, which serves to "significantly advance alliance objectives by providing high-level political oversight and coordinating and integrating various defense consultation mechanisms between the ROK and the United States."²³² In addition, the Joint Conventional Provocation Plan (CPP) is a good case as well. Under this plan, the United States can assure the ROK that they will counter provocations by the DPRK together,²³³ keeping the ROK-U.S. alliance moving in a cooperative direction.

By contrast, there are three challenges to solve in the disputed institutionalization. First is the SOFA. Even though two revisions of the SOFA have relieved some discontents of South Koreans about the unfairness of the SOFA, the revised SOFA still has issues to resolve, like criminal jurisdiction and civil case claims.²³⁴

Second is the wartime OPCON transfer. Two delays of the wartime OPCON transfer resulted from external and internal factors. The USFK commander, General

²³²ROK Ministry of National Defense, "The 45th SCM Joint Communique," last updated January 27, 2014, <http://www.mnd.go.kr/>.

²³³Ibid.

²³⁴ROK Ministry of National Defense, *60 Years History of the ROK-US Alliance*, 110–113.

Curtis Scaparrotti, described necessary enhancements of ROK forces for the wartime OPCON transfer in testimony to the U.S. Congress in 2015²³⁵; “C4 (command, control, computers, and communication system), the Ballistic Missile Defense (BDM), Munitions, and ISR (intelligence, surveillance, and reconnaissance).”²³⁶ In other words, the ROK forces need to be modernized in order to command the Joint forces. To modernize the ROK forces, concrete institutional supports of the ROK-U.S. alliance are indispensable, but with these supports the ROK can prepare thoroughly for the wartime OPCON transfer.

Last is the SMA, which is the most difficult issue to solve for the cooperative institutionalization. Donald Trump is elected as the next President of the United States. During the campaign, Trump clearly insisted that allies of the United States should share more burdens for the U.S. forces in their countries. By contrast, the ROK may try to resist sharing excessive amounts of burdens. Both countries are going to negotiate the tenth SMA in 2017 and need to find a compromise on cost sharing to maintain a bright future for the ROK-U.S. alliance. If one of these countries has more discontents about the decision of the cost sharing for the USFK than the other, it could be hard for the ROK-U.S. alliance to proceed to the optimal path.

b. USFK Capacity and ROK-U.S. Combined Exercises

For the optimal path in the new security circumstance, both countries have to enhance not the absolute quantity of troop numbers or equipment but the quality of the USFK, such as in providing extended-deterrence reassurance. As noted in Table 4, USFK troop numbers have remained 28,500 since 2006, and this USFK troop level is unlikely to change significantly for some time in the new security circumstance unless both countries have severe tension with regard to the cost sharing as noted above. By contrast, there is a definite task to enhance the quality of the USFK equipment.

²³⁵Mark E. Manyin et al., “U.S.-South Korea relations,” CRS Report No. R41481 (Washington, DC: Congressional Research Service, 2015), 18.

²³⁶Ibid.

The USFK should have enhanced equipment for extended-deterrence reassurance to respond to the strong DPRK nuclear threats. Even though this enhanced equipment for extended-deterrence could create tensions with China, especially in the case of the THAAD, the ROK needs to have the strong reassurance of extended-deterrence to confront the growing DPRK nuclear threat as long as China does not do more to stop the DPRK nuclear ambitions. The United States also thoroughly comprehends this ROK need and tries to relieve the ROK by providing commitments. For example, the U.S. Secretary of Defense “reaffirmed the continued U.S. commitment to provide and strengthen extended deterrence for the ROK using the full range of military capability”²³⁷ in the 46th SCM joint communique in 2014. Based on this mutual understanding, the USFK can be equipped with a strong extended-deterrence capability.

When it comes to the ROK-U.S. combined exercises, it is likely that the scale of the combined exercises will not change significantly for some time due to the pressure by China or the DPRK in the new security circumstance. The extent and quality of the combined exercises, however, could be enhanced. For example, during the Lee Myung-Bak administration several small scale combined exercises were added, like the Max thunder, PENORE, and the ASWEX. Through these combined exercises, the ROK could enhance its combined operational capacity further, and it could ultimately be helpful to deter DPRK threats. As a result, both countries should proceed to enhance the quality of the ROK-U.S. combined exercises, but do so quietly so as not to escalate tensions in the new security circumstance.

D. FUTURE RESEARCH

1. The Process of the Research

The research question of this thesis is how U.S. military spending has affected the cohesion of the ROK-U.S. alliance since 1953. This question is derived from the anxiety of diminishing the U.S. military spending in the new security circumstance highlighted by the rise of China and deepening DPRK nuclear threats. This thesis wanted to answer

²³⁷ROK Ministry of National Defense, “The 46th SCM Joint Communique,” last updated October 24, 2014, <http://www.mnd.go.kr/>.

this question with empirical analysis because no studies have researched this question with strong evidence. To create the empirical data about both variables, this thesis measured the cohesion of the ROK-U.S. by using the three indicators in the second chapter and analyzed three categories of total U.S. military spending in the third chapter for the period from 1953 to 2012.

By comparing both variables with three categories, this thesis could conclude that there is no definite relationship between the total U.S. military spending and the cohesion of the ROK-U.S. alliance. Even though this thesis could not prove the potential hypotheses by this empirical analysis, between the Cold War and the Post-Cold War periods it found a striking difference in the relationship of the cohesion of the ROK-U.S. alliance and three categories of total U.S. military spending. Lastly, based on these general observations, in this concluding chapter this thesis presents the implications and the optimal path for the future ROK-U.S. alliance.

2. Limitations of the Thesis

This thesis has several limitations to answer the research question. First of all, this thesis could not utilize better categories of the U.S. military spending, like the U.S. military spending related to Northeast Asia and the U.S. military spending directly related to the ROK-U.S. alliance. Originally, this thesis planned to assess these categories of the total U.S. military spending. The research of these categories, however, was not available due to the limitation of data. There are two reasons for the limitation. First, this thesis could not access the “Federal Procurement Data System-Next Generation”²³⁸, which could provide valuable data for the research of these categories. Secondly, even that source only provides data from 1978, so there is no available data from 1953 to 1977. Due to this limitation with regard to the data, this thesis could not research these categories of the U.S. military spending. Future research could surpass this limitation of this thesis by generating such data from more primary sources.

²³⁸Moshe Schwartz and Wendy Ginsberg, “Department of Defense Trends in Overseas Contract Obligation,” CRS report No. R41820 (Washington, DC: Congressional Research Service, 2015), 14.

Secondly, this thesis could not assess the cohesion of the ROK-U.S. alliance within shorter time periods than it did. Originally, this thesis planned to divide the periods by utilizing not only the administrations of the ROK but also the administrations of the United States. In fact, to measure the cohesion of the ROK-U.S. alliance annually is the best method to have valuable findings under this empirical analysis. To analyze cohesion of the ROK-U.S. alliance annually, however, is problematic if using the three indicators of this thesis. This is because these indicators utilize discrete events to measure the cohesion of the ROK-U.S. alliance that would provide misleading impressions if measured within these annual periods. To assess shorter periods marked by transitions of the administration of the United States as well faces the obstacles of generating a similar length for each time period. Thus, this thesis decided to divide the time period by the administration of the ROK to provide relatively even criteria for the whole period. Even though this thesis could not measure the cohesion using shorter time periods, dividing by the administrations of the ROK is valuable to research in its own right. This is because no studies have researched even this length of the time period to measure the cohesion of the ROK-U.S. alliance.

Lastly, the each method for measuring the three indicators to distinguish the cohesion level of the ROK-U.S. alliance may be limited in its explanatory power. In addition, there was another limitation in identifying appropriate data to measure the USFK equipment and distinguish it at certain levels. This thesis, however, tried to measure the cohesion of the ROK-U.S. alliance by original methods for empirical analysis that are more extensive than in prior studies. Even though the methods have some limitations in demonstrating definite relationships among the variables, these efforts have provided valuable insights useful for policy-making considerations. These efforts also offer direction for advanced future research with regard to the cohesion of the ROK-U.S. alliance.

3. Directions of Future Research

Based on these limitations of this thesis, there are several directions of future research to build further on this thesis. First of all, this thesis recommends future research

to deal with two more focused categories of the U.S. military spending—U.S. military spending related to Northeast Asia and U.S. military spending directly related to the ROK-U.S. alliance—to determine if these measures reveal a more definite relation with the cohesion of the ROK-U.S. alliance. For this direction, researchers might need to follow a complex administration process to access the data, or they might need to construct the data from multiple primary sources. Alternatively, researchers might deal with shorter time than this thesis due to the limitation of data.

Secondly, this thesis recommends future research to try to assess the cohesion of the ROK-U.S. alliance within shorter time periods than this thesis, which would likely create valuable findings. For this direction, researchers should come up with a plausible method to evaluate the role of significant discrete events across such short periods, and explore more detailed events with regard to the ROK-U.S. alliance than this thesis has.

Thirdly, the thesis recommends future research to come up with methods to identify indicators more explanatory power for measuring the cohesion of the ROK-U.S. alliance. Even though it might be tough to create these methods, expanding the range of indicators will be helpful to strengthen the explanatory power for the combined research efforts. For this direction, researchers might have to focus on just one indicator to measure the cohesion of the ROK-U.S. alliance and deal with shorter time than this thesis has done.

Lastly, this thesis has had many trial and errors to answer the original research question during the research process, and it still has many limitations in answering the question. This thesis, however, is the first trailblazer to measure the cohesion of the ROK-U.S. alliance with empirical analysis, and the author hopes that this thesis will help future research about the cohesion of the ROK-U.S. alliance to avoid repeating similar trials and errors.

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