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The logo of National Chengchi University is a circular emblem. It features a central five-petaled flower shape with the Chinese characters '政大' (Chengchi University) inside. The outer ring of the emblem contains the university's name in Chinese '國立政治大學' and in English 'National Chengchi University'.

South Korea's Best Strategy against China:
US Ballistic Missile Defense

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Abstract

South Korea's Best Strategy against China: US BMD

South Korea should join the US BMD in Northeast Asia. Application of Offensive Realism clearly shows that China is a potential threat to South Korea, and Seoul requires an alliance partner in order to counter the threat from the west. The immense latent power and offensive military capabilities of China, coupled with its nuclear strategic weapons render China as a potential threat to South Korean national security. No independent action from South Korea would be sufficient to balance against China, hence the need for an ally.

The United States is already engaged in relative power maximization against China. In addition, its role as an offshore balancer and status as a regional hegemon in the western hemisphere makes the US the most ideal alliance partner for South Korea.

The alliance with the US to balance against China cannot be built upon the existing ROK-US alliance, because the current status of the alliance has deteriorated. One of the key causes of alliance deterioration could be attributed to the unilateral American security assistance to South Korea. Seoul's participation in the US BMD would solve the non-reciprocating role of South Korea found in the existing ROK-US alliance. Because the benefits from South Korea's participation in the US BMD are great for Washington, Seoul would be able to secure the US as an alliance partner to balance against China.

Keywords: US, South Korea, China, Ballistic Missile Defense, ROK-US Alliance, Offensive Realism.

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LIST OF ACRONYMS



ABL	Airborne Laser
ABM	Anti-ballistic Missile
ASAT	Anti-Satellite
BMD	Ballistic Missile Defense
BMDR	Ballistic Missile Defense Review
BPI	Boost Phase Intercept
CAS	Close Air Support
CONUS	Continental United States
CTBT	Comprehensive Test Ban Treaty
C-SOF	Counter-Special Force
DMZ	Demilitarized Zone
DoD	Department of Defense, US
DSP	Defense Support Program
EEZ	Economic Exclusive Zone
FMS	Foreign Military Sales, US
GPALS	Global Protection Against Limited Strikes
ICBM	Intercontinental Ballistic Missile
IRBM	Intermediate Range Ballistic Missile
JCS	Joint Chiefs of Staff
KEI	Kinetic Energy Interceptor
KIDA	Korea Institute for Defense Analyses
KINU	Korea Institute for National Unification
KORCOM	Korea Command, US
LRS&T	Long-Range Search and Track
MAD	Mutually Assured Destruction
MCRC	Master Control and Report Center
MIRV	Multiple Independently-Targeted Re-entry Vehicle
MKV	Multiple Kill Vehicle

MND	Ministry of National Defense, ROK
MOOTW	Military Operations Other Than War
MRBM	Medium Range Ballistic Missile
MSDF	Maritime Self Defense Force, Japan
NATO	North Atlantic Treaty Organization
NMD	National Missile Defense
NPR	Nuclear Posture Review
OPCON	Operations Control
OPEC	Organization of Petroleum Exporting Countries
PAC-3	Patriot Advanced Capability-3
PLA	People's Liberation Army
PPP	Purchasing Power Parity
PRT	Provincial Reconstruction Team
PSA	Patent Secrecy Agreement
RMA	Revolution in Military Affairs
RMD	Regional Missile Defense
SALT	Strategic Arms Limitation Talks
SCM	Security Consultative Meeting
SDI	Strategic Defense Initiative
SLOC	Sea Lines of Communication
SMA	Seoul Metropolitan Area
SRBM	Short Range Ballistic Missile
SSBN	Ballistic Missile Submarines
THAAD	Theater High Altitude Area Defense
TMD	Theater Missile Defense
UEWR	Upgraded Early Warning Radars
UNCLOS	UN Convention on the Law of the Sea
UNFICYP	UN Peacekeeping Force in Cyprus
USFJ	United States Forces Japan
USFK	United States Forces Korea
WMD	Weapons of Mass Destruction

Chapter 1

Introduction

The intent of this thesis is not to survey implications of South Korea's¹ ballistic missile defense strategy. The intent of this thesis is to examine whether South Korea's participation in the Washington-led Ballistic Missile Defense (BMD)² program could enlist the United States as an alliance partner for Seoul against a potential threat of the future, China. The analyses would show that Seoul's participation in the US BMD would provide an opportunity for South Korea to play an integral role in the protection of the United States. As a result, the alliance between Seoul and Washington would be stronger than as it stands today, in which Seoul reaps the majority of the benefits from the alliance. Such a strong alliance would allow South Korea to have a reliable and powerful alliance partner like the US to counter the future potential threat from China.

In order to avoid possible challenges to the objectivity of the argument, the analyses found in this thesis would be based on a well grounded international relations theory of Offensive Realism. The theoretical analysis are able to render a conclusion that China is a potential threat to South Korea even without engaging in hostile acts over a period of time on a regular basis. An assessment of the perceptions by the South Korean elites and general public on the potential China threat buttresses the theoretical conclusion.

¹ In this thesis, instead of the diplomatic legal name the Republic of Korea, South Korea would be used for the sake of simplicity. The same standard would be applied to other nations to be mentioned or discussed in this thesis, such as the People's Republic of China as China, the Democratic People's Republic of Korea as North Korea, and the Republic of China as Taiwan.

² The designation of the ballistic missile defense program under the current Obama Administration is Ballistic Missile Defense or BMD. For the sake of simplicity, the term BMD would be used to refer to American ballistic missile defense programs in general, which comprehensively include the current BMD, National Missile Defense (NMD), Global Protection Against Limited Strikes (GPALS), and Strategic Defense Initiative (SDI). However, when referring to a program under a specific administration, the precise term, such as NMD, would be used.

Another theoretical analysis shows that the US BMD is a power maximizing agent against China and an American effort to achieve nuclear hegemony. The role of the ballistic missile defense system and the utility of ballistic missiles for China render this defensive program as an indisputable threat to Beijing. The fact that China requires counteractions in response to the US BMD is sufficient to establish that the US BMD is a power maximizing agent and that Washington is engaged in power competitions against China. However, Chinese perceptions on the US BMD also confirm that the US BMD seriously jeopardizes the security of China, decreasing China's relative power vis-à-vis the US.

The final theoretical analysis shows that the US is the most ideal candidate for South Korea to enlist as an alliance partner against the potential threat of a regional great power. And one of the means that South Korea could maintain a strong alliance with the US is to play a critical role in providing protection for the Americans, in other words minimizing "buck-passing" within the alliance. Participation in the US BMD would provide Seoul with an opportunity to catch more "buck" and preserve a strong alliance posture with Washington.

1.1 Research Method and Limitations

As the objective of this thesis is to examine the possibility of a role the US BMD could play in buttressing the alliance between Seoul and Washington, the most important aspect of the analyses would be strict adherence to the theoretical framework based on the Offensive Realism. In order to show that the Offensive Realism is a comprehensive international relations theory, a whole chapter would be devoted to introduce the relevant aspects of the theory to the analyses found in the thesis. For example, the theory's concept of "Calculated Aggression" provides an explanation to the continuation of peace and absence of hostility, while preserving outbreak of conflict and war in the future a real possibility.

A limitation to be placed on the application of the Offensive Realism for this thesis is

the evaluation on the stability of a given system. The theory discusses which type of a system, for example a balanced multipolarity, would be the most stable and would most likely face least amount of hostilities and conflicts. As the objective of this thesis is not to evaluate the likelihood of war in Northeast Asia, discussion of this theoretical aspect is unnecessary.

After having established a theoretical foundation to support the argument, practical data such as perception of the elites and publicly available government reports would be discussed to buttress the argument. Use of publicly available government reports, such as the Congressional Research Reports, are preferable as these reports provide rough but accurate reflections of matters related to the issue, from which government decision makers often base their decisions. In addition, data from the Jane's Information Group and International Institute for Strategic Studies would be used as measuring tools for the military capabilities of a given state. These data would fill in the gap of the specifics that are left out by the government reports.

This approach of employing practical data only after completion of theoretical analyses is specifically adopted in this thesis as failure to establish a theoretical basis would be vulnerable to challenges in the objectivity of the argument.

Specifically in the case of proving that China is a potential threat to South Korea, application of Offensive Realism and then providing practical data, such as perceptions, is critical. This approach is a deductive approach, where certain inherent characteristics of China are identified and these variables lead to a conclusion that Beijing indeed poses a potential threat to South Korea. Such a deductive approach is most preferable as no intelligence official or academics would be able to discern, with absolute certainty, what are the intentions behind China's actions today. For example, China's repeated proclamation to the adherence to its own concept of peaceful development, on the surface, reflects the Chinese elites' intent to preserve the peace and stability despite China's growing economic and military power. However, until long into the future when the current Chinese leadership has released memoirs in retirement and relevant state documents are declassified, no one would be able to understand the true intentions of China today.

The 1962 Cuban Missile Crisis between the US and the USSR is a case in point. Despite the gigantic intelligence apparatus and espionage capabilities for the two superpowers, neither Washington nor Moscow has been able to identify the true intentions and the limits of accommodation the other side was prepared to negotiate. Only in recent years, approximately half a century later, when the state documents are declassified and memoirs of the leaders involved are released was one finally be able to *begin* understanding the intentions and rationales behind the actions in the 1960s following an inductive approach.

As no such insightful data exists to decipher the intentions and rationales behind China's actions today, the deductive method based on theoretical framework has been chosen for this thesis. And a limitation that inductive method is unreliable, hence of no use, is placed.

This thesis would begin with a background chapter on the South Korea's actions with regard to the issue of joining the American BMD. This section would show that South Korea has kept as much distance as it could with regard to the American BMD.

In Chapter 3, Offensive Realism would be introduced. As the focus of this thesis is to analyze the Chinese threat and balancing coalition of South Korea and the US, as stated above, Offensive Realism's discussion on the three types of international system and likelihood of war would not be discussed in this section. Rather, the definition and behavioral tendencies of the Offensive Realism's term "great power" would be introduced to examine whether China and the US in 2010 matches this description of the theory. In addition, the theory's explanation and necessity of balancing coalition concept would be discussed, which would be used in the later section to assess the optimal candidate alliance partner for South Korea and the best means to maintain the alliance.

Chapter 4 would show that China in 2010 is a threat to South Korea. In a deductive approach, the examination of China's great amounts of latent and actual power would suffice to render a conclusion that China is a potential threat to South Korea. However, to further buttress the theoretical conclusion, practical data as South Korea's perception on the potential China threat would also be discussed. This

chapter would render an additional conclusion that South Korea would not be able to balance against the potential Chinese threat on its own, hence requiring an alliance partner of a great power, the US.

In Chapter 5, the US BMD would be discussed. By showing that the US BMD is an effort by Washington to achieve nuclear superiority, the term as used by Mearsheimer, it would reflect that the US is trying to maximize its power against China. In further detail, exactly how the US BMD would maximize power against China would be documented.

Finally, after having shown that China is a potential threat to South Korean national security and that the US is already engaged in relative power maximization competition against China, this final chapter would argue that South Korea should become a member of the US BMD and secure Washington as its ally.

The thesis would be organized as the following:

1. Introduction
 - 1.1 Research Method and Limitations
 - 1.2 Necessity of Research and Literature Review
2. Background Information: South Korea and the BMD
 - 2.1 Conceptualization Stage of the BMD
 - 2.2 Deployment Stage of the BMD
 - 2.3 Possible Reasons for South Korean Government's Inaction
3. Theoretical Framework: Offensive Realism
 - 3.1 Introduction of Offensive Realism
 - 3.2 Distinction among International Relations Theories
 - 3.3 Definition and Behavioral Characteristics of Great Power
 - 3.4 Balancing and Alliance in Offensive Realism
4. China as a Potential Threat to South Korea
 - 4.1 China as a Potential Threat to South Korea: Theoretical Analysis

4.2 China as a Potential Threat to South Korea: Empirical Analysis

4.3 South Korea vs. China: Seoul's Need for an Alliance Partner

5. BMD as Power Maximizing Agent against China

5.1 Brief History of the US Ballistic Missile Defense Program

5.2 The BMD as a Relative Power Maximizing Agent

6. South Korea's Requirement for an Alliance Partner

6.1 US as the Most Ideal Alliance Partner for South Korea against China

6.2 Current Status of the ROK-US Alliance

6.3 Benefits of South Korea's Participation in the BMD to the US

6.4 Potential Disadvantages for South Korea in Joining the BMD

7. Conclusion

1.2 Necessity of Research and Literature Review

A new research on a rationale for South Korea to join the US BMD is necessary. While a number of literatures discuss about the ballistic missile defense and South Korea, these literatures are problematic in three ways. First, the basis of the rationale for asserting that South Korea should have ballistic missile defense capabilities is predominantly focused on the ballistic missile threat from North Korea. While it is true that the North Korean ballistic missiles pose a significant threat to South Korea, it is not the only threat South Korea faces in 2010. Additionally, the BMD is not only a mechanism to intercept incoming ballistic missiles, but also has many other functions including alliance enhancement. Such a one dimensional analyses on a complex issue leaves large space for a further research to fill.

Second, these literatures do not make a clear argument on whether South Korea should join the US BMD or not. The recommendations that South Korea partially join while fielding an independent defensive system are simply implausible. As would be discussed in detail later in this section, Seoul's participation only in the

research level is not a possibility for the case of the US BMD. Therefore a clear reason for obtaining a full membership into the US BMD is necessary.

Third, as the existing literatures do not make a clear assertion that South Korea should join the US BMD, as a result the discussion on how South Korea's participation in the US BMD would enhance the alliance between the two countries are absent.

Therefore, this thesis would fill these three holes in the existing literatures regarding South Korea and the US BMD. And the following discussion examines in detail the three problems or holes aforementioned.

Majority of the literatures dealing with South Korea and the ballistic missile defense focus on the North Korean ballistic missile threat. The North Korean ballistic missile threat is analyzed by the South Korean Ministry of National Defense (MND) on a regular basis, and the resulting information published in its Defense White Papers serves as the foundation in the debates on the ballistic missile defense. In addition to the ROK Defense White Paper, the incumbent Commander of the ROK-US Forces' annual reports to the US Congress provides details what are not found in the South Korean publications. The officially published results of the analysis and information from the US congressional testimony are as follows.

Since the 1970s, North Korea has focused on indigenous development of ballistic missiles, which resulted in successful development of the Scud-B (range 300 km), Scud-C (range 500 km) and Rodong (range 1,300 km) missiles.³ With the deployment of the Rodong missiles, the entire South Korean territory fell under the range of North Korean ballistic missiles originating from any location within North Korea.⁴

Beyond the Korean Peninsula, North Korea possesses an Intermediate Range Ballistic

³ Republic of Korea Ministry of National Defense, *Defense White Paper 2008 English Version* (Seoul: ROK MND Defense Policy Division, December 2008), p. 38.

⁴ Refer to Figure 1.1 The North Korean Ballistic Missile Range Circles by Type. The distance from the northern most point *Onsong* (운성: 47°57'22.05''N, 129°59'35.67''E) to the southern most point *Marado* (마라도: 33°07'03.93''N, 126°16'04.43''E) of the two Koreas is only approximately 1,150 km.

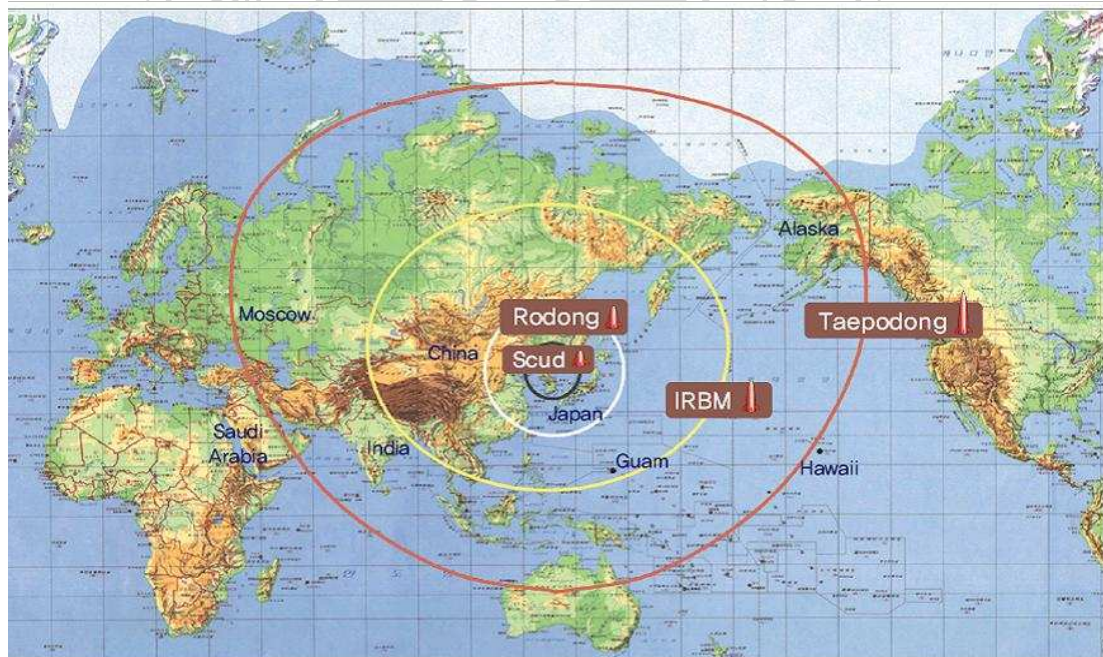
Missile (IRBM) with a range beyond 3,000 km, able to reach the American territory of Guam where key US military assets are based.⁵ And the *Taepodong-1* and 2 missiles are the long-range ballistic missiles, which the latest version is estimated to have a range of 6,700 km.⁶ The strike range of *Taepodong-2* includes Alaska and northern Australia.⁷

Table 1.1 Specification and Status of the North Korean Ballistic Missiles

Classification	SCUD-B	SCUD-C	Rodong	IRBM	Taepodong-1	Taepodong-2
Range (km)	300	500	1,300	3,000	2,500	Over 6,700
Warhead Payload (kg)	1,000	770	700	650	500	650-1,000 (Estimated)
Progress Status	Operational deployment	Operational deployment	Operational deployment	Operational deployment	Test-firing	Under development

Source: ROK MND *Defense White Paper 2008*, p. 329.

Figure 1.1 The North Korean Ballistic Missile Range Circles by Type



Source: ROK MND *Defense White Paper 2008*, p. 39.

⁵ General Walter L. Sharp, *Statement of General Walter L. Sharp, Commander, United Nations Command; Commander, Republic of Korea-United States Combined Forces Command; and Commander, United States Forces Korea before the Senate Armed Services Committee*, Prepared Statement for Testimony to the US Senate Armed Service Committee, 19 March 2009, accessed 26 May 2010 [available: <http://armed-services.senate.gov/statemnt/2009/March/Sharp%2003-19-09.pdf>], p. 7.

⁶ ROK MND, *Defense White Paper 2008*, pp. 38-39.

⁷ Refer to Figure 1.1 The North Korean Ballistic Missile Range Circles by Type.

The ROK defense white paper does not provide information on how many ballistic missiles North Korea has. However, though not a precise figure, General Sharp's most recent testimony to the US Senate states that North Korea is "maintaining several hundred missiles in its active force."⁸ Without a doubt, it is a substantial number of offensive strategic weapons with capabilities to be armed with Weapons of Mass Destruction (WMD) warheads.

The North Korean ballistic missile threat to South Korea is real and significant. In addition to the development of nuclear weapons, North Korea possesses chemical and biological agents.⁹ The most effective delivery mechanism for these WMD at Pyongyang's disposal would be the ballistic missiles. Therefore, deployment of ballistic missile defense system for South Korea is an important and pressing issue.

In consideration of this North Korean ballistic missile threat, the former ROK Air Force officer Dr. Cho Hong-jae comprehensively, though not academically,¹⁰ reviews the ballistic missile defense issue for South Korea. In his book *Missile Defense and Korea* published in 2007, Dr. Cho first traces the history of the American BMD, including issues related to the Anti-ballistic Missile (ABM) Treaty, and updates some of the technological advances the US has made in the recent years. In chapter four of the book, Dr. Cho lays out the details of the North Korean ballistic missile development and testing history, which are introduced as the threat South Korean missile defense should counter.

In the final two chapters, Dr. Cho analyzes the possibility of South Korea's joining the American BMD. He provides two important conclusions. First, Dr. Cho states that Seoul's joining of the American BMD would be in the national interest of South Korea, because it would defend against the real and credible North Korean ballistic missile threats,¹¹ and would cut-off North Korea's efforts to further develop nuclear

⁸ General Walter L. Sharp, p. 7.

⁹ ROK MND, *Defense White Paper 2008*, pp. 39-40.

¹⁰ This book does not have proper citations to support the arguments. One such example among many, in chapter four, despite readily available government and other reliable data on the subject, Dr. Cho cites contents from a South Korean internet blog to introduce North Korean missile development history. 조홍제 (Cho Hong-jae), *미사일 방어와 한국의 선택* (Missile Defense and Korea), (Seoul: Hanuri Media, 2007), p. 192.

¹¹ Dr. Cho states it is difficult to regard the Chinese and Russian ballistic missile capabilities to be real and probable threats to the South Korean national security. Cho, *op. cit.*, p. 236.

weapons and missiles.¹² Second, he concludes that South Korea cannot independently field effective ballistic missile defense system, and therefore the South Korean system must be linked to the American system.¹³

As Dr. Cho states in his introduction, his book was not written to assert a certain argument in an academic fashion, rather the purpose was to assist in South Korean general public's better understanding of the missile defense.¹⁴ Simply put, it is a mere survey of the relevant issues with a suggestion that Seoul should join the American BMD because it is in the national interest of South Korea.

Two literatures, also focused on the North Korean ballistic missile threat, provide more than a statement of support for South Korea's joining of the US BMD. A journal article written by a professor at the Kookmin University Dr. Park Hui-rak first documents the ballistic missile threat South Korea faces from North Korea. He proceeds by refuting the arguments of the opponents to the ballistic missile defense system, which are adverse effects on the inter-Korean relations, affordability, and feasibility issues of fielding the missile defense.

On relations with North Korea, he states that while sustaining good inter-Korean relations is preferable, South Korea should not consider the objections from Pyongyang, and possibly subsequent deterioration of relations between the two in fielding the ballistic missile defense system, because it was North Korea that provided a sound rationale for South Korea to consider the defensive measure.¹⁵ Regarding the expected high costs for Seoul to field missile defense systems, thus affordability, he cites a Japan's case in which to save costs, Tokyo made an arrangement to share the US military's X-band radar rather than fielding its own. Professor Park asserts that Seoul's careful negotiations with the US would be able to generate an arrangement that would minimize South Korea's financial burden.¹⁶ In terms of the feasibility of ballistic missile defense, while acknowledging that Patriot Advanced

¹² Cho, *op. cit.*, pp. 236-237.

¹³ Cho, *op. cit.*, p. 242.

¹⁴ Cho, *op. cit.*, p. 14.

¹⁵ 박휘락 (Park Hui-rak), “한국의 미사일 방어: 방향과 과제” (South Korea's Missile Defense: Direction and Task), *군사논단* (Gunsa Nondan), Vol. 58 (Summer 2009), p. 44.

¹⁶ Park Hui-rak, *op. cit.*, p. 49.

Capability-3 (PAC-3) would have some problems providing defense coverage for the South Korean territories as a whole, he states the PAC-3 could provide protection coverage to a number of selected critical sites. And addition of sea-based interceptor systems would be able to provide defense coverage to the southern part of South Korea against North Korean ballistic missiles. Hence the system would be effective, though limited in scale.¹⁷

Professor Park concludes his journal article by recommending that the South Korean government raise public awareness for the necessity of ballistic missile defense, establish infrastructures as a first step in fielding the defense system, initiate substantive negotiations and cooperation with the US, and engage in creative diplomatic measures to minimize the ballistic missile threat from North Korea.¹⁸

Another literature focused on the North Korean threat is written by the incumbent ROK National Assemblyman Hwang Jin Ha. Mr. Hwang retired as a ROK Army Lieutenant General and even served as the head of the Force Command of the UN Peacekeeping Force in Cyprus (UNFICYP). Of his seven strong reasons that Seoul should field a ballistic missile defense system, Assemblyman Hwang cites the case of Israel's Arrow missile defense system as a counterargument against the opposition's assertion that no defense system is capable of defending South Korea from the North Korean ballistic missile due to the proximity of the launch site from the target. Because the distance between the launch sites of the ballistic missiles targeting Israel is even shorter than the case of South Korea against the North Korean ballistic missiles, he states Seoul is able to field an effective missile defense for terminal stage intercept.¹⁹

In terms of Seoul's membership in the American BMD posing a threat to other states in the region,²⁰ Mr. Hwang states that these very states are increasing their ballistic

¹⁷ Park Hui-rak, *op. cit.*, p. 48.

¹⁸ Park Hui-rak, *op. cit.*, pp. 49-53.

¹⁹ 황진하 (Hwang Jin Ha), *주변국 미사일위협 분석과 한국의 미사일방어체계 구축에 관한 연구* (Analysis on Missile Threats from Neighboring Countries and Research on Deployment of South Korean Missile Defense System), The Office of ROK National Assemblyman Hwang Jin Ha (2007), pp. 46 and 48.

²⁰ It is easy to infer that Assemblyman Hwang is referring to China since Japan is already a member of the American BMD, Seoul's actions would not have much negative impact on Taiwan, and

missile capabilities and South Korea, as a strong economic power with major interests in the international affairs and security, should take proactive steps to protect itself against ballistic missile threats.²¹

Another literature on the subject of South Korea and ballistic missile defense, while also focused on the North Korean ballistic missile threat, deals with the China issue on a limited scale. A Ph.D. dissertation written in 2008 provides an economically feasible model for South Korean ballistic missile defense system against North Korea. In addition, it discusses the potential backlash from China on the ROK-PRC trade relations should Seoul chose to join the US BMD.

The then doctoral candidate at the Sung Kyun Kwan University Kim Sung-gul concludes that Seoul should be able to field the defense system against the North Korean ballistic missile threat should it cost less than eight to ten billion US dollars.²² Dr. Kim provides a mathematical model that would cost only between USD 4.7 to 6.7 billion in fielding an independent ballistic missile defense for South Korea against North Korea.²³ The proposal utilizes the already deployed PAC-2 GEM batteries with indigenously developed M-SAM that is soon to be operational in order to maximize cost savings.

With regard to China, Dr. Kim states that the concentrated deployment of US Navy Aegis ships in the Pacific could be viewed by Beijing as America's intention to counter not only the North Korean but also the Chinese ballistic missiles.²⁴ As a result, China views Seoul's participation in the American BMD to be affecting its national security to deteriorate further than in the case of US-Japan BMD.²⁵ The ROK-US and ROK-PRC relations with regard to joining the American BMD are viewed in a zero-sum manner, in which by becoming a member of the BMD, Seoul could expect enhanced relations with the US and adverse relations with China, and

Russia is primarily concerned with the American BMD in Europe, not the possibility of Seoul-Washington cooperation on BMD in Asia.

²¹ Hwang Jin Ha, *op. cit.*, p. 45.

²² Currency conversion based on an assumption that 1 USD = 1,000 Korean Won.

²³ 김성걸 (Kim Sung-gul), *한국의 미사일 방어* (South Korea's Choice on Missile Defense), Ph.D. Dissertation, Sung Kyun Kwan University-South Korea, Feb. 2008, pp. 214-216.

²⁴ Kim Sung-gul, *op. cit.*, p. 202.

²⁵ Kim Sung-gul, *op. cit.*, p. 108.

vice-versa.²⁶ He recommends that South Korea, while not fully joining the American BMD, field its own ballistic missile defense system. Under this scenario, the Chinese objections and possible adverse effects on South Korea-China economic relations would be minimized to a point that the decision to field a ballistic missile defense system has a net-benefit effect on South Korea's national interest.²⁷

There are three problems in Dr. Kim's dissertation. First, the government research report Dr. Kim cites as the basis in calculating the approximate cost of fielding independent South Korean ballistic missile defense does not deal with ballistic missile interception. *Methodology Case Study on the Required Quantity of the M-SAM System* from the Korea Institute of Defense Analyses (KIDA) published in 2006 calculates the optimal number of M-SAM launchers and missiles required by South Korea based on the missile's capability to shoot down incoming North Korean aircrafts. The report assumes the target aircrafts to be specifically MiG and Sukhoi type North Korean aircrafts flying at low-altitudes with speed of 250 m/sec, and IL-28 type bombers to be flying at mid-altitudes with speed of 250 m/sec.²⁸ Ballistic missiles travel at a speed much faster than the aircrafts, and certainly at a higher speeds than the 250 m/sec. figure used by the KIDA study.²⁹ Given that ballistic missiles are much more difficult to intercept than aircrafts, and would eventually require additional missiles to be launched at, it is logical that Dr. Kim's South Korean ballistic missile defense model is inadequate in number of interceptors to be deployed, and hence also the financial requirements.

Dr. Kim's assertion that South Korea field an independent ballistic missile defense system is based on the economic affordability. It is this economic feasibility that does not require Seoul to become a member of the US BMD. As there is no study on the number of M-SAM interceptors required to counter the incoming North Korean

²⁶ Kim Sung-gul, *op. cit.*, p. 109. Dr. Kim Sung-gul differentiates the two relationships by stating the South Korea-US relations is based on diplomatic and military relations while the South Korea-China relations is based on economic relations.

²⁷ Kim Sung-gul, *op. cit.*, p. 205.

²⁸ 김종국 (Kim Jong-guk) and 이무성 (Lee Moo-sung), "M-SAM 체계 소요결정을 위한 방법론 사례 연구" (*Methodology Case Study on the Required Quantity of the M-SAM System*), *국방정책연구* (Kookbang Jungchaek Yeongu), Vol. 71 (April 2006), p. 164.

²⁹ See Paul Zarchan, "Ballistic Missile Defense Guidance and Control Issues," *Science and Global Security*, Vol. 8 (1998). Zarchan uses an incoming ballistic missile speed of 6,000 ft/sec. (p. 114), which is 1828.8 m/sec, more than 7.3 times the figure used by the KIDA study.

ballistic missile, it is not possible to calculate how many more M-SAMs are required in addition to the 2,000 interceptor number that Dr. Kim used.³⁰ However, with absolute certainty, many more would be needed and the cost would proportionally increase, putting into doubt Dr. Kim's argument on the economic feasibility of the independent system and the absence of necessity to join the US BMD.

Second, laying aside the problem found in citing the KIDA study, the fact that Dr. Kim's ballistic missile defense system solely relies on low-altitude terminal phase interceptors casts yet another serious doubt on the effectiveness of the proposed defense system. The terminal phase intercept is the most difficult stage of the ballistic missile flight trajectory. The most critical issue that complicates interception in this phase is the fact that "the ballistic target is not as predictable because asymmetries within the target structure may cause it to spiral" as it falls back onto Earth.³¹ That is the reason why the US and Japan have developed GBIs (US only) and SM-3 interceptors for the exo-atmospheric engagement (much more predictable target flight path) for an added layer of defense above the PAC-3's endo-atmospheric engagement zone.³²

In addition, North Korea is expected to mount its ballistic missiles with chemical warheads; under this circumstance sole reliance on low-altitude terminal phase intercept system would not render protection for South Korea as the chemical agents would still reach the surface.³³ Therefore, Dr. Kim's system would require addition of high altitude interceptors such as SM-3 missiles in order to provide effective

³⁰ Kim Sung-gul, pp. 214-216.

³¹ Zarchan, p. 99.

³² Procuring and deploying Theater High Altitude Area Defense (THAAD) could be considered, as this system has its own radar systems for detection, tracking and cueing capabilities. But the high cost of the system would be a problem. A US Foreign Military Sales (FMS) package announced in September 2008 included THAAD sales to the UAE. The three units with 147 THAAD missiles were set at USD 6.95 billion (Bettina H. Chavanne, "DSCA Announces Billions In Military Sales to Middle East," *Aerospace Daily and Defense Report*, Vol. 227, No. 51, p. 5). On page 214, Dr. Kim Sung-gul specifically mentions that South Korea would have difficulty in fielding ballistic missile defense should the costs be around USD 8 to 10 billion, no matter what strategic safety it would provide. Given that THAAD system for the UAE already costs nearly 7 billion alone, even if Dr. Kim Sung-gul comes out with an innovative idea to reconfigure the number of his PAC-2/3 and M-SAM procurement, the costs would spiral out of the acceptable range.

³³ 박은주 (Park Eun-ju), *한국적 미사일방어에 대한 ABL의 효용성에 관한 연구* (A Study on the Utility of Airborne Laser for the Korean Missile Defense), Master's Dissertation, Republic of Korea National Defense University (December 2008), p. 80.

ballistic missile defense for South Korea. And the fact that these high altitude interceptors require advanced tracking and cueing capabilities, unlike the terminal phase systems,³⁴ South Korea's cooperation with the US is inevitable. Dr. Kim's suggestion of limited participation in the US BMD only as a research and development partner for radars and missiles,³⁵ is no longer a possibility should his defense system is to have any meaningful level of effectiveness against North Korea.

In evaluating the cost-benefit analysis of Seoul's joining the US BMD and Chinese reactions, Dr. Kim does not make a clear statement whether or not China is a threat to South Korea.³⁶ China is introduced as a critical trading partner.³⁷ While he discusses China's increasing military capabilities, both strategic and conventional, Dr. Kim explains the rationales behind China's growth in strength to be in response to American efforts to check China and to prevent Taiwan's independence.³⁸ Therefore, according to Dr. Kim's logic, China is not a threat to South Korea. The reason China objects to South Korea's fielding of ballistic missile defense is because it is concerned with the enhancement in the capabilities of the US BMD.³⁹

Finally, Dr. Chun Sung-hoon of the Korea Institute for National Unification (KINU)'s report titled *US-Japan's TMD Concept and South Korea's Strategic Choice* published in 2000 comes across as the existing literature that discusses the two major issues of this thesis: China threat, and the necessity of the US as an alliance partner for South Korea. However, as the objective of Dr. Chun's report is to provide a broad analysis of the dynamics in Northeast Asia with regard to the then proposed US BMD, issues of China threat along with the US as an alliance partner are not dealt with in detail. Additionally, the nature and origin of China threat is contradictory to the analysis of

³⁴ The terminal-phase intercept systems PAC-3 and M-SAM both have its own radar systems, and both are independent systems not requiring data links to any external system to intercept ballistic missiles.

³⁵ Kim Sung-gul, p. 217. While Dr. Kim Sung-gul uses the word "participate" [참여], in 2010 when the US BMD systems have reached deployment or advanced testing stages, it is difficult to consider joint-research on radars and other equipments as "participation." As in the case of Japan and Poland, stationing of American BMD assets on the territory and operating a combined command and control system would be considered as "participation." Unless, of course, South Korea is able to conduct joint research and development of exo-atmospheric kill vehicles with higher success rate than the ones used on GBI, SM-3 and THAAD, which is highly unlikely.

³⁶ Kim Sung-gul, *op. cit.*, pp. 116-127.

³⁷ Kim Sung-gul, *op. cit.*, pp. 109-111.

³⁸ Kim Sung-gul, *op. cit.*, pp. 99-108.

³⁹ Even on this issue, Dr. Kim Sung-gul does not specify exactly how South Korea's joining the US BMD would enhance the American defenses against Chinese ballistic missiles.

this thesis.

This policy recommendation paper first painstakingly introduces the history of the missile defense. In addition to tracing the history of the American ballistic missile defense from the Anti-Ballistic Missile (ABM) Treaty to the year 2000, Dr. Chun discusses the views and reactions of the neighboring states and the two Koreas. Dr. Chun identifies the countries in favor of the US BMD and against it. Japan, Taiwan and South Korea are characterized as those in favor of the US BMD, while Russia, China and North Korea are considered to be in the opposing side.⁴⁰

With regard to China, Dr. Chun states that China has opposed the American BMD in Northeast Asia, because it perceives the defense system as a part of US-Japan containment strategy against China.⁴¹ Another reason that China opposed the US BMD is the possibility of Taiwan being included in the defense system. In addition, the concern that it would have to increase spending to enhance strategic offensive capabilities to counter the US BMD, rather than increasing spending on economic development, is another reason that China opposes the American led defense system. And should South Korea join the US BMD, the interception probability of China's ballistic missiles aimed at South Korea and other countries would increase (as opposed to the case of only US-Japan BMD), hence the opposition from Beijing.⁴²

As to exactly what China⁴³ would oppose with regard to South Korea's potential ballistic missile defense system in cooperation with the US, Dr. Chun states that Beijing would object to fielding of ground-based high altitude defense systems,

⁴⁰ 전성훈 (Chun Sung-hoon), *미·일의 TMD 구상과 한국의 전략적 선택* (US-Japan's TMD Concept and South Korea's Strategic Choice), 통일연구원 (Korea Institute for National Unification), 연구총서 (Research Series) No. 2000-01 (2000), pp. 33-78. Dr. Chun also discusses the issue of North Korean ballistic missile threat in depth, however, the discussion is similar to that of Professor Park's. Given that Dr. Chun's article was written in 2000 in comparison to Professor Park's in 2008, the latter has an up to date technological feasibility data to use in discussing the North Korean threat. Therefore, Dr. Chun's analysis on the North Korean ballistic missile threat is not necessary to be discussed in this thesis.

⁴¹ Chun Sung-hoon, *op. cit.*, p. 61.

⁴² Chun Sung-hoon, *op. cit.*, pp. 84 and 90.

⁴³ Note, in this analysis, Dr. Chun does not differentiate the responses between China and Russia. The study assumes that the two states would react in a same manner. However, as previously noted in the introduction, the New START between Moscow and Washington in April 2010 should indicate that today, Russia would not necessarily have the same objections as China would have with regard to the US BMD, especially in Asia.

because the Chinese ICBMs would be vulnerable to interception in the early stages of flight.⁴⁴ Also any type of sea-based defensive systems would be opposed by Beijing, as these systems have the distinct characteristic of being highly mobile in addition to the ICBM intercept capability, there is a high possibility that Taiwan could be covered by the sea-based systems.⁴⁵ To date, because China has not objected to the placement of Patriot systems (terminal low-altitude system) by the USFK, Dr. Chun believes South Korea's deployment of terminal phase low-altitude system would not draw strong objection from China.⁴⁶

However, even if South Korea's BMD cooperation⁴⁷ with the US is limited to low-altitude terminal phase intercept and the Chinese objection remains weak, Dr. Chun states that the very virtue of having an American defense system against China on the South Korean soil makes it inevitable that South Korea would be dragged into a potential great power war between Beijing and Washington. Therefore, in contrast to Dr. Kim Sung-gul, Dr. Chun makes it clear that China would be a threat should South Korea choose to participate in the US BMD. And the cause of the Chinese threat to South Korea is the fact that the US BMD seeks to counter the ballistic missile threats from the neighboring states (meaning China) in the mid to long-term,⁴⁸ causing China to feel threatened.

Therefore, in addition to the North Korean threat, should Seoul join the US BMD, a threat from China would materialize. At this juncture, Dr. Chun examines the alliance between Seoul and Washington. In a case of war against North Korea, Dr. Chun state that Seoul's participation in the US BMD would make Washington's decision to support South Korea easier than had it not participated.⁴⁹ The protection the US BMD would supply not only to the continental US (CONUS) but also to the military infrastructures and troops in the rear area of the Korean theater works to minimize Washington's possible reluctance to fight alongside South Korea.

⁴⁴ Chun Sung-hoon, *op. cit.*, p. 84.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ Chun Sung-hoon, *op. cit.*, p. 102. By "cooperation," Dr. Chun states two situations, one in which the US BMD is permitted to defend against ballistic missiles with high-altitude interceptors over the South Korean airspace, and another in which components of the South Korean defense systems (i.e. radar) provides assistance to the US interceptors located outside South Korea.

⁴⁸ Chun Sung-hoon, *op. cit.*, p. 97.

⁴⁹ Chun Sung-hoon, *op. cit.*, pp. 86-87.

In another dimension, he states that Seoul's membership in the US BMD would change the historical dynamics of the alliance. South Korea has unilaterally reaped the benefits of the alliance to date; however, by becoming a key player in the defense of the US from ballistic missile attacks, the membership could lessen Seoul's free-riding position within the alliance.⁵⁰ This of course would enhance the solidarity of the alliance.

In the end, Dr. Chun's conclusion is that despite the potential benefits to the strengthened alliance with the US, the costs of initiating threatening relations with China and the possibility of getting dragged into a great power war are too great and outweigh the benefits. Therefore, the recommendation is that South Korea independently develop and field ballistic missile defense, but make certain that no defense system would be used against ballistic missiles not targeting South Korea.⁵¹ As for the US BMD, Dr. Chun advises that in order to show gratitude and appreciation for the alliance with the US, Seoul join the basic research with the US,⁵² which in practical terms means, involvement in the US BMD, but no physical participation.

While Dr. Chun's report also addressed the China threat and the consideration of the alliance with the US in Seoul's BMD participation issue, because the China threat is evaluated at a different angle, the conclusion is different from this thesis. As discussed above, Dr. Chun states that China would be a threat to South Korea mainly due to the American containment strategy,⁵³ one integral part of which is the BMD. The report does not state that China on its own would be a threat to South Korea. Following in this logic, there is no need for South Korea to provoke China, posing a threat through close alliance with the original provocateur, the US.

While this thesis agrees that China is a threat to South Korea, the assertion that the US containment strategy (i.e. BMD) as the reason making China to be threatening to South Korea is not agreeable. China is increasing its military strength beyond what

⁵⁰ Chun Sung-hoon, *op. cit.*, p. 102.

⁵¹ Chun Sung-hoon, *op. cit.*, pp. 99-100 and 103.

⁵² Chun Sung-hoon, *op. cit.*, p. 99.

⁵³ And the possibility of American involvement in the Taiwan issue.

is necessary for it to overcome the American BMD, even with South Korea's participation, and to overwhelm Taiwan. With the new DF-31 ICBMs and Type 094 SSBNs, the Chinese already have significantly enhanced the strategic offensive capabilities, which are very difficult for the US BMD to counter.⁵⁴ The 2009 report from the US Department of Defense (DoD) clearly shows that China has achieved air superiority over the Taiwan Straits, and that the PLA is "developing longer range capabilities that have implications beyond Taiwan."⁵⁵ More detailed analysis of China as a threat to South Korea, regardless of the US BMD, would be conducted in the fourth chapter of this thesis.



⁵⁴ Kim Sung-gul, p. 101.

⁵⁵ US Department of Defense, *Annual Report on the Military Power of the People's Republic of China: Report to Congress Pursuant to the FY2000 National Defense Authorization Act*, March 2009, pp. i and viii.

Chapter 2

Background Information: South Korea and the BMD

2.1 Conceptualization Stage of the BMD

Washington's invitation to Seoul that South Korea join the American ballistic missile defense program could be traced back to April 1985, when the then Secretary of Defense Caspar Weinberger requested that South Korea participate in the President Reagan's Strategic Defense Initiative (SDI).¹ This invitation was received favorably from Seoul, and as a result, a group of researchers were dispatched to the US and Patent Secrecy Agreement (PSA) between the two nations were concluded in 1993; however, no further government actions had been taken.² The US took another shot at inviting South Korea to its ballistic missile defense program when the then Deputy Secretary of Defense John Deutch visited South Korea and asked the Kim Yeong-sam Administration to join the Global Protection Against Limited Strikes (GPALS) in September 1993.³ Despite these two rather formal and official invitations from American officials, South Korea did not take any substantive actions in joining the program.

These two invitations, which are formal in nature, should not be equated as the contemporary formal American invitations to its allies to join the BMD, as is the case of Poland.⁴ When South Korean officials received invitations directly from their American counterparts in 1985 and 1993, no ballistic missile defense system was operational or even at a testing stage. It was at a conceptual stage, and with the high

¹ Chun Sung-hoon, p. 72.

² *Ibid.*

³ *Ibid.*

⁴ Judy Dempsey, "Poland to Accept U.S. Offer On Shield," *The New York Times*-Late Edition, 21 October 2009, p. A13. Also see 정지탄 (Jung Ji-tan), "폴란드 '새로운 美 미사일방어 제안 받았다'" (Poland, 'Received a New Offer on US Missile Defense'), *뉴스시스* (Newsis), 7 October 2009.

probability of technical unfeasibility, the invitations were not that South Korea join the defense program such as placing radar stations or interceptors (the case of Poland in 2010), but rather that it participate in conceptual and feasibility studies. Therefore, the formal invitations from Washington in 1985 and 1993 should not be considered as an invitation to join the defense program as in 2010.

2.2 Deployment Stage of the BMD

After it became apparent that the US had achieved a certain level of technical proficiency to intercept incoming ballistic missiles and had formulated plans to deploy interceptors and radar sites, the South Korean government states that it has never received a formal invitation from Washington. The testimony of the then Director of Policy Planning Division of the South Korean Ministry of National Defense (NMD) Kim Seon-gyu to the National Defense Committee of South Korean National Assembly on June 19th, 2003 succinctly represents South Korea's position with regard to issue of joining the American ballistic missile defense: no American invitation regarding participation in the MD system was received, and should the US offer an invitation, the MND would consider the North Korean threat, ROK-US combined defense readiness and diplomatic environment in the process of rendering a decision.⁵

While it is true that the US has never officially offered an invitation to South Korea, it has done so in indirect and unofficial ways. On a periodic basis, the incumbent Commander of the USFK⁶ mentions the necessity for cooperation between the US and South Korea in ballistic missile defense in a luncheon speech or in his annual testimony to the U.S. Congress. For example, in his first testimony to the US Senate Armed Services Committee in March 2009, General Walter L. Sharp testified that South Korea “should also continue to invest in a [Theater Missile Defense] TMD capability, which would ideally be interoperable with U.S. systems to enhance our

⁵ National Defense Committee of the ROK National Assembly, 國防委員會會議錄 第1號 (Defense Committee Meeting Minutes Number 1), the 240th Special Session of the ROK National Assembly, 19 June 2003, p. 15.

⁶ The Commanding General also holds the positions of Commander for the United Nations Command and Commander for the Combined Forces ROK-US.

combined defensive capabilities.”⁷ The general continued by stating “[t]he ROK must continue to develop and field an interoperable TMD system to protect critical civilian and military command capabilities, infrastructure and population centers.”⁸ It should be noted that instead of choosing “join” or “participate,” the testimony utilized the word “interoperability,” which is a much more subtle expression of insinuating the South Korea’s need to join the American ballistic missile defense.

Despite the informal and indirect offer of invitation from the US, Seoul is not providing any responses, that is no response against or for joining the American ballistic missile defense. South Korea and the United States hold a ROK-US Security Consultative Meeting (SCM) on an annual basis, during which the South Korean Minister of National Defense and the US Secretary of Defense hold meetings to comprehensively discuss security issues of the two states, ranging from operation plans to host nation support. If the Commander of the USFK is able to openly testify that South Korea should field a ballistic missile defense system that is “interoperable” with the American system, the SCM is the best setting for the US to discuss or offer a formal invitation to South Korea.

However, the fact that two Joint Communiqués of the SCM since the inauguration of President Lee Myung-bak (the 40th and 41st Joint Communiqués) do not even mention ballistic missile defense is a clear indication that South Korea does not wish to even discuss the issue with the US in a formal setting.⁹

In addition to the incumbent Commander of the USFK’s periodic nudge to Seoul, in 2010 the Obama Administration included South Korea in its *Ballistic Missile Defense Review (BMDR) Report*. The specific language used in the BMDR referred to South Korea as “an important U.S. BMD [Ballistic Missile Defense] partner” and pointed

⁷ General Walter L. Sharp, p. 14.

⁸ *Ibid.*

⁹ The President-elect Lee Myung-bak and his transition committee had a favorable view of joining the American BMD. While the favorable view was not necessarily to join immediately after inauguration, it was a significant step towards the membership considering that the previous two presidents had firmly opposed to participate in the BMD. Therefore the two communiqués of the SCM issues under President Lee’s tenure have been examined. See 황일도 (Hwang Il-do), “이명박 정부 MD[미사일방어체제] 참여 구상 정밀 분석” (In Depth Analysis of Lee Myung-bak’s Concept of MD [Missile Defense System] Participation) *신동아* (Shin Dong-A), Vol. 581 (1 Feb. 2008), pp. 290-299.

out that “the United States stands ready to work with the R.O.K. to strengthen its protection against the North Korean missile threat.”¹⁰

The South Korean government made an official response to the BMDR’s reference of South Korea as “an important U.S. BMD partner,” by stating that there has not been an official invitation from Washington requesting South Korea to join the BMD, and it is difficult to interpret the language of the BMDR to be an official request.¹¹ This response is consistent with the line of previous responses that South Korea is not in consideration of joining the American missile defense and it is also not in any discussion regarding ballistic missile defense issue with the US.

In response to Seoul’s rather “cold” response, the Deputy Assistant Secretary of Defense for Asian and Pacific Security Affairs, East Asia Michael Schiffer contributed an opinion article to a major South Korean newspaper *Dong-A Ilbo* on March 6th, 2010. In his article, Assistant Secretary Schiffer explained how the US is to invest heavily in establishing a Regional Missile Defense (RMD) arrangement, which would be more flexible and easy to be deployed than the BMD.¹² In contrast to the BMD, which seeks to intercept ICBMs bound for American territories, the RMD would be “tailored” to the unique requirements of Asia in dealing with Short-Range Ballistic Missiles (SRBMs) and Medium-Range Ballistic Missiles (MRBMs).¹³ However, even in this news article, the assistant secretary does not ask Seoul to become a member of the American-led RMD. However, an article placed on the same page by the *Dong-A Ilbo* interprets Assistant Secretary Schiffer’s mentioning of the RMD as an indirect request from the US for Seoul to join the RMD.¹⁴ Despite such indirect invitations, no response in favor or against from Seoul has been made.

¹⁰ US Department of Defense, *Ballistic Missile Defense Review Report* (Washington, DC: Office of the Secretary of Defense, February 2010), p. 33.

¹¹ 김귀근 (Kim Gui-geun), “美, BMD체제 참여제의 논란” (US, Controversy over Invitation to Join the BMD System), *연합뉴스* (Yeonhop News), 3 February 2010.

¹² 마이클 시퍼 (Michael Schiffer), “[특별기고] 마이클 시퍼 미국 국방부 차관보” ([Special Contribution] Michael Schiffer, US Assistant Secretary of Defense), *동아일보* (Dong-A Ilbo), 6 March 2010.

¹³ *Ibid.*

¹⁴ 박민혁 (Park Min-hyuk), “美 ‘한반도 새로운 지역MD’ 추진” (U.S. To Initiate a New Regional MD on the Korean Peninsula), *동아일보* (Dong-A Ilbo), 6 March 2010.

2.3 Possible Reasons for South Korean Government's Inaction

While some may suspect that South Korean government's inaction with regard to American informal invitations to join the BMD is representative of Seoul's desire to avoid joining the American program, such a reaction, or a lack of, from Seoul should not be construed in only one way. A non-response or inaction could be that Seoul opposes the BMD deployment or could also be that it seeks to join the BMD behind the scenes in order to minimize other possible diplomatic repercussions.

South Korea's procurement of two ballistic missile defense radars in September 2009 is a case in point of such a possible behind the scenes approach to quietly join the US BMD. The South Korean government procured two Green Pine Block-B radars from Israel with range over 800 km, which "would be interoperable with Theater Missile Operations-Cell (TMO), run by U.S. Forces Korea (USFK)."¹⁵ If Seoul were steadfast in opposition to joining the US BMD, the government would make sure that such systems as the ballistic missile tracking radars, would be kept separate and non-interoperable with the US BMD assets.¹⁶

As discussed in the literature review section of this thesis, specifically the writings of Dr. Kim Sung-gul and Dr. Chun Sang-hoon, Seoul's decision to join the US BMD would result in deterioration of ROK-PRC relations, especially in economic relations. In such a case, given that South Korea is not a great power like the US or Russia, and also heavily dependent on trade, Seoul must heed the adverse affects of joining the US BMD and do its best to minimize the potential repercussions. Also, behind the scenes negotiations with the US for the BMD participation provides China with some latitude to manage the ROK-PRC relations down the road. As of today, China does not have South Korean government's decision to denounce or attack, as there are no public decisions on the BMD participation.

On the other hand, for a case that Seoul's inaction is a result of South Korea's opposition to the US BMD, one is able to borrow the arguments from those outside

¹⁵ Jung Sung-ki, "Israeli Radar Chosen for Missile Defense," *The Korea Times*, 17 Sept. 2009.

¹⁶ The TMO run by the USFK are a part of the US BMD, however, under the sole control of the US government.

the government who openly take the position of anti-US BMD participation. What *could* be considered as an academic writing by Cheong Wook-sik of the Peace Network, an NGO based in South Korea, the *MD* published in 2003 and revised in 2008, argues that South Korea should not join the US BMD because of three major reasons, which are: 1.) high costs, 2.) doubtful feasibility, 3.) possibility of falling victim to great power politics in Northeast Asia.¹⁷ Mr. Cheong argues the reason Washington is pushing to deploy BMD is due to the American military-industrial complex and its search for profit.¹⁸ The arguments against South Korea's joining the American BMD is usually found in NGO press releases and newspaper articles, such as Solidarity for Peace and Reunification of Korea (SPARK). This South Korean NGO's press release on May 10th, 2010 titled "U.S. Military Strategy on the Korean Peninsula and Missile Defense in Northeast Asia," argues that Seoul should not join the American BMD as such an action would accelerate nuclear arms race in the region.¹⁹

These are the best guesses as to explain why the South Korean government has not publicly either accepted or rejected the American indirect invitations to join the US BMD. Until such a decision has been publicly made, it is impossible to understand the rationale behind Seoul's current stance of ambiguity. However, as the intent of this thesis is to provide a reason in favor of South Korea's participation in the US BMD, not to make a policy recommendation that Seoul join the US defense program, a survey of Seoul's positions with regard to the BMD and possible rationales behind such positions as background information would suffice.

¹⁷ 정욱식 (Cheong Wook-sik), *MD 미사일방어체계* (MD Missile Defense System) (Gyunggi-do, South Korea: Sallim, 2008), pp. 48-60.

¹⁸ Cheong Wook-sik, *op. cit.*, pp. 63-80.

¹⁹ Ko Young-dae, "U.S. Military Strategy on the Korean Peninsula and Missile Defense in Northeast Asia," SPARK Homepage, 10 May 2010, accessed 30 May 2010 [available: http://www.spark946.org/bugsboard/index.php?BBS=s_news3&action=viewForm&uid=1178&page=4].

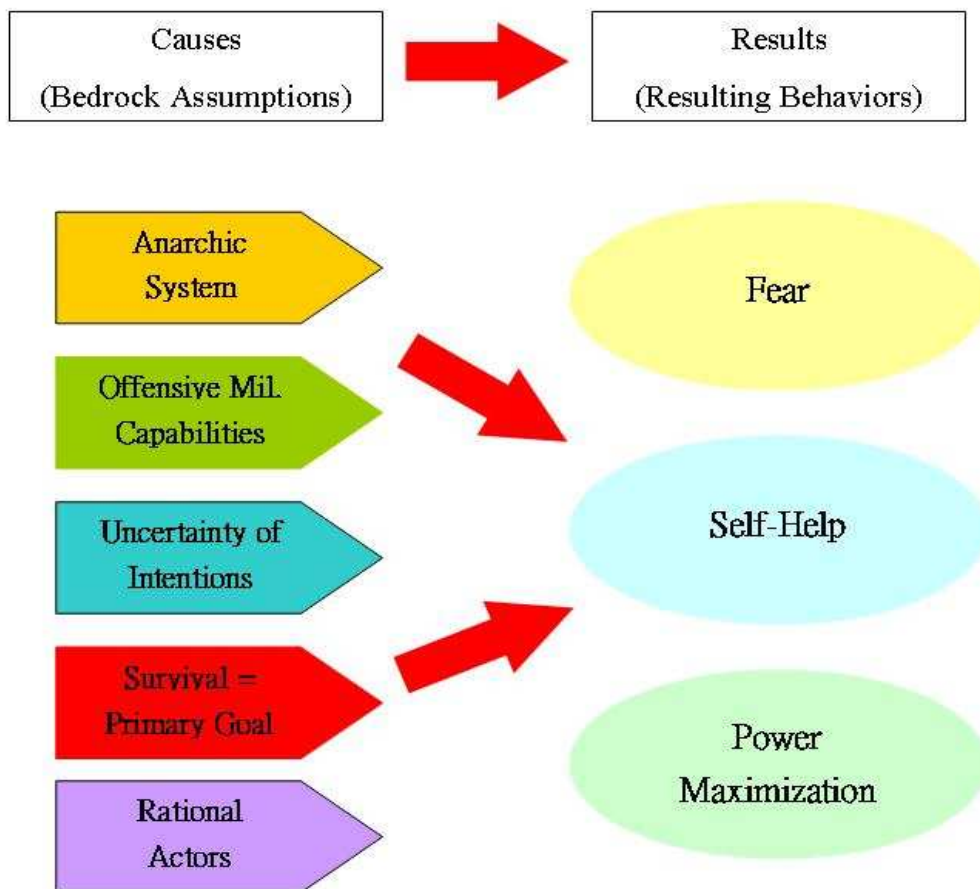
Chapter 3

Theoretical Framework: Offensive Realism

3.1 Introduction of Offensive Realism

An off-shoot of the Realism Theory in international relations academic field, the Offensive Realism is founded upon five bedrock assumptions that render three resulting behaviors on great powers.

Figure 3.1 The Basics of Offensive Realism



The first bedrock assumption “anarchy” is succinctly defined as “no central authority

[imposing] limits on the pursuit of sovereign interests” of states.¹ This concept is also a founding assumption of the Defensive Realism. The second bedrock assumption is the offensive capabilities of great powers. Mearsheimer states that “great powers inherently possess some offensive military capability, which gives them the wherewithal to hurt and possibly destroy each other.”² Third, states have no method to be certain about another’s intentions. In addition, fickle nature of intentions, that is, it could change overnight without any prior warning, makes it even more difficult for a state to identify another’s intentions.³ Fourth, according to Mearsheimer, the “primary goal of great powers” is survival, which means maintenance of “territorial integrity and the autonomy of their domestic political order.”⁴ Finally, the fifth bedrock assumption is that these great powers, or states, are rational actors; in other words, they calculate responses from others and weigh the pros and cons of their strategic actions for both short and long term.⁵

These characteristics render great powers to adhere to three behavioral patterns. First, fear arises among great powers due to the fact that other powers possess offensive capabilities and there is no way to know for certain what is the intention of the other power. Mearsheimer states, as a result, “[f]rom the perspective of any one great power, all other great powers are potential enemies.”⁶ In addition, the possibility of “falling victim” to another power’s aggression heightens the level of fear.⁷ As a result, a state “focuses mainly on the offensive *capabilities* of potential rivals, not their intentions.”⁸ Under this circumstance, the state must prepare for a worst case scenario in order to ensure its survival.

Second, the theory explains that each state engages in self-help behavior. Borrowing Mearsheimer’s words, “[i]n international politics, God helps those who help

¹ Kenneth A. Oye, “Explaining Cooperation under Anarchy: Hypotheses and Strategies,” *World Politics*, Vol. 38, No. 1 (Oct. 1985), p. 1.

² John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton and Company, 2001), p. 30.

³ *Ibid.*

⁴ *Ibid.*

⁵ *Ibid.*

⁶ John J. Mearsheimer, *op. cit.*, p. 32.

⁷ *Ibid.*

⁸ John J. Mearsheimer, *op. cit.*, p. 45.

themselves,” and even “alliances are only temporary marriages of convenience”⁹ no matter how the relationship is bound today, ideologically or strategically.

Finally, the third behavioral pattern is power-maximization of the great powers. The rationale behind adherence to power maximization is due to the fact that the “stronger the state is relative to its potential rivals, the less likely it is that any of those rivals will attack it and threaten its survival.”¹⁰ The importance of power maximization in relative terms rather than absolute terms makes the great power politics a *zero-sum* game. As a result, the great powers “look for opportunities to alter the balance of power” through acquisition of power at the expense of the rival power, hence the revisionist tendencies or as Mearsheimer calls the “aggressive intentions.”¹¹ As to a question at what level of power would a state stop maximizing power, Mearsheimer’s answer is if the state becomes a hegemon and “completely dominate the system;” however this is an unachievable goal for any state, even the US.¹²

3.2 Distinction among International Relations Theories

Mearsheimer makes clear distinctions between his Offensive Realism theory and other dominant contemporary theories of the international relations, which are the liberal theories of Democratic Peace and Economic Interdependence in addition to the realist theory of Defensive Realism.

First, what Mearsheimer calls one of the strongest challengers to the theories of realism,¹³ the Democratic Peace theory focuses on the type of governance for a given state and attempts to provide a solution to achieve or maintain peace. The means to achieve or maintain peace is to populate the globe with liberal democracies. Immanuel Kant’s concept of *Perpetual Peace* asserts that liberal democracies are “capable of achieving peace among themselves because they exercise democratic

⁹ John J. Mearsheimer, *op. cit.*, p. 32.

¹⁰ John J. Mearsheimer, *op. cit.*, p. 33.

¹¹ John J. Mearsheimer, *op. cit.*, p. 34.

¹² John J. Mearsheimer, *op. cit.*, pp. 34-35.

¹³ John J. Mearsheimer, *op. cit.*, p. 367.

caution and are capable of appreciating the international rights of foreign republics.”¹⁴

Mearsheimer exposes the problems of the Democratic Peace theory in three parts, first of which is the fact that in times of conflict, even democracies do not have benign intentions towards another democracy.¹⁵ This counter argument is echoed by a professor of Notre Dame University Sebastian Rosato, who states that democracies “do not treat one another with trust and respect when their interests clash.”¹⁶

Another argument against the Democratic Peace theory is the fact that the possibility of democracies “backsliding” to become a non-democracy exists; therefore, “just in case a friendly neighbor turns into the neighborhood bully,” democratic states would prepare against such a contingency by building up power.¹⁷ Finally, the impossibility of populating the globe with democratic states, in other words continuing existence of threatening non-democracies renders the feasibility of obtaining the Democratic Peace for the world very low.¹⁸

Second, the Economic Interdependence theory that asserts states become “cognizant of the costs of a militarized clash [and] choose to settle their differences short of the use of force,”¹⁹ is refuted with two historical examples. The first example is the case of Iraq’s invasion of Kuwait in 1991. Mearsheimer states that Kuwait’s overproduction of oil against the Organization of Petroleum Exporting Countries (OPEC) quota adversely affected Iraq’s economy, and as a result it made sense for Iraq to invade the neighbor because the potential economic losses were minimal.²⁰ Another case in point is the pre-World War I Europe (1900-1914). The author states the economic interdependence among the great powers in the early 20th century Europe failed to prevent the most horrific military conflict in the history of

¹⁴ Michael W. Doyle, “Liberalism and World Politics,” *The American Political Science Review*, Vol. 80, No. 4 (Dec. 1986), p. 1162.

¹⁵ John J. Mearsheimer, p. 368.

¹⁶ Sebastian Rosato, “The Flawed Logic of Democratic Peace Theory,” *The American Political Science Review*, Vol. 97, No. 4 (Nov. 2003), p. 599.

¹⁷ John J. Mearsheimer, p. 368.

¹⁸ Michael W. Doyle, p. 1162 and John J. Mearsheimer, p. 368.

¹⁹ William Reed, “Information and Economic Interdependence,” *The Journal of Conflict Resolution*, Vol. 47, No. 1, Building a Science of World Politics (Feb. 2003), p. 54.

²⁰ John J. Mearsheimer, p. 371.

humanity.²¹

Finally, Mearsheimer distinguishes his theory with Kenneth Waltz’s “Defensive Realism”²² theory. This theory also attributes state’s thirst for power to the state of anarchy, where “[in] the absence of an external authority, a state cannot be sure today’s friend will not be tomorrow’s enemy” and lives in a “self-help arena.”²³ This school of thought believes proliferation of nuclear weapons, granted that the nuclear weapons are controlled by rational state actors, increases the chances of inhibiting wars and conflicts, prefers balance of powers in the politics of international relations where there exists “effective counterweights,” rather than a potential hegemon.²⁴

The Defensive Realism further argues that states seek “to maintain their position in the system,”²⁵ which is in contrast to the Offensive Realism’s notion that great powers seek to “maximize their relative power because that is the optimal way to maximize their security.”²⁶ Therefore, the key difference between the two theories is on the question of power maximization, and the comparison of the two theories is shown as below.

Table 3.2 Differences and Similarities between Defensive and Offensive Realisms

	Defensive Realism	Offensive Realism
What causes states to compete for power?	Structure of the system	Structure of the system
How much power do states want?	Not much more than what they have. States concentrate on maintaining the balance of power.	All they can get. States maximize relative power, with hegemony as their ultimate goal.

Source: John J. Mearsheimer, *The Tragedy of Great Power Politics*, p. 21.

²¹ *Ibid.* Also see R. Rosecrance et al., “Whither Interdependence?” *International Organization*, Vol. 31, No. 3 (Summer 1977). On page 432, the authors state “[t]he pre-World War I system demonstrated high interdependence among separate national markets even though these were not held together by a political bond.”

²² Mearsheimer refers to what is commonly known as the “Neo-Realism” theory of Kenneth Waltz as “Defensive Realism” theory.

²³ Kenneth N. Waltz, “Structural Realism after the Cold War,” *International Security*, Vol. 25, No. 1 (Summer 2000), pp. 5 and 10.

²⁴ Kenneth N. Waltz, “Globalization and Governance,” *Political Science and Politics*, Vol. 32, No. 4 (Dec. 1999), pp. 698-699.

²⁵ Kenneth N. Waltz, *Theory of International Politics* (New York: McGraw-Hill Publishing Co., 1979), p. 126.

²⁶ John J. Mearsheimer, p. 21.

3.3 Definition and Behavioral Characteristics of Great Power

Mearsheimer defines a great power as,

[it] need[s] not have the capability to defeat the leading state, but it must have some reasonable prospect of turning the conflict into a war of attrition that leaves the dominant state seriously weakened, even if that dominant state ultimately wins the war,

hence the great power status is “determined largely on the basis of their relative military capability.”²⁷ Two indicators are helpful in assessing the level of power, which are the latent power and the actual power. Latent power is defined as “based on the size of [a state’s] population and the level of its wealth,” and the actual power “is embedded mainly in its army and the air and naval forces that directly support it.”²⁸ Because the current international system is based on territorial states, the instrument of conquering and controlling territory, the army, is of foremost importance, and as a result “continental powers with large armies” are the most threatening and dangerous states in the system.²⁹

As great powers maximize power to reach the unobtainable goal of hegemony, certain behavioral characteristics such as calculated aggression, containment and strides for nuclear superiority appear on a regular basis.

Because the Offensive Realism assumes that states are rational actors, except in rare cases of miscalculations based on wrong information, great powers assess the situation and act accordingly, which Mearsheimer calls “Calculated Aggression.”³⁰ While great powers seek to maximize power, due to the fact that they focus on relative gains, unless they have “a marked power advantage over” the rivals that increases chances of winning a war and gaining relative power, they would seek to defend “the existing balance of power” for the time being.³¹ Therefore, the great powers as described by Offensive Realism, while by definition threatening, could be temporarily contained or deterred given that the probability of success in relative power gains is kept at a significantly low level.

²⁷ John J. Mearsheimer, *op. cit.*, p. 5.

²⁸ John J. Mearsheimer, *op. cit.*, p. 43.

²⁹ John J. Mearsheimer, *op. cit.*, pp. 43 and 135.

³⁰ John J. Mearsheimer, *op. cit.*, p. 37.

³¹ *Ibid.*

As for containment of other great powers or potential powers, despite the “stopping power of water,”³² once a great power reaches the status of regional hegemony,³³ it seeks to “prevent great powers in other regions from duplicating their feat.”³⁴ The reason for a regional hegemon engaging in acts of containment in the distant region is due to the fear that should the great power in the distant region also achieve regional hegemony, the new distant hegemon would interfere in the affairs of itself.³⁵ For example, State A in the northwestern hemisphere has achieved regional hegemony. It sees that State B is on the verge of becoming a regional hegemon of the southeastern hemisphere. The State A would be fearful that once State B becomes a regional hegemon of southeastern hemisphere, State B would no longer worry about the threats and problems in its own region. As a result, State B would be able to meddle in the affairs of the northwestern hemisphere, threatening today’s regional hegemon State A.

Mearsheimer goes further to state that great powers would actively contain another every time “opportunity presents itself,” and the goal would be not only to weaken the other, but also to destroy the rival should it be possible.³⁶

On a more practical level, the great powers seek to obtain nuclear superiority. Nuclear superiority is defined as “when a great power has the capability to destroy an adversary’s society without fear of major retaliation against its own society,”³⁷ or simply a “disarming first strike” capability.³⁸

Mearsheimer states that obtaining nuclear superiority makes the obtainer the “only great power in the system, because the power advantage bestowed on that state would

³² John J. Mearsheimer, *op. cit.*, pp. 114-128. To put this concept in a simple sentence, Mearsheimer states that “large bodies of water make it extremely difficult for armies to invade territory defended by a well-armed great power,” p. 40.

³³ While Mearsheimer makes it clear that no great power would be able to become a global hegemon, he cites the case of the United States to show a regional hegemony is achievable. *Ibid.*

³⁴ John J. Mearsheimer, *op. cit.*, p. 41.

³⁵ John J. Mearsheimer, *op. cit.*, pp. 41-42.

³⁶ John J. Mearsheimer, *op. cit.*, pp. 42 and 345.

³⁷ John J. Mearsheimer, *op. cit.*, p. 129.

³⁸ Barry M. Blechman and Robert Powell, “What in the Name of God is Strategic Superiority?” *Political Science Quarterly*, Vol. 97, No. 4 (Winter 1982-1983), p. 590.

be tremendous.”³⁹

In supporting that great powers seek nuclear superiority, Mearsheimer examines the US-Soviet strategic relations during the Cold War, which operated under the prescriptions of Mutually Assured Destruction (MAD). MAD is defined as:

[T]he ability to absorb any conceivable nuclear attack and retain adequate retaliatory capacity to inflict unacceptable damage on the aggressor state. [The] deterrence is achieved because any state contemplating a nuclear attack on [another state] knows that [the other state] will retaliate and decimate [itself], thereby making the attack suicidal.⁴⁰

Achieving nuclear superiority is synonymous with termination of the MAD. Mearsheimer’s argument is that while the MAD dominated the Cold War strategic balance, the US and Soviet Union, through various means such as increasing counterforce capabilities or initiating ballistic missile defense development, have continued to upset the MAD and attempted to obtain nuclear superiority, though without any success.⁴¹ Specifically on the ballistic missile defense, Mearsheimer states,

American policymakers sometimes said that the ultimate purpose of missile defense was to move away from a nuclear world that prized offense to a safer, defense-dominant world, but the truth is that they wanted defenses in order to facilitate winning a nuclear war at a reasonable cost.⁴²

The reason ballistic missile defense system is the key to achieving nuclear superiority is due to the high value and utility of the ballistic missiles in strategic offense. The START Treaties between the US and Russia seek to limit the means of delivery and the quantity of nuclear warheads. The means of delivery are strategic heavy bombers, ground based ballistic missiles and SLBMs. Strategic heavy bombers are large in size and difficult to conceal, thus extremely vulnerable to any pre-emptive strike. Should these bombers survive a pre-emptive strike, in order to reach a target for a retaliatory strike, the bombers would have to fly long distances and penetrate enemy air defenses. In contrast, ballistic missiles are hard to destroy in a pre-emptive strike as demonstrated in the Operation Desert Storm,⁴³ and take only a short

³⁹ John J. Mearsheimer, p. 129.

⁴⁰ Donald M. Snow, “Current Nuclear Deterrence Thinking: An Overview and Review,” *International Studies Quarterly*, Vol. 23, No. 3 (Sept. 1979), p. 449.

⁴¹ John J. Mearsheimer, pp. 224-232.

⁴² John J. Mearsheimer, *op. cit.*, p. 228.

⁴³ William Rosenau, *Special Operation Forces and Elusive Ground Targets: Lessons from Vietnam and the Persian Gulf War*, (Santa Monica, CA: Project Air Force/RAND, 2001), Chapter 3 “Coalition Scud-Hunting in Iraq, 1991,” pp. 29-44.

period of time to reach the target.

In a MAD world, these strategic ballistic missiles armed with nuclear warheads are the keystone of mutual annihilation concept. However, with advent of the technology to intercept incoming ballistic missiles, indiscriminate of the origin (ground or submarine), no offensive strategic weapons are guaranteed to survive a pre-emptive strike *and* successfully carry out a retaliatory strike. Therefore, perfecting the ballistic missile defense is tantamount to achieving nuclear superiority.

Overall, the behavioral characteristics of Offensive Realism's great powers is engaging in relentless pursuit of relative power maximization, though with rational judgments that sometimes temporarily stalls the pursuit. However, in the long run, the relative power maximization is continued, and it takes the forms of containing a rising rival and efforts to achieve nuclear superiority.

3.4 Balancing and Alliance in Offensive Realism

Under the tragic circumstances of states facing constant threats to survival, Offensive Realism mandates that states, small powers and great powers alike, form a balancing coalition.⁴⁴

For an upstart state, or a small power in the system, because it is vulnerable to a neighboring great power's blackmailing⁴⁵ and ultimately threat to its survival, it should ally with a distant hegemon,⁴⁶ preferably separated by a large body of water. Of the three balancing strategies outlined by Mearsheimer, for an upstart state, forming a balancing coalition is the best option, because a small power's message of confrontation to an aggressive great power or internal mobilization to increase power

⁴⁴ Two other possible methods of survival other than formation of balancing coalition, bandwagoning and appeasement, under the Offensive Realism framework are dangerous methods as the great powers never relinquish their thirst for power. With the additional acquisition of power from the smaller powers bandwagoning or appeasing it, a great power would be emboldened, thus making it "more, not less, dangerous." John J. Mearsheimer, pp. 162-164.

⁴⁵ Mearsheimer defines the term Blackmailing as "[c]oercive threats and intimidation, not the actual use of force, [producing] the desired outcome," p. 152.

⁴⁶ John J. Mearsheimer, *op. cit.*, p. 156.

have limitations that would surely fall short of matching the capabilities of the great power. This would be especially true in a case of conventionally armed small power confronting a nuclear armed great power, the case of South Korea and China today.

For a distant great power or even a distant regional hegemon, having an upstart state as an ally in the backyard of a rival great power is both beneficial and critical. The stopping power of water makes it difficult for a distant great power to confront or check the rival power. However, the stopping power of water could be mitigated should an ally, regardless of its power status, be located near the rival great power, because its troops could be placed on the ally's territory.⁴⁷ A specific case in example is the stationing of the US forces in Europe and Northeast Asia throughout the Cold War.⁴⁸ In this case, command of the sea becomes critical as the land forces must be transported via Sea Lines of Communications (SLOCs).⁴⁹

With regard to a balancing coalition, or an alliance, formed between a local upstart state and a distant great power, the target great power of the balancing would view the alliance as an act of encirclement and thus a threat.⁵⁰ However, because balancing coalition has inherent problem of buck-passing, in certain situations, the targeted great powers are susceptible to underestimate the unity and resolve of the alliance, which could possibly result in the failure of deterrence.⁵¹

Buck-passing, or free-riding, is defined as having “another state to bear the burden of deterring or possibly fighting an aggressor, while [the buck-passer] remains on the sidelines.”⁵² In a system where self-help pays most handsome dividends, buckpassing is an attractive option, but the possibility of destroying the balancing coalition is a significant danger that both the upstart state and the distant great power

⁴⁷ John J. Mearsheimer, *op. cit.*, p. 142.

⁴⁸ John J. Mearsheimer, *op. cit.*, p. 361.

⁴⁹ John J. Mearsheimer, *op. cit.*, p. 142. Strategic airlift is another means for a distant hegemon to place its troops in an ally's territory, under which circumstance a great power without the control of SLOCs is still able to project land forces across the ocean. However, the current level of technological advancement has not been able to propel strategic airlift capacity beyond that of strategic sealift capability. For example, a naval fleet consisting of landing assault ships and carriers without any doubt far outnumber the capacity of any known strategic airlift fleet in the history, even with US Air Force's C-17 fleet.

⁵⁰ John J. Mearsheimer, *op. cit.*, p. 345.

⁵¹ John J. Mearsheimer, *op. cit.*, p. 38.

⁵² John J. Mearsheimer, *op. cit.*, pp. 157-158.

should be mindful of.⁵³

In summary, an upstart state facing a neighboring great power should ally with a distant great power to ensure its survival. At the same time, a distant great power should also ally with a distant upstart state in the backyard of the rival great power, in order to overcome the stopping power of water and contain the rival. As the upstart state and a distant great power form a balancing alliance, the two should be mindful of buck-passing wrecking the alliance and avoid such a result.



⁵³ John J. Mearsheimer, *op. cit.*, p. 159.

Chapter 4

China as a Threat to South Korea

China in the year 2010 is a formidable great power in Northeast Asia. Its unrivaled large population and continuing wealth aggrandizement indicate that the Central Kingdom of the past is well on its way to return to its central place in the region and perhaps the world.

While it faces a primary threat from the north, a nation heavily dependent on trade and energy imports such as South Korea cannot afford to focus exclusively on the North Korean threat. As a result, during the President Roh Moo-hyun's Administration, the Defense Reform Plan 2020 was drafted and made into law. The rationale behind the establishment of the new defense plan is based on two factors. The first premise of the reform plan is that by the year 2020, the North Korean threat, whether through congenial inter-Korean relations or through significant deterioration in the comprehensive national power of North Korea, would be decreased to a point of less immediate and significant threat to South Korea.¹ The second premise is that threats from regional actors would increase and slowly replace the current primary threat from North Korea.²

Since the ROKN Cheon-An incident, calls for revision of the reform plan has been made culminating in the President Lee Myung-bak expressing the necessity for a revision to the plan. However, the revision being discussed does not deny that South Korea no longer faces threats from regional actors and faces *only* the North Korean threat. What have been primarily discussed requiring revision in the Defense Reform Plan 2020 were the number of troop reduction plan, mandatory military

¹ 김호준 (Kim Ho-jun), “국방개혁 2020 전면 재조정 불가피” (Comprehensive Revision of the Defense Reform Plan 2020 Inevitable), *연합뉴스* (Yeonhap News), 7 June 2010.

² *Ibid.*

service active duty period reduction plan, and enhancement of joint operation capabilities.³ As South Korea must deal with limited defense budget and resources, the revisions to the reform plan would only shift focus and concentration of some programs to better develop deterrence against North Korea. In other words, while the primary focus would shift to containing the North Korean threat, South Korea's preparations to counter threats from regional actors, such as China, would not be abandoned.

Of the three regional actors in Northeast Asia, which are China, Japan and Taiwan, China would be the most likely potential threat to South Korea. With a long history of wars and interference in the internal matters of Korea by the Chinese throughout the pre-modern periods, and the PLA's participation in the Korean War provides more than enough reasons for South Korea to fear the rising China of 2010. In terms of actual military power of China today, a simple comparison would show that its offensive military capabilities outnumber all the other four states in the region. However, given the complexity and difficulty of measuring the relative military power of a state, this approach would pose certain problems as mere superiority in number of weapons systems does not translate into proportional superiority in capability, especially in the world of post-Revolution in Military Affairs (RMA). What helps to overcome this hurdle of offensive military capability comparison is the fact that, disregarding any alliances and nuclear umbrellas, China enjoys nuclear superiority in Northeast Asia. Under this circumstance, as the only state in the region with a proven nuclear strike capabilities and means to conduct secure retaliatory nuclear strike force, China possesses the most amount of offensive military power in the region, and renders it the status of regional hegemon.

A simple survey of the South Korea's perception also shows that a number of prominent academics and the general populace perceive China to be a potential threat to South Korea. In recent years, South Korea, in general, has viewed China through a lens of optimism, welcoming China's economic development and ever growing trade volume between the two countries. However, China's military force development and diplomatic actions, which directly run counter to the national

³ 고기정 (Koh Gi-jung), "MB '국방개혁2020 현실 맞게 고쳐야'" (MB, Defense Reform Plan 2020 Must be Revised to Reflect Realities), *동아일보* (Dong-A Ilbo), 14 May 2010.

interest of South Korea, have provided enough reasons for South Korea to perceive China as a potential threat, if not a threat already. In short, China is a potential threat to South Korea in a theoretical sense and is perceived as so in practical sense.

It is easy to see that South Korea, significantly lagging behind China in terms of latent power (populations and wealth) and actual power (nuclear strike capability) is no match for the great power. As the Offensive Realism states, due to the large gap of disparity, Seoul's message of its strong resolve to fend off any Chinese aggression to Beijing, and any attempt on its own to drastically increase its military power, internal balancing, would be useless against such a powerful country. Therefore, for South Korea to ensure its survival and prevent falling victim to China's blackmailing, it must seek an alliance partner, preferably the one separated by a large body of water, and the one that recognizes China as a threat and is already engaged in competition against China.

4.1 China as a Potential Threat to South Korea: Theoretical Analysis

The Offensive Realism provides two indicators to gauge a state's great power status, latent power and actual power. The latent power is assessed in terms of population⁴ and actual power in terms of military capability. A state with most amount of latent and actual power, in addition to a large power gap with the "second most powerful state" in Northeast Asia would qualify as a great power and a potential hegemon.⁵ The overall assessment shows that China indeed is a great power and a potential hegemon of Northeast Asia.

First, China has the most amount of latent power in the region, outpacing any other neighboring states, with a total population figure nearing 1.33 billion and the

⁴ Mearsheimer states that economic indicators, such as GNP, are not able to provide accurate assessment of a given state's relative latent power as each state has different capability to convert wealth into the actual (military) power (see pp. 65 and 75-81). However, as large population does not translate into large wealth, Mearsheimer resorts to use purchasing power parity (PPP), instead of the GNP, to assess a more accurate relative latent power of states (see p. 383).

⁵ John J. Mearsheimer, *op. cit.*, p. 45.

purchasing power parity (PPP) figure reaching USD 8.789 trillion in 2009.⁶ The latent power comparison, of the states in Northeast Asia is as laid out in Table 4.1.1.

Table 4.1.1 Latent Power Comparison in Northeast Asia

	China	Japan	South Korea	North Korea	Taiwan
Population in millions (% vis-à-vis China)	1,330.044 (100%)	127.288 (9.57%)	49.232 (3.70%)	23.479 (1.77%)	22.920 (1.72%)
PPP in USD trillions (% vis-à-vis China)	8.789 (100%)	4.137 (47%)	1.356 (15%)	0.04 (0.46%)	0.718 (8.2%)

Source: IISS, *Military Balance 2009*, pp. 381-409; and CIA World Factbook 2009.

In comparison to the second most powerful, with respect to latent power, state in the system Japan, China enjoys about 1,000% advantage in terms of population and about 210% advantage in terms of PPP. Japan's closing of the gap in the latent power with China is highly unlikely in any near future. It should be also noted that in a scenario that all other five states allied against China, the aggregate latent power of the "anti-China alliance" would only have 16.76% of the China's population and 71.12% of wealth. Undoubtedly, China has the most latent power in the region, and earns the qualification to become a regional hegemon.

Second, with regard to the actual power, China also by far outnumbers the military capability of the others in number of active duty personnel and offensive military hardware.

⁶ The International Institute for Strategic Studies (IISS), *The Military Balance 2009* (Oxford: Oxford University Press, 2009), p. 381. And Central Intelligence Agency, *The World Factbook 2009* (Washington, DC: Central Intelligence Agency, 2009), accessed 22 Mar. 2010 [available: <https://www.cia.gov/library/publications/the-world-factbook/index.html>].

Table 4.1.2 Actual Power (no. of personnel) Comparison in Northeast Asia⁷

Unit: thousands

	China	Japan	South Korea	North Korea	Taiwan
Land Forces (% vis-à-vis China)	1,600 (100%)	138.4 (8.65%)	560 (35%)	950 (59.38%)	200 (12.50%)
Naval Forces	255	44.1	68	460	45
Air Forces	300	45.6	64	110	45
Active Duty Total (% vis-à-vis China)	2,155 (100%)	228.1 (10.58 %)	692 (32.11 %)	1,520 (70.53%)	290 (13.46%)

Sources: IISS, *Military Balance 2009*; Jane's Sentinel: Country Risk Assessment: Northeast Asia.⁸

As the Offensive Realism theory stresses the importance of land forces, or as Mearsheimer calls it “the primacy of land power,” the fact that China has the largest standing land force with 1.6 million strong could be an indication that the most amount of military power belongs to China. However, in the post-RMA world of 2010, dominating only in the number of land force personnel would not render a state with the most military power. In addition to possessing the largest number of land force personnel, possessing most amount of offensive capability would be required to qualify as a great power and a potential hegemon.⁹

Mearsheimer does not provide an explicit definition of what would constitute as the offensive capability of a great power. Therefore, a criteria or a definition of offensive capability that provides a great power the motive for aggressive actions and higher success rate of relative power maximization is necessary to gauge the level of threat China poses to South Korea, and the region as a whole. Inferring from Mearsheimer's writings, one could deduce that offensive military capability would

⁷ The figures do not include para-military forces, such as coast guard or border security. By definition, para-military forces are not military forces and would not engage in combat against another state's military force, thus disregarded. Also the number of reserve forces is excluded from the analysis due to the fact that the training and quality of the reserves forces vary too greatly by each state.

⁸ Jane's Information Group, *Jane's Sentinel: Country Risk Assessments, Northeast Asia (2009)*.

⁹ As discussed in the theoretical framework chapter, the Offensive Realism theory is founded upon a premise that states possess offensive capabilities that threaten other state's security. Therefore, the most important component of power would be offensive capabilities.

mean power projection capabilities that would upset the existing balance of power.¹⁰ This would be limited to the conventional military capabilities, as the nuclear capability requires a new dimension of analysis.

In conventional military capability, offense could be defined as the means for territorial conquest.¹¹ As the world system consists of states based on territorial integrity, hence the primacy of land power, the military means that enable a great power to conquer territories, and the population in the territories, should be considered as an offensive military capability.¹² Conquest of other's territory is tantamount to power projection¹³ as the military force would have to depart the home territory and the defensive positions. Power projection military force, by definition, requires the equipments and troops to be mobile. In addition to mobility of the military force, in order to conduct territorial conquest, the expeditionary force requires strike capability, which means to incur damages to the defending opponent. Thus, a simple definition of an offensive military capability of a great power would be mobile expeditionary force with strike capability that is able to carry out territorial conquest. This definition is consistent with Offense-Defense Balance theory's definition of an offensive force analyzed in conventional level without consideration of deterrence.

¹⁰ Mearsheimer states that the US would have difficult time to use its military power "for offensive purposes in either Europe or Northeast Asia" due to the "difficulty of power projection" to overcome the stopping power of water (p. 382). Additionally, he also states that in a case that the status quo in power distribution has low probability to be destabilized, great powers would "be less inclined to consider offensive actions" (p. 37). Mearsheimer puts it in another way by stating that offensive military capabilities could be identified as "whether a state has a large army with significant power-projection capability" (p. 81).

¹¹ Keir A. Lieber, "Grasping the Technological Peace, The Offense-Defense Balance and International Security," *International Security*, Vol. 25, No. 1 (Summer 2000), p. 74. In an effort to simplify the definition of the term Offense, Lieber uses a definition of Offense as "the use of military force to attack, seize, and hold a portion or all of a defender's territory."

¹² Jack S. Levy, "The Offense/Defense Balance of Military Technology: A Theoretical and Historical Analysis," *International Studies Quarterly*, Vol. 28, No. 2 (June 1984), p. 223. It should be noted, however, that Levy is unable to reach a conclusion on exactly what would constitute an offensive military system and vice versa. The reason for the inconclusiveness is due to the fact that Levy considers the offense and defense under conventional and nuclear settings for both strategic and tactical levels, in addition to application of deterrence. For example, ballistic missile defense, while it cannot be used to conquer new territories, because such a defense system "destabilizes" the status quo strategic deterrence that keeps great powers away from utilizing their offensive military capabilities, Levy is unable to classify the ballistic missile defense in neither defensive nor offensive category (p. 226).

¹³ It should be noted that while territorial conquest is tantamount to power projection, the vice-versa would not necessarily be true in all cases. For example, a state's objective for exercising its power projection capabilities might not include territorial conquest. However, in order to achieve territorial conquest, power projection is a mandatory requirement.

Jack Levy cites Tarr who states “[d]efense refers to techniques and actions, both active and passive, to repel attack, to protect people and property, to hold territory, and to minimize damage by the attacker,”¹⁴ which is an antithetical to the definition of offense. In this logic, offense would mean techniques and actions, both active and passive, to conduct attack on enemy territory, incur damages to the enemy populace and property, conquer territory, and to maximize damage to the defending enemy. By stating that Tarr’s concept of “territorial defense was sufficient for the protection of people and property in the pre-nuclear era,”¹⁵ in the conventional warfare setting, Jack Levy is stating that the Tarr’s definition of defense, and the opposite, offense are well grounded concepts.

In order to discover exactly what type of weapons systems could execute territorial conquest, or qualify as a conventional offensive weapon, the Soviet Union’s proposal to the North Atlantic Treaty Organization (NATO) for offensive conventional force limitation could be used as a useful guide to establish the necessary standard. The then Soviet leader Gorbachev proposed to the NATO in late 1980s for reduction in conventional forces for the purpose of precluding “the possibility of their [conventional weapons] being used for offensive operations.”¹⁶ Exactly what the Soviets had in mind were reduction of “the most dangerous types of arms, which could include tanks, tactical aircraft and strike helicopters.”¹⁷ In assessing the options that the NATO could utilize in negotiating reductions in offensive conventional force against the Warsaw Pact, Jack Snyder concludes that fighter bombers (i.e. F-15E), long-range bombers, artilleries, tanks and tactical missiles (i.e. SS-21) fall in the category of offensive weapons.¹⁸ In summary, a state’s offensive military power could be defined to specifically consist of tanks, artillery, fighter bombers, tactical bombers and tactical missiles.

¹⁴ Jack S. Levy, p. 223.

¹⁵ *Ibid.*

¹⁶ Jack Snyder, “Limiting the Offensive Conventional Forces: Soviet Proposals and Western Options,” *International Security*, Vol. 12, No. 4 (Spring 1998), p. 4.

¹⁷ *Ibid.*

¹⁸ Jack Snyder, *op. cit.*, pp. 69-71. F-15E is specifically mentioned as a type of offensive conventional weapons, because the “E” variant alone possesses independent land attack ability in addition to aircraft interception ability. Soviet SS-21 is a type of ballistic missile, but it is considered in a conventional level under an assumption that it does not carry nuclear warheads.

In comparison of conventional offensive military capability of the states in Northeast Asia, China again comes out as the state with the most quantity of offensive capabilities at its disposal. With the exception of artillery, where the two Koreas field a significant quantity of the systems as well, China enjoys comfortable margin of quantitative superiority, especially in the categories of main battle tanks and bombers.

Table 4.1.3 Actual Power (no. of offensive weapons) Comparison in Northeast Asia

	China	Japan ¹⁹	South Korea	North Korea	Taiwan
Main Battle Tanks (% vis-à-vis China)	7,660+ (100 %)	880 (11 %)	2,330 (30 %)	3,500+ (46%)	926+ (12 %)
Artillery [all types] (% vis-à-vis China)	17,700+ (100 %)	1,880 (11 %)	10,774+ (61%)	17,900+ (101%)	1,815+ (10 %)
Bombers (% vis-à-vis China)	132 (100 %)	None (0 %)	None (0 %)	80 (61 %)	None (0 %)
Fighter Bombers [Fighter Ground Attack/FGA] (% vis-à-vis China)	421 (100 %)	None (0 %)	468 ²⁰ (111 %)	152 (36 %)	150 (36 %)

Sources: IISS, *Military Balance 2009*; Jane's Sentinel: Country Risk Assessment: Northeast Asia

Precise assessment of the distribution of offensive weapons among the Northeast Asian nations requires comparison of qualitative values of the weapons at each nation's disposal, in addition to the quantitative comparison. Such a qualitative comparison is a daunting task requiring evaluation of comprehensive performance data and simulation.²¹ To make matters worse, the level of training for the operating personnel and tactics dictate the performance, or the qualitative value of a given weapons system. For example, while the US Air Force's F-22 is regarded as the

¹⁹ The reason this table shows Japan to have two types of offensive weapon systems despite Japan's "Peace Constitution" is due to the fact that Japan is an insular nation. As the US Army's assessment of equipments' offensive and defensive values shows, tanks and artillery have values in both offensive and defensive categories (Jack S. Snyder, p. 68). The offensive values of tanks and artillery, absent amphibious transport capability for an insular state, would reach zero while the defensive value would reach 100, as these weapons would be used in purely defensive purposes.

²⁰ This numerical anomaly of South Korea's FGAs outnumbering that of the China's is due to the fact that South Korean fighters all possess ground strike capabilities, hence Fighter (FTR) = FGA. China's combined FTR and FGA number is 1,641, which is 3.5 times the South Korea's figure. Given that certain portion of South Korean FGAs must take air defense roles (defensive and equivalent to the Chinese FTR roles), it is rational to infer that inevitably the number of South Korean FGAs to be used for ground attack roles would be smaller than the Chinese FGA force.

²¹ Mearsheimer agrees with this difficulty (see pp. 133-135).

most advanced fighter in the world, if the pilot is incapable of exploiting all the technological advantages of the aircraft, there is certainly a possibility that the F-22 could be shot down by a less advanced aircraft such as Su-27.²²

Fortunately, the Offensive Realism theory does not require the rival power to have a superior offensive military capability for a state to fear the rival power. The mere existence of offensive military capability, whether relatively weak or powerful, coupled with the anarchy provides more than enough reasons for a state to fear for its survival. Therefore, the previous two analyses, showing that China has an absolute superiority in active duty land force personnel and significant number of offensive weapons at its disposal is sufficient to show that China is a threat to the other states in the region. What would propel China to the status of hegemon and the most formidable threat is its nuclear strategic capabilities.

China is the only nuclear state in Northeast Asia that has both a credible weaponization proficiency and diversified delivery means of its nuclear forces. As the Offensive Realism theory states, nuclear weapons, while it does not directly conquer territories, have more significance because “the power advantage bestowed on that state would be tremendous.”²³ Disregarding any alliances and nuclear umbrellas in the region, China effectively has achieved nuclear superiority in the region.

At this juncture, while it is clear that South Korea, Japan, and Taiwan do not have any nuclear weapons, thus provides absolute nuclear superiority to China, the fact that North Korea has nuclear weapons might pose a challenge to the assertion that China enjoys nuclear superiority in Northeast Asia. However, given the state of North

²² Even if this difficulty of qualitative assessment is disregarded and one attempts to compare the qualitative offensive air power capability between China and South Korea applying the standard that PLAAF's J-11B is equivalent to ROKAF's F-15K and PLAAF's J-10 is equivalent to ROKAF's KF-16, ROKAF still falls behind the capabilities of China. PLAAF has 231 F-15 class FTR/FGA compared to 39 F-15Ks for ROK AF. Even with additional 20 on order, 231 to 59 would not make any shift in balance. In the less capable KF-16 class comparison, PLAAF has 84 against ROKAF's 165 KF-16s. The 81 aircraft advantage in F-16 class FTR/FGA is offset by the 192 F-15 class FTR/FGA advantage enjoyed by the PLAAF (IISS, *Military Balance 2009*, pp. 385, 387, and 398). For aircraft class comparison, see Roger Cliff, *The Development of China's Air Force Capabilities*, Testimony presented before the U.S.-China Economic and Security Review Commission, *Rand Corporation Testimony Series CT-346* (20 May 2010), p. 8.

²³ John J. Mearsheimer, p. 129.

Korean nuclear capabilities, it is quite certain that China also enjoys nuclear superiority against North Korea.

In order to prevent another nuclear state from achieving nuclear superiority, a nuclear armed state must take at least two measures to ensure that its nuclear retaliatory strike capability would be maintained. First, it must have a credible and survivable delivery mechanism for the retaliatory strike. Second, it must expand the number of nuclear arsenal in order to ensure that at least some would survive a pre-emptive nuclear strike. The overall assessment shows that North Korea, facing China, has neither one of the two necessary measures in place.

Assuming that North Korea has successfully weaponized the nuclear materials, such as war heads for ballistic missiles, the fact that these weapons are few in number poses the greatest problem for North Korea to prevent China from gaining nuclear superiority. Of publicly released reliable estimates, none reaches more than ten in number of nuclear weapons possessed by North Korea.²⁴ Given such a small number of nuclear arsenal in its hand coupled with its small territory, China could possibly locate and destroy all of the North Korea's nuclear weapons in a pre-emptive strike. Even if China fails to destroy all the nuclear weapons, the fact that North Korea does not have effective means to deliver the weapons is also a problem.

Pyongyang certainly does not have SSBNs equipped with SLBMs. While its Ilyushin-28 bombers or other transport aircrafts could carry nuclear weapons, the extremely low chances of these antique aircrafts penetrating Chinese air defenses and air interception by fighters make the nuclear retaliatory strategic bombing nearly impossible. Finally, the ballistic missiles at Pyongyang's disposal bring certain level of credibility in delivery of retaliatory nuclear weapon.²⁵ However, these ballistic missiles are still vulnerable to Chinese nuclear strikes, and do not guarantee, as the SLBM on board SSBNs would, survival.²⁶ In practical sense, it is safe to state that

²⁴ Mary Beth Nikitin, *North Korea's Nuclear Weapons: Technical Issues*, RL34256, U.S. Congressional Research Service, 26 May 2009, pp. 4-5; and Larry A. Niksch, *North Korea's Nuclear Weapons Development and Diplomacy*, RL33590, U.S. Congressional Research Service, 27 May 2009, p. 19.

²⁵ See Figure 1.1 The North Korean Ballistic Missile Range Circles by Type.

²⁶ Even if ballistic missiles and nuclear warheads survive the preemptive strike, unless the surviving missile and warheads are in the same location, one would have to be transported to another

North Korea does not have secure retaliatory strike capability against China, and it certainly does not have capacity to conduct a disarming first strike against China; therefore North Korea does not have MAD relations with China, and as a result China also has nuclear superiority over North Korea.

Without a doubt, China is a great power in Northeast Asia. It leads in latent power and actual power (nuclear superiority) over the other states in the region. In terms of latent power of population, China outnumbers the second most state Japan by more than ten fold. With respect to actual power, notwithstanding its 1.6 million strong land force, the diverse and reliable nuclear capabilities China possesses, and the absence of any nuclear capability or credible retaliatory strike capability by others in the region, provides China with the unchallengeable lead in actual power and nuclear superiority. Therefore, China qualifies as a great power and even as a “potential hegemon” as defined by the Offensive Realism theory.

4.2 China as a Potential Threat to South Korea: Empirical Analysis

On a practical level, while China has become a significant trading partner for South Korea, China’s diplomatic actions and attitudes towards South Korea have provided more than enough reasons for the South Korean academics and the general populace to view the rise, or development as Beijing would prefer to, of China. Most recently China’s diplomatic actions following the North Korean attack on the ROKN Cheon-An have furnished a turning point where the general suspicion on the rise of China’s power became an actual perception of China threat.

Before the March 2010 ROKN Cheon-An attack, a research report by the East Asia Institute finds that while South Koreans welcomed the economic development of China, the strengthening of the military power was seen as a negative factor in China’s rise.²⁷ The report also finds that South Koreans’ perception on China’s role

location to be “mated.” This creates another window of opportunity for China to strike and destroy the potential retaliatory strike against itself.

²⁷ 이내영 (Lee Nae-young) and 정한울 (Jung Han-wool), “중국의 부상, 위협인가 기회인가” (The Rise of China, a Threat or an Opportunity), East Asia Institute Research and Survey Series 5,

in the international stage is negative and that 49% of the respondents view China's rise as a significant threat to South Korea, which is less than 29% for the conflict on the Korean Peninsula.²⁸ One year later, a BBC survey conducted before the 2008 Beijing Olympic Games showed that majority of the South Korean people considered China as "threatening." Of the five countries surveyed, which include the US, the UK, India and Brazil, and South Korea, with 55% of those surveyed considering China as a threat to South Korea, Seoul came out as the only one of the five to have a majority consider China as the threat.²⁹ This is a 6% increase from time the 2007 East Asia Institute report was published, despite the fact that the 2008 Beijing Olympic Games was to showcase China's peaceful development to the world.

In the post-ROKN Cheon-An incident, the perception of threat but coupled with favorable view of China's economic development rendering suspicions about China's growing power turned towards realization that China, if not a direct threat, acts counter to the national interests of South Korea. A detailed news report from *Joong-Ang Sunday* succinctly puts the diplomatic actions of China that has turned South Korea's suspicion to realization of China threat in the aftermath of the ROKN Cheon-An crisis. The report quotes a South Korean diplomat who recounted a meeting with the Chinese counterpart, during which the Chinese stated that one tragedy could bring yet another tragedy, and that South Korea better act wisely.³⁰ The South Korean diplomat characterizes such a statement as a diplomatic discourtesy and that Chinese has more and more taken a position of warning or commanding South Korean diplomats not to take certain actions.³¹ Even worse, it has been reported that in a meeting with a third party, a Chinese diplomat stated that had there not been the United States, China would have "taken care of" South Korea long time ago.³²

Further, with regard to the ROK-US combined naval exercise code named "Invincible

6 Aug. 2007, p. 16.

²⁸ 이내영 (Lee Nae-young) and 정한울 (Jung Han-wool), *op. cit.*, pp. 21 and 34.

²⁹ 송화정 (Song Hwa-jung), "(국제) 한국인 55% '중국 위협적'" ([International] 55% of South Koreans View China as 'Threatening'), *아시아경제* (Asia Economy), 6 Aug. 2008.

³⁰ 김수정 (Kim Su-jeong), "中 이러면 한국 안 좋아 韓 우리가 판단할 문제" (China, South Korea better not act this way, South Korea, how we act is up to us), *중앙선데이* (JoongAng Sunday), Vol. 175, 18 July 2010, p. 1.

³¹ *Ibid.*

³² *Ibid.*

Spirit,” PLA Brigadier General Zhu Cheng-hu (朱成虎) stated that the true objective of the combined naval exercise is to target China.³³ In addition to stating that there are no international waters in the Yellow Sea that required the South Korean government’s response that waters outside 12 nm from China’s coastline is international waters,³⁴ China has forced the naval exercise involving a US aircraft carrier to avoid entering the Yellow Sea and conducted missile firing exercises near the area by the PLA’s Nanjing Military Region artillery forces.³⁵ Another report cites the South China Morning Post of Hong Kong that the PLA conducted three military exercises in response to the ROK-US combined naval exercise.³⁶ A *Dong-A Ilbo* (동아일보) editorial sums up the issue and states that China would not sit ideally if South Korea were to play a role of guardian for a state that attacked China and that South Korea must disregard China’s criticism of the combined exercise, which is Beijing’s encroachment in the sovereignty of South Korea, as China refuses to accept the truth and threatens South Korea.³⁷

As a result, it is reported that inside the government circles, a realization that China has shown its true intentions when it comes to North Korean issues, which are in direct conflict with the national security and interest of South Korea, hence South Korea must remember the historical China who played a “big brother” role as the Middle Kingdom and regarded Korea as a vassal state.³⁸ And a former ambassador, national security advisor to the office of president and professor emeritus at the Hankook University of Foreign Studies Lim Sung-joon writes that China has become more assertive as its power increased, and that Beijing is quietly preparing itself for a competition against the United States.³⁹ Such preparation for competition against

³³ 장학만 (Jang Hak-man), “중국 장성 ‘韓美 군사훈련은 中 위협용’” (Chinese General, Objective of the ROK-US Military Exercise is to Threaten China), *한국일보* (Hankook Ilbo), 20 July 2010.

³⁴ Song Hwa-jung.

³⁵ Moon Gwang-lip, “China reacts to joint drill with its own exercise,” *JoongAng Daily*, 29 July 2010.

³⁶ 이항수 (Lee Hang-su), “中, 황해지역서 최근 3차례 군사훈련...韓-美 훈련 대응인 듯” (China, Conducts 3 Military Exercises Near the Yellow Sea...Likely to be in Response to the ROK-US Exercise), *조선일보* (Chosun Ilbo), 29 July 2010.

³⁷ 동아일보 (Dong-A Ilbo), “[사설] 중국의 韓美서해훈련 시비는 주권 침해다” ([Editorial] China’s Contestation on ROK-US West Sea Exercise is Encroachment on Sovereignty), *동아일보* (Dong-A Ilbo), 9 July 2010.

³⁸ Song Hwa-jung.

³⁹ 임성준 (Lim Sung-joon), “[글로벌포커스] G2 시대 달라진 중국” ([Global Focus] G2 Period and the Changed China), *매일경제* (Maeil Business Newspaper), 12 July 2010.

the incumbent superpower renders Chinese actions in the region threatening as gains in the competition becomes more important for Beijing than the stability of the region, of which the ROKN Cheon-An is a case in point.

A deputy director of the politics editorial board for the Seoul Shinmoon Kim Sang-yeon writes that South Korea must understand China's 黑猫白猫論 characteristics, which simply means that whatever the means, China would take to obtain its own interests, and Seoul must not be so naïve to think that China would look after the mutual good of the two countries.⁴⁰ Recommendations from 2007 by the then Institute of Foreign Affairs and National Security Professor and the current Korea University Professor Kim Sung-han are that first South Korea must heed historical lessons in dealing with powerful China along with Japan, and second that the status-quo and peace for South Korea is managed only due to US presence in the region.⁴¹ Without a doubt, South Korean public, along with its elites perceive China as a potential threat, if not a threat already.

4.3 South Korea vs. China: Seoul's Need for an Alliance Partner

China's great advantage over South Korea in terms of latent power and formidable conventional military capability coupled with nuclear superiority is more than enough to categorize China as a threat to South Korea. However, the fact that China, absent current alliance structures and nuclear umbrellas, possesses nuclear superiority and enjoys the regional hegemon status due to the fact that there are no intra-regional great power to counter China makes the Chinese threat on South Korea even more immediate and serious. Its status as a regional hegemon renders China an extremely favorable environment to black mail or even launch a territorial conquest against South Korea.

As stated in the research design and limitation chapter, to establish China as a threat

⁴⁰ 김상연 (Kim Sang-yeon), “[오늘의 눈] 너무 이기적인 중국” ([Today's Focus] Such a Selfish China), *서울신문* (Seoul Shinmoon), 8 July 2010.

⁴¹ 김성한 (Kim Sung-han), “中-日 동반 상승과 한국의 선택” (The Simultaneous Rise of China and Japan, and South Korea's Choice), *매일경제* (Maeil Business Newspaper), 26 Aug. 2007.

to South Korea, Beijing need not show a regular pattern of engaging in hostile acts against South Korea over a long period of time. As this thesis has already laid out a theoretical framework that specifically provided indicators to qualify a state as a threat and a great power, the latent power and existence of offensive capabilities, as long as China possesses the qualities of the indicators, it can be stated that China is a threat.

Specifically, in the latent power category, China leads South Korea by 27 fold in terms of population and 6.4 fold in the PPP comparison.⁴² Given that South Korea has completed its own rapid industrial development in the second half of the 20th century, while China is still in the process of its development stage, with an exception of catastrophic and sudden collapse of the Chinese economy, it is highly unlikely that South Korea would be able to match or close the gap in the future.

In terms of actual power considerations, South Korea should not only be mindful of the immense number of offensive weapons at Beijing's disposal, but also the amphibious and anti-access capabilities of the Chinese. In addition to strengthening amphibious capabilities,⁴³ the PLA has simultaneously focused on anti-access capability enhancement with a Taiwan contingency in mind. These amphibious and anti-access capabilities have been developed specifically to deter American expeditionary forces from entering the Western Pacific, and to conquer Taiwan.⁴⁴ These capabilities could also be used against South Korea with certain adjustments. While South Korea enjoys longer separation of water from China than the case of Taiwan, the fact that South Korea significantly lacks its own anti-access capabilities and the shallow waters of its western coast makes the threat of Chinese invasion credible.⁴⁵

⁴² See Table 4.1.1 Latent Power Comparison in Northeast Asia.

⁴³ Of a few types of power projection capabilities, the most threatening type would be amphibious capabilities, as it allows the projector to physically conquer and occupy the other's territory. China has focused on increasing the number and capabilities of its amphibious forces, see US DoD, *Annual Report on the Military Power of the People's Republic of China: Report to Congress Pursuant to the FY2000 National Defense Authorization Act*, 2009, p. 28.

⁴⁴ US DoD, *Annual Report on the Military Power of the People's Republic of China: Report to Congress Pursuant to the FY2000 National Defense Authorization Act*, 2009, *op. cit.*, pp. 20-24.

⁴⁵ The feasibility of amphibious operation in South Korea's western coastline was already demonstrated by General McArthur's Operation Chromite in 1950.

Additionally, the anti-access capabilities of China could be used to decimate the South Korean naval forces that would be an obstruction to PLA amphibious forces. Given that South Korean Navy uses nearly identical systems and employs operational strategies as the US Navy, China's tactics against the US would also be effective.

China's offensive capability focused on amphibious and anti-access operations poses one of the most significant potential threats to the South Korean national security in addition to the domination in nuclear forces and latent power dynamics. Without a doubt, China is a serious threat to South Korea.

The Offensive Realism provides three ways for South Korea to face the regional threat of China. The first would be Seoul sending a firm message of confrontation and resolve to make the fight into a quagmire should Beijing attempt to endanger Seoul's national security. The second option would be for South Korea to increase its actual power through internal balancing, such as significantly increasing defense spending. Under any circumstances, China's possession of nuclear weapons makes these two options unviable for a non-nuclear state South Korea.

While it is conceivable that South Korea develop its own nuclear weapons and delivery means, it is not a good option for Seoul. The extraction of weapons grade nuclear materials and weaponization takes time. Also such endeavors are easily detectable by others. Therefore, South Korea could receive a pre-emptive strike from China before it can become a nuclear power. In a scenario that Seoul does achieve nuclear power status, its action would spur a domino effect in which Japan and Taiwan would follow suit. In reaction, China would increase and sophisticate its nuclear force to a point that it could carry out a counterforce nuclear strike against South Korea. Therefore, nuclearization of South Korea would hardly be able to change the current playing field. Rather, South Korea would waste much capital in its pursuit, perhaps adversely affecting its national security than had it not done so.

The third option, forging a balancing coalition, or an alliance, to address this potentially grave threat to its national security and survival would be the best option for South Korea. The most ideal great power ally would be a distant one separated by a large body of water, so that once China is contained and no longer poses threat to

South Korea, the ally would not turn against South Korea and become a new threat. Also, the distant power that already recognizes China as a threat to itself and seeks to contain China would be ideal, for the objective between the two allies would be identical and already be set in place.



Chapter 5

BMD as Power Maximizing Agent against China

5.1 Brief History and Status of the US Ballistic Missile Defense Program

In the United States, the idea of fielding defensive weapon systems against enemy state's ballistic missiles arose in order to buttress deterrence. However, an on-going debate about the ballistic missile defense concept, even today, in the academic community has been whether or not this defensive system jeopardizes the MAD.

Therefore, the argument against fielding of ballistic missile defenses stated, the aggressor could initiate a nuclear strike because with its ballistic missile defense, it could defend against the attacked state's retaliatory nuclear strike. Therefore, a state without ballistic missile defense would feel threatened as the deterrence, or the MAD, is jeopardized. In other words, the fielding state has a chance to achieve nuclear superiority.

In the 1960s and 70s, the argument that ballistic missile defenses would jeopardize the MAD took the upper-hand,¹ and hence resulted in the 1972 ABM Treaty between the United States and the Soviet Union, an arms control treaty. This treaty "prohibited the deployment of ABM systems for the defense of the nation's entire territory" and "agreed in 1974 Protocol that each would have only one ABM site, located either at the nation's capital *or* around an ICMB deployment area."²

Although the two superpowers were permitted to field ballistic missile defense systems, the restrictions stipulated in the arms control treaty limited the effectiveness

¹ John D. Steinbruner, "National Security and the Concept of Strategic Stability," *The Journal of Conflict Resolution*, Vol. 22, No. 3 (Sept. 1978), p. 416.

² Steven A. Hildreth, *Ballistic Missile Defense: Historical Overview*, RS22120, U.S. Congressional Research Service, 7 July 2007, p. 2.

of the defense. Restrictions such as the limitation to have only one ABM site, no sea-based ABM systems, and the limitation of defense coverage area to either an ICBM deployment site or the capital city³ made certain that the missile defense system would not be able to provide an effective nation-wide coverage, as other soft and hard targets were still vulnerable even with these ABM systems, hence MAD would be preserved.

However, since signing of the treaty about four decades ago, the technology to intercept incoming ballistic missiles has evolved continuously and new threats, other than the Soviet nuclear ICBMs have emerged by the time of the 21st century. New debates on fielding of ballistic missile defense arose as sole reliance on the MAD with the Soviet Union could no longer guarantee the security of the United States against nuclear strikes. This time, the arguments for fielding ballistic missile defense have had the upper-hand over the arguments against, and hence plans for ballistic missile defense materialized as a security policy in the US government. This development also denotes that Washington's commitment to the arms control, though limited to the anti-ballistic missiles, has waned due to its national interest that conflicted with its commitment.

In the 1990s, the rationale for fielding more effective and more complete ballistic missile defense was to provide protection “from an accidental or unauthorized launch of Russian or Chinese missiles.”⁴ In the George W. Bush Administration era, the rationale changed to protect the United States from “proliferation of ballistic missiles and weapons of mass destruction from other countries” such as North Korea and Iran.⁵

At this juncture, the United States withdrew from the ABM Treaty in 2002 and a full scale development of ballistic missile interception capabilities had begun. The American arms control commitment with regard to anti-ballistic missiles had been broken, and yet another round of debates on how the MAD would be jeopardized had ensued.

³ *Ibid.*

⁴ Steven A. Hildreth, *op. cit.*, p. 5.

⁵ *Ibid.*

With the inauguration of President Obama of the US Democratic Party, it was expected that the National Missile Defense program of President George W. Bush would be scrapped; however, with the release of the *Ballistic Missile Defense Review Report of 2010* (BMDR)⁶ in February of 2010 reflected the Obama Administration's commitment to field the ballistic missile defenses. However, the Obama Administration's plans, called the Ballistic Missile Defense (BMD), are fundamentally different from the George W. Bush Administration's National Missile Defense in two aspects.

First, in examination of the BMDR, the limited capabilities placed in the BMD in comparison to the NMD, and decisions to forego continuing development or deployment of certain anti-ballistic missile systems, clearly shows that the BMD is less threatening to other states and as a result less likely to completely jeopardize the MAD. For example, the number of Ground Based Interceptors, capable of intercepting ICBMs, to be deployed would be reduced from 44 to 30.⁷ Also the Airborne Laser system (ABL) is to be shifted to become a "technology demonstration program," while the Multiple Kill Vehicle (MKV) and Kinetic Energy Interceptor (KEI) programs would be terminated.⁸ The shelving of the MKV program is significant in that this technology would provide the BMD with efficacy of defending against ballistic missiles armed with decoys or MIRVs. The decision to not deploy the ABL and KEI programs is also significant as they have the capability for Boost-Phase Intercept (BPI). BPI is the most vulnerable stage of ballistic missile flight path, and hence the best window of opportunity to intercept, and greatly reduces the uncertainties on the effectiveness of the missile defense.

Second, the Obama Administration has tied the fielding of BMD with strategic nuclear arms control issue. By designating the BMD as a vital component of non-nuclear deterrence, the administration has announced that the American strategic nuclear forces could be reduced. Specifically, the *Nuclear Posture Review (NPR) Report of 2010* states,

⁶ As this is the US Department of Defense's (US DoD) first review report on the ballistic missile defense, therefore it is commonly referred to as "BMDR" rather than "BMDR Report of 2010."

⁷ US DoD, *BMDR*, pp. 15-16.

⁸ US DoD, *BMDR*, *op. cit.*, pp. 11-12.

continued improvements in U.S. missile defenses and capabilities to counter and mitigate the effects of CBW, the role of U.S. nuclear weapons in deterring non-nuclear attacks – conventional, biological, or chemical – has declined significantly. The United States will continue to reduce the role of nuclear weapons in deterring non-nuclear attacks.⁹

Thanks in great part to the BMD, the role of American nuclear forces could be limited to strategic deterrence, rendering the number of necessary nuclear weapons to be reduced.

In addition to announcing plans for nuclear arms control, the Obama Administration successfully materialized its policy objective with the signing of the Treaty between the United States of America and the Russian Federation on Measure for the Further Reduction and Limitations of Strategic Offensive Arms, or simply New START. The treaty was signed on April 8th, 2010, and would limit the number of deployed nuclear war heads to 1,550,¹⁰ which is about 30% reduction from the current level of 2,200 deployed nuclear warheads for the United States.¹¹

In contrast to the Strategic Arms Limitation Talks (SALT) I, which resulted in the ABM Treaty of 1972, the New START of 2010 does not limit the US from developing, deploying or utilizing anti-ballistic missile systems. While the Article V Clause 3 prohibits the conversion or usage of existing ICBM and SLBM launchers for missile defense purposes, American analyses indicate that the limitation “has no effect on U.S. [ballistic missile defense] programs.”¹² The Obama Administration has deftly managed to re-affirm the United States’ commitment to arms control and nuclear weapons reduction while preserving the country’s rights to deploy ballistic missile defense.

Considering the reduction in capabilities of the BMD, one may contemplate that in contrast to the prescriptions of the Offensive Realism, the Obama Administration is

⁹ US Department of Defense, *Nuclear Posture Review Report*, (Washington, DC: Office of the Secretary of Defense, April 2010), p. viii.

¹⁰ *Treaty Between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms*, 8 April 2010, Article II Section 1(b).

¹¹ US DoD, *NPR 2010*, p. 20.

¹² Walter Pincus, “Arms treaty shouldn’t constrain U.S. missile defenses,” *The Washington Post*, 20 April 2010, p. A13. Also see Steven Pifer, “New START-No Killer Flaws Emerge,” Brookings Institute On-line, 4 June 2010, accessed 29 June 2010 [available: http://www.brookings.edu/opinions/2010/0604_start_treaty_pifer.aspx].

seeking to keep the status quo in power politics and not attempting to maximize relative power against others such as China. First, as the Offensive Realism does not state that great powers blindly and regardless of the circumstances, constantly seek to maximize relative power, the reduction of BMD capabilities under President Obama's watch is consistent with the theory. The United States has suffered financial crisis since 2008 and as a result the defense budget has been reduced drastically, and many other programs, in addition to the BMD sub-programs such as MKV, have been terminated.¹³ The BMDR explicitly states that the three programs have been terminated or shifted from development for deployment due to budget constraint and low cost-effectiveness.¹⁴ This budget cutting action by the Obama Administration is explained by Mearsheimer as,

states sometimes limit defense spending either because spending more would bring no strategic advantage or because spending more would weaken the economy and undermine the state's power in the long run.¹⁵

Additionally, it should be noted that while these development programs have been "terminated," the technological advances made to date would not be terminated. Other than no more government funding influx, the programs are "preserved" rather than "terminated."

Second, with regard to the New START, as the NPR 2010 states, the capabilities bestowed by the BMD to the US permit reduction in the American nuclear force strength. Therefore, there is no net-loss of American power in comparison to the days prior to the signing of the New START. In fact, as the Russians do not have the ballistic missile defense capabilities of the US today, Russia needs to increase the nuclear forces rather than limit in order to prevent American relative power gain. Therefore, the New START could have permitted the US to gain power at the expense of Russia.

With respect to the New START and China, it is undisputable that the reduction of American nuclear warheads to 1,550 warheads does not change the nuclear strategic

¹³ See Christopher Drew, "Military Contractors Nervously Await Budget Details," *The New York Times*, 28 Feb. 2009, Section B, p. 3. And Jackie Calmes, "Obama Will Propose Cuts of \$17 Billion from Budget," *The New York Times*, 7 May 2009, Section A, p. 22.

¹⁴ US DoD, *BMDR*, pp. 40-41.

¹⁵ John J. Mearsheimer, p. 37.

dynamics between Washington and Beijing as the latter's nuclear capabilities are still far behind America's.¹⁶ Therefore, while the Obama Administration on the surface would seem that it is relinquishing power in search of the nuclear free world, in practical sense, it did not lose any relative power over the others.

Third, as would be examined in the following section, the ballistic missile defense system need not demonstrate its effectiveness to have strategic value and relative power gains. The BMDR's plan, while reduced in capabilities, is still a non-ignorable system that could have catastrophic consequences should one not prepare counter strategies. The plan also has a potential to become a more advanced and highly effective system in the future, for which the opposing state must also prepare with careful consideration.

Simply, the Obama Administration's BMD serves America's purpose of maximizing or at least maintaining the relative power among its rivals.

5.2 The BMD as a Relative Power Maximizing Agent

The US BMD allows Washington to gain relative power over its rivals. As discussed in the theoretical framework chapter, sole fielding of a perfect ballistic missile defense system is tantamount to achieving nuclear superiority and hegemony. Extending this logic, fielding a ballistic missile defense system, though shy of perfection, is equal to taking strides to achieve nuclear superiority and hegemony, in other words gaining relative power over the rivals. Therefore, the US BMD is a relative power maximizing agent. Specifically, the US BMD yields relative power gains for Washington in two ways. First, it serves as a powerful bargaining chip in negotiations. Second, it spurs the rival states to take actions in attempts to prevent or minimize relative power loss against the US.

First, the mere possibility of the defensive system jeopardizing MAD relations and presenting significant advantage to the fielding state translates the BMD into a high

¹⁶ China's nuclear capabilities would be discussed in details in Section 5.2.

value bargaining chip. A supreme example demonstrating the BMD as a high value bargaining chip is the experience of Reagan Administration in eventually negotiating the START I with the Soviet Union. As the Reagan Administration sought to address the “window of vulnerability” American land-based ICBMs faced against the Soviets, the harbinger of the current BMD the Strategic Defense Initiative (SDI) played a critical role in securing a favorable deal for the US. Fareed Zakaria writes, while “SDI existed only in theory [and that] it could alter only the psychological balance of power,” because the Soviets “feared that SDI would give the United States a survivable offensive capability and did not want to enter into a high-technology arms race (that it would lose) in response,” they were ready to negotiate arms control issues with the US with “unusually accommodating” attitude.¹⁷

As a result, the Reagan Administration successfully managed to negotiate with the Soviet Union and was able to address the vulnerability without spending capitals to rapidly develop and deploy MX missiles, while at the same time abiding by the general trend of the “nuclear freeze movement” which opposed expansion of nuclear strategic forces.¹⁸ The fear of potentially effective ballistic missile shield that would provide the US with nuclear superiority, and the difficulty to compete in technologically advanced and financially taxing program such as the SDI, resulted in mere blue prints of a system becoming a high value bargaining chip for the US.

Dr. Chun of KINU also gives the BMD a high bargaining value, and recommends that South Korea demand China and North Korea withdraw ballistic missiles targeting South Korea and initiate verifiable arms control agreements to limit the number of ballistic missiles in return for South Korea’s, and possibly with Japan, refusal to join the US BMD.¹⁹ The basic logic is that by not permitting the US BMD to be based in

¹⁷ Fareed Zakaria, “The Reagan Strategy of Containment,” *Political Science Quarterly*, Vol. 105, No. 3 (Autumn 1990), p. 386. While the resulting Strategic Arms Reduction Treaty (START I) does not limit the US from making further progress on the SDI, due to the fact that Soviets feared an operational SDI in the future would be devastating for its strategic offensive arms, it could be deduced that the Soviets agreed to asymmetrical limitations in hopes that the treaty would wane the necessity and political support for the SDI in the US. The fact that the US did not withdraw from the ABM Treaty could be attributed to the START I, and it is a concrete result the Soviets attained through negotiations with the US.

¹⁸ Fareed Zakaria, *op. cit.*, p. 385.

¹⁹ Chun Sung-hoon, pp. 99 and 106-107. For Chinese ballistic missiles targeting South Korea, see 김청중 (Kim Chung-joong), “中, 韓 • 日사정권 중거리미사일 배치” (China, Deploys Medium Range Missile with South Korea and Japan within Range), *세계일보* (Segye Ilbo), 22

Northeast Asia, South Korea and Japan would guarantee survival of the Chinese and North Korean retaliatory strike ballistic missile force should Beijing and Pyongyang adopt a non-threatening approach to the two US allies. Given that China in 2010 is much more robust economically and is on the rise, in contrast to the declining Soviet Union in the late 1980s, Beijing would not have as much pressure to acquiesce to the idea of arms control as Moscow did due to the specter of operational SDI. However, should the US, along with South Korea and Japan, significantly enhance the effectiveness of the BMD in Northeast Asia, it is plausible that Beijing might chose a safer and less challenging option of limiting ballistic missile deployment in return for South Korea and Japan's non-participation. Overall, the BMD system, whether fully functioning or not, is a high value bargaining chip.

The high valued placed in the BMD system is a relative power maximizing agent for the fielding state. In the first case of examination between the US and the Soviet Union, with a blueprint of the SDI, the US gained relative power over the Soviet Union thru arms control measures. While American efforts to close the power gap with the Soviet Union through successful development and deployment of MX ICBMs and other measures might have worked with considerable financial burden, the Soviets could have countered such a move with their own new system development and deployment, effectively maintaining the existing power gap. Due to the fact that the SDI is a fundamentally new and unfamiliar technology, the Soviets were hesitant and uncertain if they could counter the SDI to prevent America's relative power gain over itself. Therefore, the Soviets made a rational choice to minimize the loss of relative power through arms control, which is something that they already have had experiences from the previous dealings such as SALT I and II.²⁰

Second, because the US has already fielded, though limited in scale, the BMD, rival powers such as China must act in order to prevent or minimize relative power loss vis-à-vis the US. Although the BMDR states that China's "capability to conduct a large-scale ballistic missile attack" against the US is "not the focus of U.S. BMD,"²¹ the uncertainty of retaliatory strike capability's survival and the potential that

Mar. 2010.

²⁰ Fareed Zakaria, p. 386.

²¹ US DoD, *BMDR*, p. 4.

advancement would perfect the system, permitting the US to achieve nuclear superiority, demands Chinese response and affects Beijing's strategic thinking.²²

Focusing specifically on China, in response to the American relative power gain over itself, China has two options to respond and counter the American gain. First, it could try to sophisticate the nuclear ballistic strike force and overwhelm, by a comfortable margin, the capabilities of the current and potential US BMD system. Second, Beijing could try to match the American actions and develop its own ballistic missile defense system. As of 2010, China has implemented both options and pursued them to the best of its abilities.

Since the acquisition of nuclear weapon, China has resorted to two critical principles with regard to nuclear strategy, which are no first use declaration and minimum deterrence.²³ As a result, the Chinese only maintained eighteen ICBMs that could reach the US and did not seek to "match" the American nuclear forces.²⁴ The reason China did not need to "match" the American nuclear forces is because its retaliatory nuclear strike capability against the US was secure. Absent the US BMD, as long as Beijing could conceal and protect its ICBMs, though small in number, Washington would not dare challenge China as the possibility of even one ICBM surviving American pre-emptive strike and absorbing the resulting retaliatory strike from China is unacceptable for Washington. A retired PLA General Pan Zhenqiang, state that as long as "the United States does not threaten the credibility of China's small, nuclear retaliatory force," such non-threatening nuclear weapons policy of China would continue.²⁵

²² Tsinghua University Professor Li Bin and PLA Officer Nie Hongyi state the US BMD adversely affects China's secure second strike capability in theory, and assesses that the US "does not need many interceptors to weaken the Chinese capability for nuclear retaliation." Li Bin and Nie Hongyi, "An Investigation of China – U.S. Strategic Stability," trans. Gregory Klacki, *World Economics and Politics*, No. 2 (2008).

²³ Jia Qingguo, "China's Nuclear Weapon Policy," in *Perspectives on Sino-American Strategic Nuclear Issues*, ed. Christopher P. Twomey (New York: Palgrave Macmillan, 2008), pp. 87-88.

²⁴ Michael May, "The U.S.-China Strategic Relationship," in *Perspectives on Sino-American Strategic Nuclear Issues*, ed. Christopher P. Twomey (New York: Palgrave Macmillan, 2008), pp. 42-43. And Michael Nacht, "Confronting Gathering Threats: U.S. Strategic Policy," in *Perspectives on Sino-American Strategic Nuclear Issues*, ed. Christopher P. Twomey (New York: Palgrave Macmillan, 2008), p. 83.

²⁵ Pan Zhenqiang, "Chinese Perspective on Strategic Context of Nuclear Weapons and Implications for the New Nuclear World Order," in *Perspectives on Sino-American Strategic Nuclear Issues*, ed. Christopher P. Twomey (New York: Palgrave Macmillan, 2008), p. 69.

However, with the advent of US BMD, the Chinese began to doubt the retaliatory strike capability and to feel vulnerable. A Beijing University professor Jia Qingguo summarizes China's reaction to the American defense system as "some Chinese analysts point out that the real motive behind such efforts [US BMD] is to neutralize China's limited nuclear deterrence capabilities" and that China should quantitatively and qualitatively enhance its nuclear force to "penetrate missile defense system and maintain China's minimum deterrence capabilities."²⁶ Dr. Yao Yunzhu, the director of the Asia-Pacific Office at the Department of World Military Studies, Academy of Military Science of China, categorizes the US BMD as an offensive weapon and states "this very defensive shield, when used against the only flying dagger the opponent throws at it while taking the deadly blow, would be very offensive in nature."²⁷ The US BMD is causing strategic vulnerability for China and it recognizes this problem.

In response to redress the vulnerability issue, China has been engaged in strengthening its nuclear force. While the US BMD did not exclusively spark the modernization and enhancement of China's nuclear force, the high level of threat American defense system poses to the survivability of China's retaliatory force has acted as a catalyst in accelerating and extending the scope of modernization.²⁸ A strategic nuclear issue expert Joseph Cirincione states that reportedly, the Chinese efforts to develop Multiple Independently-Targeted Re-entry Vehicle (MIRV) warheads began in September 1984, was spurred by the announcement of SDI in 1983.²⁹ MIRV technology is possibly the most effective means to complicate a ballistic missile defense system as the defending state must launch multiple interceptors with kill vehicles to neutralize MIRVs. For example, the US does not have multiple kill vehicles delivered by a single interceptor missile, either in development or in deployment. Therefore, if the Chinese were to launch a single ICBM with ten MIRVs, the US BMD would require at least a salvo launch of ten

²⁶ Jia Qingguo, pp. 90-91.

²⁷ Yao Yunzhu, "Chinese Nuclear Policy and the Future of Minimum Deterrence," in *Perspectives on Sino-American Strategic Nuclear Issues*, ed. Christopher P. Twomey (New York: Palgrave Macmillan, 2008), pp. 119-120.

²⁸ Thomas Adams, "China's Strategic Nuclear Modernization: Reasons and Implications," *Canadian Institute of Strategic Studies-Strategic Datalink*, No. 141 (Dec. 2007).

²⁹ Joseph Cirincione, "China's Nuclear Modernization," *Carnegie Proliferation Brief*, Vol. 2, No. 8 (4 Apr. 1999).

interceptor missiles to carry out the defense. The technical feasibility of a ten interceptor missile salvo launch *and* the guarantee that each kill vehicle would destroy an MIRV that is not targeted by other kill vehicles are a daunting task for the BMD developers to overcome. In addition, simple economics, one offensive ballistic missile requiring multiple interceptor missiles, are heavily in favor of the offense. A CIA study released in April 1999 stated that China possessed the ability “to develop a MIRV system for the currently deployed ICBM but has not done so.”³⁰ While the deployment of MIRV capable ICBMs may not have taken place yet, it would be only a matter of days for the MIRV systems to be mounted on the Chinese ICBMs.

Today, although the NPR 2010 does not explicitly discuss China’s MIRV capabilities, it assesses China to be continuing both “quantitative and qualitative modernization of its nuclear capabilities.”³¹ Addition of road-mobile DF-31 ICBMs and JL-2 SLBMs onboard Type 094 SSBNs in China’s efforts to reach “sufficient numbers and sophistication to overcome anticipated US national and regional missile defences”³² are the specific actions of China’s quantitative and qualitative modernization of nuclear force.

Going further, while an anti-satellite (ASAT) and laser illumination weapons do not perform offensive nuclear strike mission, Chinese demonstration of these two capabilities, January 2007 and September 2006 respectively, shows a potential that these technologies could be used to disrupt the missile defense system. Due to the fact that US BMD relies on Defense Support Program (DSP) satellite system for cueing data of interceptors, China’s ability to destroy or disrupt the DSP satellites would significantly reduce the effectiveness of the BMD.³³ The Jane’s Information

³⁰ Shirley A. Kan, *China: Ballistic and Cruise Missiles*, 97-391F, U.S. Congressional Service, 10 Aug. 2000, p. 5.

³¹ US DoD, *NPR 2010*, p. 5.

³² Jane’s Information Group, *Jane’s Sentinel: Country Risk Assessments, Northeast Asia-China Section, Strategic Weapons Systems-Assessment-paragraph no. 3*. The SSBNs are the most reliable strategic nuclear weapon delivery platform. See Richard L. Garwin, “Will Strategic Submarines be Vulnerable?” *International Security*, Vol. 8, No. 2 (Autumn 1983), pp. 52-67.

³³ Christopher P. Twomey, “Dangers and Prospects in Sino-American Strategic Nuclear Relations,” in *Perspectives on Sino-American Strategic Nuclear Issues*, ed. Christopher P. Twomey (New York: Palgrave Macmillan, 2008), pp. 4 and 6. Twomey states, however, the successful 2007 ASAT test had a low orbiting target, which is different from the DSP satellites’ high orbiting characteristics. Therefore China did not have the capability to destroy the DSP system in 2007. However, China’s advances in the future, perhaps not in kinetic destruction technology, could have direct impact on the DSP satellite system’s functioning capabilities.

Group states the development of ASAT and laser along with stealth and space technologies were pursued by China under the direction of Deng Xiaoping through “863 Program” in response to President Reagan’s SDI.³⁴

Another option, matching the American step to field its own defense system, was revealed to the world on January 11th, 2010. The day after, China’s Ministry of Foreign Affairs Spokesperson Jiang Yu responded to a reporter’s question regarding China’s missile defense test as, “China conducted a test on ground-based mid-course missile interception technology in its territory and the test has reached the expected goal,” and also the “test is defensive and not targeted at any country.”³⁵ China’s Xinhua News Agency reported an interview with PLA’s National Defense University Professor Tan Kaijia, who referred to the January 11th test as “China’s first announcement that we have the ground-based midcourse anti-missile technology” that is capable of intercepting warheads “hundreds of kilometers above the ground.”³⁶ A US news report cites a Pentagon source confirming Chinese assertion of exo-atmospheric interception; more specifically the report refers to a PLA colonel unofficially “suggesting” the interception took place at the altitude of 20 km.³⁷

Although not much has been revealed about China’s ballistic missile interception capability since the January test, just as in the case of SDI and Soviet Union in the 1980s, the specter of operational Chinese ballistic missile defense system is causing anxiety in the US. The former senior director of the US Congressional Commission on the Strategic Posture of the United States Bruce McDonald states due to a

³⁴ Jane’s Information Group, *Jane’s Sentinel: Country Risk Assessments, Northeast Asia-China*, Section: Armed Forces-Assessment-paragraph no. 4.

³⁵ Jiang Yu, “Foreign Ministry Spokesperson Jiang Yu’s Regular Press Conference on January 12, 2010,” Ministry of Foreign Affairs of the People’s Republic of China (13 Jan. 2010), Press and Media Service-Spokespersons’ Remarks-Regular Press Conference, accessed 29 June 2010 [available: <http://www.fmprc.gov.cn/eng/xwfw/s2510/2511/t651245.htm>].

³⁶ Yan Hao, “Anti-missile interception builds shield for China’s defense,” Xinhua News Agency-English (China), 14 Jan. 2010, accessed 30 June 2010 [available: http://news.xinhuanet.com/english/2010-01/14/content_12809916.htm].

³⁷ Wendell Minnick, “China Missile Test Has Ominous Implications,” *Defense News* (weekly print edition), 19 Jan. 2010, p. 7. While a part of Wendell Minnick’s report suggests the January test could have been a much easier ASAT test rather than a ballistic missile interception test, the Chinese are firm in their assertion of a successful ballistic missile interception. In an interview with *South China Morning Post*, retired General Xu Guangyu (formerly with the PLA General Staff Headquarters) specifically addresses the skepticism that the test could have been ASAT. See Stephen Chen, “Mid-space missile test marks milestone for defense strategy,” *South China Morning Post* (Hong Kong), 13 Jan. 2010, p. 4.

possibility of China deploying “even a thin strategic missile defense system,” the American nuclear deterrence and nuclear umbrella in Northeast Asia along with the viability of continuing strategic arms control reduction with Russia would pose problems for the US.³⁸

China’s achievements in nuclear force modernization coupled with anti-satellite technologies, and fielding of its own ballistic missile defense system, are nevertheless mere efforts to minimize the elongating relative power gap with the United States. The reason that these Chinese efforts only minimize, not close the gap with the US is due to the fact that Chinese capabilities in both technological fields lags far behind that of the US. For example, the absence of Chinese ballistic missile defense system allows US to maintain the current strategic nuclear posture, while the US BMD mandates the Chinese to modernize and devise countermeasures for its nuclear force. The existence of the Chinese ballistic missile defense system also forces the US to restructure the nuclear posture; however not to the degree the Chinese are required to do in countering the US BMD thanks to the technological superiority of the American system today.

As China seeks to minimize the widening relative power gap with the US, it is unable to better concentrate its resources to close the relative power gap with the US where it has the proficiency to do so in 2010, which are in conventional capabilities. Had there not been the threat of US BMD requiring certain actions for the PLA, Beijing could have had better blue water capability for the PLA Navy, enhanced in-flight refueling ability for the PLA Air Force, and the list would go on. The requirement of advanced technology for constructing a ballistic missile defense system coupled with a near US monopoly on such advanced technology with financial wherewithal to support the development³⁹ are precisely the foundation on which the US is maximizing relative power over China with a US BMD card.

Under this circumstance, because China, the challenger, is unable to prevent relative

³⁸ Bruce McDonald, “China’s Missile Defense Challenge,” *Defense News* (weekly print edition), 25 Jan. 2010, p. 37.

³⁹ Avery Goldstein, “An Emerging Grand Strategy: A Neo-Bismarkian Turn?” in *International Relations Theory and the Asia-Pacific*, eds. G. John Ikenberry and Michael Mastanduno (New York: Columbia University Press, 2003), p. 76.

power gain of the US, the defender's dissatisfaction with the current situation increases, endangering the existing deterrence dynamic.⁴⁰ Interestingly, the study by Quackenbush that rendered such a conclusion, suggests the best means to avoid the deterrence failure is to buttress the ballistic missile defense system in order to establish the fielding state's "threat" credible.⁴¹

Simply, the US BMD is a "win-win" option for Washington in its efforts to maximize its power against China.



⁴⁰ Stephen L. Quackenbush, "National Missile Defense and Deterrence," *Political Research Quarterly*, Vol. 59, No. 4 (Dec. 2006), p. 540.

⁴¹ *Ibid.*

Chapter 6

South Korea's Requirement for an Alliance Partner

The analysis of the situation in Northeast Asia has shown that China is a great power with good potential to become a regional hegemon. South Korea, with a much smaller population and without nuclear weapons is no match for a giant nuclear armed China next door. In the mean time, the United States, a regional hegemon of the western hemisphere, has been engaged in relative power maximizing behavior with China in hopes of obstructing China's domination of Northeast Asia. As South Korea looks for an alliance partner in this already existing great power security dynamic, partnering with the United States turns out to be the best option. It is a distant hegemon also in need of countering the potential threat of China, which South Korea also hopes to do.

While South Korea is already an ally of the United States, the changing dynamics of the alliance and countering China as an additional objective require extensive efforts to restructure the existing alliance. The existing alliance between Seoul and Washington is focused on countering the North Korean threat, and the strength of the alliance has waned. The unilateral nature of the US providing support for South Korea is one of the key causes of the alliance deterioration, and as a result it is not possible to simply "add" an objective of countering China's aggressive military action against South Korea in the existing alliance structure. A separate alliance agreement or a completely revamped alliance structure, in which South Korea would play a role that is beneficial to the US in countering China, less buck-passing, is necessary.

An effective means for Seoul to enlist the US as an alliance partner against China is through participation in the US BMD. South Korea's geographic location offers a great advantage for the defense system in countering the Chinese ballistic missiles threatening the US territories and its troops in the region. As South Korea shares the

burden of the alliance and plays a key role in protecting America, the alliance it needs would be forged and maintained. Therefore, South Korea should join the US BMD.

6.1 US as the Most Ideal Alliance Partner for South Korea against China

The United States is the most ideal alliance partner for South Korea against China. First, the US is not a territorial presence in Northeast Asia, rather an offshore balancer. The offshore balancers, by definition, do not seek conquest or domination of the extra-regional area due to the stopping power of water.¹ The inverse relations of a great power's disposition for conquest and the distance separated by water, makes the probability of US endangering the national sovereignty or security of South Korea highly unlikely.

Second, its unique status in the western hemisphere guarantees continuing capacity for the US to be involved in Northeast Asia. A supplementary study to the Mearsheimer's Offensive Realism theory finds that a distant hegemon is unable to act as an offshore balancer should it be faced with an adverse local situation. The study asserts "a continental great power *may* intervene in another region, but only when that action will not undermine its relative position in its own neighborhood."² The US is a continental power of the western hemisphere; however, because it has achieved regional hegemony it has obtained a favorable local situation exclusively enjoyed by insular powers.

In addition, the US controls the SLOCs and possesses long range heavy airlift capabilities that are incomparable to other great powers. Control of the SLOCs is important in that its troops would be able to safely reach the ally's territory in support. The inability of the French fleet during Napoleon Bonaparte's reign to reach Louisiana, and the subsequent loss of its colony is a case in example.³ Heavy airlift capability is also another mechanism that is required for an offshore balancer to have credible *prompt* reinforcement ability for the extraterritorial ally. Therefore the US

¹ John J. Mearsheimer, pp. 234-238.

² Colin Elman, "Extending Offensive Realism: The Louisiana Purchase and America's Rise to Regional Hegemony," *The American Political Science Review*, Vol. 98, No. 4 (Nov. 2004), p. 567.

³ Colin Elman, *op. cit.*, p. 572.

is able to engage in distant regions as an offshore balancer on a reliable and timely basis.

In Northeast Asia, the presence of a great power China has already solicited American interest and involvement in the region, which are demonstrated by the recent EP-3 and the USNS Impeccable incidents. The United States justifies its activities, including military activities, near China on the grounds of the 1982 UN Convention on the Law of the Sea (UNCLOS) that only grants China exclusive military operating rights over its territorial waters of 12 nautical miles from the coastline; China is trying to enlarge the exclusivity to its Economic Exclusive Zone (EEZ),⁴ and in the process it hopes to force the American military forces far away from its shores. As to exactly what type of military activities the EP-3 aircraft and the USNS Impeccable were engaged in the Chinese EEZ, which is also the international airspace and waters (70 miles for the EP-3 and 75 miles for USNS Impeccable from Hainan), the US acknowledges clearly that the EP-3 was engaged in “routine [and] overt reconnaissance mission,”⁵ and as a result China has great “interest in stopping US reconnaissance.”⁶

As for the 2009 USNS Impeccable incident, no official US government response as to specifically what kind of a mission or an activity was being conducted by the non-combat ship has been made. However, one can examine the types of routine missions the USNS Impeccable conducts that are available in public, and infer what this ship was doing 75 miles off China’s Hainan Island. A non-related US Navy news report from 2006 quotes the USNS Impeccable’s Chief Warrant Officer Richard Linsowe, who interviewed “[t]he data collected by Impeccable gives the fleet commanders the ability to put together a larger plan for other operations forces,” and the report states that data and any contacts from the sonar are reported “to the area of operation’s sub-surface commander.”⁷ USNS Impeccable surveys underwater geography, which allows sub-surface units, submarines, with information on

⁴ Raul Pedrozo, “Close Encounters at Sea: The USNS *Impeccable* Incident,” *Naval War College Review* (US), Vol. 62, No. 3 (Summer 2009).

⁵ Shirley A. Kan et al., *China-U.S. Aircraft Collision Incident of April 2001: Assessments and Policy Implications*, RL30946, U.S. Congressional Research Service, 10 Oct. 2001, p. 1.

⁶ Shirley A. Kan, *U.S.-China Military Contacts: Issues for Congress*, RL32496, U.S. Congressional Research Service, 15 Apr. 2009, p. 18.

⁷ Barry Hirayama, “USNS Impeccable Deploys Passive Sonar While Underway,” *Navy NewsStand* (US), Story Number: NNS060307-07. 7 Mar. 2006, accessed 1 July 2010 [available: http://www.navy.mil/search/display.asp?story_id=22543].

maneuverable space at a give area. By surveying the underwater geography near Yulin Naval Base in Hainan, where the PLAN's SSBN fleet, in addition to other sub-surface assets, is ported, the US Navy would be able to predict and monitor Chinese submarines' activities. In addition, the US Navy is also able to devise routes and plans for its own submarine forces to operate around the Chinese coast.

Routine reconnaissance and data collection relevant to sub-surface operations against China by the US military clearly denotes Washington's interest and involvement in the region vis-à-vis the great power China. Considering that the US BMD is spurring Chinese responses and maximizing American relative power against China as discussed in Chapter 5 Section 2, the US is already engaged, though low in intensity, in containing China's rise. In other words, the distant regional hegemon has a need to balance against China, which overlaps with the need of South Korea against China. One need not quote Henry Kissinger to see the matching of strategic objectives between Seoul and Washington, and the suitability of each other to forge an alliance against the potential Chinese regional hegemon.

6.2 Current Status of the ROK-US Alliance

South Korea and the US already have an existing alliance relation founded upon the 1953 ROK-US Mutual Defense Treaty. This treaty obliges each party to come to the aid of the other in case of an external armed attack. Although the treaty does not specify the external armed attack from North Korea, the context of the treaty was to prevent another invasion from North Korea.⁸ The planning and preparation of the two states is still focused on deterring the North Korean threat, and even this clear and historical objective of the past six decades has been waning. Therefore, this treaty cannot be automatically used by the two capitals to counter China.

With South Korea's development from a war-ravaged nation of the 1950s, its military

⁸ Dr. Chun states that the security cooperation between South Korea and the US has been strictly focused on preventing and repelling potential North Korean invasion with unilateral support from the US (p. 102). Therefore, the scope of the alliance has been limited to the Korean Peninsula and the internal dynamics has been American support of Korea without South Korean reciprocation.

pro prowess has also grown. Regardless, the pillar of South Korea's deterrence against North Korea has been the alliance with the US, the epitome of which is the USFK in South Korea. However, the evolving posture of the USFK to date reflects the deteriorating nature of the ROK-US alliance. The role of the USFK has steadily decreased in terms of quantity and diversity. The USFK now has a force level of 28,500 personnel, which is 24% decrease since 2003; one of the reasons for the reduction is attributed to the hand over of "Ten Military Missions" originally carried out by the USFK, such as anti-artillery mission, to the South Korean counterparts.⁹

In terms of reduction in diverse capabilities of the USFK, the withdrawal of two Apache attack helicopter (AH-64) squadrons since 2004 is a good example. Due to the absence of all weather and night mission capable attack helicopters for the South Korean military, the combined forces have relied on American Apache attack helicopters to conduct Counter-Special Force (C-SOF) operations. The C-SOF operations are one of the most critical elements in defending South Korea against North Korean invasion as North Korean Special Forces are expected to attempt penetration into the rear area of South Korea. However, of the three Apache squadrons under the command of US Second Infantry Division, one was withdrawn and another was replaced by an addition of one F-16 fixed wing aircraft squadron.¹⁰ As a result, the USFK has only one AH-64 squadron of 24 units to counter penetrating North Korean Special Forces on the eastern and western coastlines of South Korea using rotary wing aircrafts, which are the most effective assets for this particular mission.

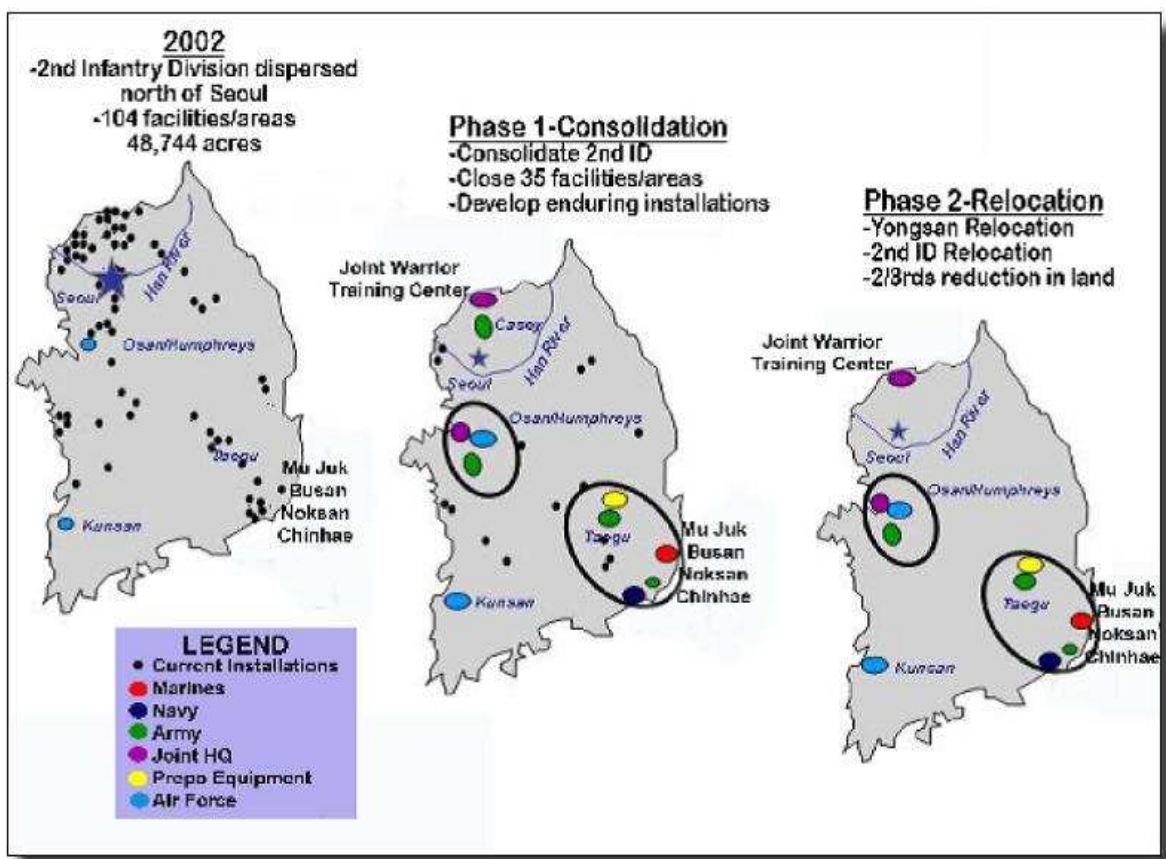
On a larger scope, two other developments, USFK re-alignment and Wartime Operations Control (OPCON) transfer, have put the maintenance of the alliance in

⁹ ROK MND, *Defense White Paper 2008*, p. 85.

¹⁰ 윤상호 (Yoon Sang-ho) and 박민혁 (Park Min-hyuk), "주한미군 남은 아파치헬기 대대 2012년까지 완전 철수할 듯" (USFK, Expected to Withdraw the Last Remaining Apache Helicopter Squadron by 2012), *동아일보* (Dong-A Ilbo), 3 Aug. 2009. And 김귀근 (Kim Gui-geun) and 이상헌 (Lee Sang-hun), "美, '아파치' 대체전력 F-16 한국배치 [종합]" (US to Deploy F-16 as Replacement for the Apache [Wrap-up]), *연합뉴스* (Yeonhap News), 13 Jan. 2009. The original plan was to replace the AH-64 squadron with 12 A-10 fixed wing aircrafts. However, citing necessity for repairs and maintenance of A-10 type aircrafts, the US reached an agreement with South Korea to place 12 F-16 aircrafts. Given that while A-10 is a specially designed aircraft for Close Air Support (CAS) and F-16 a multi-role aircraft, a controversy sparked in South Korea as to whether the 12 F-16 were capable of filling the capability gap from the withdrawal of 24 AH-64Ds.

doubt or at least in controversy. The realignment of the USFK was a plan to remove American forces from the existing forward deployment posture near the De-Militarized Zone (DMZ) to south of Seoul, effectively eliminating the “trip-wire” presence the USFK has maintained since the armistice.¹¹ As the Figure 6.2 shows, except for a training center, the USFK would be relocated into two large areas of Pyongtaek and Daegu, well south of the Seoul Metropolitan Area (SMA).

Figure 6.2 The USFK Relocation Plan



Source: USFK Public Affairs Office, “The New Korea: U.S. Forces Korea Strategic Digest.”¹²

Given that the “trip-wire” presence guaranteed American participation in a war against any type of North Korean invasion,¹³ controversy and public debate have

¹¹ Nam Chang-hee, “Relocating USFK Bases: Background and Implications,” *East Asian Review*, Vol. 15, No. 3 (Autumn 2003).

¹² USFK Public Affairs Office, “The New Korea: U.S. Forces Korea Strategic Digest,” June 2009, accessed 30 June 2010 [available: <http://www.usfk.mil/usfk/Uploads/200/printready27may09small.pdf>], p. 16.

¹³ For example, North Korea has an OPLAN to invade and occupy the Seoul Metropolitan Area (SMA) in five to seven days before the American reinforcements could arrive. By occupying the SMA, Pyongyang could obtain a favorable condition in negotiations and could possibly prevent USFK or American intervention. See 김민석 (Kim Min-seok), “김정일 ‘대남 작계’ 바꿨다

taken place in South Korea as to the credibility of American support and reinforcement in case of a war.

In addition to the loss of USFK's "trip-wire" presence, the upcoming Wartime OPCON transfer from the Combined Forces Command to the South Korean Joint Chiefs of Staff (JCS) also further aggravated the controversy of possibly waning American support for South Korea. This wartime OPCON transfer would dissolve the Combined Forces Command's right to command, by the American four-star general, both the US and South Korean forces. A specialist in South Korean affairs and a former staff writer for the US Congressional Research Service Dr. Larry Niksch succinctly states the controversy to be centered on the post-Wartime OPCON command structure having a South Korean command and a separate American command, which "signals a lessening of the U.S. defense commitment to South Korea and a near term U.S. military withdrawal from South Korea."¹⁴

Under this backdrop, the presidents of the two countries issued *Joint Vision for the Alliance of the United States of America and the Republic of Korea* in June 2009. This new agreement, appraised as enlarging the scope of the alliance,¹⁵ set a new course and objective for the alliance to be maintained and strengthened. However, in terms of traditional military security issue, the language from the fifth paragraph, "[t]he continuing commitment of extended deterrence, including the US nuclear umbrella, reinforces" the combined robust defense posture of the two states, is not a new concept to the alliance. And the vague nature of exactly what constitutes "extended deterrence" and under what circumstances the US nuclear umbrella would remain effective for South Korea leaves many questions unanswered.

A researcher from one of the leading think tanks in South Korea the Sejong Institute points out the vagueness of the language and the fact that the US has declared the

(Kim Jung-il Changed the Southward Invasion Operation Plan), *중앙일보* (JoongAng Ilbo), 27 Apr. 2010, p. 1.

¹⁴ Larry A. Niksch, "The OPCON Military Command Issue amidst a Changing Security Environment on the Korean Peninsula," KORUS Forum at the Embassy of Korea, 24 March 2010, accessed 25 June 2010 [available: <http://asiafoundation.org/resources/pdfs/NikschOPCON100324.pdf>], p. 1.

¹⁵ Refer to transcript of Brookings Institute, Center for Northeast Asian Policy Studies Event "Opportunities for U.S.-ROK Alliance Cooperation: New Issues on the Agenda," 8 Oct. 2009, accessed: 30 June 2010, [available: http://www.brookings.edu/~media/Files/events/2009/1008_us_rok/20091008_us_rok.pdf].

existence of nuclear umbrella over South Korea without any substantive follow up actions to bring the declaration into actual existence.¹⁶

In the year 2010, despite the efforts by Seoul and Washington to save and extend the life of the 1953 alliance agreement, South Korea cannot be certain that the US would come to its aid as agreed upon, including utilization of nuclear weapons on North Korea should South receive a nuclear attack. And this uncertainty that exists even against North Korea, the target of the alliance, would increase by geometric proportions should South Korea be attacked by China, as no OPLAN or military contingencies have even been discussed or prepared between South Korea and the US, in contrast to the case involving North Korea.

In order to enhance the defense commitment of the US with regard to South Korea, especially against China, South Korea should catch more “buck” within the alliance and play a critical role in US security interests. Suggestions made by South Korean analysts such as the USFK troop and family housing agreements, dispatch of Provincial Reconstruction Team (PRT) to Afghanistan, increased participation in UN peacekeeping missions,¹⁷ and cooperation in the field of Military Operations Other than War (MOOTW)¹⁸ are practical and could be implemented immediately to have more “buck” for South Korea to catch. However, as a researcher for the South Korean Ministry of Foreign Affairs and Trade Choi Kang points out, the deployment of South Korean troops in support of US-led wars in Iraq and Afghanistan has been limited to medical, reconstruction and engineering fields.¹⁹ What the US critically requires is for South Korea to share the burden of its combat troops. The reluctance on South Korea to absorb combat casualties for the US is one of the main issues. And Seoul must understand that in case of a war in South Korea, the US would also, and have the right to, be reluctant to send its citizens, whom most likely to suffer

¹⁶ 박용옥 (Park Yong-ok), “북한의 핵보유와 미국의 확장 억제: 주요이슈 및 대책” (Nuclear Armed North Korea and Extended Deterrence: Issues, Prospects, and Suggestions), *경제와 정책* (Jungsaewha Jungchaek), No. 163 (Nov. 2009), p. 3.

¹⁷ Ohm Tae-am, “The ROK-U.S. Strategic Alliance in the 21st Century and the KORUS FTA,” *ROK Angle*, Issue 17 (19 Nov. 2009), pp. 4-5.

¹⁸ 최강 (Choi Kang), “오바마정부의 안보정책과 한미동맹: 4년주기 국방검토보고서[QDR]를 중심으로” (The Obama Administration’s Security Policy and ROK-US Alliance: based on Quadrennial Defense Review [QDR]), *주요국제문제 분석* (Juyo Gookjae Moonjae Bunseok), No. 2010-04 (2 March 2010), p. 12-13.

¹⁹ Choi Kang, *op. cit.*, p. 12.

combat casualties in defending “a country they never knew and a people they never met.”²⁰

While it would take enormous, and probably never ending, national debate on whether South Korean soldiers should face danger to share the American combat burden for the sake of reinforcing and enlarge the alliance to include China threat, South Korea’s participation in the US BMD would provide similar level of contribution to the cause as the America’s security would be directly buttressed by South Korea.

6.3 Benefits of South Korea’s Participation in the BMD for the US

By participating in the US BMD, South Korea can strengthen and enlarge the alliance with the US to counter China. In an international system where states seek for survival, defense of the homeland is of utmost importance and priority. South Korea’s participation in the US BMD increases the effective area of coverage for the system, specifically in enhanced early warning, better protection of the US territories and troops (USFK and US Forces Japan), and strengthened surveillance. The participation would also benefit South Korea in countering both the North Korean and Chinese ballistic missiles; however, the benefits would be greater for countering the Chinese ballistic missiles.²¹ By playing a critical role in protecting the US and its interests, South Korea could then play a reciprocating role for the expected American military support in case of an external armed attack on itself, including the Chinese attack.

South Korea’s participation in the US BMD enhances the effectiveness of the system by permitting forward deployment of sensors and interceptors against China. In terms of sensors, the US has already deployed one AN/TPY-2 (X-Band) radar to the Japanese Air Self Defense Force (SDF) base in Tsugaru City.²² The distances

²⁰ As inscribed in a plaque at the Korean War Veterans Memorial in Washington D.C.

²¹ Logically, South Korea’s participation enhancing the effectiveness of the US BMD also means the participation to adversely affect the reliability of China’s retaliatory strike capabilities against the US.

²² Jennifer H. Svan, “Army showing off new X-Band radar in Japan,” *Stars and Stripes*, 8 June 2006, accessed 1 July 2010 [available: <http://www.stripes.com/news/army-showing-off-new-x-band-radar-in-japan-1.50062>].

between the radar site and key locations, for rough reference purposes only, are shown as below.

Table 6.3 Approx. Distances from Japan based AN/TPY-2 Radar

Unit. Kilometers

Key Sites	Distance	D. from hypothetical Osan-Pyeongtek Site	Reduction in Distance
Seoul, ROK	1,200	60	1,140
Osan-Pyeongtek Area, ROK	1,230	0	1,230
Pyongyang, DPRK	1,260	250	1,010
Musudan-ri, DPRK (ballistic missile test site)	900	480	420
Tong-ch'ang Dong, DPRK (ballistic missile test site)	1,340	360	980
Beijing, PRC	2,000	990	1,010
Nanyang Location, PRC ²³ (suspected DF-31 launch sites)	2,600	1,400	1,200
Lhasa, PRC	4,600	3,400	1,200

Source: Google Earth 2010. Distance calculation based on the Google Earth distance measuring tool.

The Osan-Pyeongtek Area is located near the western coastline of South Korea approximately 60 km south of SMA. While no previous US plan has designated the area as the potential placement site for BMD radars, the presences of USFK Korea Command (KORCOM), Osan Master Control and Reporting Center (MCRC), Osan Combined Forces Airbase K-55, and USFK PAC-3 battery in the area makes the site an ideal candidate.

The approximate distance between the current AN/TPY-2 deployment Japanese site and Osan-Pyeongtek Area of South Korea is 12,300 km, which gives the new site longitudinal gain of approximately 1,200 km east for selected sites in China. As the increase in distance from the target decreases the radar resolution of the target,²⁴

²³ Jeffrey Lewis, "DF-31 Launch Site at Nayang," Arms Control Wonk.Com, 31 March 2008, accessed 1 July 2010 [available: <http://www.armscontrolwonk.com/1834/df-31-launch-site-at-nanyang>].

²⁴ Andrew M. Sessler et al., "Countermeasures: A Technical Evaluation of the Operational Effectiveness of the Planned US National Missile Defense System," Union of Concerned Scientists MIT Security Studies Program, April 2000, pp. 135-143.

regardless of the AN/TPY-2's detection range, proximity to the potential ballistic missile launch site is of tremendous advantage for the missile defense system fielder. This is the reason why the Ballistic Missile Defense Organization under President Clinton planned for placement of Upgraded Early Warning Radars (UEWRs) and X-Band Radars in South Korea to counter "many, complex" warheads.²⁵ In addition, an extra radar site to track a target in conjunction with existing radar sites could help produce multi-dimensional image of the incoming target,²⁶ increasing the possibility of more precise cueing and hence the interception.

In terms of interception capability, South Korea could offer the US assets to be based in its territory and territorial waters. However, given that South Korea needs to carry out ballistic missile defense against North Korea and the fact that its KDX-III class ships have SM-3 missile launch capability (MK-41 Vertical Launch System), Seoul should take the responsibility of intercepting US bound ballistic missiles in the ascent phase.

No other system in service or development is capable of ascent phase intercept other than the SM-3 missile. This missile is, to date, exclusively used by the naval forces, therefore the South Korean Navy would need to take this responsibility. South Korean Navy can execute ballistic missile defense by upgrading its own Aegis destroyer fleet with Long-Range Search and Track (LRS&T) system and procuring SM-3 missiles.²⁷

In addition, the BMDR's plan for defenses in Europe requires high demand of BMD capable Aegis ships from the US Navy. This high demand, which requires additional upgrade of the existing Aegis fleet to bestow BMD capabilities affects the US Navy in both force readiness and finances.²⁸ The South Korean Navy could lessen this burden for the US.

²⁵ Andrew M. Sessler et al., *op. cit.*, pp. 19-29.

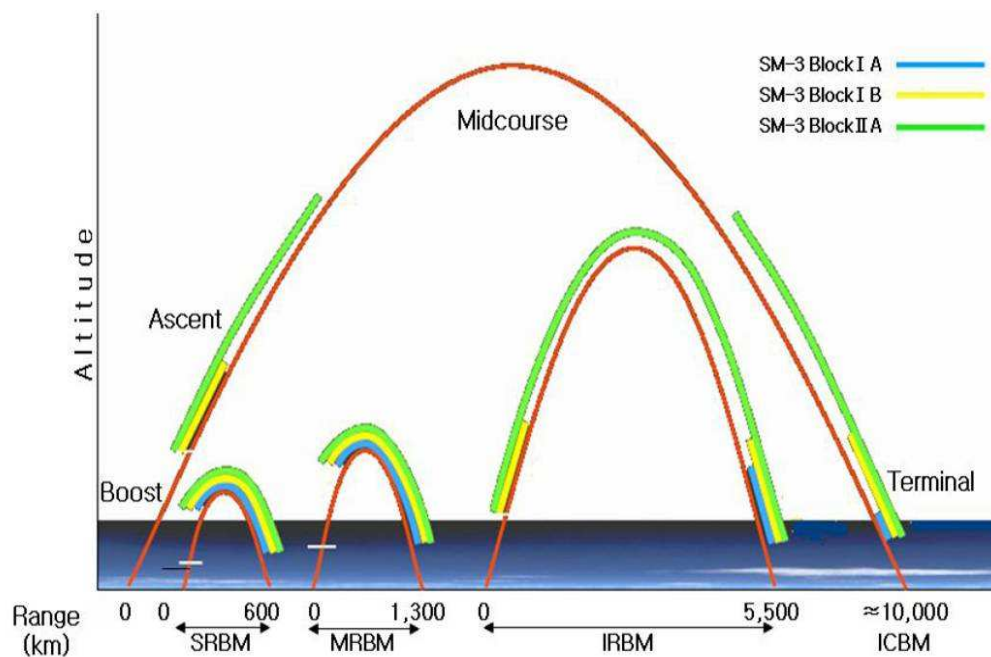
²⁶ Andrew M. Sessler et al., *op. cit.*, p. 27.

²⁷ 이장호 (Lee Jang-ho), *공중·미사일방어를 위한 KDX-III급 함정의 외부시스템 능력에 관한 연구* (A Study on the External System Capabilities of the KDX-III Class for Air and Missile defense), Master's Dissertation, Republic of Korea National Defense University (December 2007), p. 29.

²⁸ Ronald O'Rourke, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, RL33745, U.S. Congressional Research Service, 8 Apr. 2010.

The SM-3 missiles are already deployed by the US Navy and Japanese Maritime Self Defense Force (MSDF). This exo-atmospheric ballistic missile interceptor is designed to shoot down short and intermediate-range ballistic missiles today.²⁹ However, with upcoming upgraded variants, such as Block IIA and IIB,³⁰ it would possess the ability to intercept ICBMs in the ascent and descent phases of the flight.

Figure 6.3 SM-3 (Aegis BMD) Interception Phases



Source: Park Eun-ju, ROK National Defense University.³¹

As can be seen from Figure 6.3 SM-3 (Aegis BMD) Interception Phases, the Aegis BMD equipped with SM-3 missiles provide additional window of intercept opportunities, in the ascent and descent phases, for all types of ballistic missiles. In particular, the ascent phase of the ballistic missile is the second most preferred window for interception because of the relative ease of detection and tracking/cueing.³² The current US BMD plan does not have any deployable system capable of conducting BPI. Therefore, the only weapon system able to carry out

²⁹ Raytheon Company, "SM-3 Data Sheet," Raytheon.Com, accessed 16 June 2010 [available: http://www.raytheon.com/capabilities/rtnwcm/groups/rms/documents/content/rtn_rms_ps_sm3_data_sheet.pdf], p. 1.

³⁰ US DoD, *BMDR*, p. 21. And Ronald O'Rourke, p. 5.

³¹ Park Eun-ju, p. 15.

³² Lee Jang-ho, pp. 23-24.

ascent phase intercept is the SM-3 missile. In addition, as this system also has the ability to intercept in the descent phase, in case of interception failure in the ascent phase, the defender is able to have another opportunity to neutralize the incoming ballistic missile.

In a scenario to counter Chinese ICBMs bound for the US, by deploying South Korean Navy BMD capable Aegis destroyers around the Korean Peninsula, in addition to US Navy Aegis ships placed further east towards the CONUS, the defense system would be able to exploit windows of opportunity for the ascent phase intercept carried out by South Korean Navy. Therefore, the BMD would have total of three windows of intercept opportunity: ascent phase with South Korean SM-3, mid-course with GBI, and descent phase with its SM-3, THAAD or PAC-3.

In another scenario to counter Chinese MRBMs or IRBMs targeting the USFK or USFJ bases, again the South Korean Navy would be able to carry out ascent phase intercept in the Yellow Sea, and even a second intercept attempt with a ship deployed in the East Sea for the case of USFJ defense.

In the future, should the US decide and successfully develop and deploy the ABL system, participation of South Korea in the US BMD would significantly increase the effectiveness. The ABL is the only existing BPI capable system, and it requires forward deployment of the aircraft. While the exact intercept range of the ABL has not been released,³³ ABLs deployment in South Korea or within the South Korean airspace as compared to the cases for Japan would significantly increase the effectiveness and engagement capacity.

As examined, South Korea's participation in the US BMD would not only provide Seoul protection from Chinese ballistic missiles, but also increase effectiveness of the defense system for better protection of the US. As South Korea bears more responsibility of the alliance's deterrence against China, in other words reducing the

³³ One study puts the maximum range of the ABL (based on Al Husayn Ballistic Missile or SCUD-C) under optimal conditions at 720 km. In this generalization, ABLs deployed in the Japanese airspace would have no effect on Chinese ballistic missiles. See Geoffrey E. Forden, "The Airborne Laser: Shooting Down What's Going Up," *Working Paper*, Center for International Security and Arms Control-Stanford University, Sept. 1997, p. 13.

“buck-passing,” the alliance would be able to be maintained robustly.

In practical terms, South Korea would have easier time obtaining American political support in case of conflict with China. James Lindsay and Michael O’Hanlon discuss the difficulty of obtaining US congressional support in a situation where the US would be vulnerable to ballistic missile attacks.³⁴ The effective ballistic missile defense provided by South Korea’s participation and South Korea’s playing a critical role in defending Chinese ballistic missile attack against the US would neutralize what Lindsay and O’Hanlon call the “Missiles’ Prewar Coercive Value”³⁵ in Washington.

Without a doubt, the US is the most ideal alliance for partner South Korea could have. And the existing ROK-US alliance could serve as a bridge for the two states to counter the Chinese threat. However, because the nature of the current ROK-US alliance has been focused on North Korea and Seoul enjoyed Washington’s unilateral security assistances, the alliance is not strong and certainly in no condition to simply “add” another threat, China, to counter. However, South Korea’s participation in the US BMD would be able to solve the “buck-passing” problem that was inherent in the existing alliance. The benefits Washington would gain through South Korea’s participation in the US BMD would serve as a bonding agent for strong alliance, and in turn secure American defense commitment for South Korea against China. Therefore, South Korea should join the US BMD.

6.4 Potential Disadvantages for South Korea in Joining the BMD

As with all things in human affairs, South Korea’s participation in the US BMD does not only bring benefits and advantages for South Korea. However, close examination of the potential disadvantages would show that the membership in the US BMD only increases possibility of the disadvantages materializing, or simply no new disadvantages are introduced. As this thesis asserts, Seoul entering the US

³⁴ James M. Lindsay et al., “Correspondence: Limited National and Allied Missile Defense,” *International Security*, Vol. 26, No. 4 (Spring 2002), p. 193.

³⁵ *Ibid.*

BMD system in Northeast Asia should be seen as an act of buttressing the ROK-US alliance. South Korea has understood and managed deftly or accepted the possible disadvantages from allying with the US since the end of the Korean War. Therefore, as BMD buttresses the alliance, the existing potential disadvantages have increased probability of materializing, while at the same time, no new negative factors are introduced.

As discussed by Dr. Chun Sang-hoon of the KINU in the introductory chapter of this thesis, entering the US BMD could drag Seoul into the possible great power war between Washington and Beijing. In such a scenario, the assets based in Seoul would be used to intercept Chinese ballistic missile targeting the US, USFJ or USFK. Therefore, the PLA would have to strike against the BMD installations in South Korea, hence Seoul would be dragged into a war between the two great powers against its will. However, such a scenario is not a new development that only follows after Seoul's entrance into the US BMD system.

Application of Strategic Flexibility by the US forces in the region renders the same effect of drawing South Korea into US-Sino armed conflict. The term "Strategic Flexibility" used by the US DoD for the case of South Korea could be defined as pulling some American "forces out of Korea to meet another contingency, another contingency that the U.S. has to deal with somewhere else in the world," at the same time in a case South Korea requires more military strength, US forces located outside the Korean Peninsula could be introduced to the theater.³⁶ This concept was discussed officially between the two states and resulted in a language found in the 35th SCM Communiqué of November 2003. The exact language regarding Strategic Flexibility is "the Secretary [Rumsfeld of the US] and the Minister [Cho of the ROK] reaffirmed the continuing importance of the strategic flexibility of United States forces in the Republic of Korea."³⁷

³⁶ Brookings Institute, Center for Northeast Asian Policy Studies, "Expanding the Agenda for Cooperation between the United States and Republic of Korea," Center for Northeast Asian Policy Studies Event, 5 Jan. 2010, accessed 26 July 2010 [available: http://www.brookings.edu/~media/Files/events/2010/0105_korea/20100105_korea.pdf]. p. 46 a response by Michael Finnegan.

³⁷ *Korea-U.S. Security Consultative Meeting Joint Communiqué of the 35th Security Consultative Meeting*, 17 Nov. 2003.

The Strategic Flexibility materialized with 3,600 soldiers from the US Second Infantry Division based in South Korea being deployed to the Iraq Theater in 2004.³⁸ And such a mechanism for the USFK has caused great trouble for Beijing. The then China's ambassador to South Korea Ning Fukui said that unless the Strategic Flexibility is limited to the ROK-US bilateral framework solely for the South Korean security, "China will have no choice but to shift attention to the matter" regarding possible conflict between the US and China over Taiwan.³⁹ While South Korea might have objections and could possibly have a veto over any of the USFK being transferred to the Taiwan contingency, the possibility of Beijing taking chances to permit a US force capable of being deployed to the Taiwan Theater in a matter of hours without damage is extremely unlikely. In a Taiwan conflict scenario, China would attempt to neutralize the US forces in the region, attempting to enlarge the time period that the US could come to the aid of Taiwan. That means, the primary and first strike targets would be the USFK and USFJ, theoretically. Simply, unless the USFK withdraws from South Korea completely, the chances of South Korea being dragged into a war between China and the US would continue to exist.

In summary, over a sixty-year period, South Korea has understood and accepted the potential disadvantages from allying with the United States and having its forces stationed in its sovereign territory, as the pros of maintaining the USFK and the ROK-US alliance outweighed the possible cons. Seoul's participation in the US BMD, should it choose to do so, would enhance the ROK-US alliance as this thesis asserts. Therefore, the existing potential disadvantages may have higher chance of materializing; however, no new negative factors are introduced. For example, the Strategic Flexibility applied to the USFK is as potentially dangerous to South Korean national security from China as is the membership in the US BMD.

³⁸ Jin Dae-woong, "'Strategic flexibility' to apply case-by-case: Swift transfer of USFK to be allowed," *The Korea Herald*, 21 Jan. 2006.

³⁹ Yeonhap News, "Chinese envoy to South Korea cautious on US 'military flexibility,'" *BBC Monitoring Asia Pacific-Political*, 22 Mar. 2006.

Chapter 7

Conclusion

On the topic of South Korea and the US Ballistic Missile Defense, no research to date discusses the necessity for Seoul to address threats other than the North Korean threat, clear recommendation that South Korea should participate in the US BMD, and membership in the defense system enhancing the alliance with the US. This thesis has addressed these three lapses in the existing studies on the subject in an academic and theoretical process, and the arguments were buttressed by practical examples.

Using a theoretical framework based on the Offensive Realism theory, this thesis established China as a great power and a potential regional power, absent US nuclear umbrella, of Northeast Asia. The virtue of being a great power, which is in possession of offensive military capabilities, renders China as a threat to other states. The uncertainly and fickle nature of a state's intentions instill fear in other states facing a great power, as the Offensive Realism prescribes. The fact that Offensive Realism does not require examination of a state's intentions to categorize a great power as a threat, this thesis is able to identify China as a potential threat to South Korea in a deductive process. This process of establishing China as a potential threat is important in that with certainty, one is able to reach a conclusion today, without having to wait half a century to pass by and examine de-classified documents to understand a state's intentions of the past. Therefore utilization of the Offensive Realism theory is a critical part of this thesis.

In the case of South Korean security, China is a potential threat in 2010, and as the giant neighbor develops further into the future, the level of threat would increase proportionally. Not only does China lead South Korea and other states in Northeast Asia in latent power considerations, but also its large military with formidable offensive capabilities qualify China as a threat to South Korea and the region. On a

practical level, the research has found that South Korean elites and general public, especially after the March 2010 ROKN Cheon-An incident, perceive China as a threat to South Korea. Despite South Korea's efforts to increase its military strength, the fact that China possesses offensive nuclear weapons, a nuclear superiority in the region as a matter of fact, makes it clear that South Korea alone is no match for China under any circumstances. Therefore Seoul needs an alliance partner to counter China.

In the meantime, the US has already been engaged in countering China by engaging in acts of relative power gains with the distant rival power. Specifically, its ballistic missile defense system is playing a key role in maximizing relative power over China. The requirement of sophisticated technology and huge amount of financial investment in fielding a ballistic missile defense system is precisely what gives the US relative power gains.

While China is attempting to counter the US BMD with its nuclear force modernization and its own ballistic missile defense system, these countermoves merely minimize Washington's relative power gains over itself. The US has a near monopoly in advanced technology required to field a ballistic missile defense system. China could attain such technology, although it would require more financial investment and efforts. Therefore, its fielding of own defense system cannot have the same effect on the US as the US BMD has on itself. In addition, China's efforts to counter the US BMD are affecting its conventional force improvement, as even China must manage finite defense budget. Given that China has reached a level of proficiency in indigenous production of conventional arms, and hence better efficiency in converting capital into military hardware than in the case of fielding a ballistic missile defense system, China is not able to gain conventional relative power against the US to the full potential.

The US BMD, which aids Washington in containing China, matches the objective of the alliance that Seoul seeks to form with a great power. The US is an offshore balancer from a distant region; therefore, the US would not become a threat to South Korea once China has been contained. Washington's hegemony in the western hemisphere, coupled with US domination in control of SLOCs and possession of

strategic airlift capability makes the US a reliable ally. Simply the US is the most ideal partner for Seoul in forming an alliance to counter China.

With this ideal partner, South Korea has had a security alliance for the past 60 years. However, the deterioration of the alliance, partly due to the unilateral assistance of the US for South Korea, does not allow “addition” of countering China as another objective. Either a new alliance directed against China or a revamped alliance where South Korea plays a reciprocating role for the US, that is to provide protection for the US, would be required to counter China.

One of the ways that South Korea could play a more significant role in an alliance with the US to counter China would be participation in the US BMD. South Korea’s geographical proximity to China renders its cooperation a significant enhancement for the US BMD. Seoul would not only be able to enhance the BMD effectiveness, but also could play a direct role in defending the US territories with its Aegis destroyer fleet intercepting US bound ballistic missiles from China. Such an arrangement, where the two parties reciprocate to buttress each other’s national security would render a strong and reliable alliance against the great power China.

In conclusion, South Korea’s participation in the US BMD is a reliable mechanism for Seoul to enlist the United States as its alliance partner against the potential threat of China.

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