Abstract

Since the 1st nuclear test of North Korea in October 2006, the UN Security Council has made economic sanctions against North Korea for the past 20 years beginning with the resolution number 1718, but North Korea has continued to test nuclear weapons and ballistic missiles and has retained intercontinental ballistic missiles ICBM and submarine launched ballistic missiles SLBM.

Amidst such international crisis, on June 12, 2018, the US President Donald Trump and Kim Jong Un of North Korea agreed on the complete denuclearization of North Korea through a summit held in Singapore, but ever since, North Korea has not followed up on this agreement.

However, the United States began a trade war with China, an economic sponsor of North Korea, thereby causing serious damages against companies, and the US is deliberating on the use of military options in North Korea.

In this study, I have investigated the strategic plan of South Korea for the active military officers of the Republic of Korea, which is a party to the Korean War and confronted with North Korea geopolitically in the crisis caused by North Korea’s possession of nuclear weapons, and analyzed the results of the research to categorize North Korea for a denuclearization plan from the political and military perspectives.

As a result of the study, first, the political direction is to expand international cooperation in response to economic sanctions against North Korea and military provocations. Second, by expanding economic sanctions against North Korea, North Korea should not be allowed to continue military exercises including nuclear tests. Third, expansion of psychological warfare program so that North Korean residents can learn about the human rights violations of the dictatorship regime.

Next, military options include, first, with the consent and management of the United Nations, South Korea can possess nuclear weapons and take strategic advantage. Second, establish and expand the integrated missile defense system of UN and South Korean forces in Northeast Asia.

Lastly, at the conclusion of this study, I presented a specific model of the denuclearization phase for North Korea.

[Keywords] Military Conflict in Northeast Asia, Missile Defense, Denuclearization, Psychological Warfare, UN

1. Introduction

1.1. Research background

In order to maintain a single man ruling system over the past 70 years, North Korea has deified its leader, has committed murders and human rights through the surveillance of its residents, and continued military exercises such as nuclear tests and ballistic missile launches, and after the first nuclear test in October 2006, it repeatedly conducted nuclear tests and finally completed the development of nuclear weapons,
and in August 1993, launched the first intermediate range ballistic missile (IRBM) has threatened Northeast Asia and the international community.

Therefore, in 1994, the United States presented a plan to pursue precision bombing of North Korea’s Yongbyon nuclear facility, but failed to complete the denuclearization as the US President Jimmy Carter entered into the Geneva agreement under the condition of nuclear freeze.

However, North Korea withdrew from the Nuclear Non-Proliferation Treaty(NPT) in 2003 and declared its nuclear possession in 2005, and on April 23, 2016, successfully launched a test of the SLBM, or Polar Star 1, from its submarine.

If North Korea succeeds in miniaturizing nuclear warheads and the SLBM becomes strategized, the international community will no longer be able to control North Korea, which may bring about the World War III.

1.2. Historical case analysis

1.2.1. The United States and Japan

According to the North Korean specialist media of 38 North in 2017, the article entitled "Japan 1941, North Korea 2017?" provided an example of how Japan, the hegemon of East Asia, became a defeated nation by the US nuclear attack in World War II[1].

The US first applied economic sanctions against Japan, but after these sanctions failed to produce effective results, the US eventually ended the war by dropping nuclear bombs on Hiroshima and Nagasaki.

The report claims that if the target was Japan in 1941, then North Korea is the target at the present time.

Examples of such economic sanctions and military actions are as follows. When France surrendered to Germany in 1941, Japan invaded Indo-china, the French state, and expanded its military power throughout China and Southeast Asia, at which time the US began economic sanctions to constrain Japan’s military capabilities¹.

At the time, Japan was importing 93% of the crude oil from the United States, and the Navy was using 400 tons of oil per day, so economic sanctions such as the prohibition of exporting crude oil had a powerful ability to paralyze the military. The Japanese options for such sanctions was as follows.

First, withdraw troops following the demand of the United States.

Second, wait for the oil shortage to weaken the military.

Third, attempt to acquire resources in Southeast Asia by expanding military actions.

Japan’s chose to expand military action. As a result, it invaded Pearl Harbor of Hawaii in the United States without declaring war, and forced the United States to withdraw from the Philippines, and at the same time, caused great damages such that it could not counter attack immediately, then took over Southeast Asia and South Pacific and moved into India and Australia, causing the Pacific War. However, eventually, in 1945, a US bomber dropped a nuclear bomb on Japan and ended the war in East Asia as Japan surrendered².

¹ Economic sanctions prohibited scrap metal exports required for manufacturing weapons, crude oil exports, froze Japanese assets in the US, and refused to pass Japanese ships.

² The US’ use of nuclear weapons - Little Boy, an enriched uranium nuclear bomb dropped on Hiroshima on August 6, 1945: Colonel Paul Warfield Tibbets, Jr. (1915-2007) flew a B-29 bomber from Tinian Island of Mariana Islands and dropped it at an altitude of 9,450 meters above Hiroshima and exploded over 550 meters above sea level. Its length was approximately 3m, diameter was 71cm, the power was 13-18kt with TNT, and 50% died within 1.2Km from the center of explosion on that day, and 140,000 people died until the end of December 1945.

- Fat Man, a plutonium nuclear bomb dropped on Nagasaki, Japan, on August 9, 1945: Major Charles W. Sweeney (1919-2004) flew a B-29 bomber from Tinian Island of Mariana Islands and dropped it at an altitude of 9,450 meters above sea level and exploded over 550 meters above sea
The following <Figure 1> is the US operation schedule of August 13, 1945.

**Figure 1.** The US’s use of nuclear weapons.

### 1.2.2. The US and the Soviet Union

The Cuban missile crisis led to the verge of the World War III on October 14, 1962, when the Soviet Union began a conflict with the US following the installation of a base for the Soviet SS-4 ballistic missile(MRBM) in Cuba, a communist nation. The following <Figure 2> illustrates the SS-4 ballistic missile introduced at the Moscow Square in the Soviet Union.

**Figure 2.** The CIA’s photograph of the Soviet’s medium range ballistic missile(SS-4 in US documents R-12 in Soviet documents) in the red square moscow.

In this incident, the United States issued an official statement that it would take it as a declaration of war if the Soviet Union completed the missile base and that it would face the third World War if necessary.

The world feared that the World War III may be triggered by President Kennedy's remarks. Eventually, the Soviet Union ceased building the missile base, and the entire world was able to avoid the nuclear war.

It was apparent through this case that the common position of the US is that it would never tolerate any threat against the mainland US. However, the situation in North Korea is very dangerous now. This is because North Korea does not the same military power as the Soviet Union of the past and has no diplomatic capability in the international community, and China, which currently is a supporter, is also on the path of decline after having a trade war with the United States.

If North Korea does not perform on the principle of denuclearization it agreed upon, the US will eventually pursue a complete denuclearization(CVID) through North Korea’s regime change.

In the past, such cases were repeated in the regime change through the police actions the US took on the dictatorship regimes, which were taken to be actions of protecting, rather than maintaining, peace under the US foreign policy.

### 1.3. Research method

In order to accomplish the purpose of this study, reference study and empirical analysis were performed concurrently. First, in the reference study, I set up a research analytical model based on the books, academic papers, research reports, websites of government agencies, and data obtained from experts on North Korea’s nuclear development and ballistic missiles.

And the contents were analyzed in depth through interviews. This is an inferential methodology for exploring research questions, rather than validating a hypothesis, and a research method that is appropriate for revealing types formed by subjective structures and is a research injured.
method suitable for the topic of exploratory research that has not been conducted so far.

This study examined and conducted previous studies related to this study since the test launch of the SLBM Polar Star 1, launched from a submarine on April 23, 2016, along with North Korea's continued nuclear test. The following <Figure 3> illustrates Polar Star 1 test launched on April 23, 2016 in the northeastern shore of Shinpo.

Figure 3. SLBM(Polar Star 1) test launched by North Korea.

The interviewees who provided the results of this study are an expert group of South Korea, consisted of 20 active military officers (5 from the Army, 5 Navy, 5 Air Force, and 5 from the Marine Corps), and the analytical results are summarized from April 2018.

The sample of the data presented during the interviews were determined by the Factor of Redundancy. This means that interviews are conducted until new information is no longer available, and in this study, from about the 19th interview, new questions were not added to the next interview and responses to the interview questions began to be repeated. This means that enough resources to answer research questions through interviews were secured.

The interviews took between 70 and 90 minutes per participant of the study. The conversations during the interviews were recorded with a digital tape recorder and were transcribed into documents after the interviews. The transcribed conversations were categorized again by research questions and detailed topics through the content analysis, and the categorized data were analyzed through the narrative analysis.

2. Previous Studies

The United Nations and the international community, after the first North Korean nuclear crisis in 1994, passed the resolution of the Security Council to urge North Korea to stop its nuclear militarization and denuclearize itself, but North Korea has not abandoned its nuclear retention policy. Ever since, various studies have been conducted on the denuclearization of North Korea in academic circles. Many studies on North Korea’s nuclear issue have been conducted in the geographically neighboring South Korea, but almost no papers in English were published, so none can be indexed to internationally diverse researchers. The following <Table 1> is an analysis of previous studies of this research topic.

Table 1. Previous studies.

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Key details of previous studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jia D &amp; Kideuk H</td>
<td>Analyzed North Korea's nuclear development and suggested that North Korea is approaching with new concepts of politics and culture of related countries[2].</td>
</tr>
</tbody>
</table>
3. The US and North Korea

3.1. Political perspective

In 2018, North Korea reached an agreement after negotiating the denuclearization at the 2018 North Korea-US Summit after the launch of the North Korean ICBM Polar Star 2 in 2018, but six months have passed, and no result has been achieved. The following <Figure 4> is the 2018 North Korea-US Summit.

For the past six months, however, the United States began a trade war with China, an economic supporter of North Korea, and firmly contained China, and confirmed the popular support for the Trump administration in the mid-term election in November as the Republicans did very well.

In addition, it confirmed that CVID is the way of denuclearization for the US allies and North Korea, and until the denuclearization of North Korea is completed, the international community, centered on the United States, is firmly committed to furthering economic sanctions against North Korea.

However, the meaning of retaining nuclear weapons in quite significant for the North Korean regime. It is not just a weapon, it is a political tool to maintain North Korea's dictatorship, and it backs up North Korea's bargaining power in the international community.

North Korea's Kim Jong Un regime claimed that it will denuclearize, but it will not be able to agree to denuclearization, and the assumption that the CVID, a denuclearization method required by the international community including the US, will only be achievable through the regime change is perceived to be dominant.

3.2. Military perspective

The US military budget is larger than the sum of the budgets of the nations ranked 2nd to 8th in terms of military power, which demonstrates the capabilities in a real war situation. The following <Figure 5> is a report cited from the Stockholm International Peace Research Institute by the New York Times.

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it does not announce defense expenditure. However, it is estimated that military expenditure was 15.9% of the national budget at the Supreme People’s Committee on April 9, 2016, and so and it can be estimated as approximately USD 1,500,000,000 at the official exchange rate of North Korean money and the US Dollar.

On the other hand, the South Korean Ministry of Defense has explained that it is approximately USD 102,000,000,000 because North Korea uses tremendous amounts of money to develop nuclear weapons and missiles, and to purchase and maintain conventional weapons.

Putting together, if the US uses its military option, North Korea will have its regime changed within a few hours.

### 4. Interview Result

This study was conducted to explore the strategic plans of South Korea with the active military officers of the Republic of Korea, which was a party to the Korean War and faces geopolitically against North Korea, as a UN response strategy for denuclearization of North Korea and conducted in depth interviews with the Interview Guide secured through the Pilot Study, and the following is a transcription of the duplicated key parts by analyzing the contents of the interview on the site.

#### 4.1. Political perspective

##### 4.1.1. Expansion of international cooperation

The North Korean nuclear issue is creating very serious problems internationally. I think that we should work hard together with the Republic of Korea and neighboring countries to rectify these behaviors of deviation(M_KYN).

It is important to emphasize that the possession of nuclear weapons by North Korea is a threat to the international community, and we must mobilize more powerful military forces with the international community to achieve denuclearization(M_CMH).

We must build a thorough military defense posture in cooperation with the US, an ally, to ensure that there is no margin of error for national defense(M_LYS).

First, it is necessary to focus on nuclear disarmament and take actions sequentially, and we need to resume the six party talks to this end, and we must proceed with dialogues and negotiations with North Korea in a variety of ways (W_HSY).

The problem will be solved only by removing Kim Jong Un and the command unit. If the threat of nuclear provocation will persist, we will assassinate Kim Jong Un in cooperation with the neighboring countries for the peace of Northeast Asia(M_KSH).

##### 4.1.2. Expansion of economic sanctions against North Korea

We should block and sanction foreign trade against North Korea’s preparation of nuclear weapons, and we should not provide food and economic support, etc. I think it is time for more powerful and rigorous sanctions against North Korea(M_JHS).

The UN Security Council should condemn North Korea’s provocations for the destruction of world peace and sanctions against North Korea should be raised to the farthest extent possible to ensure that North Korea is pressed (M_BS).

If we provide food and supplies, there will be more damages. We should no longer provide support for the weapons production(M_KMR).

From now on, cutting off monetary supply support and strongly responding to even small provocations will be the answer(M_KKD).

##### 4.1.3. Expansion of psychological warfare against North Korea

I think we should continue to broadcast against North Korea. If we continue to appease
North Korea, they will continue to provoke such as by nuclear tests and they will also want more. I think that we should resume the broadcasting to which North Korea responds sensitively and we should no longer accept North Korea’s demands (W_LSR).

It is necessary to change the minds of North Koreans by informing them of the realities of North Korea inside North Korean society and the international community. I think there is nothing more fearful than that (M_LJH).

In addition to conducting those in the private sector, just as they did 30 years ago in the armed forces, the armed forces should also distribute flyers to North Korea thereby providing the North Korean residents with opportunities to learn about the realities of the international community (M_KJS).

First, in order to approach Kim Jong Un regime’s ruling strategy through nuclear weapons, it is necessary to inform the North Koreans about how the international community feels about the nuclear development in North Korea (W_HAR).

We must help North Koreans, who are not using the Internet, to learn that losses will be much greater than whichever gains achieved by the North Korean regime’s possession of nuclear weapons.

4.2. Military perspective

4.2.1. Korea’s nuclear weapons development

In order to prevent the recurrence of the Korean War of the 1950s, we should have nuclear weapons and strengthen our military capabilities to punish North Korea in any event (M_KKD).

North Korea’s nuclear development will lead to a nuclear domino phenomenon in the Northeast Asia, and we should also prepare for the threat of North Korea by possessing tactical nuclear weapons under a defensive concept with the consent of the international community (M_HMG).

We need to inform the international community that if North Korea tests nuclear weapons again, South Korea cannot but review nuclear militarization for defense purposes (W_BHJ).

To respond to the unpredictable and unreliable North Korean regime, we must also possess tactical nuclear weapons (M_LSO).

4.2.2. Establishment and expansion of integrated missile defense system

North Korea’s nuclear weapons are threatening us day after another. In order to avoid such a situation, I believe that weapons that can be used against North Korea’s nuclear weapons are also needed in South Korea (M_CJH).

The enemy’s missile must be shot down in the air before they reach the targets, and we must deploy THAAD of the US or develop South Korea’s defense weapon capabilities (M_JJI).

We have enough technologies to develop nuclear weapons and missiles, but we should develop weapons that are not vulnerable against North Korean threats by correcting the missile policies which have long been executed with the US (M_SWM).

We should also deploy strategic weapons such as THAAD widely enough to prepare for threats of imminency. I think that a strategic defense weapon on the Korean peninsula is necessary to protect our people and reduce damages (W_LJH).

5. Discussion

5.1. Political perspective

First is the expansion of international cooperation on the denuclearization of North Korea. Even now, the fact that the US and China are still different in their views on the possession of nuclear weapons by North Korea seems to suggest that the international community has not agreed on the common directions for resolving North
Korea’s nuclear issue. Therefore, it is necessary to gather and publicize the common views of the international community that sanctions are needed against the North Korean economy until the denuclearization is completed.

Second, the economic sanctions against North Korea should be expanded. The US President Donald Trump has exercised the largest sanctions against North Korea, and these sanctions should be extended to North Korea as well as to China, Russia and all related countries.

Third is the expansion of psychological warfare against North Korea. The issues of human rights and religion for North Koreans is very serious. Therefore, it is necessary to operate the psychological warfare of North Korea including the South Korean military’s loudspeaker broadcasting to North Korean people so that they can learn about the values of human rights, ideology, religion and freedom of expression.

**5.2. Military perspective**

First, South Korea can be authorized to develop and manage nuclear weapons under the UN control. The claim that South Korea should make nuclear weapons on its own is expanding even in the South Korean political realm, as North Korea has reached its status as a nuclear power nation through its sixth nuclear test. South Korea already has a considerable level of nuclear power facilities, and if South Korea decides to develop nuclear weapons, it can make up to 100 nuclear warheads within two years, they said. In July 1970, the US Secretary of State William Rogers informed Minister of Foreign Affairs Choi Kyu-Ha of the US intention to withdraw the 20,000 US troops from South Korea during the Vietnam War Conference held in Saigon, Vietnam, after which South Korea did commence developing nuclear weapons and, at the time, it was very close to completing the nuclear weapons development.

Second, South Korea should build and expand an integrated missile defense system with the US and Japan. While it has been said that the South Korean government has already developed an independent missile defense system in response to North Korea’s nuclear and missile threats, the expansion of the missile defense system through military alliances with the US and Japan will narrow North Korea’s intention for denuclearization. Furthermore, it is necessary to jointly participate in the development of the MD system of the United States and Japan to seek a more efficient and complete defense.

**6. Conclusion**

If North Korea does not cooperate for denuclearization, it may take more than 15 years, so they say, but there is an analysis that it could take far much more time or even impossible to achieve considering the political weight of the nuclear weapons in North Korea.

However, the International Atomic Energy Agency (IAEA) claimed that if North Korea is willing to disclose both its production facilities and the quantity of nuclear substances it retains, 2 to 3 years would be sufficient to denuclearize realistically. The US National Security Adviser John Bolton of the White House and the US Secretary of State Mike Pompeo said that within 3 years is the target. The following Table 2 illustrates a 5 staged denuclearization model for North Korea.

**Table 2.** Illustrates North Korea’s 5 staged denuclearization model.

<table>
<thead>
<tr>
<th>Phase</th>
<th>North Korea</th>
<th>UN</th>
</tr>
</thead>
</table>
| 1st phase | - Nuclear facility’s shutdown  
- IAEA monitoring unit’s nuclear facility shutdown  
- UN’s precision inspection of nuclear weapons by experts  
- IAEA sealing | - Commencement of relationship improvement discussions |
| 2nd phase | - Report of all nuclear weapons to IAEA  
- Disabling of nuclear facilities | - Release from the list of terrorist harboring countries  
- Release of application of the Trading with the Enemy Act |
This study has examined the political and military perspectives of the denuclearization of North Korea in the United States, including the United Nations, as well as how nuclear weapons were used under what circumstances in the past within the international community, and plans were discussed and ultimately a denuclearization model was derived for North Korea.

7. References

7.1. Journal articles


7.2. Books


7.3. Additional references

[1] https://www.38north.org/

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